

BUILDING RECORDING AND
INTERPRETATION OF
PROSPECT WORKS,
MILL STREET
REDDITCH

Shona Robson-Glyde (BA (Hons), Dip Arch)

Illustrated by Carolyn Hunt

6th February 2004

© Historic Environment and Archaeology Service,
Worcestershire County Council

Historic Environment and Archaeology Service,
Worcestershire County Council,
Woodbury,
University College Worcester,
Henwick Grove,
Worcester WR2 6AJ
WSM 33515



Project 2441
Report 1215

Contents

Part 1 Project summary	1
Part 2 Detailed report	
1. Background	2
1.1 Reasons for the project	2
1.2 Project parameters	2
1.3 Aims	2
2. Methods	2
2.1 Documentary search	2
2.2 Fieldwork.....	3
2.2.1 Fieldwork strategy	3
2.2.2 Structural analysis.....	3
2.3 Building recording.....	3
2.4 The methods in retrospect.....	3
3. Topographical and archaeological context	3
4. Historical context	4
5. Building description	4
6. Phasing	5
6.1 By 1887	6
6.2 By 1904	6
6.3 By 1927	6
6.4 Post 1927	6
7. Discussion	7
7.1 Research frameworks.....	7
8. Publication summary	7
9. The archive	7
10. Acknowledgements	8
11. Personnel	8
12. Bibliography	8
13. Abbreviations	8

Building recording and interpretation of Prospect Works, Redditch

Shona Robson-Glyde

Part 1 Project summary

Building recording was undertaken at Prospect Works, Mill Street, Redditch (National Grid reference SP 0395 6800). It was undertaken on behalf of Owens Property Solutions, who intend to convert the building into residential accommodation for which a planning application has been submitted. The project aimed to determine when the works were built, what the works were built to make and what is the architectural development history of the site.

Prospect Works was originally built as a needle and fishhook maker. The original building on the site probably consisted only of a scouring mill. Scouring was the process of polishing the needles. The needles were made in the people's cottages and taken to a scouring mill to be polished. The expansion of the industry under one master saw other buildings being added for each process of the needle industry. In the early 20th century the Works was converted for use as a spring manufactory.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

Building recording and interpretation project was undertaken at Prospect Works, Mill Street, Redditch, Worcestershire (NGR SP 0395 6800), on behalf of Owens Property Solutions. They intend to convert the existing buildings and create a new residential development comprising of 18 apartments, car parking and amenity space and has submitted a planning application to Redditch Borough Council (reference R/03/0332), who consider that a site of archaeological interest may be affected (WSM 10256).

1.2 Project parameters

The project conforms to the *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* (IFA 1999).

The project also conforms to a brief prepared by the Planning Advisory Section of Worcestershire County Council Historic Environment and Archaeology Service (HEAS 2003a) and for which a project proposal (including detailed specification) was produced (HEAS 2003b).

1.3 Aims

The aims of the recording were to ‘determine as far as is reasonably possible, the nature of the archaeological resource associated with a specified building structure or complex’ (HEAS 2003a).

More specifically the following aims have been identified:

- When were the works built?
- What were the works built to make?
- What is the architectural development history of the site?

2. Methods

2.1 Documentary search

Prior to fieldwork commencing a search was made of the Sites and Monuments Record (SMR). The County Records Office contained no sources directly related to the works. In addition the following sources were also consulted:

Cartographic sources

- Ordnance Survey maps of 1886, 1904, 1927 and 1999 at 1:2500

Documentary sources

- Trade Directories

2.2 **Fieldwork**

2.2.1 **Fieldwork strategy**

A detailed specification has been prepared by the Service (HEAS 2003b).

Fieldwork was undertaken between 20th and 24th November 2003. The fieldwork consisted of a photographic survey of the interior and exterior of all the buildings. All photographs were taken with appropriate scales visible in shot. Photographs were taken with 35mm cameras using black and white and colour print film and also with a Fujifilm Finepix S602zoom digital camera set at 1M Fine.

2.2.2 **Structural analysis**

All fieldwork records were checked and cross-referenced. Analysis was affected through a combination of structural evidence allied to the information derived from other sources.

2.3 **Building recording**

The project conformed to the specification for a level 2 survey as defined by the Royal Commission on the Historic Monuments of England (RCHME 1996). This entailed the following elements of survey:

- General view or views of the exterior of the buildings
- The overall appearance of the rooms
- Detailed coverage of the interior and exterior of the buildings
- Any functional fixtures and fittings
- The buildings' relationship to their setting and other buildings
- Any structural or decorative detail.

2.4 **The methods in retrospect**

Having undertaken the project the following comments may be made with regard to the methods adopted. The Brief requires that a phased drawing be produced but did not allow a provision for producing a drawn record of the buildings if ground survey plans did not exist. The survey plans that were provided by the client consist only of proposed plans for the main Prospect Works building; the architect did not produce an existing survey drawing. A phase plan has been produced for this building based on the proposed drawings. For the rest of the buildings a block-phasing plan was produced based on Ordnance Survey maps.

3. **Topographical and archaeological context**

Redditch is situated in a hilly area of Worcestershire. It was historically a small village that grew up outside the walls of Bordesley Abbey. It grew in the late medieval period as a result of the prosperous needle and fishhook industry. Originally it was a chapelry of Tardebigge but received its own church in the 1800s when the town was rapidly growing. The SMR shows a large number of listed buildings of this date in the town.

Prospect Works is to the immediate west of Redditch town centre (Fig 1). This area of the town seems to have been the focus for the 18th and 19th century industrial works of the town. The SMR has a number of mills in vicinity including Standard Works (WSM 19778); Excelsior Works (WSM 17670); Forge Mills (WSM 19782); Easemore Works (WSM 19772) and Windsor Mills (WSM 114). All of these were manufacturers of needles and fishhooks.

