



WYAS  
**Archaeological  
Services**

**Land at Sandbeck Lane**

**Wetherby**

**West Yorkshire**

Archaeological Evaluation

Report no. 2801  
September 2015

**Client:** Prospect Archaeology



**Land at Sandbeck Lane**  
**Wetherby**  
**West Yorkshire**  
**Archaeological Evaluation**

*Summary*

*An archaeological evaluation consisting of the excavation of sixteen trenches was carried out on land at Sandbeck Lane, Wetherby. The evaluation confirmed the findings of the heritage assessment and subsequent geophysical survey, in that no significant archaeological remains or deposits are likely to be found within the bounds of the proposed development area.*



## Report Information

Client: Prospect Archaeology Ltd  
Address: Garden lane, Sherburn-in-Elmet, North Yorkshire, LS25 6AT  
Report Type: Archaeological Evaluation  
Location: Wetherby  
County: West Yorkshire  
Grid Reference: SE 40970 49480  
Period(s) of activity represented: Modern  
Report Number: 2801  
Project Number: 6152  
Site Code: SBW15  
Planning Application No.: 15/03206/FU  
Museum Accession No.: Not allocated  
Date of fieldwork: 27th – 28th August, 7th September 2015  
Date of report: September 2015  
Project Management: David Williams BA MCIfA  
Fieldwork supervisor: Matt Wells MA  
Report: Iain McIntyre and David Williams  
Illustrations: Rosie Scales and David Williams  
Photography: Site Staff

Authorisation for  
distribution: \_\_\_\_\_



© Archaeological Services WYAS 2015  
Nepshaw Lane South, Morley, Leeds LS27 7JQ  
Telephone: 0113 383 7500  
Email: [admin@aswyas.com](mailto:admin@aswyas.com)



## Contents

Report information .....	ii
Contents.....	iii
List of Figures .....	iv
List of Plates.....	iv
List of Tables .....	iv

<b>1 Introduction.....</b>	<b>1</b>
Site location and topography .....	1
Soils, geology and land-use .....	1
<b>2 Archaeological and Historical Background.....</b>	<b>1</b>
<b>3 Aims and Objectives .....</b>	<b>2</b>
<b>4 Methodology .....</b>	<b>2</b>
<b>5 Results .....</b>	<b>3</b>
<b>6 Environmental Record .....</b>	<b>10</b>
<b>7 Discussion and Conclusions .....</b>	<b>11</b>

Figures

Plates

### Appendices

Appendix 1: Specification for Pre-determination Trial Trenching

Appendix 2: Inventory of primary archive

Appendix 3: Concordance of contexts yielding artefacts or environmental remains

### Bibliography

### **List of Figures**

- 1 Site location
- 2 Site location showing location of excavated evaluation trenches
- 3 Trench 3. Plan and section

### **List of Plates**

- 1 Trench 1, looking south
- 2 Trench 3, looking north-west
- 3 Trench 3, showing Pit 302, looking south-west
- 4 Trench 4, looking south-east
- 5 Trench 4, showing ditch 402, looking west
- 6 Trench 10, looking north-west
- 7 Trench 11, showing modern wall, looking south-east
- 8 Trench 12, showing modern drain, looking south-east
- 9 Trench 16, looking north-east

### **List of Tables**

- 1 Trench 1
- 2 Trench 2
- 3 Trench 3
- 4 Trench 4
- 5 Trench 5
- 6 Trench 6
- 7 Trench 7
- 8 Trench 8
- 9 Trench 9
- 10 Trench 10
- 11 Trench 11
- 12 Trench 12
- 13 Trench 13
- 14 Trench 14
- 15 Trench 15
- 16 Trench 16

## 1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Prospect Archaeology Ltd on behalf of their client Barratt David Wilson Homes/Wetherby Park Ltd to carry out an archaeological evaluation on land at Sandbeck Lane, Wetherby, West Yorkshire (Fig. 1). The work was carried out in accordance with a Specification prepared by David Hunter of West Yorkshire Archaeology Advisory Service (WYAAS) to satisfy planning application REFERENCE 51/03206/FU (Appendix 1).

### Site location and topography

The site is centred on SE 40970 49480 and comprises two fields situated north and south, of Sandbeck Lane. Immediately east of the site is the line of the A1M with Sandbeck Industrial Estate to the west. The town of Wetherby lies *c.* 1.3km to the southwest. From Sandbeck Lane, the northern field slopes down to the north, while the southern field rises to the south.

### Soils, geology and land-use

The British Geological Survey (BGS 2015) identifies the underlying bedrock as sedimentary of Permian origin belonging to the Cadeby Formation (to the northwest) and Edlington Formation, under the majority of the site. Superficial geology, as exposed during excavation, is a mixture of glaciolacustrine sands, silts and, predominately, clays. The overlying soil is slightly acidic loamy and clayey soil (Soils of England and Wales 1983). Both fields were covered in rough grassland with the northeast of the southern field containing an area of scrubland and small trees.

## 2 Archaeological and Historical Background

The site lies in an area of high archaeological potential, as demonstrated by archaeological excavation and crop marks recorded by aerial photography in the vicinity.

Three cropmark examples recorded in the West Yorkshire Historic Environment Record include rectilinear enclosures 1.5km to the east at Ingmanthorpe Farm (PRN 4127) and a similar distance to the west at Kingmanthorpe Farm (North Yorkshire PRN 5225) and south of Wetherby at Sweep Farm (PRN 4073). A variety of features are present at these sites ranging from presumed burial mounds and ditched track ways through sinuous boundaries to rectangular and “D” shaped enclosures around settlements and field systems. The crop marks illustrate the general character of the area during the later prehistoric and Romano-British periods.

Historically the parcel of land south of Sandbeck Lane was identified as Hall Close and Audby Close (West Yorkshire Historic Environment Record PRN 5181, Class III Area of Archaeological Interest). It is thought that these field names, and in particular Audby Close, may record the location of an earlier settlement or farmstead (Aud is derived from *Aid*: the elements *Aid* and *-by* are Norse, specifically Danish, and refer to an 'Old farm', or settlement.

The northern development site lies in an area known as Eel Mires and is suggestive of formerly marshy land. That Sandbeck Lane marked the edge of cultivation during the medieval is strongly suggested by this and the results of the geophysical survey.

A geophysical (magnetometer) survey, undertaken by GSB Prospection Ltd (Tanner 2015) identified anomalies interpreted as medieval and post-medieval cultivation. Other anomalies of uncertain origin were also identified and there is the potential that underlying geology and 20th-century cultivation mask earlier activity.

### **3 Aims and Objectives**

The aim of the evaluation was to gather sufficient information to establish the extent, condition, character, and date of any archaeological features and deposits within the area of interest in order for the Planning Authority's archaeologist to make a reasonable and informed decision as to whether archaeological deposits should be preserved in-situ, or more appropriately, be recorded prior to destruction.

### **4 Methodology**

All work was carried out in accordance with a specification prepared by David Hunter of WYAAS (Appendix 1), and with accepted professional standards and guidelines, including Standards and Guidance for Archaeological Evaluation (Chartered Institute for Archaeologists 2014), Management of Archaeological Projects (English Heritage 1991) and Management of Research Projects in the Historic Environment PPN3 Historic England: Archaeological Excavation (2008). ASWYAS's own methodologies (ASWYAS 2010) were also adhered to.

