

**Bill Mills, Pontshill,
Ross-on-Wye, Herefordshire**

Building Recording

For H. E Coombes

by Clare Challis and Dave Fellows
Thames Valley Archaeological Services
Ltd

Site Code BMR 05/101

November 2005

Summary

Site name: Bill Mills, Pontshill, Ross-on-Wye

Grid reference: SO 6249 2161

Site activity: Building Recording

Date and duration of project: 2nd – 4th November 2005

Project manager: Helen Moore

Site code: BMR 05/101

Summary of results: A complex of buildings including a timber-framed building and water mill dating from the early 18th century.

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited with Herefordshire Heritage Services in due course.

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Report 05/101

Introduction

This report documents the results of building recording at Bill Mills, Pontshill, Ross-on-Wye, Herefordshire (SO 6249 2161) (Fig. 1). The work was commissioned by Mr. Simon Redman of H.E Coombs, Bill Mills, Pontshill, Ross-on-Wye, HR9 5TH.

Listed Building consent (app no DCSE2005/1051/L) has been granted by Herefordshire District Council for the conversion of the existing mill buildings to ten dwellings. The consent is subject to a condition that requires historic building recording of the listed building.

This is in accordance with the Department of the Environment's Planning Policy Guidance, *Planning and the Historic Environment* (PPG15 1994), policies of the Hereford and Worcester County Structure Plan and the South Herefordshire District Local Plan. The fieldwork was undertaken by Clare Challis, Helen Moore and David Fellows on 2nd – 4th November 2005 and the site code is BMR 05/101.

The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Herefordshire Heritage Services and a copy sent to the National Monuments Record in due course.

Location, topography and geology

Pontshill is situated in the parish of Weston-under-Penyard approximately 3 miles to the south east of the market town of Ross-on-Wye. The River Wye meanders southwards to the west, and the main transport routes M50 and A40 can be found to the north and east.

Bill Mills is a complex of industrial and residential buildings to the south-west of the centre of Pontshill within the Castle Brook valley, surrounded by farmland and woodland. The geology of the site (BGS, 2001) is old red sandstone, the local building material, and the site lies approximately 55m above the Ordnance Datum.

Castle Brook flows from east to west down the valley, and the Bill Mills complex is located in a looping meander of the brook. A straight channel cutting across the meander has been excavated to redirect part of the brook flow to serve the mill complex. A channel from the Castle Brook passes into the site and beneath the complex and then converges with the main channel to the west (Fig. 1).

Historical Background

Weston-under-Penyard and Pontshill are both recorded in the Domesday Book, held by Durand, the first sheriff of Gloucestershire (Williams,A & Martin,G 1992). Bill Mills is first mentioned in a document dating to 1362 when 'a highway leading to Bulimulle' is recalled. It is subsequently recorded in 1367 when Nicholas le Castell grants 'all his lands and tenements in Poushill, Bullmyll, and Hope Maloisell' to the Rector of Mitcheldean (Hurley 2001). These early records suggest that a mill was established at this site at this time.

From c.1638 until around 1821 it was operated as a paper mill by the Lloyd family as mentioned in 'Cobbetts Rural Rides' (SMR 10999). The Lloyd family was established in paper making, making paper at several other establishments as well as Bill Mills. When the owner John Lloyd died in 1828 his son Thomas made arrangements to sell Bill Mills to Thomas Bright who was a corn miller. As part of the agreement Lloyd arranged to remove the engine, presses and all associated workings which had been used in the paper making process leaving the vat, furnaces, pipes machinery and chests (Hurley 2001). It is clear at this time that Bright was intending to change the use of the mill to grinding corn, not an unusual occurrence at this time. The practice of making paper was becoming less profitable for small mills as competition from other better-sited mills, and those who were able to incorporate new machinery, could produce larger quantities of cheap paper. It also coincided with a reduction in the availability of rags, the raw ingredient for the production of paper.

It is probable that alterations were made to the buildings and watercourse to make them suitable for the grinding of corn and manufacture of flour. By 1857, after establishing the corn mill at Bill Mills, Bright retired and sold the site to Thomas Wintle, an up-and-coming corn merchant. At this time the water wheel provided the only source of power (Hurley 2001). Soon after his purchase he conveyed the business to his brother, Alfred Wintle, who soon expanded the business to include a miller and a maltster, both living on site. In 1888 his brother Thomas died and alterations in 1891 enlarged the site and indicate that he benefited from Thomas's will. (Hurley 2001).

The improvements in communication networks, including the repair of the highway from Hereford to Gloucester around the mid-1800's and the coming of the railway to Ross, Gloucester and Hereford opened in 1855, enabled further enlargement of the business. This, along with improvements allowing for the bottling of beer, encouraged Wintle to pursue this line of business coupled with the bottling of mineral water. By 1891 machinery had been installed at the mill to do this job and contracts from factories such as Guinness to bottle their beer had been established. Also at this time a Robinson Steam engine was acquired to assist in this process. The introduction of

this steam engine required that numerous alterations had to be made to the building to assist its installation. The former malt house was heightened to four stories to house the flour mill. A wall was removed near the water wheel, the building made good where it connected with the malt kiln, and thirteen iron-framed windows inserted in the flour mill similar to those already present in the factory. The floors and roof of the old corn mill were repaired, the store house and cottages whitewashed, and the furnace moved to a new position.

In 1895 Alfred Wintle died and the business passed to his sons who continued to expand the business. They further modernized the factory with the introduction of the Tangye horizontal steam engine in 1899, which remains in situ with its associated boiler in the lower floor of the flour mill.

During WWI the flour mill ceased to be used for milling flour, and for a short time was used for bottling mineral water. Through the 1920's the mill again operated as a corn and flour mill, and its function then reverted to the bottling of mineral water and beer in the 1930's, a process that continued into the 40s. In 1958 Brian Jenkins joined the firm and eventually bought the company. In 1979 the company became Dayla Soft Drinks Western Limited and some of the outbuildings were converted to holiday cottages. In 1989 a modern factory was built at the site that continued to expand until the end of 2000 when the business was moved to a new site and Bill Mills left redundant.

Since its closure, Brian Jenkins has made a number of attempts to reuse the building, and has been involved in the slow process of restoration of the mill machinery until the building was sold.

Methodology

The building survey was carried out in accordance with guidelines set out by the Royal Commission on Historic Monuments, Level 2. The survey comprised three components of study: a short desk-based historical study requiring Sites and Monuments Record information and historical maps and previous studies; photography of items of standing building fabric or historical interest, or other items of historical interest that will be destroyed or altered by the development, (this will include photographs of the site in its setting and the overall proposed development), and summary analysis of the structure using the architects plans of the site as a base. In particular the water wheel and associated apparatus, and the millstone set-up and flooring, were recorded in detail.

The structure has been recorded photographically on 35mm format using colour print, colour slide and black and white media that are catalogued (Appendix 1).

Description

The site at Bill Mills is a complex of nine buildings, all of which are to be described separately. The locations of each building are marked on the site plan (Fig 2). The buildings have been numbered sequentially, with the oldest first.

Explanatory Note

Historic landscaping works at Bills Mills have altered the ground level and have raised the level at the front of the building relative to that at the rear. In the following section, each of the buildings is described using the terminology defined by the architects drawings, with the lowest level being the basement level, with ground floor, first floor etc above, even though the basement may have originally been the ground floor level.

Building 1

Building 1 (plate 1) is a three-bay timber-framed structure with box-framed walls and a king-post roof with treenched purlins. The main framing posts are jowled with six of the original eight surviving. The box frame has been infilled with hand-made red brickwork.

The timber-framed building sits on a sandstone basement structure. The northern wall of the basement is not square and the timber framing above respects this slight change in angle.

The basement has a large four-centred arched stone door opening at the western side of the southern elevation, and access to this is now down a set of stone steps. On the northern elevation there is an iron-barred window opening, now partially blocked with timber, brick and concrete, with a sandstone jamb and part of the sandstone sill surviving. The floor is of sandstone flags and drainage grooves in the slabs lead to a floor drain (plate 2). This building appears to have been constructed before the changes in ground level associated with the construction of the mill pond. The door and window opening described above, currently below ground level, were presumably originally at ground floor level.

Later works visible in the basement include chutes and openings in the north wall, and concrete platforms for industrial machinery set on the floor in the eastern half of the building.

The timber-framed structure above has been heavily modified. There is evidence on the southern roof truss that shows that the southern bay of the roof space had at some time been boxed off, with the remains of lath and plaster on the ceiling beneath the rafters. In the central bay of the western elevation the sill beam had been cut away for the insertion of a later door leaving the tenon of the post exposed and unsupported causing the whole of the frame to subside at this point.

Three original window openings (subsequently blocked) were seen on the western elevation. These were simple rectangular timber-framed openings with holes for horizontal dowels seen on the jambs where some of the brick infill had been removed.

The eastern elevation of the building has been much altered, with only the framing of the southern bay surviving. The northern two-thirds of this frame had been removed to create an open space between building 1 and building 6 to the east (Plate 3).

The northern elevation has also been heavily modified, with the insertion of a large sliding door opening and of a four –light window above the midrail on the western side.

Weather boarding has been added to the external faces of the north and south elevations. On the external face of the western elevation the original carpenters' marks were recorded (plate 4).

Later repairs have been made to the brick panelling infill with the use of modern frogged and stamped bricks, along with breeze blocks in the eastern elevation. The roof covering is slate although on the western roof-slope roof tiles have been laid on top of the slates.

Building 2

This building (plate 5) was located at the eastern end of the complex. It was built of coursed red sandstone blocks and has a slate roof. It is a simple rectangular two-storey building with a basement and ground floor level (originally at ground and first floor level, prior to the landscaping associated with the creation of the mill pond).

At basement level the front or eastern elevation has a door opening, and a simple square window to its south. To the north of the door the raised ground level obscures the wall fabric.

At ground floor level there are three round-headed brick window openings with iron-framed windows, and at the southern end of the elevation there is a tall brick door opening – an access door with a pulley system for lifting material into the ground floor storage space. The windows and door opening appear to have been inserted into the elevation, with a change in size of the stonework used above the level of the brick window arches. Directly to the south of building 2 a later row of houses has been built.

The external western elevation has three windows at basement level, the outer two having arched brick openings, the central one being plain. On the ground floor there are two rectangular three-light windows, the northern one obscured by vegetation. All of these windows openings have timber slats rather than glass for increased ventilation. The quoin stones at the south-western corner of this building were rusticated.

Internally, at basement level, this building becomes much more interesting. The remains of the substantial flagstone floor were recorded in the south-eastern corner of the building, partially covered by a skim of concrete. How much of the flag floor survives in the rest of the room beneath the concrete is unclear. The floor also had evidence for drainage and service runs with inspection covers, one of them with an inscribed date of 1944, as well as for later partition walls. At the northern end of the eastern elevation there was a blocked doorway and window opening (plate 6). These appeared to be the original openings, but had been blocked when the ground level had been raised outside. The level had been raised in two stages, the first retained these openings, whereas the second stage built the wall up against them. The blocking, consisting of brickwork with timber lacing, has been particularly unsuitable and the damp conditions have caused the timber to rot.

On the southern elevation, various blocked openings could be seen, with a breeze block doorway and window opening, along with other timber lintels visible beneath the paintwork. These openings pre-dated the range of buildings to the south. There are a number of circular-sectioned iron posts and two RSJ's supporting the flooring joists of the ground floor. The northern elevation had a door opening through to the basement of building 3 to the north.

At ground floor level evidence for the earlier and possibly original roofline was seen on the southern elevation, and there was the pulley system for the loading door in the eastern elevation. An opening in the northern elevation leads to the ground floor of building 3.

Building 3

Building 3 is a large rectangular three-storey sandstone building to the north of building 2. The front (eastern) elevation stands proud of the line of building 2 (plate 7). At the ground floor level there is a simple door opening with a timber porch canopy over through the southern half of the wall and at the first floor level there are two plain two-light windows. The western external elevation has a rectangular four-light timber slatted window at basement level, a similar window on the ground floor, and a smaller version at first floor level (plate 8).

Internally the basement level of building 3 is entered via the door openings from the buildings to the north and south. The basement has a flagstone floor, with quarry tile patching where one of the flags has been removed to the west of the door opening to building 2. The ends of the RSJ's from building 2 penetrate through the south wall at the basement level. In the south eastern corner of this room there is a blocked door opening.

Just in front of this blocked doorway a wooden staircase rises eastwards to the ground floor, although there is no opening in the floor joists of the room above.

This building has the watermill wheel situated against the outer face of the northern wall with the wheel axle penetrating the wall. The pit wheel was observed emerging vertically above its stone housing on the axle shaft. This would have driven the horizontal wallower cog (Plate 9), and above this on the main shaft were the spur wheel and the stone nut, with the shaft then rising through into the floor above. Three meal spouts from the floor above are present in this room, two of which had grain sacks attached. A belt and pulley system is also present in this room.

In the north western corner of the room was a rotating dressing machine for flour processing, used to separate the bran from the flour (Plate 10). Meal was fed into a cloth sleeve, which was then rotated and knocked against the wooden bars, driving the finer flour through. There were three types of dressing machine, the *bolter*, the *wire machine* and the *reel*, of which this is likely to be a *bolter* as it appears to have been hand powered and not connected to the remainder of the mill machinery.

Along the western wall stood three metal safes from when the room was used as a strong room. The door to this room from building 4 to the north was an iron door that remains in situ.

Access to the ground floor of building 3 was via the doorway in the eastern elevation. This room contained the mill stone although the bed stone and casing (or tun) were not in situ on the pegs located in the floor, and were instead leaning against the east wall (Plate 11). Several hoppers were observed to penetrate the ceiling of this room along with pulleys reaching from floor to ceiling. Other associated pulleys and belts were present in the north wall, their shafts penetrating the wall.

Access to the first floor of this building was through the doorway in the northern elevation from building 4 to the north. A timber mezzanine floor level had been created at the eastern end of this room, secondary to the original build (plate 12). The mezzanine timbers were tied into the walls, and in the northern wall the timbers were located in a now-blocked original window opening.

The mezzanine level occupies the eastern two thirds of the roof space of building 3, and was constructed at the level of the roof's tie beams. Access to the mezzanine level was via a small timber stair against the building's eastern elevation. The lower flooring level of the western third of the roof space (continuing under the mezzanine) was presumably constructed at the same time as the mezzanine. The queen-post roof structure had been modified to incorporate these changes in use. The walls of the building have been built up and now enclose the ends of the roof truss tie beams and the wall plates. The ends of the principal rafters are supported by horizontal timbers that sit on top of the walls and are pegged (mortice and tenoned) into the queen posts.

The westernmost truss has had its original tie beam removed and its queen posts shortened to the wall top level, and a secondary tying timber has been bolted between the rafter ends and the ends of the shortened queen posts. This has opened up this end of the first floor space to improve access to the mezzanine, and the mezzanine provides an upper level of access to the two large timber storage bins that occupy the northern side of the room. There is also a hatch with a pulley hoist that passes through the flooring timbers from the mezzanine, and this is driven by a belt and pulley system off the crown wheel.

Alterations to the roof of building 2 to the south were recorded where the roof structure had been extended to the north to meet and tie in to the different roof alignment of the later building (the ridge of the roof of building 2 runs north-south, whereas building 3 runs east-west) (plate 8).

Building 4

Building 4 (plate 13) is a rectangular 4-storeyed building situated to the north of building 3. It is built of red sandstone blocks of larger size than buildings 2 and 3 and with less regular coursing, and has a slate covered roof. On the front or eastern elevation of the building there is a door opening at the northern end of the wall at ground floor level. The current door sits in an opening with brick jambs and a stone segmental arched head. At first floor level there are two round-headed brick window openings with metal-framed windows. There are two identical windows at second floor level with a central circular opening with wall lamp. A date stamp (dated 1891) is located above this opening with the initials W&S for Wintle and Sons.

