CONTENTS

Illustrations

Plates

Non-technical Summary

Little Matlock Hamlet has been granted planning permission and listed building consent, subject to a Section 106 agreement, for a development at Low Matlock Wheel, Sheffield.

A desk-based assessment (Aitchison 2001) has identified a complex history of buildings at the site, focussing around a series of water-powered mills on the River Loxley. The earliest documented mill on the site dates from the first half of the eighteenth century. The site was badly damaged and then largely rebuilt following the Great Sheffield Flood of 1864.

The mill buildings on site incorporated the last water-powered steel rolling mill in Sheffield. The mill buildings are grade II listed, while a row of cottages above the mill which partly date from the start of the nineteenth century and survived the flood are grade II listed. The mill buildings and associated water management features are within the area of a Scheduled Ancient Monument.*

South Yorkshire Archaeology Service, advisors to the City of Sheffield Council, requested that an archaeological evaluation be carried out in two areas where new building is intended. ARCUS was appointed to undertake this evaluation.

This report details the results of the evaluation.

Checked by Project Officer	Passed for submission to client
Date	Date
Kenneth Aitchison *Project Archaeologist*	Mr James Symonds *Executive Director*

1 INTRODUCTION

Little Matlock Hamlet, a partnership between the companies of Hawk Estates and Trading Ltd and Major Lease Ltd, have been granted planning permission for alterations to a grade II listed mill building (Sheffield LBC 9A/0237); extensions to a grade II listed row of existing cottages (Sheffield LBC 9A/0234 and Full 99/0233); alterations and extensions to two existing ancillary buildings – for residential use, and up to three areas of new build – for residential use (LBC 9A/0236 and Full 99/0235), subject to a Section 106 agreement. The scheme will include landscaping, works to services and works to the access roads.

ARCUS was appointed by Little Matlock Hamlet to undertake an archaeological field evaluation required under the planning conditions incorporated in the Section 106 planning obligation on the site.

1.1 Project Aims

The aims of this project were to:

- evaluate the preservation and potential of buried archaeological deposits, the likely significance of such deposits, and the impact on them of the development proposals.

1.2 Site Location

Low Matlock Wheel (also known as Low Matlock Mill, Lower Cliff Wheel or Boggey Wheel) lies on the north side of the River Loxley, on the south side of Low Matlock Lane, within the City of Sheffield (SK 309 894), 6km west of the centre of Sheffield (**Figure 1**).

The site consists of mill buildings, a range of cottages and two other free-standing buildings, all of which are on the north bank of the river; the site extends onto the wooded south bank of the river.

Two evaluation trenches were excavated, one to the immediate east of the building known as the Counting House, and the other east of the Cottages (**Figure 2**).

2 ARCHAEOLOGICAL BACKGROUND

A previous desk-based assessment of the archaeology of the site (Aitchison 2001) identified a complex history of buildings, focussing around a series of water-powered mills on the

River Loxley. The earliest documented mill on the site dates from the first half of the eighteenth century. The site was badly damaged and then largely rebuilt following the Great Sheffield Flood of 1864.

The mill buildings on site incorporated the last water-powered steel rolling mill in Sheffield. The mill buildings are grade II* listed, while a row of cottages above the mill which partly date from the start of the nineteenth century and survived the flood are grade II listed. The mill buildings and associated water management features are within the area of a Scheduled Ancient Monument.

The building immediately to the west of Trench 1, the Counting House, has dated by cartographic analysis to between 1898 and 1905 (Aitchison 2001, 12); the cottages to the west of Trench 2 date to c1800 or earlier (*ibid*.).

Both of the trenches were located close to areas identified as having been the sites of now demolished buildings.

The Counting House is an area where the likely survival of buried archaeological deposits is considered to be high, and the impact of the development on buried archaeological deposits is also considered to be high (Aitchison 2001, 15).

In the area of Trench 2, where a new build to be called Meadowview Cottages will be located is in an area where the likely survival of buried archaeological deposits is considered to be moderate, and the impact of development upon buried archaeological deposits is considered to be high (*ibid*.).

3 METHODOLOGY

3.1 Machine Excavation

The area of new build to the rear of the Counting House (an area of approximately 8m x 3m) was stripped (Trench 1) and a trench of 20m x 2m was stripped in the footprint of the new cottages (Trench 2). Provision was made for these areas to be extended if features were revealed that warranted formal excavation and recording.

A mechanical excavator with toothless bucket was used in order to carry out a clean and safe job.

All machining was carried out under the direct supervision of an archaeologist and would have been halted if archaeological deposits were encountered.

All topsoil or recent overburden was removed down to the first significant archaeological horizon in successive level spits.

3.2 Hand Excavation

All features revealed needed to be investigated - discrete features were to be half-sectioned in the first instance; linear features were to be sampled at a minimum of 20% along their length (each sample area being not less then 1m in length), or a minimum of a 1m sample section, if the feature was less than 1.0m long. In addition, deposits at junctions or interruptions in linear features were to be sufficiently excavated for the relationship between components to be established.