The sixteen evaluation trenches and open-area extension to Trench 3 were excavated by a JCB excavator equipped with a ditching bucket with an archaeologist in attendance at all times. The trenches were positioned to provide a sample of the whole area, while targeting the anomalies identified in the geophysical survey which might prove to be of archaeological origin (Fig. 2). The trenches were machine excavated in level spits of no more than 0.2m until natural deposits or the first archaeological horizon was encountered, thereafter, all investigations were undertaken by hand. Detailed records sheets were completed for each trench and these are included as part of the site archive. All written records were produced on pro-forma recording sheets in accordance with ASWYAS site recording manual (ASWYAS 2010).

An inventory of the archive is provided in Appendix 2, with a concordance of contexts detailed in Appendix 3.

ASWYAS will hold the archive securely until it is deposited with Leeds City Museums.

## 5 Results

The excavation of the trenches revealed a predominately grey-brown clay-silt topsoil between 0.22 and 0.50m in depth, overlying a very patchy, mid grey-brown clay subsoil (maximum of 0.29m). The superficial geology uncovered was a mixture of glaciolacustrine sands, silts and, predominately, clays.

All sixteen trenches, and the extension to Trench 3, were excavated under favourable light and weather conditions affording excellent visibility and differentiation between natural sediments and potential archaeological deposits. However, no archaeological features were identified other than a single pit [303] within the southern end of Trench 3 (Figs 2 and 3; Plates 2 and 3). The pit yielded no artefacts or exhibited any diagnostic features. A 10m x 10m extension to Trench 3, centred on this pit, uncovered no further features. A shallow linear feature [404], interpreted as a field boundary in Trench 4 was sample excavated (Fig. 2).

The evaluation did encounter the vestigial remains of modern building activity in Trenches 7, 8 and 11, indicating that the ground had been disturbed in these areas.

Dimensions and the orientation of each trench are presented below (Tables 1 to 16). A concordance of contexts and a brief description of the trench is contained within each table.

*Table 1. Trench 1*

<b>Trench 1</b> (Plate 1)					
<b>General Description</b>				<b>Orientation</b>	E-W
Brick rubble within subsoil. No archaeological deposits or features.				<b>Average Depth (m)</b>	0.60
				<b>Width (m)</b>	1.7
				<b>Length (m)</b>	50.00
<b>Contexts</b>					
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>
100	Layer	-	-	0.50	Dark brown silt-clay topsoil
100	Layer	-	-	0.10	Mid brown-grey subsoil
102	Layer	-	-	-	Light grey sand and clay natural



Table 2. Trench 2

<b>Trench 2</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench was devoid of archaeology.				NE-SW		
				<b>Average Depth (m)</b>		0.45
				<b>Width (m)</b>		1.70
				<b>Length (m)</b>		
50.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
200	Layer	-	-	0.35	Mid grey-brown sand-clay topsoil	
201	Layer	-	-	-	Mid grey-white sand-clay natural	

Table 3. Trench 3

<b>Trench 3 (Plates 2 and 3)</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench contained a single pit [303], located within southern end, containing no finds or diagnostic features. A 10m x 10m open area was subsequently excavated centred on the pit, but no further archaeological features were observed.				N-S		
				<b>Average Depth (m)</b>		0.40
				<b>Width (m)</b>		1.7 max
				<b>Length (m)</b>		
53.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
300	Layer	-	-	0.35	Dark brown silt-clay topsoil	
301	Layer	-	-	0.05	Mid yellow-brown silt-clay subsoil	
302	Fill	-	0.5	0.5	Fill of [303]	
303	Cut	-	0.5	0.5	Filled by (302)	
304	Layer	-	-	-	Light grey-yellow clay natural	

Table 4. Trench 4

<b>Trench 4</b> (Plates 4 and 5)						
<b>General Description</b>				<b>Orientation</b>		
Trench contained a single linear feature aligned NW-SE, parallel to SW field boundary.				E-W		
				<b>Average Depth (m)</b>		0.48
				<b>Width (m)</b>		1.70
				<b>Length (m)</b>		
50.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
400	Fill	>1	0.66	0.09	Dark grey-brown clay; above (401), fill of [402]. Excavated in sondage for 1m.	
401	Fill	>1	0.57	0.14	Mid grey-blue clay; below (400), fill of [402]	
402	Cut	>1	0.66 max	0.23	NW-SE linear, concave sides and base, parallel to SW field boundary; filled by (400) and (401)	
403	Layer	-	-	0.30	Dark grey-brown clay topsoil	
404	Layer	-	-	0.15	Mid grey-brown clay subsoil	
405	Layer	-	-	-	White-yellow clay natural	

Table 5. Trench 5

<b>Trench 5</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench was devoid of archaeology.				NNW-SSE		
				<b>Average Depth (m)</b>		0.40
				<b>Width (m)</b>		1.70
				<b>Length (m)</b>		
50.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
500	Layer	-	-	0.40	Dark grey-brown silt-sand topsoil	

501	Layer	-	-	-	Mid orange-yellow sand natural
-----	-------	---	---	---	--------------------------------

Table 6. Trench 6

<b>Trench 6</b>							
<b>General Description</b>				<b>Orientation</b>			
Trench was devoid of archaeology. The trench length was shortened due to the proximity of a fence.				<b>NE-SW</b>			
				<b>Average Depth (m)</b>		0.40	
				<b>Width (m)</b>		1.7	
		<b>Length (m)</b>		20.00			
<b>Contexts</b>							
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>		
600	Layer	-	-	0.40	Mid grey-brown sand-clay topsoil		
601	Layer	-	-	-	Mid orange-brown sand-clay natural		

Table 7. Trench 7

<b>Trench 7</b>							
<b>General Description</b>				<b>Orientation</b>			
Trench contained the remains of a breeze block wall. No archaeological features or deposits were uncovered.				<b>NE-SW</b>			
				<b>Average Depth (m)</b>		0.37	
				<b>Width (m)</b>		1.70	
		<b>Length (m)</b>		50.00			
<b>Contexts</b>							
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>		
700	Layer	-	-	0.20	Dark grey clay topsoil		
701	Layer	-	-	-	Mid orange-brown clay natural		
702	Structure	2.0	0.1	-	Modern breeze block wall		

Table 8. Trench 8

<b>Trench 8</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench contained modern rubble. No archaeological features or deposits were uncovered.				NW-SE		
				<b>Average Depth (m)</b>		0.36
				<b>Width (m)</b>		1.7
<b>Length (m)</b>		20.00				
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
800	Layer	-	-	0.30	Mid grey-brown clay topsoil	
801	Layer	-	-	-	Mid orange-brown clay natural	

Table 9. Trench 9

<b>Trench 9</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench contained modern land drains. No other archaeological features or deposits were uncovered.				NE-SW		
				<b>Average Depth (m)</b>		0.45
				<b>Width (m)</b>		1.70
<b>Length (m)</b>		50.00				
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
900	Layer	-	-	0.32	Mid grey clay topsoil	
901	Layer	-	-	-	Mid orange-brown sand-clay natural	

Table 10. Trench 10

<b>Trench 10 (Plate 6)</b>			
<b>General Description</b>		<b>Orientation</b>	
Trench was devoid of archaeology.		NNW-SSE	
		<b>Average Depth (m)</b>	0.45
		<b>Width (m)</b>	1.70

					<b>Length (m)</b>	50.00
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1000	Layer	-	-	0.34	Mid grey clay topsoil	
1001	Layer	-	-	-	Mid brown sand-clay natural	