The ground level on the western side of the building is lower revealing the rectangular, timber-slatted, basement window at the western end of the southern elevation (plate 8). There are single metal-framed windows with round-headed brick openings on each of the ground, first and second floors to the southern side of the western elevation, although the bricks used are different on the ground floor window.

A metal and brick extension creating a large covered area obscures the lower portion of the northern face of this elevation, although two metal-framed windows with brick surrounds, one at ground floor level, the other being the lower half of the first floor opening, were seen. Immediately to the south of the ground floor window a segmental arched opening, now blocked was observed with a second at basement level.

Access to the basement level of building 4 was one of two ways. The first was through the doorway from the basement of building 3, which was iron-framed and originally held a double iron door. This has been modified and currently has a single door opening with an iron door securing the room in the basement of building 3 that contained the safes. The second route was via the timber staircase down from the ground floor of building 4. At

the bottom of the staircase there is a recessed rectangular area in the stone flag floor, marked on the plan Fig. 14. Immediately around this recess survives evidence for what appears to be a low brick wall, now removed, with a threshold leading to the remainder of the room.

A square window with timber slats is situated to the west of the staircase with a timber support within the window recess supporting the floor joist. In the south-western corner of the room a timber with metal attachment is attached to the underside of the floor joists and the lettering C O U? appears on the western wall. Also within this elevation there is a timber-framed rectangular 3-light window with iron mullions, blocked externally by a breeze block wall constructed approximately 1m away from the wall face.

The northern elevation was punctuated by numerous openings that have subsequently been blocked (Plate 15). These include two tall openings, one of which had a white painted wooden lintel extending at least 0.50m into the wall and several timber headers deep in-filled with frogged bricks and stone blocks. The second had a stone sill, was bricked flush with the internal wall face and in-filled with brick rubble behind. An opening (now blocked with breeze blocks) extended from floor to ceiling, as did a vertical-sided, 0.35m wide, brick chute. Three further blocked window openings were also recorded in this elevation.

In the north-eastern corner of the room a large wooden boiler stands on a breeze block plinth. The Tangye steam engine is located to the south of the boiler, mounted on a concrete plinth, and is connected to the water wheel by an arrangement of belts and pulleys (Plates 16 and 17). At the base of the east wall is a channel constructed in brick 0.19m wide and one brick high to carry water along this wall. Along the southern elevation a wall has been constructed in red sandstone to enclose the water wheel (Pl. 18). This wall does not meet the eastern wall leaving a gap that has been bricked to mid-height leaving a small viewing space. The two large iron pipes feeding the overshot water wheel can be seen penetrating through the east wall. A second channel was observed at the base of the retaining wall joining the eastern channel feeding overflow water into the water wheel chamber. The path of the water course through the building could be traced along the floor to the west wall, covered by stone slabs and marked on the plan Fig. 14. Where the channel passed across the staircase recess it was covered with perforated red quarry tiles (Plate 14). A drainage channel was observed flowing towards the north wall from the water wheel chamber, and this was also covered with stone slabs and marked on the plan Fig. 14. A number of chutes and holes were apparent in the ceiling along with re-used floor joists.

The staircase against the south wall rises from the basement to the ground floor level of the building. At ground floor level the water wheel enclosure extends from floor to ceiling, with an iron railing at the western end over which the top of the wheel can be observed (plate 18). There is an opening in this enclosure wall through which

some machinery and belt mechanisms penetrate the floor to the basement. Further along the southern elevation to the west of the staircase two inspection holes have been created in the plaster, and behind the plaster the quoins of the north-western corner of building 3 have been revealed (plate 23).

In the northern elevation there is a square window that has been blocked up in two phases, which has left two wooden lintels in situ, and there is an inserted brick door opening fitted with a sliding door. To the east of this doorway is a further square bricked-up window opening, and another fitted with iron bars. The chute that had been observed in the basement is present at this level as an opening.

A staircase on the eastern elevation rises to the landing of the main door to the building, raised as the ground level on this side of the building is at a higher level.

At the western end of the southern elevation at first floor level there were further inspection holes in the plaster revealing the stone quoins of the north-western corner of building 3. The southern wall also contained the doorway leading to first floor of building 3, with a sloping threshold accommodating the change in floor level between the two buildings. There is a chute cut through the wall at floor level, and an opening for machinery penetrating the wall. There is also evidence for two further openings with wooden lintels still in situ. On the north wall there are three of the round-headed brick window openings containing the metal-framed windows, and to the west of these was a simple square opening with a wooden lintel. There is evidence of scarring on the floor for a partition at this point with a yellow square painted on the wall below the window. There is further evidence of partitioning in the south-eastern corner of the room where the wall is painted orange. Several cuts appear in the floor timbers, although most of these have been patched.

On the second floor there are the remnants of a stair banister in the south-western corner of the room, and there is some evidence for joist sockets in the roof timbers for an attic floor. On the western elevation there is evidence of a partition that has been keyed into the roof truss. There are four round-headed metal-framed windows in the northern elevation. There is a pulley channel over the trap door observed on the ground floor and a pulley wheel mounted on the ceiling joist. Several chute sockets cut through the flooring timbers, the top of one of these has a box surround. This building has a king-post roof that has iron reinforcing brackets. The purlins are mortice and tenoned into the principal rafters and the tie beams sit on a timber wall plate.

At the junction of buildings 1 and 4 there is a chimney with flues on the northern elevation for a boiler or fire. It tapers slightly as it rises to the top of the stack that is corbelled with wider banding. On the eastern face the brickwork is decorated with brick headers used to create a lozenge shape in purple and white (Plate 19).

Building 5

This small rectangular sandstone building is located to the north of building 4, butting against its north-western corner. At ground-floor level of the northern elevation there is a blocked brick door opening (sandstone blocking), and at first-floor level there is a sequence of window openings, with the primary arched window opening cut for the insertion of a secondary segmental-headed window, which has itself been blocked.

A blocked window opening was also recorded in the western elevation, along with the ends of three metal tie rods.

The eastern elevation of this building had been cut away and knocked through to create a full height door opening spanned by an RSJ lintel, and the building is currently used for storage (wood).

The original height of the building is not known as the upper levels of the walls have been truncated for the insertion of the late 20th-century steel roof.

Building 6

This is a five sided building built of red sandstone situated on the northern side of the mill pond (Plate 21). It was built against the eastern elevation of building 1 to the west, and when this building was constructed the northern part of the timber framing of the eastern elevation of building 1 was removed to enable access between the two structures (plate 3). A straight stair gave access from the ground floor of building 1 into the first floor of building 6.

On the southern elevation there is a ground floor 12-light timber-framed window with a tile sill. Directly over this window is a first floor doorway of simple design. In the south-eastern elevation on the ground floor is a square 2-light wooden-framed window with a segmental stone arch and on the first floor there are two further windows that meet the roofline. A second doorway is located at ground floor level and this has a segmental stone arched head. On the eastern elevation there are two windows, one at ground floor level, the second at first floor level. These are 8-light rectangular windows with segmental arched heads. The ground floor window is blocked. At the rear of this building in the western elevation there are two square windows at first floor level, both with two lights. On the ground floor there are two openings, both with RSJ lintels, the southern one being the taller.

A timber first floor has been inserted with a wooden staircase rising from within building 1 to the first floor of building 6. The ground floor is concrete and the walls have been lime washed to blend with the appearance of building 1.

Building 7

This is the most easterly building within the complex and fronts the road that passes the site. The building is constructed of brickwork and there is a large door opening on the front or eastern elevation with a timber lintel and stone jambs (Plate 20). Above the door there is a wooden plaque that reads 'I. R Jenkins'. To the south of the door are two round-headed window openings with metal-framed windows. On the first floor there are three square wooden-framed windows with brick jambs, one 4-light, one 3-light and the last 2-light, and these are replacement windows that have replaced what appear to be round-arch headed windows of similar design to those on the ground floor.

Built against the northern elevation is a stone extension that contains a staircase to the first floor of the building. There is a single square wooden-framed window lighting the stair and an opening in the west wall with a stone lintel that creates a storage space beneath the staircase.

Further openings in this elevation include a round brick window surround with a metal-framed window at ground floor level, and a mixture of wooden-framed windows at first floor level; one 3-light window, one 2-light and two single light windows, one of which is directly above the external staircase. Immediately above the ground floor window there is a vertical line of bricks within the stonework which terminate at the stone lintel of the first floor window above, and the stonework to the west of this is different in character to the remainder of the build.

The lower half of the western elevation is painted white and there is an arched doorway leading into the ground floor. At this level there is another round-headed brick window opening with a metal-framed window. At first floor there are four wooden-framed window openings, two are 2-light and the two central examples are one-light.

On the southern elevation at first floor level there is a balcony with a wooden part glazed door opening onto it flanked by two wooden-framed windows (plate 24). A gable with a 2-light window lies to the east, and beyond this there is a second 2-light wooden-framed window. On the ground floor beneath the balcony there is a sliding door opening and a round-headed metal-framed window.

This building is served by five brick built chimney stacks each with a single chimney pot. The roof is slate covered.

The ground floor of the building is a single open space with a concrete floor. There are cast iron columns supporting set into the concrete supporting the flooring structure above. The external staircase rises against the

northern wall, turning at first floor level and forming a lobby area to the first floor rooms. There are five rooms on the first floor, with the south-western room opening out onto a timber balcony. The fireplace is in the western elevation of this room and has a decorative wooden surround. The fireplace itself is redundant and has been blocked. The south-eastern room is of similar layout, the fireplace in the south wall retains its grate and its plain tiles and has a decorative wooden surround. The room to the north-west has a bricked-up fireplace with no surround. Two further rooms of similar style were also recorded.

To the rear of building 7 and extending to building 6 is a single storey brick-built enclosure. The timber roof joists have been keyed into building 6, although the roofing material has been removed, and the building housed a large boiler.

Building 8

This building is a square single storey extension to the south of building 7 built of stone with a slate roof (plates 20 and 24). The main entrance is in the east wall, a doorway with a segmental brick arched head and black and white painted door with plaque that reads 'Dayla Soft Drinks' (Pl. 20). A large rectangular window extending to the roofline with brick jambs and tile sill is present to the south of the doorway. Two further windows are present in the south elevation with the space between them in-filled with brick. A third window exists on the west wall of the extension along with an arched door opening. Internally this building is open to building 7 and has a Victorian fireplace with decorative tiles in the west wall.

Building 9

This building is located to the south of building 7 and infills the space between building 6 and building 8 (plate 24). The walls are constructed of breeze blocks finished with an imitation stone render. There are two window openings in the south wall, both with brick segmental -arched heads, with a third wider door opening to the east. The roof covering had been removed prior to the survey although the RSJ's were still in place, supported with an additional RSJ on the underside of the balcony of building 7. A large weighing machine was present within building 9.

The Mill Pond

The mill pond is man-made and retained within a mortared stone wall. A channel has been diverted from the main Castle Brook, which continues to flow to the south, and straightened to create a mill race flowing to the

mill pond. Here the water is retained and a sluice gate at the western end of the pond used to control the flow of water entering the water wheel within the basement of building 4 (Plate 22). This enables a head of water to build which is more powerful entering the wheel and makes the mill more efficient. After passing through the wheel the channel of water could be observed passing under the stone slabs and perforated quarry tiles in the basement of building 3, fig. 14, flowing west as the tail race until it passes out underneath a stone arch and back to the Castle Brook.

Interpretation

In total seven phases of construction on this site can be interpreted from the field survey observations and from the supporting cartographic evidence. The phases are illustrated on figure 13.

Phase 1 Pre c. 1700

Although it is known from documentary sources that there had been a mill at Bill Mills since the 14th century, the earliest evidence recorded on site (other than the straightened mill race channel), was the timber-framed building with the stone basement, building 1.

It has already been noted that the variations in the ground level associated with the construction of the mill pond have raised the level on the eastern side of the site relative to the west, and what is now the basement of building 1 appears to have originally been at ground floor level, with the large door on the southern elevation and the window on the northern elevation now being below ground level. It is possible that the addition of the two-storey timber-framed building is secondary.

Phase 2 1700 - c.1820

Phase 2 covers the period between the construction of the timber-framed building (building 1 in the early 18th century), and the date of the first detailed plan of Bill Mills (produced specifically to show alterations to the water courses) of c.1820. Within this period, a lot of construction work and expansion had taken place, and the site had developed the core of the present day layout. This plan is reproduced as Fig 3, and shows the buildings on the site that at the time was operating as a paper mill.

The timber-framed building, building 1, stands alone to the north, with a complex of buildings to the south and west. These represent the early structures on the site of buildings 2, 3 and 4, although they are not the same

shape in plan as they appear today. The mill pond was also smaller in size at this time, with the remainder of the space depicted as a garden.

The survey of the site has shown building 2 to be the earliest of the western range of buildings. This is butted to the north by building 3. Building 3 formed the heart of the milling complex, with the water wheel on the outer face of its northern wall. The window and door openings are plain in style and similar to those of the ground floor of building 2. Building 2 is constructed on the lower ground level at the southern end of the site, and is built using regularly coursed small stones. The upper part of the eastern elevation of building 2 has been rebuilt from the bottom of the arched window heads using larger stones, and this indicates that the windows are a later insertion, probably to allow more light into the building as its function changed. It is likely that the windows on this level were originally similar to the simple square windows present on the ground floor. At the rear of buildings 2 and 3 there is no clear break in the coursing of the masonry between them and this may be due to a later re-facing.

Building 4 is the latest addition within this phase of construction and was originally a building of two storeys above ground level. This is apparent in the south wall where the internal investigation holes on both the ground and first floors revealed the quoin stones of building 3 (Pl. 23), indicating that the north wall of building 3 was originally constructed as an end wall. The construction of building 4 involved enclosing of the water wheel in the wheel housing chamber.

Phase 3 1820 – 1889

In 1828 the mill was sold to Thomas Bright and was converted from a paper mill to a grain mill, and part of the agreement was that the associated paper making machinery be removed from site. The tithe map of 1839 describes the site as Bill Mill with houses, garden and buildings, with Thomas Bright still in residence and living on the site. By this time the mill pond had been increased in size with the addition of the stone-built retaining wall. The mill race also appears to be more streamlined, alterations that were possibly necessary to improve the workings of the mill for grinding corn rather than making paper. In 1857 the site was sold again, this time to the Wintle family and the business moved into malting as well as milling corn.

Phase 4 1889 - 1904

In 1891 there was much building work conducted on the site and by the time of the Ordnance Survey of 1904, this was completed, with the buildings much as they are today. This was as a result of the expansion of the

business into the bottling of beer and the manufacture of mineral water requiring more space. The alterations on site included the increase in height of building 4 from three to four storeys (including the basement). It shows the date 1891 and the initials W&S for Wintle and Sons in a stone in the east wall. The iron-framed windows were inserted in the four-storey flour mill at this time and were similar to those already existing in building 2, which had been converted to be the mineral water factory.

The introduction of the steam engine within the confines of the basement of building 4 required modifications to the fabric of the structure. This included the removal of the wall near to the water wheel, and the making good of the building where it connected with the malt kiln.

The roof of building 3 was modified with the insertion of the mezzanine level, and the roofs of buildings 2 and 3 were joined, with the new roof of building 2 extending to meet the southern slope of the roof of building 3.

In 1899 a second steam engine was installed in the basement of building 4, and this is present today. It is unclear whether this Tangye engine was intended to replace the existing engine or to work in tandem providing more power for the ever expanding manufacturing process.

