Historic Buildings Photographic Survey

Great Gransden Post Mill

Historic Buildings Photographic Survey Report

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Great Gransden Post Mill

Historic Buildings Photographic Survey

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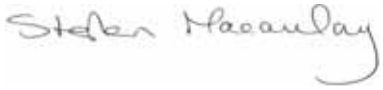
Signed:	

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Summary

On the 15th of January 2016 Oxford Archaeology East undertook a photographic survey on The Post Mill, Great Gransden, Cambridgeshire. The survey concentrated on internal aspects of the building including mill machinery and graffiti attributed to former mill owners. The photographic survey was carried out in advance of proposed alterations and repairs by Cambridgeshire County Council and The Cambridgeshire Windmill Consultancy.

1 Introduction

1.1 Location and scope of work

1.1.1 An historic buildings photographic survey was conducted at The Post Mill, 43 Mill Road, Great Gransden, Cambridgeshire SG19 3AG.

1.1.2 The works followed the guidelines of an English Heritage Level 1 photographic survey ("Understanding Historic Buildings – A Guide to Good Recording Practice" English Heritage, 2006).The survey made a photographic record of the interior and exterior of the building prior to alteration, paying particular attention to graffiti and machinery relating to the working of the mill.

1.1.3 The survey was undertaken at the request of Quinton Carroll, Head of the Historic Environment Team, Cambridgeshire County Council.

1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Location

1.2.1 The Grade II* post and open trestle windmill at Gransden is a Scheduled Monument (Great Gransden Windmill SM No 1006820), situated on the east side of the settlements of Great and Little Gransden in the District of Huntingdon in Cambridgeshire. (TL2771755522).

1.3 Historical background

1.3.1 Great Gransden Windmill is an 'open trestle' post mill set on low piers. It dates from some time prior to 1694. Its date of construction has been suggested to be as early as 1612 by one author but this possibly refers to another earlier mill situated on the same site. If a 1612 date for construction is correct it would make Great Gransden Mill the oldest renaming mill in England (https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/1688880).

1.3.2 The mill is a 'head and tail' mill with good machinery, including two pairs of stones directly overdriven using stone nuts with 11 and 18 cogs, and with unusual tail lag governors in wrought iron with lead weights and three arms on curved horns. The brake-wheel used to have two rows of staggered applewood cogs but one row has been removed. There is an iron tail-wheel. A bolter (a type of flour dressing machine) is located on the first floor. The black tarred horizontally weatherboarded buck (body) has an ogee roof and a rear extension, a tailpole and rear ladder.

1.3.3 It was last thought to be worked in around 1890, when it had two common and two spring sails, which it retained until at least the outbreak of the first world war, though it was last wind worked in 1911. The mill had become disused and derelict by 1925, and was later bought by Wallis Mills, who waterproofed the body. It was owned by Queen Marie and her son, King Peter of Yugoslavia, who lived in the mill house during World War II. The mill was given over to the County Council in 1950.

1.3.4 By the 1970s, the sails had long gone but the stocks remained. The buck was twisted and had to be supported with scaffolding. Restoration took place by R. Thompson and sons between 1982-4. Two common and two patent clockwise sails were installed.

1.3.5 The mill is in no owned and maintained by Cambridgeshire County Council.

1.4 Post Mills

1.4.1 Post mills are so named because of the large upright post on which the mill's main structure (the "body" or "buck") is balanced. By mounting the body this way, the mill is able to rotate to face the (variable) wind direction.

1.4.2 To maintain the upright post, a structure consisting of horizontal crosstrees, and angled quarterbars is used. By far the most common arrangement was 2 cross bars at right angles to each other under the base of the post, together with 4 quarterbars. Occasionally however other arrangements did occur, such as 3 crosstrees, and consequently 6 quarterbars.

1.4.3 Initially the crosstrees would have rested directly on the ground, (or indeed were buried in the ground for extra stability) but since this makes them very succeptible to rotting, the crosstrees were soon being placed on brick piers, to raise them off the ground.

1.4.4 The body of the mill housed all the milling machinery - a large brake wheel on the same shaft as the sails (the "windshaft") transferred power to a smaller gear at right angles to it, called the wallower. The wallower shared a vertical shaft with the great spur wheel, and from this smaller wheel a "stone nut" was used to drive the millstone. As larger mill bodies were constructed, additional pairs of stones could be driven, by taking further power taps, each using an extra "stone nut" off the great spur wheel. In order to apply some level of control to the mill, the brake wheel could be slowed using a large wooden friction brake around its outer edge.

1.4.5 As already mentioned, the whole body rotated on the central post, in order to face the wind. To allow this to happen, a tailpole or tiller beam extended from the rear of the body. By pushing on this beam (or by using some form of winch or animal power) the miller rotated his mill. The tailpole also provides a useful attachment point for a ladder to provide access to the mill.

1.4.6 An obvious improvement on the early post mill, is to build a roundhouse up around the crosstrees and quarterbar structure. This makes this structure a lot more protected from the weather, and provides additional storage space.

1.5 Acknowledgements

1.5.1 The author would like to thank Quinton Carroll of Cambridgeshire County Council who commissioned and funded the project. On site photographic work was undertaken by James Fairbairn. I would also like to thank Martin Davies of the Cambridgeshire Windmill Consultancy for his invaluable advice on site and for help in captioning the photographs. Stephen Macaulay managed the project for Oxford Archaeology East.

2 Aims and Methodology

2.1 Aims

2.1.1 The main aims of this photographic survey were to undertake a Level 1 photographic survey and provide a basic visual record of the Gransden Mill, supplemented by information needed to identify the building's location, age and type.

2.2 Methodology

2.2.1 The photographic survey adhered to the guidance for English Heritage Level 1 photographic surveys as set out in “Understanding Historic Buildings – A Guide to Good Recording Practice” (English Heritage 2006).

2.2.2 Photographs were taken using a Nikon D90 high quality digital camera. Photos were taken in both raw and Jpeg formats.

2.2.3 Conditions during the photographic survey were dry and cold. Light was generally inadequate for the taking of internal photographs and flash photography is not conducive to small and faint subjects such as lightly drawn graffiti. Mounting the camera on a tripod and the use of hand held directional lighting combined with slow shutter speeds was used to address some of the issues.

3 Results

3.1 Introduction

3.1.1 The results and conclusions of the photographic survey are presented below. The exterior plates are shown first followed by the interior photographs of the mill machinery and examples of the graffiti. Full descriptions of photograph and locations can be found within tables 1, 2 and 3.

3.2 Gransden Mill Exterior *(Table 1)*

Plate. No.			Item	Location	Additional Comments
1	DSC	6170	Trestle - Quarter-bars and Cross Trees	Outside - viewed from S	As restored by Richard Seago 2014 - 2015
2	DSC	6197	Trestle, back and tail-ladder	Outside - viewed from NE	
3	DSC	6199	Buck and tail-ladder	Outside - viewed from N - from rear	
4	DSC	6200	Buck and Trestle, one Stock in place front of mill	Outside - viewed from S - from front	Photo from Mill Road
5	DSC	6201	Buck and Trestle, one Stock in place front of mill	Outside - viewed from S - oblique view from front	Photo from Mill Road
6	DSC	6202	Buck and Trestle, one Stock in place front of mill	Outside - viewed from SE - oblique view from front	Photo from Mill Road

3.3 Mill Interior and workings (Table 2)

Plate. No.			Item	Location	Additional Comments
7	DSC	5895	Belt pulley wooden wheel for sack hoist; wooden grain spout	Screwed to wall of Meal Floor for security	Wooden wheel belongs in roof as part of sack hoist assembly; wooden spout was probably part of grain feed to the stones
8	DSC	5896	Large circular iron band that went around the Main post with long bar attached that then tied this to the back of the Prick Post	Screwed to wall of Meal Floor for security	This was part of the drastic measures taken to prevent the mill collapsing in the past. Not known whether this item dates to earlier in the 20th Century or back to Victorian times when the millers became concerned about the mill's structural integrity
9	DSC	5899	Meal floor looking forward; shows Lag Governor attached to the wall; also 2 wooden sail pushers and part of Main Post	Meal floor	
10	DSC	6005	Lag Governor	Attached to wall of Meal Floor for security	"A very unusual and early design of Governor with three curved ""horns"". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest. The lag governor was invented by Thomas Mead, a Kent millwright, in the 1780s. The Gransden example must be quite early - it is blacksmith made, with bob weights of cast lead. Unusually it has 3 bob weights. Other later examples exist, for example at Heckington Mill (Lincs) and Bardwell (the governor is thought to come from a Lincs mill). These later ones appear to be more standardised & factory made, and only have 2 bob weights. In theory the lag governor detects acceleration. However the Gransden one is set up such that it probably at least is sensitive to running speed - much as the later centrifugal governor on the front millstones. It may have been at Gransden Mill from new, but has been fitted in its latter days to the much newer tail stone set up."
11	DSC	6006	Tentering gear for Lag Governor attached to roof of Meal Floor; also another view of large circular iron band that went around the Main post with long bar attached that then tied this to the back of the Prick Post	Circular ring attached to wall of Meal Floor for security	Tentering gear for Lag Governor attached to roof of Meal Floor - valuable structures to enable the lag governor to be set up to run again in due course on the rear pair of millstones
12	DSC	6008	Tentering screw on tentering gear for the rear pair of millstones	At rear of Meal Floor on right-hand side	Tentering gear is a valuable structure to enable the governor to be set up to run again in due course on the rear pair of millstones
13	DSC	6013	"Large circular iron band that went around the Main post with long bar attached that then tied this to the back of the Prick Post wooden grain spout, probably originally from the Stone Floor, to	Right-hand rear corner of Meal Floor. Items screwed to wall of Meal Floor for security	"This was part of the drastic measures taken to prevent the mill collapsing in the past. Not known whether this item dates to earlier in the 20th Century or back to Victorian times when the millers

