Oughtibridge Mill
Sheffield

Post-excavation Assessment and Updated Project Design

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On behalf of	Commercial Estates Group Ltd
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Summary

Wessex Archaeology was commissioned by ECUS Ltd on behalf of Commercial Estates Group Ltd to undertake a programme of archaeological mitigation works at Oughtibridge Paper Mill, 22-24 Main Rd, Oughtibridge, Wharncliffe Side, Sheffield, South Yorkshire, S35 0DN ('the site'). The programme comprised archaeological excavation of two areas: Spring Grove corn mill centred on NGR 429996 394361 and Spring Grove paper mill centred on NGR 430163 394079.

The archaeological investigations were successful in addressing the aims laid out in the written scheme of investigation (Wessex Archaeology 2018).

The two areas were excavated to examine the surviving remains of the two mill complexes which were the site of Spring Grove corn mill and Spring Grove paper mill from 1834 onwards (Northern Archaeological Associates 2016).

Although significant truncation had occurred, well-preserved remains relating to the Spring Grove corn mill included a building with three rooms, further brick and sandstone walls, brick and paving slab floor surfaces and a cobbled yard, all with preserved thresholds. The features were covered by an occupation deposit. The whole area was covered by the demolition debris. The mill structures appeared to have been constructed in a single phase of activity.

One stone wall and the remains of a possible goit in the Spring Grove paper mill area had been incorporated into the cellar of a later brick and concrete structure. It was not possible to access these structures or record them in detail.

The archive resulting from the work is currently held at the offices of Wessex Archaeology in Sheffield under the project code 203220. In due course, the archive will be deposited with Museums Sheffield under an accession number to be determined. An OASIS record, wessexar1-322138, has been completed for this work and will be finalised at the time of deposition.

Acknowledgements

Wessex Archaeology is grateful to ECUS ltd who on behalf of Commercial Estates Group Ltd commissioned the work. Wessex Archaeology is also grateful for the advice of Jim McNeil and Dinah Saich who monitored the project for South Yorkshire Archaeology Service (SYAS) and to Mark Edge of Pierre Angulaire Limited for his cooperation and help.

The fieldwork was directed by Emma Carter, with the assistance of Jonathan Buttery, Nick Woodward, Phillip Maier, Jack Peverall, Sam Birchall, Luke Roberts, Ceridwin Blakesley and Jonathan Landless. This report was written by Emma Carter and edited by Milica Rajic and Ashley Tuck. The project was managed by Milica Rajic on behalf of Wessex Archaeology.

Oughtibridge Mill, Sheffield, South Yorkshire

Post-excavation Assessment and Updated Project Design

1 INTRODUCTION

1.1 Project and planning background

1.1.1 Wessex Archaeology was commissioned by ECUS Ltd on behalf of Commercial Estates Group Ltd to undertake a programme of archaeological mitigation works at Oughtibridge Paper Mill, 22-24 Main Rd, Oughtibridge, Wharncliffe Side, Sheffield, South Yorkshire, S35 0DN ('the site'; Fig. 1). The programme comprised archaeological excavation of two areas: Spring Grove corn mill centred on NGR 429996 394361 (153 m^2) and Spring Grove paper mill centred on NGR 430163 394079 (365 m^2).

1.1.2 The work was carried out as a condition of planning permission, granted by Sheffield City Council (17/02624/OUT) for demolition of existing buildings and structures and erection of residential development (use class C3) with means of access including a new vehicular bridge and pedestrian/cycle bridge across the River Don, as well as associated landscaping and infrastructure works.

1.1.3 The excavation was the final stage in a programme of archaeological works, which had included Heritage Assessment (Northern Archaeological Associates 2016) and Archaeological Evaluation (Northern Archaeological Associates 2017).

1.1.4 The excavation was undertaken in accordance with a written scheme of investigation (WSI), which detailed the aims, methodologies and standards to be employed, for both the fieldwork and the post-excavation work (Wessex Archaeology 2018). Jim McNeill (South Yorkshire Archaeological Service) approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing. The excavation was undertaken between the 4 and 15 June 2018.

1.2 Scope of the report

1.2.1 The purpose of this report is to provide the results of the excavation to assess the potential of the results to address the research aims outlined in the WSI. Where appropriate, the report is intended to recommend a programme of further analysis work, and outline the resources needed to achieve the aims (including the revised research aims arising from this assessment), leading to dissemination of the archaeological results via publication and the curation of the archive.

1.3 Location, topography and geology

1.3.1 The site is approximately 1.5 km north of the centre of the village of Oughtibridge, and south-east of Wharncliffe Side in the Bradfield area of Sheffield (Fig. 1). The area is 5 km north-west of the area of Sheffield known as Hillsborough in the Don valley. The development area is currently a brownfield site. The site is bordered to the south and west by the A6102 (Langsett Road), to the east and north by Redmires Wood, with the River Don flowing through the centre of the site.