Other buildings constructed during this phase include building 5 that butts the north wall of building 4 and stands proud on the western elevation. It has the same iron-framed windows as building 4, and has undergone major modifications that have removed the roof and blocked the window and door openings.

Building 6 butts the east wall of building 1 and obscures many of its original features. It is built in a different style to the other sandstone buildings on site, with larger blocks of stone with plain square windows with stone surrounds indicating a later construction. A loading door at first floor level indicates that the building was part of the factory and not a dwelling. On the ground floor in the north wall two openings have been inserted with steel lintels obscuring an earlier doorway. Building 7 is open on the ground floor, but with rooms above that were originally for accommodation as each has a fireplace and associated chimney stack. This building is similar in style to the mill buildings, and butts against the north eastern corner of building 6, with a brick lean-to built between them. The different windows on ground and first floor (timber-framed on the first floor, metal-framed on the ground floor) indicate the different uses of the floors. In the north wall a window has been inserted at first floor level and the area around it rebuilt, with bricks used to infill the space. A single storey extension, building 8, has been added to the south of this building, housing an office space with a fireplace and with access to the ground floor of building 7.

Phase 5 1904-1992

In 1989 a modern factory was built at Bill Mills, and this included the addition of the brick and steel framed structure at the northern end of building 4 that extends over building 5, removing the upper part of this building and cutting through the tops of the window arches. The eastern elevation of building 5 has also been removed and an RSJ lintel inserted to create one large opening. A second steel and brick structure was constructed against the west walls of buildings 4 and 5.

A breeze block wall with imitation stone render has also been assigned to this phase, and this spans the space between buildings 6 and 8, creating an extension to this line of buildings and making use of this area to create additional factory space. Concrete floors appear in a number of ground floor rooms at the site although it is unclear at what stage they were inserted. It was observed in the ground floor of building 2 that this concrete was simply a skim over the flagstones the extent of which was not able to be determined.

Another area of concrete is visible where the ground level changes between buildings 2 and 3. There is a break in the construction of the stone retaining wall that surrounds the mill pond. The void immediately in front of building 2 has been infilled obscuring the lower elevation of this building including a window and door opening visible internally. On the ground surface in front of building 3 it was observed that stone paving terminated at the break in the retaining wall and the remainder closest to the building had been finished in concrete.

Phase 6 Post 1992

The last addition to this site not observed on the Ordnance Survey of 1992 is the external staircase on the north wall of building 7. The boxing for this structure is visible on the ground floor and the stonework is more modern in appearance than the remainder of the building. It was probably constructed to allow access to the first floor without entering the ground floor, possibly indicating it was a dwelling separate to the business below.

Conclusions

In summary a property has existed on the site at Bill Mills since and probably prior to the 1700's that is the approximate date of construction of the timber-framed building. By the 1820's buildings 2, 3 and 4 had been added to the site and are clearly marked on the plan of the water courses at Bill Mills (Fig. 3). With the expansion of the business in 1891 further buildings were required to house the new machinery and manufacturing processes necessary for the bottling of beer and of mineral water. This also necessitated internal alterations to buildings 2, 3 and 4 especially with the introduction of a steam engine on site. Further expansion

and construction of a new factory on the site in 1989 required new steel constructions until the premises became unsuitable for the business and the site was abandoned.

The site has undergone many modifications and alterations throughout its life, adapted to facilitate the ever changing needs of its owners for the various types of manufacture from paper making to grinding corn to beer bottling and soft drink production.

Despite these alterations a large number of original features still exist in the building largely confined to buildings 3 and 4. In the basement of building 4 sit the Tangye stationary steam engine and boiler and on the upper floors there still exist a number of the pulley mechanisms necessary in the corn milling process. Building 3 is the core of the mill with the water wheel still in situ in its housing outside on the north wall. Connected to the main shaft are the pit wheel, wallower and spur wheel observed in the basement of the building (Pl. 9) along with the chutes that have grain sacks re-attached to their ends. On the ground floor the stones for grinding the corn are not in situ but are present leant against the east wall. On the first floor there is the mezzanine level that was inserted to support the large grain hoppers or silos that are still present.

Much of the machinery is in good condition largely thanks to the voluntary restoration works on the mill workings. The machinery is mainly associated with the period of corn milling in the life of the building, adapted for use for bottling, with the machinery required for paper making removed in the early 19th century when the mill was sold to Thomas Bright.

The site is of great local historical interest as much of the mill workings remain in situ or in the complex, and the timber-framed building, although much altered, is in good condition and represents the earliest phase of building on this site. It is possible to follow all the stages in the milling process with the milling machinery on site, and of equal interest and importance is the evidence for the later modifications, with the improvements and use of steam allied to the use of water showing the development of the milling process in what was a very important local industry.

Acknowledgements

Thanks to Dave Fellows for his help and advice, and editing of this report.

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Appendix 1. Photographic Catalogue
A .Colour prints

No.	Description
1	Building 1, Looking NE to building 6, truss 2
2	Building 1, Basement, Northern elevation
3	Building 1, Basement, Northern elevation, original sandstone window jambs
4	Building 1, Basement, Eastern elevation
5	Building 1, Basement, Western elevation
6	Building 1, Basement, Looking S, Stone doorway
7	Building 1, Basement, Looking S, drainage channels in floor
8	Building 1, Basement, Looking S, drainage channels in floor, 1x2.0m, 1x1.0m, 1x0.5m
9	Building 1, Southern elevation, Basement doorway, 1x2.0m
10	Building 1, Looking NE, Southern elevation
11	Building 1, Looking SW, Eastern elevation at Southern end, 1x2.0m
12	Building 1, Looking S, Internal, Truss
13	Building 1, Looking SE, Internal, E elevation, 1x2.0m
14	Building 1, Looking N, Internal, N elevation, 1x2.0m
15	Building 1, Looking S, Northern elevation, 1x2.0m
16	Building 1, Looking S, Northern elevation showing adjacent buildings to west, 1x2.0m
17	Building 1, Looking SE, Northern elevation showing adjacent buildings to east, 1x2.0m
18	Building 1, Looking E, Western elevation, 1x2.0m
19	Building 1, Western elevation, Carpenters marks, III and IIII
20	Building 1, Western elevation, Carpenters marks, V
21	Building 1, Western elevation, Internal, S end
22	Building 1, Western elevation, Internal, Door and blocked window, 1x2.0m
23	Building 1, Western elevation, Internal, N end, 1x2.0m
24	Building 1, Looking N, Truss 1
25	Building 1, Looking N, End truss
26	Building 1, Looking N, End truss
27	Building 1, Western elevation, Internal, Window opening with dowel holes
28	Building 1, Looking NW, Western elevation, Cut through wall plate for door insertion
29	Building 9, Looking NE, Modern façade
30	Building 9, Looking N, Modern façade
31	Building 9, Looking S, Internal elevation and weighing machine
32	Building 9, Looking S, Internal elevation and weighing machine
33	Site shot, Looking N, Buildings 6 and 7
34	Site shot, Looking NW
35	Pond and sluice gate
36	Sluice gate
37	Looking NE, Modern wall infill, Adjacent to building 2, 1x2.0m
38	Looking SE, Stone slabs and concrete adjacent to building 2, 1x1.0m
39	Building 2, East elevation, 1x2.0m
40	Buildings 2, 3 and 4, Looking N, Changes in ground level, 1x2.0m
41	Building 2, East elevation, Looking SW, 1x1.0m
42	Building 3, East elevation with porch canopy, Looking NW, 1x2.0m, 1x1.0m
43	Building 3, East elevation, Looking SW
44	Building 4, East elevation, Looking W
45	Chimney adjacent to Building 4, Looking NW, Shows lozenge design
46	Modern brickwork between Buildings 1 and 4, Looking NW
47	Buildings 2, 3 and 4, Western elevation, Looking E
48	Buildings 2 and 3, Western elevation, shows join
49	Stone arch for mill race on western side of mill
50	Modern factory building on western side of mill buildings
51	Buildings 4 and 5, within modern factory building, Western elevation
52	Building 4, Western elevation, Looking east
53	Building 5, Northern elevation, Looking SE
54	Building 5, Eastern elevation, Looking SW

55	Building 4, Northern elevation, Looking SE
56	Building 7 with modern extension, W elevation, Looking E
57	Building 6, Northern elevation, Looking S, 1x2.0m
58	Building 7, Western elevation, Looking E, furnace, 1x2.0m
59	Building 7, Northern elevation, 1x2.0m
60	Building 7, Northern elevation, Looking SE, 1x2.0m
61	Building 7, Looking S, Internal, Staircase
62	Building 7, First floor, Skylight in roof
63	Building 7, First floor, SW room, Looking SW, Door and fireplace
64	Building 7, First floor, SE room, Looking SE, Door and fireplace
65	Building 7, First floor, Lobby area, Looking NW
66	Building 7, First floor, NW room, Looking NW
67	Building 7, Eastern elevation, Looking SW
68	Building 7, Eastern elevation, Looking W, I.R. Jenkins sign
69	Building 8, Eastern elevation, Looking W, Door, 'Dayla Soft Drinks' plaque
70	Building 8, Eastern elevation, Looking NW
71	Building 8, Southern elevation, Looking NW
72	Building 7, Southern elevation, Looking N
73	Building 6, Southern elevation, Looking NW
74	Site shot from Building 4, First floor, Looking NE
75	Site shot from Building 4, First floor, Looking E
76	Building 2, Basement, Eastern elevation, Looking SE
77	Building 2, Basement, Southern elevation, Looking SW
78	Building 2, Basement, Western elevation, Looking NW
79	Building 2, Basement, Northern elevation, Looking N
80	Building 2, Basement, Flag stone floor with concrete skin, Looking NE, 1x1.0m
81	Building 3, Basement, Southern elevation, Looking SE
82	Building 3, Basement, Southern elevation, Blocked door and stairs
83	Building 3, Basement, Southern elevation, Looking NE, Mill machinery
84	Building 3, Basement, Looking E, Mill machinery
85	Building 3, Basement, Looking NW, Mill machinery
86	Building 3, Basement, Looking SE, Mill machinery
87	Building 3, Basement, Northern elevation, Looking N, Mill machinery
88	Building 3, Basement, Looking N, Flag floor, 1x1.0m
89	Building 4, Basement, Looking W, Stairwell recess, 1x1.0m
90	Building 4, Basement, Quarry tile in stairwell recess, 1x1.0m
91	Building 4, Basement, Looking N, Drainage channel, 1x1.0m
92	Building 4, Basement, Southern elevation, Doorway to Building 3, Looking S
93	Building 4, Basement, Northern elevation, Western end, 1x1.0m
94	Building 4, Basement, Northern elevation, Eastern end, 1x1.0m
95	Building 4, Basement, Tangye steam engine, Looking NE
96	Building 4, Basement, Tangye steam engine, Looking N
97	Building 4, Basement, Boiler, Looking NE
98	Building 4, Basement, Tangye steam engine, Looking SE
99	Building 4, Basement, Channel along eastern elevation, Looking S
100	Building 4, Basement, Tangye steam engine and machinery, Looking SE
101	Building 4, Basement, Channel alongside mill wheel housing, Looking E
102	Building 4, Basement, Eastern elevation, mill race entrance to wheel, Looking S
103	Building 4, Basement, Eastern elevation, piped mill race to wheel, Looking S
104	Building 4, Basement, Tangye steam engine, Looking W
105	Building 4, Basement, Mill wheel viewed through archway in housing, Looking S
106	Building 4, Ground floor, Mill Wheel from above looking to basement
107	Building 4, Ground floor, Mill Wheel from above looking to basement
108	Building 4, Ground floor, Staircase, Looking east
109	Building 4, Ground floor, Northern elevation, Looking NW
110	Building 4, Ground floor, Southern elevation, Corner quoins of building 3, Looking SE
111	Building 4, First floor, Northern elevation, Looking north
112	Building 4, First floor, Staircase, Looking east

113	Building 4, First floor, Southern elevation, Machinery
114	Building 3, First floor, Roof
115	Building 3, First floor, Mezzanine level, Looking east
116	Building 3, First floor, Northern elevation, Machinery, Looking north
117	Building 3, First floor, Northern elevation, Machinery, Looking east
118	Building 3, First floor, Row of posts, Foreground post removed, Looking east
119	Building 4, Second floor, Chutes cutting floor and stair banister, Looking west
120	Building 4, Second floor, Roof, Looking east
121	Building 3, Ground floor, Northern elevation, machinery, Looking NW
122	Building 3, Ground floor, Mill wheels not in situ, Looking north
123	Building 3, Ground floor, Chutes and pulleys, Looking west
124	Building 2, Ground floor, Southern elevation, Pulley, Looking south

B. Colour Slides

No.	Description
1	Building 1, Looking NE to building 6, truss 2
2	Building 1, Looking NE to building 6, truss 2
3	Building 1, Basement, Northern elevation
4	Building 1, Basement, Northern elevation, original sandstone window jambs
5	Building 1, Basement, Eastern elevation
6	Building 1, Basement, Western elevation
7	Building 1, Basement, Looking S, Stone doorway
8	Building 1, Basement, Looking S, drainage channels in floor
9	Building 1, Basement, Looking S, drainage channels in floor, 1x2.0m, 1x1.0m, 1x0.5m
10	Building 1, Basement, Looking S, drainage channels in floor, 1x2.0m, 1x1.0m, 1x0.5m
11	Building 1, Southern elevation, Basement doorway, 1x2.0m
12	Building 1, Looking NE, Southern elevation
13	Building 1, Looking SW, Eastern elevation at Southern end, 1x2.0m
14	Building 1, Looking S, Internal, Truss
15	Building 1, Looking SE, Internal, E elevation, 1x2.0m
16	Building 1, Looking N, Internal, N elevation, 1x2.0m
17	Building 1, Looking N, Internal, N elevation, 1x2.0m
18	Building 1, Looking S, Northern elevation, 1x2.0m
19	Building 1, Looking S, Northern elevation showing adjacent buildings to west, 1x2.0m
20	Building 1, Looking SE, Northern elevation showing adjacent buildings to east, 1x2.0m
21	Building 1, Looking E, Western elevation, 1x2.0m
22	Building 1, Western elevation, Carpenters marks, III and IIII
23	Building 1, Western elevation, Carpenters marks, V
24	Building 1, Western elevation, Carpenters marks, II
25	Building 1, Western elevation, Internal, Door and blocked window, 1x2.0m
26	Building 1, Western elevation, Internal, N end, 1x2.0m
27	Building 1, Looking N, Truss 1
28	Building 1, Looking N, End truss
29	Building 1, Looking N, End truss
30	Building 1, Western elevation, Internal, Window opening with dowel holes
31	Building 1, Looking NW, Western elevation, Cut through wall plate for door insertion
32	Building 1, Roof
33	Building 9, Looking NE, Modern façade
34	Site shot, Looking N, Buildings 6 and 7
35	Site shot, Looking NW
36	Pond and sluice gate
37	Sluice gate
38	Looking NE, Modern wall infill, Adjacent to building 2, 1x2.0m
39	Looking SE, Stone slabs and concrete adjacent to building 2, 1x1.0m
40	Building 2, East elevation, 1x2.0m
41	Buildings 2, 3 and 4, Looking N, Changes in ground level, 1x2.0m
42	Building 2, East elevation, Looking SW, 1x1.0m
43	Building 3, East elevation with porch canopy, Looking NW, 1x2.0m, 1x1.0m
44	Building 3, East elevation, Looking SW
45	Building 4, East elevation, Looking W
46	Chimney adjacent to Building 4, Looking NW, Shows lozenge design
47	Modern brickwork between Buildings 1 and 4, Looking NW
48	Buildings 2, 3 and 4, Western elevation, Looking E
49	Buildings 2 and 3, Western elevation, shows join
50	Stone arch for mill race on western side of mill
51	Modern factory building on western side of mill buildings
52	Buildings 4 and 5, within modern factory building, Western elevation
53	Building 5, Northern elevation, Looking SE
54	Building 4, Western elevation, Looking east
55	Building 4, Northern elevation, Looking SE