Table 11. Trench 11

<b>Trench 11 (Plate 7)</b>						
<b>General Description</b>					<b>Orientation</b>	NNW-SSE
Trench contained the remains of a modern wall. No archaeological features or deposits were uncovered.					<b>Average Depth (m)</b>	0.50
					<b>Width (m)</b>	1.70
					<b>Length (m)</b>	50.00
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1100	Layer	-	-	0.30	Dark-grey clay topsoil	
1101	Layer	-	-	0.15	Mid brown clay natural	
1102	Structure	-	-	-	Modern brick wall	

Table 12. Trench 12

<b>Trench 12 (Plate 8)</b>						
<b>General Description</b>					<b>Orientation</b>	NW-SE
Modern field drain or soak-away in north-western end of trench, no archaeology present.					<b>Average Depth (m)</b>	0.50
					<b>Width (m)</b>	1.7
					<b>Length (m)</b>	50.00
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	

1200	Layer	-	-	0.29	Mid grey clay topsoil
1201	Layer	-	-	0.19	Mid grey-brown clay subsoil
1202	Layer	-	-	-	Mid yellow-brown clay-sand natural

Table 13. Trench 13

<b>Trench 13</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench was devoid of archaeology.				E-W		
				<b>Average Depth (m)</b>		0.36
				<b>Width (m)</b>		1.70
				<b>Length (m)</b>		50.00
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1300	Layer	-	-	0.30	Mid grey clay topsoil	
1301	Layer	-	-	-	Mid orange-brown clay natural	

Table 14. Trench 14

<b>Trench 14</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench was devoid of archaeology.				NE-SW		
				<b>Average Depth (m)</b>		0.50
				<b>Width (m)</b>		2.00
				<b>Length (m)</b>		50.00
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1400	Layer	-	-	0.30	Mid grey-brown clay topsoil	
1401	Layer	-	-	0.17	Mid grey-brown clay subsoil	
1402	Layer	-	-	-	Mid orange-brown clay natural	

Table 15. Trench 15

<b>Trench 15</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench cut across E-W bank yet was devoid of archaeology.				NNW-SSE		
				<b>Average Depth (m)</b>		0.45
				<b>Width (m)</b>		1.70
				<b>Length (m)</b>		
50.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1500	Layer	-	-	0.36	Mid grey-brown sand-clay topsoil	
1501	Layer	-	-	-	Mid orange-brown sand-clay natural	

Table 16. Trench 16

<b>Trench 16 (Plate 9)</b>						
<b>General Description</b>				<b>Orientation</b>		
Trench was devoid of archaeology.				NE-SW		
				<b>Average Depth (m)</b>		0.60
				<b>Width (m)</b>		1.7
				<b>Length (m)</b>		
50.00						
<b>Contexts</b>						
<b>Context No</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Comment</b>	
1600	Layer	-	-	0.36	Mid grey-brown clay topsoil	
1601	Layer	-	-	0.29	Mid grey-brown clay subsoil	
1602	Layer	-	-	-	Mid orange-brown clay natural	

## 6 Environmental Record

One bulk environmental sample from the fill (302) of pit 303 was processed by ASWYAS using a Siraf-style water flotation system (French 1971), a 300 micron sieve and a 1mm mesh. The flot was dried before examination under a low power binocular microscope

typically at x10 magnification. The retent was sorted by eye, and scanned with a magnet in order to retrieve any hammerscale.

The flot contains no charred cereals, chaff or weed seeds, but small undiagnostic fragments of wood charcoal are present. Modern plant material, including rootlets were noted. The retent contained no artefacts, ecofacts or hammerscale and has been discarded. The flot will be retained as part of the site archive, but no further analysis is required.

## **7 Discussion and Conclusions**

The archaeological trial trenching confirmed the findings of the geophysical survey, in that no significant archaeological remains or deposits were observed. The potential for Anglo-Scandinavian settlement activity suggested by historical field names was not identified and the evaluation did not find any activity relating to local cropmarks, attributed to the later prehistoric and Romano-British periods.