1.3.2 The existing ground level at the corn mill is 99.061 m aOD and the level at the paper mill is 100.062 m aOD.

1.3.3 The underlying geology is mapped as Millstone Grit Group, comprising mudstone and siltstone sedimentary bedrock. Drift deposits of clay and silt alluvium are present in the base of the valley, close to the River Don. The soils belong to the East Keswick association, these are mapped as deep, well-drained, fine and coarse loamy soils (British Geological Survey online viewer).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological and historical background was evaluated in a prior desk based and heritage assessment (Northern Archaeological Associates 2016), which considered the recorded historic environment resource within a 1 km study area of the proposed development. In addition, an archaeological test trenching evaluation was carried on the site (Northern Archaeological Associates 2017). A summary of the results is presented below.

2.2 Archaeological and historical context

Prehistoric to medieval

2.2.1 Evidence for prehistoric to medieval activity in the immediate area is limited, possibly due to a lack of fieldwork. The site location may have been attractive to settlement during the prehistoric, Roman and medieval periods; however there is no evidence to support this. Given the extent of the later site disturbance, the potential for the survival of such remains is considered to be low.

Post-medieval

2.2.2 Paper mills developed along the River Don during the 19th century. The Spring Grove Paper Mill is thought to have been constructed in 1834 (Northern Archaeological Associates 2016). It is not clear whether the Spring Grove Corn Mill predated this.

2.2.3 Prior to the mid-19th century, when William Jenkinson overtook ownership, the paper mill was used for gun wadding manufacture. In 1850 Jenkinson registered the mill as new mill (no. 353) and became a manufacturer of different types of paper (writing, grocers, printing and packing).

2.2.4 The earliest cartographic evidence of Spring Grove paper mill is the six-inch Ordnance Survey map of 1855 depicting a small building with the main mill building to the south.

2.2.5 The corn mill, approximately 300 m to the north-west from the paper mill, is also visible on the 1855 map.

2.2.6 In the same year (1855), both paper mill and corn mill were sold at auction due to William Jenkinson going bankrupt. The paper mill included two stone mill buildings, water wheels, grinding wheel, dams, goits, a steam engine, three rag engines, a paper making machine and other machinery and paper making tools. The paper mill was advertised as having the capacity to produce 12 tonnes of paper per week.

2.2.7 Between 1860 and 1869 Spring Grove changed hands twice: T and J March purchased the mill from Wollatt (later Mollatt), Hough and Brassington. T and J March developed the

site considerably. A large explosion in February 1870 caused the loss of many buildings (including the cutting room, and sorting room) and machinery.

2.2.8 In 1871, Peter and Joseph Dixon took over Spring Grove Paper Mill and established a new company under the same name Dixon and Son. The Dixons repaired and modified the mill to produce newsprint. They were also among the first newsprint manufacturers to use wood pulp instead of rags to meet the rising demand of paper production.

2.2.9 An illustration published in the Sheffield and Rotherham Independent (14 August 1886), shows that the complex had expanded up the roadside and to the bank of the River Don. The large mill pond area depicted on the 1855 Ordnance Survey map had been divided into four elements, and a separate mill race was created isolated along the western side of the mill pond. The illustration indicated that the warehouses and offices ran along the roadside, while processing buildings ran perpendicular to the road and river in the centre of the site.

2.2.10 By 1894 the expansion of the mill, which had previously been limited by the river to the east, crossed the River Don via a newly constructed railway siding and an iron bridge.

2.2.11 In 1897, the first buildings were erected on the eastern bank of the river and housed the paper making machinery. From this point on, the preparatory processes continued to occur on the main mill site, but the later stages of the process were carried out in these new buildings, purpose built for the machinery they housed.

2.2.12 Despite the damages caused by a fire in 1899 (which destroyed the central buildings of the yard), Spring Grove made a relatively quick recovery. A directory from 1900 details that the mill was operating two machines running on water and steam and by 1905 the Oughtibridge Mill site had been extended considerably to the south along the river. There were now two bridges crossing over the River Don. The buildings in the centre of the site that had been destroyed by fire changed from a narrow block of buildings to a much wider range.

2.2.13 In 1912 and 1917 the mill suffered more fire damage. As a result, it was closed for a year and the workforce and the surviving machinery relocated to Grimsby.

2.2.14 The layout of the mill changed relatively little by the time of a 1927 map. The tall, narrow shelter into which the railway siding entered on its approach to the warehouse is visible to the south of two new sheds set within a derelict building. The building range on the east side of the river included four gables of three stories, each story featuring eight windows. The reservoirs and the mill race are unchanged. A large waste heap is visible to the east of the river to the north of the railway spur.

