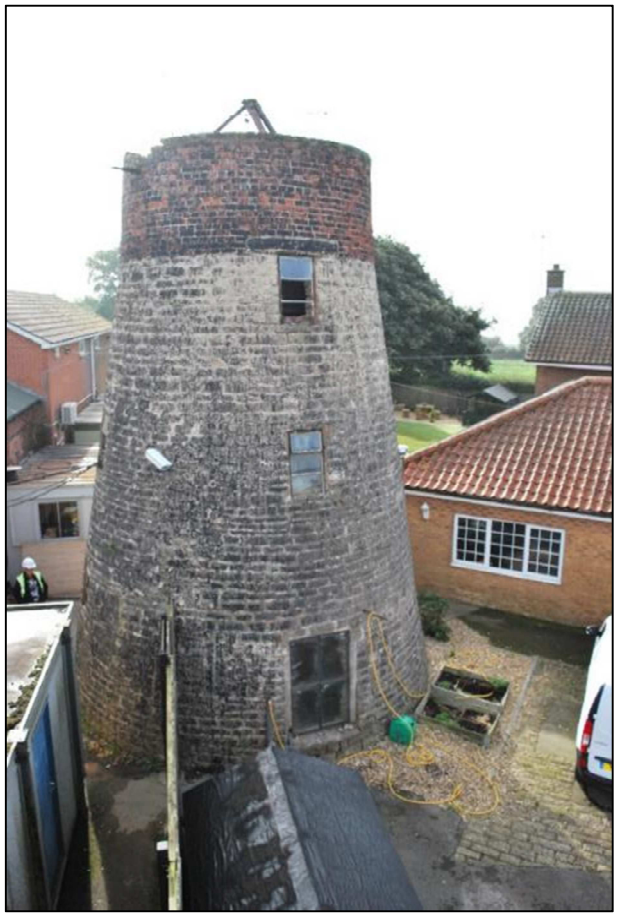
HISTORIC BUILDING SURVEY REPORT:

WINDMILL HOUSE FARM, FOREST ROAD, WARSOP, NOTTINGHAMSHIRE

Planning Reference: 2016/0050/NT
NGR: SK 5823 6628
AAL Site Code: WAFR16
Museum Accession Number: MASMG 2016-489
OASIS Reference Number: allenarc1-265135



Report prepared for Bowring Transport

By
Allen Archaeology Limited
Report Number AAL 2016158

October 2016

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Version no.:	1.0	27/10/2016

Cover image: Warsop Windmill, looking southeast

Executive Summary

- Allen Archaeology Limited was commissioned by Bowring Transport Limited to undertake a programme of historic building recording of Warsop Windmill at Windmill House Farm, Forest Road, Warsop, Nottinghamshire, as a condition of Listing Building Consent prior to internal and external alterations to the building.

- Warsop Windmill dates to the beginning of the 19th century and is a stone mill, raised in brick at a later date. It had fallen into disuse by 1897. The cap and parts of the machinery were still in place in the early 1900s, however only the tower remained by the 1930s. Since that date it has been used for storage by a farm previously located on the site, and possibly had some domestic use, given the presence of a modern boiler unit.

- This survey has recorded the standing fabric of the building. It is a relatively small tower mill, only rising to three storeys, but otherwise appears fairly typical in construction. Internally the floors and ceilings are still in place, however, they are in poor condition and appear to have been subject to a number of *ad hoc* repairs. No machinery associated with the former operation of the building as a mill survives. The relatively short period of use is of interest as the building itself is not in particularly poor condition, and therefore its abandonment and disuse may relate to a general decline in the use of buildings of this type during the Industrial Revolution.

1.0 Introduction

1.1 Allen Archaeology Limited (AAL) was commissioned by Bowring Transport Limited to undertake a programme of historic building recording of Warsop Windmill at Windmill House Farm, Forest Road, Warsop, Nottinghamshire. The work has been undertaken to fulfil a condition of Listed Building Consent for internal and external alterations to the windmill.