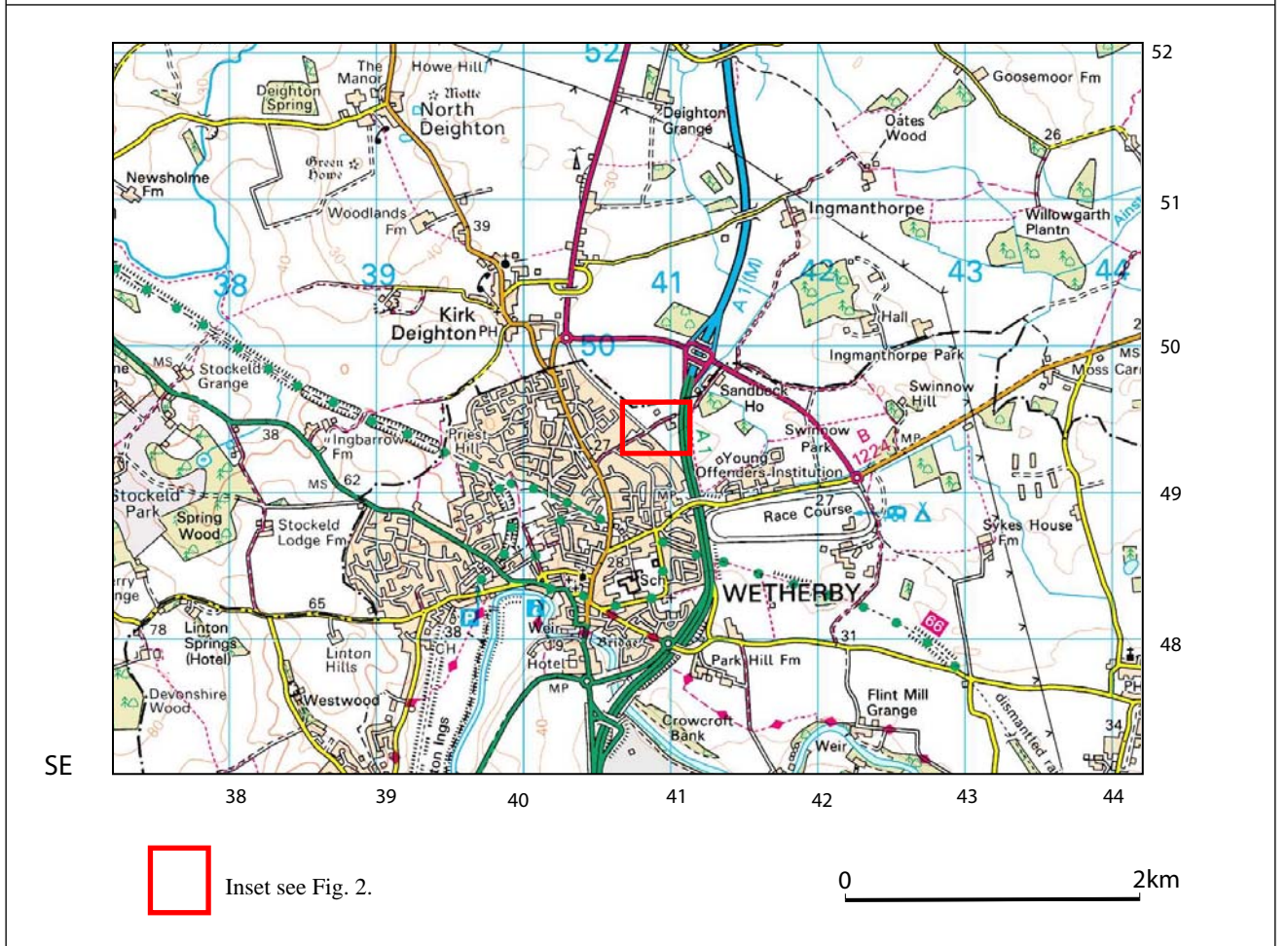
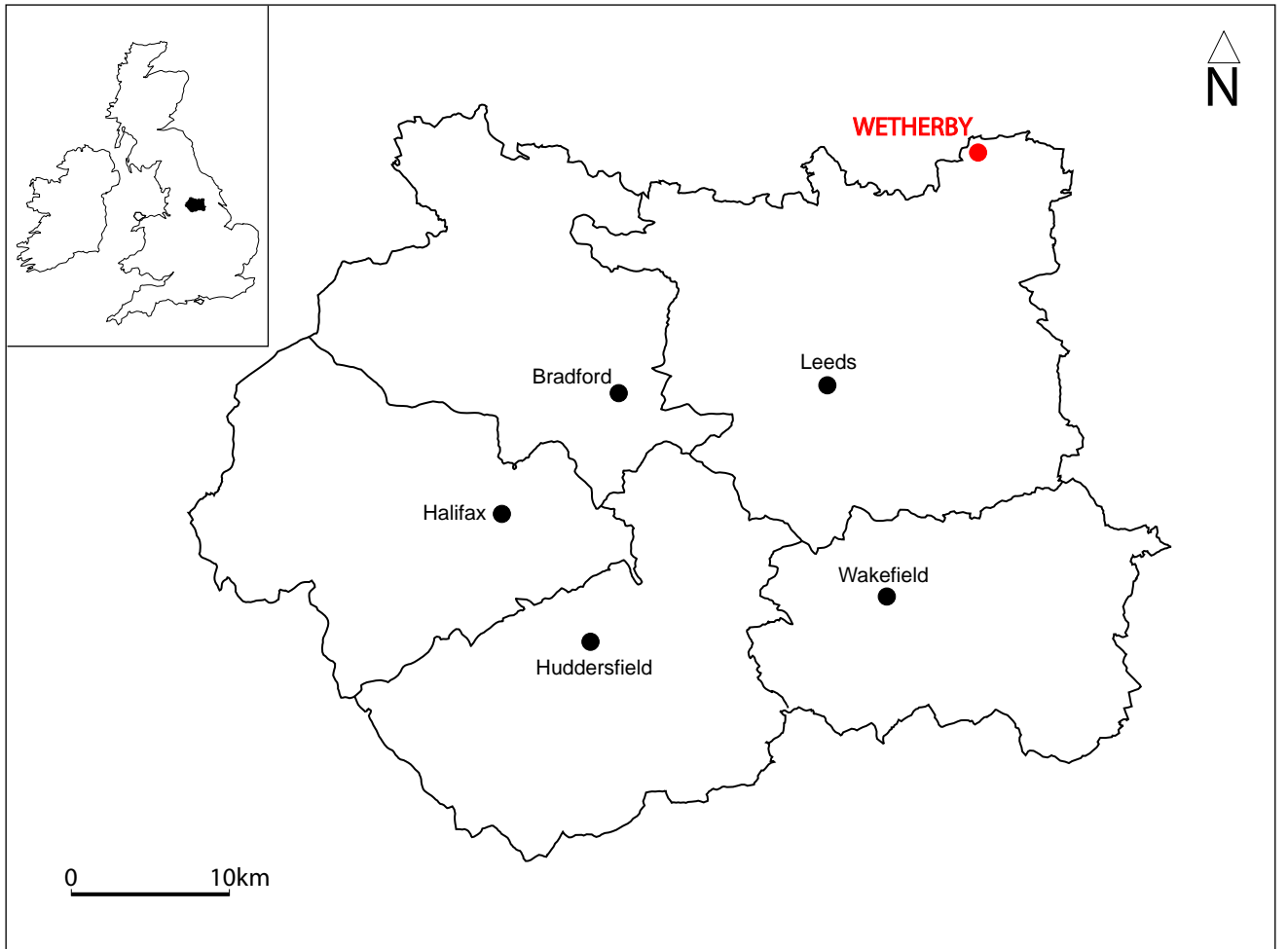


Fig. 1. Site location

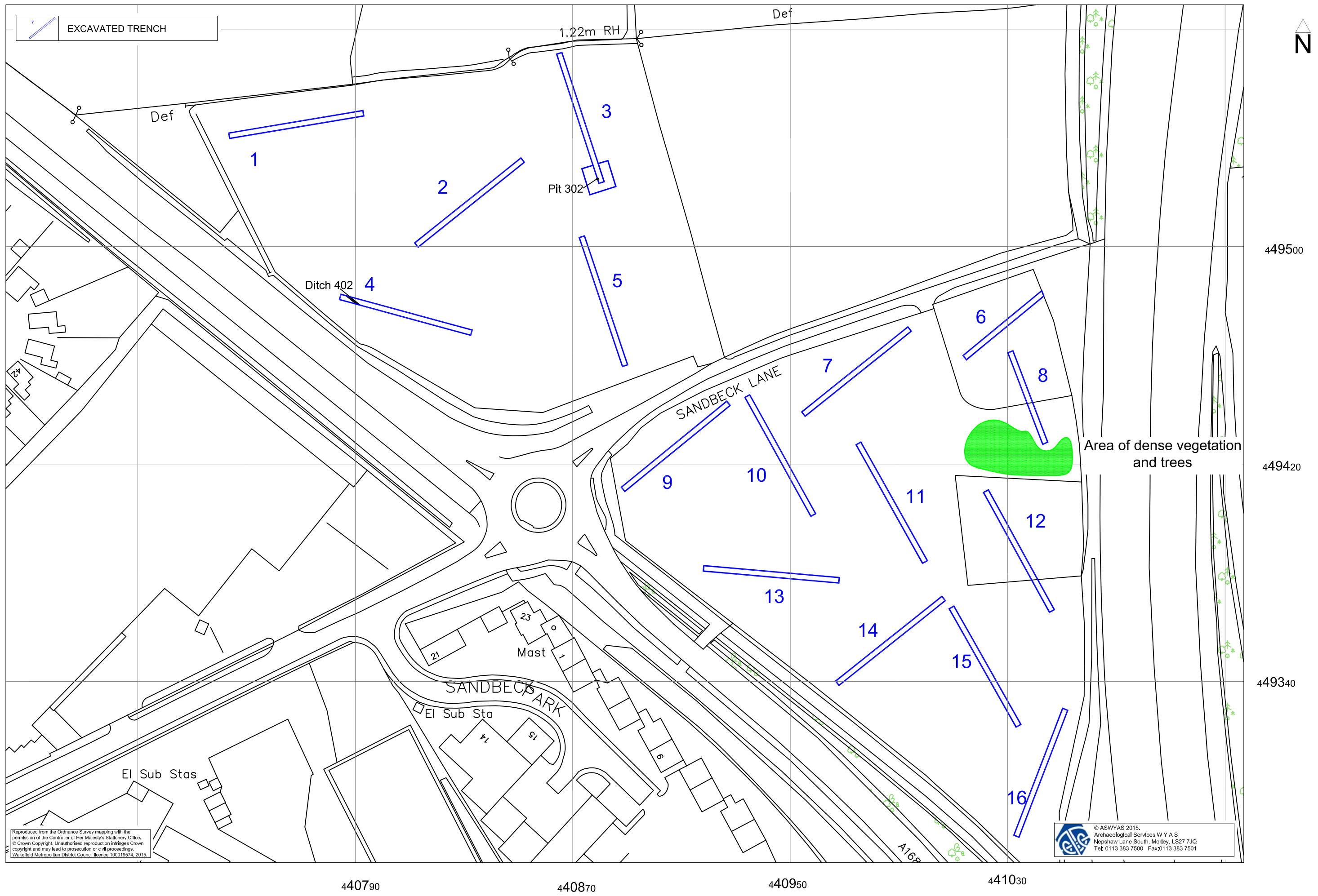


Fig. 2. Site location showing position of excavated evaluation trenches (1:1250 @ A3)