2.2.15 In 1958, a large phase of development occurred in response to the gradual shift towards tissue production. In 1959 a new machine house was built and a £2 million upgrade of the mill was completed by 1965. The development included a new power station and boiler house, a new converting shop, new packing and dispatch departments and a new office block with canteen. Spring Grove continued to generate most of the electricity required for production, with coal-fired boilers, buying only a small amount of electricity from the Yorkshire Electricity Board. The water treatment plant (which processed water prior to use in the boiler) was located near to the boiler house, receiving supplies from three mill-dams on the bank of the River Don.

2.2.16 By 1983, there are records that the mill was occupied by British Tissues. In the years following British Tissues' occupation of the mill, Spring Grove was passed from Jamont UK to Fort James, Georgia Pacific (2008) and finally to SCA in 2012. Paper production ceased in 2007, when the mill site suffered serious flooding, and thereafter it was limited to processing and packaging operations.

2.3 Previous works related to the development

2017 evaluation

2.3.1 Archaeological evaluation of the site (Northern Archaeological Associates 2017) identified numerous relatively undisturbed remains related to the corn mill, namely rectangular sandstone sett yards and a range of rooms within a substantial stone constructed building of an unknown date. In addition, the remains of a red brick building overlaying two stone walls belonging to the paper mill cellar and a poorly preserved flagstone floor were also found.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The general aims of the excavation, as stated in the WSI (Wessex Archaeology 2018) and in compliance with the CIfA' *Standard and guidance for archaeological excavation* (CIfA 2014a), were:

- to examine the archaeological resource within a given area or site within a framework of defined research objectives;
- to seek a better understanding of the resource;
- to determine the extent, condition, character, significance and date of any archaeological deposits encountered that will be removed or disturbed by groundworks;
- to compile a lasting record of the resource; and,
- to analyse and interpret the results of the excavation, and disseminate them.

3.2 Research objectives

3.2.1 Following consideration of the archaeological potential of the site the research objectives of the excavation defined in the WSI (Wessex Archaeology 2018) were:

- to enhance the understanding of the development of the site and its associated buildings (mainly the 19th century phases) but also take into the consideration the potential for earlier phases of activity on the site;
- to determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the site;
- to determine the layout of both mills and the potential of the multiple phases of construction identified in the evaluation trenches;
- to determine the location, extent, date, character, condition, complexity, significance and quality of any as yet unidentified archaeological remains within the site;

- to assess the artefactual and environmental potential of the archaeological deposits encountered;
- to inform formulation of a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- to allow the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) during the limited trial trench evaluation; and,
- to ensure their preservation by record to the highest possible standard.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2018) and in general compliance with the standards outlined in CIfA guidance (CIfA 2014a). The site comprised two areas each targeting features identified during trial trench evaluation. The methods employed are summarised below.

4.2 Fieldwork methods

General

4.2.1 The excavation area was set out using a Leica GNSS system ('GPS'), in the same position as those proposed in the WSI (Fig.1). The topsoil/overburden was removed in level spits using a JCB 3CX and an 8 tonne 360° excavator equipped with a toothless bucket, under the constant supervision and instruction of a monitoring archaeologist. Machine excavation proceeded in level spits until the archaeological horizon or the natural geology was exposed.

4.2.2 The surface of archaeological deposits was cleaned by hand to aid visual definition. A sample of archaeological features and deposits identified was hand-excavated, sufficient to address the aims of the excavation.

4.2.3 Spoil derived from both machine stripping and hand-excavated archaeological features was visually scanned for the purposes of finds retrieval. Late 19th century and early 20th century finds were observed in the made ground overburden and in modern utilities backfill layers but were not retained.

Recording

4.2.4 All archaeological features and deposits were recorded using Wessex Archaeology's *pro forma* recording system. A complete drawn record of excavated features and deposits was made including both plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections), and tied to the Ordnance Survey (OS) National Grid. The Ordnance Datum (OD: Newlyn) heights of all principal features were calculated, and levels added to plans and section drawings.

4.2.5 A Leica GNSS connected to Leica's SmartNet service was used to survey the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50 mm.

4.2.6 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes.

4.3 Artefactual and environmental strategies

General

4.3.1 Appropriate strategies for the recovery, processing and assessment of artefacts and environmental samples were in line with those detailed in the WSI (Wessex Archaeology 2018). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b) and *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011).

4.3.2 No finds were identified in sealed contexts and as a result no finds were retained.

4.3.3 No deposits suitable for environmental sampling were identified during the works.

4.4 Monitoring

4.4.1 South Yorkshire Archaeological Services (SYAS), on behalf of the LPA, monitored the excavation.

5 ARCHAEOLOGICAL RESULTS

5.1 Area 1: Spring Grove corn mill

General stratigraphy

5.1.1 Overburden comprised 0.8–1.5 m thick demolition rubble deposits (1001, 1003). Made ground and overburden deposits generally comprised dirty silts, ash, rubble and silty clays.