Plate. No.			Item	Location	Additional Comments
			feed grain into the stones"		had become concerned about the mill's structural integrity Wooden spout was probably part of grain feed to the stones"
14	DSC	6015	"Large circular iron band that went around the Main post with long bar attached that then tied this to the back of the Prick Post wooden grain spout, probably originally from the Stone Floor, to feed grain into the stones Tentering screw for tentering gear for rear pair of stones also visible"	Right-hand rear corner of Meal Floor. Items screwed to wall of Meal Floor for security	"This circular band was part of the drastic measures taken to prevent the mill collapsing in the past. Not known whether this item dates to earlier in the 20th Century or back to Victorian times when the millers had become concerned about the mill's structural integrity. Wooden spout was probably part of grain feed to the stones"
15	DSC	6018	"Wooden belt wheel; wooden grain spout, probably originally from the Stone Floor, to feed grain into the stones Metal sail clamp from the original Victorian sails; note alos the original diagonal timber brace, thought to be from an attempt to strengthen the buck in the past"	All items screwed to wall of Meal Floor for security. Right hand rear half of side wall on Meal Floor.	Part of meachanism to drive the Sack Hoist on Stone Floor, around and above the windshaft
16	DSC	6019	Wooden belt wheel	Item screwed to wall of Meal Floor for security. Right hand rear half of side wall on Meal Floor.	Part of mechanism to drive the Sack Hoist from the windshaft on Stone Floor
17	DSC	6020	Lag Governor - as DSC 6005 - side view	Attached to wall of Meal Floor for security. Would have been set up in roof of Meal Floor at rear of mill when in use to control the rear pair of stones.	A very unusual and early design of Governor with three curved "horns". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest.
18	DSC	6025	Lag Governor - as DSC 6005 - side view	Attached to wall of Meal Floor for security. Would have been set up in roof of Meal Floor at rear of mill when in use to control the rear pair of stones.	A very unusual and early design of Governor with three curved "horns". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest.
19	DSC	6030	Lag Governor - ventral view	Attached to wall of Meal Floor for security. Would have been set up in roof of Meal Floor at rear of mill when in use to control the rear pair of stones.	A very unusual and early design of Governor with three curved "horns". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest.
20	DSC	6031	Lag Governor - oblique view from above view	Attached to wall of Meal Floor for security. Would have been set up in roof of Meal Floor at rear of mill when in use to control the rear pair of stones.	A very unusual and early design of Governor with three curved "horns". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest.
21	DSC	6032	Lag Governor - dorsal view	Attached to wall of Meal Floor for security. Would have been set up in roof of Meal Floor at rear of mill when in use to control the rear pair of stones.	A very unusual and early design of Governor with three curved "horns". This Gransden example is possibly a unique survivor of this early design of governor and is thus of great historical interest. Note clockwise curve of the three "horns.
22	DSC	6035	Various strap irons from old Victorian mill - not re-used in 1980s restoration	Attached to wall of Meal Floor for security	Precise former uses of these items unknown
23	DSC	6037	Tentering screw for tentering gear of governor on front stones	Meal floor at front	Screw to adjust tentering of the stones in use

Plate. No.			Item	Location	Additional Comments
24	DSC	6040	Governor used on front set of stones	Viewed from below, front of Meal Floor	This is a more typical centrifugal governor, younger in design than the lag governor.
25	DSC	6045	Stone spindle under front set of stones	Viewed from below, front of Meal Floor	
26	DSC	6046	Stone spindle under front set of stones	Viewed from below, front of Meal Floor	
27	DSC	6053	Various metal straps and bolts from old mill; also old scaffolding joint	Front of Meal Floor, on the floor nexr front wall	Precise former uses of these items unknown
28	DSC	6058	Sail clamps from the 1981 sails; also wooden wedges	piled on floor off Meal Floor after sails being taken down by Richard Seago at start of current 2014 - 2017 restoration phase	
29	DSC	6061	Metal chain	on floor of Meal Floor - was on wall before being taken down	Former use in the mill not known but possibly part off the sack hoist
30	DSC	6062	Belt wheel and drive cog to power the flour bolter	In front of flour bolter, just in from front wall of mill on left-hand side of Meal Floor	To relay power down from Brake Wheel on Stone Floor (by means of a belt) to drive another cog on the end of the spindle of the flour bolter
31	DSC	6065	Wooden wheel, part of sack hoist	Screwed to left-hand wall of Meal Floor	Was around the windshaft in front of the tailwheel
32	DSC	6066	Hopper to feed grain into centre of top of a millstone	Loose on Meal Floor	Would have been set up above one of the millstones on the Stone Floor to feed grain to the centre of the stones for milling.
33	DSC	6068	Spout - narrow form	On floor of Meal Floor by right-hand wall	Spout to carry flour from rear stones down to Meal Floor directly below to be bagged/sacked
34	DSC	6073	Metal ring attached to small vertical piece of wood	Hanging from roof of Meal Floor near to the tentering gear of the rear stones	Possibly connected with the tentering gear but exact function not understood. Piece of wood very roughly cut from sapwood opf tree and still with bark on one side
35	DSC	6074	Flour bolter - oblique rear view, from centre of Meal Floor at rear. Lots of carved inscriptions on these sides of it	Meal Floor	An ancient bolter (at least 1774, possibly older) in largely intect condition, missing only its cloths
36	DSC	6075	Central spindle and radial arms of bolter	Meal Floor	
37	DSC	6081	Front lower end of bolter	Meal Floor	Note lines of tacks still present in the wood where the muslin cloth had been attached to guide the flour into the bolter itself and avoid it ending up on the floor
38	DSC	6084	Drive cog to enage with cog on end of bolter spindle.	Meal Floor	
39	DSC	6088	Front lower face of bolter	Meal Floor	Note remains of some muslin cloth around the sloping panel (to gather the flour into the sacks below)
40	DSC	6090	Front lower end of bolter - close up of lines of tacks that formerly attached the muslin cloth	Meal Floor	Note lines of tacks still present in the wood whee the muslin cloth had been attached to guide the flour in to the bolter itself and avoid it ending up on the floor
41	DSC	6092	Stone nut over front stones and	Stone Floor	

Plate. No.			Item	Location	Additional Comments
			lower edge of brake wheel and brake rim		
42	DSC	6097	Brakewheel , windshaft and Sprattlebeam	Stone Floor. Viewed from left-hand side of windshaft looking forwards	
43	DSC	6098	Front "pair" of millstones - lateral view, with their retaining metal bands but no wooden stone furniture present	Stone Floor	Note Runner Stone is smaller diameter than the bedstone (normally the pair need to be same diameter. These are thus not actually a "pair"n and would have difficult to make work. The Runner is 50" diameter whereas the Bedstone is 54" (latter really too big for this mill)!
44	DSC	6100	Spout through the floor of the Stone Floor (viewed from above) to carry flour down to the bolter on the floor below (postioned just left of the front pair of stones)	Stone Floor	
45	DSC	6101	Stone nut of the front millstones	Stone Floor	A small gear that is driven directly off the Brake Wheel to turn the runner stone below
46	DSC	6105	Tail wheel, at rear end of the Windshaft	Stone Floor	Used to the drive the Stonenut of the rear pair of stones
47	DSC	6107	Brakewheel , windshaft and Sprattlebeam	Stone Floor. Viewed from right-hand side of windshaft looking forwards	Note pine spokes of Brakewheel that were fitted in 1979-81; also wooden pine wedges
48	DSC	6109	Part of brake rim and edge of brakewheel	Stone Floor	
49	DSC	6110	Brake-lever	Along left-hand wall of Stone Floor	Used to engage the brake to slow/halt the Brake Wheel
50	DSC	6112	Metal hook to hold brake-lever in "brake not engaged" position	Along left-hand wall of Stone Floor	
51	DSC	6113	Metal hook to hold brake-lever in "brake not engaged" position; pulley and rope to lift brake lever into "brake not engaged" position	Along left-hand wall of Stone Floor	
52	DSC	6117	Cog wheel and Beltwheel that drive off the Brakewheel to provide power to the bolter below (by means of a belt and further cogs below); end of sack hoist spindle also visible on floor	Loose on Stone Floor but should be fitted onto missing bear to left of Brakewheel	
53	DSC	6119	Rear end of Windshaft and rear face of Tailwheel; rear bearing at back end of Windshaft supported on major oak tailbeam.	Stone Floor rear part	Much grease staining on wood around bearing
54	DSC	6125	Brakewheel , windshaft and Sprattlebeam. Stone nut not quite engaged in the front set of stones and in the underside of the Sprattlebeam	Stone Floor. Viewed from right-hand side of windshaft looking forwards	Note pine spokes of Brakewheel that were fitted in 1979-81; also wooden pine wedges
55	DSC	6127	Brakewheel , windshaft and upper surface of Sprattlebeam.	Stone Floor front part	Note also arched shape of roof
56	DSC	6132	Brake-lever and front stones	Stone Floor front part	
57	DSC	6145	Rear end gable of arched roof, above Tailwheel	Stone Floor rear part	
58	DSC	6150	Front of mill, up behind Brakewheel, showing part of storm hatch and part of left-hand	Stone Floor front part	

