

**BOILER HOUSE, WILLIAM BARTLETT & SON
GRAFTON STREET, HIGH WYCOMBE,
BUCKINGHAMSHIRE**

HISTORIC BUILDING RECORDING

ARCHAEOLOGICAL SOLUTIONS LTD

**BOILER HOUSE, WILLIAM BARTLETT & SON,
GRAFTON STREET, HIGH WYCOMBE,
BUCKINGHAMSHIRE**

HISTORIC BUILDING RECORDING

Authors:	Tansy Collins BSc Lee Prosser BA PhD Kathren Henry	
NGR: SU 8497 9371		Report No. 3662
Parish: High Wycombe		Site Code: AS 1077
Approved: Claire Halpin MIFA		Project No. 2920
Signed:		Date: October 2010

This report is confidential to the client. Archaeological Solutions Ltd accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

ARCHAEOLOGICAL SOLUTIONS LTD
98-100 Fore Street, Hertford, SG14 1AB
Unit 6, Brunel Business Court, Eastern Way, Bury St Edmunds IP32 7AJ
Tel: 01992 558170
Fax: 01992 553359
E-mail: info@ascontracts.co.uk
Web: www.archaeologicalsolutions.co.uk
Registered Number: 4702122

CONTENTS

OASIS SUMMARY SHEET

SUMMARY

- 1 INTRODUCTION**
- 2 DESCRIPTION OF THE SITE**
- 3 METHOD OF WORK**
- 4 HISTORIC BACKGROUND**
- 5 THE BUILDING**
- 6 DISCUSSION**
- 7 CONCLUSION**

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDICES

- 1 ARCHAEOLOGICAL DATABASE (HER)**
- 2 CARTOGRAPHIC EVIDENCE**
- 3 HBR ARCHIVE FORM**
- 4 EARLY ARCHITECT'S PLANS**

OASIS SUMMARY SHEET

Project details			
Project name	<i>Boiler House, William Bartlett & Son, Grafton Street, High Wycombe, Buckinghamshire</i>		
Project description (250 words)			
<p><i>In August 2010, Archaeological Solutions Limited (AS) conducted a programme of historic building recording of the boiler house and associated chimney at the William Bartlett & Son site, Grafton Street, High Wycombe, Buckinghamshire. The recording was commissioned to comply with a planning condition attached to planning consent to demolish the building.</i></p> <p><i>The project revealed that the initial factory buildings were constructed in 1901 / 1902, although it is clear from both physical evidence and information found on a number of early plans, that the boiler house and factory chimney date from a later phase of development on the site.</i></p> <p><i>There appear to have been at least four significant phases of expansion following the development of a thriving furniture manufacturers, beginning with a relatively modest array of buildings. The construction of the boiler house coincides with phases of development carried out between 1912 and the early 1920s. The development is somewhat confused, for parts of the boiler house incorporate earlier walls predating the adjoining building to the south, and hence fall into the earlier time span. Evidence suggests that the boiler and much of the building to the south was constructed fairly soon after the production of the 1912 plan. However, the chimney and remainder of the walling dates to the early 1920s, perhaps representing a new chimney constructed as a replacement for a smaller example associated with the earlier boiler.</i></p>			
Project dates (fieldwork)	<i>3rd August 2010</i>		
Previous work (Y/N/?)	<i>Y</i>	Future work (Y/N/?)	<i>N</i>
P. number	<i>2920</i>	Site code	<i>AS 1077</i>
Type of project	<i>Historic building recording</i>		
Site status	<i>None</i>		
Current land use	<i>Boiler house</i>		
Planned development	<i>Mixed residential, retail and commercial/business use</i>		
Main features (+dates)	<i>Early 20th century boiler house</i>		
Significant finds (+dates)	<i>n/a</i>		
Project location			
County/ District/ Parish	<i>Buckinghamshire</i>	<i>Wycombe</i>	<i>High Wycombe</i>
HER/ SMR for area	<i>Buckinghamshire SMR</i>		
Post code (if known)	<i>-</i>		
Area of site	<i>c. 1.74 hectares</i>		
NGR	<i>SU 8497 9371</i>		
Height AOD (max/ min)	<i>c. 79m AOD</i>		
Project creators			
Brief issued by	<i>n/a</i>		
Project supervisor/s (PO)	<i>Archaeological Solutions</i>		
Funded by	<i>Leadbitter</i>		
Full title	<i>Boiler House, William Bartlett & Son, Grafton Street, High Wycombe, Buckinghamshire; historic building recording</i>		
Authors	<i>Collins, T., & Prosser, L.</i>		
Report no.	<i>3662</i>		
Date (of report)	<i>October 2010</i>		

BOILER HOUSE, WILLIAM BARTLETT & SON, GRAFTON STREET, HIGH WYCOMBE, BUCKINGHAMSHIRE

HISTORIC BUILDING RECORDING

SUMMARY

In August 2010, Archaeological Solutions Limited (AS) conducted a programme of historic building recording of the boiler house and associated chimney at the William Bartlett & Son site, Grafton Street, High Wycombe, Buckinghamshire. The recording was commissioned to comply with a planning condition attached to planning consent to demolish the building.

The project revealed that the initial factory buildings were constructed in 1901 / 1902, although it is clear from both physical evidence and information found on a number of early plans, that the boiler house and factory chimney date from a later phase of development on the site.

There appear to have been at least four significant phases of expansion following the development of a thriving furniture manufacturers, beginning with a relatively modest array of buildings. The construction of the boiler house coincides with phases of development carried out between 1912 and the early 1920s. The development is somewhat confused, for parts of the boiler house incorporate earlier walls predating the adjoining building to the south, and hence fall into the earlier time span. Evidence suggests that the boiler and much of the building to the south was constructed fairly soon after the production of the 1912 plan. However, the chimney and remainder of the walling dates to the early 1920s, perhaps representing a new chimney constructed as a replacement for a smaller example associated with the earlier boiler.

1 INTRODUCTION

1.1 In August 2010, Archaeological Solutions Limited (AS) conducted an programme of historic building recording of the boiler house and associated chimney at the William Bartlett & Son site, Grafton Street, High Wycombe, Buckinghamshire (NGR SU 8497 9371; Figs. 1 & 2). The recording was commissioned by Leadbitter in order to comply with a planning condition (07/06366/FUL) attached to planning consent to demolish the building, along with the remaining buildings on the site, and erect four new residential blocks, commercial/business use units, new access, car parking and landscaping.

1.2 In 2007, Archaeological Solutions Ltd carried out an historic building appraisal of all the surviving buildings on the site, in association with an archaeological desk-based assessment (Collins *et al* 2007). AS also monitored geotechnical test pits (Pozorski 2010). The appraisal and assessment have been used as a basis for this report, with additional new

information added. This report has been produced in accordance with a brief issued by Buckinghamshire County Archaeological Service (BCAS), dated 19th July 2010 and a specification prepared by AS (dated 26th July 2010), and approved by BCAS.

1.3 The historic building recording conformed to the English Heritage (EH) document *Understanding Historic Buildings: a guide to good recording practice* (2006) and the Institute for Archaeologists' (IfA) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* (revised 2008). The level of recording was to Level 4 as defined in the EH document.

The objectives of the building recording were to compile

- a photographic recording of interior and exterior features along with accurate measured plans
- an account of the buildings plan, form, function and age with development sequence.

1.4 The main research issues of the building recording were to provide a recording of the boiler house and associated chimney, identified as a distinct architectural feature of the site. The Solent Thames Research Frameworks for Buckinghamshire note the importance of increasing the record of post-medieval buildings in the county. The historic interest of the site stems from its role in the important furniture industry within the town during this period. As noted in the adjacent East Anglian regional archaeological research frameworks (Brown & Glazebrook 2000), structures of the Industrial Age (1750 – 1960) face a high rate of loss (due to renovation, conservation and redundancy), and the phases and uses of the buildings fall into this time frame. It is important to understand the origins, status, function and phasing of the buildings.

1.5 In the intervening time since the historic building appraisal of 2007 the chimney had been substantially demolished, and only the base survived. A substantial volume of bricks has fallen within the building obscuring some areas.

Planning policy context

1.6 PPG16 (1990), the national Planning Policy Guidance Note which applies to archaeology and PPG15 (1994) the national Planning Policy Guidance Note which applies to conservation of the historic environment (by protecting the character and appearance of Conservation Areas and protecting listed buildings (of architectural or historical interest) from demolition and unsympathetic change and safeguarding their settings as far as is possible) have been replaced by Planning Policy Statement 5 (2010), the national Planning Policy Statement that applies to the historic environment

1.7 PPS5 states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The Planning Policy Statement aims to deliver

sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. It aims to conserve England's heritage assets in a manner appropriate to their significance. It states that opportunities to capture evidence from the historic environment and to contribute to our knowledge and understanding of our past, and to make this publicly available, should be taken, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE (Figs. 1 & 2)

2.1 The William Bartlett & Son site is situated in the valley of the river Wye, 1.6km west-north-west of High Wycombe's town centre in the area known as Desborough, which lies within the District of Wycombe in Buckinghamshire (Fig. 1).

2.2 The site fronts onto Grafton Street, and is demarcated to the south-west by Fryer's Lane and partially to the south-east by Desborough Park Road (Fig. 2). The majority of the site, however, is bound by the meandering course of the river Wye, which flows eastwards in an arc around the northern edge of the site. For much of its course, the river Wye runs on an approximately north-west to south-east alignment through the settlement of High Wycombe, although a number of small tributaries branch off to the immediate north of the site.

2.3 The site is roughly semi-circular in shape and comprised an area of approximately 1.74 hectares. The buildings on the site comprise workshops, factory buildings and other associated structures such as storage sheds and timber-drying kilns, some of which are in the process of being demolished. It is surrounded by a mixture of industrial properties immediately to the south, Desborough Recreation Ground to the north-west and mixed residential and industrial properties to the north-east (Fig. 2). The boiler house which is the subject of this assessment occupies the north-west corner of a much larger building (Building 4 of the earlier report). For ease of reference where necessary, the building numbers assigned during the earlier report are used and have been marked on Fig. 2.

3 METHOD OF WORK

3.1 The earlier report has been used as a basis for this report, with additional research and recording carried out where necessary. Information was sought from a variety of available sources in order to meet the objectives of the project.

Archaeological databases

3.2 The standard collation of all known archaeological sites and spot-finds in the area is the Buckinghamshire HER (historic environment record). The HER database was searched for all known entries within a 500m radius of the site. Entries within this approximate 500m radius of the site are listed in Appendix 1 and only where relevant have they been discussed in Section 4.2.

Historical and cartographic sources

3.3 The principal sources for historical and cartographic documents were the Centre for Buckinghamshire Studies (CBS), based at the County Hall in Aylesbury, and the Buckinghamshire HER. Relevant cartographic sources are listed in Appendix 2 and reproduced in Figs. 3-6. Early architect's plans were retrieved from the site during the earlier survey, which provide useful information; a selection of those that are relevant have been reproduced here as Appendix 4.

Secondary sources

3.4 The principal source of secondary material was the Centre for Buckinghamshire Studies (CBS), based at the County Hall in Aylesbury, as well as AS's own library. Relevant material is listed in the bibliography, and also listed in Appendix 2.

The Buildings

3.5 The site was visited on the 03rd August 2010 in order to compile descriptions of the building and undertake the drawing and photographic work. Tansy Collins compiled the written descriptions and carried out the photographic recording, while Kathren Henry completed the drawing work. Detailed drawings, including a floor plan along with the principal elevation and cross-section, were produced. These are included with annotations as Fig. 7.

