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**ARCHAEOLOGICAL SOLUTIONS LTD**

**SPROUGHTON MILL, LOWER STREET,  
SPROUGHTON, IPSWICH, SUFFOLK**

**HISTORIC BUILDING RECORDING &  
ARCHAEOLOGICAL MONITORING & RECORDING**

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NGR: TM 12480 45103	Report No: 3474
District: Babergh	Site Code: SPT 036
Approved: Claire Halpin	Project No: 3664
Signed:	Date: Jan 2010

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**OASIS SUMMARY SHEET**

<b>Project details</b>			
Project name	<i>Sproughton Mill, Lower Street, Sproughton, Suffolk. Historic Building Recording</i>		
Summary			
<p><i>In November 2009 Archaeological Solutions Ltd. conducted historic building recording at Sproughton Mill, Lower Street, Sproughton, Suffolk (NGR TM 12480 45103). The recording was undertaken in advance of the proposed residential conversion of the former mill building. In January 2010, Archaeological Solutions Ltd (AS) carried out a programme of detailed archaeological monitoring and recording, principally prior to the construction of a car park and driveway.</i></p> <p><i>Sproughton Mill, a Grade II Listed Building, is a typical example of an early industrial structure, most probably dating to the late 18<sup>th</sup> century. There is documentary evidence indicating an earlier mill in the vicinity. Two arches span the mill race beneath the building providing power to an undershot mill wheel although this has been removed. It retains a high quality and picturesque brick façade with a weather-boarded hoist loft extending from the upper floor. The internal layout is open plan; massive Baltic softwood joisting supports several floors, while the ground floor preserves a large robust oak frame which formerly enclosed the milling machinery. Most of the machinery has been removed, though some pulley wheels remain in the roof space. One corner of the building was extensively rebuilt in the recent past.</i></p> <p><i>The archaeological monitoring and recording revealed no archaeological features or finds</i></p>			
Project dates (fieldwork)	25/11/09; 18/01/10		
Previous work (Y/N/?)	N	Future work (Y/N/?)	N
P. number	3664	Site code	SPT 036
Type of project	<i>Historic Building Recording &amp; Archaeological Monitoring &amp; Recording</i>		
Site status	<i>Grade II listed, Area of Archaeological Significance</i>		
Current land use	<i>Mill and associated grounds</i>		
Planned development	<i>To convert the mill to create a single residential dwelling</i>		
Main features (+dates)	<i>Late 18<sup>th</sup> century Georgian Mill</i>		
Significant finds (+dates)	-		
<b>Project location</b>			
County/ District/ Parish	<i>Suffolk</i>	<i>Babergh</i>	<i>Sproughton</i>
SMR for area	<i>Suffolk County Council Archaeological Service Conservation Team</i>		
Post code (if known)	-		
Area of site	n/a		
NGR	<i>TM 12480 45103</i>		
Height AOD (max/ min)	<i>c. 5m AOD</i>		
<b>Project creators</b>			
Brief issued by	<i>SCC AS-CT</i>		
Project supervisor/s (PO)	<i>Lisa Smith &amp; Tim Schofield</i>		
Funded by	<i>Mr Richard Howard</i>		
Full title	<i>Sproughton Mill, Lower Street, Sproughton, Suffolk. Historic Building Recording &amp; Archaeological Monitoring &amp; Recording</i>		
Authors	<i>Thompson, T. (DBA), Smith, L. Prosser, L.</i>		
Report no.	3474		
Date (of report)	Jan 2010		

# **SPROUGHTON MILL, LOWER STREET, SPROUGHTON, IPSWICH**

## **HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL MONITORING AND RECORDING**

### **SUMMARY**

*In November 2009 Archaeological Solutions Ltd. conducted historic building recording at Sproughton Mill, Lower Street, Sproughton, Suffolk (NGR TM 12480 45103). The recording was undertaken in advance of the proposed residential conversion of the former mill building. In January 2010, Archaeological Solutions Ltd (AS) carried out a programme of detailed archaeological monitoring and recording, principally prior to the construction of a car park and driveway.*

*Sproughton Mill, a Grade II Listed Building, is a typical example of an early industrial structure, most probably dating to the late 18<sup>th</sup> century. There is documentary evidence indicating an earlier mill in the vicinity. Two arches span the mill race beneath the building providing power to an undershot mill wheel although this has been removed. It retains a high quality and picturesque brick façade with a weather-boarded hoist loft extending from the upper floor. The internal layout is open plan; massive Baltic softwood joisting supports several floors, while the ground floor preserves a large robust oak frame which formerly enclosed the milling machinery. Most of the machinery has been removed, though some pulley wheels remain in the roof space. One corner of the building was extensively rebuilt in the recent past.*

*The archaeological monitoring and recording revealed no archaeological features or finds*

### **1 INTRODUCTION**

1.1 In November 2009, Archaeological Solutions Ltd (AS) conducted a programme of historic building recording at Sproughton Mill, Sproughton, Ipswich, Suffolk (NGR TM 12480 45103; Figs. 1 - 2). In January 2010, Archaeological Solutions Ltd (AS) carried out a programme of detailed archaeological monitoring and recording, principally prior to the construction of an access road. The monitoring and recording was required as part of a planning condition imposed in advance of converting the mill to a residential dwelling (Planning Ref. B/09/00168/FUL). The project was commissioned by barefoot & Gilles on behalf of their client Mr Richard Howard. This report relates to the recording of the existing structure.



1.2 The relevant planning policies which apply to the effect of development with regard to cultural heritage are Planning Policy Guidance Note 15 'Planning and the Historic Environment' (PPG15: 1994). This is the national Planning Policy Guidance Note which applies to the 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. This condition is also widely applied by local authorities.

1.3 The project was conducted in accordance with advice from Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) and a written scheme of investigation (specification) prepared by AS (dated 2<sup>nd</sup> October 2009), and approved by SCC AS-CT. The building recording was carried out to Level 3 as defined in the English Heritage document *Understanding Historic Buildings: a guide to good recording practice*, 2006 and the Royal Commission's *Recording Historic Buildings: A descriptive specification 3<sup>rd</sup> edition*, RCHME 1996. It was also carried out in accordance with the Institute of Archaeologists' (IfA) *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (revised 2001). The relevant sections of *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Paper 14/ALGAO (Gurney 2003) were followed. The IfA *Standard and Guidance for Archaeological Desk-Based Assessments*, and the IfA *Standard and Guidance for Archaeological Watching Briefs* (both revised 2001) were also followed.

1.4 The objective of the historic building recording and archaeological monitoring in the specification is in particular, to characterise evidence of the mill complex and evidence of medieval settlement and origins/precursors to the mill as set out in the IFA and English Heritage guidance documents:

- to compile a comprehensive and high quality record of the structure identified for alteration, with analysis and interpretation of that structure in conjunction with an associated documentary survey;
- to provide a review of the local and regional historical context of the building, adequately detailed to place the findings of the archaeological recording in context, and;
- to produce a high quality, fully integrated archive suitable for long-term deposition in order to 'preserve by record' the building in its current form prior to alteration.

1.5 The specification allowed for further monitoring works during alteration to the fabric of the building but it was felt that any additional visits would not provide any further information.

1.6 The objectives of the monitoring and recording were:

- to determine the location, extent, date, character, condition, significance and quantity of any surviving archaeological remains and geological deposits that are threatened by the proposed development;
- to characterise any evidence of the mill complex, and to identify the presence of any earlier evidence (in particular any medieval settlement evidence, or evidence of earlier mill/s) on the site;
- to ensure the archaeological monitoring of all aspects of the development programme likely to affect archaeological remains;
- to secure the adequate recording of any archaeological remains revealed by the development programme;
- to secure the full analysis and interpretation of the site archive and the publication of the project results, if appropriate;
- to secure the conservation and long-term storage of any artefactual/ecofactual material recovered from the site.

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

2.1 Sproughton Mill is located on the north end of the village of Sproughton 3.75 km west of the centre of Ipswich and just over 700 metres west of the A14. It lies at the bottom of the north-south running Gipping valley.

## **3 METHODOLOGY**

### **3.1 Desk-based Assessment & Historic Building Recording**

#### **3.1.1 Archaeological databases**

The standard collation of all known archaeological sites, chance finds and historic landscape features in Suffolk is the Suffolk Historic Environment Record (HER). The HER database was searched for all known entries within a c. 1 km radius of the assessment site. These are listed in Appendix 1 and plotted below (Figs. 3). Where relevant, entries have been discussed in Section 4.2.

#### **3.1.2 Cartographic and documentary sources**

The principal source for maps and historic documents was Ipswich record office. All available material regarding the site was consulted and is listed in Appendix 2. Where relevant, these sources have been discussed in Sections 4.2-3 and reproduced in Figs. 4 - 6.

#### **3.1.3 Secondary sources**

The principal sources of secondary material were the Ipswich record office and AS's own reference library. All sources used have been referenced in the appendices and bibliography.

### 3.1.4 Geological/ geotechnical information

Information was compiled from appropriate maps published by the Geological Survey of Great Britain and the Soil Survey of England and Wales (SSEW 1983). No detailed geotechnical information for the site was available at the time of writing.

### 3.1.5 The building

The site was visited on the 25<sup>th</sup> November 2009 in order to compile the description of the building and undertake the drawing and photographic work. Lisa Smith and Lee Prosser compiled the written descriptions and carried out the photographic recording. Kathren Henry completed the drawing work. Floor plans, sections and an elevation based upon drawings provided by the client are included with annotations (Figs. 7-10).

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. Architectural detail was captured using 35mm black and white film. 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)

## 3.2 Archaeological Monitoring and Recording

3.2.1 The archaeological monitoring comprised the observation of all groundworks, inspection of subsoil and natural deposits for archaeological features, the examination of spoil heaps and the recording of soil profiles. Deposits were excavated by hand and recorded by means of *pro forma* recording sheets, drawn to scale and photographed as appropriate. Excavated spoil was searched for archaeological finds.

3.2.2 The monitoring and recording focused on all intrusive activity associated with the ground works, principally the construction of an access road. The site was visited in January 2010.

## **4 DESK-BASED RESEARCH**

### **4.1 Topography, geology and soils**

4.1.1 The mill is situated in the low, but fairly steep sided Gipping valley at approximately 5 metres above sea level. The valley bottom comprises peo-alluvial gley soil, with typical argillic brown earth (Ludford type) higher up the valley sides. The underlying solid geology comprises Cretaceous Upper Chalk in the valley with overlying London clay which may feature higher up the slopes. The Parish is generally described as sandy soils over gravels with clay soils over peat with risks of flooding (Goult 1990).

### **4.2 Archaeological and historical background (Fig. 3)**

#### *Prehistoric (700,000 - c. 100 BC)*

4.2.1 The Gipping Valley was favourable to Mesolithic occupation with six or seven sites noted within a 1km radius of Sproughton Mill, but none in near proximity. The situation is similar with the later Neolithic and Bronze Age material with the exception of a single flint flake found in the garden at 26 Church Crescent, approximately 150 metres south of the assessment site (SHER SPT Misc – MSF808). An undated circular enclosure by the River Gipping approximately 65m in diameter discovered by aerial photography could also be prehistoric (SHER SPT 027 – MSF15187) but has not been investigated further.