1.2 The works adhere to the national guidance set out in the Historic England documents '*Understanding Historic Buildings: A guide to Good Recording Practice*' (2016) and the Chartered Institute for Archaeologists '*Standard and guidance for the archaeological investigation and recording of standing buildings or structures*' (CIfA 2014), and a specification for the work prepared by this company (AAL 2016).

1.3 The documentary and photographic archive will be submitted to Mansfield Museum within 12 months of the completion of this report, where it will be stored under the museum accession code MASMG 2016-489.

2.0 Site Location and Description

2.1 Warsop is situated in the administrative district of Mansfield District Council, approximately 7.5km northeast of central Mansfield. The site is located to the southeast of the village on the north side of Forest Road, and is centred on NGR SK 5823 6628 (Figure 1).

3.0 Planning Background

3.1 An application for Listed Building Consent has been submitted for internal and external alterations to a windmill at the property (Ref. 2016/0050/NT). A programme of historic building recording was required, prior to any alterations taking place, as a condition of Listed Building Consent.

3.2 The approached adopted is consistent with the guidelines that are set out in the National Planning Policy Framework (NPPF) (Department for Communities and Local Government 2012).

4.0 Archaeological and Historical Background

4.1 The building that is the subject of this report is a Grade II Listed Building (Ref. 1074946). It was constructed in the early 19th century, originally part of a smallholding on the site. It has long been out of use and is recorded as being used as an animal shelter and general store since its abandonment (NHER ref: M4056).

4.2 It is one of a number of industrial HER entries in the vicinity including a reservoir (NHER ref: M6658), gravel pit (NHER ref: M6657), and quarry (NHER ref: M3997).

5.0 Methodology

5.1 The works described below are based on the guidance set out the Historic England document '*Understanding Historic Buildings: A guide to good recording practice'* (2016) for a Level 3 survey. The building survey has been undertaken by an experienced archaeologist who recorded all aspects of the relevant buildings prior to any alterations, acting strictly in accordance with the approved specification (AAL 2016).

5.2 Photographs were taken of the following:

- All external elevations
- All internal elevations, including internal walls and subdivisions
- The roof structure of the building, internally and externally, where visible
- The relationship of the structure to their surroundings
- Architectural details, i.e. windows, doors, decorative brickwork, and other significant features, fixtures or fittings. Generally a single representative shot was taken of particular features such as windows or openings of a single type that occur more than once within the structure
- A general internal photographic record of the building. Photographs were be taken of each room/discrete internal space from sufficient points to show the form, general appearance and methods of construction

5.3 Site plans provided by the client have been annotated showing the location and direction of each photograph taken during the survey.

5.4 The survey was carried out by the author on 3rd October 2016. The weather was sunny providing challenging lighting conditions externally and internally, a fill flash was used where appropriate. The floors were no longer stable therefore access to the upper floors was limited to single firing positions.

6.0 Results

6.1 The location of the development site is shown on Figure 2. An account of the exterior of the building will be given before commenting on the interior. The plate number refers to Appendix 1, showing a selection of photographs taken during the survey. The location of each photograph is shown on Figure 3–Figure 6, which can be cross referenced with the photographic archive list in Appendix 2. Elevation drawings are shown Figure 7.

Exterior

6.2 The windmill is located to the southwest of Bowrings Transports main yard (Plate 1). Directly to the east a brick building of a probable 19th century date, presumably associated with the mill, has been altered and reroofed in subsequent years (Plate 2).

6.3 The existing mill building is mainly of coursed stonework, with 19 courses of red brick in English Bond above, and it rises to three storeys (Plate 1). The building has been tarred, a common practise in brickwork mills of this age, to prevent water eroding the mortar (Freese 1957); although the tar has now largely weathered away.