4. **Historical context**

Redditch was famous for its manufacture of needles and fishhooks. The former industry began in the medieval period when the monks of Bordesley Abbey were producing them and by the 15th century were selling them commercially out of Bristol. A rise in the industry came in 1483 when the government banned the import of foreign needles and pins. By the 16th century needle making had become a cottage industry where the needles were made and scoured (polished). In the 17th century needle makers from all over the country moved their businesses to Redditch after the Civil Wars. The advances in the use of coal for furnaces, as a substitute for charcoal, allowed the needle industry to develop further in the 18th century. It was at this time that needle mills began to be set up using either coal or also water. Forge mills produced the iron wire to make the needles; the needles were produced in cottages and then taken by each maker to be scoured at the local needle mill. By the late 18th century fishhooks were beginning to be made alongside the needles and the whole business had moved into mills. Often these had been built specifically for the manufacture of the needles and fishhooks but some also developed out of the inns where the needle makers met to transact business, for example the Fountain Inn. By the mid 19th century the trades employed to make needles consisted of wire drawers, file makers, toolmakers, bellows makers, grindstone trimmers, millwrights, as well as the needle makers. At this time the Redditch area was producing 15,000,000 needles a week. The needle industry in Redditch seemed to decline at the beginning of the 20th century and the mills were gradually closed or converted for other uses (Rollins 1984).

The Prospect Works site on Mill Street was in existence as a needle and fishhook maker by 1855 when Billing's Directory (Billing 1855, 379) mentions the company James Thomas and Sons of Mill Street works. It is not known whether the buildings still surviving on the site were part of this company but it is probable that they were. James Thomas and Sons was mentioned in Jones' Directory (Jones 1865, 139) in 1865 when they were manufacturers of needles, fishhooks and fishing tackle. In 1876 they were mentioned in the Post Office Directory (Post Office 1876, 1039) and in 1900 they were mentioned in Kelly's Directory (Kelly 1900, 209) as being of Mill Street works. There is a gap in the record between 1900 and 1928 when Kelly's Directory (Kelly 1928) mentions The Redditch Spring Company Limited of Prospect Works. This is the first time that the mill has been known as the Prospect Works and it also shows that the business had become a spring manufactory. Kelly's Directories of 1936 and 1940 also have the same entry for the works. The Redditch Spring Company Limited was in business at the Prospect Works until around the year 2000.

5. **Building description**

The results of the structural analysis are presented in the table below. The buildings recorded are shown in Plates 1 – 27. A site layout is included as Figure 2 and phase diagrams have been produced as Figure 3 and 4. A photo location plan has been produced as Figure 5.

Range	Building	Function	Date	Notes
1	A (Plate 1)	Offices	By 1887	Made of brick. Bay windows (Plate 2) and door surround typical of early-mid 19 th century.
	B (Plate 3)	Offices	By 1904	Made of brick. Consists of corridor containing a later clocking-in machine inserted into a doorway (Plate 4). Another section has a small room with a weighing machine (Plate 5).
	C (Plate 6)	Scouring mill	By 1887	Same date as the offices A. Built of brick three stores high with rectangular sash windows and decorative lintels. Interior is open (Plate 7).
	D (Plate 8)	Heading and cheeking	By 1904	Built of brick three storeys high. Ground floor has blocked up semi-circular arched head windows and door (Plate 9). Interior is open (Plate 10).

	E (Plate 11)	Spring works	Post 1927	Built of concrete. Two storeys with later external wooden staircase and large rectangular windows with iron glazing bars. The interior is open (Plate 12).
2	A (Plate 13)	Spring works	Post 1927	Built of concrete. Two storeys with large rectangular windows and an open interior (Plate 14). Same as 1-E
3	A (Plate 15)	Possibly Cart shed	By 1887	Built of brick. Redditch Spring Co. tin sign on south elevation (Plate 16). Open south elevation. East elevation has a large double-doored opening (Plate 17).
	B (Plate 18)	Eye punching	By 1887	Built of brick. Interior is divided into 2 rooms. Contains later stove (Plate 19) attached to original chimney breast and later cupboards (Plate 20). 1 st floor access not possible due to rotten stairs (Plate 21). 1 st floor is later addition by raising of roof. East elevation has segmental arched head openings and later rectangular sash window.
	C (Plate 22)	Wire drawing and cutting	By 1887	Built of brick. Bare long room (Plate 23). 1 st floor access from within B. 1 st floor is later addition by raising of roof. Has large added windows and taking-in door that are now blocked.
	D (Plate 24)	Pointing shed	By 1887	Built of brick. Containing mechanism for running pointing machinery (Plate 25). Segmental arched head window and doubled-doored opening.
4	A (Plate 26)	Forge	By 1887	Built of brick. Contains three forges (Plate 27) built into west wall and using a single flue. The windows have segmental arched heads as have the forge openings.
	B (Plate 28)	Spring works	By 1927	Built of concrete. Is divided into two rooms which contain workbenches (Plate 29) and an office and electricity fuse boxes (Plate 30). The windows are rectangular with wooden lintels and iron glazing bars.
5	A (Plate 31)	Engineering works	Post 1927	Built of brick. It has a large open space (Plate 32) and contains benches where machinery and lamps were attached (Plate 33). The windows are large and rectangular with iron glazing bars.
6	A (Plate 34)	Spring works	By 1927	Built of brick. Open space inside (Plate 35).
7	A (Plate 36)	Winding shed	By 1927	Built of pale coloured brick. Contains machinery (Plate 37) for running winding mechanism (Plate 38). Windows have concrete lintels and are rectangular with 8 lights and iron frames.
	B (Plate 39)	Toilet	Post 1927	Built of brick

The needle making process

The needle making process is described on the Unofficial Forge Mill website (Geocities 2004) and has been paraphrased below. This has allowed an understanding of the process at Prospect Works. This is detailed as a flow diagram on Figure 3.