Plate. No.			Item	Location	Additional Comments
			side of roof at front		
59	DSC	6156	Side hatch on right-hand side wall of Stone Floor	Stone Floor	
60	DSC	6158	Shallowly carved inscription on back (upper) surface of front runner stone	Stone Floor	letters hard to read/illegible
61	DSC	6166	Bolter and ladder from Meal Floor to Stone Floor	Meal Floor	
62	DSC	6169	Meal Floor- right-hand side looking forwards showing open hatch	Meal Floor	
63	DSC	6172	Samson Head and Upper part of Main Post	Meal Floor	
64	DSC	6181	Rear Stones from below, including Bridge Beam and tentering Gear supports	Meal Floor - rear part	
65	DSC	6182	Rear wall and door leading to outside step ladder. Door open.	Meal Floor - rear part	
66	DSC	6189	Rear wall and door leading to outside step ladder. Door closed.	Meal Floor - rear part	Note plyboard backing to door, fitted in 1979-81 restoration

3.4 Graffiti *(Table 3)*

Plate. No.			Item	Location	Additional Comments
67	DSC	5900	Carved initial "M" and date 1674 (but poor definition picture of carving due to flash; DSC 5990 much clearer); initial R?A	Section of Transverse beam (only face survives), eye-level on Meal Floor, behind bolter at LH front of mill	1674 is the oldest carved date in the mill. Identity of M not known. Identity of RA not known
68	DSC	5902	Carved initials TW H + H 1806? (inscription partly hidden behind batten) C + W 1848; T W 1851; F Webb; GW (inscription partly hidden behind batten)	On end of bolter casing, under ladder to stone floor, facing rear door	TW (top left of photo) may be Thomas Webb - miller at Gransden from 1854 to sometime between 1881 and 1891. TW 1851 almost certainly refers to him but this is 3 years before he actually took over as miller. CW 1848 refers to Cornelius Webb, miller at Gransden in 1851, apparently alongside Wright Blackman. CW died in 1854 at young age of 26. Thomas Webb (Cornelius' cousin) took over from him as miller in 1854 . Identity of F Webb and GW (presumably another Webb) not known.
69	DSC	5907	"Carved sets of initials and dates: H + H 1813; H + HEN (N backwards); C + W 1848; F Webb 1849; W; I L 1774"	On end of bolter casing, under ladder to stone floor, facing rear door	identity of H + HEN (but N backwards), I L 1774, W and H + H 18213 are not known; CW 1848 refers is Cornelius Webb
70	DSC	5908	"Carved sets of initials and dates: H + HEN (but N backwards); "	On end of bolter casing, under ladder to stone floor, facing rear door	identity of H + HEN (but N backwards) is not known
71	DSC	5910	"Carved initials and date: I L 1774 - in close up; "	On end of bolter casing, under ladder to stone floor, facing rear door	1774 is the oldest date carved on the bolter, this confrioming that this is a very old and unusally complete example of a flour bolter in a windmill
72	DSC	5916	"Carved sets of initials and dates: I L 1774; H + HEN (but N backwards); W; RW; W + M"	On end of bolter casing, under ladder to stone floor, facing rear door	1774 is the oldest date carved on the bolter, this confirming that this is a very old and unusally complete example of a flour bolter in a windmill; identity of H + HEN (but N backwards); W; RW; W + M is not known
73	DSC	5923	Carved "SW" initials	On ladder string between Meal Floor and Stone Floor	"Stephen Webb is Stephen Docwra Webb, born 1873 in Great Gransden, Huntingdonshire. Stephen Docwra was the son of William Jabez Webb (b 1850) and brother of Aubrey Lemuel (b 1878). Stephen was miller at Potton Windmill in 1899. His father William Jabez died in 1911 and was the last miller at Great Gransden."
74	DSC	5924	Carved "SW" initials (a different inscription from DSC 5923)	On ladder string between Meal Floor and Stone Floor	Stephen Webb - see above DSC 5923
75	DSC	5928	Carved initials N I	On vertical post by rear of bolter and ladder from Meal Floor to Stone Floor	Identity of N I not known

Plate. No.			Item	Location	Additional Comments
76	DSC	5929	Carved initials "PBL H? 1981"	On upper part of Main Post on Meal Floor at eye-level, on side facing bolter	Philip Barrett Lennard was the millwright who undertook much of the earlier restoration of Gransden Windmill 1979-1981, under contract to Cambridgeshire County Council
77	DSC	5941	Flaky remains of printed poster (text very incomplete and hard to decipher); also poorly defined scratched date 1?9xx	Paper poster stuck to side of bolter; scratched date into wood of bolter side	Origins or subject matter of poster not known; date not legible or known
78	DSC	5948	Chalk inscription "xxxx DRIVE NO SIGNALS"	On wooden side of bolter	Now fading and only lower part still legible. Photos from 1974 show much more of inscription legible, reading ". "US ?? NO RIDERS CAUTION LEFT HAND DRIVE NO SIGNALS". Quite what this means and why it is written on the side of the bolter is another question! Possibly from the Second World War period but it was the Canadians (405 Squadron) who were based at the Gransden Lodge airfield, not the US.
79	DSC	5972	Chalk inscription "??81q??"	on horizontal stud alongside bolter, on Meal Floor	Identity or meaning unknown.
80	DSC	5976	Carved "ALW" initials, letters made up of points cut into the wood.	At eye-level, on side of horizontal plank supporting bolter at the front, on Meal Floor	Aubrey Lemuel Webb was the son of William Jabez Webb, the last miller at Gransden, who died in 1911. ALW would perhaps have continued to try to work the mill after the 1st World War war but he was killed in France in 1918.
81	DSC	5979	Ink letters "DOORS 4265 LOFTY"	On side of bolter on Meal Floor	Identity of "Lofty" or meaning of "Doors 4265" not known, but possibly 2nd World War related?
82	DSC	5990	Carved date 1674 and "M" initial. The oldest carved date in the mill.	Section of Transverse beam (only face survives), eye-level on Meal Floor, behind bolter at LH front of mill	
83	DSC	5996	Hard to read carved inscriptions inside rear door lintle	Rear wall of Meal Floor	
84	DSC	6000	Carved initials "RW" but no date.	Rear wall of Meal Floor. On door lintle directly above doorway	Identity of RW not known but probably a member of the Webb family
85	DSC	6003	Carved initial "W" and "M" but no dates.	On inside face of door post of rear door to outside ladder on left-hand side of door looking ftowards front of mill, near top of door post just below door lintel	Identity of "W" or "M" not known but at least the "W" seesm likely to be one of the Webb family

3.5 Summary

3.5.1 The historic buildings photographic survey carried out at Great Gransden Mill has provided a baseline visual record of the building in their present state focussing on the existing machinery and graffiti of former owners and workers. Although not all of the machinery is in its original position it is hoped that the current conservation and preservation work being carried out will return some of it to its former working order.

3.5.2 It is evident that additions and alterations have changed the layout, fabric and use of the Mill since its conception in the 17th Century but the repair of this historic building will go a long way to preserving Great Gransden Mill for future generations.

APPENDIX A. BIBLIOGRAPHY

Brown.J.R	1976	Windmills of England
English Heritage	2006.	"Understanding Historic Buildings" – A Guide to Good Recording Practice
Smith A.C.	1975	"Windmills in Cambridgeshire" Stevenage Museum Publications.

APPENDIX B. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-263757		
Project Name	Great Gransden Post Mill. Historic Buildings Photographic Survey		
Project Dates (fieldwork) Start	15-01-2016	Finish	15-01-2016
Previous Work (by OA East)	Yes	Future Work	No

Project Reference Codes

Site Code	GREGRM16	Planning App. No.	
HER No.	ECB5298	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt: Planning condition

Please select all techniques used:

☐ Field Observation (periodic visits)	☐ Part Excavation	☐ Salvage Record
☐ Full Excavation (100%)	☐ Part Survey	☐ Systematic Field Walking
☐ Full Survey	☒ Recorded Observation	☐ Systematic Metal Detector Survey
☐ Geophysical Survey	☐ Remote Operated Vehicle Survey	☐ Test Pit Survey
☐ Open-Area Excavation	☐ Salvage Excavation	☐ Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the NMR Monument Type Thesaurus and significant finds using the MDA Object type Thesaurus together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Post Mill	Post Medieval 1540 to 1901	None	None
	Select period...		Select period...
	Select period...		Select period...