56	Building 7 with modern extension, W elevation, Looking E
57	Building 6, Northern elevation, Looking S, 1x2.0m
58	Building 7, Western elevation, Looking E, furnace, 1x2.0m
59	Building 7, Northern elevation, 1x2.0m
60	Building 7, Northern elevation, Looking SE, 1x2.0m
61	Building 7, Looking S, Internal, Staircase
62	Building 7, First floor, Skylight in roof
63	Building 7, First floor, Skylight in roof
64	Building 7, First floor, SW room, Looking SW, Door and fireplace
65	Building 7, First floor, SE room, Looking SE, Door and fireplace
66	Building 7, First floor, Lobby area, Looking NW
67	Building 7, First floor, NW room, Looking NW
68	Building 7, Eastern elevation, Looking SW
69	Building 7, Eastern elevation, Looking W, I.R. Jenkins sign
70	Building 8, Eastern elevation, Looking W, Door, 'Dayla Soft Drinks' plaque
71	Building 8, Eastern elevation, Looking NW
72	Building 8, Southern elevation, Looking NW
73	Building 7, Southern elevation, Looking N
74	Building 6, Southern elevation, Looking NW
75	Building 6, Eastern elevation, Looking NW
76	View of site, Looking North
77	View of site, Looking North
78	Site shot from Building 4, First floor, Looking NE
79	Site shot from Building 4, First floor, Looking E
80	Building 2, Basement, Eastern elevation, Looking SE
81	Building 2, Basement, Southern elevation, Looking SW
82	Building 2, Basement, Northern elevation, Looking N
83	Building 2, Basement, Flag stone floor with concrete skin, Looking NE, 1x1.0m
84	Building 3, Basement, Southern elevation, Looking SE
85	Building 3, Basement, Southern elevation, Blocked door and stairs
86	Building 3, Basement, Southern elevation, Looking NE, Mill machinery
87	Building 3, Basement, Looking NW, Mill machinery
88	Building 3, Basement, Looking SE, Mill machinery
89	Building 3, Basement, Northern elevation, Looking N, Mill machinery
90	Building 3, Basement, Looking N, Flag floor, 1x1.0m
91	Building 4, Basement, Looking W, Stairwell recess, 1x1.0m
92	Building 4, Basement, Quarry tile in stairwell recess, 1x1.0m
93	Building 4, Basement, Looking N, Drainage channel, 1x1.0m
94	Building 4, Basement, Southern elevation, Doorway to Building 3, Looking S
95	Building 4, Basement, Northern elevation, Western end, 1x1.0m
96	Building 4, Basement, Northern elevation, Western end, 1x1.0m
97	Building 4, Basement, Northern elevation, Eastern end, 1x1.0m
98	Building 4, Basement, Tangye steam engine, Looking NE
99	Building 4, Basement, Boiler, Looking NE
100	Building 4, Basement, Tangye steam engine and machinery, Looking SE
101	Building 4, Basement, Channel alongside mill wheel housing, Looking E
102	Building 4, Basement, Eastern elevation, mill race entrance to wheel, Looking S
103	Building 4, Basement, Tangye steam engine, Looking W
104	Building 4, Basement, Mill wheel viewed through archway in housing, Looking S
105	Building 4, Ground floor, Mill Wheel from above looking to basement
106	Building 4, Ground floor, Mill Wheel from above looking to basement
107	Building 4, Ground floor, Machinery on south wall
108	Building 4, Ground floor, Machinery on south wall
109	Building 4, Ground floor, Staircase, Looking east
110	Building 4, Ground floor, Northern elevation, Looking NW
111	Building 4, Ground floor, Southern elevation, Corner quoins of building 3, Looking SE
112	Building 4, First floor, Northern elevation, Looking north
113	Building 4, First floor, Staircase, Looking east

114	Building 4, First floor, Southern elevation, Machinery
115	Building 3, First floor, Roof
116	Building 3, First floor, Mezzanine level, Looking east
117	Building 3, First floor, Northern elevation, Machinery, Looking north
118	Building 3, First floor, Northern elevation, Machinery, Looking east
119	Building 3, First floor, Row of posts, Foreground post removed, Looking east
120	Building 3, Ground floor, Northern elevation, machinery, Looking NW
121	Building 3, Ground floor, Mill wheels not in situ, Looking north
122	Building 3, Ground floor, Chutes and pulleys, Looking west
123	Building 2, Ground floor, South wall, Earlier roofline
124	Building 2, Ground floor, North wall, Looks through to building 3
125	Building 2, Ground floor, Roof truss
126	Building 2, Ground floor, Southern elevation, Pulley, Looking south

C. Monochrome Images

Sheet 1

No.	Description
5	Building 1, Looking NE to building 6, truss 2
6	Building 1, Looking NE to building 6, truss 2
7	Building 1, Basement, Northern elevation
8	Building 1, Basement, Northern elevation, original sandstone window jambs
9	Building 1, Basement, Eastern elevation
10	Building 1, Basement, Western elevation
11	Building 1, Basement, Looking S, Stone doorway
12	Building 1, Basement, Looking S, drainage channels in floor
13	Building 1, Basement, Looking S, drainage channels in floor, 1x2.0m, 1x1.0m, 1x0.5m
14	Building 1, Basement, Looking S, drainage channels in floor, 1x2.0m, 1x1.0m, 1x0.5m
18	Building 1, Looking S
19	Building 1, Looking S, Internal, Truss
20	Building 1, Looking SE, Internal, E elevation, 1x2.0m
21	Building 1, Looking N, Internal, N elevation, 1x2.0m
22	Building 1, Looking N, Internal, N elevation, 1x2.0m
26	Building 1, Looking E, Western elevation, 1x2.0m
27	Building 1, Western elevation, Carpenters marks, III and IIII
28	Building 1, Western elevation, Carpenters marks, V
29	Building 1, Western elevation, Carpenters marks, II
30	Building 1, Western elevation, Internal, S end
31	Building 1, Western elevation, Internal, Door and blocked window, 1x2.0m
32	Building 1, Western elevation, Internal, N end, 1x2.0m
33	Building 1, Looking N, Truss 1
34	Building 1, Looking N, End truss
35	Building 1, Looking N, End truss
36	Building 1, Western elevation, Internal, Window opening with dowel holes

Sheet 2

No.	Description
1	Building 8, Looking N, Modern façade
2	Building 8, Looking S, Internal elevation and weighing machine
3	Site shot, Looking N, Buildings 6 and 7
4	Site shot, Looking NW
5	Pond and sluice gate
6	Sluice gate
7	Looking NE, Modern wall infill, Adjacent to building 2, 1x2.0m
8	Looking SE, Stone slabs and concrete adjacent to building 2, 1x1.0m
9	Building 2, East elevation, 1x2.0m
10	Buildings 2, 3 and 4, Looking N, Changes in ground level, 1x2.0m
11	Building 2, East elevation, Looking SW, 1x1.0m
12	Building 3, East elevation with porch canopy, Looking NW, 1x2.0m, 1x1.0m
13	Building 3, East elevation, Looking SW
14	Building 4, East elevation, Looking W
15	Chimney adjacent to Building 4, Looking NW, Shows lozenge design
16	Modern brickwork between Buildings 1 and 4, Looking NW
17	Buildings 2, 3 and 4, Western elevation, Looking E
18	Buildings 2 and 3, Western elevation, shows join
19	Stone arch for mill race on western side of mill
20	Modern factory building on western side of mill buildings
21	Buildings 4 and 5, within modern factory building, Western elevation
22	Building 4, Western elevation, Looking east
23	Building 5, Northern elevation, Looking SE
24	Building 5, Eastern elevation, Looking SW

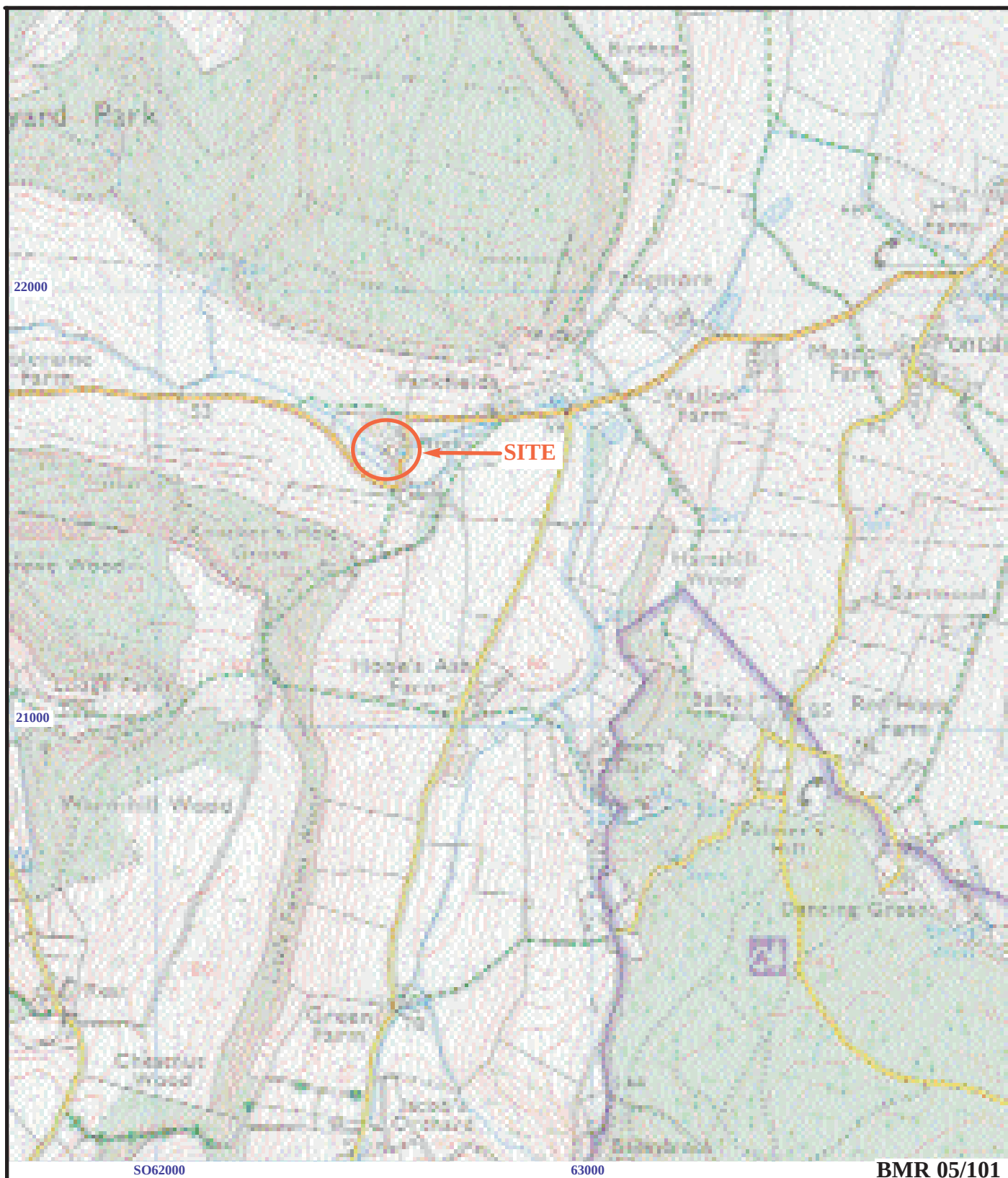
25	Building 4, Northern elevation, Looking SE
26	Building 7 with modern extension, W elevation, Looking E
27	Building 6, Northern elevation, Looking S, 1x2.0m
28	Building 7, Western elevation, Looking E, furnace, 1x2.0m
29	Building 7, Northern elevation, 1x2.0m
30	Building 7, Northern elevation, Looking SE, 1x2.0m
31	Building 7, Looking S, Internal, Staircase
32	Building 7, First floor, Skylight in roof
33	Building 7, First floor, SW room, Looking SW, Door and fireplace
34	Building 7, First floor, SE room, Looking SE, Door and fireplace
35	Building 7, First floor, Lobby area, Looking NW
36	Building 7, First floor, NW room, Looking NW

Sheet 3

No.	Description
2	Building 7, Eastern elevation, Looking W, I.R. Jenkins sign
3	Building 8, Eastern elevation, Looking W, Door, 'Dayla Soft Drinks' plaque
9	Site shot, Looking N
10	Site shot, Looking N
11	Site shot from Building 4, First floor, Looking NE
12	Site shot from Building 4, First floor, Looking E
13	Building 2, Basement, Eastern elevation, Looking SE
14	Building 2, Basement, Eastern elevation, Looking SE
15	Building 2, Basement, Southern elevation, Looking SW
16	Building 2, Basement, Western elevation, Looking NW
17	Building 2, Basement, Western elevation, Looking NW
18	Building 2, Basement, Northern elevation, Looking N
19	Building 2, Basement, Manhole covers in floor, Looking SW
20	Building 2, Basement, Flag stone floor with concrete skin, Looking NE, 1x1.0m
21	Building 3, Basement, Southern elevation, Looking SE
22	Building 3, Basement, Southern elevation, Blocked door and stairs
23	Building 3, Basement, Southern elevation, Looking NE, Mill machinery
24	Building 3, Basement, Looking E, Mill machinery
25	Building 3, Basement, Looking NW, Mill machinery
26	Building 3, Basement, Looking SE, Mill machinery
27	Building 3, Basement, Northern elevation, Looking N, Mill machinery
28	Building 3, Basement, Looking N, Flag floor, 1x1.0m
29	Building 4, Basement, Looking W, Stairwell recess, 1x1.0m
30	Building 4, Basement, Quarry tile in stairwell recess, 1x1.0m
31	Building 4, Basement, Looking N, Drainage channel, 1x1.0m
32	Building 4, Basement, Southern elevation, Doorway to Building 3, Looking S
34	Building 4, Basement, Northern elevation, Western end, 1x1.0m
35	Building 4, Basement, Northern elevation, Eastern end, 1x1.0m
36	Building 4, Basement, Tangye steam engine, Looking NE
37	Building 4, Basement, Tangye steam engine, Looking N

Sheet 4

No.	Description
0	Building 4, Basement, Boiler, Looking NE
1	Building 4, Basement, Tangye steam engine, Looking SE
3	Building 4, Basement, Tangye steam engine, Looking W
4	Building 4, Basement, Mill wheel viewed through archway in housing, Looking S
5	Building 4, Ground floor, Mill Wheel from above looking to basement
6	Building 4, Ground floor, Mill Wheel from above looking to basement
7	Building 4, Ground floor, Machinery on south wall, Looking E
9	Building 4, Ground floor, Northern elevation, Looking NW
10	Building 4, Ground floor, Southern elevation, Corner quoins of building 3, Looking SE
11	Building 4, First floor, Northern elevation, Looking north



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Figure 1. Location of site within Pontshill and Herefordshire