- Iron was made into coils of wire in the Black Country.
- Once at the needle mill, this wire was drawn. This involved heated wire being pulled through a series of holes in a metal block that got smaller and smaller.
- Then the wire was cut into sections the length of 2 needles.
- The wire was straightened by packing up to 15000 lengths together between iron rings and heating until they were red hot. Then they were rolled back and forth, the motion causing the wires to rub together and straighten themselves.
- The lengths were then pointed at each end. The pointers, the most risky job in the industry, put 50-100 lengths in his hands at a time and rubbed them against the pointing stone.
- Eyes were put into the needles but using a kick-stamp to leave the impression of the holes and then a fly-press to punch out the holes.
- The needles were then separated by 'heading and cheeking'. This process threaded the needles onto a spit and the excess metal was ground away and the needles were separated by hand.
- Next the needles needed to be hardened by being heated in a furnace at ~~800~~ until they were cherry red. They were then quenched in fish oil as water caused the needles to bend.

6. Phasing

The Prospect Works was originally built as a needle mill. The oldest buildings on the site probably pre-date the first reference to the mill in 1855. These consist of the main offices and the scouring mill (Range 1 Buildings A and C) that were probably first constructed around 1820. The needle mill began by scouring, polishing, needles brought to the mill by the cottage industries that needed the extra power supplied by the mills.

6.1 By 1887

By this time the works consisted of buildings A and C of range 1, all of range 3 and building A of range 4. This expansion of the works probably gradually took place as more and more of the manufacturing of needles was carried out on the site. By 1887 almost all of the process was being carried out on the same site.

6.2 By 1904

The industry at the works had expanded by the addition of buildings B and D of range 1. These buildings were probably used for offices and for the last process of the needle making to be carried out in a mill, the heading and cheeking (dividing) of the needles from their pairs into single units. Women and children originally completed this process in their cottages.

6.3 By 1927

By this time further buildings had been constructed on the site consisting of range 2, building B of range 4, range 6 and range 7. It is likely that the works had been converted for the manufacture of springs by this time as The Redditch Spring Company is first documented in 1928. The forge was still being used to heat the iron wire but the other buildings had probably changed their use, even if subtly.

6.4 Post 1927

The production of the springs and other products on the site expanded after 1927. A large works building was constructed (Range 5) and a smaller works was also built (Building E of range 1). The large works was fitted out for the large-scale manufacture of small items such as pressed work and wire work.

7. Discussion

The manufacture of needles was an industry dominated by Redditch. Prospect Works began life as one of these works and expanded and changed to become The Redditch Spring Company Limited. However when you compare the size of Prospect Works to the surrounding needle mills, it is obvious that Prospect was not a large-scale or dominant producer within the industry. It is possible that its type of product was different to that of the surrounding mills and this worked against its expansion. It is also possible that due to the mill staying in the hands of one family for 50 years the capital was not available to allow large-scale expansion and competition with the surrounding mills.

7.1 Research frameworks

Detailed historical records of Prospect Works are not currently available for study but the previous owners may hold documents relating to the buildings. A more detailed investigation of the buildings and their history would be worthwhile to gain a more in-depth look at the needle mill and spring works of Prospect Works. The study of the works has allowed an insight into the needle industry of Redditch and can work alongside the information already stored at the Forge Mill Needle Museum.

8. Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

Building recording was undertaken on behalf of Owens Property Solutions at Prospect Works, Redditch, Worcestershire (NGR ref SP 0395 6800; SMR ref WSM 10256). The Prospect Works was originally built as a needle and fishhook maker. The original building on the site probably consisted only of a scouring mill. Scouring was the process of polishing the needles. The needles were made in the people's cottages and taken to a scouring mill to be polished. The expansion of the industry under one master saw other buildings being added for each process of the needle industry. In the early 20th century the Works was converted for use as a spring manufactory.

9. The archive

The archive consists of:

- 3 Fieldwork progress records AS2
- 4 Photographic records AS3
- 4 Colour photographic films
- 4 Black and white photographic films
- 145 Digital photographs
- 1 Computer disk

The project archive will be placed at:

Worcestershire County Museum
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416

10. **Acknowledgements**

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Roger Owens, Wall James Davies and Mike Glyde.

11. **Personnel**

The fieldwork and report preparation was led by Shona Robson-Glyde. The project manager responsible for the quality of the project was Simon Woodiwiss. Shona Robson-Glyde and Andy Brown undertook the fieldwork. Historical research was carried out by Shona Robson-Glyde and Anna Deeks. Illustration was undertaken by Carolyn Hunt. Shona Robson-Glyde prepared the photographs.

12. **Bibliography**

Billing, M, 1855, *Directory and gazetteer of the county of Worcestershire*

Geocities, 2004, http://www.geocities.com/forgemillmuseum/needle_making.htm

HEAS, 2003a *Requirements for a programme of Historic Building Recording and Interpretation of Prospect Works, Mill Street, Redditch*, Historic Environment and Archaeology Service, Worcestershire County Council unpublished document valid until 4th February 2004

HEAS, 2003b *Proposal evaluation/recording of an historic building at Prospect Works, Mill Street, Redditch, Worcestershire*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 18th September 2003, **P2440**

IFA, 1999 *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*, Institute of Field Archaeologists

Jones, 1865, *Mercantile Directory of the Iron District – Staffordshire; Worcestershire*

Kelly, 1900, *Directory of the county of Worcestershire*

Kelly, 1928, *Directory of the county of Worcestershire*

Kelly, 1936, *Directory of the county of Worcestershire*

Kelly, 1940, *Directory of the county of Worcestershire*

Post Office, 1876, *Post Office Directory of the county of Worcestershire*

RCHME, 1996 *Recording historic buildings: a descriptive specification (3rd edition)*, Royal Commission on the Historical Monuments of England

