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**ARCHAEOLOGICAL SOLUTIONS LTD**

**PHASE 1, LAND AT WHEATCROFT FARM, BRADWELL, NORFOLK**

**ARCHAEOLOGICAL ASSESSMENT AND  
UPDATED PROJECT DESIGN**

**NHER: ENF130238**

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NGR: TG 5073 0302	Report No: 4976	
District: Great Yarmouth	Site Code: ENF130238	
Approved: Claire Halpin CMIfA	Project No: 4837	
Signed:	Date: 29/10/2015	

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**OASIS SUMMARY SHEET**

<b>Project details</b>			
Project name	<i>Phase 1, Land at Wheatcroft Farm, Bradwell, Norfolk</i>		
<i>In August 2014 Archaeological Solutions Ltd (AS) carried out an archaeological excavation at Wheatcroft Farm, Bradwell, Great Yarmouth, Norfolk. The project was undertaken in advance of the residential development of the site and was preceded by a geophysical survey, a desk-based assessment, field walking and an archaeological trial trench evaluation. Based on known sites/ find spots in the area and the results of earlier work the site was considered to have good archaeological potential, particularly for remains of prehistoric and Saxo-Norman/ medieval date.</i>			
<i>In the event, the excavation predominantly encountered features and contexts dating to the Saxo-Norman and medieval/ post-medieval periods, collectively spanning the 10<sup>th</sup> to 17<sup>th</sup> centuries AD. Most of the encountered features dated between the 10<sup>th</sup> and 14<sup>th</sup> centuries AD and included a complex rectilinear system of enclosures and a kiln (probably agricultural in nature). A second kiln and features consistent with a windmill mound were dated to the High medieval to post-medieval period. Sparse evidence of prehistoric (early Neolithic) and early modern/ modern activity was also encountered.</i>			
Project dates (fieldwork)	August 2014		
Previous work (Y/N/?)	Y	Future work	TBC
P. number	4837	Site code	ENF130238
Type of project	Archaeological Excavation		
Site status	None		
Current land use	Agricultural Fields		
Planned development	Residential		
Main features (+dates)	<i>Early Neolithic: Pit</i> <i>Saxo-Norman to High medieval: Post-built structure; kiln; ditches/ gullies</i> <i>High medieval to post-medieval: Windmill; kiln; ditches/ gullies</i>		
Significant finds (+dates)	<i>Early Neolithic: Struck flint</i> <i>Prehistoric: Pottery; struck flint</i> <i>Saxo-Norman to High medieval: Pottery; whetstone</i> <i>High medieval to post-medieval: Pottery; whetstone</i>		
<b>Project location</b>			
County/ District/ Parish	Norfolk	Great Yarmouth	Bradwell
HER/ SMR for area	Norfolk Historic Environment Record		
Post code (if known)	-		
Area of site	c. 75ha		
NGR	TG 5073 0302		
Height AOD (min/max)	c. 10-12m		
<b>Project creators</b>			
Brief issued by	Norfolk County Council Historic Environment Service		
Project supervisor/s (PO)	Laszlo Litchenstein		
Funded by	Persimmons Homes (Anglia) Ltd		
Full title	Phase 1, Land at Wheatcroft Farm, Bradwell, Norfolk. Archaeological Assessment and Updated Project Design		
Authors	Bull, K. and Mustchin, A.R.R.		
Report no.	4976		
Date (of report)	29 October 2015		

## PHASE 1, LAND AT WHEATCROFT FARM, BRADWELL, NORFOLK

### ARCHAEOLOGICAL ASSESSMENT AND UPDATED PROJECT DESIGN

#### PART I: ARCHAEOLOGICAL ASSESSMENT

##### **SUMMARY**

*In August 2014 Archaeological Solutions Ltd (AS) carried out an archaeological excavation at Wheatcroft Farm, Bradwell, Great Yarmouth, Norfolk. The project was undertaken in advance of the residential development of the site and was preceded by a geophysical survey, a desk-based assessment, field walking and an archaeological trial trench evaluation. Based on known sites/ find spots in the area and the results of earlier work the site was considered to have good archaeological potential, particularly for remains of prehistoric and Saxo-Norman/ medieval date.*

*In the event, the excavation predominantly encountered features and contexts dating to the Saxo-Norman and medieval/ post-medieval periods, collectively spanning the 10<sup>th</sup> to 17<sup>th</sup> centuries AD. Most of the encountered features dated between the 10<sup>th</sup> and 14<sup>th</sup> centuries AD and included a complex rectilinear system of enclosures and a kiln (probably agricultural in nature). A second kiln and features consistent with a windmill mound were dated to the High medieval to post-medieval period. Sparse evidence of prehistoric (early Neolithic) and early modern/ modern activity was also encountered.*

## **1 INTRODUCTION**

1.1 In August 2014 Archaeological Solutions Ltd (AS) carried out an archaeological excavation at Wheatcroft Farm, Bradwell, Great Yarmouth, Norfolk (NGR TG 5073 0302; Figs. 1-2). The excavation was commissioned by Persimmons Homes (Anglia) Ltd and was undertaken in compliance with a planning condition attached to planning approval for the proposed residential development of the site. The project was required by Great Yarmouth District Council (Planning Ref. 06/13/0652/O), based on advice from Norfolk County Council Historic Environment Service (NCC HES). The archaeological excavation of the site was preceded by a geophysical survey by Stratascan Ltd (Smalley 2013), a desk-based assessment, field walking and an archaeological trial trench evaluation, conducted by AS (Egan 2012; Fairclough 2014; Thompson 2013).