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	Huntingdonshire	43 Mill Road, Great Gransden, Cambridgeshire. SG19 3AG	
Parish	Great Gransden		
HER	Cambridgeshire		
Study Area	100sqm	National Grid Reference	TL 27717 55522

Project Originators

Organisation	OA East
Project Brief Originator	Cambridge County Council
Project Design Originator	OA East
Project Manager	Steven Macaulay
Supervisor	James Fairbairn

Project Archives

Physical Archive	Digital Archive	Paper Archive
None	OA East	CCC stores
	GREGRM16	ECB5298

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	☐	☐	☐
Ceramics	☐	☐	☐
Environmental	☐	☐	☐
Glass	☐	☐	☐
Human Bones	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☐	☐	☐
Stratigraphic		☐	☐
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☐	☐	☐
None	☒	☒	☒
Other	☐	☐	☐

Digital Media	Paper Media
☐ Database	☐ Aerial Photos
☐ GIS	☐ Context Sheet
☐ Geophysics	☐ Correspondence
☒ Images	☐ Diary
☐ Illustrations	☐ Drawing
☐ Moving Image	☐ Manuscript
☐ Spreadsheets	☐ Map
☐ Survey	☐ Matrices
☐ Text	☐ Microfilm
☐ Virtual Reality	☐ Misc.
	☐ Research/Notes
	☒ Photos
	☒ Plans
	☒ Report
	☒ Sections
	☐ Survey

Notes:

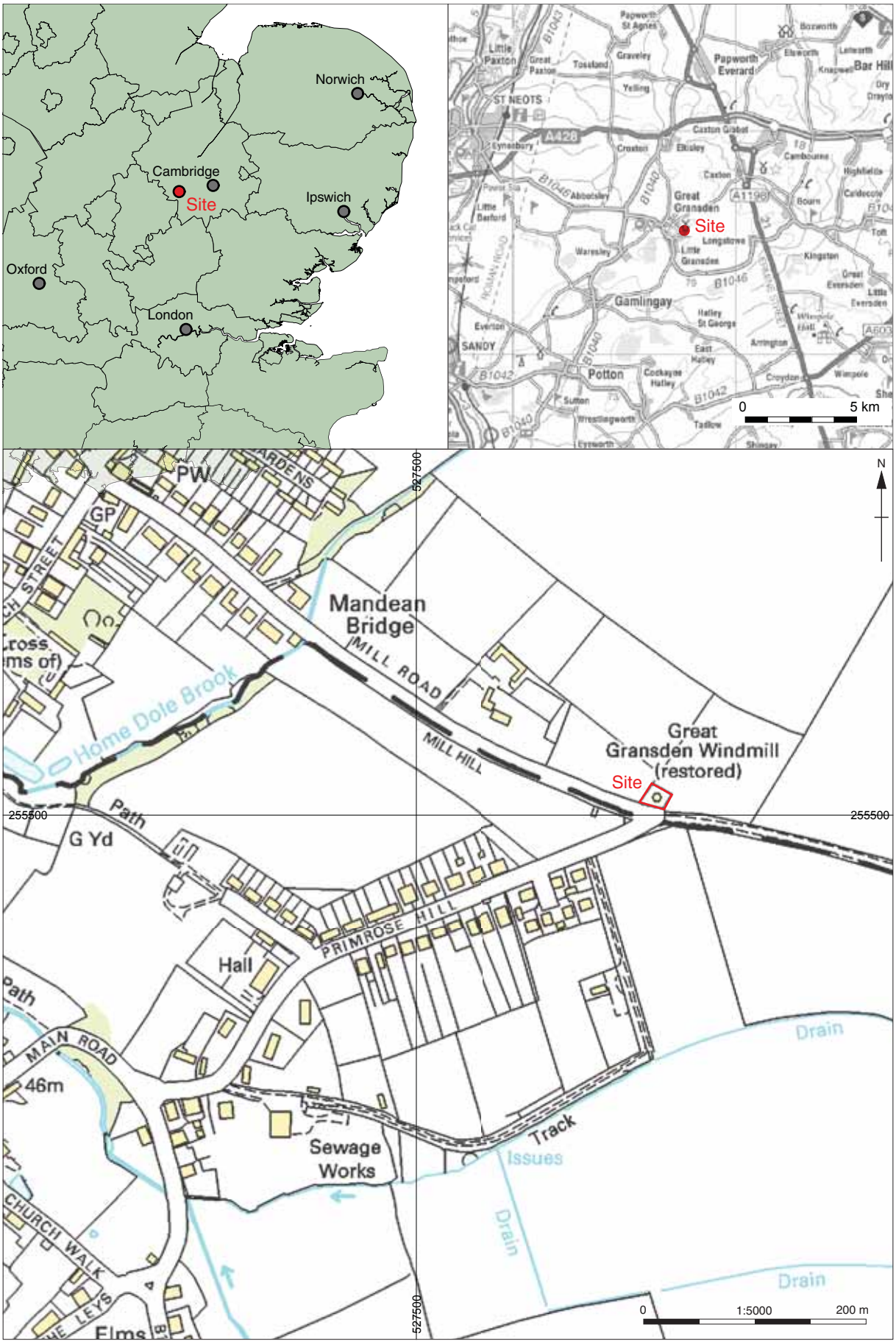

Figure 1: Site location. Scale 1:5000

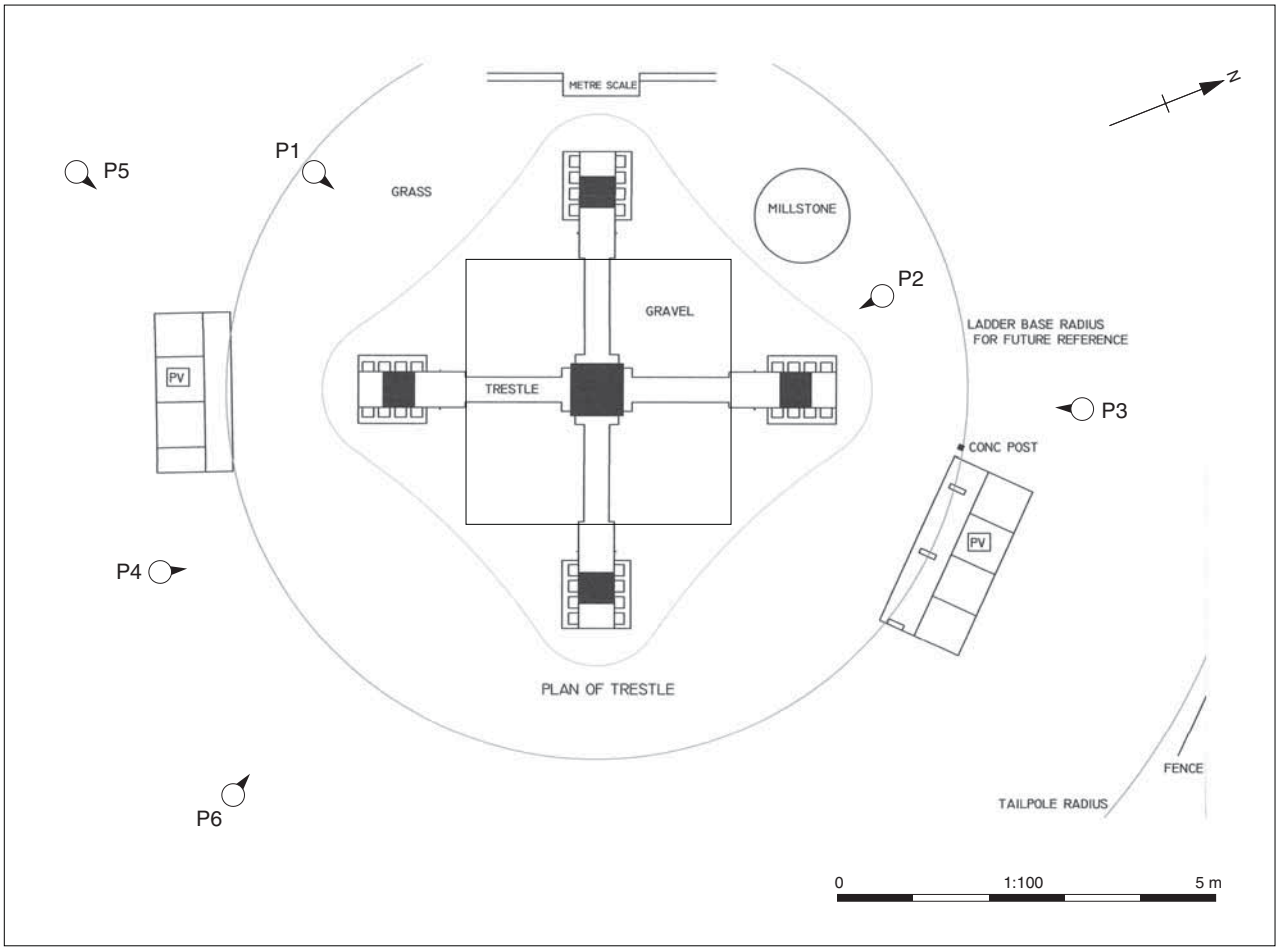

Figure 2: Site location plan showing plate locations

Plate 1: Trestle - Quarter-bars and Cross Trees.