3.6 The photographic recording was conducted using medium format (4.5cm x 6cm) black and white film and included all external views and general internal shots. This utilised a Zenza Bronica ETRS camera and Ilford HP5 IOS 400 120mm film. Colour photographs were taken using a Canon 1000D (10 megapixels) digital camera, duplicating the black and white photography. Where necessary, architectural detail was captured using 35mm black and white film and supplementary colour photography used 35mm Ektachrome colour transparency. External lighting and weather conditions were good at the time of the survey. A scale was used wherever possible, and a flash was employed for internal shots. A pictorial index of the digital photography and selected colour plates are included below together with location plots (Fig. 7)

4 HISTORIC BACKGROUND

Historical background

4.1 Evidence that the river Wye formed a strong focus for settlement throughout both prehistory and history can be seen in the archaeological record of the region, although it is not until the 11th century that High Wycombe began to flourish in written records. In the Norman period the settlements arrayed along the banks of the river were referred to as 'The Wicombes', although by the 11th century High Wycombe was noted simply as 'Wicumbe' (Sparkes 1983, 22). Mills located along the river clearly formed an important part of the industry in the area and are recorded as far back as the 11th century (McOmish *et al* 2001) and the river continued to be utilised in mills and for various processes in the post-medieval furniture-making industry that began to dominate the economy of the area. By the end of the 19th century High Wycombe was internationally known for furniture manufacture, particularly chairs, which were exported to places such as Australia (Sparkes 1983).

4.2 The early 20th century saw the continued expansion of this industry (Miller 2004) throughout High Wycombe and in 1901 Bartlett acquired the land at Grafton Street. Prior to this, the land was simply in use as watercress beds (Fig. 3). A number of early plans were retrieved from the site during the earlier survey and detailed inspection of these can shed light on the development of the buildings, reinforced by the physical observations made on site.

4.3 Plans dating from the initial phase in 1901 / 1902 suggest the factory began with a small number of buildings only, with two block plans dating from 1901 and 1902 showing slight variation (Appendices 4.1 and 4.2) but all centred around a large workshop (Appendix 4.3) comprising the principal range of Building 6. These plans suggest the boiler house was originally intended to lie to the north of the workshop. The two most informative plans are later, one dates to 1912 (Appendix 4.4) and the other is undated although clearly later, likely 1930s in date when considered with physical observations of the structures during the earlier survey. The 1912 plan suggests a phase of improvement since 1901 with further buildings added to the north of the principal workshop. Notable is the presence of a building of the size and form of the initial boiler house noted on the earlier plans. Between this point and the production of the 1925 OS map (Fig. 4) the site was substantially altered.

4.4 By 1925 the chimney is clearly marked on the OS map and the near contemporary plan shows the boiler room and engine room (now referred to as the tank room) which are the subject of this assessment, along with the installation of the railway system and numerous other buildings still extant today. The undated architect's plan bears marked similarities to the outline shown on the 1925 OS map, apart from the addition of a large structure to the north lit by northern lights. No further change in the assessment structure can be traced through cartographic records as both the 1967 OS map (Fig. 5) and

the survey of the premises dated 1970 (Fig. 6) show the site as existing today and of very similar form to the probable 1930s plan.

4.5 The fortunes of the Bartlett family mirror the development seen in the cartographic sources, with Kelly's directories listing the company as a chair manufacturers between 1903 and 1939, although clearly had surge of prosperity and later became well-known for the 'Strongbow' collection of furniture. Apparently William Bartlett & Son Ltd were know for producing high-class work in comparison to other furniture-makers in the area, which led to a new and prestigious office and showroom being opened around Fitzroy Square in London (Mayes 1960, 90). Subsequent historic directories note William Bartlett & Son as furniture manufacturers (SEP 1952-53). However, in 2005 after over a hundred years of production the company ceased business (Miller 2004) and the Strongbow collection now forms part of the furniture produced in Waltham Abbey by Rosjohn Furniture Ltd.

Note on the Lancashire boiler

4.6 Of particular interest is the survival of a Lancashire boiler which the former owner suggested was installed in 1914, and what follows comprises an outline of a typical boiler.

4.7 The Lancashire boiler was developed in 1844 by William Fairbairn, and was notable for the twin furnace tubes as opposed to the single tube of the Cornish boiler (1810). Coal was fed into the two firedoors at the end (a typical Lancashire boiler would consume about six tons of coal per day) and the resultant hot gases transferred the heat energy to water surrounding the two furnace tubes, hence the two furnace tubes allowed a much larger heating surface (MOSI 2005). The super heated water turned to steam which was transferred to the engines to produce power.

4.8 Methods used for utilising the heated gases most efficiently included the addition of brickwork flues surrounding the boiler, through which the hot gases produced could re-circulate, further aiding in heating the water. In addition an 'economiser' was often utilised. This was invented by Edward Green in 1845 and is a mechanical device by which heat energy, which would otherwise be lost, was instead re-used (Websites 2 and 4). Finally the hot gases exited to the main flue and out through the chimney.

4.9 Due to the potentially dangerous heat levels, it was vitally important that the water levels within the boiler be maintained. This was monitored by glass gauges located on the front on the boiler and a boiler feed pump would be housed nearby to feed the water into the boiler (MOSI 2005). Water from the feed pumps would pass through the tubes of the economiser and be reheated initially before entering the boilers.

5 THE BUILDING

5.1 The extant buildings on the site comprise eight discrete structures, which were the subject of an earlier report by AS Ltd (Collins *et al* 2007) and are labelled as such on Fig. 2. All the buildings on the site were purpose-built for the factory during various phases of development. The lodge (Building 1) and main factory building (Building 4) front onto Grafton Street, with access given by modern robust steel gates. A second gate is located to the west of the Building 4. The remaining buildings are arrayed to the north in a closely-spaced pattern, separated by roadways of tarmac hardstanding, many of which retain a railway system for transporting materials around the site. For an overview of these buildings, refer to the earlier report (Collins *et al* 2007)

5.2 The boiler house occupies the north-west corner of Building 4, although it is one of a number of distinct structural elements which make up the whole building. The north-east section of Building 4 (not assessed) retains elements of the buildings visible on the 1912 plan, although the area occupying the southern part and the boiler house under inspection are both later.

5.3 The boiler house was constructed as a power-plant and preserves its early Lancashire boiler. The factory chimney survived at the time of the previous recording (Plate 1) but now only the base of the chimney remains, with much of the brick debris having fallen within the building itself. Internally the boiler house is divided into two distinct areas, the boiler room which contains the boiler and chimney, and a tank room to the rear (south).

Exterior

5.4 The boiler house rises over a single storey and is constructed of brick. It has a continuous pitched roof covered with corrugated metal sheeting. The roof is independent of the rest of the units which comprise Building 4; there is a further pitched roof to the east and northern lights cover the remainder. The building is generally constructed of pink Flettons laid in English bond, with some Staffordshire blue bull-nosed brick jambs to the apertures. There has been various modifications visible with the concrete lintels spanning openings along with blocked apertures and brick repair elsewhere. In addition, the rest of Building 4 encloses the east and south façades but these walls are visible from the interior.

5.5 From the north (Plate 2), the interior is given access through two steel sliding doors on this façade, the apertures with segmental arches. Otherwise this elevation contains a single window in the gable above, which is of two lights, each containing twelve panes with the central six forming a pivoting casement. This elevation is not symmetrical as the north-west corner is occupied by the base of the factory chimney, which is constructed of pink Flettons laid in a bond of three courses of stretchers to one course of headers. At the time of the earlier recording the circular stack had 'BARTLETT' painted on the side in vertical lettering and sat on a moulded and decorated base. Now only the base remains.

5.6 The west wall of this range displays much alteration and phasing with, to the south, a concrete buttress marking the division with the remainder of Building 4. The brickwork of this side has been much disturbed and there is a higher proportion of the pinkish/yellow Flettons seen elsewhere on the site, measuring on average 8¾" x 2½" x 4¼" (222mm x 64mm x 114mm). This wall is supported by a brick buttress, along with secondary H-girder supports and two applied cement buttresses. There is no fenestration, but there are several low level iron-framed apertures (Plate 3), with doors, leading to the main chimney flue, two of which retain inscriptions:

'E GREEN & SON LTD
FUEL ECONOMISER WORKS
WAKEFIELD'

5.7 The south and east elevations of the boiler house are now visible from within the larger factory building, where many features suggest that that elements of the building were formerly external or independent of the building that adjoins it now.

5.8 The east wall has been substantially reworked although the alterations are readily discernable. Two brick buttresses frame the southern section and define the area of the tank room, the south buttress with a bevelled corner. The remainder of the wall here is of plain painted brickwork, although it is clear that the wall has been raised to support the northern light of the adjoining area. To the north, the original form was of three wide apertures framed by solid Staffordshire blue brick piers with bevelled corners. All three apertures has a concrete lintel, chamfered on both edges. The two apertures to the north have been reduced in size and now hold sliding doors similar to those seen on the north façade. The remaining aperture has been entirely infilled with painted brickwork and is punctuated only at low level by a small aperture with a cambered arch framing a duct in the floor leading from the boiler.

5.9 The south wall is now internal although elements indicate this may have originally formed an external wall. The wall comprises a gable end, rising to an apex above the existing roof formed by the northern lights of this element. The wall has been painted and is now divided by full-height applied buttresses that hold trusses to support the northern lights, apart from one example where the truss is supported on a corbel of brickwork rather than a full-height buttress. At low level, the wall is pierced by two apertures. To the west a large wide aperture with a cambered arch has been infilled with brick and bisected by one of the later applied buttresses. At the east end, a smaller blocked aperture, possibly a doorway, also has a cambered arch. Above the roof line of this element the gable end of the boiler house is of exposed brickwork pierced by a large circular aperture. This has been infilled with pink Flettons.

Interior

5.10 The boiler room is of plain construction, the roof comprising two composite steel trusses bolted to gang-plates. There are five I-section steel purlins in each pitch and the roof over, as noted, is covered in corrugated metal sheeting. A portion of the roof has fallen in the north-west corner.

5.11 The factory chimney is located in the north-west corner and the boiler occupies the south-west corner. The remaining walls are largely of exposed brickwork, although the west side is largely obscured due to fallen brickwork debris from the factory chimney. The north wall contains the two doorways visible from the exterior, each of differing height but both displaying Staffordshire-blue brick jambs and cambered arched heads. The east wall consists of three apertures divided by blue brick piers although the outer jambs are simply of Flettons with bevelled corners. Various fixtures are attached to this wall, for example pipework and remnants of electrical wiring.

5.12 To the south, a doorway gives access to the adjoining tank room. This doorway has a cambered arch and contains a robust boarded, ledged and braced door.

5.13 The remainder of the boiler room is largely occupied by the boiler and chimney with related elements. The boiler occupies the south-west corner of the room (Plate 4). It is a Lancashire boiler and consists of those parts described for a typical example (Sections 4.6-4.9), although much of the associated pipework and fixtures have been lost. The boiler itself survives in fairly good condition, surrounded by a retaining wall of Flettons with a cast-iron ladder attached to give access. Two furnace doors survive, with the inscription 'MELDRUMS LTD, TIMPERLEY', although asbestos lagging encloses the front so was not closely inspected beyond this point (Plate 5). Markings survive for various attachments and fixtures although most of these are lost, for example the glass gauges used to monitor the water levels. Ducts in the floor to the front of the boiler carry pipework, although in addition two inspection hatches are visible to give access below the boiler for maintenance and repair (Plate 6).

5.14 The west wall is now obscured by debris, although was briefly inspected in the earlier survey, and houses the main flue from the boiler to the chimney in the north-west corner. Features visible on this wall at the time of the earlier survey included various levers and outlets from the main flue. The interior of the flue was visible from the exterior through one of the low doors on the west elevation. A section of the flue was visible from here, which had a barrel-vaulted ceiling and was divided from the remaining sections of the flue by pivoting vents (Plate 7). Due to the demolition of the chimney the brick of the chimney can be inspected. The majority of the bricks comprise a typical salmon-pink Fletton brick with a sharp V-shaped frog and stamped with 'Phorpres' and 'LBC' (London Brick Company). Fletton bricks were produced from 1889, and the 'Phorpres' mark is understood to have been coined in 1901, named after the technique of pressing the green brick four times. However, these salmon-pink Flettons are usually understood to be associated with the London Brick Company brickworks based at Stewartby from 1923. A

different unfrosted brick appears to have been utilised as an inner facing brick to the chimney as most examples surviving are blackened on the inner face.