5.1.2 The north and the north-east part of the area had been disturbed. Across the rest of the area, a 0.4 m thick layer of soft dark grey silt, ash and clinker (1007) overlay the archaeological features described below.

5.1.3 The undisturbed natural geological substrate was identified 1 m from the surface, and was compact, mid-yellowish orange sandy clay (1020).

19th century

5.1.4 The excavation area was dominated by a north-west to south-east oriented, 3.64 m wide yard surface (1013) made of well worn, sub-angular cobbles laid in east-west running rows. The north and north-east parts of the yard were truncated by modern disturbance. The west edge of the yard was defined by a curb made of raised sandstone flags (1014/1018).

5.1.5 To the west of this ran a north-south external linear pavement (1015) of sandstone flagstones (9.28 m by 0.77 m) laid on compact mid-blackish grey sandy silt (1010).

5.1.6 The external brick wall of a building comprising three rooms abutted the pavement, the room complex used frogged bricks and black ash mortar throughout. The wall (1024) was south-west to north-east oriented, and constructed of frogged, stretcher bonded bricks two

skins thick and black ash mortar. The wall, bonded by black ash mortar to sandstone foundations a single stone wide, (1009) laid atop the natural geology (1020).

5.1.7 The northern room (2.6 m by 2.4 m) contained a floor (1008) made of bricks which were laid in an east to west running stretcher bond on a sandstone foundation (1009). A layer of clinker (1007) and modern concrete (1006) overlay the floor.

5.1.8 The middle room's floor surface (2.2 m by 3 m) was made of sandstone flagstones (1012) laid onto compacted mid-blackish grey sandy silt (1010).

5.1.9 The two rooms were separated by east to west running frogged brick wall (1025), two skins wide, bonded with black ash mortar which was keyed into the external wall (1024). The brick wall is bonded by black ash mortar to sandstone foundation (1009).

5.1.10 The southern room's floor surface (2.5 m long) was also made of sandstone flagstones (1012) laid on mid-blackish grey sandy silt (1010). A possible plain, sandstone threshold (1019), partly unearthed, was visible in the south-east corner of this room.

5.1.11 The wall which separated the south and middle rooms had been removed during the excavation of a utility trench (1021) within which a cast-iron pipe had been inserted.

5.1.12 Abutting the building to the west was a 0.46 m wide wall (1016). The wall, comprised 10 courses (1 m) of sandstone bonded with lime mortar, and was set in a construction cut (1017).

5.2 Area 2: Spring Grove paper mill

General stratigraphy

5.2.1 Overburden comprised a demolition rubble deposit (2027) derived from recent demolition of buildings and concrete slabs (2023).

5.2.2 The demolished modern building had been reduced to ground level and was evidenced by concrete floor slabs, modern brick walls and concrete and iron stanchions.

5.2.3 The undisturbed natural geological substrate, mid-yellowish orange clay (2030) was encountered at 1.8 m below the surface.

19th century

5.2.4 The early phases of the paper mill were seen in the central part of the area only within a small slot in the concrete floor.

5.2.5 A heavily disturbed wall (2029) found running north-east to south-west was 0.78 m wide made of large sandstones bonded with lime mortar.

5.2.6 Another sandstone wall (2028) with lime mortar was observed in section under a concrete floor, behind a cast-iron service pipe and a modern brick wall. This wall is most likely the continuation of a goit visible to the north of the excavation area.

5.2.7 In the north-west corner of the area a modern concrete raft overlaid a cellar. A test pit through the concrete revealed the cellar to be more than 3 m deep. Due to this depth and the proximity of the adjacent gable wall the cellar was not further examined.

6 ASSESSMENT AND QUANTITY OF DATA

6.1 Summary

6.1.1 All hand written and drawn records from the excavation have been collated, checked for consistency and stratigraphic relationships. Key data has been transcribed into an Access database for assessment, which can be updated during any further analysis. The excavation has been preliminary phased using stratigraphic relationships and the spot dating from artefacts, particularly pottery. Table 1 below provides a quantification of the records from the excavation.

Table 1 quantification of records

Type	Quantity
Context records	55
Context registers	2
Graphics (A4 and A3)	5
Graphics registers	2
Digital photographs	380

7 ARTEFACTUAL AND ENVIRONMENTAL EVIDENCE

7.1 Summary

1.1.1 A small number of finds (late 19th and early 20th century clay pipe fragments and glass) was observed from modern disturbance fills, however these items were not kept.