6.4 A photograph of Warsop windmill in the early 1900s shows that the machinery at the top of the windmill was once concealed in an ogee cap (Plate 3), which was gone by 1931 (https://catalogue.millsarchive.org/forest-mill). The same image shows the extant outbuilding to the rear of the windmill. All that remains on the building now is part of a winch mechanism to the lower floors (Plate 4).

6.5 There is a single doorway into the building from the southeast (Plate 5). However, a large window on the ground floor to the northwest is likely to have been another doorway prior to conversion (Plate 6). There are four windows and doors regularly spaced out on the ground floor and first floor at the four intercardinal directions (Plate 1). The southwestern ground floor window has had a modern steel exhaust pipe inserted through it from a boiler inside the building (Plate 7). The second floor has windows on the southeast and northwest elevation (Plate 1) and a blocked opening on the northeast elevation (Plate 8). The early photo is not clear, but only appears to show a single window on the southwest elevation at first floor level (Plate 3), suggesting that the upper window may have been bricked up by this time.

6.6 The surviving windows are three-light casements with the exception of the ground floor northwest window, which is a four-light casement and the southwest ground floor window, which has had the glass removed to fit a modern steel exhaust pipe (Plate 7). They all have metal frames and the second floor windows have tarred, cut stone lintels (Plate 1).

6.7 The door is set back from the face of the wall and appears to have been replaced as it does not fit the frame properly (Plate 9). A concrete porch projects over the doorway and is supported by a metal pole on one corner (Plate 5).

Interior

6.8 Internally, the walls have been plastered, but the plaster is now falling away and the underlying stonework is visible (Plate 10). The ground floor surface is composed of a patchwork of irregular stone and concrete blocks, reflecting the *ad hoc* repair and maintenance of this area of the building (Plate 11). There was also a burnt area on the northern wall, possibly the site of a former fireplace (Plate 12).

6.9 The ground floor room contains a number of features associated with recent reuse of the building; including a modern gas boiler, the exhaust pipe for which has been inserted through one of the windows (Plate 13). Another of the windows has been blocked with breeze blocks (Plate 14), although the glass remains on the exterior. Pipework and cables protrude through the floor relating to the installation of modern services in the building (Plate 12 and Plate 15). Some timber supports have been added to one of the beams but these do not appear to be supporting any weight in the ceiling and are more likely part of an internal partition (Plate 16).

6.10 The entrance to the building is from the southeast (Plate 17). On the opposite side of the building a doorway to the northwest has been removed and a modern four-light window inserted. The brickwork below the window is clearly later and has not been plastered (Plate 15).

6.11 Access to the upper floors is currently via ladders through a central opening where the lifting mechanisms for the mill would originally have raised and descended (Plate 18).

6.12 The first and second floors are wooden planking supported by joists and two principal beams (Plate 19). The beams are lodged into recesses in the wall, made for the purpose and resting on large wooden blocks. These are further bracketed with iron supports (Plate 20). A number of other supports have been added to the joists including metal and wooden brackets (Plate 21). The floor

joists rest on top of the supporting beams, and have mostly been doubled in the gap between the two principal beams (Plate 19). There are no visible peg marks and the timber is all machine sawn. Machine-sawn timber comes into use in the mid-19th century, suggesting that these floors may have replaced the original floors, the building being of a probable late 18th or early 19th century date. The ground floor principal beams have a number of unused sockets and an assembly mark is visible on one of the beams, but there are no other marks across the rest of the building (Plate 22). These suggest that either the beams are reused from an earlier building on the site, or that they have been removed and repaired or replaced, possibly in the mid-19th century.

6.13 The second floor beams are not of cut timber, instead whole trunks have been used, the reason for which is unclear (Plate 23). The joists still rest on top of these, however, fewer additional supports have been added.