0 40m

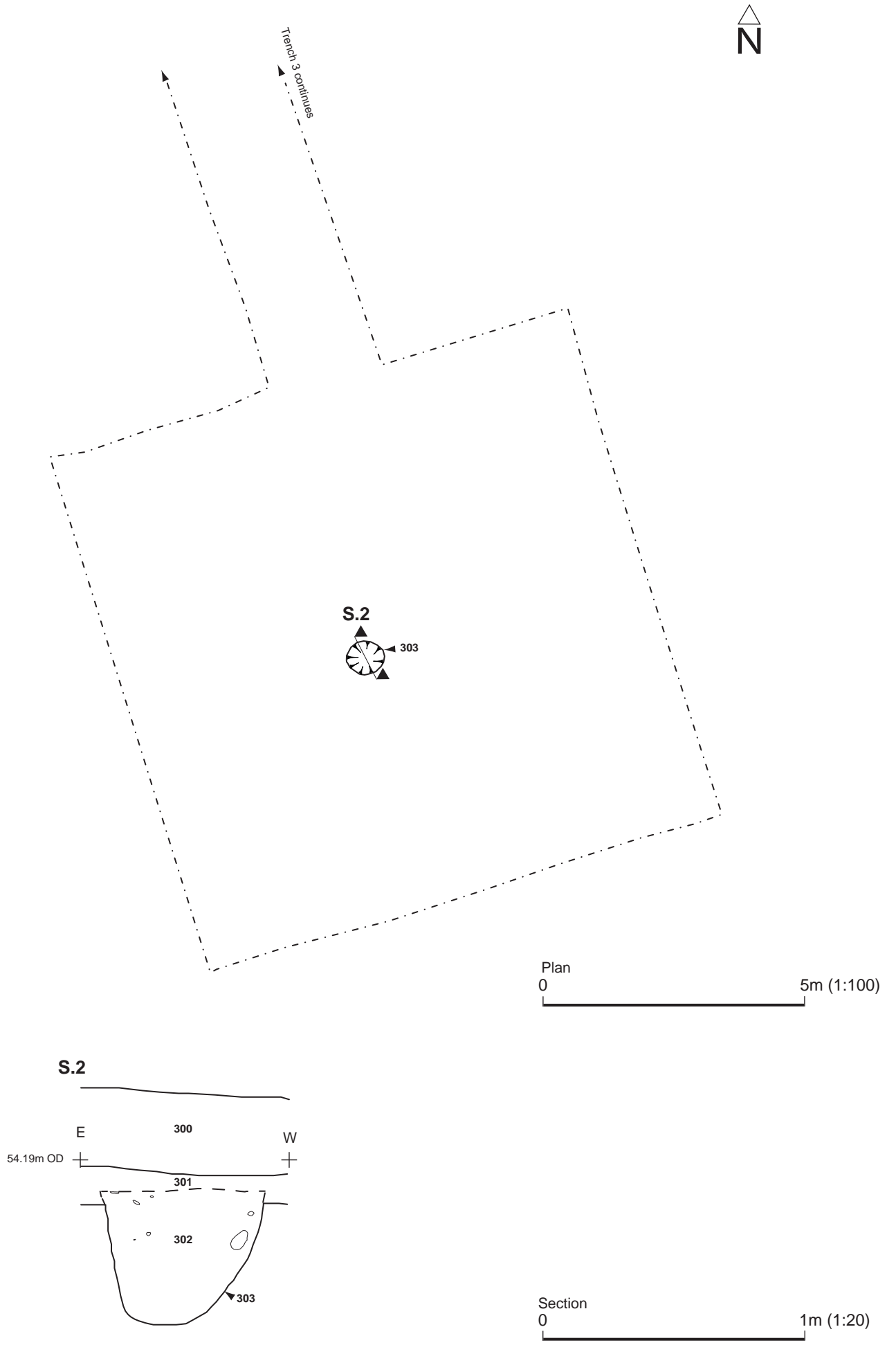


Fig. 3. Trench 3. Plan and section



*Plate 1. Trench 1, looking south*



*Plate 2. Trench 3, looking north-west*



*Plate 3. Trench 3, showing Pit 302, looking south-west*



*Plate 4. Trench 4, looking south-east*



*Plate 5. Trench 4, showing ditch 402, looking west*



*Plate 6. Trench 10, looking north-west*



*Plate 7. Trench 11, showing modern wall, looking south-east*



*Plate 8. Trench 12, showing modern drain, looking south-east*



*Plate 9. Trench 16, looking north-east*

**Appendix 1: Specification for Pre-determination Trial Trenching**

**WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE (WYAAS):  
SPECIFICATION FOR PRE-DETERMINATION TRIAL TRENCHING TO EVALUATE  
AND RECORD ARCHAEOLOGICAL REMAINS IN ADVANCE OF DEVELOPMENT  
AT SANDBECK LANE, WETHERBY (SE 40970 49480)**

**Specification prepared on behalf of Leeds City Council at the request of Ms Nansi Rosenberg of Prospect Archaeology (Planning Application reference 15/03206/FU)**

## **1.0 Summary**

1.1 A limited amount of archaeological work consisting trial trenching is proposed to help establish the archaeological significance of the above site. Any work arising from the results of the evaluation will be covered by a further specification.

1.2 This specification has been prepared by the West Yorkshire Archaeology Advisory Service, the holders of the WY Historic Environment Record

NOTE: The requirements detailed in paragraphs 6.2, 6.3, 6.4, 6.5 and 9.1 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

## **2.0 Site Location & Description**

### **Grid Reference (centred): SE 40970 49480**

2.1 The application site is located to the north and south of Sandbeck Lane. The A1(M) is to the immediate east of the site and Wetherby c. 1.3km to the south west. The development areas comprise two uncultivated fields with a combined area of c. 4.1ha. The northern field slopes down to the north from Sandbeck Lane whilst the southern field rises to the south. The north-east corner of this field also contains an area of rougher ground and young trees. Sandbeck Lane has a sinuous course and a possible medieval headland was noted to its north in the field to the east of the proposed development site.

The underlying geology comprises undifferentiated Permian rocks comprising mudstones, siltstone and sandstone and overlain by river terrace deposits of sands and gravels.

The site lies in the historic township of Wetherby.

## **3. Background**

3.1 A planning application 15/03026/FU for a development comprising 113 dwellings has been submitted to Leeds City Council by Barratt David Wilson Homes/Wetherby Park Limited.