7.1.1 No deposits suitable for environmental sampling were identified during the works.

8 DISCUSSION

8.1 Conclusions

8.1.1 The completed excavation shows that the potential for the survival of remains predating the 19th-century mill buildings was low, with no earlier remains uncovered. The remains relating to the mill buildings having suffered substantial truncation during later development.

8.1.2 The earliest remains recorded on the site were those of the Spring Grove corn mill where a boundary wall and the footprints of a building with three rooms were recorded, arranged adjacent to a cobbled yard. The internal and external spaces were similar in materials and construction techniques and were most likely contemporary. Although the boundary wall, the building and its internal divisions are depicted on the 1890-92 Ordnance Survey map, the exact date and function of the features remains unclear.

8.1.3 The later brick, concrete and cast-iron features recorded at Spring Grove paper mill relate to a 20th Century of activity within the site. Here, a small length of a heavily disturbed sandstone wall and obscured section of a possible goit recorded under modern concrete floor were the only evidence of an earlier phase of construction at the paper mill.

8.1.4 The archaeological investigation was successful in addressing the aims laid out in the WSI (Wessex Archaeology 2018).

8.1.5 The results of the archaeological investigations are consistent with the existing cartographic and historical evidence for the use of the site.

9 RECOMMENDATIONS

9.1 Updated project design

9.1.1 The stratigraphy of the site and is well understood and no further work is required. No artefactual or environmental analysis is possible due to the lack of recovered artefacts and environmental material.

9.1.2 The results of the excavation are modest and the publication of the results beyond the production of this grey literature report is not considered necessary. Illustrated brief round-up of the work will appear in Archaeology in South Yorkshire. An OASIS record for the site has been completed and will be finalised in due course.

9.1.3 The archive resulting from the work will be prepared for deposition with Museums Sheffield following standard practice as detailed below.

10 ARCHIVE STORAGE AND CURATION

10.1 Museum

10.1.1 The archive resulting from the excavation is currently held at the offices of Wessex Archaeology in Sheffield. Museums Sheffield has agreed in principle to accept the archive on completion of the project. Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

10.2 Preparation of the archive

10.2.1 The archive, which includes paper records, graphics and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Sheffield Museums, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011; ADS 2013).

10.2.2 All archive elements are marked with the site/accession code, and a full index will be prepared. The physical archive comprises the following:

- 1x files/document cases of paper records and A3/A4 graphics

10.3 Security copy

10.3.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

10.4 OASIS

10.4.1 An OASIS online record (http://oasis.ac.uk/pages/wiki/Main) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

11 COPYRIGHT

11.1 Archive and report copyright

11.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act* 1988 with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations* 2003. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.

11.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

11.2 Third party data copyright

11.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of *the Copyright, Designs and Patents Act* 1988 with regard to multiple copying and electronic dissemination of such material

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APPENDICES

Appendix 1 Area summaries

Spring Grove corn mill

Fill	Cut	Fill Interpretation	Cut Interpretation	Description
1001		Layer		Uppermost Made ground light orangey brown
1002		Layer		Dark brownish grey buried soil
1003		Layer		Made ground mixed layer containing 20th C debris
1004		Pipe		Modern pipe bonded to 1006
1005		Stone		Large sandstone blocks possible pipe buttressing
1006		Concrete		Concrete
1007		Layer		Made ground clinker layer
1008		Brick surface		Brick floor surface beneath 1007
1009		Flagstones		Sandstone flags beneath 1010 + 1011
1010		Subsoil		Subsoil
1011		Wall		Sandstone flag curb wall for 1015
1012		Flagstones		Flagstone surface bonded by 1024
1013		Cobbled Setts		Cobbled setts making up yard
1014		Curb		Brick curb of cobbles
1015		Flagstones		Flagstone pavement
1016	1017	Wall	Construction cut	Sandstone wall running N-S
1018		Curb		Brick curb of cobbles
1019		Flagstone		Flagstone threshold or surface
1020		Natural		Mid yellowish orange sandy clay
1022	1021	Fill	Cut - utilities	Clay fill for pipe service, Made ground
1023	1021	Fill	Cut- utilities	Rubble infill of service slot
1024		Brick surface		Same as 1005
1025		Wall		Red brick dividing wall

Spring Grove paper mill

Fill	Cut	Fill Interpretation	Cut Interpretation	Description
2001		Wall		Machine made red brick wall
2003		Surface		Sandstone flag
2004		Surface		Sandstone block forming surface with 2003
2005		Wall		Red brick wall handmade greyish lime mortar bonded to 2003 + 2004
2006		Wall		Machine made red brick wall with black ash mortar
2007		Block		Limestone block, same as 2008
2008		Block		Limestone block same as 2007
2009		Wall		Damaged sandstone wall beneath 2007 and 2008
2010	2002	Layer		Demolition fill
2011		Wall		Modern red brick walls
2012		Wall		NW-SE red brick black ash mortar bonded to 2011
2013		Concrete		Modern concrete poured over 2003 and 2007 as base for culvert
2014		Layer		Modern pea gravel for service pipe
2015		Made ground		Sandy silt made ground
2016		Made ground		Black ash Made ground