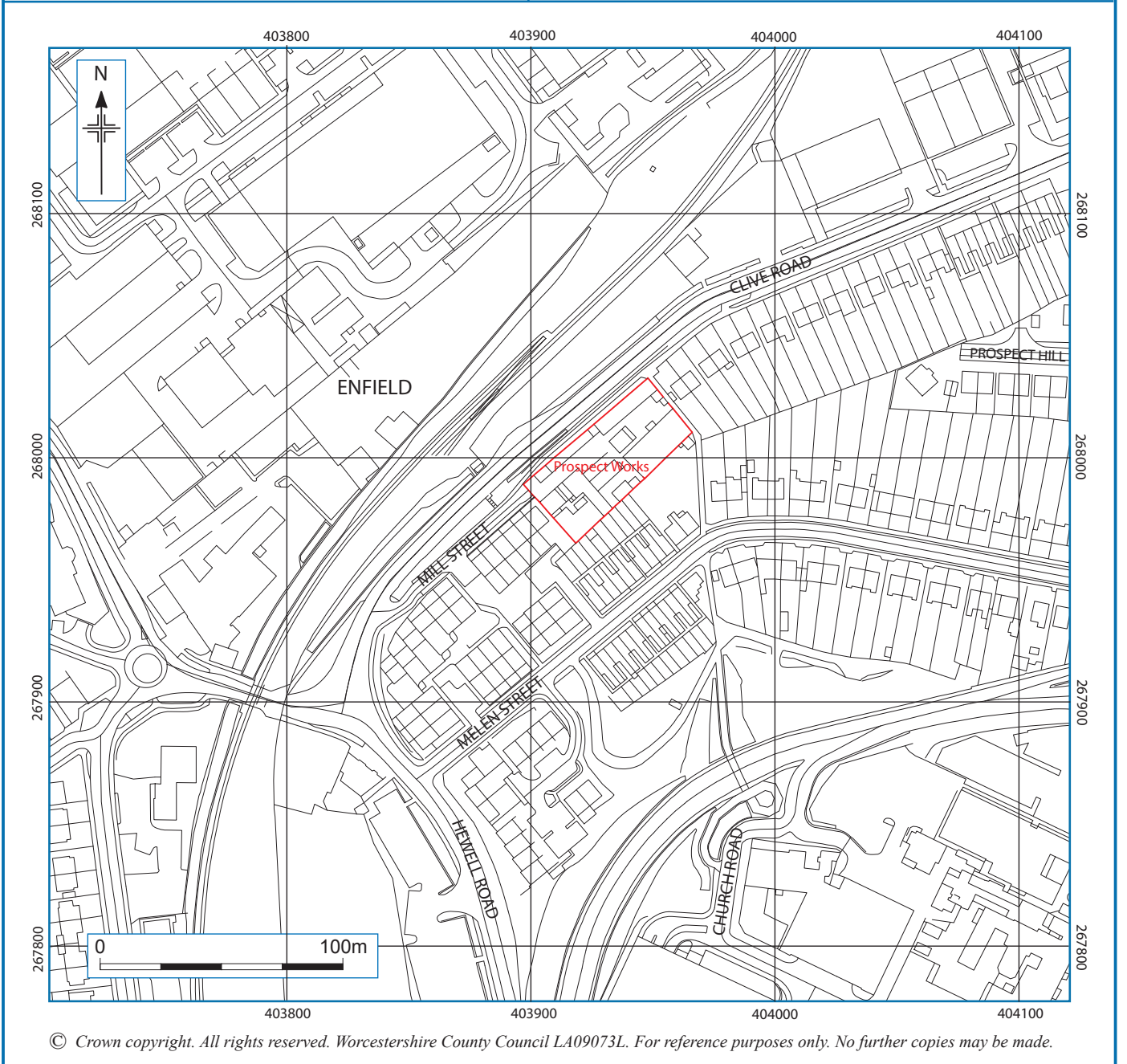
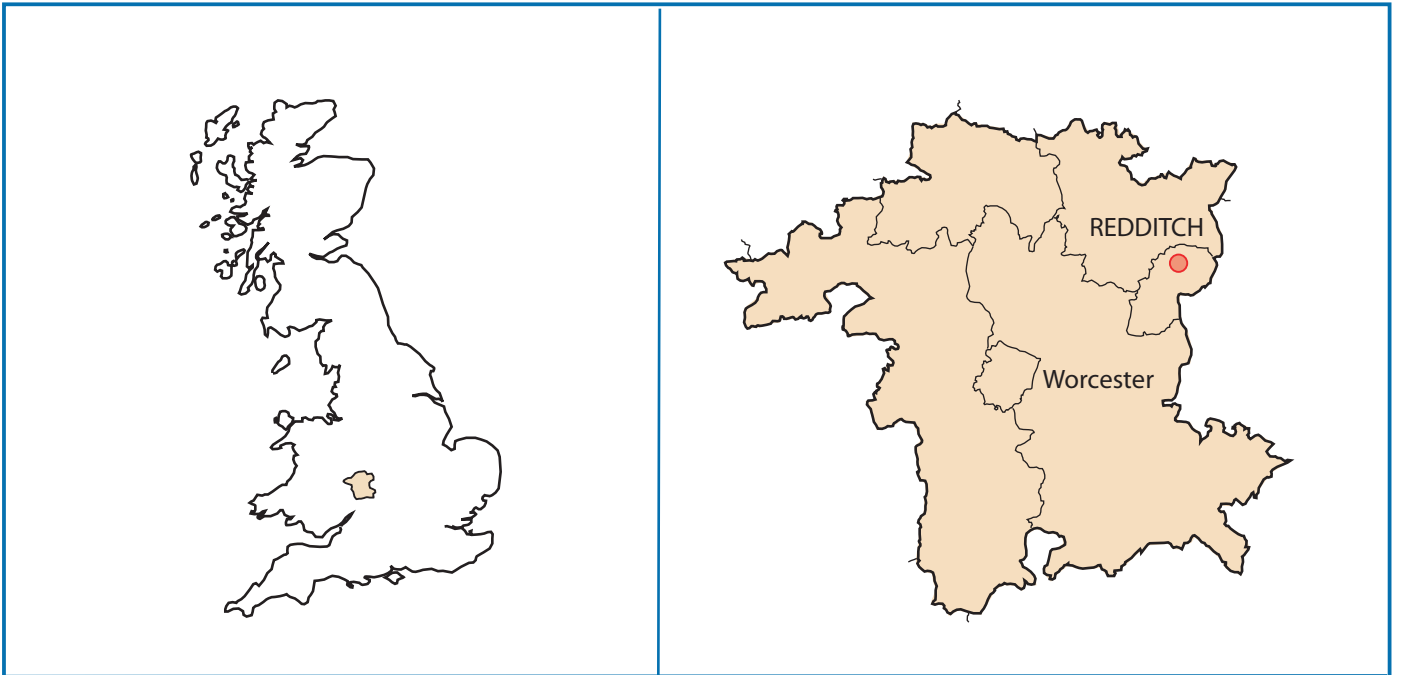
Rollins, J G, 1984 *A history of Redditch*, Worcester