6.14 Access to the first and second floors was extremely limited as the floors no longer safely bear weight. The first floor does not appear to have been used as extensively as the ground floor since its disuse as a windmill and no features of historic interest survive. The second floor was not accessible internally, but a cherry picker was used to examine the space through a window. A large, steel water tank has been inserted into this floor and occupies most of the space. This is supported by iron joists, in turn supported on the window ledges (Plate 24).

7.0 Discussion and Conclusions

7.1 The mill building was built in the late 18th or early 19th century. Tower mills of this type were the most common type of windmill in neighbouring Lincolnshire during this period, and were brought in to supersede post-mills in many locations, despite the increased expense (Freese 1957). The brick portion of the tower, and the former ogee cap are also common Lincolnshire traditions (Jager 2007).

7.2 Located in the midlands, the building combines eastern (brick-built) and western (stone-built) traditions of tower mills (Leslie Hills 1996). It is at the smaller end of the scale of tower mills, constructed of only three floors and was referred to as a flour mill on the 1885 Ordnance Survey map. Given its limited size, the raising of the building in brick may have been an attempt to improve wind-flow efficiency and power by giving the sails more clearance above ground. The raised portion of this tower is cylindrical, rather than following the angled profile, or 'batter' of the stone walls below. This was often the case, so that the original cap could be removed and replaced (Jager 2007).

7.3 The building was subsequently described as 'disused' on the 1897 Ordnance Survey map, and as such ceased operation at some point between 1885 and 1897. Like many mills of its type, it likely fell into disuse as the Industrial Revolution saw enhancements in milling technology that the tower mill buildings could not make adjustments for (Neaverson and Palmer 2002). The photo from the early 1900s shows the building with its ogee cap and parts of the machinery still in place, but these were gone by 1931. Today, none of the original machinery survives in the building.

7.4 The building itself still appears in good condition despite some structural decisions which suggest it should have fallen into disrepair. For example, having floor beams running in the same direction was meant to weaken those parts of the walls where the beams were secured (Freese 1957). The windows and doors placed on top of each other also encouraged vertical joints to pull away from each other between floors (Leslie Hills 1996). The wooden floors appear to have been replaced, given the use of machine sawn timber for many of the main structural members, but there is no evidence to suggest that the position of the floors was moved when the building was raised. A steel water tank occupies all of the second floor, and is presumably a later addition associated with the use of the adjacent transport yard. This has done little to affect the structure however, other than

wedging its supports into the window frame. Except for the floor boards, the first floor appears in good condition with very little alteration. Therefore it is likely that the ground floor is the only space that has been in continued use, apparently as general purpose storage, and has been re-floored, probably on several occasions, using readily available, *ad hoc* materials. The introduction of the boiler and other modern utilities suggests that the building may have had some domestic use as well.

8.0 Effectiveness of Methodology

8.1 The methodology was appropriate for the project and has allowed for a permanent record of the structure to be made prior to alteration. Unfortunately the survey was limited by the safety concerns with accessing the upper floors, although it was still possible to get a reasonable record of these areas.

9.0 Acknowledgements

9.1 Allen Archaeology Limited would like to thank Bowring Transport for this commission and the staff on site for the help that they provided regarding access to the building.

10.0 References

AAL, 2016, *Specification for an historic building survey: Windmill House Farm, Forest Road, Warsop, Nottinghamshire,* Allen Archaeology Limited

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https://catalogue.millsarchive.org/forest-mill Accessed 6/10/16