2017		Made ground		black ash clinker made ground layer
2018		Made ground		Mid orange brown made grown
2019		Backfill		Stone packing for pipe
2020		Made ground		Mid orange brown sandy silt made ground
2021		Made ground		Black ash clinker made ground
2022		Made ground		Mid orange grey made ground
2023		Concrete		Modern concrete floor or demolished building
2024		Layer		mid orange brown clay
2025		Wall		Red brick wall
2026		Structure		Red brick void with sandstone lintel, into which sandstone cellar walls can be seen.
2027		Demolition rubble		Recent demolition from modern structure
2028		Wall		Robbed out sandstone foundation wall
2029		Foundation		NE-SW sandstone foundation wall
2030		Natural		Mid yellowish orange clay

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S2 3EN

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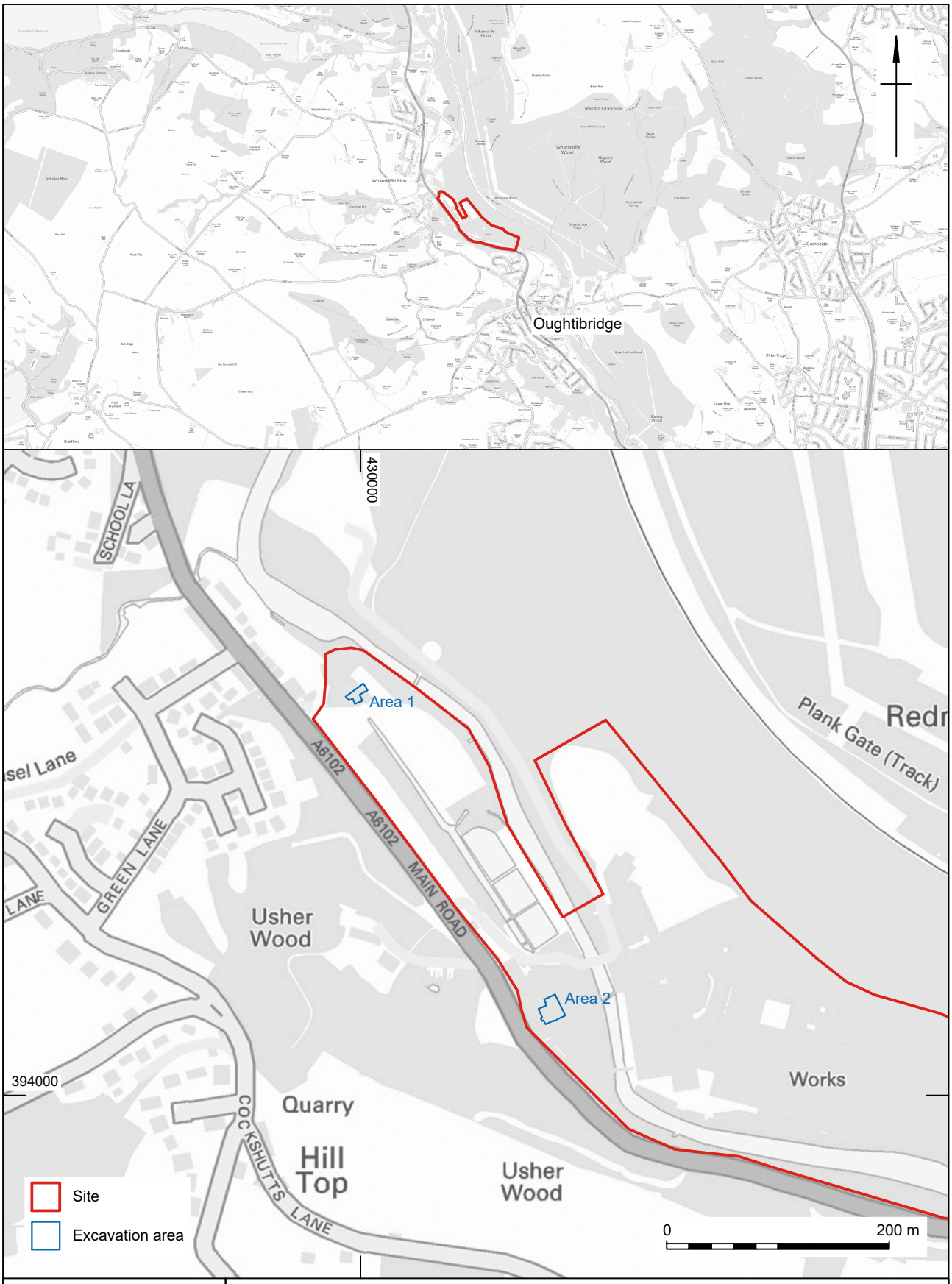