#### *Roman (AD 43 – AD 410)*

4.2.2 There are no Roman sites within 1km of the assessment area.

#### *Anglo-Saxon and medieval (c. AD 410 – 1500)*

4.2.3 The etymology of the place-name Sproughton may derive from 'Spro's homestead' or enclosure. In 1286 the manor of Sproughton was owned by Roger Loveday who held it as part of the larger barony known as the Honour of Lancaster. Medieval finds are few in number. Only three SHER find spots have been made within the 1km radius, the closest being a circular crop mark c.550 metres east of Sproughton Mill, which when bulldozed produced several sherds of Thetford ware pottery of c. late 9<sup>th</sup> to mid 12<sup>th</sup> centuries date (SHER SPT 017 – MSF4539). The parish church of All Saints (SHER SPT 016 – MSF 14415) situated approximately 80 metres south of Sproughton Mill is not mentioned in Domesday Book, but could be one of the two listed for the neighbouring parish of Bramford. It is mainly 13<sup>th</sup>-14<sup>th</sup> century with restorations in the 19<sup>th</sup>. A complete medieval red ware bottle was found in an original scaffolding hole in the tower wall (SHER SPT 016 – MSF 4538).

### *Post-medieval (c. AD 1500 – present)*

4.2.4 There are 11 listed buildings in Sproughton (Appendix 2), including the mill. In addition a bridge, now disappeared, was situated just to the south or near the current bridge, although its precise location is unknown. It is apparent on maps dated 1755 and 1783 (SHER SPT 028 – MSF15846). The mill is ascribed to the late 18<sup>th</sup> century, though a watermill with mill race is recorded on the 1755 Bowen map showing that there was a precursor. In addition, an account for 1844 records a corn miller (Goult 1990). In 1840 a bread charity rent charge of one pound and six shillings was introduced for supplying bread to poor widows.

4.2.5 Pevsner records the mill as being a late Georgian brick structure of five bays and four storeys set across the mill stream (Pevsner, 1974). In 1983 the Women's Institute of Suffolk unveiled a new village sign depicting the Wild Man public house and the water mill, illustrating its importance to the village. It was last used in 1947, but has long been a popular subject for artists.

## **4.3 Cartographic Sources**

4.3.1 The earliest map showing detail is the 1838 tithe map (Fig 4), the water mill in its present state is absent on earlier maps not being built until the late 18<sup>th</sup> century, along with most of the buildings now in its immediate vicinity. However, the tithe map Award (FDA 233/A1/IG) indicates the presence of an earlier mill, although it cannot be identified on the map itself. Plot 235 comprising the peninsula in the modified River Gipping, assessed as 3 acres and 13 perches, is named Mill Meadow, and was owned by one Joseph Burch Smythe and occupied by a James Cooper. The 1904 2nd edition 25 inch OS map (Fig 5) clearly labels the Corn Mill and the lock, the former with the adjacent buildings that stand currently. The 1926 3<sup>rd</sup> edition OS map (Fig 6) shows virtually no change from the 1904 map other than marking on the sluice and a boat house to the north.

## **5 THE BUILDINGS**

### Exterior

5.1 In many respects, Sproughton mill, with its slender proportions is typical of the late 18<sup>th</sup> century industrial building, presenting a symmetrical, neat and well-made appearance to the passer by (Plate 1). It spans the mill leat on an approximately north-south alignment. The mill bridge is of contemporary brickwork, restrained with ornate scrolled wrought iron ties. Two cambered archways frame the mill race allowing the water to pass beneath the building. A contemporary low parapet wall extends across the bridge capped by a large coping course and reflects the quality we see on the main façade.

5.2 The building is of five bays and four storeys defined by a regular arrangement of windows framing central doors at each of the principal levels. These are characterised by cambered arches; those on the eastern elevation being tuck-pointed and of visibly higher status. Most retain timber surrounds for casement windows which, with one exception, have all been removed. A weather-boarded loading bay extends on brackets from the upper level of the eastern elevation. A shallow hipped roof is covered in black -glazed pan tiles. Some structural assistance has been given with cast iron disc-ties, but in the recent past, an improvised lattice of scaffolding poles has pierced and clasped the building to counteract perceived structural failure.

5.3 The bricks are of a fine, homogenous orange fabric, slightly creased with few flinty inclusions. They measure 9" x 2¾" x 4" (229mm x 69.85mm x 101.6mm) with ½" (12.7mm) lime mortar joints. Occasional straight skintles can be seen, which are characteristic of the later 18<sup>th</sup> and early 19<sup>th</sup> century. The brick is laid in Flemish bond along its eastern elevation and English bond elsewhere.

#### *Eastern Elevation (Fig. 8)*

5.4 The eastern elevation was clearly designed to be both functional and impressive. The central bay frames the doorways, flanked by windows on each floor, with a similar arrangement of blind windows in the outer bays (Plate 2). Entry is given at the centre by a simple vertically boarded door of domestic proportions, ledged and braced to the rear. This is of no great age. A small niche in the adjoining brickwork houses a rudimentary, but original boot scraper.

5.5 Directly above the entrance, a loading door leads directly to the first floor. This has a cambered arch in keeping with the general style, and is likewise composed of vertical boarding, attached to the door frame with hand-made strap hinges. It appears to be a 20<sup>th</sup> century replacement.

5.6 A hoist loft (noted as a 'lucum' on the listing) protrudes from the upper level on two large joists, supported on long, straight brackets which sit on lower timber corbels with shaped ends. The structure is weather-boarded with a window in the gable end. Some disturbance is visible to the brickwork immediately below the area and one of the corbels has been replaced in the recent past.

#### *Southern Elevation (Fig. 8)*

5.7 The southern or thin elevation of the building is of two bays, having a single blind window to each level, though these are set off-centre to the east. On the ground floor access is given by a wide double loading door, vertically



boarded with modern hinges. The door arch here has been repointed crudely with cement, while the brickwork shows some damage from water up-cast.

#### *Western Elevation (Fig. 9)*

5.8 The west, or rear elevation is a more sober reflection of the main frontage. It has a similar arrangement of windows and blind outer apertures, but the central bay is blank. By contrast the window heads are not tuck-pointed. The northern end has been extensively rebuilt, but clearly with great care and skill. At the lower level two cambered arches allow water to flow through the mill race. For functional reasons they are not symmetrical with the upper windows.

5.9 A cast iron sluice gate controls water-flow through the northern arch. It consists of two vertical gates on a frame with decorative ball-finials, elsewhere copying the radial spokes seen on the disc-ties. It is stamped with the mark of 'Whitmore and Binyon' of Wickham Market (See Appendix 4). A similar pair of gates is located to the west and may have been fitted some after 1868.

#### *Northern Elevation (Fig. 9)*

5.10 Approximately one third of the northern façade has been incorporated into the rebuilding seen on the west. In addition, long iron restraining bars have been employed to provide added strength and support.

5.11 The windows are set off centre to the east; the upper three being blind as on the south; the sills are of chamfered brick. A low plinth was exposed at this point and may extend all the way around the building, though disguised in part by the variation in ground level.

#### *Interior*

5.12 Each floor is generally open-plan, though the presence of the modern scaffolded support-frame and decaying floor boards prevented close inspection of the southern end of the building on the upper levels.

#### *Ground Floor (Fig. 7)*

5.13 Though the existing doorway is fairly domestic, the presence of the boot-scraper indicates that this was always the principal entrance. The door is modern, but the internal frame preserves little pintles for the earlier split-door and grooves for a movable lower shutter, presumably to prevent vermin from entering the mill. Immediately adjoining the entrance, access to the first floor is given by a timber staircase. This is clearly a reused domestic stair with a curtailed base, moulded nosings and marks for lost balusters on a closed string – all possibly of 18<sup>th</sup> century date (Plate 3). This would have replaced simpler and steeper ladder stairs which can be seen elsewhere.

5.14 The northern part of the ground floor is plain and open plan, but with heavy modernisation. The floor is concrete, with white-washed brick walls, except in the north-west corner where rebuilding is evident (Plate 4). Small patches of plaster are preserved in one or two places. Long iron bands at high and low level provide restraining support to the walls. A casement window, probably of early 20<sup>th</sup> century date provides light from the north wall. This is the only window joinery remaining *in situ*, though complete frames remain stored elsewhere in the building.

5.15 The ceiling is supported by four substantial binding joists measuring 13" x 13" (330mm x 330mm) expressing the bay divisions. They are chamfered with run outs (though not all are treated this way). Homogenous, closely spaced common joists extend between the main joists. Several batching or identification marks are also preserved on the soffit of several timbers.

5.16 The mill race still flows beneath the southern bay where the water wheel was located. At present it is covered by a rough boarded floor. A sluice gate constructed of timber and metal survives but in poor condition. A few minor components of the original machinery, such as a cog-wheel and small drive-wheel for Machinery associated with the working of the sluice gate also survive.

5.17 In the adjacent bay a heavy oak frame would have enclosed and supported the main milling machinery (Plate 5). Two robust oak joists are supported by oak posts of similar scantling, braced by elbowed brackets bolted to the principals. Both joists retain marks and empty mortices to show that this was originally much more complex. For example two diagonal mortices are visible adjacent to the braces to accommodate additional uprights. A third, matching mortice is visible on the southern joist. These would have provided support for the main drive shaft. Diagonal let-in joints in the soffits can also be attributed to this internal framing system although the complete form is unknown.

5.18 Other signs of former function also survive. At either end adjoining the brackets and adjacent mortices, short trimmers define apertures and supporting blocks fixed by a tension rod and nuts. The timber is heavily abraded. They may have housed pulley wheels although the configuration is not readily apparent. Similarly, the eastern posts are notched out below the bracket and may have housed a lateral timber secured with a socketed cleat. Both posts are embedded in the concrete floor.

5.19 This robust supporting framework is also carried into the ceiling construction where four massive lateral oak joists extend between the principal joists noted above. The inner pair is inclined; all are properly pegged. Several inner joists are paired and connected by short oak members, one of which retains a double mortice on the outer edge of the soffit. An additional pair of short connecting joists also adjoins the southern principal joist.



5.20 Many alterations have been made to the ceiling in the south bay which may have been reconfigured when the wheel was removed. Many components are clearly reused; empty diminished haunch mortices suggest some reuse from earlier floor joists for example. A rudimentary floor made from wooden tea chests can be seen above.

### *First Floor (Fig. 7)*

5.21 The first floor is open-plan, like its companions, with plain brick walls, housing bearer timbers at low level and given additional support by an iron band located at c. 1.50m above the floor level (Plate 6). The walls have been white washed except in the north western corner where the structure has been repaired. A central loading hatch and a number of smaller openings pierce the floor which consists of a mixture of boarding, much patched and repaired.