Appendix 1: Colour Plates

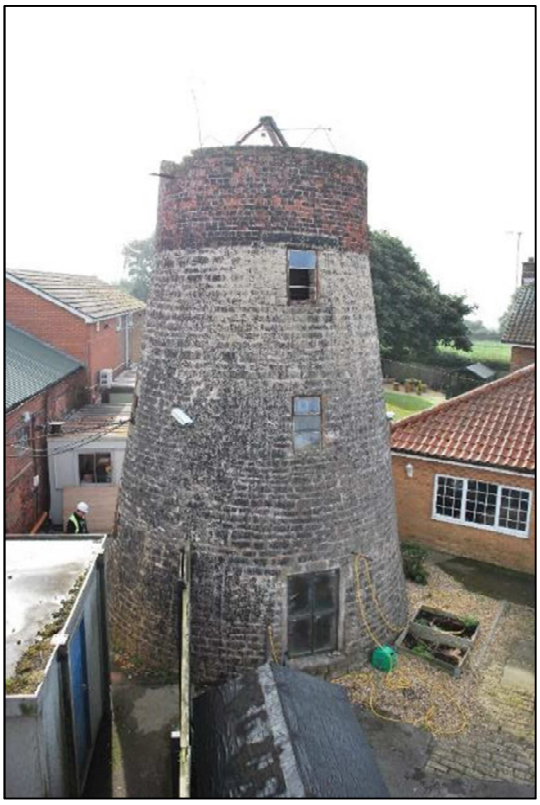

Plate 1 (Shot 17): Warsop mill, looking southeast

Plate 2 (Shot 85): 19th century building to the northeast of the mill, looking north

Plate 3: Warsop Mill in the 1900s, image kindly supplied by Denise Varley, conservation officer for Mansfield District Council

Plate 4 (Shot 1): The top of the windmill, looking southeast

Plate 5 (Shot 30): Entrance to the mill, looking northwest (1m scale)

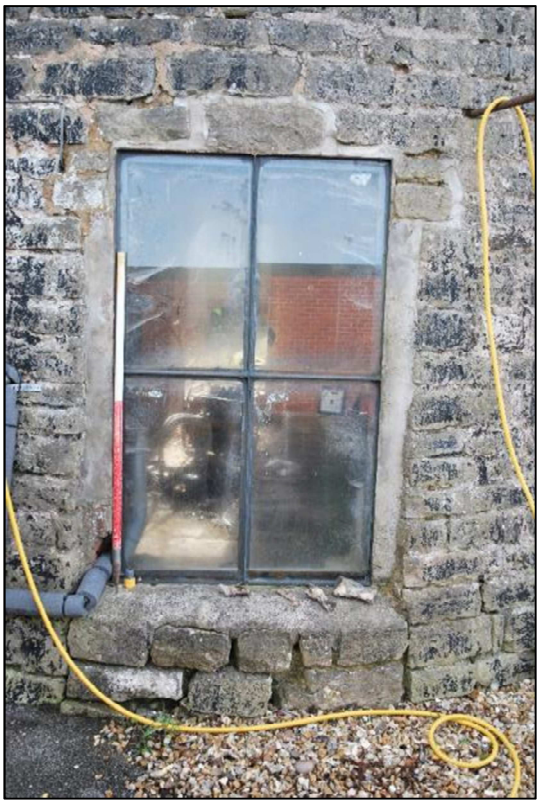

Plate 6 (Shot 21): Large four-light casement window inserted in place of a door, looking southeast (1m scale)