5.15 The tank room lies to the south and is set substantially higher than the boiler room, given access through the doorway noted above and up a short flight of concrete steps. This room now comprises a fuel store with oil tanks surviving along the south, although other plant survives along with a number of fuse boxes in the north-west corner (Plate 8). The roof is of simple construction comprising H-girders bridging the room along with H-section purlins supporting corrugated sheeting over.

5.16 The area below the existing floor is a large void, and hatches in the floor allow a view to the area, which is not accessible and appears from a limited vantage to be empty of equipment. The existing floor is clearly later than the south wall as it bisects the blocked aperture at the east end. The second blocked aperture is also visible at the west end along with the circular aperture in the gable above. At the west end of the room, further steps lead to a short area on the same level or slightly lower than the adjoining boiler room.

5.17 An aperture lies on the west wall at approximately 0.8m height which is visible from the exterior at ground level. A series of fuse boxes are attached to the north wall at this end, most of fairly recent date although one or two may be of some age.

6 DISCUSSION

6.1 The historic building recording allowed the boiler house to be analysed with more detail and a wider scope than the earlier historic building appraisal. The initial factory buildings were constructed in 1901 / 1902, although it is now clear from both physical evidence and information found on a number of early plans that the boiler house and factory chimney date from a later phase of development on the site.

6.2 For the site as a whole, there appears to have been at least four significant phases of expansion, traceable through historic maps spanning the last century. What is clear that the expansion on the site in the first half of the 20th century follows the development of a thriving business, that began as a fairly modest array of buildings. From architect's plans of 1901 and 1902 the original factory was centred round a single large workshop (southern part of Building 6) with a boiler house to the north and a number of smaller buildings to the north and east. From a later plan it appears that only a few of the smaller proposed buildings, but including the original boiler house, were constructed, of which none survive today having been demolished during later expansion.

6.3 By 1912 the number of buildings had increased and those located to the east of the site of the existing boiler house have survived as partial remnants within Building 4. Between this point and 1925 substantial expansion saw the construction of the boiler house and surrounding structures

much as exists today, although within the boiler house and adjoining area to the south the evidence is somewhat confused and indicates a more detailed phasing for the building.

6.4 Elements of the boiler house use an early yellow-pink Fletton brick, particularly to the south and enclosing the boiler. The former owner suggests that the boiler was installed in 1914, and though there is no visible supporting evidence, the structure is consistent with this date. However, the remainder of the boiler house and chimney is constructed in salmon-pink Flettons marked with the 'phorpres' stamp of the London Brick Company. As far as is currently understood the process used to create the characteristic salmon-pink 'phorpres' Fletton bricks is associated with the branch of the London Brick Company that worked in Stewartby from 1923, and this, with the presence of the chimney on the 1925 OS map, suggests a very narrow time-frame for the construction of the chimney. It could be suggested that this chimney in fact replaces a smaller example added with the construction of the boiler house.

6.5 Other evidence indicates that the southern wall of the boiler house was formerly external and structurally pre-dates the adjoining area to the south, which the earlier survey suggests must have been built prior to 1916. However, no buildings appear in this location on the 1912 plan suggesting the period of remodelling and addition was carried out within a very short space of time, perhaps even representing alterations during the construction process.

6.6 The boiler house in outline existed by 1925 and at this point consisted of a room housing the boiler and main flue to an impressive factory chimney, which bore the name BARTLETT. Indicated by early plans, the engine room was probably housed in the existing tank room to the south although the only features present are fuel tanks, a portion of a large pipe system and a number of fuse boxes. It is likely the water feed pumps for the boiler were also housed in this area.

7 CONCLUSION

7.1 Despite having lost a number of fixtures, the Lancashire boiler is a well-preserved example of the type. Overall the boiler house and surrounding buildings preserve, in outline, the sequential development and expansion of a purpose-built factory which has been subject to constant adaptation and modification. Although the chimney has fallen, these features represent a period in the history of the factory when business was thriving and the need for expansion was evident.

ARCHIVE DEPOSITION

Archive records, with an inventory, will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. The archive will be deposited with the Buckinghamshire County Museum.

ACKNOWLEDGEMENTS

AS would like to thank Leadbitter for funding and commissioning the report (in particular Mr David Fisher) and also to LBH Wembley for their kind assistance.

Thanks are also due to the staff at the Centre for Bucks Studies (CBS), which is based in Aylesbury, and Ms. Julia Wise at the Buckinghamshire Historic Environment Record (HER).

AS would like to thank Ms Eliza Alqassar of BCAS for her input and advice.

BIBLIOGRAPHY

Anon. 2002 'Archaeological notes', in; *Records of Buckinghamshire*. Volume 42

Brown, N. & Glazebrook, J. (eds) 2000 *Research and Archaeology; a framework for the eastern counties. 2; research agenda and strategy*. East Anglian Occasional Papers 8

Chitty, A. M. 1950 *Advisory Development Plan for High Wycombe and District*. High Wycombe Joint Planning Sub-committee

Collins, T, Prosser, L, Henry, K, Doyle, k, 2007, *William Bartlett & Son, Grafton Street, High Wycombe, Buckinghamshire; Archaeological Desk-based Assessment and Historic Building Appraisal*, AS Report 2878

Cox, A. 1979 *Brickmaking: a history and gazetteer (survey of Bedfordshire)* Beds CC with Royal Commission.

Doyle, K. 2007 *241 Desborough Road, High Wycombe, Buckinghamshire; an archaeological desk-based assessment*. Archaeological Solutions unpublished report No. 2207

Goodearl, R. 1992 *High Wycombe in Old Photographs*. Alan Sutton Publishing, Stroud

Glazebrook, J. (ed.) 1997 *Research and Archaeology; a framework for the eastern counties. 1; resource assessment*. East Anglian Occasional Papers 3

Hillier, R. 1982 *Clay that burns: a history of the Fletton Brick industry*. London Brick Co.

Kelly's Directory 1903 *Kelly's Directory of Buckinghamshire*. Kelly's Directory, London

Kelly's Directory 1915 *Kelly's Directory of Buckinghamshire*. Kelly's Directory, London

Kelly's Directory 1928 *Kelly's Directory of Buckinghamshire*. Kelly's Directory, London

Kelly's Directory 1939 *Kelly's Directory of Buckinghamshire*. Kelly's Directory, London

Mayes, L. J. 1960 *The History of the Borough of High Wycombe from 1800 to the present day*. Routledge & Kegan Paul, London

McOmish, D., Tuck, C. & Went, D. 2001 *West Wycombe Park, Buckinghamshire* English Heritage Archaeological Investigation Report Series A1/17/2001

Miller, M. 2004 *High Wycombe 'Furniture Town'; the built heritage*. Unpublished MSc Dissertation, Oxford Brookes University School for the Built Environment & University of Oxford Department for Continuing Education

Museum of Science and Industry (MOSI) 2005 *Lancashire Boiler*. Museum of Science and Industry Collections Centre

MW Archaeological Consultancy 2001 *Western Sector, High Wycombe, Buckinghamshire; archaeological desktop assessment*. MW Archaeological Consultancy unpublished report

Page, W. 1925 *Victoria County History of Buckinghamshire*. Volume III. University of London Institute of Historical Research, Dawsons of Pall Mall, Folkestone

Pozorski, Z., *William Bartlett & Son, Grafton Street, High Wycombe, Buckinghamshire; Archaeological Monitoring & Recording (Geotechnical Test Pits)*, AS Report 3600

Silver Eagle Publishers (SEP) 1952 – 53 *High Wycombe Directory*. SEP, Piccadilly

Sparkes, I. G. 1979 *The Book of Wycombe*. Barracuda Books, Buckingham

Sparkes, I. G. 1983 *Yesterday's Town; Wycombe*. Barracuda Books, Buckingham

Waterfall, L. 2005 *Desk Study Report; William Bartlett site, Grafton Street, High Wycombe*. JNP Environmental (JNPE) unpublished report Ref. ME50022/RE/001

Websites

Website 1 <http://www.papplewickpumpingstation.co.uk/boilers.htm>

Website 2 <http://www.gracesguide.co.uk/wiki/E. Green and Son>

Website 3 <http://www.croftonbeamengines.org/hwboilerlancashire.html>

Website 4 <http://homepage.ntlworld.com/howard.v.moore/economiser.htm>

APPENDIX 1 ARCHAEOLOGICAL DATABASE (HER)

HER	NGR SU	Description
Prehistoric (until AD 43)		
1801	8472 9331	Possible late prehistoric hillfort pre-dating Desborough Castle, revealed remains of outer work probably contour fort with an Iron Age bank and ditch
1802	84648 93326	Possible Bronze Age round barrow under Desborough Castle ditch as recorded in field survey
1803/1	84710 93320	Iron Age to Roman metalwork found at Desborough Castle along with two further earthworks around the Castle
1803/2	84710 93320	Iron Age and Roman pottery found in excavation on western side of Desborough Castle apparently partly destroyed during construction of ditch
1803/1	84710 93320	Iron Age to Roman metalwork found at Desborough Castle including fowler type brooches
1803/2	84710 93320	Iron Age and Roman pottery comprising 22 sherds of Belgic and Roman pottery found during excavations at Desborough Castle
1804	84710 93320	Iron Age metalwork found at Desborough Castle comprised a gold coin of Philip II of Macedon and another Greek coin
1804/1	84710 93320	Mesolithic flint axe found at Desborough Castle
1804/2	84710 93320	Late prehistoric flint artefacts found on the ground surface and in excavation at Desborough Castle
1670	85460 93940	Middle Bronze Age metalwork found on ground surface included a celt and small narrow palstave
Romano-British (AD 43 - 410)		
1803	84710 93320	Roman roof tiles found around Desborough Castle included one piece of Roman tegula and one imbrex as well as flanged tegulae, other tile and some Roman coins
6090	85500 93400	Roman metalwork found in the 19 th century included a coin of Constantine II
6130	85000 93500	Roman metalwork found near High Wycombe included Roman coins of emperors Nerva, Antoninus Pius and Marcus Aurelius
61301	85000 93500	Roman metalwork found during construction of railway in the early 20 th century comprised a coin minted in London AD 322
61302	85000 93500	Roman metalwork found in the early 20 th century included a coin of Vespasian
61303	85000 93500	Roman metalwork found in the early 20 th century
61304	85000 93500	Roman metalwork found in the early 20 th century
61305	85000 93500	Roman metalwork found in the early 20 th century
61306	85000 93500	Roman metalwork found in the early 20 th century