5.22 As seen on the ground floor the bay divisions are expressed by five binding joists of even greater proportions than the lower members, each measuring 14" x 16" (356mm x 406mm). They are of softwood, chamfered with run outs visible at the eastern and western ends although as before, this is not universal. The soffits retain evidence of lath and plaster. Common joists measuring 7" x 2½" (178mm x 64mm) extend at regular c. 1" (305mm) intervals between the binders. Smaller, subsidiary joisting extends alongside these. Many of the larger common joists retain empty mortices for small, lateral joisting, though it is not known whether this system was an early abandoned intention or actually used.

5.23 A central loading door gives access from the east. It is ledged and braced and though modern, sits in an original frame. The door is flanked by large two members providing addition support for the hoist loft at the upper level. They comprise curving brackets attached to the central joists with nuts and bolts. Elsewhere all windows have been removed; a few remain *ex situ* and are late 19<sup>th</sup>/early 20<sup>th</sup> century. Access to the second floor is given via a ladder stair on the west side.

### *Second Floor (Fig. 7)*

5.24 The second floor has low head-height. Much of the area appears to have been boarded out originally in 10" (254 mm) softwood boards. Small sections remain *in situ* in the central bay, while others have been removed and stacked nearby. Two timber bearers, one at floor level the other at a higher level within the brickwork are visible continuously across this level and clearly acted as a supported for the boards.

5.25 The floor is original, of good quality, but shows signs of extensive wear. As with the first floor it is pierced by numerous trap doors. On the eastern side, an

aperture and handrail are all that remain of the original stair well. Access to the upper floor is by a ladder stair on the west side of the central bay, possibly a later introduction

5.26 Floor supports continue the system of large bay-division binding joists resting on timber bearing pads where they abut the external walls. These are approximately a foot square, chamfered on all sides. A series of in-line lateral joists extend throughout, measuring 8" x 4" (200mm x 103mm) (Plate 7). As on the floor below, we see here the empty mortices for subsidiary joisting now removed or never employed. The existing north-south members are slender, but properly morticed into the binders.

5.27 Structural elements of the hoist loft are visible at this level in the form of two heavy projecting supports with rounded ends. These are set in slightly from the principal binding joists but have been integrated with the frame construction. A large lateral joist measuring 5" x 8" (127mm x 203mm) clasps the two beams with its own subsidiaries to give additional strength.

#### *Upper floor and roof (Fig. 7)*

5.28 The upper floor is given access by a steep, open stair located on the western side of the central bay. Exposed and painted brick walls are strengthened as elsewhere by metal strapping except in the north western corner where rebuilding has occurred. As seen on lower levels the floor is robust with slender softwood boarding, patched in places, with the occasional trap door.

5.29 The roof is exposed and fairly homogenous, comprising slightly larger principal rafters at the bay divisions, and slender tie-beams (Plate 8). Six pairs of subsidiary common rafters rise to a ridge board in each bay, riding over butt-purlins with shallow cogging. High collars are notch-lapped to the principal rafters. The wall plates are recessed and hidden by mortar apart from above the window heads where a simple scarf joint can occasionally be seen.

5.30 The roof is fairly simple, but queen posts are present in the two southern bays. Closer inspection reveals that they are simply coggled over and nailed to the tie beam and rafters, and are associated with two hanging joists spanning the trusses, which support an iron-clad roller which must have been used for lifting sacks (Plate 9).

5.31 The hoist loft is framed by the outer walls and wall plate and is supported by structural elements mentioned above (Plate 10). A band of metal runs parallel with the wall plate at floor level for added support. Internally the sides of the loft are lined with wide softwood boards.

5.32 A rudimentary and incomplete attic floor spans the two central bays, supported by slender common joists. This may have housed some of the winding gear or other equipment, as it appears too insubstantial to have carried heavy loads. A number of minor elements such as pulley wheels and metal fixtures survive from the mill's original function (Plate 11).

## 6 DISCUSSION

6.1 In its size, proportions and materials, Sproughton Mill would not be out of place beside the large industrial mills of the north. Yet in its construction we see great subtlety and care expressed in architectural language of a type which was dispensed with as the Industrial Revolution gathered pace. Care was taken to produce a symmetrical façade, using blind windows where they were not required, and expressing the 'show' face with Flemish bond brickwork and tuck-pointing in the window voussoirs. The adjoining miller's house also preserves similar characteristics. This is probably a 17<sup>th</sup> century house which has been modernised and gentrified, in tandem with the mill, to be polite and modern when viewed from the bridge.

6.2 Structurally, the mill was probably over-ambitious. It is rather high to its depth ratio, but this may have been an attempt to show off, and many of these deficiencies were made up by the strength of materials used for its construction. The internal layout is systematic, in line with the industrial thinking of the time, though this was clearly constructed before the widespread use of cast iron. The lateral binding joists which express the internal bay divisions are of massive proportions, required both to tie the external walls together but also to support the heavy sacks of grain stored on several floors. Much of this softwood is probably Baltic in origin – knot-free and bearing on occasion the scribed initials 'Wc' which are characteristic of the type of marking seen from the late 18<sup>th</sup> to the late 19<sup>th</sup> century, particularly in industrial buildings (Plate 12).

6.3 Strength was also needed for the mill's primary function – that of powering the mill machinery, which gave rise to vibration. The heavy, integrated oak framework adjoining the mill wheel attests the power of the process, though sadly this now only survives in skeletal outline, and all the machinery, with one or two ephemeral traces, is lost.

6.4 The various floors were given over to storage, or the operation of hoisting sacks within the building. The large iron roller at roof level was probably driven directly by the mill machinery. At least one floor was lined in timber boarding, and probably divided into stalls, but this all now remains only as fragmentary traces, and most other evidence such as chutes which would give a more precise idea of the workings of this building have disappeared.

6.5 The roof is fairly old fashioned. Even in the 18<sup>th</sup> century, a king or queen-post roof would be expected, but here the much earlier form of the butt-purlin roof remained in use, and the tie-beams are remarkably mean, given the strength of all the other structural timber in the building. Those queen-posts which were employed were clearly used as a means of support for the machinery.

6.26 Originally, it is likely that the windows were slatted or shuttered to provide ventilation and protect the grain and flour from vermin and birds. Glazing seems only to have been introduced in the late 19<sup>th</sup> or 20<sup>th</sup> century, when the doors were probably also replaced.

6.7 There is nothing particularly unusual in the carpentry system, the joists being morticed to the principal with a diminished haunch tenon. This is a long lasting technique dating from the 16<sup>th</sup> to 19<sup>th</sup> century. All scarf joints are seen in their simplest form. There is some indication that a different joisting system was intended, but it is not possible to say whether the existing arrangement represents a change or a modification during construction. Some of the larger joists on the lower floors were clearly under-drawn at some point, but the full sequence is not clear.

## **7 CONCLUSION**

7.1 The mill stands on the banks of the river Gipping commanding a picturesque position within the village of Sproughton. It is a typical example of a late 18<sup>th</sup> century industrial building which deserves to be converted and maintained in alternative use.

## **8 MONITORING & RECORDING** Figs. 2 & 11; DPS 35-38

### **8.1 Results**

#### **Site visit 18/01/2010**

8.1.1 The site was monitored during the reduction of the ground level by 0.25m for a car park and driveway. The ground reduction was undertaken using a tracked 360° excavator with a 750mm bucket fitted with blade guards.

8.1.2 Three sample sections were recorded:

#### **Sample Section 1**

Sample Section 1 was located on the baulk of the driveway towards the eastern sector of the site, close to the entrance (Fig. 11).

Sample Section 1 0.00m = 13.04m AOD	
0.00 – 0.25m +	L1001. Tarmac & Made Ground. Compact tarmac, brick hardcore and sandy gravel

### Sample Section 2

Sample Section 2 was located in approximately the middle of the driveway (Fig. 11).

Sample Section 2 0.00m = 13.36m AOD	
0.00 – 0.25m +	L1000. Topsoil. Dark black brown, compact sandy silt with clay lenses

### Sample Section 3

Sample Section 3 was located on the baulk of the car park, in the western sector of the site (Fig. 11).

Sample Section 3 0.00 = 13.52m AOD	
0.00 – 0.25m	L1000. Topsoil. As above

No archaeological features or finds were present.

## 8.2 Confidence Rating

8.2.1 The ground reduction did not exceed the depth of the topsoil and therefore archaeological features, if present, were not revealed.

## 8.3 Deposit Model

8.3.1 The topsoil, L1000, was a dark black brown, compact, sandy silt with clay lenses and was present across site.

8.3.2 Tarmac and Made Ground, L1001, overlay the topsoil, L1000, in the eastern sector of the site and represented the remains of a former modern trackway. It was a mixed black yellow, compact tarmac and brick hardcore with sandy gravel. No further layers were observed.

## 8.4 Comment

8.4.1 No archaeological features or finds were present.

8.4.2 The track way that served the mill before it became derelict was evident in the eastern sector of the site.

## **DEPOSITION OF THE ARCHIVE**

The requirements for archive storage will be agreed with the Suffolk HER, and the archive deposited there. The archive will be deposited within three months of the conclusion of the fieldwork. The archive will be prepared in accordance with the UK Institute for Conservation's *Conservation Guideline No. 2*

## **ACKNOWLEDGEMENTS**

AS would like to thank Mr Richard Howard for funding the project and his architects, Barefoot & Gilles for their kind assistance (in particular Mr Karl Reeve).

Archaeological Solutions would like to thank the staff at Ipswich record office for their help and advice.

AS would like acknowledge the input and advice of Mr Edward Martin of SCC AS-CT.

## **BIBLIOGRAPHY**

Goult W. 1990 *A Survey of Suffolk Parish History. East Suffolk Volume 2*. Suffolk County Council

Gurney, D. 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology occasional paper No. 14

Institute of Archaeologists (IA) 2001 *Standard and Guidance for Archaeological Watching Briefs*. IfA, Reading

Institute of Archaeologists (IA) 2001 *Standard and Guidance for Archaeological Desk-Based Assessments*. IfA, Reading

Pevsner, N. 1974 *The Buildings of England: Suffolk, Second Edition*. Yale University Press, London

Soil Survey of England and Wales 1983 *Legend for the 1:250,000 Soil Map of England and Wales*. Harpenden

### **Websites**

Images of England, Accessed 14/05/09.

Full site address: <http://www.imagesofengland.org.uk/search>

Grace's Guides, Accessed 26/11/09

Full site address: [http://www.gracesguide.co.uk/wiki/Main\\_Page](http://www.gracesguide.co.uk/wiki/Main_Page)

## APPENDIX 1 HISTORIC ENVIRONMENT RECORD DATA

The following sites are those that lie within a c. 1km radius of the assessment site. The table has been compiled from data held by the Hertfordshire Historic Environment Record (HER). The locations of the sites are shown on Fig. 2. Their significance, where relevant, is discussed in Section 4.2.