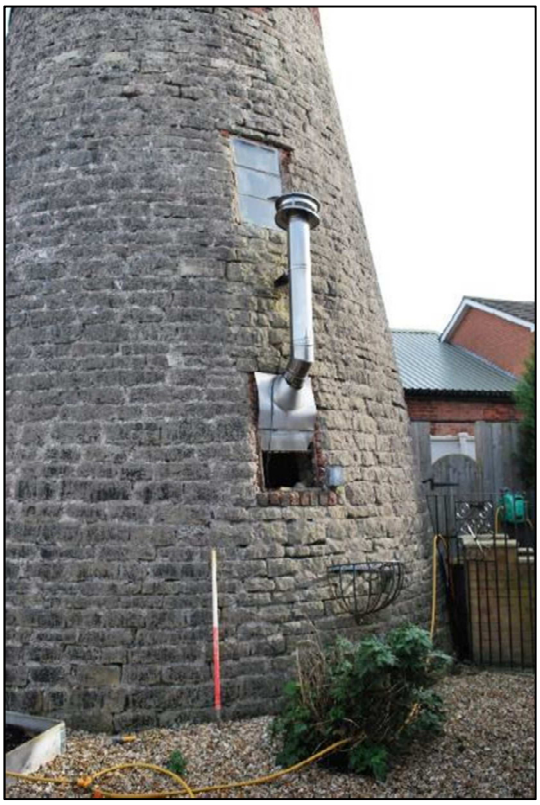

Plate 7 (Shot 23): Southwestern ground and first floor windows, looking east (1m scale)

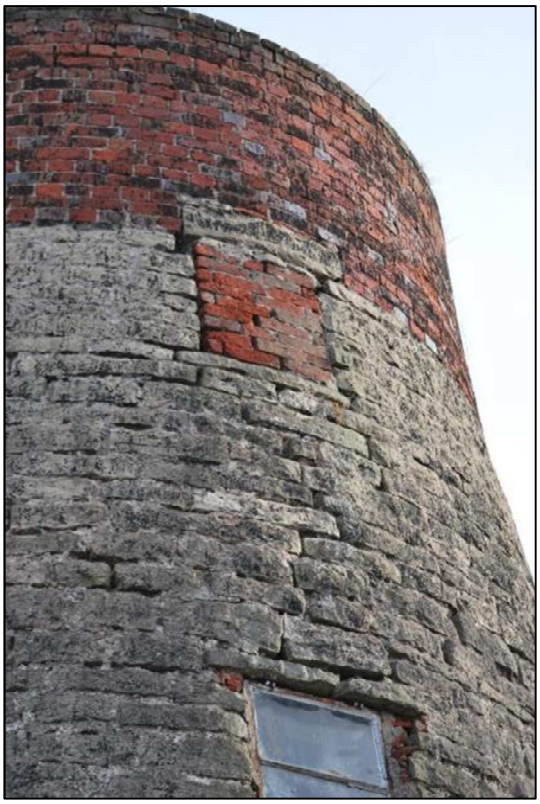

Plate 8 (Shot 24): Blocked second floor window, looking east

Plate 9 (Shot 37): Detail of the concrete porch and wooden door frame, looking northwest

Plate 10 (Shot 75): Plasterwork falling away on the ground floor, looking southwest (1m scale)

Plate 11 (Shot 70): General view of ground floor interior, showing patchwork of repairs to floor, looking east-southeast (1m scale)

Plate 12 (Shot 67): Burnt area on ground floor, looking north (1m scale)

Plate 13 (Shot 69): Chimney from the boiler going through a ground floor window, looking southwest

Plate 14 (Shot 64): Ground floor window bricked up from the interior, looking northeast

Plate 15 (Shot 66): Pipework coming through the floor and brickwork below inserted window, looking northwest (1m scale)

Plate 16 (Shot 76): Supports added to the principal beams, looking west (1m scale)

Plate 17 (Shot 81): Ground floor entrance, looking southeast (1m scale)

Plate 18 (Shot 86): Access to the upper floors, looking northwest

Plate 19 (Shot 68): Ceiling support; beams supporting joists and planks, looking southeast

Plate 20 (Shot 72): Principal beam recessed into the wall, looking southeast

Plate 21 (Shot 71): Various additional supports to the first floor, looking northwest

Plate 22 (Shot 59): Unused socket and assembly mark on the principal beam (looking southwest)

Plate 23 (Shot 44): Trunk used for a beam on the second floor, looking southeast

Plate 24 (Shot 9): Second floor of the building, viewed from the exterior, showing the inserted water tank and its supporting joists, looking southeast