61307	85000 93500	Roman metalwork found in the early 20 th century during construction of the railway included a further Roman coin
61308	85000 93500	Roman metalwork found in the early 20 th century during construction of the railway included a further Roman coin
61309	85000 93500	Roman metalwork found in the early 20 th century included a further Roman coin
1196	84550 93440	Roman metalwork found in High Wycombe comprised a very worn Roman coin
1197	84740 93420	Roman metalwork found at Desborough Castle comprised Roman coins and other remains from Desborough Field
1197/1	84740 93420	Roman metalwork found at Desborough Castle included small bronze coin of Constantine I
1197/2	84740 93420	Roman metalwork found at Desborough Castle comprised a small 4 th century coin
Anglo-Saxon (AD 410 – 1150)		
1802/1	84648 93326	Possible Saxon moot mound under Desborough Castle ditch recorded in field survey
Medieval (AD 1150 - 1500)		
1800	8471 9331	Medieval ringwork known as Desborough Castle surviving as single rampart and ditch earthworks, and known from historic to be early 13 th century in date
1801	8471 9332	Medieval roof tiles found in tree roots at Desborough Castle, some with peg holes
1802	8471 9332	Medieval building foundations seen at Desborough Castle in innermost part of castle were buildings of strength, many foundations being found, including an entire stone window frame found in 1743
1801/1	8472 9330	Possible medieval bailey earthworks at Desborough Castle
2869	85500 93633	11 th – 19 th century records of Lord's Watermill recorded as 'Balls Mill' in 1788 and 'Nownes Mill' in 1825
2869/2	85500 93600	11 th – 18 th century records of fishpond at Lord's Mill mentioned in 1400 as the fish pond of 'Pitmill', possible one of three mills attached to the manor of West Wycombe according to the Domesday Book
1208/2	84900 93840	Possible 14 th century record of Friar's Watermill as mentioned in the transcriptions of the pipe rolls of the bishopric of Winchester 1301 - 1302
Post-medieval (AD 1500 – 1750)		
1208	84900 93840	16 th – 19 th century records of Friar's Watermill as mentioned of Thomas Darell, miller of Brook
12081	84894 93886	Site of Mill End Watermill, in use as a paper mill in the 18 th – 19 th centuries, a corn mill by early 20 th century, a chair factory in 1920s and demolished in 1950s or early 1960s
2818	85190 93800	18 th century milestone moved to this location in the 19 th century, originally erected in 1744 by the side of West Wycombe Road near junction of Desborough Park Road
2869/1	85500 93633	17 th – 19 th century records of papermill, appears attached to West Wycombe manor from 17 th century and started by John Crofton, master paper maker
13216	84552 94024	17 th century or earlier house on Mill End Road is Grade II listed
Early modern (AD 1750 – 1900)		

13195	85185 93267	18 th century Grade II listed farmhouse at Copyground Farm
13195/1	85178 93256	17 th – 18 th century timber-framed barn at Copyground Farm is Grade II listed
8453	85494 93407	Group of buildings comprising a former dwelling house and a three-storey factory both built about 1900
8465	85404 93545	14/16 Oakridge Road comprised a furniture factory occupied by Greengate Furniture until 2004, the building was constructed about 1898 for the Thompson family who manufactured mineral waters
8466	85416 93530	Oakridge House at No. 18 Oakridge Road is a double-fronted dwelling house with ground floor bays at front and date-stone 1897 over front door
8510	85180 93252	Barn and other buildings at Copyground Farm were used for furniture manufacture by E. Cutler & Co Ltd
8512	85285 93501	Site of a furniture factory thought to have been used at one time by Joynson Holland, factory has since been demolished and redeveloped as flats called Dilwyn Court
9485	85413 93560	Highly Sprung warehouse at Oakridge Road is a modern furniture retail , although the 1910 valuation survey and freer's directories of 1905 and 1909 show the site was owned and occupied as a house (12 Oakridge Road) and chair-making factory by Jabez Harris probably built around 1900
9486	85369 93483	Former furniture factory at 30 Oakridge Road redeveloped site of former furniture factory as the 1910 valuation survey shows a complex of chair-making workshops and related buildings occupied partly by William Quarterman and E. Craft
Modern (AD 1900 - present)		
13199	84749 93477	20 th century church of St Mary and St George on Dashwood Avenue was built in 1938 by Wellesley and Wills in a modified Neo-Byzantine style
8426	85230 93461	South Midland Saws at the junction of Lindsay Avenue and Dashwood Avenue is the former small furniture factory of Russell & Co. who in the 1920s specialised in making adjustable chairs and settees
8427	85337 93540	Group of 20 th century buildings of differing ages on the north side of Abercromby Avenue occupied by Joynson Holland, furniture makers
8428	84931 93586	Group of buildings now called Fryers Works, on north side of Abercromby Avenue at junction with Fryers Lane, much altered but probably mainly 1920s in date
8429	84936 93592	148 Abercromby Avenue comprising two buildings; one a two-storey former furniture factory built end-on to the road
8430	85159 93587	Small two storey brick building behind 84 Abercromby Avenue believed to have been an upholstery workshop numbered 84a and used by Charles J. Faulkner from 1924 - 1966
8431	85382 93528	Furniture factory at 8 Abercromby Avenue was built 1900 but ceased working by 2004

8434	85122 93234	Large former furniture and upholstery factory on Chairborough Road comprising a group of two and three-storey buildings around a yard and originally dating from the 1930s
8437	85143 93312	Former furniture factory apparently a pair of 1930s semi-detached houses knocked into one and extended at the rear
8438	85098 93332	Late 1920s former furniture factory complex now converted to make four business units around a yard and called the Brow Business Centre
8439	85159 93317	Three former late 1920s furniture factories on the north side of Copyground Lane comprising Sherwood House, Seymour House and Brow Works
8440	85324 93451	Typical arrangement of Chairmaster's house, factory and yard at 8 Dashwood Avenue
8441	85074 93485	Group of buildings comprising a single storey brick double building at the junction of Dashwood Avenue and Desborough Park Road, on which the name C P Vine is still visible
8442	84813 93524	Former sawmill and timber yard on the north side of Dashwood Avenue at junction with Fryers Lane, operated by C Noel Legh & Co Ltd
8443	84899 93528	Three-storey yellow/brown brick building believed to have been a furniture factory and now part of Dashwood Industrial Estate, Dashwood Avenue and probably built in the 1920s
8444	85204 93483	Group of buildings on a site occupied by the furniture making firm of Hands since 1906 at 36 Dashwood Avenue
8445	85440 93495	Modern furniture warehouse and associated offices on the site of the former Large's furniture factory at the junction of Desborough Street, Oakridge Road and Jubilee Road
8446	85105 93708	Former furniture factory burnt and largely rebuilt around 1988 in a form sympathetic to the original 1920s factory
8450	84976 93726	Bartlett's furniture factory on Grafton Street comprises a group of buildings forming the large furniture factory of William Bartlett & Son Ltd
8451	85008 93665	Former chair factory on the south side of Grafton Street close to the junction with Desborough Park Road
8455	85400 93277	Most westerly of a group of three factories built in 1909 on land belonging to Lord Carrington on the north side of Kitchener Road
8456	85419 93267	Berber Business Centre on Kitchener Road is the middle of a group of three furniture factories built in 1909 on land belonging to Lord Carrington
8457	85439 93256	Will Beck Factory, Kitchener Chair Works is the most easterly of the group of three furniture factories built in 1909 on the north side of Kitchener Road on land belonging to Lord Carrington
8459	85532 93267	Former factory of E. Gomme, the company founded by Ebenezer Gomme, comprising four-storey brick factory built early 1900s and rebuilt in 1922 after a serious fire
8464	85522 93585	Ruskin Works on Oakridge Road comprises a three storey red brick factory with new corrugated metal roof, formerly the chair-making factory of H. J. Castle and Abbott

8511	84992 93394	Former furniture factory, now Bevelwood Gardens site of the former furniture factory of Castles which was used by Bristow & Townsend
8522	85147 93769	Demolished furniture factory at 90 Desborough Park Road, now part of Desborough Industrial Park
8523	85463 93250	96 Kitchener Road redeveloped site of former furniture factory probably built soon after 1900 since the shape of the building shown on the 1924 OS map

APPENDIX 2

Cartographic evidence consulted

Date	Map	Scale	Fig. No.	Location
1899	Bucks sheet XLVII.1; 2 nd edition Ordnance Survey map	1:2,500	3	CBS
1925	Bucks sheet XLVII.1; 3 rd edition Ordnance Survey map	1:2,500	4	CBS
1950	High Wycombe and District proposed land use	Scale of feet	-	(Chitty 1950)
1967	Plan SU 8493 – 8593; Ordnance Survey map	1:2,500	5	CBS
1970	Wm. Bartlett & Son Ltd survey of premises	16ft:1inch	6	(Waterfall 2005)
1982	Plan SU 8493 – 8593; Ordnance Survey map	1:2,500	-	CBS
1993	Plan SU 8493 – 8593; Ordnance Survey map	1:2,500	-	CBS
1999	Ordnance Survey Explorer sheet 172; site location	1:25,000	1	AS
2007	Detailed site location plan	1:1,000	2	Client
2007	Site survey as existing	1:1,500	-	Client

Documents consulted at the Centre for Buckinghamshire Studies (CBS);

Borough of High Wycombe tithe map, 1849
PR249/27/6R

Ref.

Borough of High Wycombe tithe apportionment, 1849
PR249/27/7R

Ref.

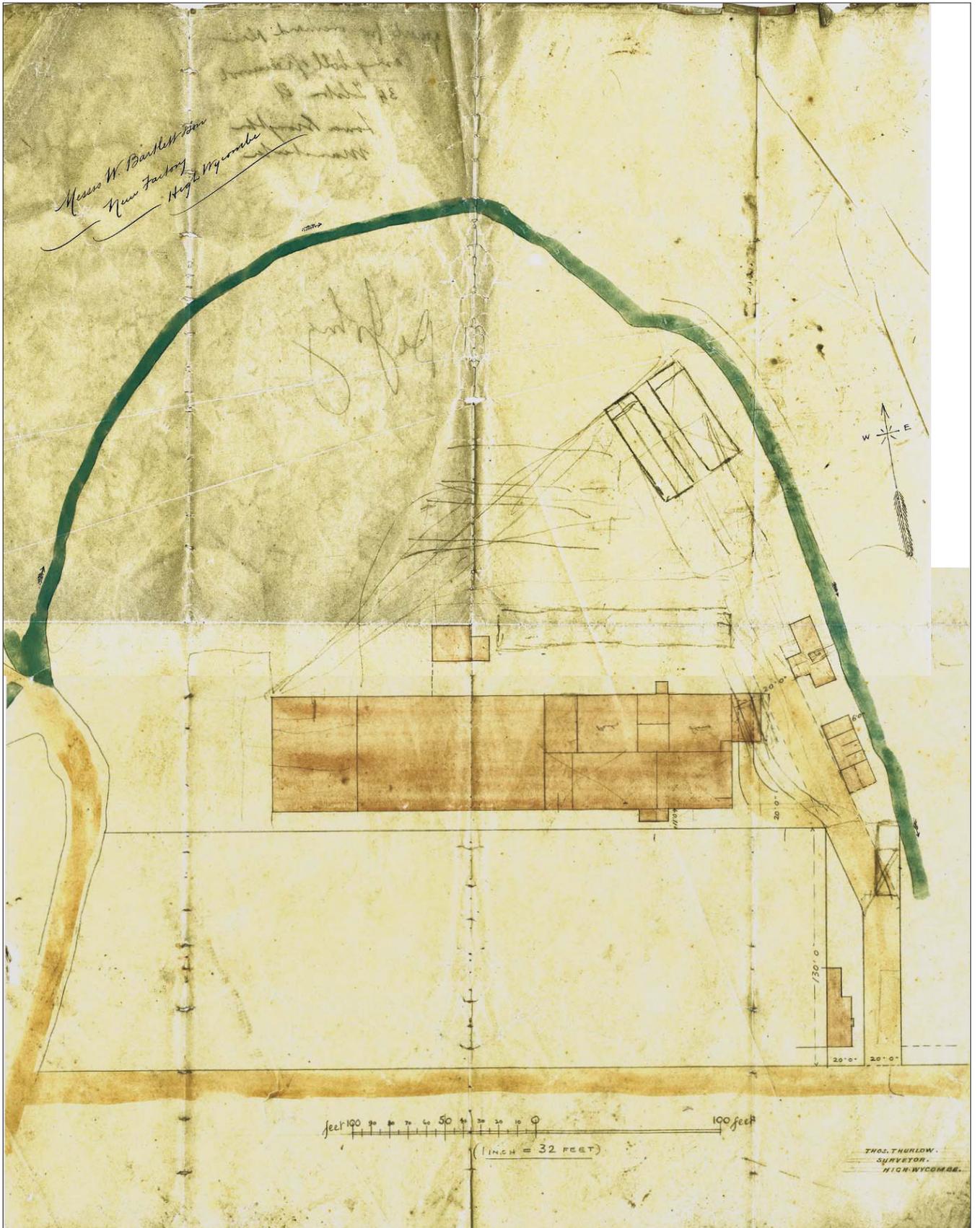
Parish of High Wycombe enclosure, 1868
IR/42.R

Ref.