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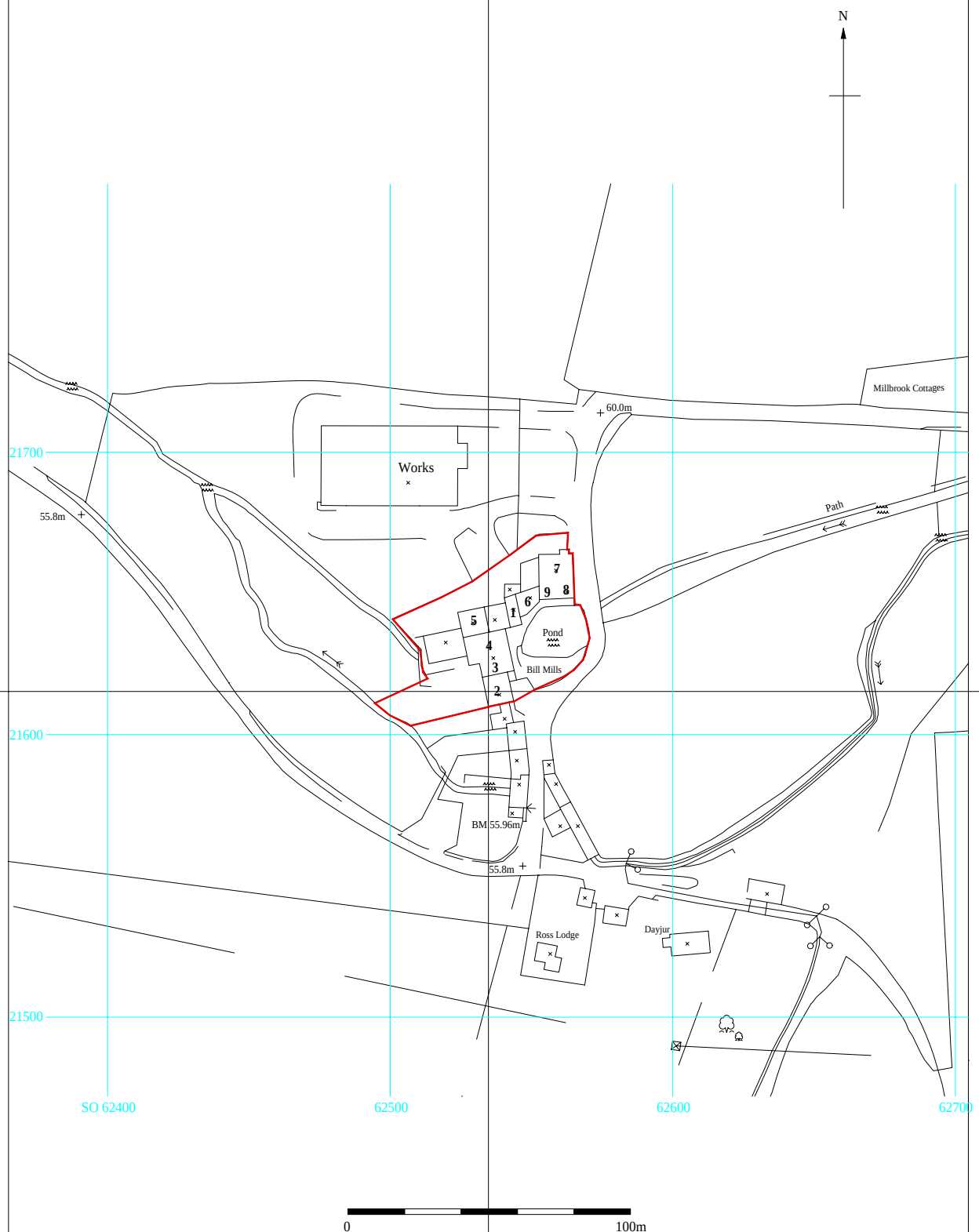
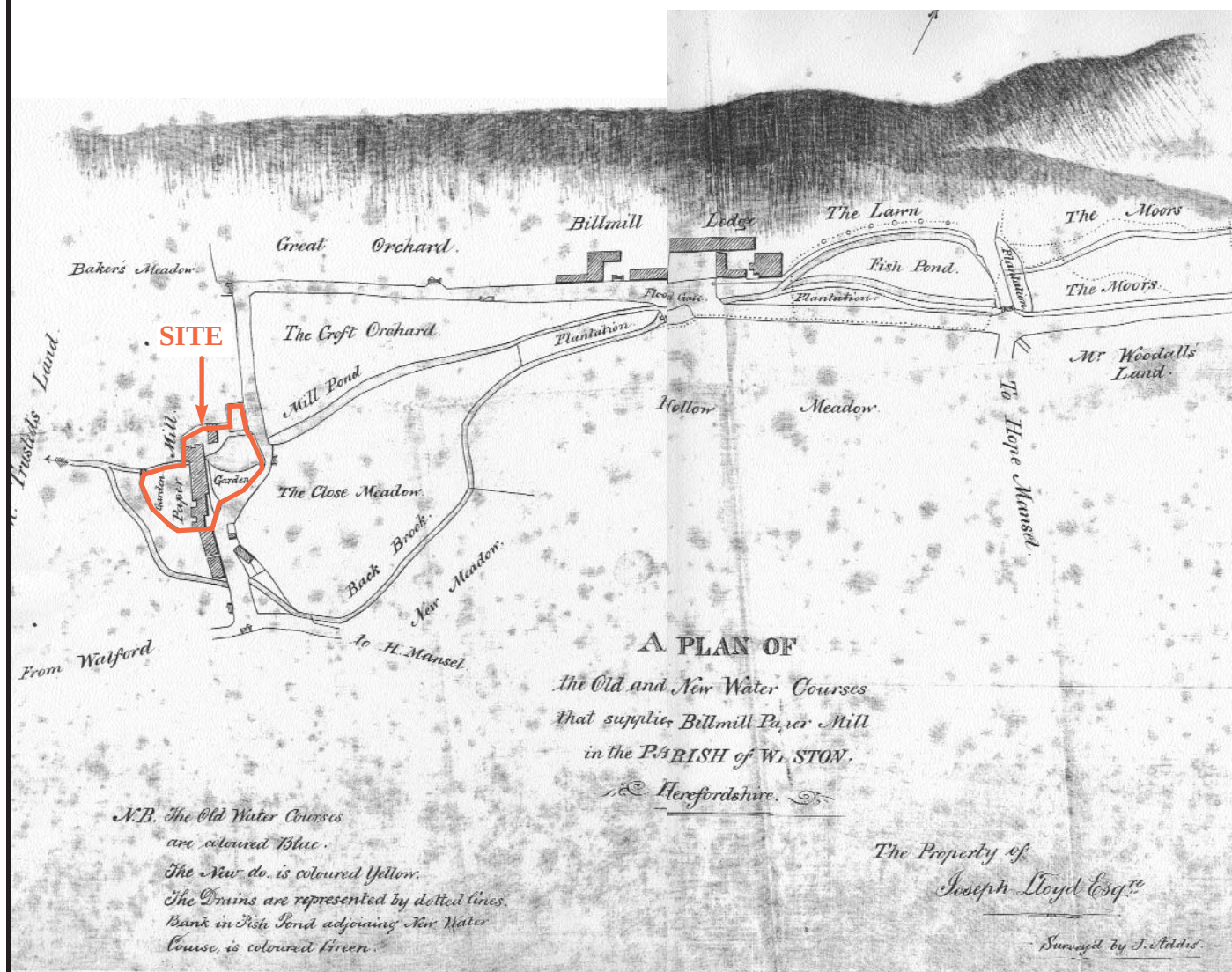


Figure 2. Location of mill buildings with assigned building numbers



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Figure 3. Plan of the watercourse, c.1820

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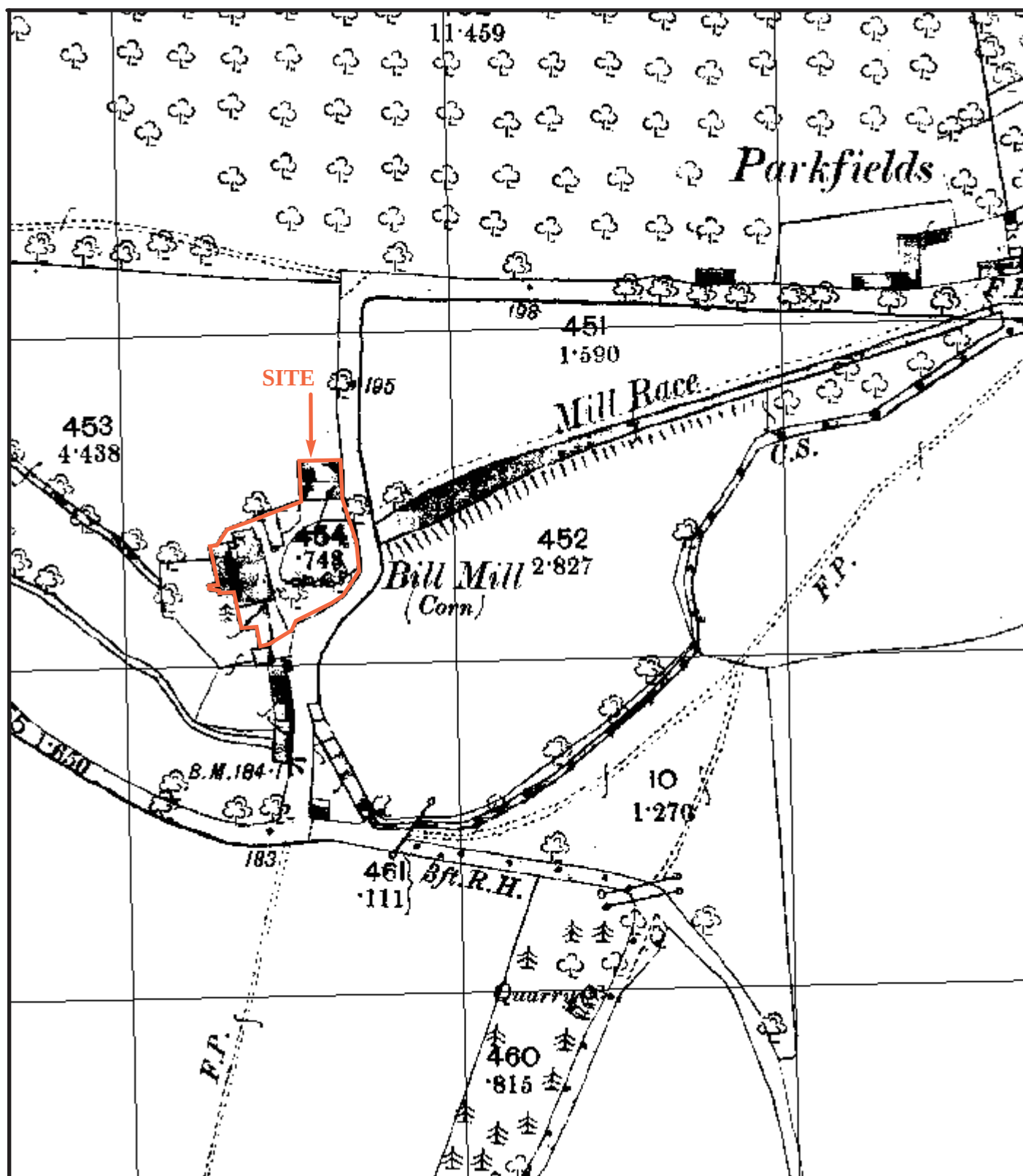


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Figure 4 . Tithe Map for Weston-Under Penyard,
1838

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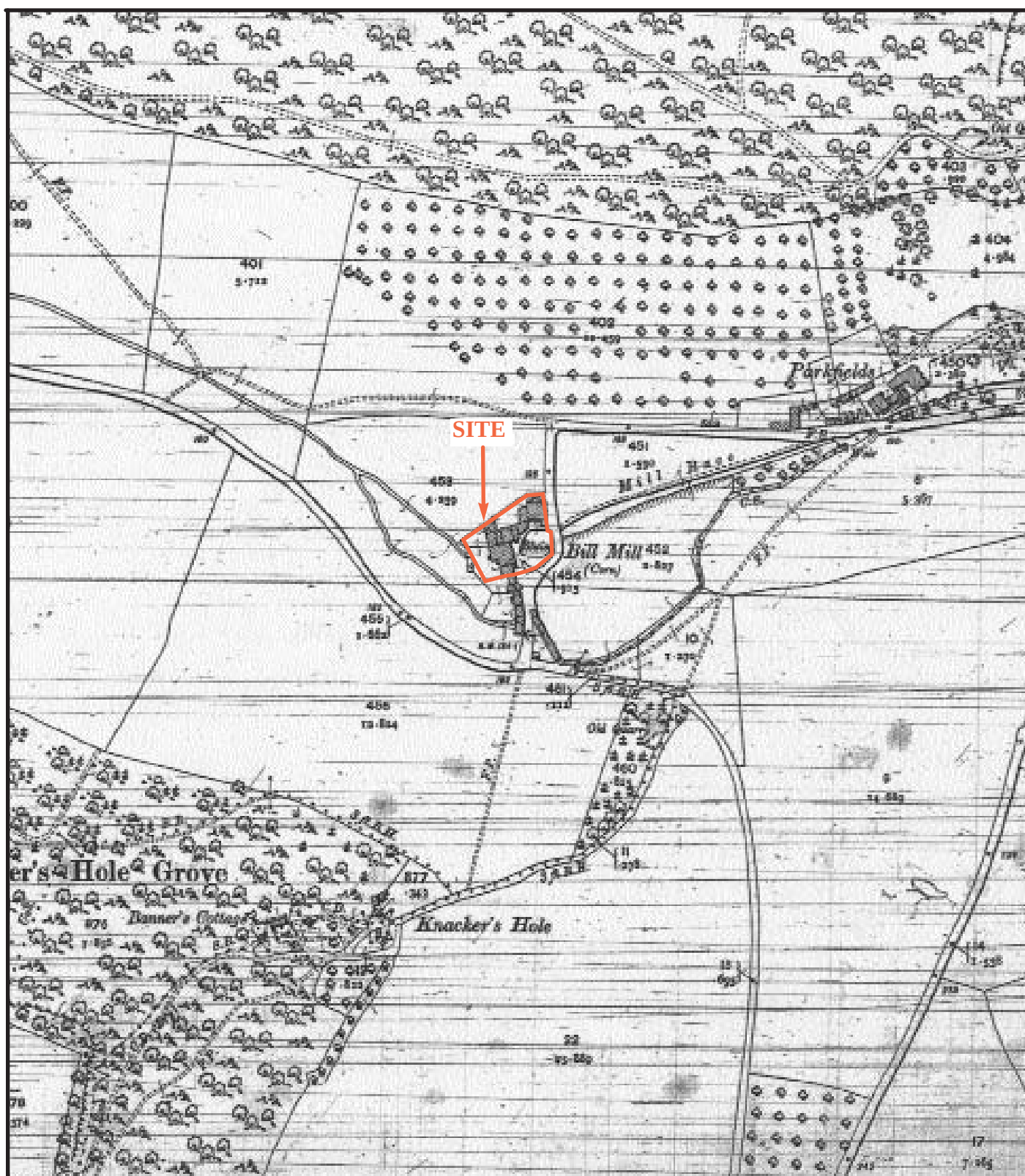


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Figure 5. Ordnance Survey, 1889