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Path:	S:\PROJECTS\203220\Graphics_Office\Rep figs\WSI\2018_04_05		

Site location

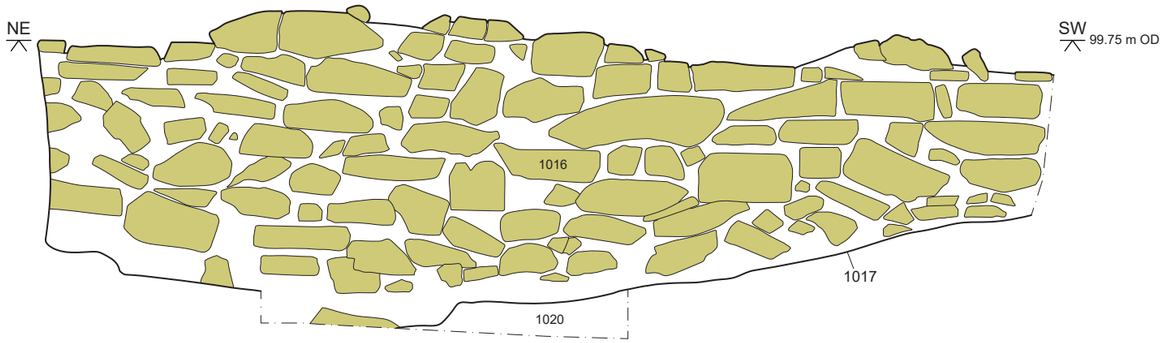
Figure 1

Date:	28/06/2018	Revision Number:	0
Scale:	1:200 at A4	Illustrator:	IA
Path:	S:\PROJECTS\203220\Graphics_Office\Rep figs\WSI\2018_04_05		