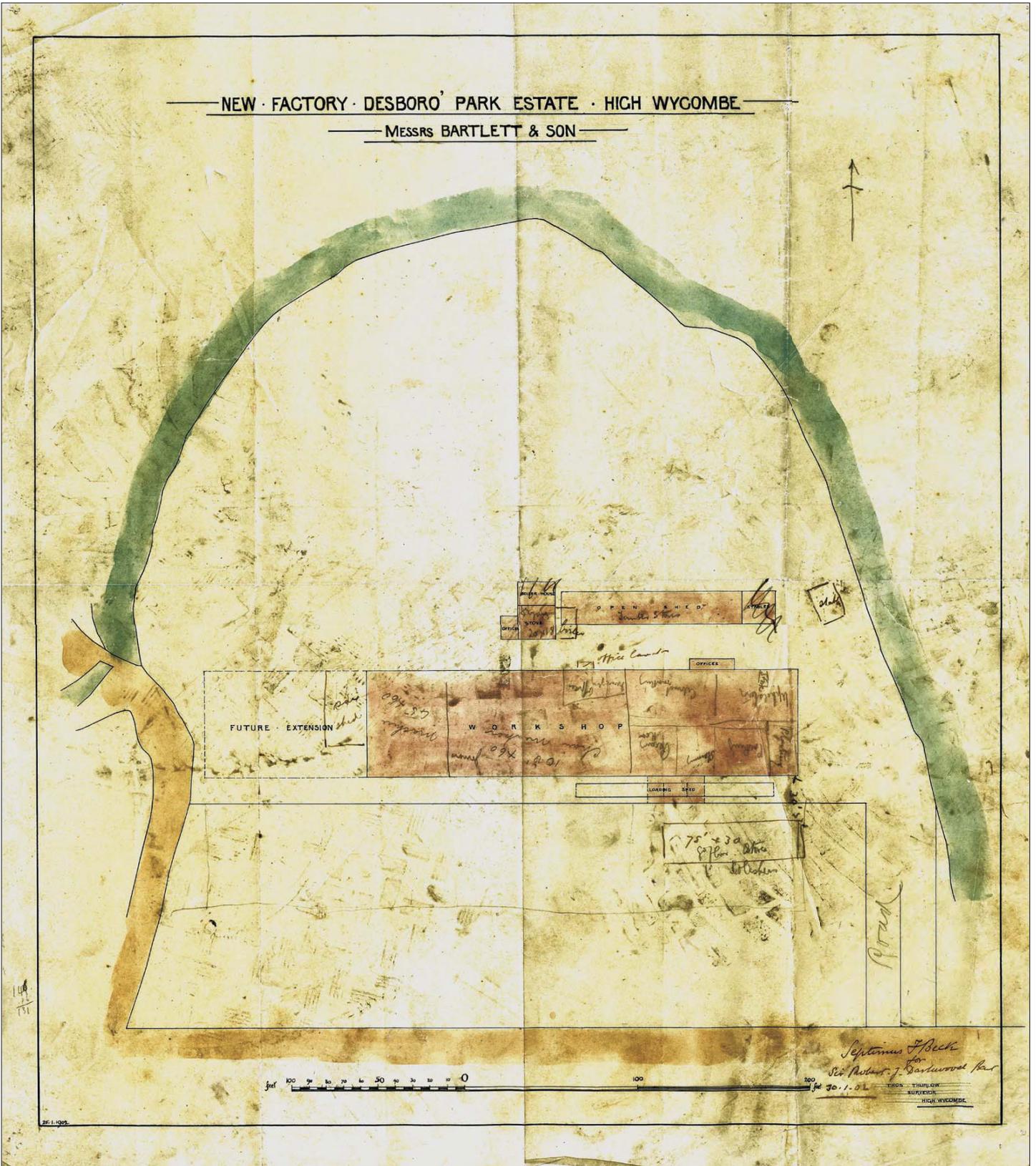
APPENDIX 3 HBR ARCHIVE FORM

Site Details							
Site Name: William Bartlett & Son, Grafton Street, High Wycombe					NGR: SU 8497 9371		
County: Buckinghamshire				Museum Collecting Area: Bucks County Museum			
Site Code: AS 1077				Project Number: 2920			
Date of Work: 03.08.2010				Related Work:			
Brief/s				Specification/s			
Date		Present		Date		Present	
19.07.2010		Yes		26.07.2010		Yes	
Site Records (Description)							
Notes (3 pages A4)							
Site Drawings (Give Details of Formats & Size)							
<i>Drawn Plans & Sections:</i> 1 A3 and 1 A4 sheets drawing film							
Architect's Drawings:							
<i>Digital Drawings</i>							
<i>Printouts of D4rawings</i>			<i>Printouts of Data</i>			<i>Digital Data</i>	
						Digital photographs and drawings in digital format on CD	
Reports							
Report No		Report Type				Present	
3662		Historic building recording				Yes	
site Photographs							
Black & White Contact Prints					Colour Slides		
Film No	Film Type	Negs	Negs Present	Contacts Present	Film No	Negs	Present
1	120mm	4-15	Yes	Yes	1	1-11	Yes
2	120mm	1-11	Yes	Yes			
Photographic Location Plans Present? (Give Details)							
Printed in report and separate printout in archive folder							
Digital Photographs (Give Details):							
Index and selected plates printed in report. Separate printout of index included in archive folder and digitally on CD							

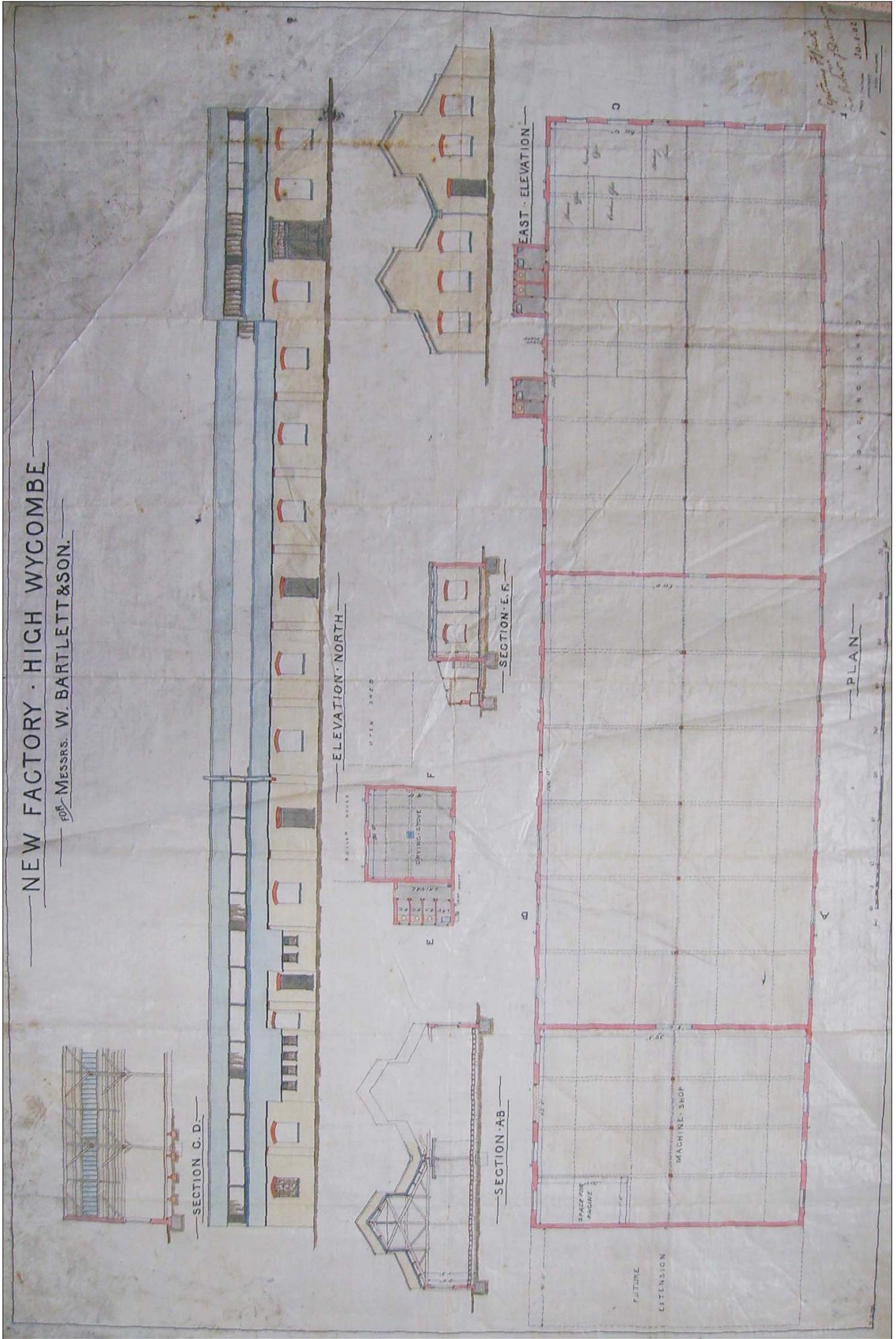
Appendix 4.1



Architect's plan 10.12.1901 - not to scale



Architect's plan 25.01.1902 - not to scale



FACTORY PLAN SCALE 30' = 1"

Messrs. WILLIAM BARTLETT & SON LTD
 GRAFTON STREET, HIGH WYCOMBE, BUCKS.

- 2 STOREY BUILDINGS
- 1 STOREY BUILDINGS
- ROOF LIGHTS
- RAILWAY (24" GAUGE)

FLOOR AREA

DRY TIMBER STORE	9,486 SQ. FT. x 12' HIGH
ASSEMBLING DEPARTMENTS GROUND FLOOR	10,700 SQ. FT. x 12' HIGH
ASSEMBLING DEPARTMENTS FIRST FLOOR	9,430 SQ. FT. x 11' HIGH
POLISHING SHOP (G)	2,000 SQ. FT. x 12' HIGH
STAINING SHOP	2,400 SQ. FT. x 8' HIGH
STORES OVER	2,400 SQ. FT. x 6' HIGH
PACKING SHOP	1,870 SQ. FT. x 11' HIGH
FITTING UP DEPARTMENT	3,630 SQ. FT. x 11' HIGH
UPHOLSTERY DEPARTMENT & DRYING ROOMS	5,500 SQ. FT. x 11' HIGH
VENEER LAYING DEPARTMENT	2,475 SQ. FT. x 11' HIGH
MACHINE SHOP	18,150 SQ. FT. x 15' HIGH
TABLE MAKING DEPARTMENT	990 SQ. FT. x 8' HIGH
POLISHING SHOP (M) GROUND FLOOR	2,650 SQ. FT. x 8' HIGH
POLISHING SHOP (M) FIRST FLOOR	2,650 SQ. FT. x 10' HIGH
<u>TOTAL FLOOR AREA 74,500 SQ. FT.</u>	