13. **Abbreviations**

SMR Sites and Monuments Record.

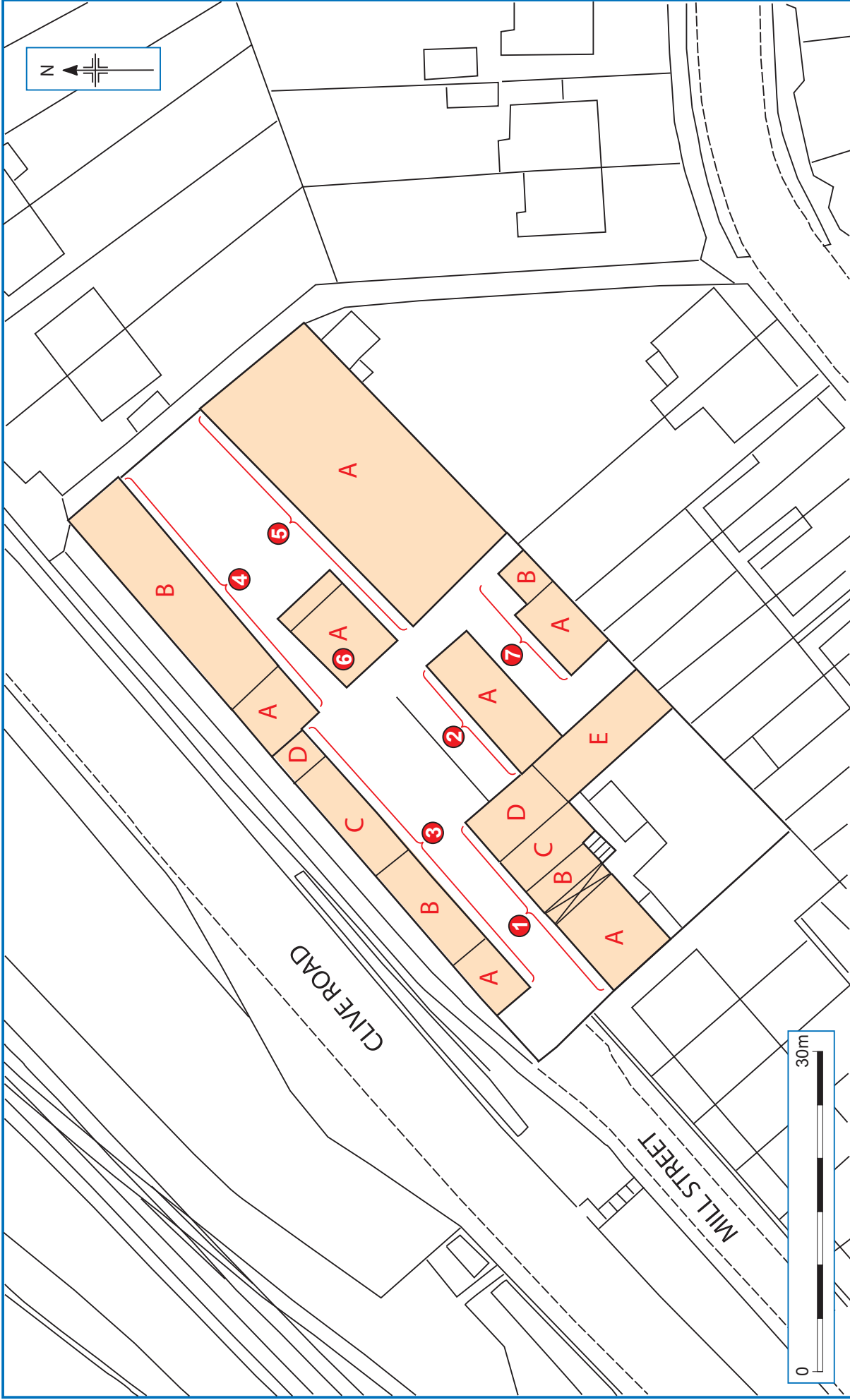
WCRO Worcestershire County Records Office.

WSM Numbers prefixed with ‘WSM’ are the primary reference numbers used by the Worcestershire County Sites and Monuments Record.



Location of Prospect Works.

Figure 1



© Crown copyright. All rights reserved. Worcestershire County Council LA09073L. For reference purposes only. No further copies may be made.