3.2 The Planning Authority have been advised by the WYAAS that there is reason to believe that important archaeological remains may be affected by the proposed

development and that an archaeological evaluation is required to establish the significance and the degree of archaeological recording that may be necessary.

3.3 This specification has been prepared by the WYAAS at the request of Nansi Rosenberg of Prospect Archaeology (Prospect House, Garden Lane Sherburn-in-Elmet Leeds, LS25 6AT Tel.: 01977 681885), acting on behalf of the applicants, to detail what is required for the evaluation and to allow an archaeological contractor to provide a quotation.

#### **4. Archaeological Interest**

4.1 The proposed development site lies in an area of known archaeological potential demonstrated by crop marks observed from aerial photography. Three examples recorded in the West Yorkshire Historic Environment Record include crop marks of rectilinear enclosures 1.5km to the east at Ingmanthorpe Farm (PRN 4127) and a similar distance to the west at Kingmanthorpe Farm (North Yorkshire PRN 5225) and south of Wetherby at Sweep Farm (PRN 4073). A variety of features are present at these sites ranging from presumed burial mounds and ditched track ways through sinuous boundaries to rectangular and "D" shaped enclosures around settlements and field systems. The crop marks illustrate the general character of the area during the later prehistoric and Romano British periods.

The applicant has carried out an archaeological geophysical survey of the development site. This shows the land to have been cultivated in narrow strips during the medieval and post medieval periods. Very limited archaeological evaluation during the 1990s in advance of construction of the A1M confirmed the presence of ridge and furrow cultivation to the west of the A1(M) (PRN 7674). In addition a number of features of uncertain origin were detected by the applicant's geophysical survey. However, it is possible that underlying geology and both medieval and 20<sup>th</sup> century cultivation mask early activity.

Historically the parcel of land south of Sandbeck Lane was identified as Hall Close and Audby Close (West Yorkshire Historic Environment Record PRN 5181, Class III Area of Archaeological Interest). It is thought that these field names, and in particular Audby Close, may record the location of an earlier settlement or farmstead (Aud is derived from *Aid*: the elements *Aid* and *-by* are Norse, specifically Danish, and refer to an 'Old farm', or settlement (Smith A H Place Names of the West Riding of Yorkshire (8 vols) 1963 V, 38). The northern development site lies in an area known as Eel Mires and is suggestive of formerly marshy land. That Sandbeck Lane marked the edge of cultivation during the medieval is strongly suggested by this and the results of the geophysical survey.

Although earlier archaeological activity has not been detected by the geophysical survey the site lies in an area of high archaeological potential (as demonstrated by archaeological excavation and crop marks recorded by aerial photography in the vicinity) and it is possible that medieval cultivation and 20<sup>th</sup> century road building has masked earlier activity.

#### **5. Aim of the Evaluation**



5.1 The aim of the evaluation is to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest. The information gained will allow the Planning Authority to make a reasonable and informed decision on the planning application as to whether archaeological deposits should be preserved in-situ, or more appropriately, be recorded prior to destruction (whether this be a summary record from a salvage excavation or watching brief, or a detailed record from full open area excavation).

## 6. General Instructions

### 6.1 Health and Safety

6.1.1 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Where archaeological work is carried out at the same time as the work of other contractors, regard should also be taken of any reasonable additional constraints that these contractors may impose. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. The West Yorkshire Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries that may occur to outside contractors while attempting to conform to this specification.

### 6.2 Confirmation of Adherence to Specification

6.2.1 Prior to the commencement of *any work*, the archaeological contractor must confirm adherence to this specification in writing to the WYAAS, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the WYAAS to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor. **Modifications presented in the form of a re-written specification/project design will not be considered by the WYAAS.** Any technical queries arising from the specification detailed below should be addressed to the WYAAS *without delay*.

### 6.3 Confirmation of Timetable and Contractors' Qualifications

6.3.1 Prior to the commencement of *any work*, the archaeological contractor **must** provide WYAAS **in writing** with:

- a projected timetable for the site work;
- details of the staff structure and numbers;
- names and CVs of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors *etc.*),

6.3.2 All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

### 6.4 Notification

6.4.1 The project will be monitored as necessary and practicable by the WYAAS, in its role as "curator" of the region's archaeology. The WYAAS should receive as much

notice as possible, and certainly one week, of the intention to start fieldwork. This notification is to be supplied **in writing**, and copied to the relevant District Museum (see para. 9.1 below), Historic England's Science Adviser Dr Andy Hammon should also be notified of the intention to commence fieldwork (contact : tel. 01904 601983; email Andy.Hammon@HistoricEngland.org.uk). A copy of the contractor's risk assessment should accompany notification of intention to commence work.

## 6.5 Documentary Research

6.5.1 Prior to the commencement of *fieldwork*, the WY HER should be visited by either the project manager or the site supervisor, in order to gain an overview of the archaeological/historical background of the site and its environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to that report, but any extraneous material should be omitted. Please note that the WY HER makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. Please note, however, that a formal desk-based report is not required and the results of this stage of work should be incorporated in the final report.

## 7. Fieldwork Methodology

### 7.1 Trench Size and Placement (Fig. 1)

7.1.1 The work will involve the excavation of 16 (sixteen) 2m x 50m trenches, which can be machine-opened. The contractor should also allow for a contingency amount of 400 square metres. The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of the WYAAS, whose decision will be issued in writing, if necessary in retrospect after site discussions. Proposed trench locations, which are based on the results of the geophysical survey, are shown on Figure 1.

Trench No	Dimensions (m)	Area (m <sup>2</sup> )
1	2 x 50	100
2	2 x 50	100
3	2 x 50	100
4	2 x 50	100
5	2 x 50	100
6	2 x 50	100
7	2 x 50	100
8	2 x 50	100
9	2 x 50	100
10	2 x 50	100
11	2 x 50	100
12	2 x 50	100
13	2 x 50	100
14	2 x 50	100
15	2 x 50	100
16	2 x 50	100

Total site area: **40100m<sup>2</sup>**

Total area of trenching: **1600m<sup>2</sup>**

Contingency trenching: **400m<sup>2</sup>**

## 7.2 Method of Excavation

7.2.1 The trial trenches may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a **maximum** 0.2m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. **Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.** All machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.

7.2.2 No archaeological deposits should be entirely removed unless this is unavoidable in achieving the objectives of this evaluation, although **all** features identified are expected to be half-sectioned and the **full** depth of archaeological deposits must be assessed. All trenches are to be the stated dimensions at their base.

7.2.3 All artefacts are to be retained for processing and analysis except for unstratified 20<sup>th</sup>-century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3<sup>rd</sup> edition).

## 7.3 Method of Recording

7.3.1 The trenches are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trial trench is to be recorded even where no archaeological deposits have been identified.

7.3.2 The actual areas of trenching and any features of possible archaeological concern noted within the trenches should be accurately located on a site plan and recorded by photographs, summary scale drawings and written descriptions sufficient to permit the preparation of a report on the material. The site grid is to be accurately tied into the National Grid and located on the largest scale map available of the area (either 1:2500 or 1:1250).

7.3.3 Except where otherwise requested, black and white photography using orthodox monochrome chemical development should be used. Film should be no faster than ISO400. Slower films should be used where possible as their smaller grain size yields higher definition images. Technical Pan (ISO 25), Pan-F (ISO50), FP4 (ISO125) and HP5 (ISO400) are recommended. The use of dye-based films such as Ilford XP2 and Kodak T40CN is unacceptable due to poor archiving qualities. Black and white photography should be supplemented by colour photography; this should be in transparency format (i.e. slides or digital photography as an acceptable alternative, see paragraph 7.3.4 below).