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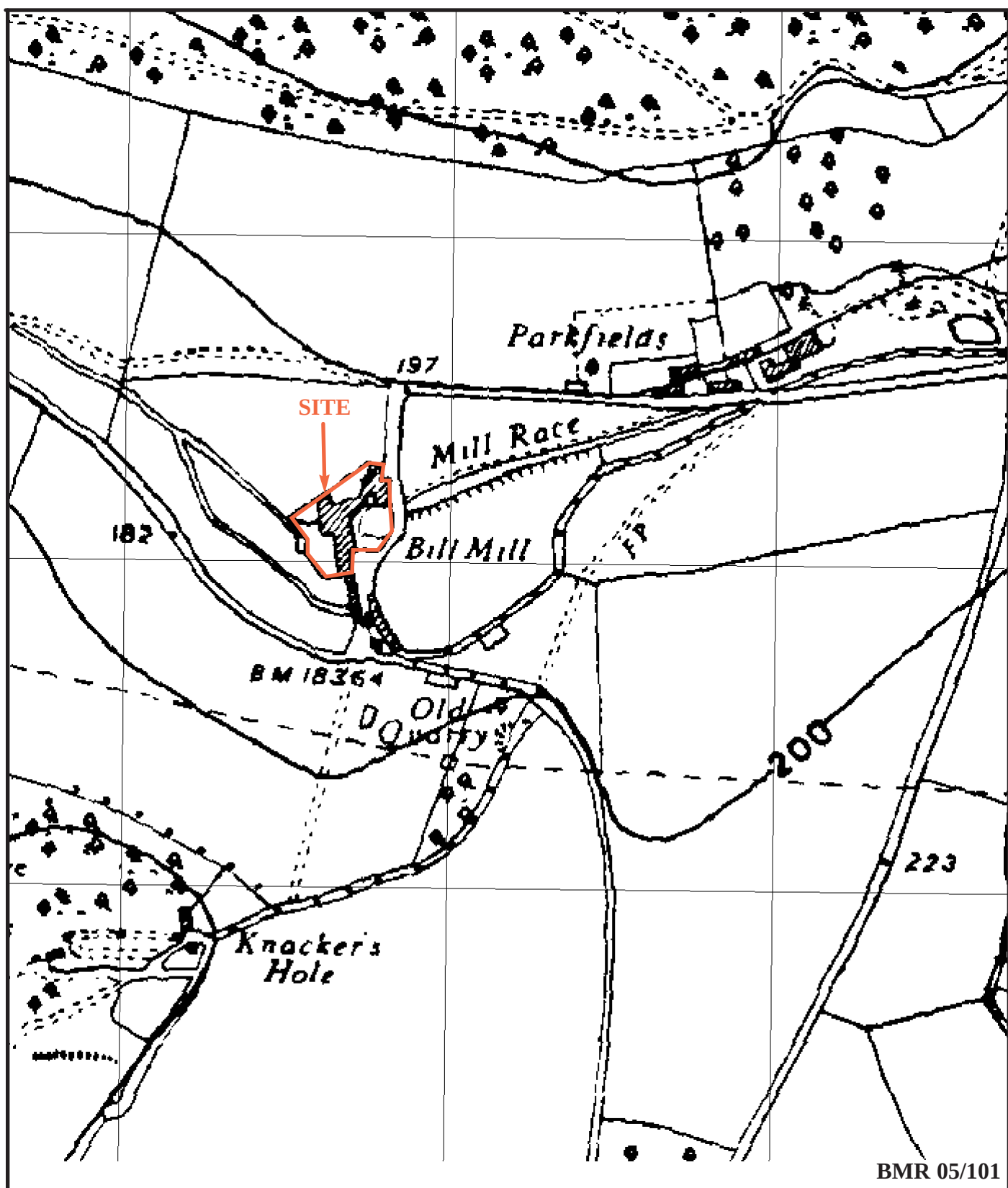


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Figure 6. Ordnance Survey 1904

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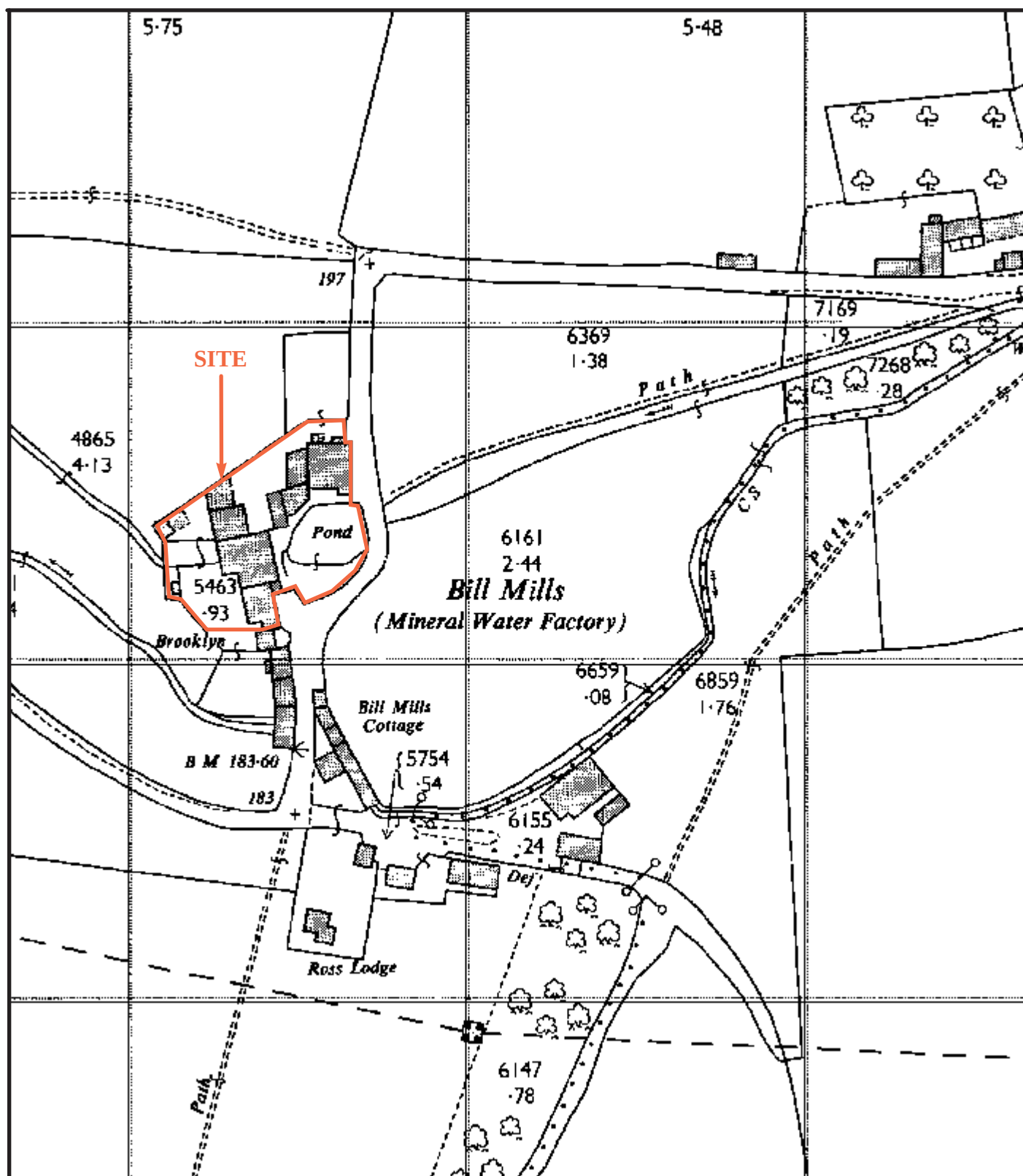


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Figure 7. Ordnance Survey, 1953

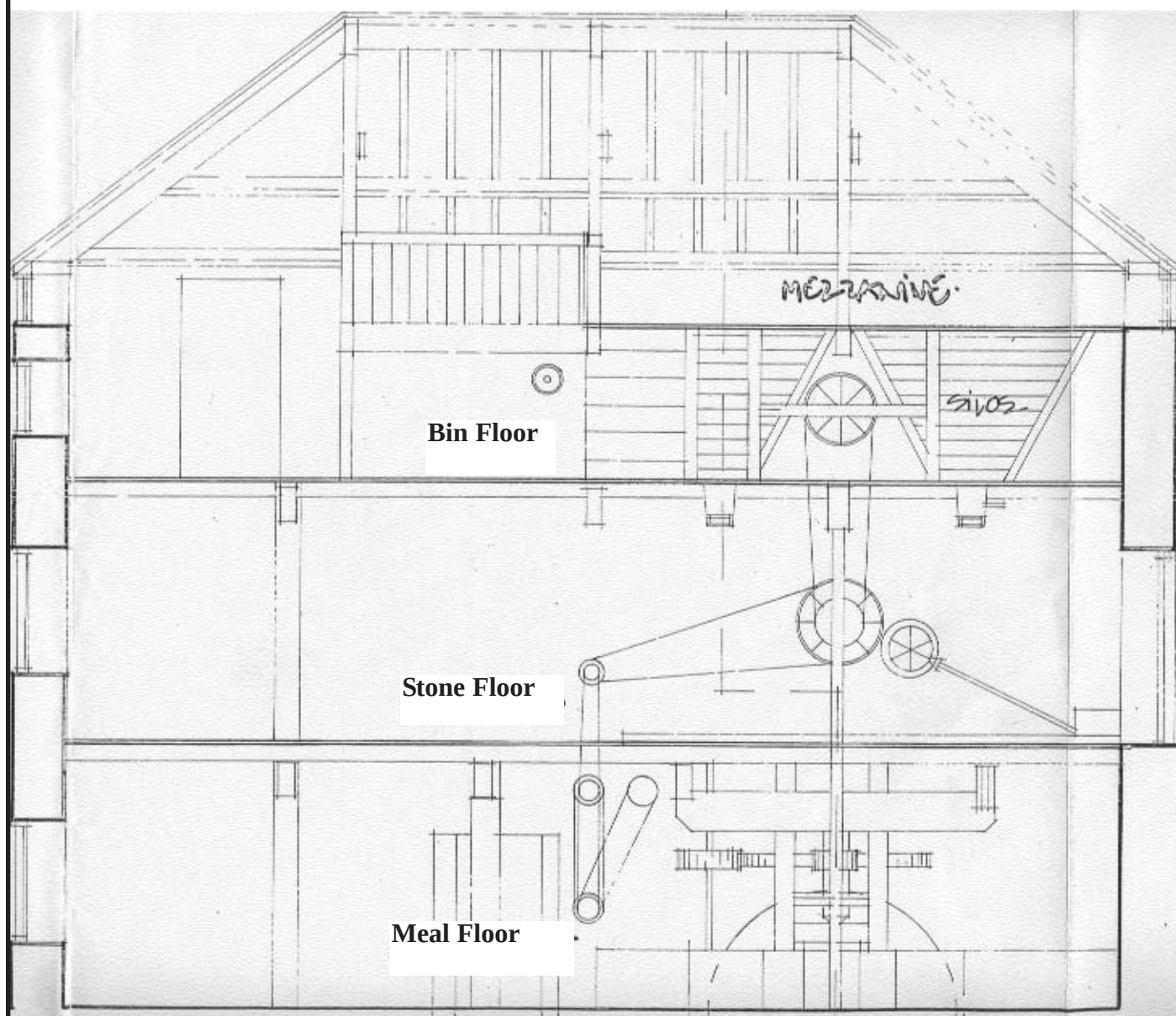
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Figure 8. Ordnance Survey, 1970

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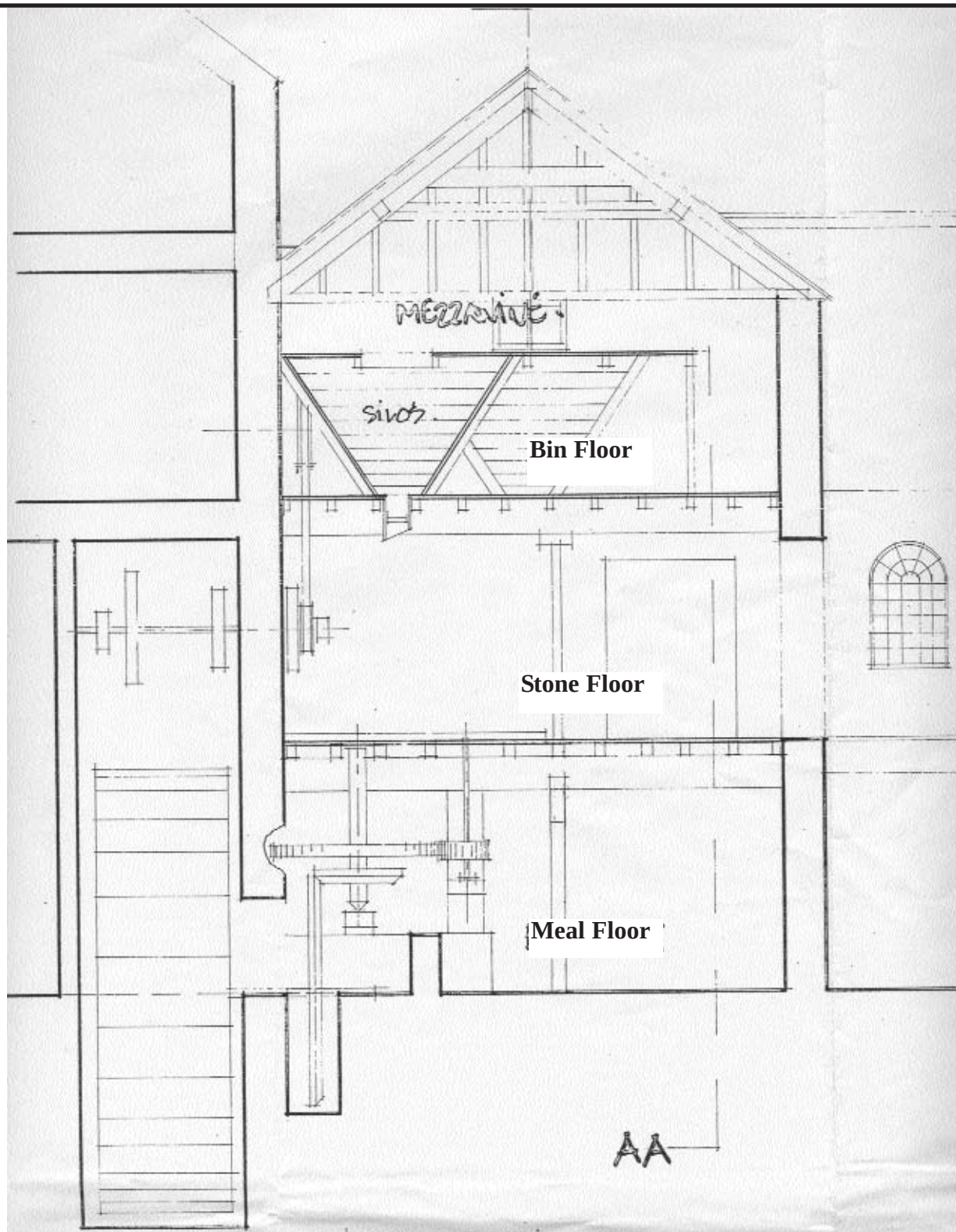


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Figure 9. Building 3, Elevation E-W, showing existing mill machinery

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Figure 10. Building 3 Elevation N-S, showing existing mill machinery