3.3 Recording

All trenches were planned at 1:50. Individual features were to be planned at 1:20 where additional detail was required. One representative long section of each trench was produced, at an appropriate scale. Sections and profiles of each feature sampled were to be drawn at 1:10 or 1:20, depending on the size of the feature.

3.4 Environmental Sampling

An environmental specialist (Sean Bell) visited the site to advise on a sampling strategy and their suggested strategy was then implemented.

3.5 Scientific Dating

Provision was made to recover material suitable for scientific dating and contingency sums were available to undertake such dating, had it proved necessary. This was to be decided in consultation with the South Yorkshire Archaeology Service (SYAS).

3.6 Staffing

The project environmental specialist was Sean Bell, ARCUS Assistant Archaeologist. The archaeological evaluation and recording work was undertaken by Sean Bell and Kenneth Aitchison, ARCUS Project Archaeologist.

4 RESULTS

4.1 Trench 1

Trench 1 measured 8m by 3m, aligned north-south and was located immediately to the east of (behind) the Counting House. In this trench, the following sequence of deposits was encountered (from the highest to the lowest):

- topsoil [100]; overlying
- yellow clay [101}, interpreted as make-up for car parking; overlying
- mixed rubble [102], incorporating modern brick fragments, reinforced concrete rubble; overlying
- buried topsoil [103]; overlying
- subsoil [104}; overlying
- natural clay [105].

At the southern end of the trench, excavation continued into the natural [105] to a total depth of 2.00m. Towards the northern end of the trench, a redundant early twentieth century water pipe was encountered below buried topsoil [103], cut into [104]. In this area, excavation ceased where this was encountered at a depth of 1.05m.

The plan of the trench, and the east-facing section, are included as **Figures 3** and **4**.

No artefacts were recovered from the buried topsoil [103] or lower. No artefactual material was retained from stratigraphically higher deposits.

The stratigraphic sequence is interpreted as a field surface [103], which corresponds in height to a field immediately adjacent to the evaluated area (to the east), overlain in the late twentieth century by dumped material, making up a ground surface that was used for car parking.

4.2 Trench 2

Trench 2 measured 20m by 2m, aligned roughly east-west. The stratigraphic sequence exposed in this trench was (from the highest to the lowest):

- flyash and cinders [200] in the western part of the trench; overlying
- compacted stone rubble [201]; overlying
- topsoil [203]; overlying
- natural clay [202].

This was excavated to a maximum depth of 1.15m.

The plan of the trench, and the south-facing section, are included as **Figures 5** and **6**.

No artefactual material was recovered from this trench.

The sequence is interpreted as industrial dumping of ash and rubble (possibly following the flood) from the steel mill, onto topsoil which directly overlies the natural subsoil.

4.3 Environmental Sampling

Visual examination by hand-lens indicated there was no survival of organic remains and a high incidence of root activity. Thus the deposits exposed in both trenches were not secure contexts for environmental sampling, and accordingly none was recommended.

5 CONCLUSIONS

Two trenches were opened, exposing a total area of 104m². The archaeological evaluation of these trenches revealed no archaeological deposits that could be disturbed by construction in the areas evaluated. The soils exposed in these trenches did not prove to have potential for the preservation of palaeoecological remains.

Any further development work in these areas will not be expected to disturb archaeological remains.

6 COPYRIGHT

7 BIBLIOGRAPHY

Aitchison, K. 2001. *Archaeological Desk-Based Assessment of Low Matlock Mill, Loxley Valley, Sheffield*. Unpublished ARCUS report 597.1.

ILLUSTRATIONS

PLATES

	
Plate 1: photo 1/10	Plate 2: photo 1/12
Trench 1, after excavation, facing south	Trench 2, after excavation, facing west

APPENDIX I: CONTEXT REGISTER

context	trench	description	interpretation
100	1	dark brown sandy-silty clay	topsoil
101	1	pale yellow clay	car park surface
102	1	mid grey-brown clayey silt	make-up for car park
103	1	dark grey-brown sandy clay-silt	buried top soil
104	1	pale grey silty clay	subsoil
105	1	mid-yellow clay	undisturbed natural clay
200	2	dark grey loose	industrial residue
201	2	yellow sandstone rubble	store layer to aid drainage
202	2	mid-yellow clay	undisturbed natural clay
203	2	mid-grey-brown clayey silt	subsoil

APPENDIX II: PHOTOGRAPHIC REGISTER

Film	Frame	Trench	Description	Direction Facing	Photographer	Date
1	1	1	working shot	NW	SDB	19/07/01
1	2	1	working shot	NW	SDB	19/07/01
1	3	2	working shot	NE	SDB	19/07/01
1	4	2	working shot	NE	SDB	19/07/01
1	5	2	stone layer below ash	SE	SDB	19/07/01
1	6	2	stone layer below ash	SE	SDB	19/07/01
1	7	1	east facing section	W	SDB	19/07/01
1	8	1	east facing section	W	SDB	19/07/01
1	9	1	post-excavation	S	KA	19/07/01
1	10	1	post-excavation	S	KA	19/07/01
1	11	2	post-excavation	W	KA	19/07/01
1	12	2	post-excavation	W	KA	19/07/01
1	13	2	south facing section	N	KA	19/07/01
1	14	2	south facing section	N	KA	19/07/01