SHER Number	National Grid Reference (TM)	Description
<b>Prehistoric 500,000 BC – AD 43</b>		
SPT Misc – MSF20493	1244 4496	26 Church Crescent, three flakes and a scraper found, probably Neolithic or Bronze Age
<b>Palaeolithic (500,000-12,000 BC)</b>		
SPT 026 – MSF808	128 444	Flake found in The Old Rectory gardens
<b>Mesolithic (12,000 -4,000 BC)</b>		
SPT 001 – MSF4518	1333 4434	Stone tools: worked blades, points, graters and cores
SPT 001 – MSF4519	133 444	Stone tools: scatter of tools including cores, flakes blades, scrapers and microliths. Those identifiable are Mesolithic
SPT 002 – MSF453	130 445	Stone tools: flaked axehead and flakes, scrapers and microliths indicating Mesolithic occupation on Sproughton Knoll
SPT 003 – SF4523	132 449	A scatter of stone tools found 18 inches down including tranchet axe, blades, scrapers, cores and microliths
SPT 017 – MSF455	130 449	Three areas excavated in a field revealed Mesolithic occupation including axes, cores, flakes, scraper and microliths
SPT 025 – MSF710	131 449	Small-scale excavations found flint scatters of a Mesolithic blade industry, probably part of SPT 017
<b>Neolithic (4,000 – 2,300 BC)</b>		
SPT 001 – MSF4520	1334 4442	Area of Neolithic settlement; flint arrowheads, blades, cores, flakes and Peterborough ware pottery
SPT 002 – MSF454	130 445	Area of Neolithic occupation



		including Durrington Walls style Grooved ware and worked flints in pits
<b>Bronze Age (2,300-750 BC)</b>		
SPT 001 – MSF4521	1330 4441	Beaker pottery and arrowhead associated with late Neolithic settlement
SPT 001 – MSF7497	130 445	Beaker pottery found in pits during trenching for sewage pipes
SPT 005 – MSF4525	1277 4474	Two cremation urns, both Collared
SPT018 – MSF4540	131 446	Bronze dirk
<b>Roman (43-410 AD)</b>		
BRF 023 – MSF4510	1205 4695	A 1100, Lorraine Way: Roman road
BRF 037 – MSF16145	124 461	Metal detected finds including 2 brooches and a coin of Gratian AD 378-383
SPT 001 – MSF4522	1335 4450	Roman coin: Found at Devil's Wood Pit; Vespasian AD 69-79
SPT 024 – MSF4547	u/k	Roman road
<b>Saxon (410-1066)</b>		
BRF 037 – MSF 13697	1235 4610	In 1992-5 metal detecting recovered a cast lead Saxon disc brooch, a pewter disc brooch and two bronze dress hooks with a fragment of another brooch. Mid to Late Saxon
BRF 041 – MSF 14835	122 459	Pottery: Ipswich ware 8 <sup>th</sup> -9 <sup>th</sup> centuries
SPT 017 – MSF4539	130 449	Thetford ware pottery and animal bone found after bulldozing a circular cropmark
<b>Medieval (1066-1539)</b>		
BRF 037 – MSF13270	124 461	Scatter of metalwork found detecting including bronze cauldron, rings, horse accoutrements, and coins, also pottery and part of a scabbard. Mainly 13 <sup>th</sup> -14 <sup>th</sup> century with some post-medieval
BRF 041 – MSF14836	122 459	Pottery scatter: 13 <sup>th</sup> -14 <sup>th</sup> and some late medieval
SPT 016 – MSF14415	1251 4503	Church of All Saints, not mentioned in Domesday Book but

		possibly one of two documented for parish of Bramford. Mainly 13 <sup>th</sup> -14 <sup>th</sup> with restorations in 19 <sup>th</sup> century
SPT 016 – MSF4538	125 450	Medieval redware bottle found in original scaffolding hole at All Saints Church
<b>Post-medieval (1539-1900)</b>		
BRF 041 – MSF14837	122 459	Nuremberg token and 17 <sup>th</sup> -18 <sup>th</sup> century pottery
SPT 028 – MSF15846	1255 4507	Sproughton Bridge shown on two 18 <sup>th</sup> century maps
SPT 034 – MSF24163	1247 4513	Sproughton Mill; Listed red brick with pantiled roof and mill race, shown on 1755 map
<b>Undated</b>		
BRF 046 – MSF15186	115 453	Cropmarks: small rectangular enclosure and trackway
BRF 064 – MSF22007	12244 45578	Ring ditch: 17m diameter, one of four beside River Gipping. Also field boundaries
BRF 065 – MSF22009	12296 4591	Ring ditch: 17m diam, one of four, also field boundary and track leading to it
BRF 066 – MSF22010	12291 45556	Ring Ditch: c.20m diam, possible enclosure next door
BRF 067 – MSF22011	12235 45543	Ring ditch: 21m diam, cut by field boundary
SPT 009 – MSF4531	133 446	Sharpened, polished sheep tibia from a pit
SPT 012 – MSF4534	128 458	Two flint flakes found by track in Hazel Wood
SPT 019 – MSF4541	1215 4417	Possible ring ditch c.25m diameter
SPT 020 – MSF4542	123 438	Rectilinear ditch system
SPT 027 – MSF15187	1284 4493	Circular enclosure c.65m diameter close to the River Gipping
SPT 030 – MSF 19397	12844 45849	Ancient woodland

## APPENDIX 2 LISTED BUILDINGS

Listed Building Number (DSF)	National Grid Reference (TM)	Grade and Description
277369	12278 44974	6/41, Lower Street: Grade II 16 <sup>th</sup> century with 19 <sup>th</sup> century façade. Two cottages
277374	12404 45072	Barn south-west of Sproughton Hall: Grade II 16 <sup>th</sup> century
277364	12541 44987	Church Close formerly The Old Rectory, Church Lane: Grade II late 15 <sup>th</sup> to 17 <sup>th</sup> century
277363	12515 45029	Church of All Saints: Grade II* early 14 <sup>th</sup> century with subsequent rebuilding and development
277370	12318 44992	Lower House and The Stores: Grade II early-mid 16 <sup>th</sup> century
277376	12483 45102	Watermill, Lower Street: Grade II late 18 <sup>th</sup> century red brick Flemish bond and hipped glazed pantile roof.
277375	12477 45079	Mill House, Lower Street: Grade II Mill House, formerly divided into cottages. C. 1600 changes in late 17 <sup>th</sup> , 19 <sup>th</sup> and 20 <sup>th</sup> centuries
277361	12322 44310	Prync's Lodge: Grade II 16 <sup>th</sup> -17 <sup>th</sup> century
433429	12161 45789	Runcton House, Loraine Way: Grade II 15 <sup>th</sup> century hall with 19 <sup>th</sup> century rebuilding
277373	12418 45122	Sproughton Hall, Lower Street: Grade II late 16 <sup>th</sup> /early 17 <sup>th</sup> century
277362	12786 45616	Sproughton Manor: Grade II built 1863
361669	11893 45292	The Grindle House: Grade II early 17 <sup>th</sup> century 19 <sup>th</sup> and 20 <sup>th</sup> century additions
277368	12239 44979	The Wild Man: Grade II 16 <sup>th</sup> century public house with extensive 20 <sup>th</sup> century additions
43425	11777 45797	Thornbush Hall: Grade II 17 <sup>th</sup> century farmhouse with 19 <sup>th</sup> century additions
277372	12429 45050	Tithe Barn, Lower Street: Grade II 17 <sup>th</sup> and 18 <sup>th</sup> century
277371	12307 45010	Walnut Cottage, Lower Street: Grade II 16 <sup>th</sup> century

## APPENDIX 3      CARTOGRAPHIC SOURCES

<b>Date</b>	<b>Title</b>	<b>Scale</b>
Modern	OS Explorer Map 197	1:25,000
Modern	HER information	1:25,000
1838	Tithe Map	
1904	OS 2 <sup>nd</sup> edition	25 inch
1926	OS 3 <sup>rd</sup> edition	25 inch

APPENDIX 4 HISTORIC ADVERTISEMENT

**WHITMORE**  
*and* **BINYON**  
**64, MARK LANE,**  
**LONDON, E.C.**  
**Works - - WICKHAM MARKET.**

---

MANUFACTURERS OF  
**High-Class Steam Engines.**

---

Flour Mill and Rice Mill Machinery.

---

**MINING MACHINERY.**

---

*CEMENT-MAKING MACHINERY.*

---

**STONES AND MACHINES FOR  
PROVENDER MILLS.**

---

**WATER WHEELS.**



## APPENDIX 5 ARCHIVE CONTENTS FORM

Site Details							
<b>Site Name:</b> Sproughton Mill, Lower Street, Sproughton, Ipswich, Suffolk					<b>NGR:</b> TM 12480 45103		
<b>County:</b> Suffolk				<b>Museum Collecting Area:</b> Suffolk HER			
<b>Site Code:</b> SPT 036				<b>Project Number:</b> 3664			
<b>Date of Work:</b> November 2009				<b>Related Work:</b>			
Brief/s				Specification/s			
Date		Present		Date		Present	
		No		2 <sup>nd</sup> October 2009		Yes	
Site Records (Description)							
Notes taken on site (8 pages A4) 7 archaeological record sheets							
Site Drawings (Give Details of Formats & Size)							
2 x A3 sheet of draft film							
Architect's Drawings:							
Plans and elevations 20 sheets A3 – annotated							
Digital Drawings							
Printouts of Drawings			Printouts of Data			Digital Data	
In report						Digital photographs and drawings in digital format on CD	
Reports							
Report No		Report Type				Present	
3474		Historic Building Recording & Archaeological Monitoring & 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	1-15	Yes	Yes	1	10 - 16	Yes
2	35mm	8-11	Yes	Yes			
Photographic Location Plans Present? (Give Details)							
In report and separate printouts in archive folder							
Digital Photographs (Give Details):							
Digital photography. Index and selected plates printed in report. Separate printout of index included in archive folder and digitally on CD							

## PLATES



Plate 1 South-east elevation of mill, taken from the south-east (DP1)



Plate 2 South-west and south-east elevations of mill, taken from the south (DP 4)





Plate 3 Ground floor reused domestic staircase, taken from the west (DP 29)



Plate 4 Ground floor, taken from the west (DP 8)





Plate 5 Ground floor oak timber framing to house mill machinery, taken from the north-east (DP 22)



Plate 6 First floor, taken from the north-east (DP 10)



Plate 7 Second floor, taken from the north-east (DP 12)



Plate 8 Third floor and roof construction, taken from the north (DP 14)





Plate 9 Queen post roof construction with cambered hanging joists, taken from the north-east (DP16)



Plate 10 Hoist loft extending from south-east elevation, taken from the north-west (DP 15)



Plate 11 Pulley wheel located in roof space, taken from the east (DP 17)



Plate 12 Detail of Baltic mark from second floor joist, taken from the north (DP 20)



## PHOTOGRAPHIC INDEX



1

*Exterior view of Sproughton Mill, taken from the south-east*



2

*South-east elevation of mill, taken from the south-east*



3

*South-west and south-east elevations of mill, taken from the south*



4

*South-west and south-east elevations of mill, taken from the south*



5

*North-west elevation of mill, taken from the north-west*



6

*Lock gates to the rear of mill, taken from the south-west*





7

*North-east and south-east elevation of mill, taken from the east*



8

*Ground floor, taken from the west*



9

*Ground floor window in north-east elevation, taken from the south-east*



10

*First floor, taken from the north-east*



11

*First floor, taken from the south-west*



12

*Second floor, taken from the north-east*



13

*Second floor, taken from the south-west*



14

*Third floor and roof construction, taken from the north*



15

*Hoist loft extending from south-east elevation, taken from the north-west*



16

*Queen post roof construction with cambered hanging joists, taken from the north-east*