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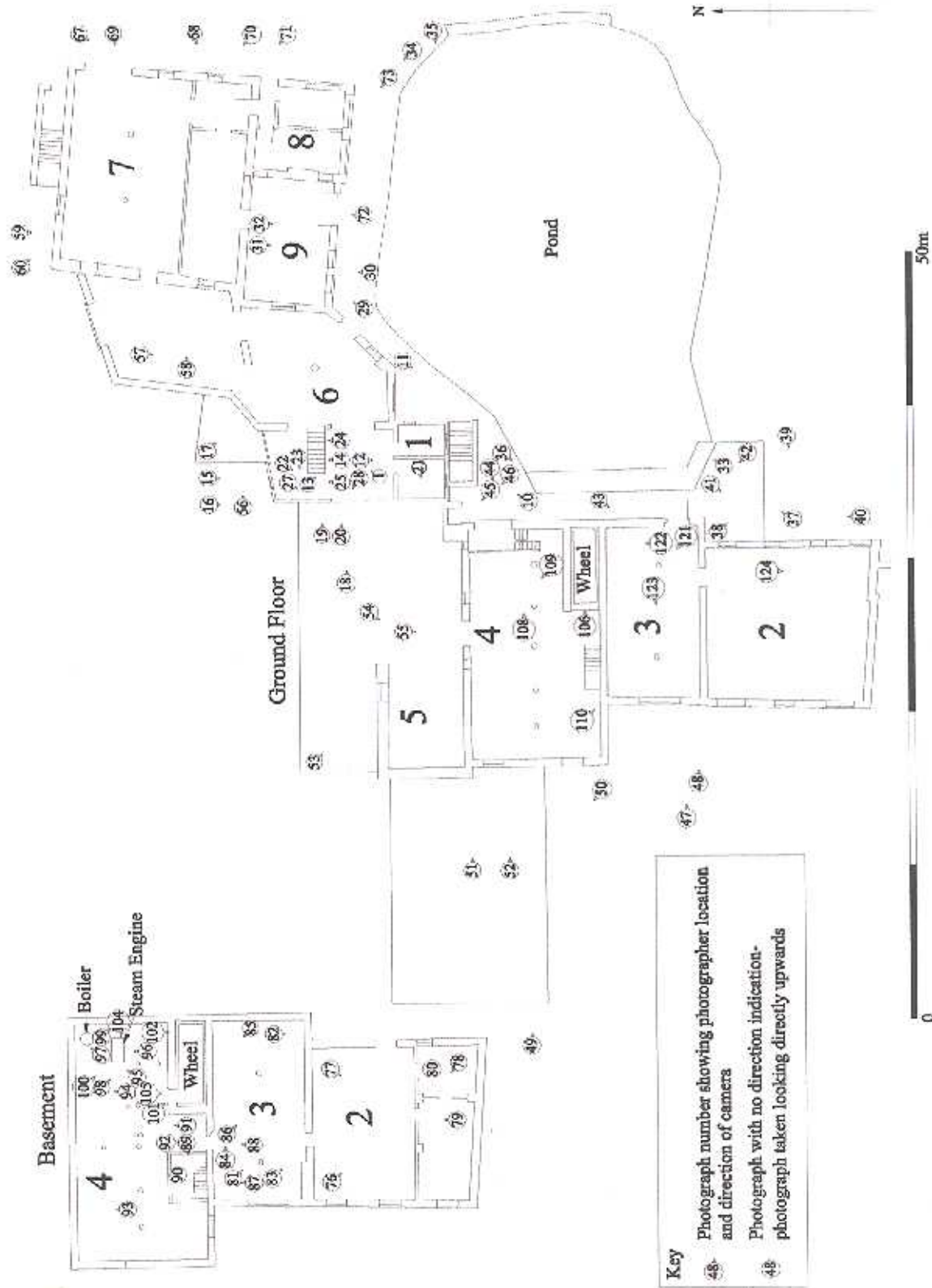


Figure 11. Plan of the basement and ground floor levels showing photograph locations.

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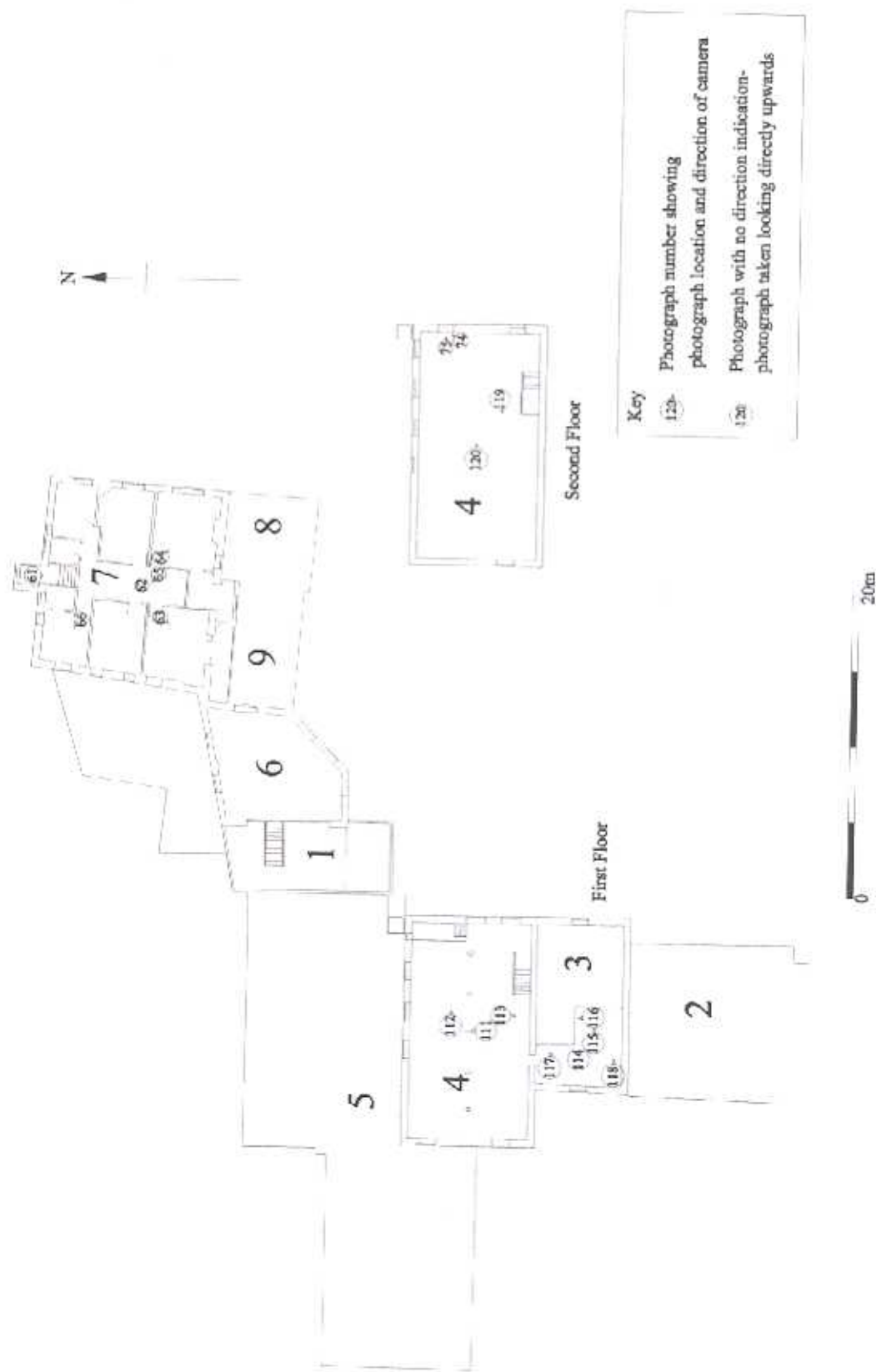


Figure 12. First and second floors of mill buildings showing the location of the photographs.

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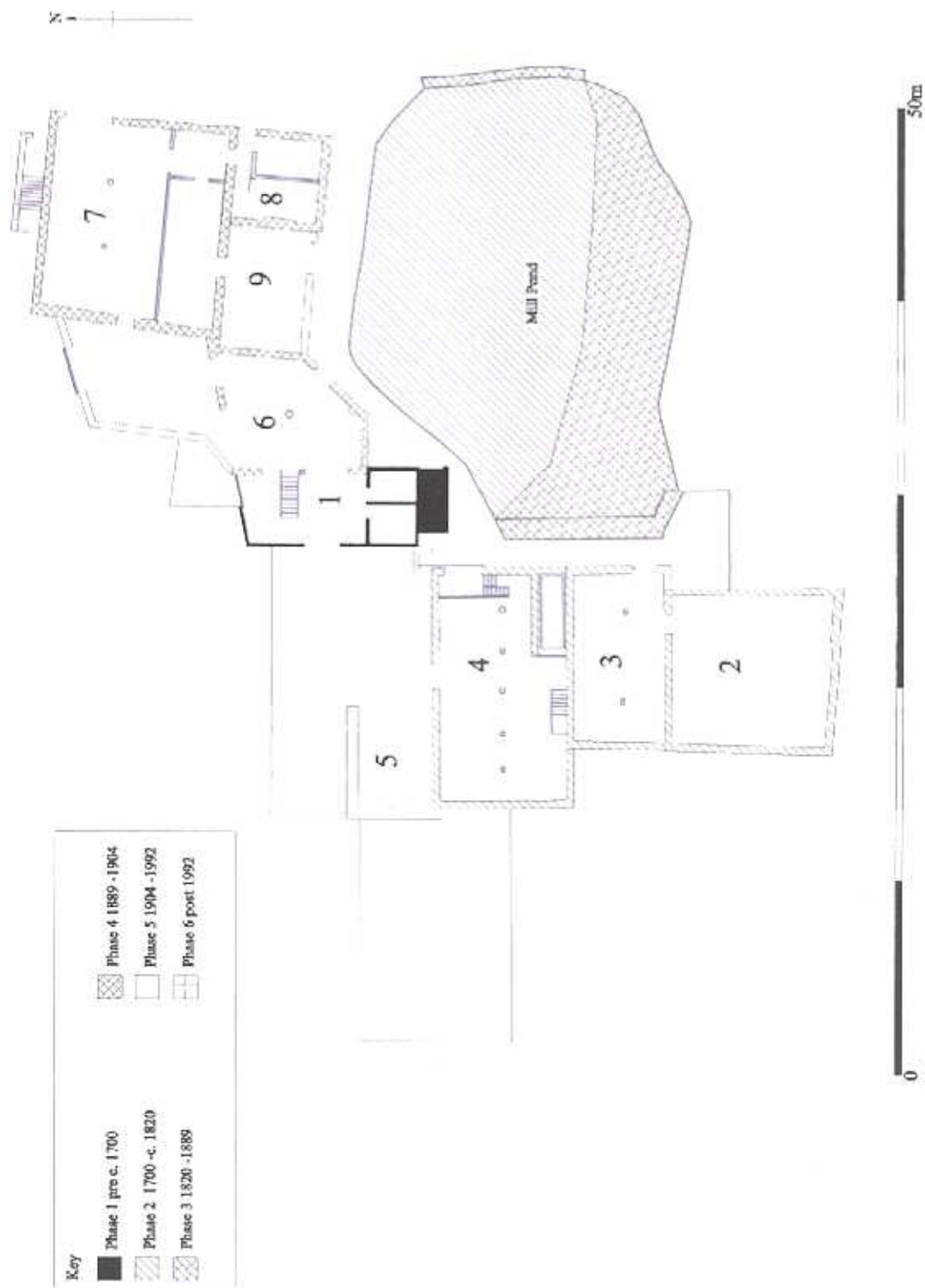


Figure 13. Phase plan of the building complex

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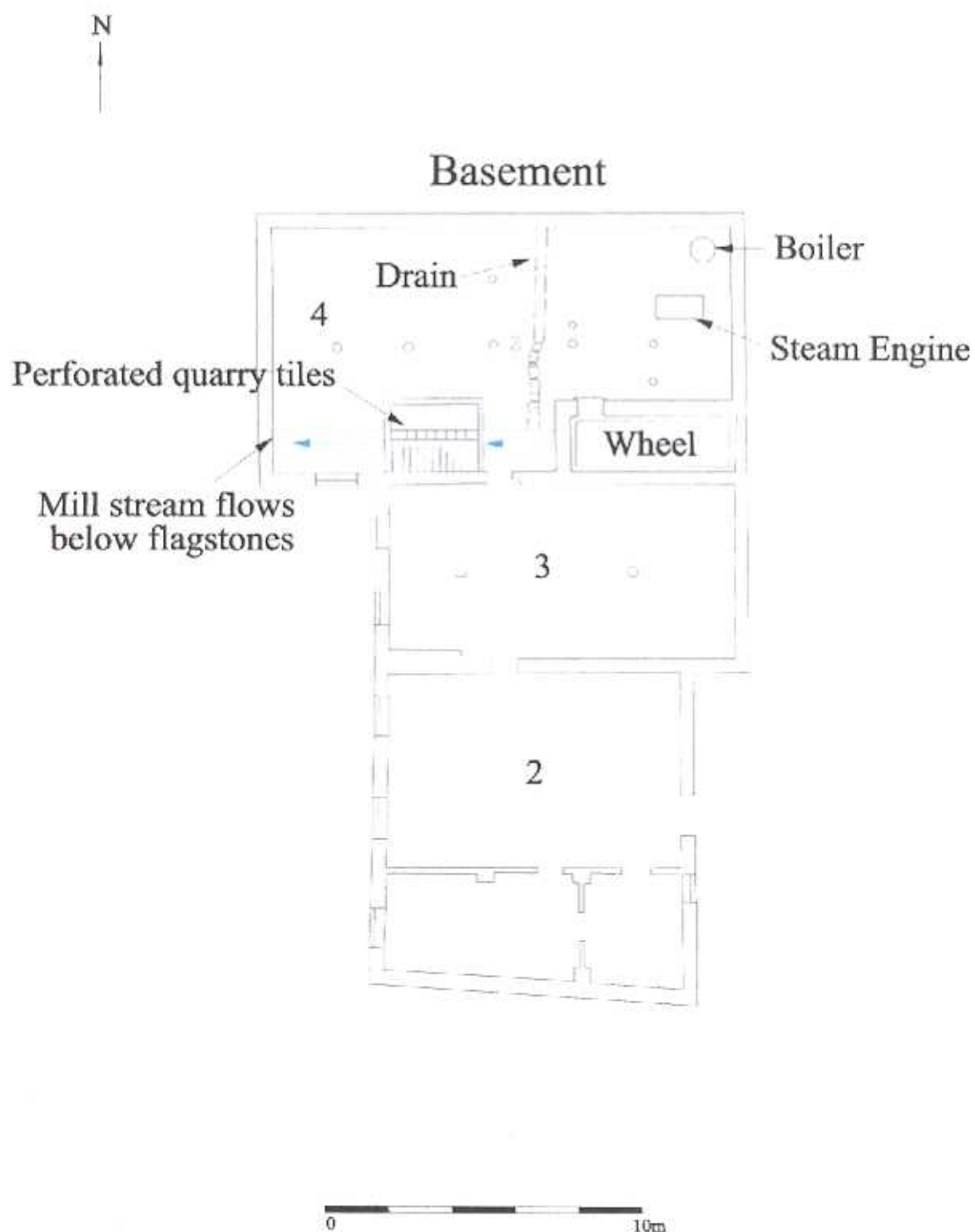


Figure 14. Basement level showing the quarry tiles, drain and mill stream in Building 4. BMR05/101



Plate 1. Building 1, southern elevation, Looking NE.



Plate 2. Building 1 basement, looking south towards the door, showing drainage channels and drain in the flag floor 1m, 2m and 0.50m scales.