Figure 2

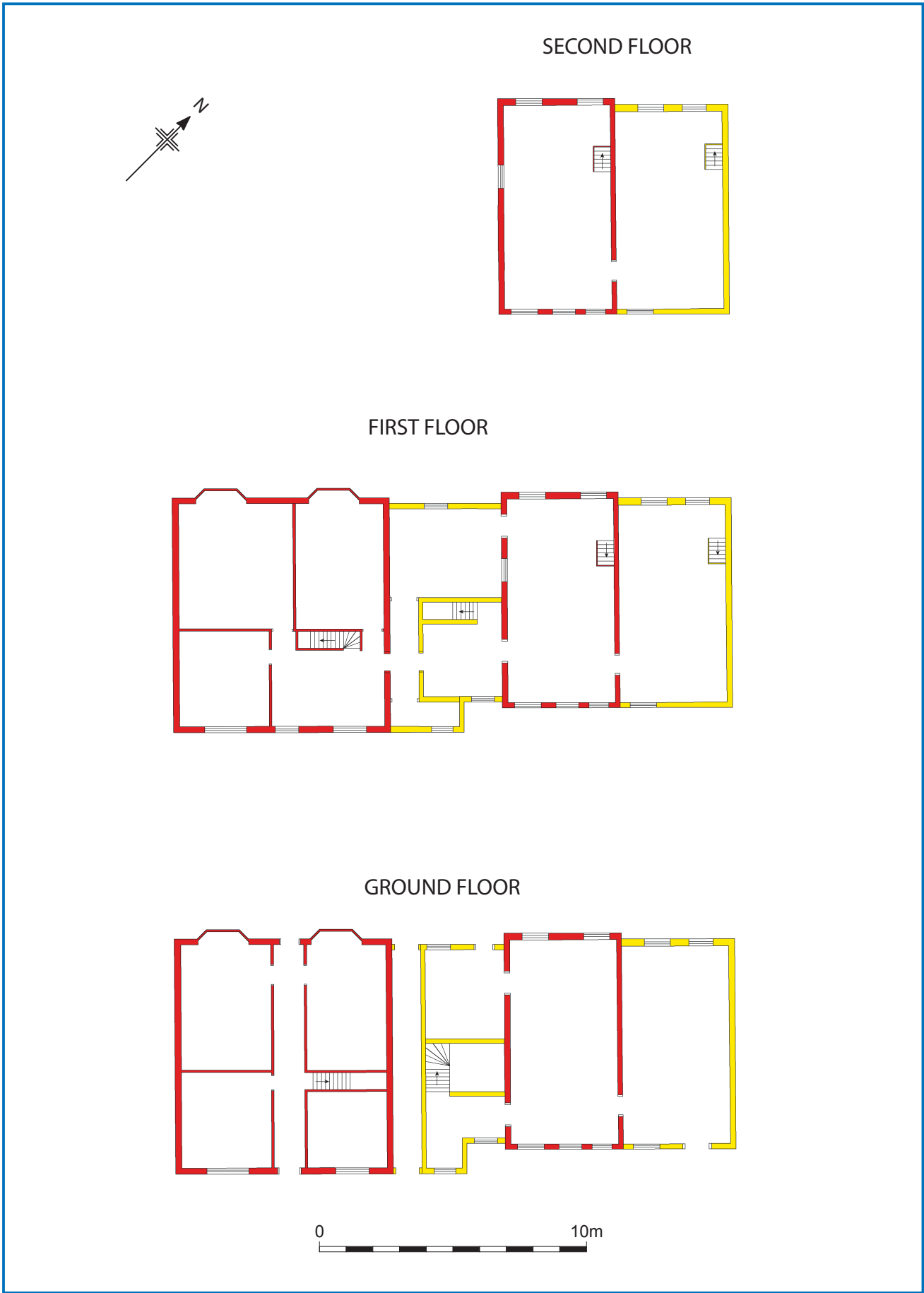
Site layout.



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Worcestershire County Council LA09073L. For reference purposes only. No further copies may be made.

Phasing of Prospect Works and flow of needle making process.

Figure 3



Plan of Prospect Works: Range 1, Buildings A-D.

Figure 4



Photo locations.