Appendix 2: Photographic archive

Photo Number	Direction	Interior/ Exterior	Description
1	Southeast	Exterior	Roof of mill
2	Southeast	Exterior	Roof of mill
3	Southeast	Exterior	Roof access
4	Southeast	Exterior	Roof of mill
5	Southeast	Exterior	Remaining mill emchanism
6	Southeast	Exterior	Second floor from exterior
7	Southeast	Exterior	Exterior
8	Southeast	Exterior	Second floor window from exterior
9	Southeast	Interior	Second floor
10	Southeast	Interior	Second floor
11	Southeast	Interior	Second floor
12	South	Interior	Second floor
13	Southeast	Interior	Second floor
14	South	Interior	Second floor
15	East	Interior	Second floor
16	Southeast	Exterior	Second floor
17	Southeast	Exterior	Exterior
18	Southeast	Exterior	Exterior
19	Southeast	Exterior	Exterior
20	Southeast	Exterior	First floor window
21	Southeast	Exterior	Ground floor converted window
22	Southeast	Exterior	Exterior
23	East	Exterior	Window with modern chimney
24	Northeast	Exterior	Blocked second floor window
25	Northeast	Exterior	First floor window
26	Northeast	Exterior	Window with modern chimney
27	Northeast	Exterior	Window with modern chimney
28	South	Exterior	Ground floor window
29	South	Exterior	First floor window
30	Northwest	Exterior	Entrance
31	Northwest	Exterior	First and second floor windows
32	Northwest	Exterior	First floor window
33	Northwest	Exterior	Second floor window
34	Northwest	Exterior	Modern porch
35	West	Exterior	Pole supporting porch
36	West	Exterior	Pole supporting porch
37	Northwest	Exterior	Detail porch and door frame
38	Northwest	Interior	First floor window
39	Northwest	Interior	First floor ceiling
40	Southeast	Interior	First floor window
41	Southwest	Interior	View from first to second floor
42	Southeast	Interior	View from first to second floor
43	Northeast	Interior	View from first to second floor
44	Southeast	Interior	First floor ceiling
45	Southwest	Interior	Second floor
46	Southwest	Interior	Second floor
47	West	Interior	Second floor
48	Northwest	Interior	Second floor
49	Northwest	Interior	Second floor
50	Northeast	Interior	Second floor
51	Northeast	Interior	Second floor

Photo Number	Direction	Interior/ Exterior	Description
52	Northeast	Interior	Second floor
53	Southeast	Interior	Second floor
54	Southeast	Interior	Second floor
55	Southeast	Interior	Second floor
56	Southeast	Interior	Second floor
57	Southwest	Interior	Blocked second floor window
58	Northeast	Interior	View to first floor from second floor
59	Southwest	Interior	Carpenters marks
60	Southwest	Interior	Unused socket
61	Southeast	Interior	Unused socket
62	West	Interior	Beam joints
64	Northeast	Interior	Blocked ground floor window
65	Northwest	Interior	Inserted ground floor window
66	Northwest	Interior	Pipework and brickwork beneath converted window
67	North	Interior	Soot and large stone debris ground floor
68	Southeast	Exterior	Ground floor ceiling
69	Southwest	Interior	Chimney through ground floor window
70	Southeast	Interior	Broken up floor and timber/ burning section
71	Northwest	Interior	Ground floor ceiling
72	Southeast	Interior	Principal beam socket
73	Southwest	Interior	Modern boiler
74	Southwest	Interior	Boiler using ground floor window for chimney
75	Southwest	Interior	Plastered walls
76	West	Interior	Inserted supports for ground floor ceiling
77	Southwest	Interior	Inserted supports for ground floor ceiling
78	Southwest	Interior	Inserted supports for ground floor ceiling
79	South	Interior	Plastered walls
80	Southeast	Interior	Door
81	Southeast	Interior	Door
82	Northeast	Interior	Decayed brickwork
83	Northeast	Interior	Decayed brickwork
84	Southeast	Exterior	Access to building
85	North	Exterior	Converted building next to mill
86	Northwest	Interior	Void between floors
87	Northeast	Interior	Void between floors