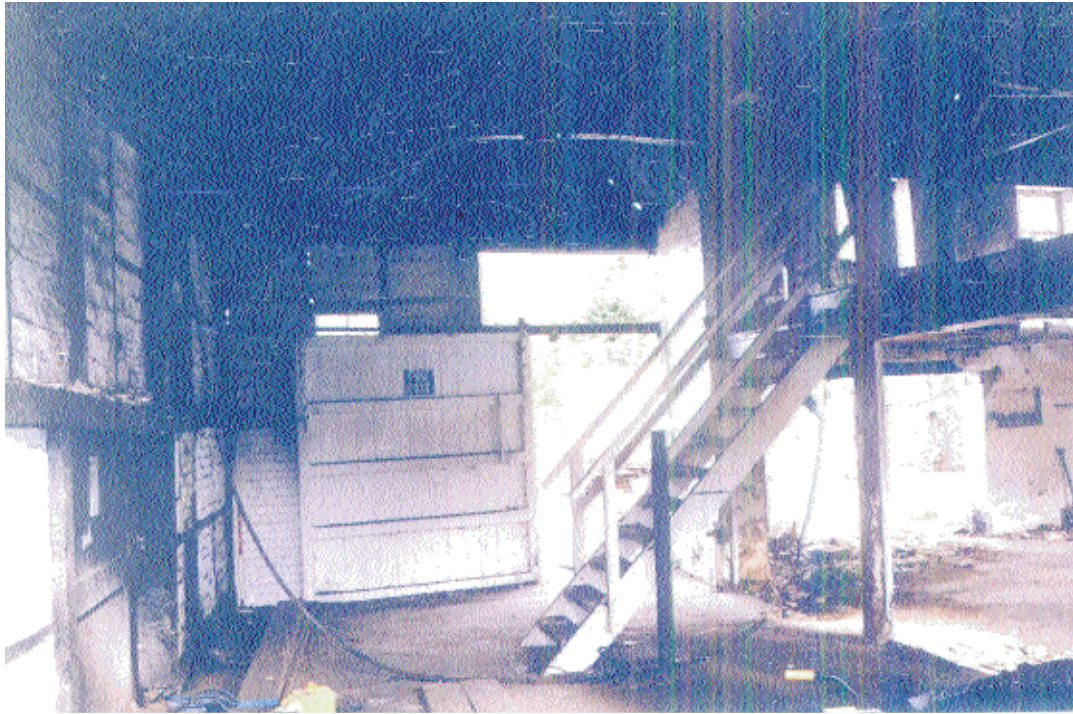


Plate 3. Interior of building 1 with east wall removed to incorporate Building 6, showing stairs to first floor of Building 6, Looking N.



Plate 4. Building 1 Carpenters marks III and IIII, External west wall, Looking E.



Plate 5. Building 2, Looking NW, Scales: 2m.



Plate 6. Building 2 Basement, eastern elevation, showing blocked doorway and window.



Plate 7. Building 3, Front eastern elevation, scales: 2m and 1m.



Plate 8. Rear western elevation of buildings 2, 3 and 4.



Plate 9. Pit wheel and wallower, Building 3, Basement, Looking E.

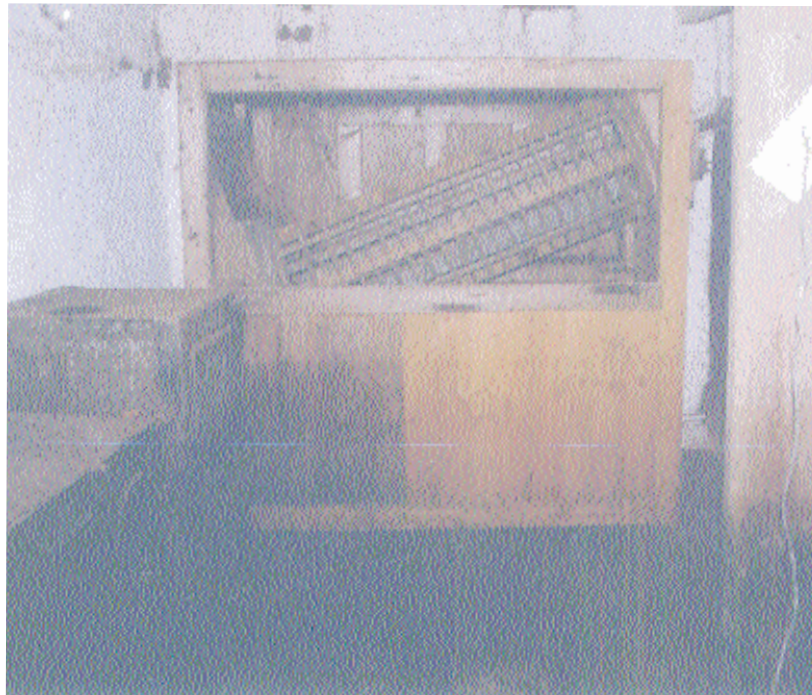


Plate 10. Bolter, Building 3, Basement, Looking N.

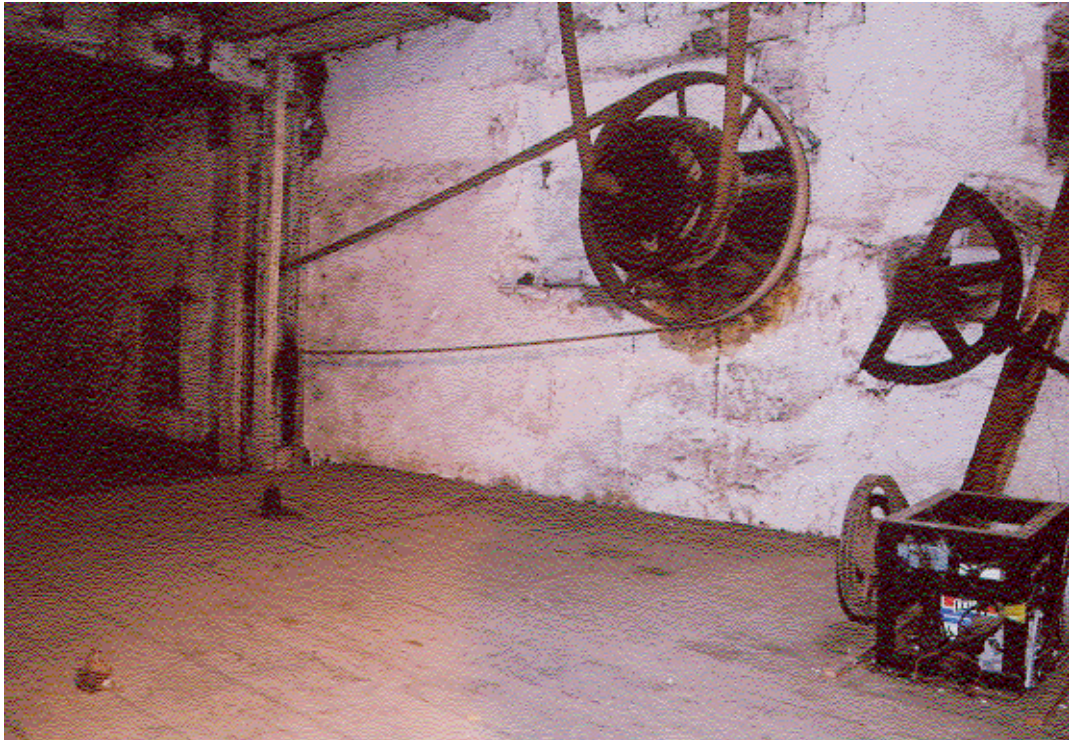


Plate 11. Stone floor, Mill machinery and the location of the mill stones, Building 3, Ground Floor, Looking NW.

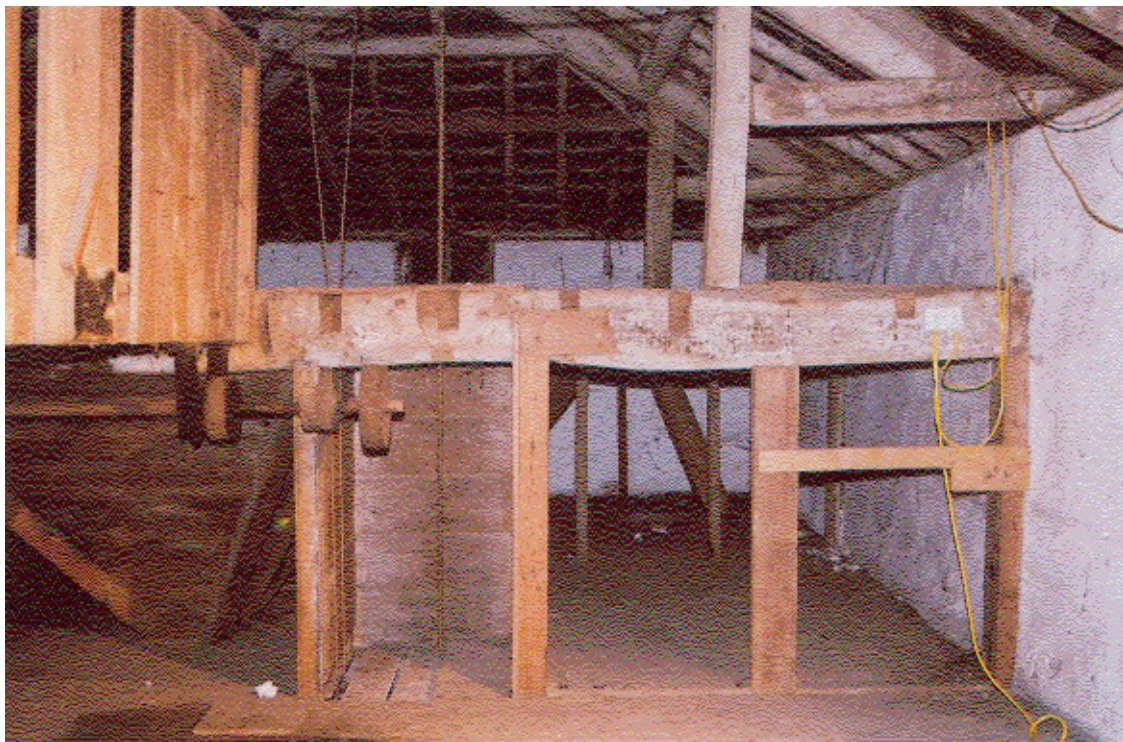


Plate 12. Mezzanine level on bin floor, Building 3, First floor, Looking E.



Plate 13. Building 4, Looking SW, Scales: 2m.

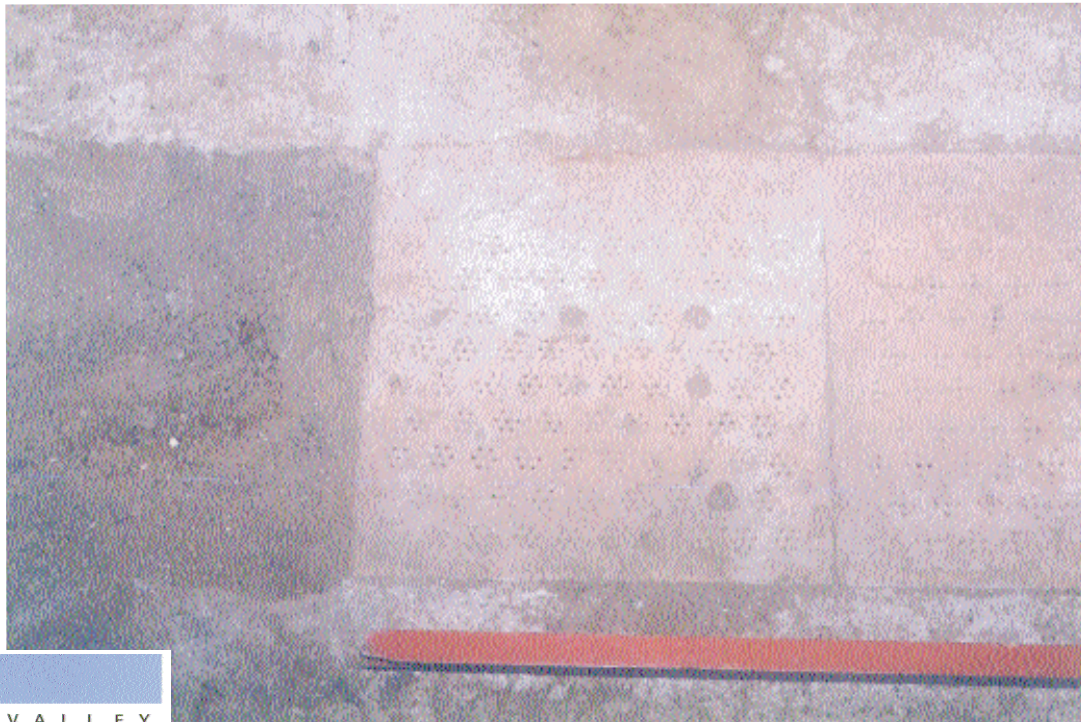


Plate 14. Building 4, Basement, Looking W, Recessed area at foot of staircase with perforated quarry tiles, Scales 1m.



Plate 15. North Wall, Building 4, Basement, Looking NE, Scales: 1m.



Plate 16. Tangye Steam engine and boiler, Building 4, Basement, Looking NE.



Plate 17. Tangye Steam engine and water wheel enclosed behind the wall, Building 4, Basement, Looking SE.

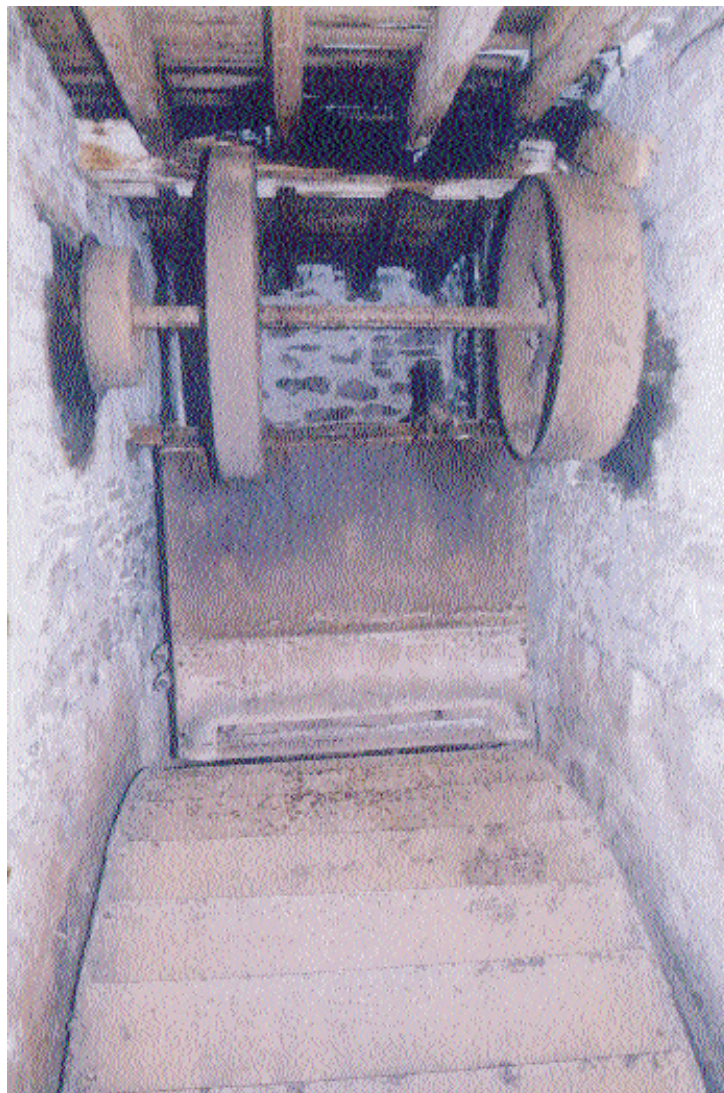


Plate 18. Water wheel Building 4, Ground floor, Looking E.



Plate 19. Chimney with lozenge design, Looking NW.



Plate 20. Building 7, 8 and external staircase, Looking SW,
Scales: 2m.



Plate 21. Building 6, eastern elevation.



Plate 22. Mill pond and sluice gate. The mill wheel is in the basement of building 4 immediately behind the sluice gate, Looking W.



Plate 23. Quoin stones of Building 3 observed in south wall of Building 4, Building 4, Ground floor, Looking SE



Plate 24. Mill pond and buildings 6, 7, 8, and 9 looking north.