Undated architect's plan (possibly 1930s) - not to scale

**APPENDIX 5
HER SUMMARY SHEET**

Site name and address:	<i>Boiler House, William Bartlett & Son, Grafton Street, High Wycombe, Buckinghamshire</i>
County: <i>Buckinghamshire</i>	District: <i>Wycombe</i>
Village/Town: <i>High Wycombe</i>	Parish: <i>High Wycombe</i>
Planning application reference:	
Client name/address/tel:	Leadbitter
Nature of application:	Demolition
Present land use:	Derelict industrial building (boiler house and factory chimney)
Size of application area:	Size of area investigated
NGR (8 figures):	<i>SU 8497 9371</i>
Site Code:	AS 1268
Site director/Organization:	Archaeological Solutions Ltd.
Type of work:	Historic building recording
Date of work:	<i>3rd August 2010</i>
Location of finds/Curating museum:	Buckinghamshire
Related SMR Nos:	Periods represented: Early 20 th century
Relevant previous summaries/reports: -	
Summary of fieldwork results:	<p><i>In August 2010, Archaeological Solutions Limited (AS) conducted a programme of historic building recording of the boiler house and associated chimney at the William Bartlett & Son site, Grafton Street, High Wycombe, Buckinghamshire. The work was commissioned in order to comply with a planning condition imposed on consent to demolish the assessment building.</i></p> <p><i>The project revealed that the initial factory buildings were constructed in 1901 / 1902, although it is clear from both physical evidence and information found on a number of early plans, that the boiler house and factory chimney date from a later phase of development on the site.</i></p> <p><i>There appear to have been at least four significant phases of expansion following the development of a thriving furniture manufacturers, beginning with a relatively modest array of buildings. The construction of the boiler house coincides with phases of development carried out between 1912 and the early 1920s. The development is somewhat confused, for parts of the boiler house incorporate earlier walls predating the adjoining building to the south, and hence fall into the earlier time span. Evidence suggests that the boiler and much of the building to the south was constructed fairly soon after the production of the 1912 plan. However, the chimney and remainder of the walling dates to the early 1920s, perhaps representing a new chimney constructed as a replacement for a smaller example associated with the earlier boiler.</i></p>
Author of summary: Tansy Collins	Date of Summary: 28.10.2010

PLATES

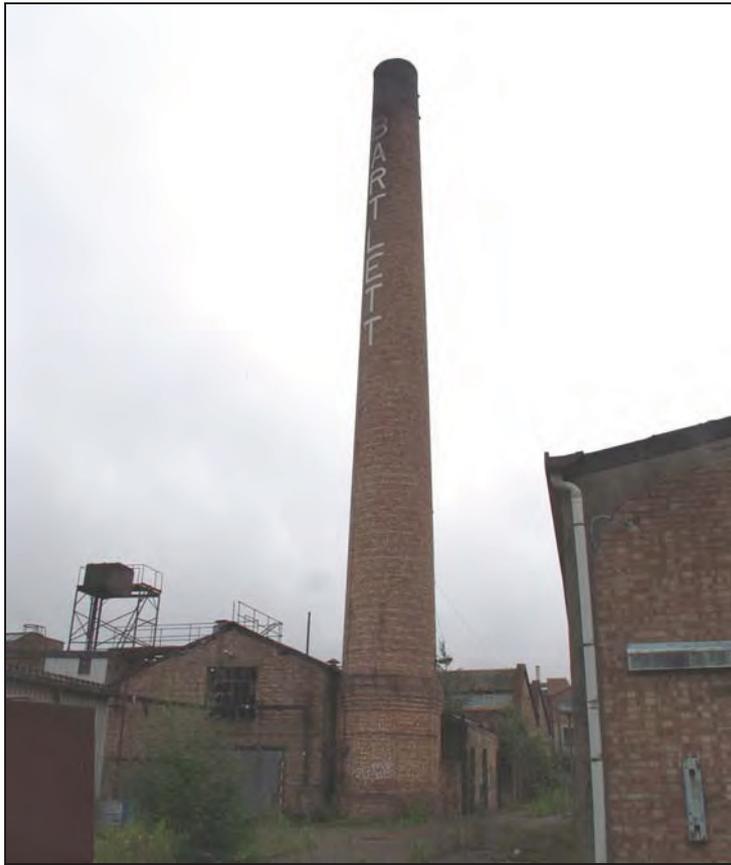


Plate 1 View of the factory chimney taken during the earlier appraisal, taken from the north (33)



Plate 2 North façade of the boiler house and the remains of the chimney, taken from the north (06)



Plate 3 Small door on the west elevation giving access to the main chimney flue, taken from the west (03)



Plate 4 Lancashire boiler in the south-west corner of the boiler room, taken from the north-east (15)



Plate 5 Twin furnace doors to the Lancashire boiler, taken from the north-east (16)

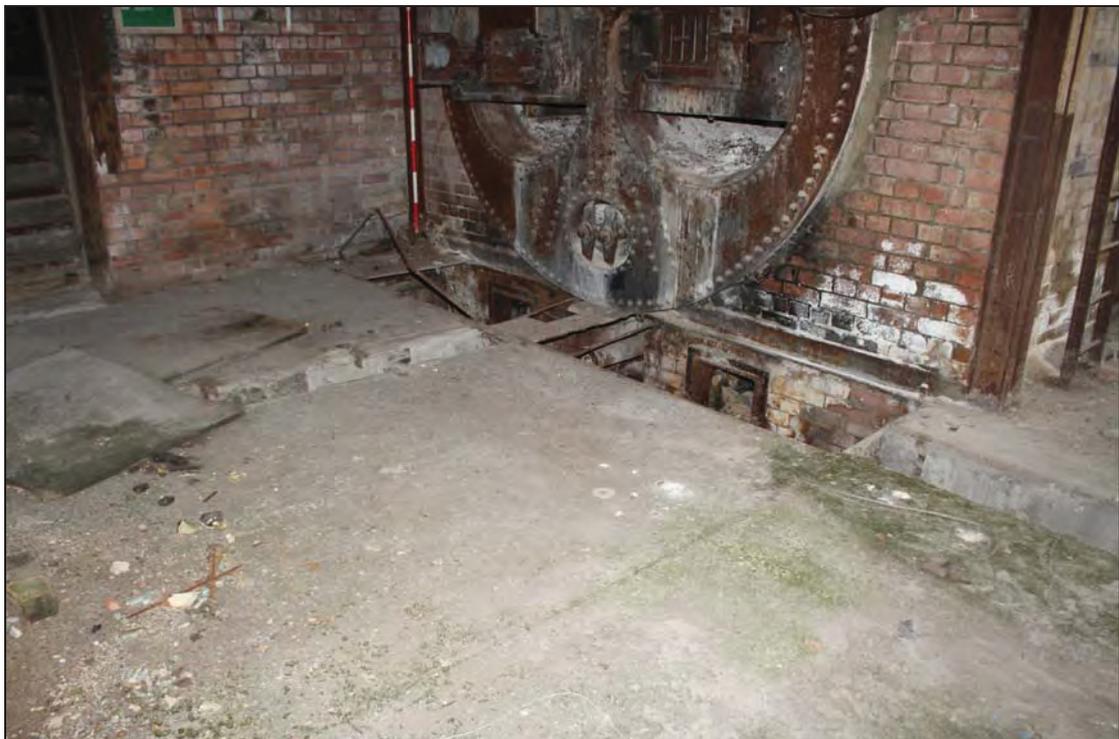


Plate 6 Ducts in the floor and inspections hatches to beneath the boiler, taken from the north-east (17)

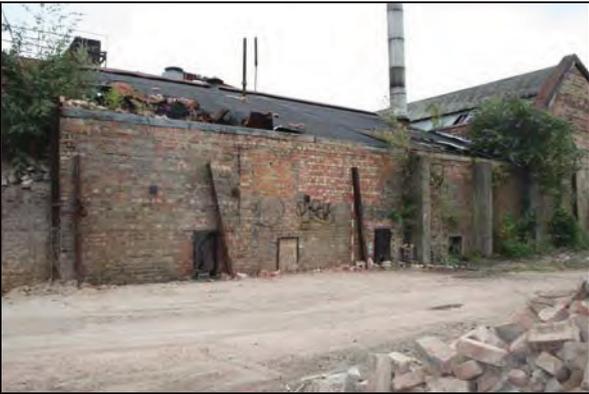


Plate 7 Pivoting vent-doors in the main flue from the boiler to the chimney, taken from the south-west (30)



Plate 8 Surviving fixtures within the tank room, taken from the south-east (22)

PHOTOGRAPHIC INDEX



1

West elevation of the boiler house, taken from the north-west



2

West elevation of the boiler house, taken from the south-west



3

Small door on the west elevation giving access to the main chimney flue, taken from the west



4

Boiler house with the remains of the chimney, taken from the north-west



5

Base of the chimney, taken from the north



6

North façade of the boiler house and the remains of the chimney, taken from the north



7

Boiler house, northern elevation, taken from the north-west



8

East side of the boiler house and adjoining building, taken from the north-east



9

Doorway in the formerly external east wall of the boiler house, taken from south-east



10

Formerly external east wall of the boiler house showing blocked apertures, taken from the south-east



11

Formerly external south and east walls of the boiler house, taken from the south-east



12

Formerly external wall of the boiler house, taken from the south



13

North wall of the boiler room, taken from the south



14

Sliding doors on east wall of the boiler room, taken from the west



15

Lancashire boiler in the south-west corner of the boiler room, taken from the north-east



16

Twin furnace doors to the Lancashire boiler, taken from the north-east



17

Ducts in the floor and inspections hatches to beneath the boiler, taken from the north-east



18

Form of the bolted steel roof structure Metal roof trusses, boiler house, taken from the north



19

Entrance to the tank room from the boiler room, taken from the north



20

Tank room, taken from the south-west



21

South wall of the tank room (west end) showing blocked aperture, taken from the north



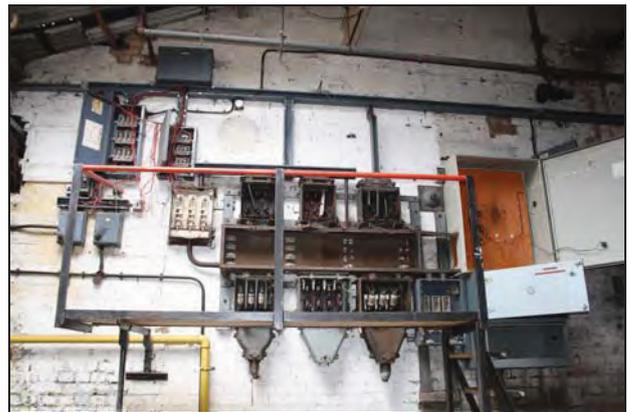
22

Surviving fixtures within the tank room, taken from the south-east



23

South-western corner of the tank room showing blocked aperture, taken from the north-east



24

Fuse boxes and similar on the north wall of the tank room, taken from the south



25

Formerly external south wall (west end) of the boiler house showing a blocked aperture, taken from the south



26

Formerly external south wall (east end) of the boiler house showing a blocked aperture, taken from the south



27

Small aperture in east wall of the boiler room, taken from the east



28

Remains of pipework on the west wall of the tank room, taken from the east



29

South wall of the tank room showing blocked circular aperture at high level, taken from the north-east



30

Pivoting vent-doors in the main flue from the boiler to the chimney, taken from the south-west



31

Barrel ceiling in the main flue from the boiler to the chimney, taken from the south-west