Plate 2: Trestle, back and tail-ladder.

Plate 3: Buck and tail-ladder.

Plate 4: Buck and Trestle, one Stock in place front of mill.

Plate 5: Buck and Trestle, one Stock in place front of mill.

Plate 6: Buck and Trestle, one Stock in place front of mill. South east

Plate 7: Belt pulley wooden wheel for sack hoist;

Plate 8: Large circular iron band that went around the Main post.

Plate 9 Meal floor looking forward. Showing Lag Governor attached to the wall.wooden grain spout.

Plate 10: Lag Governor.

Plate 11: Tentering gear for Lag Governor.wooden grain

Plate 12: Tentering screw on tentering gear.

Plate 13: Large circular iron band that went around the Main post.spout.

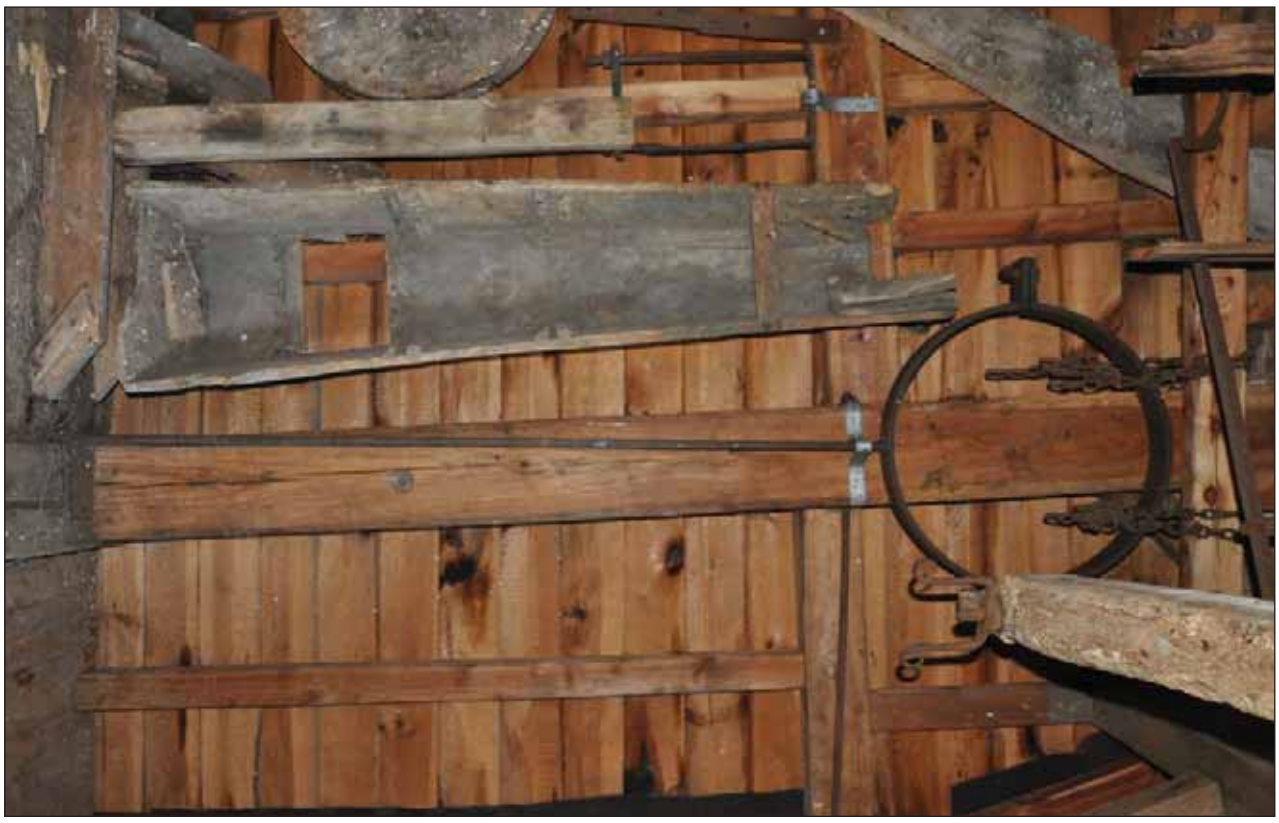

Plate 14: Large circular iron band that went around the Main post with long bar attached.

Plate 15: Wooden belt wheel.

Plate 16: Wooden belt wheel.

Plate 17: Lag Governor - as DSC 6005 - side view.

Plate 18: Lag Governor - as DSC 6005 - side view

Plate 19: Lag Governor - ventral view

Plate 20: Lag Governor - oblique view from above view.

Plate 21: Lag Governor - dorsal view.

Plate 22: Various strap irons from old Victorian mill.

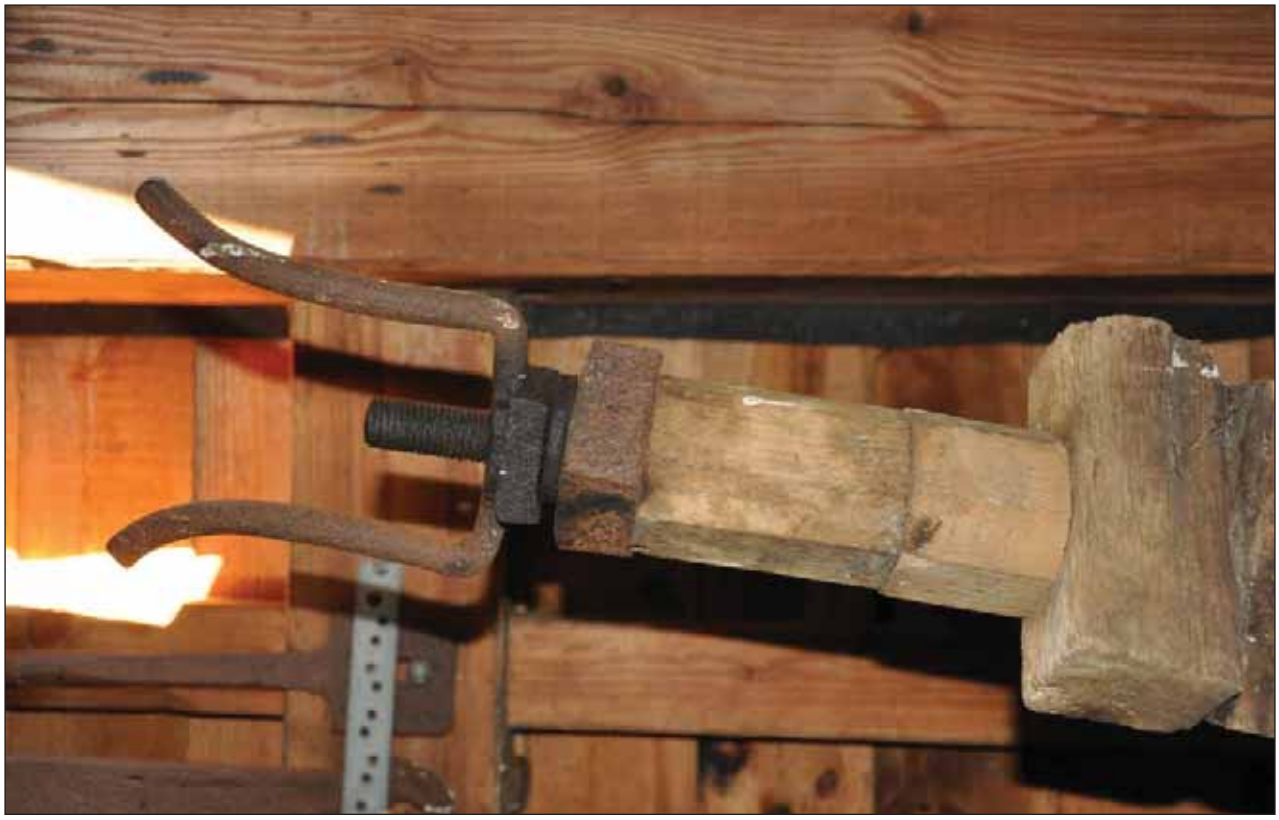

Plate 23: Tentering screw for tentering gear of governor on front stones.

Plate 24: Governor used on front set of stones.

Plate 25: Stone spindle under front set of stones.

Plate 26: Stone spindle under front set of stones.

Plate 27: Various metal straps and bolts from old mill; also old scaffolding joint.

Plate 28: Sail clamps from the 1981 sails; also wooden wedges.

Plate 29: Metal chain.

Plate 30: Belt wheel and drive cog to power the flour bolter.

Plate 31: Hopper to feed grain into centre of top of a millstone.

Plate 32: Hopper to feed grain into centre of top of a millstone.

Plate 33: Spout - narrow form.

Plate 34: Metal ring attached to small vertical piece of wood.

Plate 35: Flour bolter - oblique rear view.

Plate 36: Central spindle and radial arms of bolter

Plate 37: Front lower end of bolter

Plate 38: Drive cog to engage with cog on end of bolter spindle.