17

*Pulley wheel located in roof space, taken from the east*



18

*Pulley wheel associated with hoist, taken from the south-east*





19

*Ex situ mill hoist machinery, taken from the south-east*



20

*Detail of Baltic mark from second floor joist, taken from the north*



21

*Detail of a rope tie attached to large binding joist, taken from the north-east*



22

*Oak timber framing to house mill machinery, taken from the north-east*



23

*Oak timber ceiling within second bay, taken from the north-west*



24

*Ex situ pulley wheel, taken from the north-west*





25

*Ground floor, second bay, oak ceiling joists, taken from the north-west*



26

*Ground floor, second bay, oak ceiling joists, taken from the south-west*



27

*Sluice gate, taken from the east*



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*Ground floor, second bay, joist with double mortise taken from south*



29

*Ground floor reused domestic staircase, taken from the west*



30

*Mechanism associated with sluice gate, taken from the north-east*



31

*Blocked aperture possibly associated with a pulley system, taken from the east*



32

*Blocked aperture possibly associated with a pulley system, taken from the east*



33

*Detailed shot of sluice gates stamped 'Whitmore and Binyon, Wickham Market', taken from the east*



34

*Detailed shot of sluice gate taken from south*





35

*Sample section 1*



36

*Sample section 2*



37

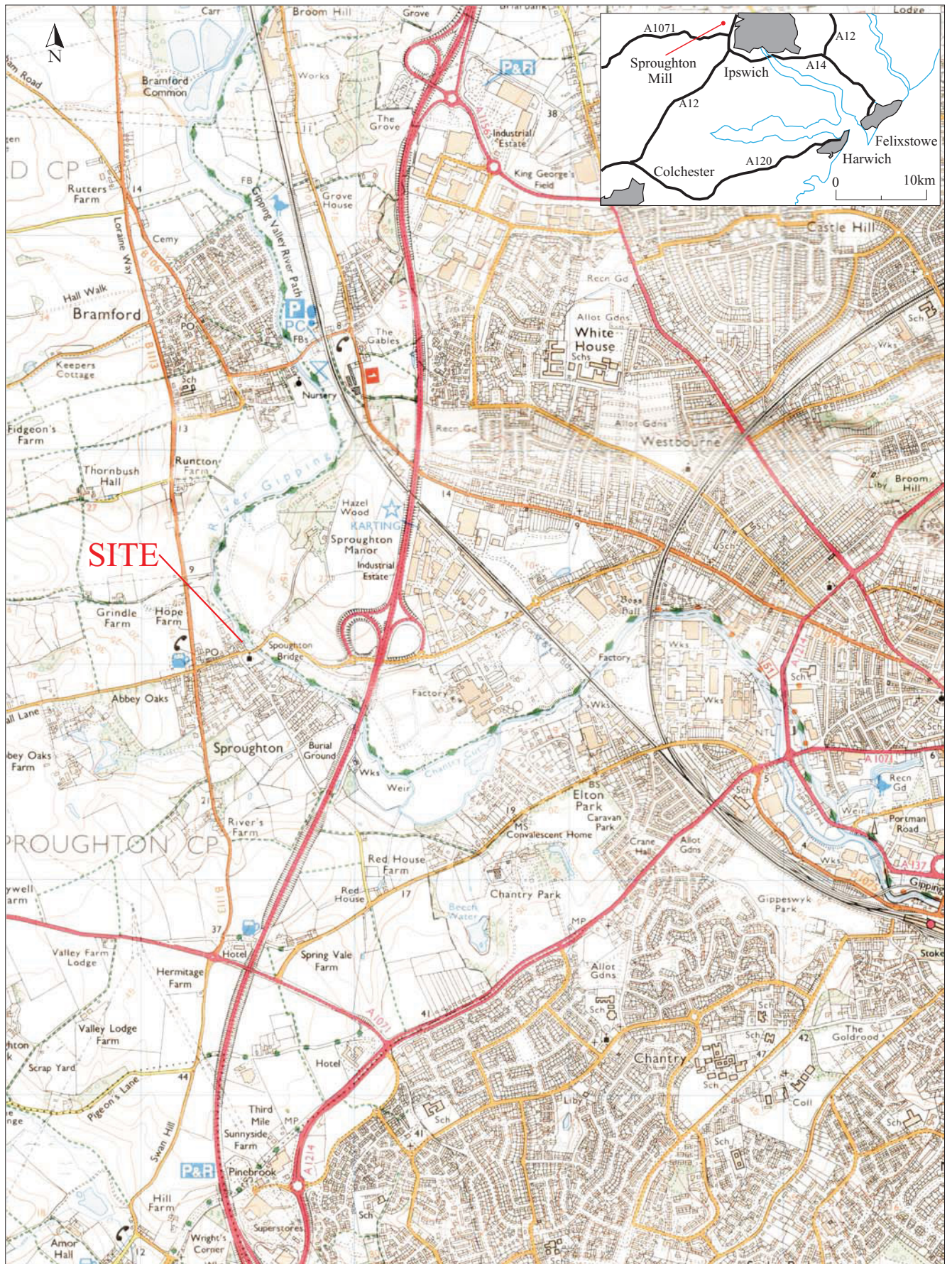
*Sample section 3*



38

*General view*





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**Fig. 1 Site location plan**  
 Scale 1:25,000 at A4



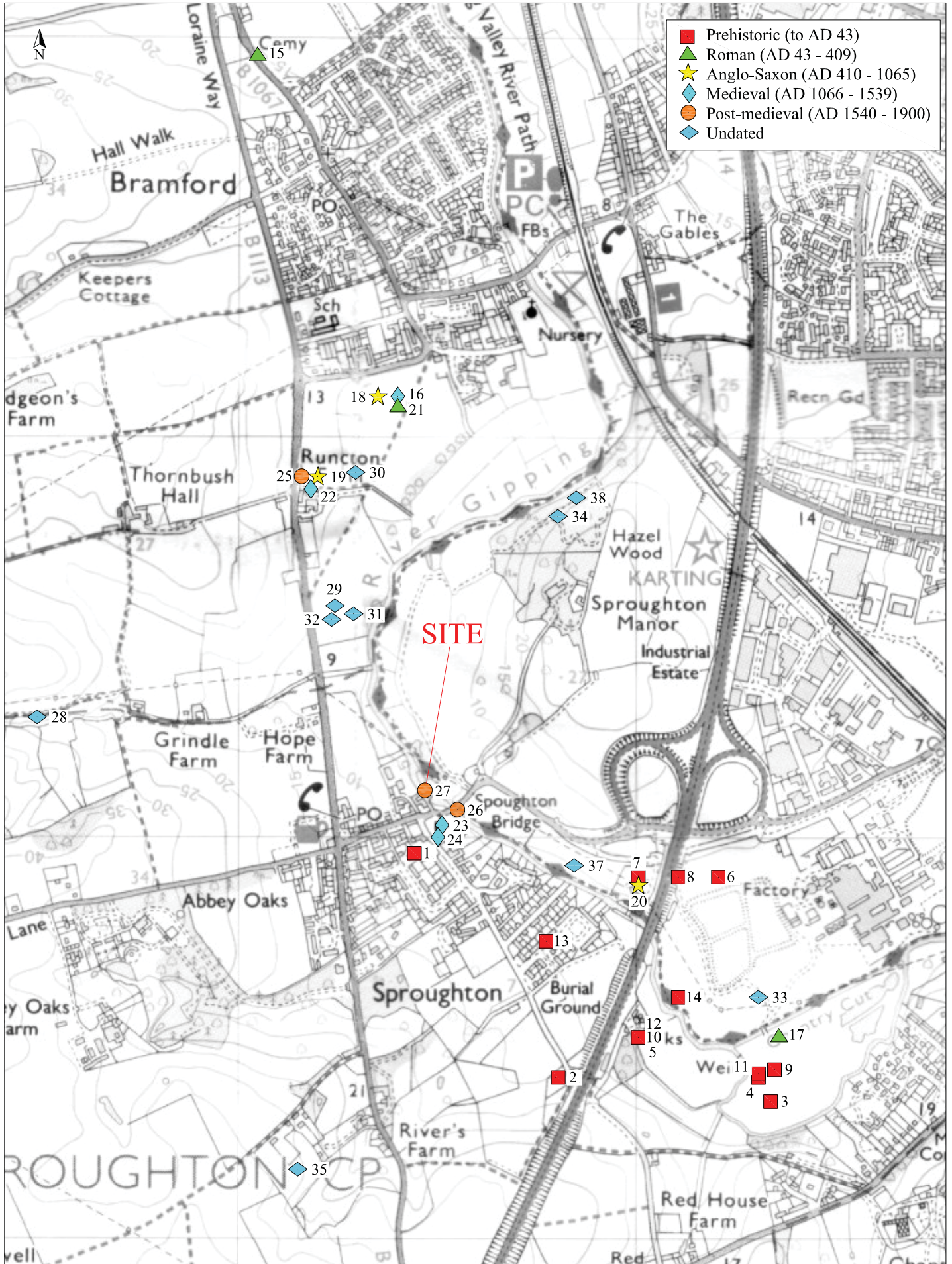


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↑  
1 Photographic location

*Archaeological Solutions Ltd*  
**Fig. 2 Detailed site location plan**  
 Scale 1:1250 at A4