32

Detail of apertures from the main flue to the boiler room, taken from the west



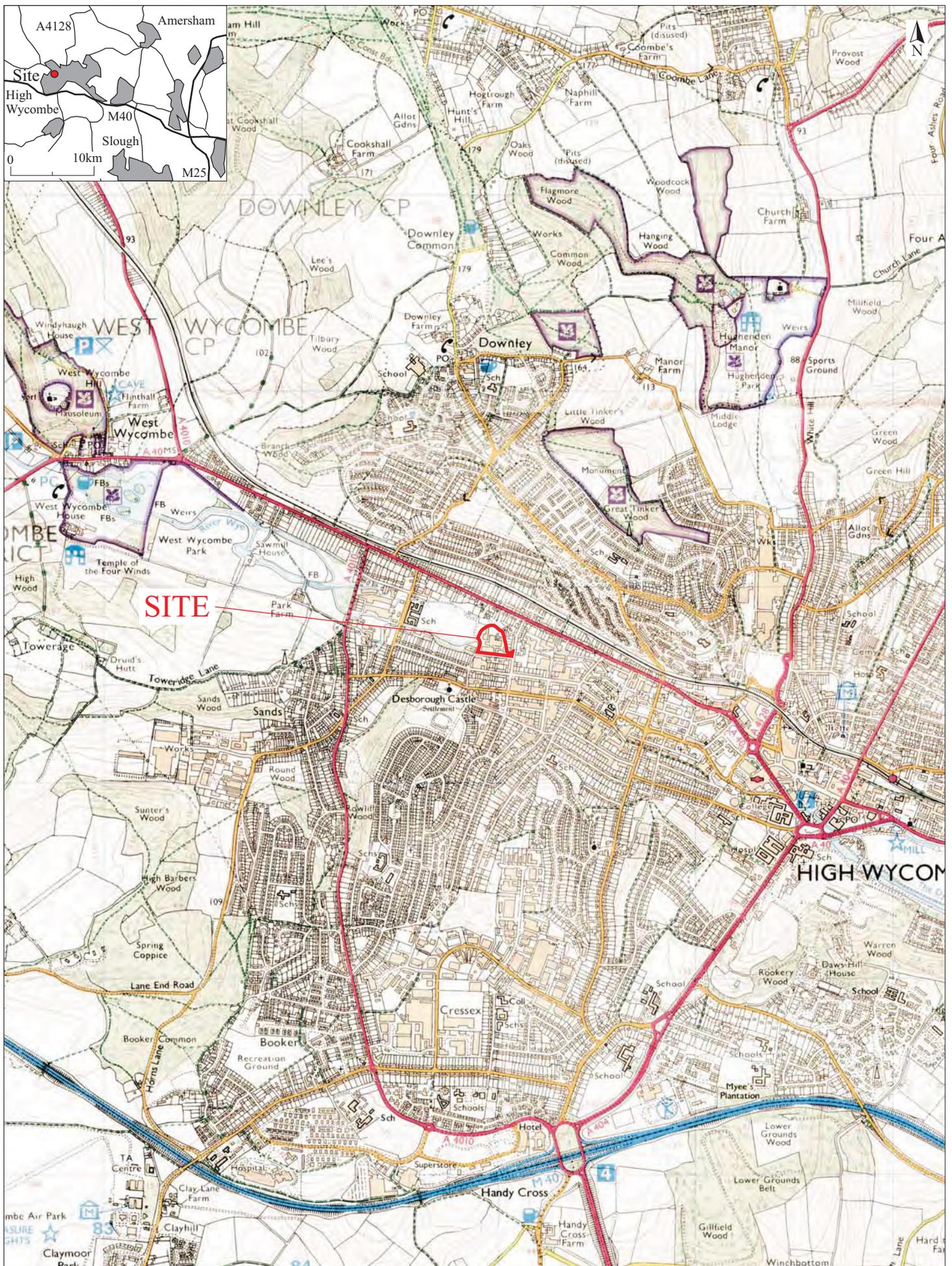
33

View of the factory chimney taken during the earlier appraisal, taken from the north



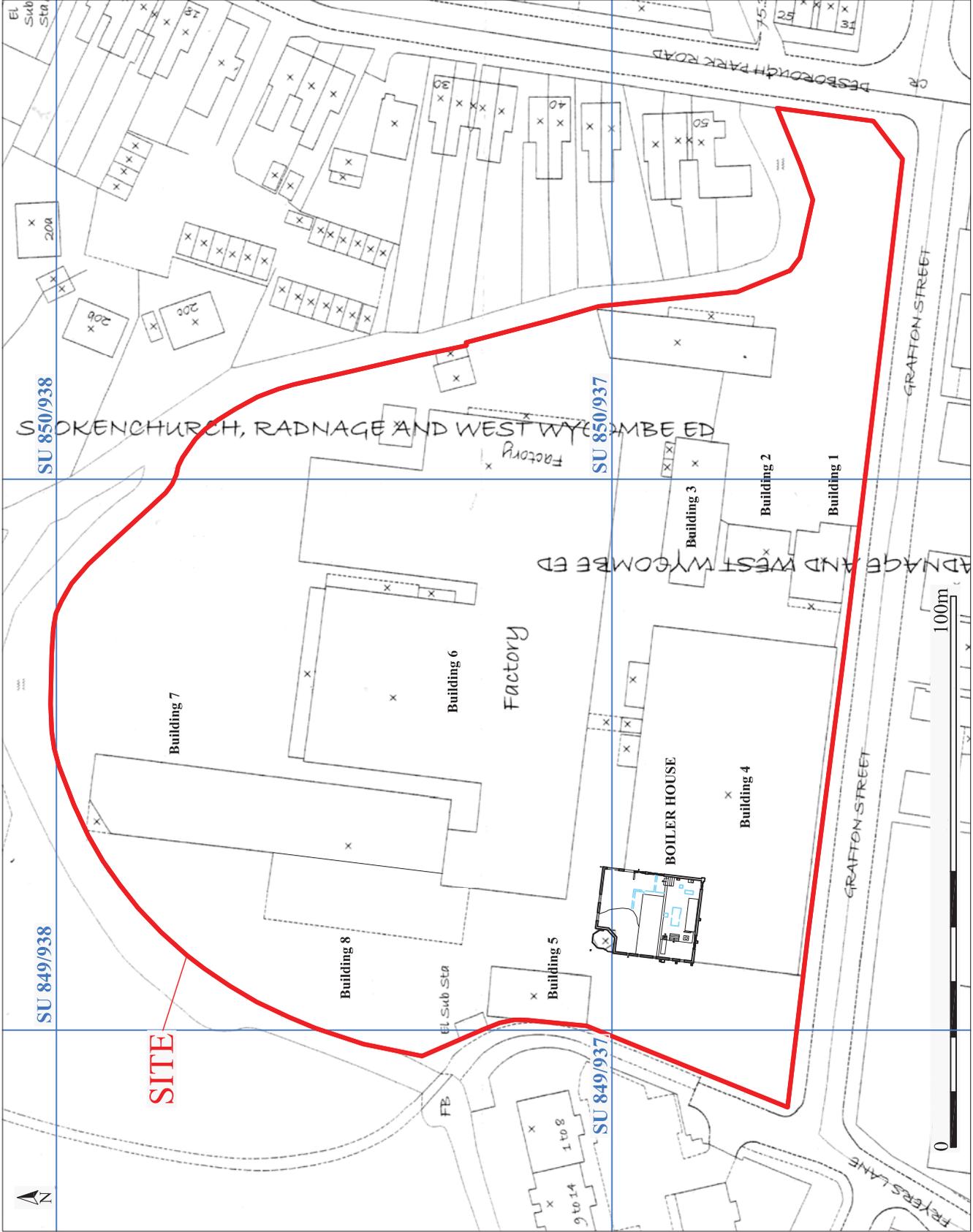
34

View of the west side of the boiler room taken during the earlier appraisal, taken from the east

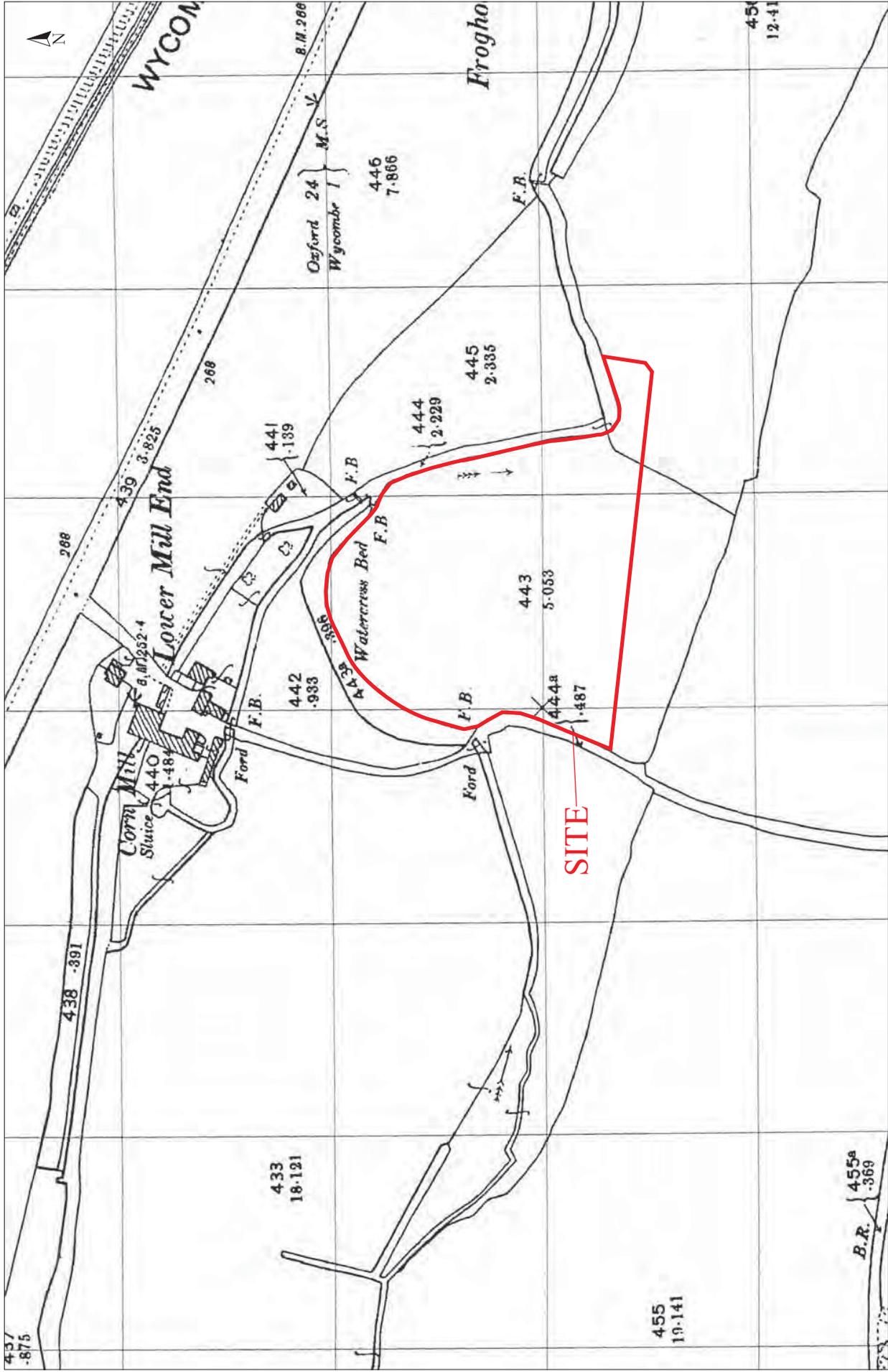


Reproduced from the 1999 Ordnance Survey 1:25000 map with the permission of Her Majesty's Stationery Office. Crown copyright Archaeological Solutions Ltd Licence number 100036680

Archaeological Solutions Ltd
Fig. 1 Site location plan
 Scale 1:25,000 at A4



Archaeological Solutions Ltd
Fig. 2 Detailed site location plan
 Scale 1:1000 at A4