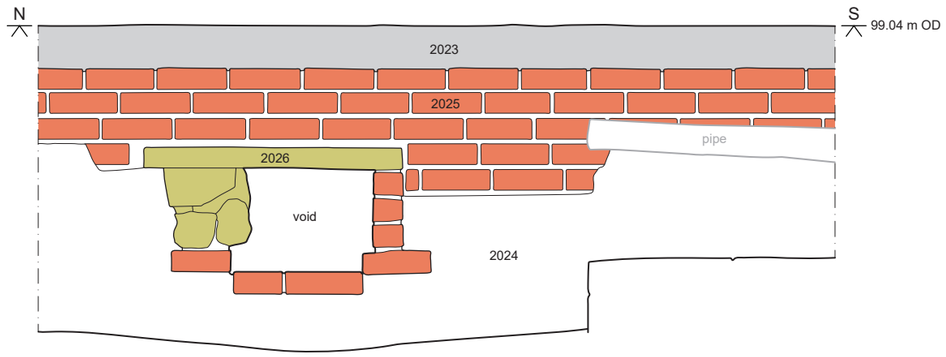
Areas 1 and 2 - plans

Figure 2

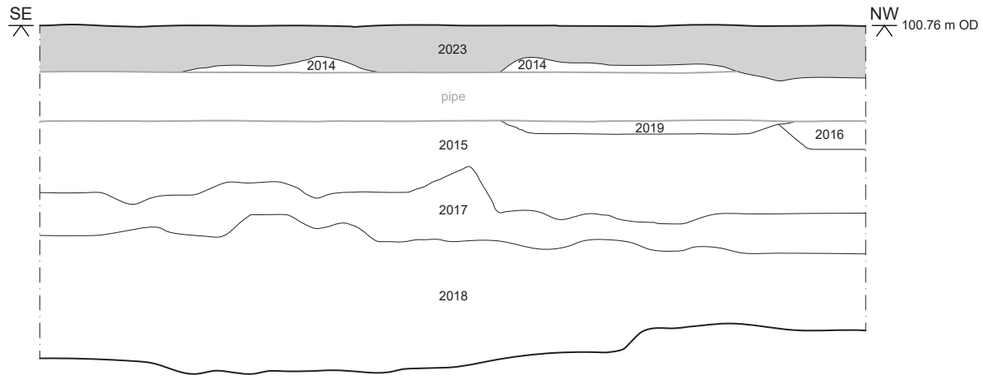
Section 1



Section 2



Section 3



Brick
Sandstone
Concrete
Modern

0 1 m

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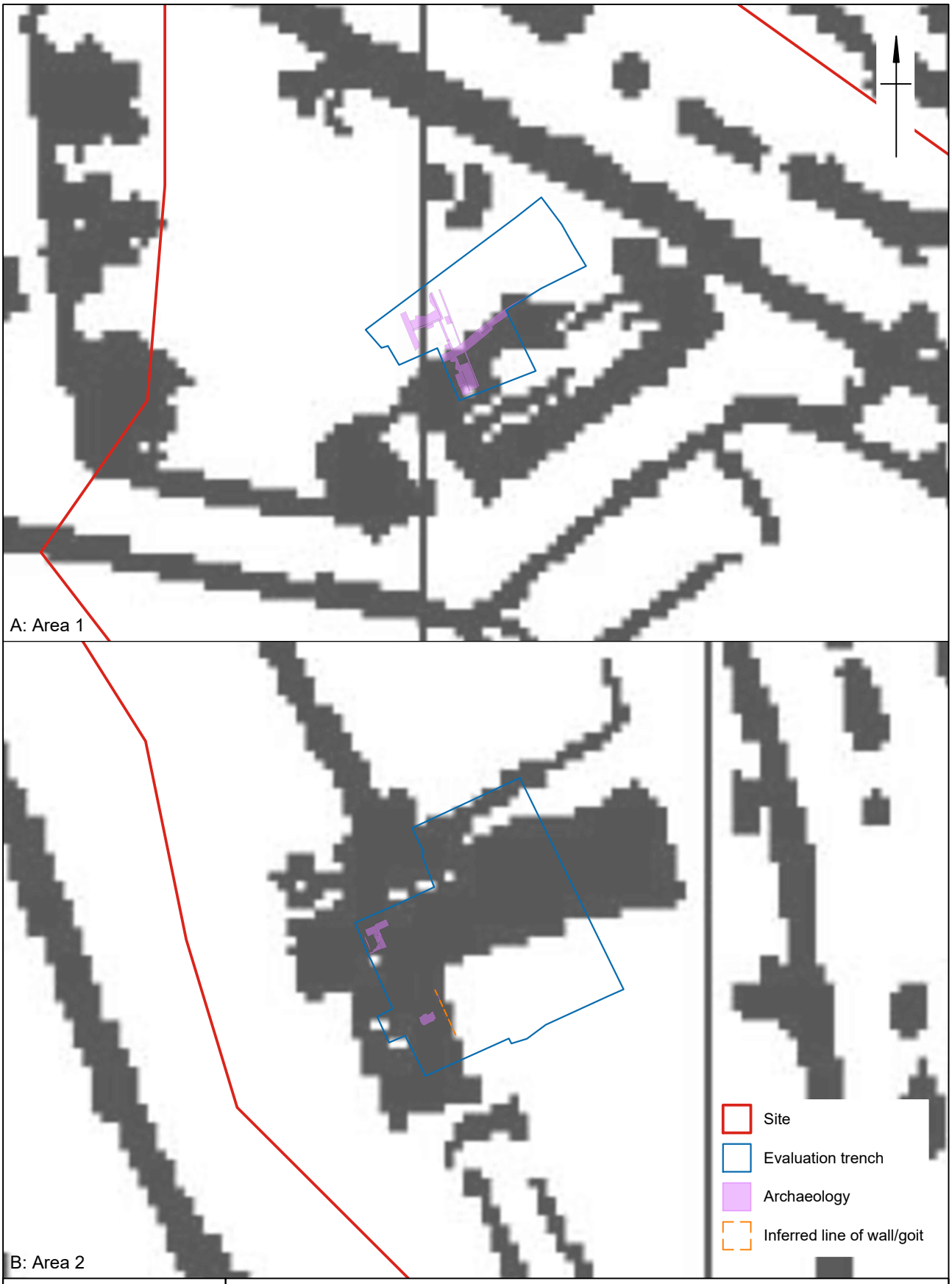
Sections

Figure 3



Date:	28/06/2018	Revision Number:	0
Scale:	1:500 at A4 (approx.)	Illustrator:	IA
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Excavation areas overlain on 1855 Ordnance Survey map

Figure 4

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Excavation areas overlain on 1890-92 Ordnance Survey map

Figure 5

Plate 1: Area 1 view from south

Plate 2: Area 1 view from north-east

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Plate 3: Area 1 cobble setts 1013 view from south

Plate 4: Area 1 cobble setts 1013 view from east

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Plate 5: Area 1 flagstone surface 1015 view from north

Plate 6: Area 1 slot into 1015

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Plate 7: Area 1 sandstone wall 1016

Plate 8: Area 1 multi-phase brick surface and drain 1004-1008,1024, 1025

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Plate 9: Area 1 multi-phase brick surface and drain 1004-1008,1024

Plate 10: Area 1 North facing section of excavation area view from north-east

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Plate 11: Area 1 area of disturbance

Plate 12: Area 2 view from north east

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