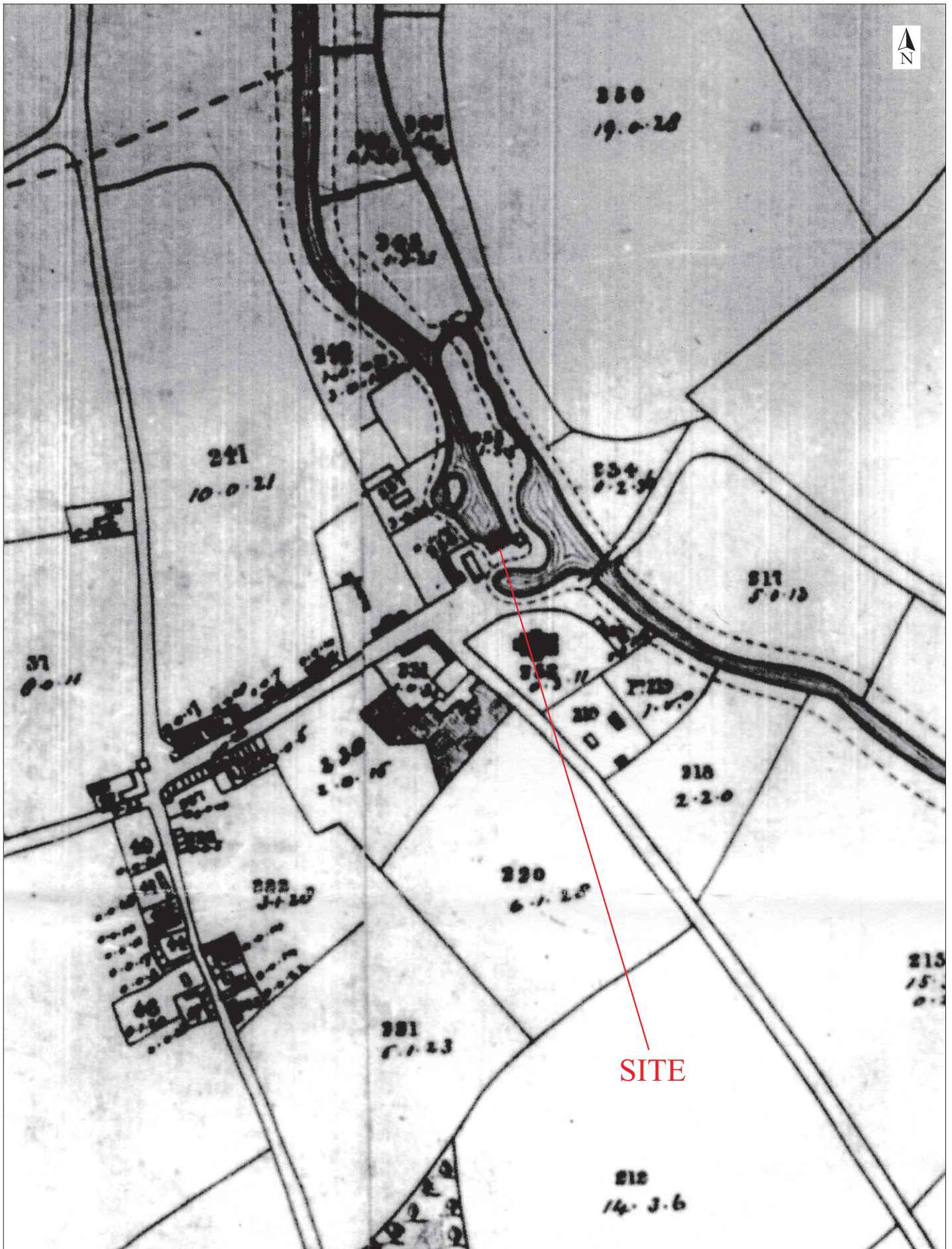




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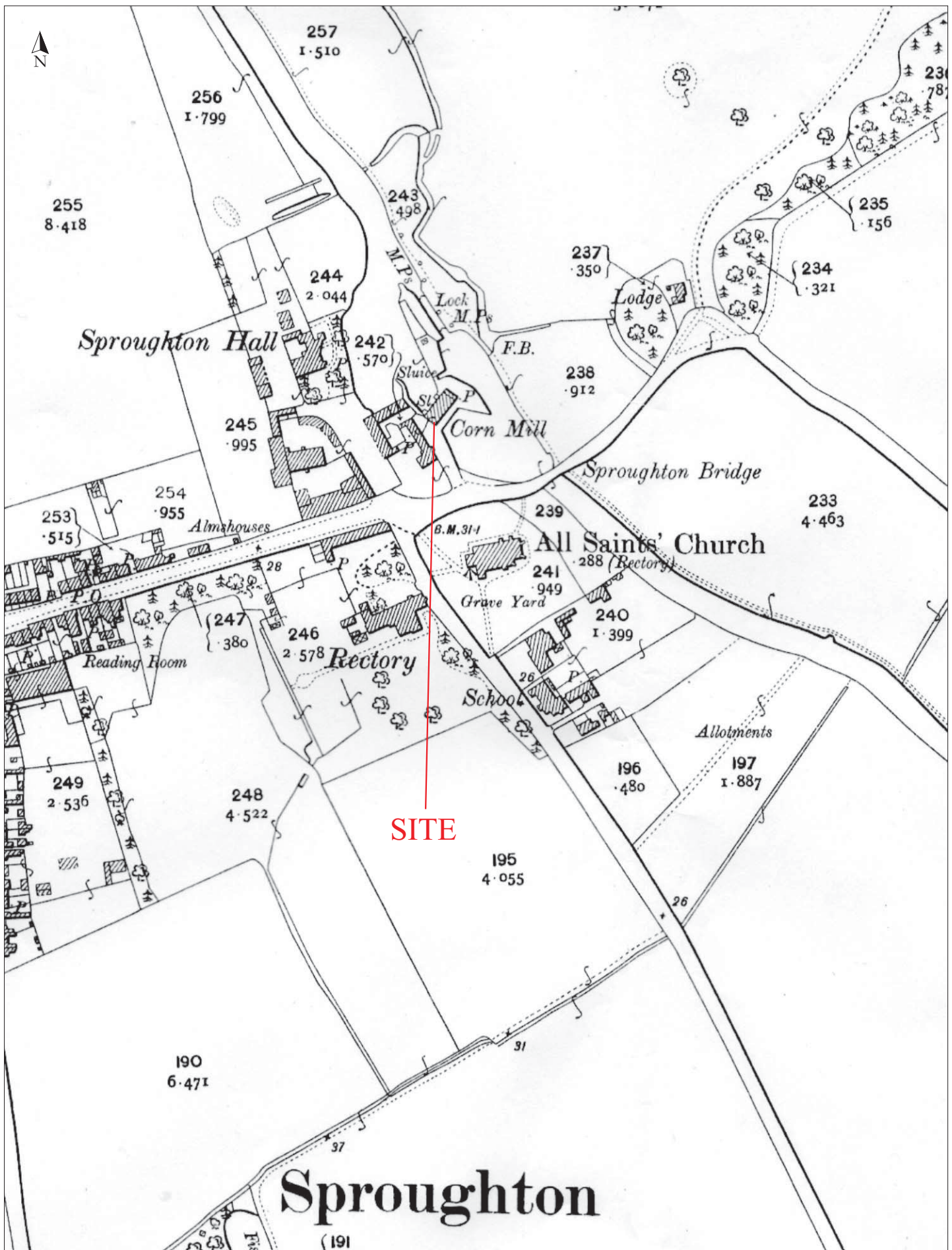
Archaeological Solutions Ltd  
**Fig. 3 HER data**  
 Scale 1:12,500 at A4





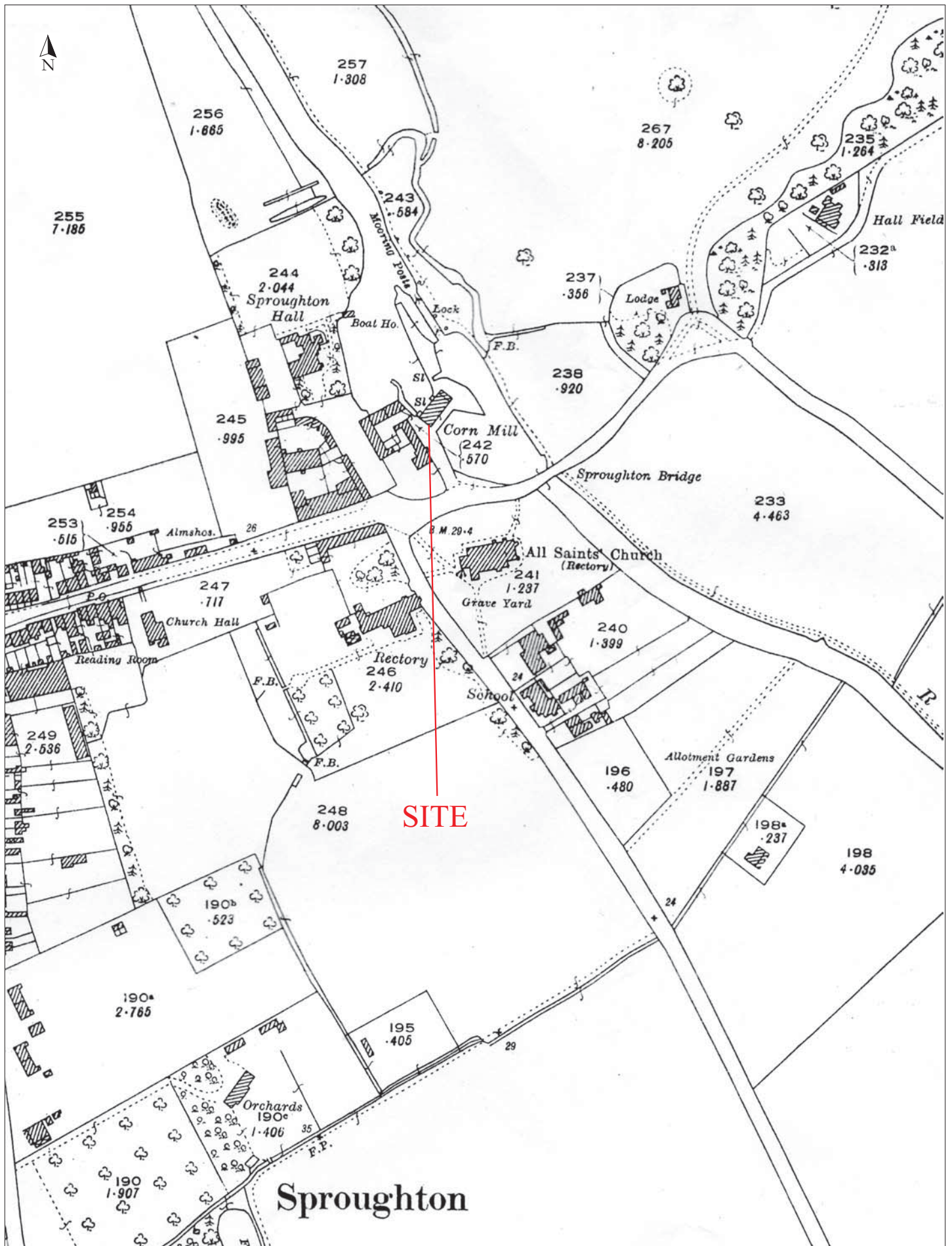
Archaeological Solutions Ltd  
Fig. 4 Tithe map, 1838  
Not to scale





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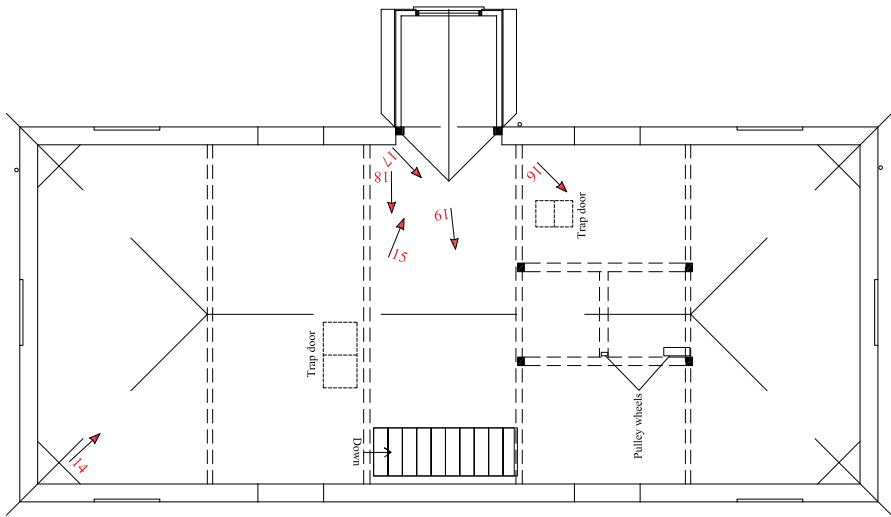
Archaeological Solutions Ltd  
 Fig. 5 OS map, 1904  
 25 inches to 1 mile at A4