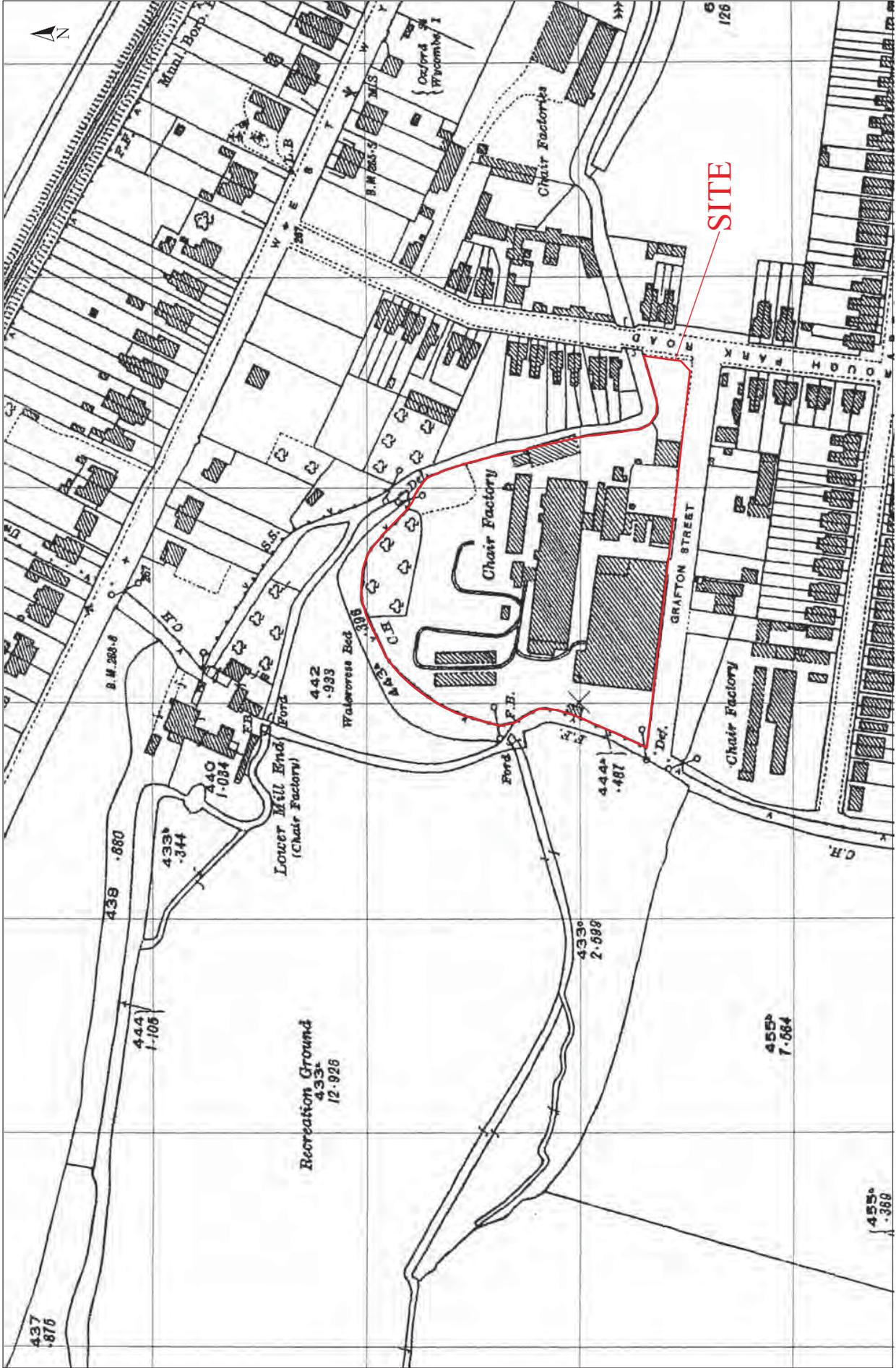


Reproduced from the 1899 Ordnance Survey 25' to 1 mile map with the permission of Her Majesty's Stationery Office. Crown copyright Archaeological Solutions Ltd Licence number 100036680

Archaeological Solutions Ltd

Fig. 3 2nd edition OS map, 1899

Scale 25" to 1 mile at A4



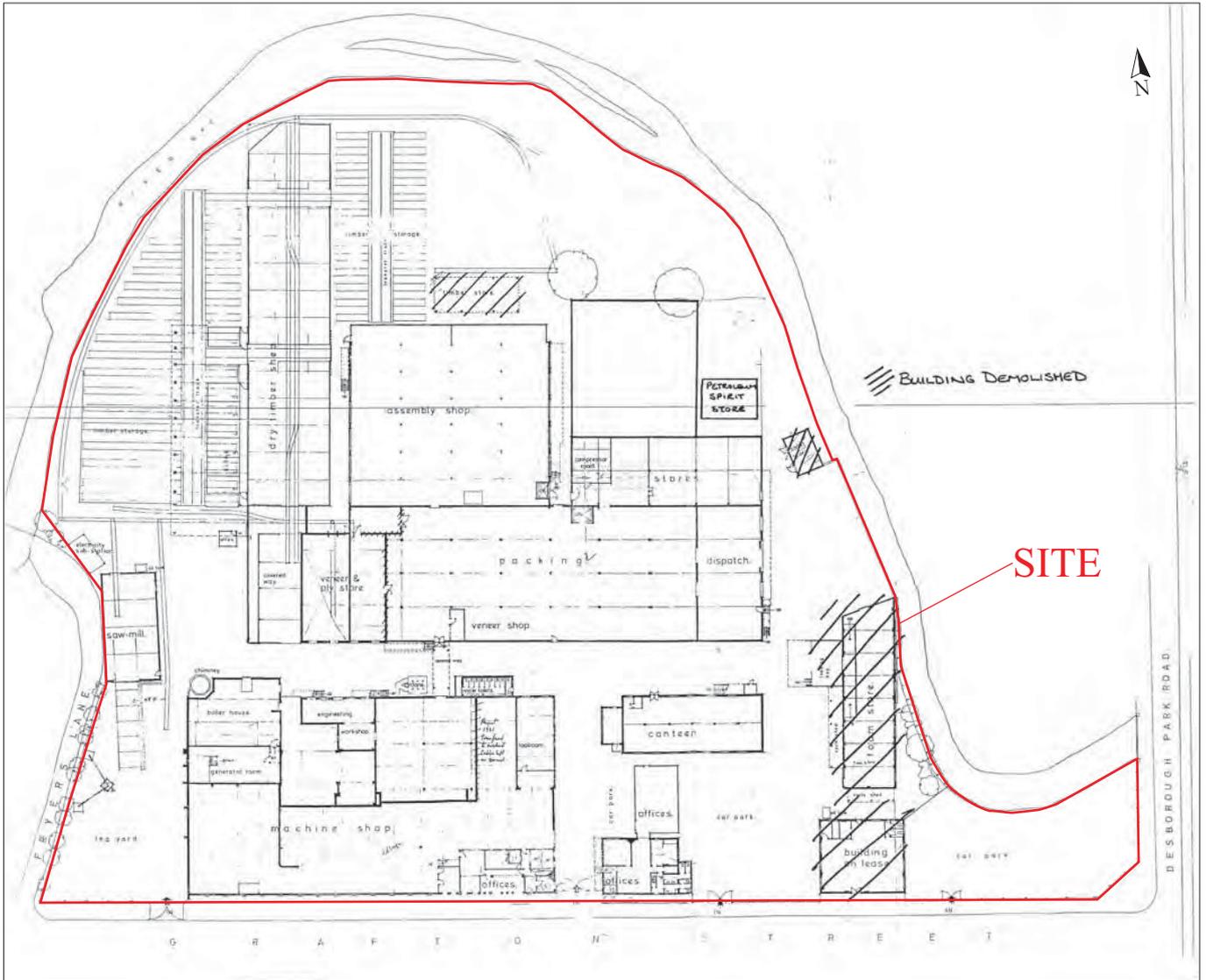
Archaeological Solutions Ltd
Fig. 4 3rd edition OS map, 1925
 Scale 25" to 1 mile at A4

Reproduced from the 1925 Ordnance Survey 25" to 1 mile map with the permission of Her Majesty's Stationery Office. Crown copyright Archaeological Solutions Ltd Licence number 100036680



Archaeological Solutions Ltd
Fig. 5 OS map, 1967
 Scale 25" to 1 mile at A4

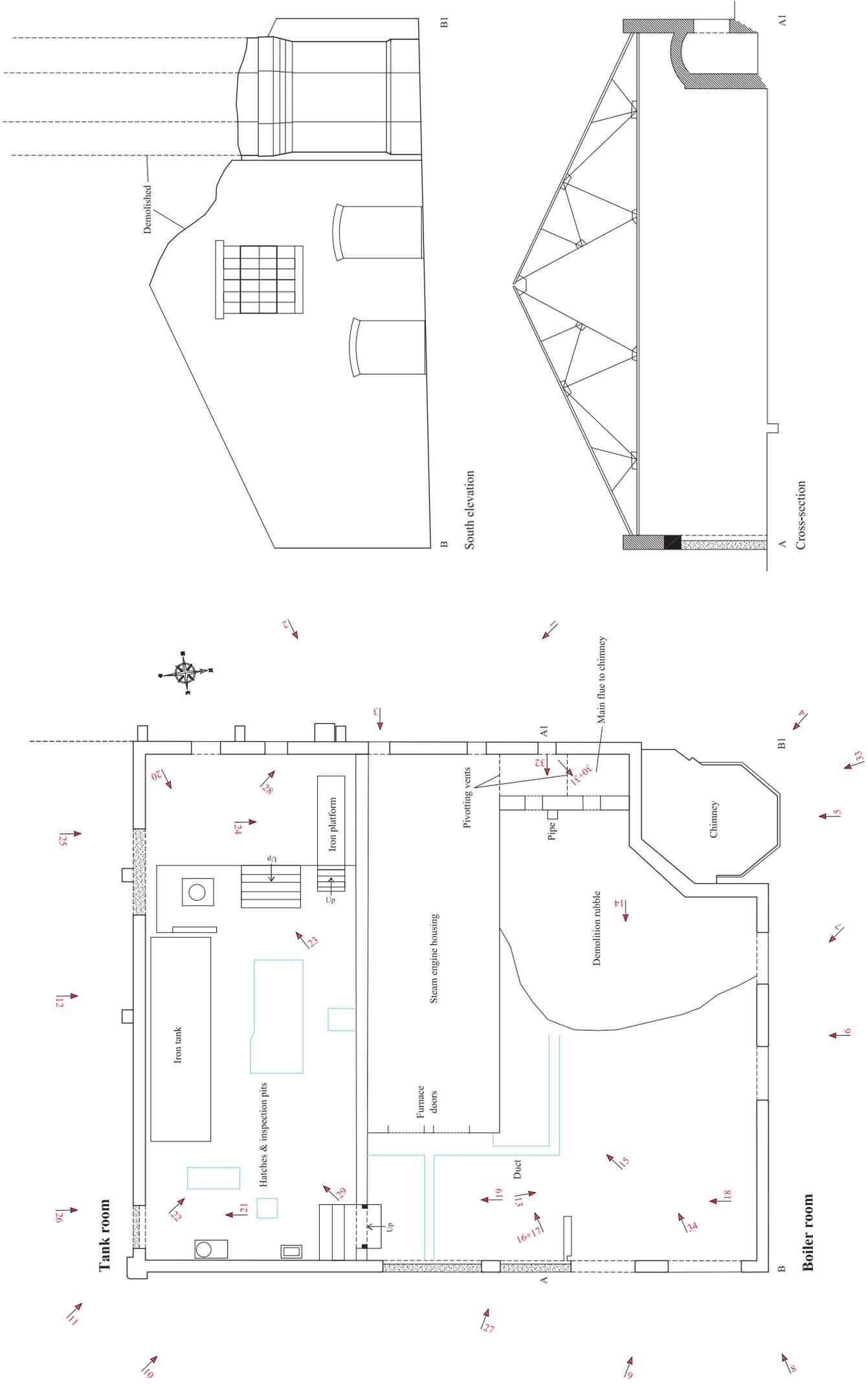
Reproduced from the 1967 Ordnance Survey 25 to 1 mile map with the permission of Her Majesty's Stationery Office. Crown copyright Archaeological Solutions Ltd Licence number 100036680



Archaeological Solutions Ltd

**Fig. 6 Wm. Bartlett & Son Ltd.
survey of premises 1970**

Scale 1 inch to 32 ft (reproduced from a plan at 1 inch to 16 ft)



Blocked door
 Floor ducts