Plate 39: Front lower face of bolter

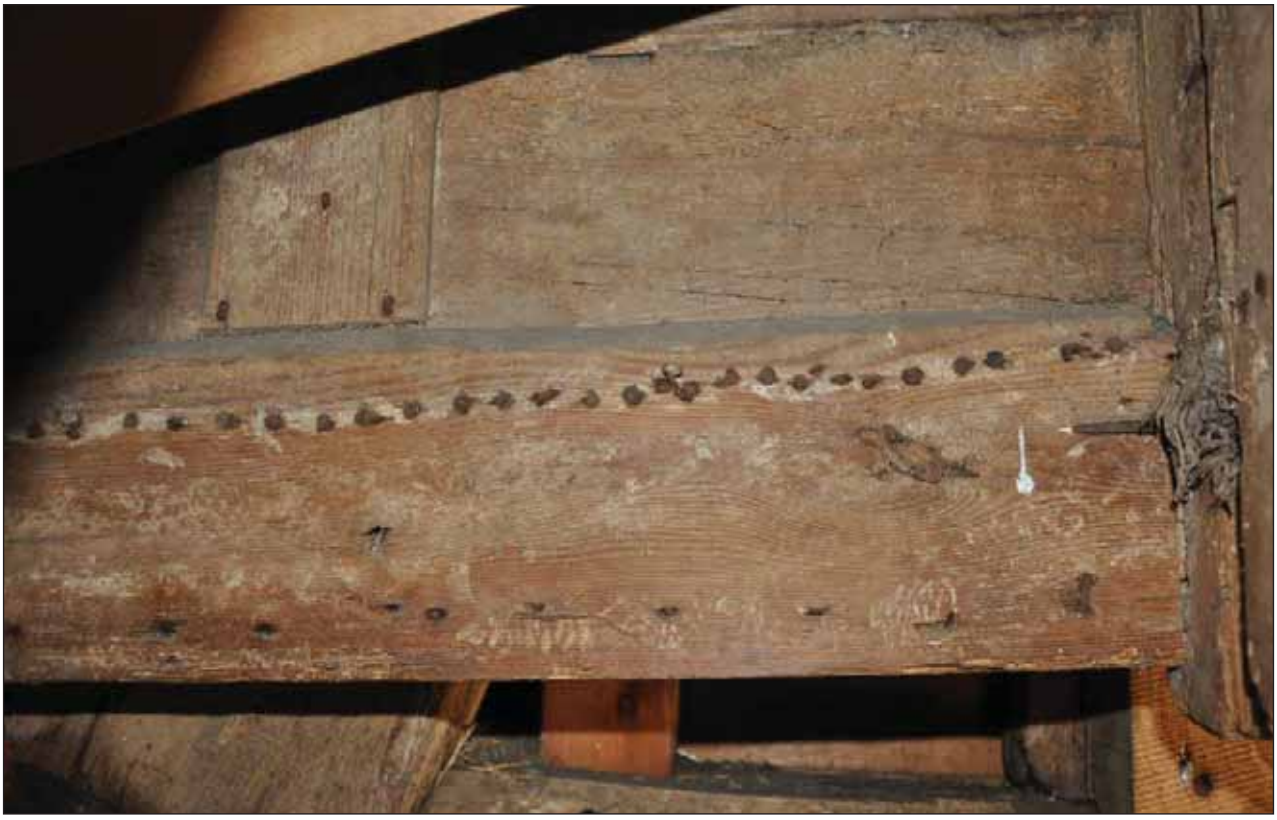

Plate 40: Front lower end of bolter – close.

Plate 41: Stone nut over front stones and lower edge of brake wheel and brake rim.

Plate 42: Brakewheel , windshaft and Sprattlebeam.

Plate 43: Front “pair” of millstones - lateral view.

Plate 44: Spout through the floor of the Stone Floor (viewed from above).

Plate 45: Stone nut of the front millstones.

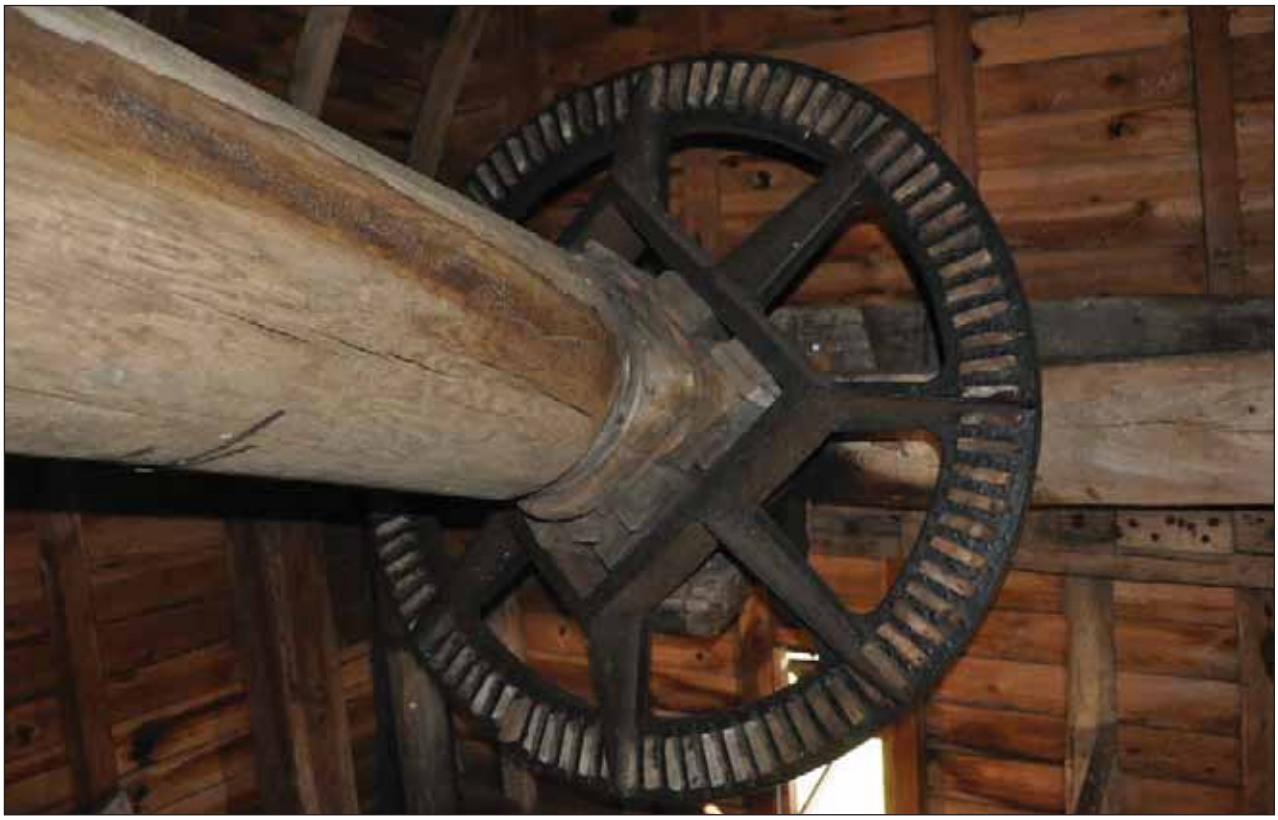

Plate 46: Tail wheel, at rear end of the Windshaft.

Plate 47: Brakewheel , windshaft and Sprattlebeam.

Plate 48: Part of brake rim and edge of brakewheel.

Plate 49: Brake-lever.

Plate 50: Metal hook to hold brake-lever in “brake not engaged” position.

Plate 51: Metal hook to hold brake-lever in “brake not engaged” position.

Plate 52: Cog wheel and Beltwheel that drive off the Brakewheel to provide power to the bolter

Plate 53: Rear end of Windshaft and rear face of Tailwheel.

Plate 54: Brakewheel , windshaft and Sprattlebeam. Stone nut not engaged.

Plate 55: Brakewheel , windshaft and upper surface of Sprattlebeam

Plate 56: Brake-lever and front stones.

Plate 57: Rear end gable of arched roof, above Tailwheel

Plate 58: Front of mill, up behind Brakewheel, showing part of storm hatch and part of left-hand

Plate 59: Side hatch on right-hand side wall of Stone Floor

Plate 60: Shallowly carved inscription on back (upper) surface of front runner stone

Plate 61: Bolter and ladder from Meal Floor to Stone Floor

Plate 62: Meal Floor- right-hand side looking forwards showing open hatchside of roof at front

Plate 63: Samson Head and Upper part of Main Post

Plate 64: Rear Stones from below, including Bridge Beam and tentering Gear supports

Plate 65: Rear wall and door leading to outside step ladder. Door open.