APPENDIX III: BRIEF FOR ARCHAEOLOGICAL EVALUATION ISSUED BY SOUTH YORKSHIRE ARCHAEOLOGY SERVICE

2) Evaluation to rear of Counting House and to east of Cottages

2.1) The area of new build to the rear of the counting house (an area of approximately 8m x 3m) will be stripped and a trench of 20m x 2m will be stripped in the footprint of the new cottages. This area may will be extended, if features are revealed that warrant formal excavation and recording; a contingency for this eventuality should be allowed for.

An appropriate machine and bucket should be used. This choice should be influenced by the prevailing site conditions; the machine must carry out a clean and safe job.

All machining is to be carried out under the direct supervision of an archaeologist and should be halted if archaeological deposits are encountered.

All topsoil or recent overburden should be removed down to the first significant archaeological horizon in successive level spits.

The archaeological contractors will be responsible for locating any service pipes, cables etc., which may cross any of the trench lines, and for taking the necessary measures to avoid disturbing such services.

All features revealed need to be investigated - discrete features will be half-sectioned in the first instance; linear features will be sampled a minimum of 20% along their length (each sample section to be not less then 1 m), or a minimum of a 1 m sample section, if the feature is less than 1.0m long. In addition, deposits at junctions or interruptions in linear features to be sufficiently excavated for the relationship between components to be established.

All trenches will be planned at 1:50, with individual features being planned at 1:20 where additional detail is required. One representative long section of each trench will be produced, at an appropriate scale. Sections and profiles of each feature sampled will be drawn at 1:10 or 1:20, depending on the size of the feature. All plans, sections and profiles will be related to Ordnance Datum in metres.

An environmental specialist will visit the site to advise on a sampling strategy and their suggested strategy will then be implemented.

Provision will be made to recover material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary - to be decided in consultation with the South Yorkshire Archaeology Service (SYAS).

Further contingency provision will be made for additional specialist advice, e.g. for finds analysis and conservation.

Any human remains revealed will be excavated following the receipt of an appropriate licence from the Home Office.

All finds that are `treasure' in terms of the Treasure Act 1997 will be reported to the Coroner and appropriate procedures then followed.

2.2) Post-excavation and reporting

All finds to be treated in accordance with the EH guidance document 'A strategy for the care and investigation of finds' (1995) and the UKIC's document 'Guidelines for the preparation of excavation archives for long term storage' - in particular, all ferrous objects and a selection of non-ferrous objects (including all coins), will be x-radiographed.

Appropriate palaeo-environmental scientific analyses will be undertaken.

The site archive will be prepared in accordance with the specification outlined in 'Management of Archaeological Projects' (English Heritage 1991).

The report will include a detailed context index and an index to the archive.

The report will include a phased interpretation of the site, if possible.

Illustrations to be included are: a detailed location map, a detailed site plan showing all trenches, all trench plans and sections and detailed plans and sections of features, select artefact illustrations and a selection of scanned photographs; an overall site plan showing all (phased) archaeological features recorded will also be included.

A copy of this brief should be bound into the back of the report.

2.3) Archiving

Arrangements will be made for the deposition of the archive at Sheffield City Museum, in agreement with the landowner.

The project will be discussed with the relevant museum curator, in advance of work commencing on site. Contact Gill Woolrich on telephone 0114 - 278 2640.

3) Monitoring

The South Yorkshire Archaeology Service will be responsible for monitoring. A minimum of one week's notice of the commencement of fieldwork must be given so that arrangements can be made.

Any alterations to this programme of work found to be necessary during the lifetime of the project will be discussed and agreed with the South Yorkshire Archaeology Service.

4) Submission of reports

A copy of the completed reports should be submitted to Anthony Brownlow of Little Matlock Hamlet and to John Proctor of Sheffield City Council Development Control.

A copy of each should also be submitted to the South Yorkshire Archaeology Service, Howden House, 1 Union Street, Sheffield, S1 2SH for inclusion into the South Yorkshire Sites and Monuments Record.

As well as a printed copy of the reports, an electronic copy of all files produced are to be provided in text (ASCII) format and submitted to SYAS.

5) Publication & Dissemination

A summary of the results, of an appropriate length, will be prepared and submitted for inclusion in the South Yorkshire Annual Archaeology Review, accompanied by illustrations.

Text to be submitted as ASCII, illustrations as .tiff files (scanned at 300 dpi and saved as black & white line art for diagrams, greyscale for photos).

Provision for publication of the results in an appropriate regional or national journal, if appropriate, will be allowed for.

Provision will be made for publicising the results of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day and talking to local societies, etc.