Figure 5

Appendix 1 Plates



Plate 1: Range 1 building A, from the west



Plate 2: Windows of range 1 building A



Plate 3: Range 1 building B, from the south



Plate 4: Range 1 building B, clocking-in machine



Plate 5: Range 1 building B, weighing machine



Plate 6: Range 1 building C (left centre) from the south

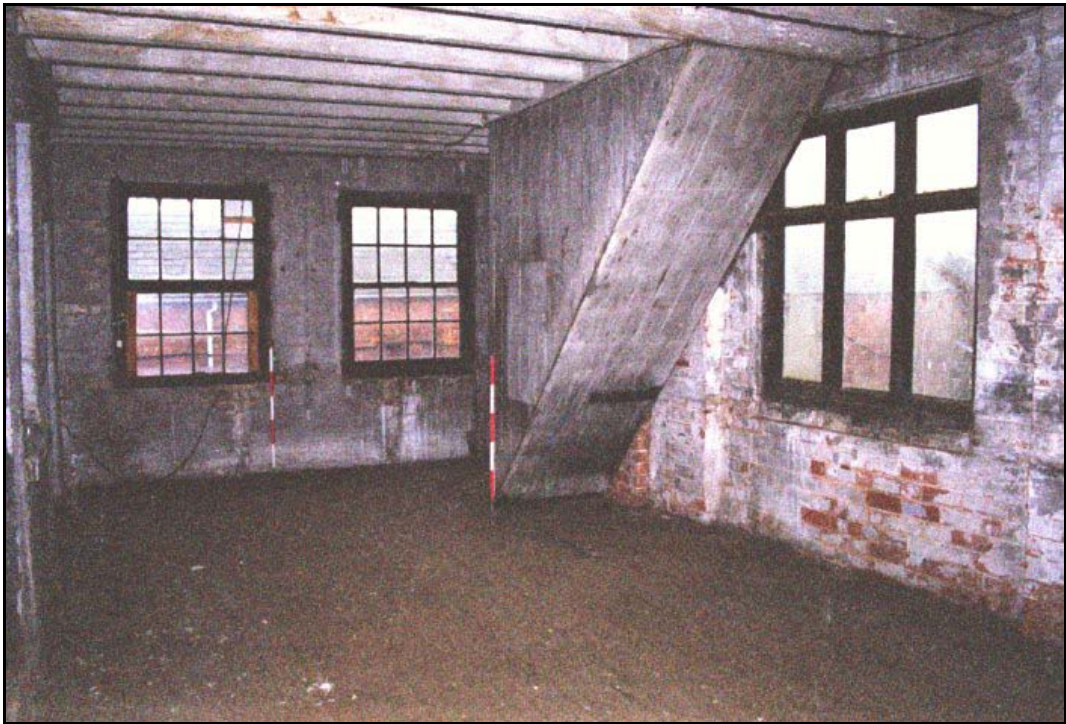


Plate 7: Interior of scouring mill, Range 1 building C



Plate 8: Range 1 building D from the north



Plate 9: Range 1 building D, semi-circular arched window



Plate 10: Range 1 building D interior



Plate 11: Range 1 building E, from the north



Plate 12: Interior of Range 1 building E



Plate 13: Range 2 from the north-west

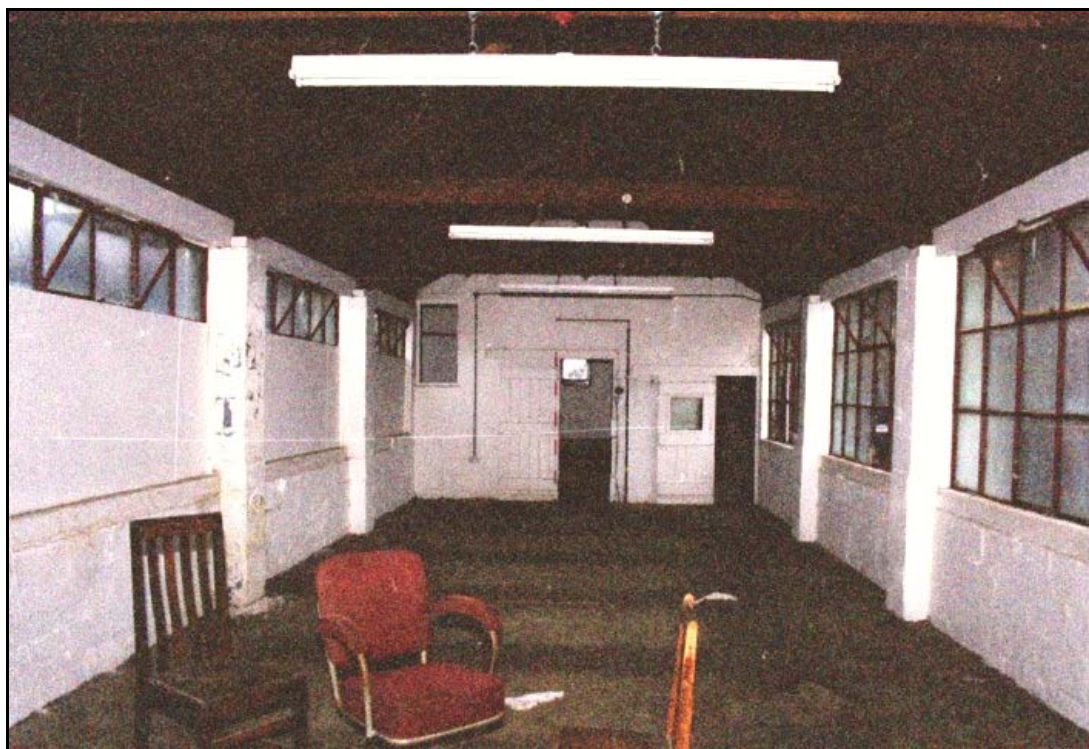


Plate 14: Range 2 interior



Plate 15: Range 3 building A, from the south



Plate 16: Range 3 building A, tin sign

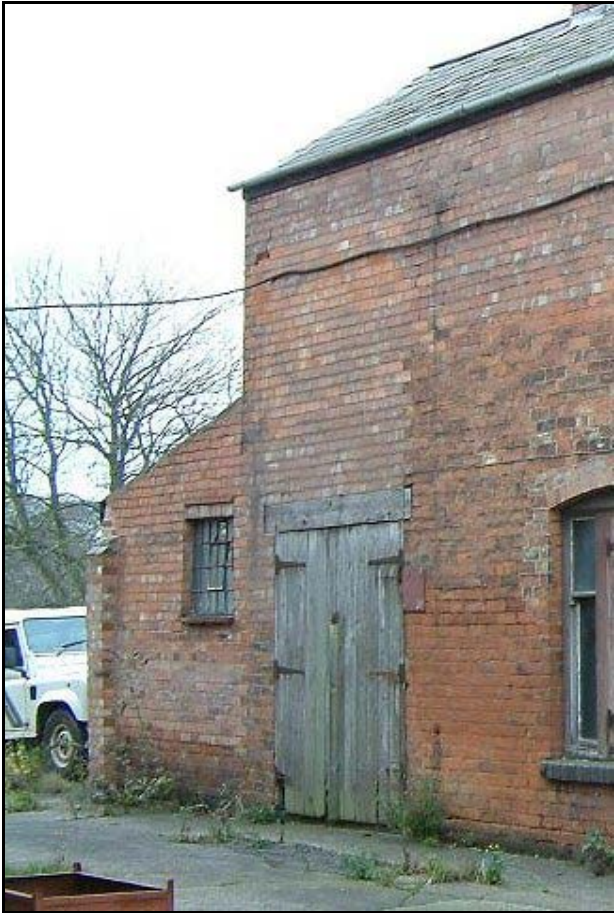


Plate 17: Exterior of Range 3 building A, from the north-east



Plate 18: Range 3 building B, from the north