Plate 66: Rear wall and door leading to outside step ladder. Door closed.side of roof at front

Plate 67: Carved initial “M” and date 1674; initial R?A

Plate 68: Carved initials TW H + H 1806?(inscription partly hidden behind batten) C + W 1848; T W 1851; F Webb; GW (inscription partly hidden behind batten)

Plate 69: "Carved sets of initials and dates: H + H 1813; H + HEN (N backwards); C + W 1848; F Webb 1849; W; I L 1774"

Plate 70: "Carved sets of initials and dates: H + HEN (but N backwards); "

Plate 71: “Carved initials and date: I L 1774 - in close up; “

Plate 72: “Carved sets of initials and dates: I L 1774; H + HEN (but N backwards); W; RW; W + M”

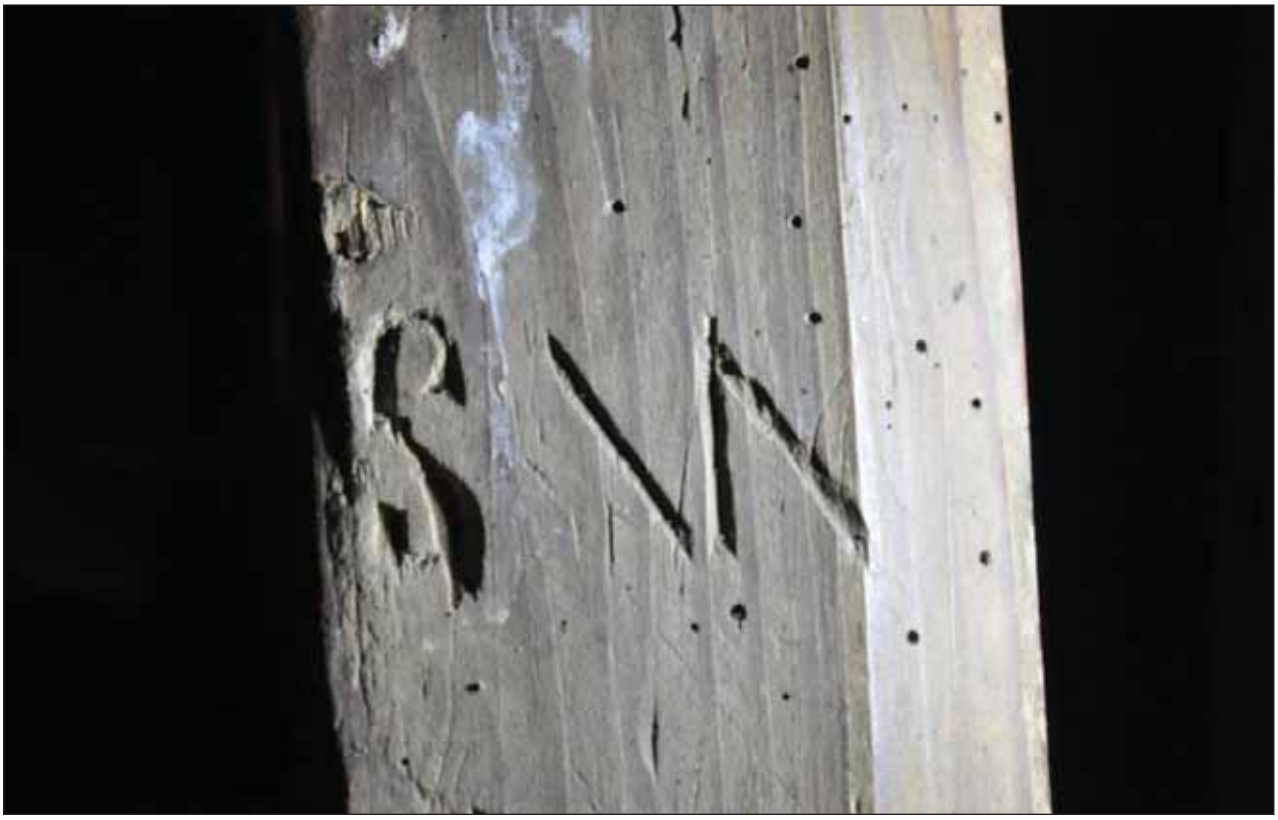

Plate 73: Carved “SW” initials

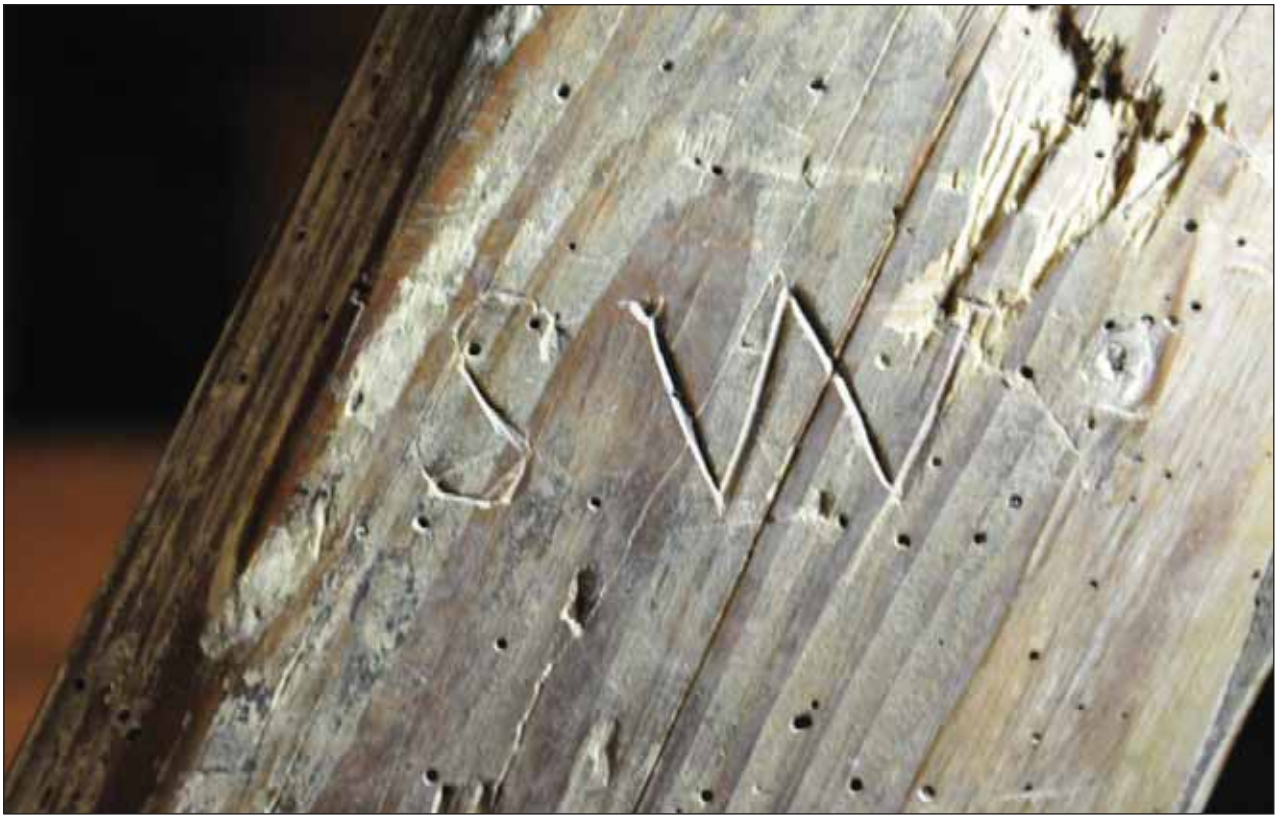

Plate 74: Carved “SW” initials

Plate 75: Carved initials N I