7.3.4 Digital photography: as an alternative for colour slide photography, good quality digital photography may be supplied, using cameras (not mobile phones) with a minimum resolution 8 megapixels. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied in three file formats (as a RAW data file, a DNG file and as a JPEG file). The

contractor must include metadata embedded in the DNG file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. **Any digital images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.**

#### **7.4 Use of Metal Detectors on Site**

7.4.1 Spoil heaps are to be scanned for both ferrous and non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (19<sup>th</sup>-century material and earlier should be retained.)

7.4.2 If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not. To avoid financial claims under the Treasure Act a suggested wording for this formal agreement with the metal detectorist is: "In the process of working on the archaeological investigation at [*location of site*] between the dates of [*insert dates*], [*name of person contributing to project*] is working under direction or permission of [*name of archaeological organisation*] and hereby waives all rights to rewards for objects discovered that could otherwise be payable under the Treasure Act 1996."

#### **7.5 Environmental Sampling Strategy**

7.5.1 Bulk samples must be taken from **all** securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) 'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)' guidance.

7.5.2 Samples for scientific dating (radiocarbon dating, archaeomagnetic dating etc.) should be taken if suitable material is encountered during the excavation. The Historic England Science Advisor should be consulted (Dr Andy Hammon, tel.: 01904 601983, email: Hndy.Hammon@HistoricEngland.org.uk) and provision should be made for an appropriate specialist(s) to visit the site, take samples and discuss the sampling strategy, if necessary.

#### **7.6 Conservation Strategy**

7.6.1 A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving museum. As a guiding principle only artefacts of a "displayable" quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be X-rayed if necessary, and conservation costs should also be included as a contingency.

## **7.7 Location of Services, etc.**

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

## **7.8 Human Remains**

7.8.1 Any human remains that are discovered must initially be left *in-situ*, covered and protected. WYAAS will be notified at the earliest opportunity. If removal is necessary the remains must be excavated archaeologically in accordance with the *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* published by English Heritage (2005), a valid Ministry of Justice licence and any local environmental health regulations.

## **7.9 Treasure Act**

7.9.1 The terms of the Treasure Act 1996, as amended, must be followed with regard to any finds that might fall within its purview. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the "Code of Practice". Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

## **8. Monitoring**

8.1 The representative of the WYAAS will be afforded access to the site at any reasonable time. It is usual practice that the visit is arranged in advance, but this is not always feasible. The WYAAS' representative will be provided with a site tour and an overview of the site by the senior archaeologist present and should be afforded the opportunity to view all trenches, any finds made that are still on site, and any records not in immediate use. It is anticipated that the records of an exemplar context that has previously been fully recorded will be examined. Any observed deficiencies during the site visit are to be made good to the satisfaction of the Advisory Service's representative, by the next agreed site meeting. Access is also to be afforded at any reasonable time to Historic England's Archaeological Science Advisor.

8.2 Please note that WYAAS now make a charge for site monitoring visits. An invoice will be raised on the archaeological contractor. One monitoring visit will be charged for this project. Please contact us for the current charge.

## **9. Archive Deposition**

9.1 Before commencing any fieldwork, the archaeological contractor must contact the relevant District museum archaeological curator to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Katherine Baxter at Leeds City Museums and Arts, (Leeds Museum Discovery Centre Carlisle Road, Hunslet, Leeds, LS10 1LB Tel.: 0113 2305492; email: [katherine.baxter@leeds.gov.uk](mailto:katherine.baxter@leeds.gov.uk)). Deposition should be confirmed in writing by the archaeological contractor; this correspondence is to be copied to the WYAAS.

**9.2** It is the policy of Leeds City Museums to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District that it serves.

**9.3** It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with Leeds City Museums.

**9.4** It is the responsibility of the archaeological contractor to meet Leeds City Museums' requirements with regard to the preparation of excavation archives for deposition.

## **10. Unexpectedly Significant or Complex Discoveries**

10.1 Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgement of the archaeologist on site, more detailed recording than is appropriate within the terms of this specification, then the archaeological contractor should urgently contact the WYAAS with the relevant information to enable them to resolve the matter with the developer.

## **11. Post-Excavation Analysis and Reporting**

### **11.1 Finds and Samples**

11.1.1 On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed/analysed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines.

11.1.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues, shell, molluscs, charcoal and mineralised plant remains as a minimum. 'Specialist' samples (e.g. monoliths, cores, plant/invertebrate macrofossils) should be processed separately as appropriate.

11.1.3 Material suitable for scientific dating (e.g. charcoal) should be identified to species and assessed for suitability by an environmental specialist prior to submission to a dating laboratory. Any human remains submitted for C14 dating should also have carbon ( $\delta 13C$ ) and nitrogen isotope analysis carried out by the radiocarbon laboratory.

11.1.4 All finds and biological material must be analysed by a qualified and experienced specialist.

11.1.5 Following identification, finds of 20<sup>th</sup>-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19<sup>th</sup> century or earlier date should be retained and archived.

### **11.2 Field Archive**

11.2.1 A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints/slides. Standards for archive compilation and transfer should conform to those outlined in Archaeological Archives – a guide to best practice in

creation, compilation, transfer and curation (Archaeological Archives Forum, 2007). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).

11.2.2 Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters detail or perspective). **All digital prints, including those presented in the report, must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability.** Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.

11.2.3 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 8.4 above). In the absence of this agreement the field archive (less finds) is to be deposited with the West Yorkshire Archaeology Advisory Service.

### 11.3 Report Format and Content

11.3.1 A report should be produced, which should include background information on the need for the project, a description of the methodology employed, and a full description and interpretation of results produced. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers.

11.3.2 Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn.

11.3.3 Artefact analysis is to include the production of a descriptive catalogue, quantification by context and discussion/interpretation if warranted, with finds critical for dating and interpretation illustrated.

11.3.4 Environmental analysis is to include identification of the remains, quantification by context, discussion/interpretation if warranted, and a description of the processing methodology. Radiocarbon results must be presented in full (laboratory sample number, conventional radiocarbon age, delta C13 value, calibration programme). Copies of the laboratory-issued dating certificates must be included as an appendix to the report.

11.3.5 Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

#### **11.4 Summary for Publication**

11.4.1 The attached summary sheet should be completed and submitted to the WYAAS for inclusion in the summary of archaeological work in West Yorkshire published on WYAAS' website.

#### **11.5 Publicity**

11.5.1 If the project is to be publicised in any way (including media releases, publications etc.), then it is expected that the WYAAS will be given the opportunity to consider whether it wishes its collaborative role to be acknowledged, and if so, the form of words used will be at the WYAAS' discretion.

#### **11.6 Consideration of Appropriate Mitigation Strategy**

11.6.1 The report should not give a judgement on whether preservation or further investigation is considered appropriate, but should provide an interpretation of results, placing them in a local and regional, and if appropriate, national context. However, a client may wish to separately commission the contractor's view as to an appropriate treatment of the resource identified.