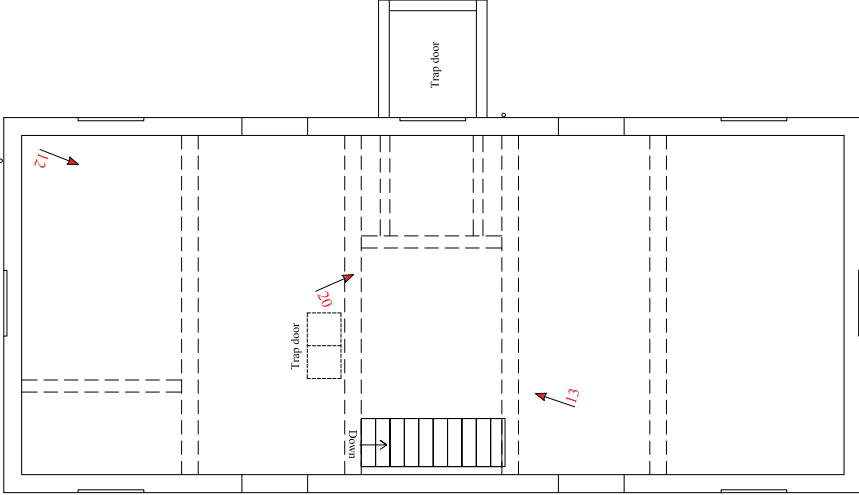
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Archaeological Solutions Ltd  
 Fig. 6 OS map, 1926  
 25 inches to 1 mile at A4

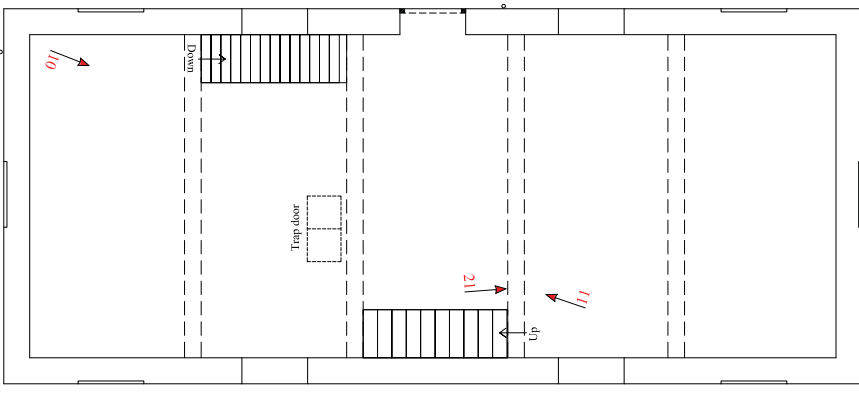




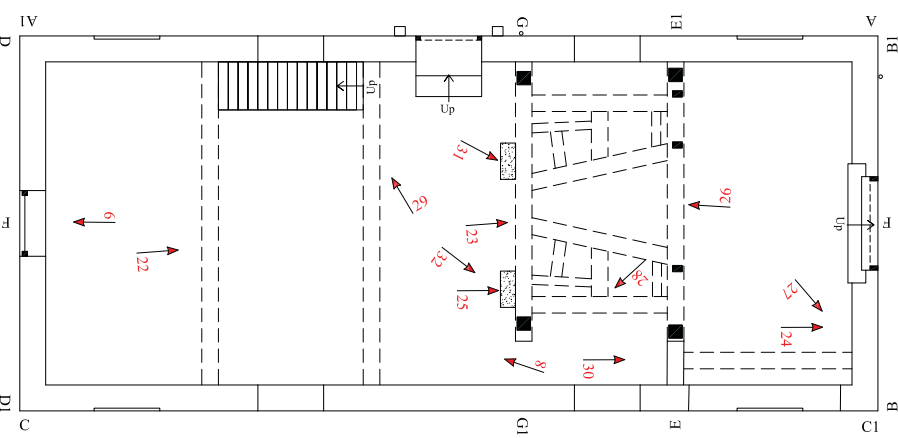
Third floor



Second floor



First floor

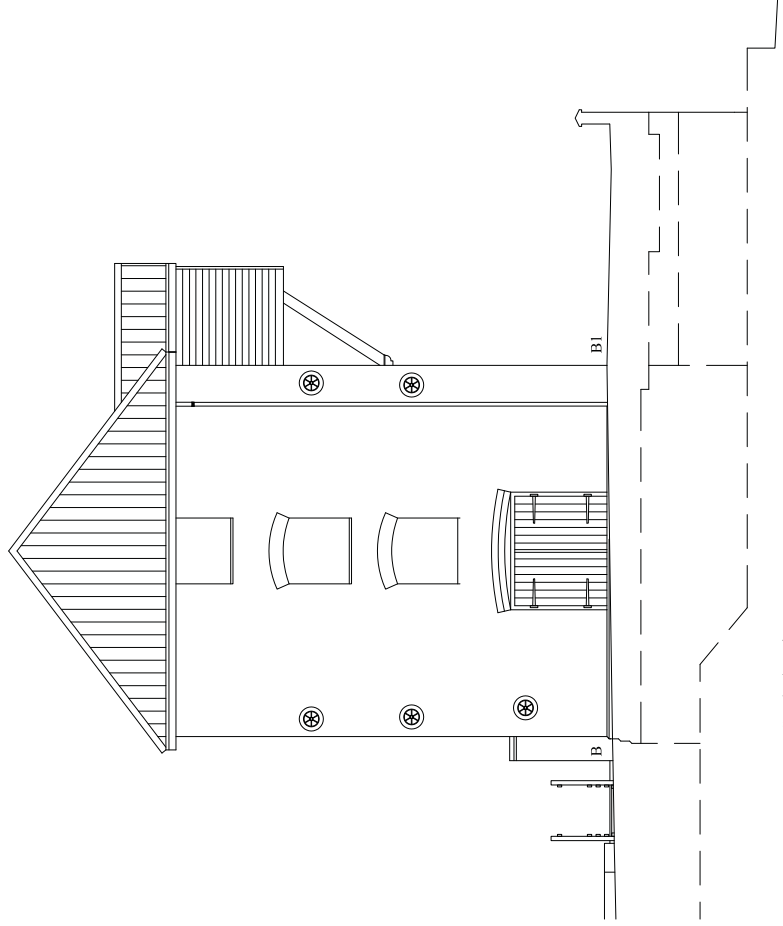


Ground floor

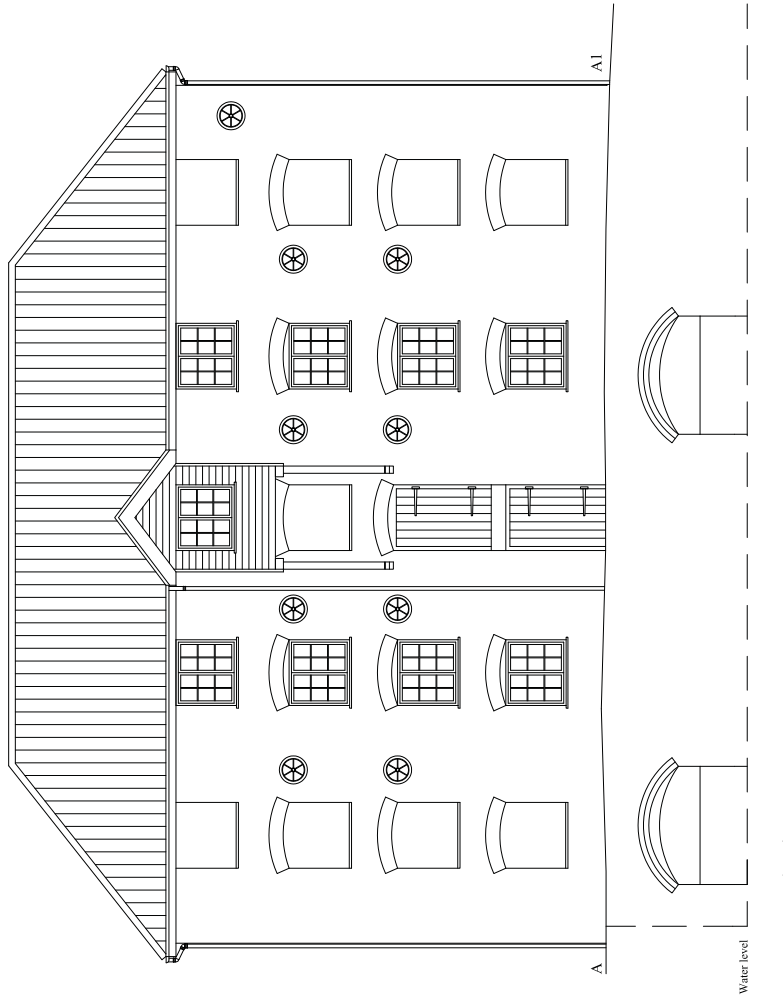
Blocked aperture  
 Photographic location