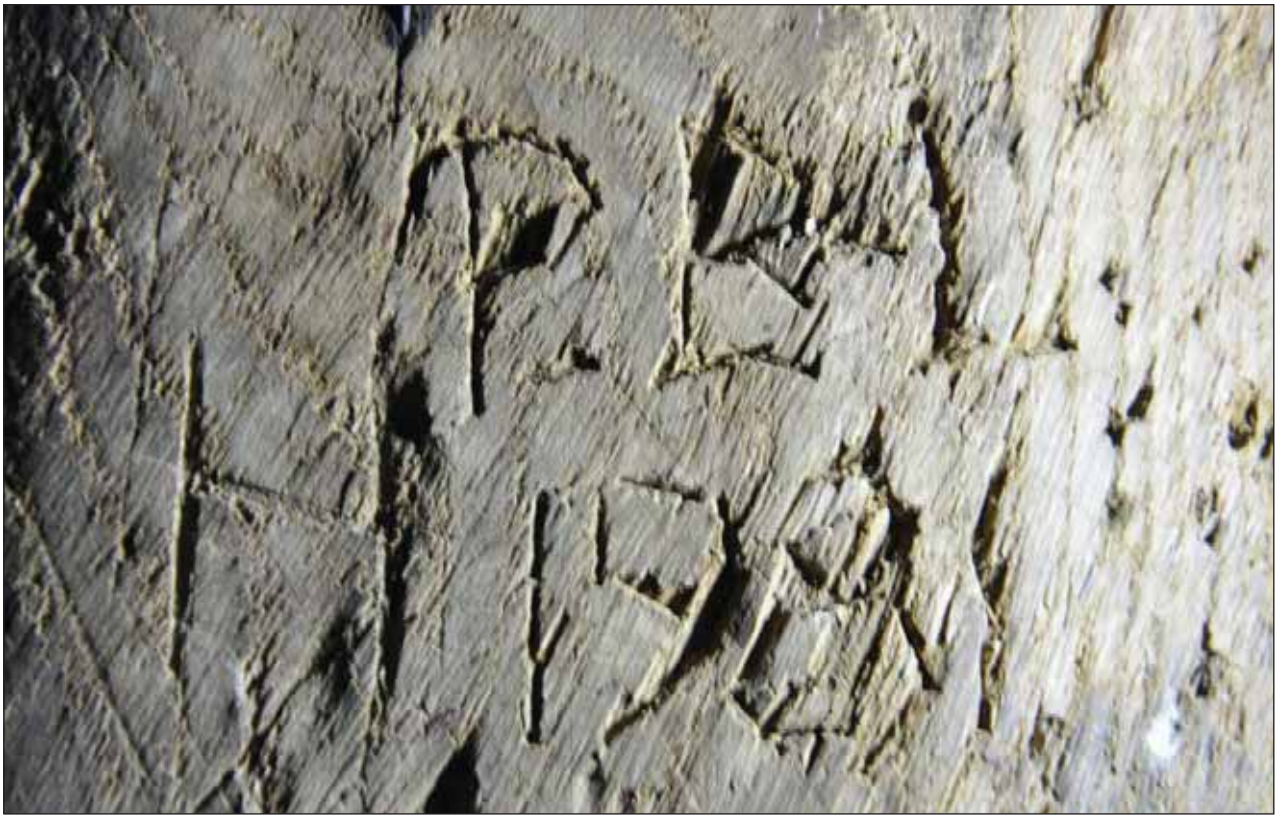

Plate 76: Carved initials “PBL H? 1981”

Plate 77: Flaky remains of printed poster (text very incomplete and hard to decipher); also poorly defined scratched date 1?9xx

Plate 78: Chalk inscription “xxxx DRIVE NO SIGNALS”

Plate 79: Chalk inscription “??81q??”

Plate 80: Carved “ALW” initials, letters made up of points cut into the wood.

Plate 81: Ink letters “DOORS 4265 LOFTY”

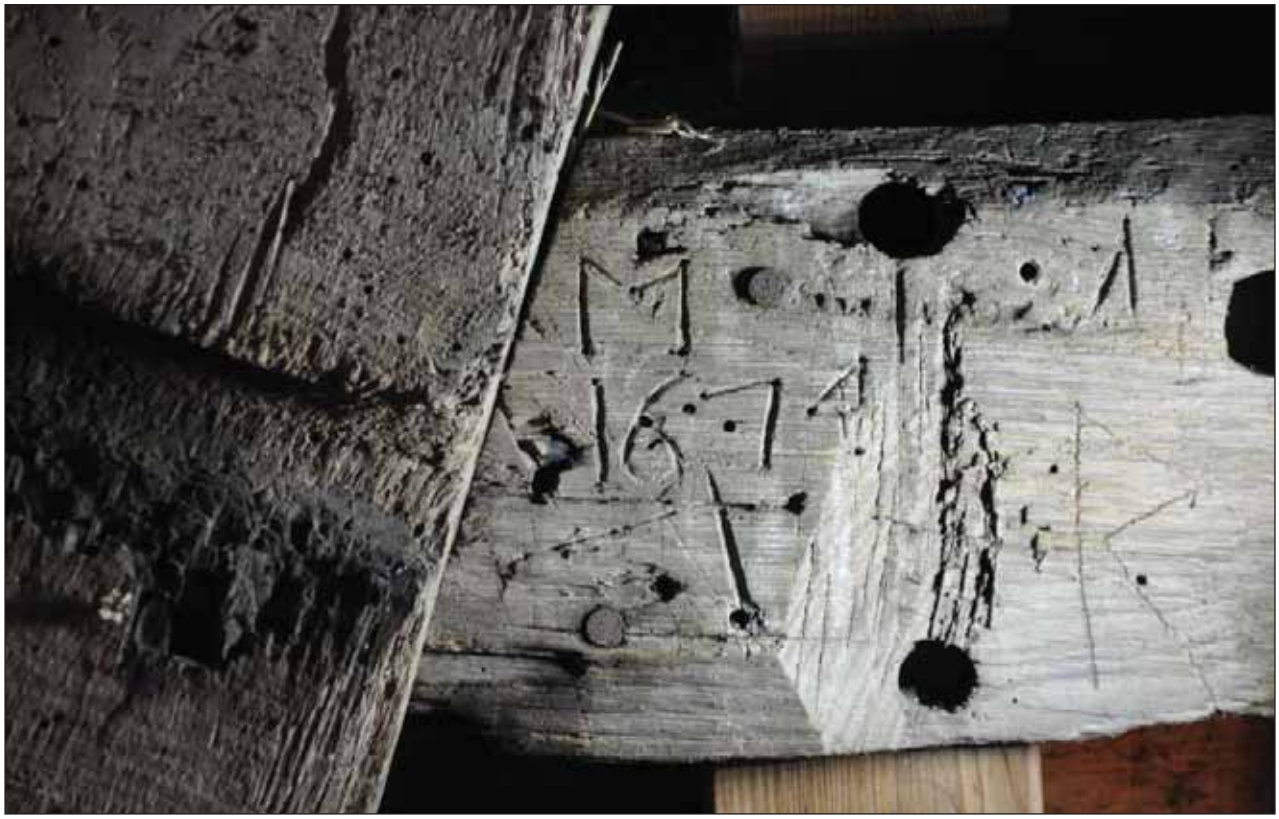

Plate 82: Carved date 1674 and “M” initial. The oldest carved date in the mill.

Plate 83: Hard to read carved inscriptions inside rear door lintle

Plate 84: Carved initials “RW” but no date.

Plate 85: Carved initial “W” and “M” but no dates.

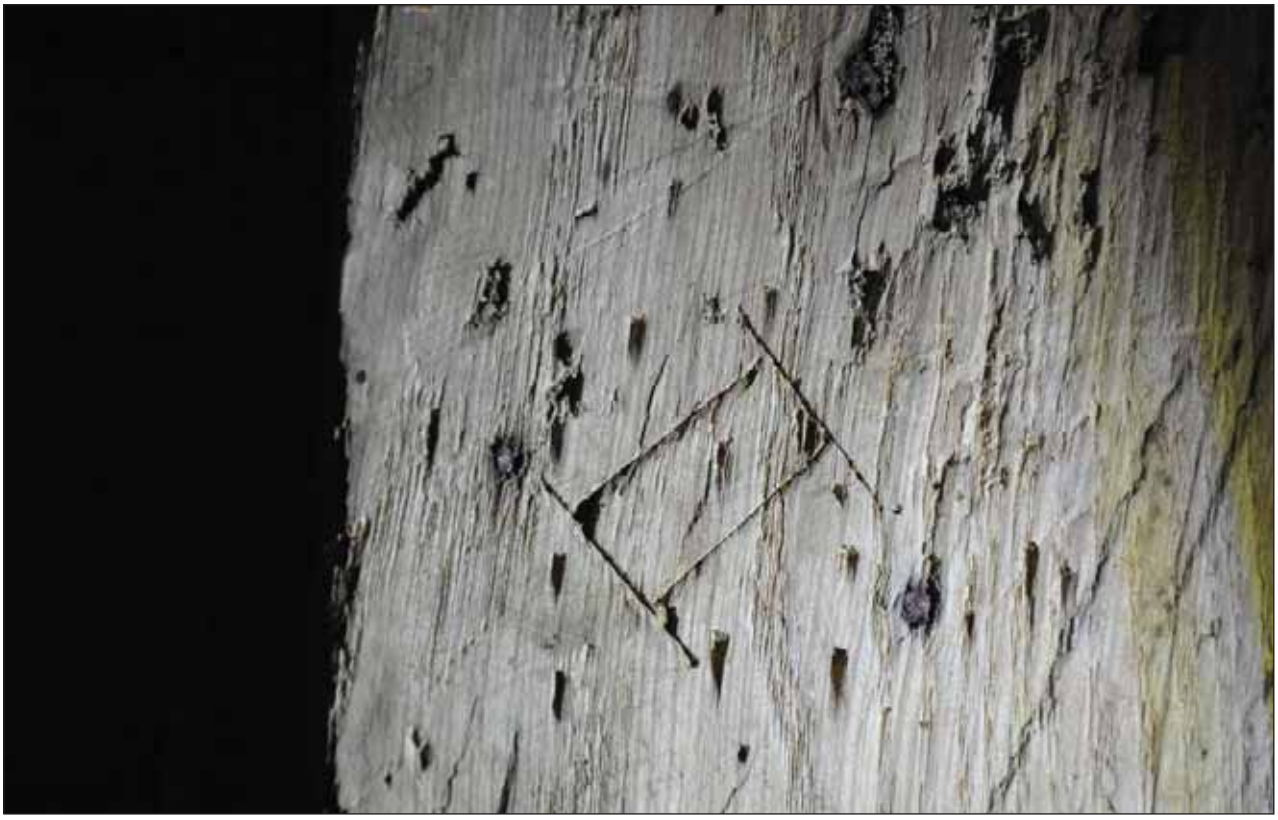

Plate 86: Roman II - as carpenter’s mark

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