Plate 19: Range 3 building B, showing the stove



Plate 20: Range 3 building B, showing cupboards



Plate 21: Range 3 building B, showing the staircase



Plate 22: Range 3 building C, from the east



Plate 23: Range 3 building C interior



Plate 24: Range 3 building D from the east

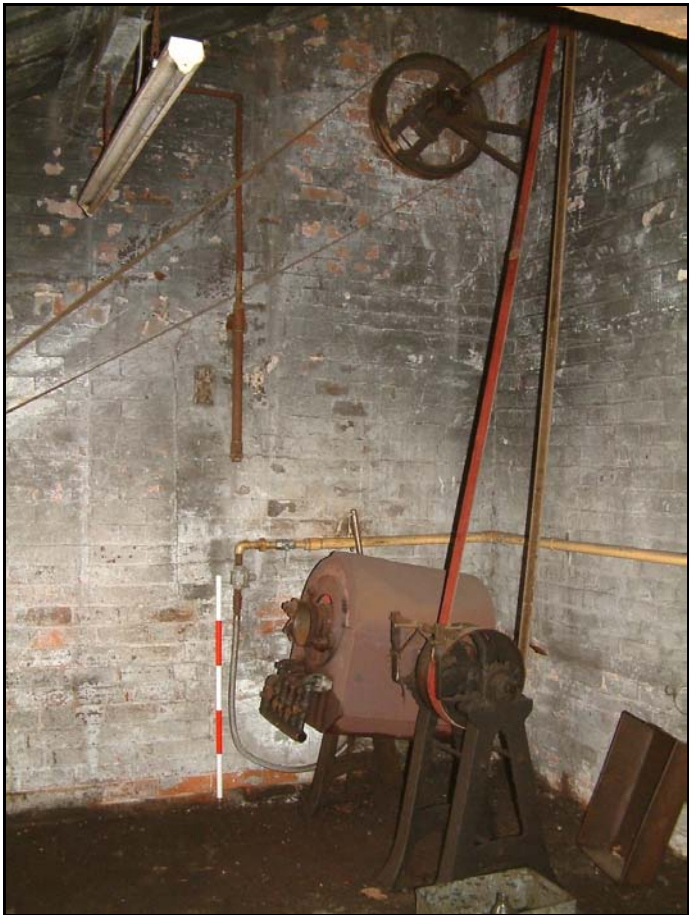


Plate 25: Range 3 building D, machinery



Plate 26: Range 4 building A, from the south



Plate 27: Range 4 building A, the forges

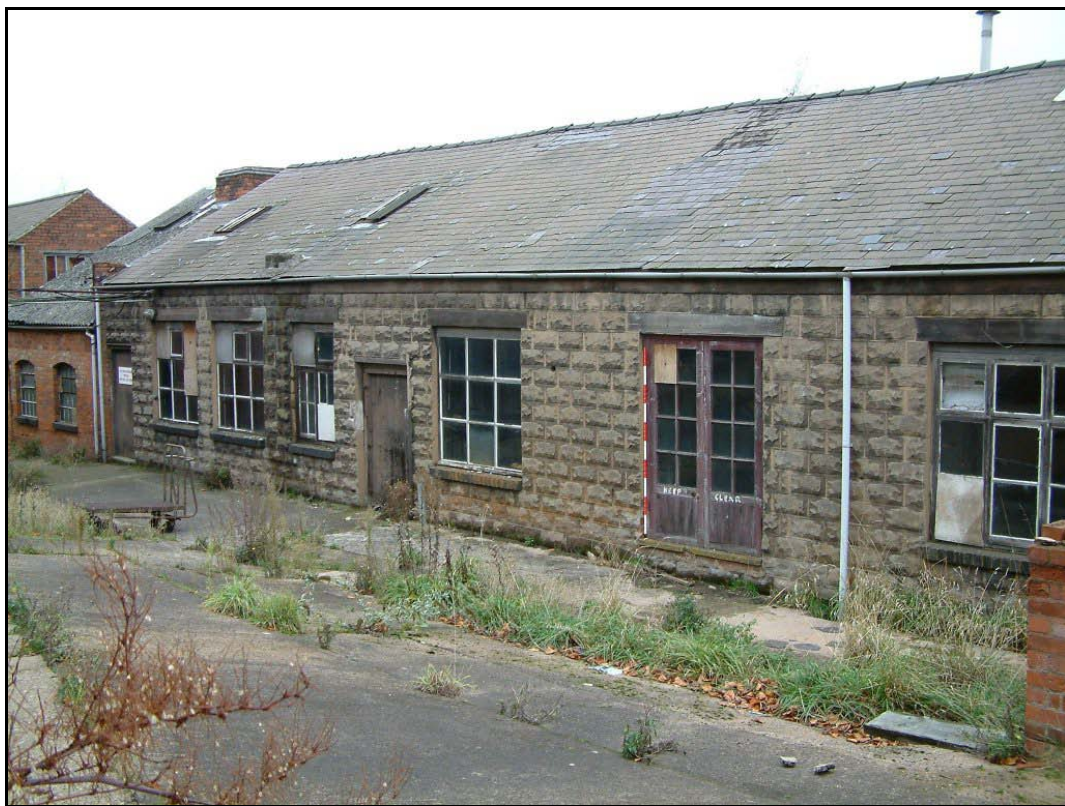


Plate 28: Range 4 building B, from the north



Plate 29: Range 4 building B interior



Plate 30: Range 4 building B interior



Plate 31: Range 5, from the south-west



Plate 32: Interior of Range 5



Plate 33: Interior of Range 5, workbenches



Plate 34: Range 6 from the south-west



Plate 35: Range 6 interior



Plate 36: Range 7 building A, from the west



Plate 37: Range 7 building A, machinery



Plate 38: Range 7 building A, winding machinery



Plate 39: Range 7 building B, from the west