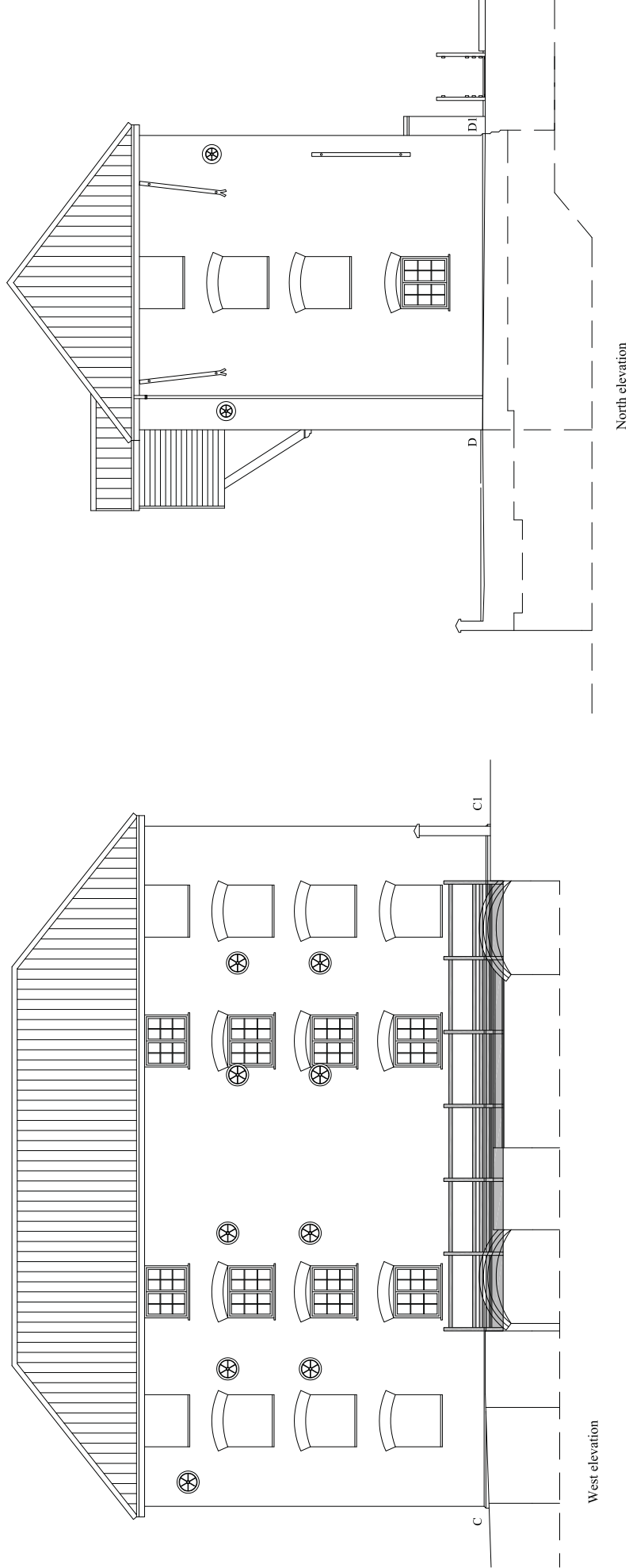


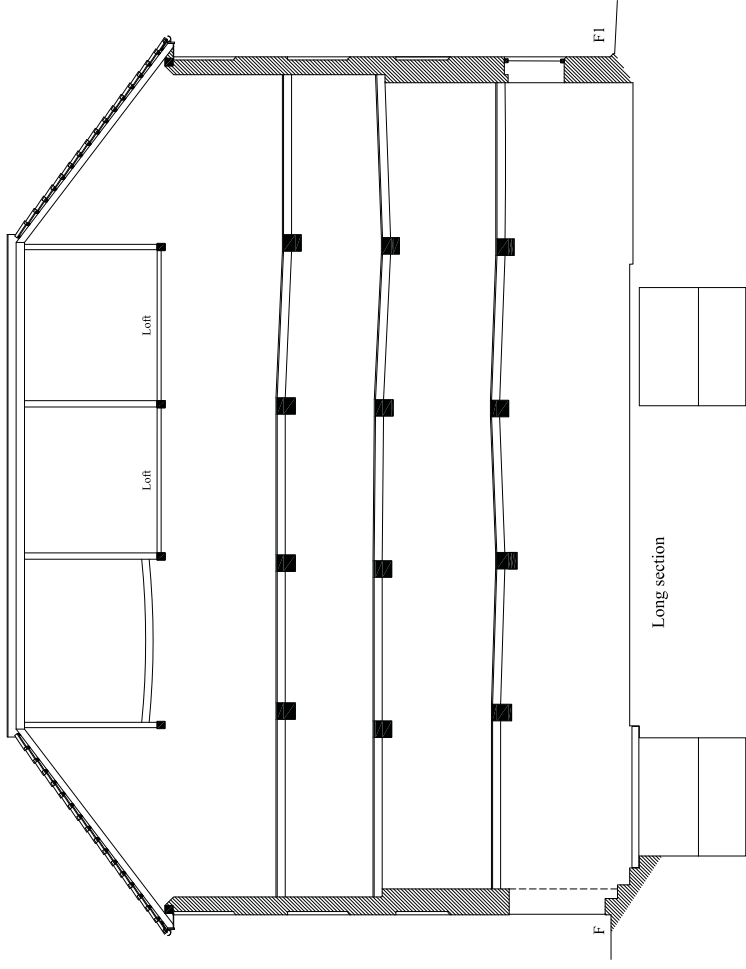
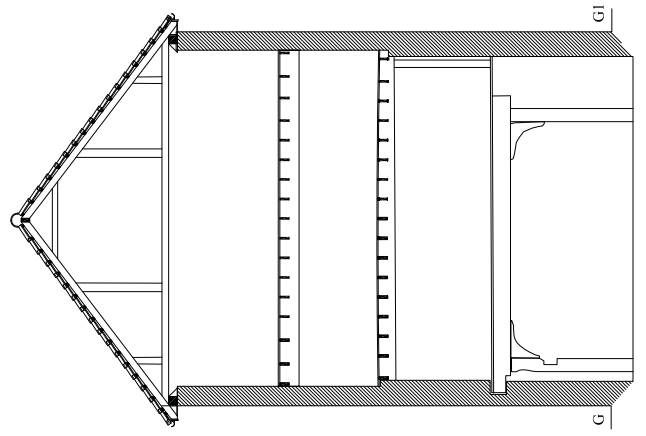
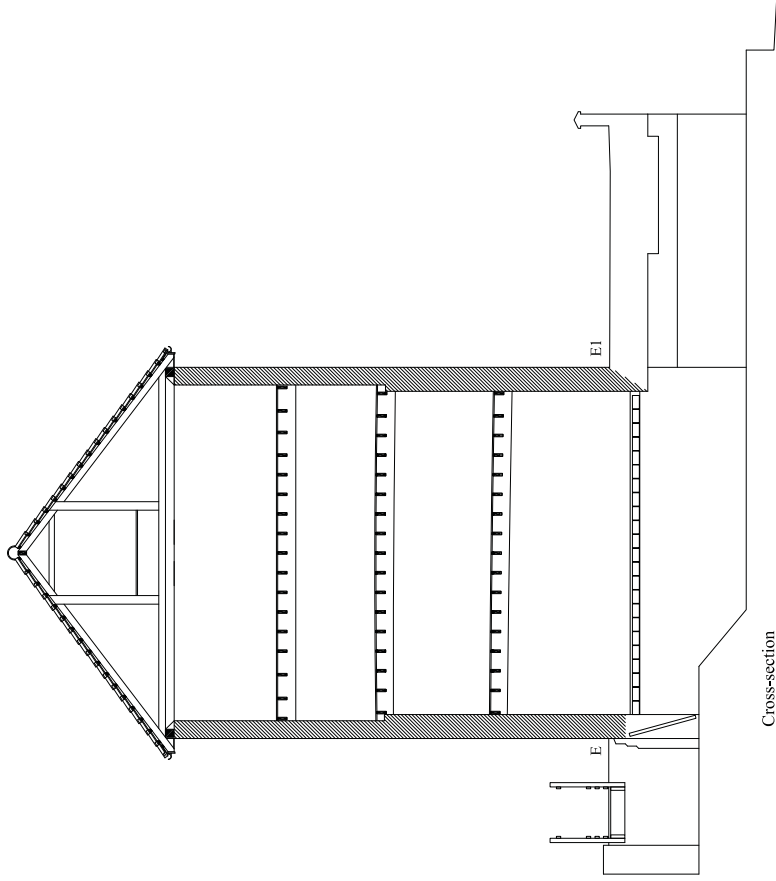
South elevation

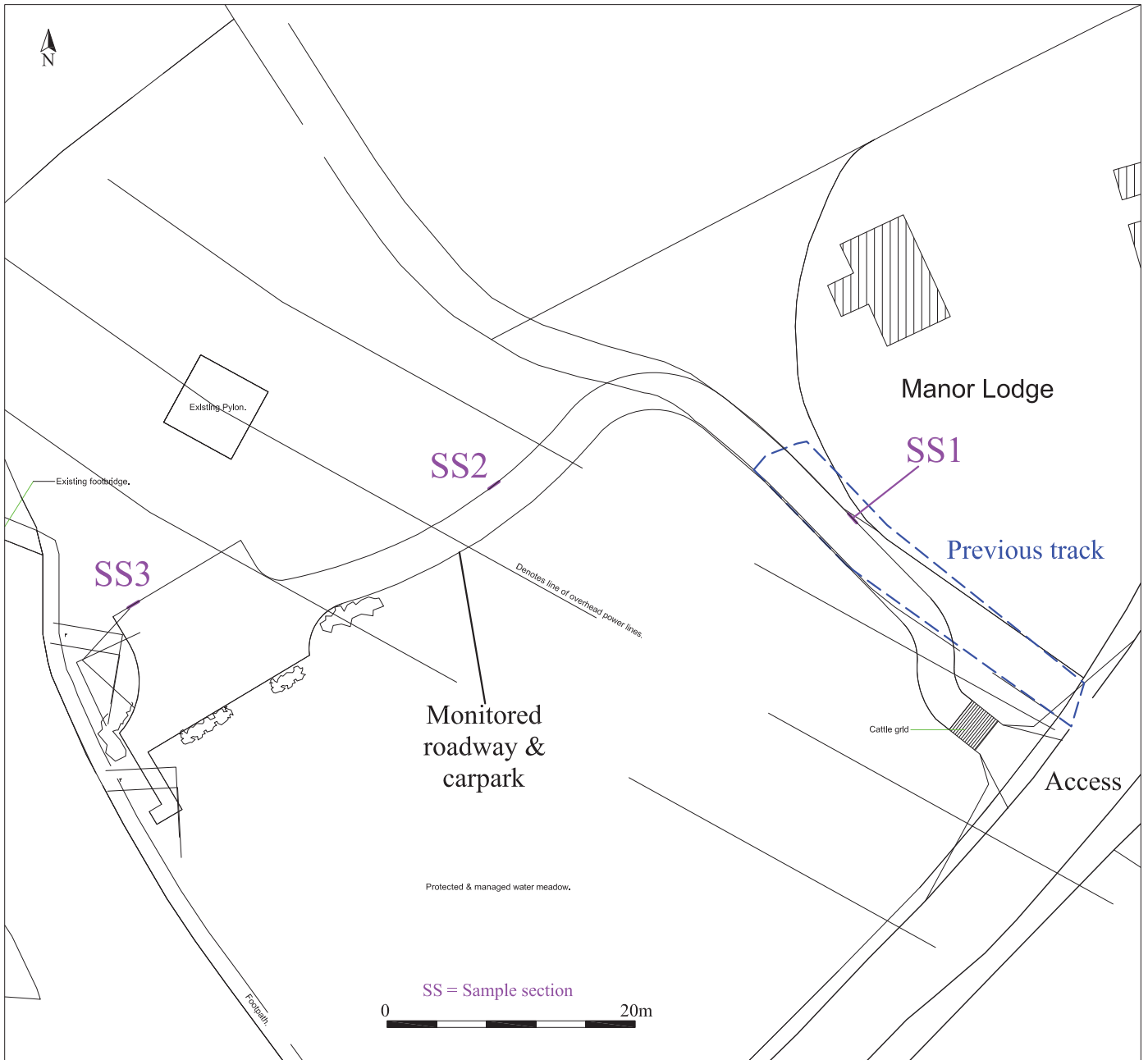


East elevation









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**Fig. 11 Area of watching brief**  
 Scale 1:500 at A4