#### **11.7 Report Submission and Deposition with the WY HER**

11.7.1 **A hard copy of the report (plus a digital copy on gold disk) is to be supplied directly to the WYAAS, in a timely manner to allow further work, if necessary, to be scheduled and the planning application to be determined in an informed manner, and certainly within a period of two months following completion of fieldwork** so as not to delay a planning decision to be made, unless specialist reports are awaited. In the latter case a revised date should be agreed with the WYAAS. Completion of this project and advice from WYAAS on an appropriate mitigation strategy are dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.

11.7.2 The report will be supplied on the understanding that it will be added to the West Yorkshire Historic Environment Record where it will be publicly accessible once deposited with the WYAAS unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.

11.7.3 A copy of the final report (in .pdf format) shall also be supplied to Historic England's Science Advisor (Andy Hammon, Historic England, 37 Tanner Row, York YO1 6WP Andy.Hammon@HistoricEngland.org.uk).

11.7.4 Copyright - Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright, Designs and Patents Act 1988* (chapter IV, section 79). The permission will allow



the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.

11.7.5 The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

## **12. General Considerations**

### **12.1 Authorised Alterations to Specification by Contractor**

12.1.1 It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the WYAAS. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that:

- i) a part or the whole of the site is not amenable to evaluation as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results,

then it is expected that the archaeologist will contact the WYAAS as a matter of urgency. If contractors have not yet been appointed, any variations which the WYAAS considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, the WYAAS will resolve the matter in liaison with the developer and the Local Planning Authority.

### **12.2 Unauthorised Alterations to Specification by Contractor**

12.2.1 It is the archaeological contractor's responsibility to ensure that they have obtained the WYAAS' consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in the WYAAS being unable to recommend determination of the planning application to the Local Planning Officer based on the archaeological information available and are therefore made solely at the risk of the contractor.

### **12.3 Technical Queries**

12.3.1 Similarly, any technical queries arising from the specification detailed above, should be addressed to the WYAAS without delay.

## **12.4 Valid Period of Specification**

12.4.1 This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

**David Hunter**  
**West Yorkshire Archaeology Advisory Service**

**August 2015**

WY Historic Environment Record  
West Yorkshire Archaeology Advisory Service  
Registry of Deeds  
Newstead Road  
Wakefield  
WF1 2DE

Telephone: (01924) 306798  
Fax: (01924) 306810  
E-mail: [dhunter@wyjs.org.uk](mailto:dhunter@wyjs.org.uk)

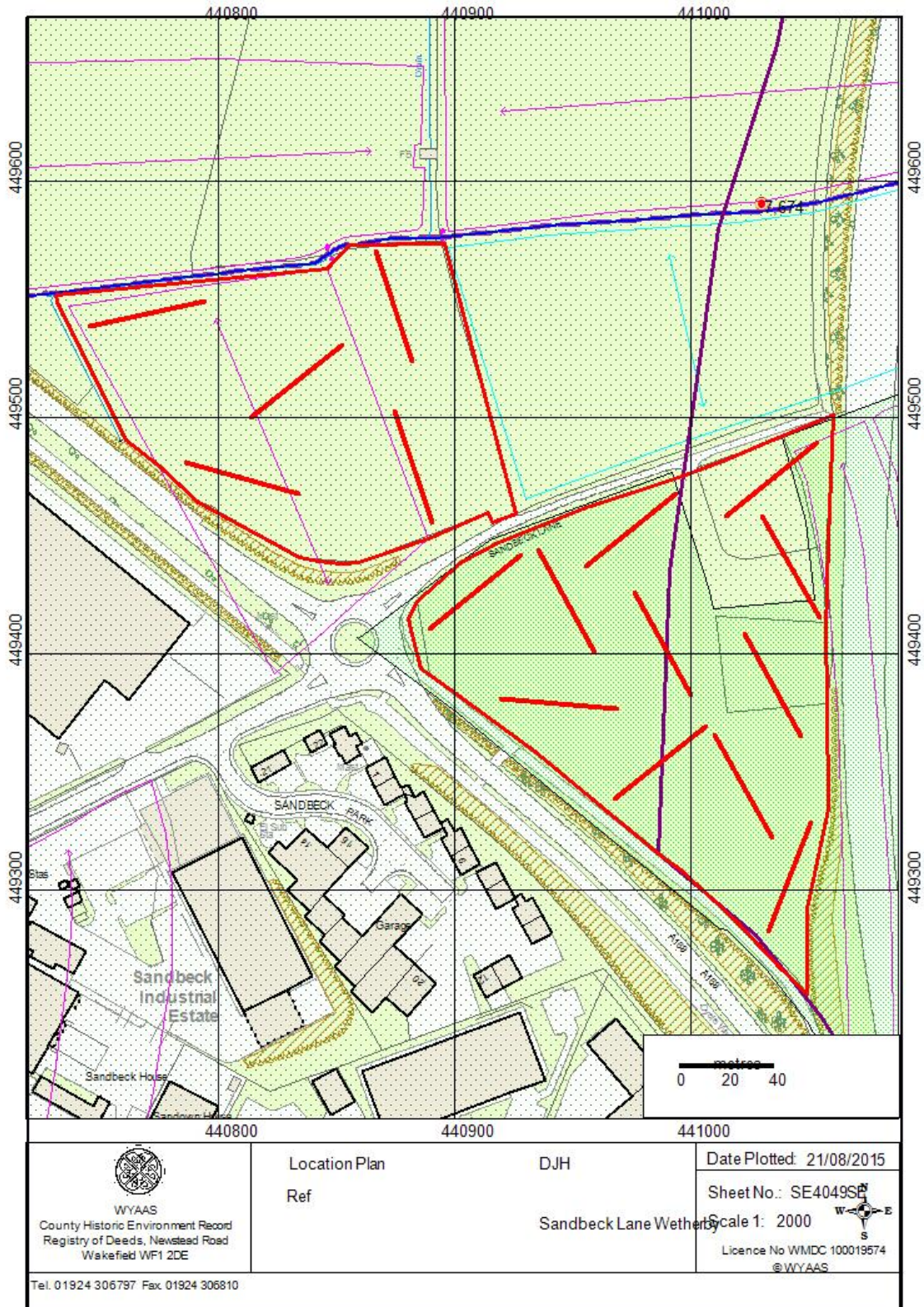


Fig. 1 Site and trench location plan

**Appendix 2: Inventory of primary archive**

Phase	File/Box No	Description	Quantity
Evaluation	File no.1	Context register sheets	1
		Drawing register sheets	1
		Photo register sheets	2
		Context sheets	7
		Trench sheets	16

**Appendix 3: Concordance of contexts yielding artefacts or environmental remains**

Context	Trench	Description	Artefacts and environmental samples
302	3	Fill of Pit [303]	GBA1

## **Bibliography**

- ASWYAS, 2010, Archaeological Recording Manual, ASWYAS (unpubl.)
- BGS, 2015, <http://www.bgs.ac.uk/opengeoscience/home.html?Accordion2=1#maps>  
(accessed September 2015)
- Chartered Institute for Archaeologists, 2014, *Standard and Guidance for Archaeological Evaluation*
- English Heritage, 1991, *Management of Archaeological Projects*, London
- English Heritage, 2008, *Management of Research Projects in the Historic Environment, (MoRPHE), PPN3: Archaeological Excavation*
- French, D.H., 1971, 'An Experiment in Water Sieving', *Anatolian Studies* 21 59-64
- Soil Survey of England and Wales, 1983. *Soils of Northern England Sheet 1*
- Tanner, J., 2014, *Sandbeck Lane, Wetherby Geophysical Survey Report*, GSB Prospection Ltd. report G1532