1.2 The project was carried out in accordance with a brief issued by NCC HES (dated 01/04/2014), and a specification compiled by AS (dated 24/04/2014) and approved by NCC HES. It conformed to the Institute for Archaeologists' (2013) *Standard and Guidance for Archaeological Excavation* and relevant sections of Gurney's (2003) *Standards for Field Archaeology in the East of England*.

1.3 This document is presented in two parts. Part I comprises the preliminary results of the archaeological fieldwork and contains detailed descriptions of the

encountered features and deposits. Specialist artefact and environmental analyses are presented in Section 11. Part II of the document – the Updated Project Design – sets out the framework for post-excavation analysis, additional report writing and publication.

## **2 PROJECT AIMS AND OBJECTIVES**

2.1 The principal aim of the excavation was to preserve the archaeological evidence contained within the site by record and to attempt a reconstruction of the history and use of the site. Specific research priorities, as presented in Section 5.2 of the specification were to:

- place the Anglo-Saxon and medieval activity [identified by the trial trench evaluation] in context with the known activity of these dates in the surrounding area;
- characterise the activity present within the site;
- identify topographical/ geological/ geographical influences on the layout and development of the activity present within the current site and in the surrounding area; and
- attempt environmental reconstruction

### **Planning Policy Context**

2.2 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

2.3 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a

manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

### **3 THE SITE**

3.1 The village and civil parish of Bradwell is located immediately west of Great Yarmouth on the east coast of Norfolk, approximately 2.75km inland. Norwich lies some 27km to the west-north-west. The development site comprises an irregular plot of agricultural land (totalling c. 75ha) on the south-western edge of the village, bordered to the north-west by the modern A143 (DPs 1-2; Figs. 1-2). The site is delineated to the north by modern housing and the route of Clay Lane, while additional farmland exists to the east and south. The c. north to south route of Browston Lane runs through the westernmost part of the site.

### **4 TOPOGRAPHY, GEOLOGY AND SOILS**

4.1 The site occupies the gently undulating Norfolk coastal plain, some 2km inland and c. 5km east of the confluence of the Rivers Yare and Waveney. The site sits at approximately 10-12m AOD, above the solid geology of the Norwich Crag Formation, predominantly composed of fine-grained marine sands with some gravels and clays (British Geological Survey 1978). The site's soils are those of the Wick 3 Association, comprising 'deep well drained coarse loamy often stoneless. Some similar sandy soils. Complex pattern locally. Risk of water erosion' (Soil Survey of England and Wales 1983, 9). These soils are suitable for cereal cultivation (*ibid.*).

### **5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

#### **Prehistoric**

5.1 Considerable evidence of prehistoric occupation/ activity is known from the area. Among the earliest finds is a collection of Mesolithic struck flints recovered by fieldwalking some 250m east of the current site (NHER 59571). Local Neolithic activity is represented by additional fieldwalking finds (NHER 59571) while material from further afield includes a quartzite macehead from Belton (NHER 01478), c. 3km to the west and flint axe heads from Great Yarmouth and Gorleston-on-Sea, to the east (NHERs 10552 and 20357). Numerous Bronze Age features have been encountered in the vicinity, including cropmarks (possibly of this date) within a 1km radius of the site (NHERs 12777, 12779 and 43551). A possible Iron Age square barrow (NHER 45051) is located some 430m to the south of the site.

#### **Romano-British**

5.2 Romano-British evidence is relatively scarce from the area, although includes cropmarks of possible Roman date within the site and its immediate surroundings (NHERs 43467 and 43476). Local finds of this date include copper alloy coins of Constantine I or II and Vespasian (NHERs 10559 and 10560) and a 4<sup>th</sup> century Roman coin (NHER 12433), all from Gorleston-on-Sea.

## Anglo-Saxon to Medieval

5.3 Metal detecting has recovered a number of Anglo-Saxon finds, including a brooch, a book mount and a silver ingot (NHERs 18004, 21796 and 39556), all within a 250m of the development site. Various pieces of medieval metalwork, including coins (e.g. NHERs 18991, 18992 and 18993), a buckle (NHER 21795), a brooch (NHER 30084) and a lead seal matrix (NHER 19242) have also been found in the area. Neighbouring Gorleston-on-Sea and Browston are also recorded in the Domesday Book ([www.opendomesday.org](http://www.opendomesday.org)). The deserted medieval village of Browston is thought to be located in the vicinity of Browston Hall (NHER 11433), some 1.2km to the south of the site.

## Post-Medieval and Modern

5.4 Post-medieval evidence in the vicinity of the site includes Browston Hall (NHER 24633), some 1.2km to the south, Hobland House (NHER 42863) and Hobland Hall Park (NHER 56288) approximately 1km to the south-east. In addition, a number of local cropmarks are thought to relate to post-medieval field systems and trackways. A large corpus of records relates to the World War II landscape and includes the site of a high frequency direction finding station (NHER 42232), immediately east of the site and a gun emplacement (NHER 42230) c. 1km to the north-east.

## 6 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

6.1 The archaeological excavation was preceded by a desk-based assessment (Thompson 2013), fieldwalking (Egan 2012), geophysical survey (Smalley 2013), and a trial trench evaluation (Fairclough 2014). The results of the earlier fieldwork are summarised below:

### *Fieldwalking*

*'...fieldwalking recovered a total of 113 pieces (2085g) of struck flint. The assemblage includes part of a flaked axe, scrapers, blades and debitage of mixed prehistoric date and technology, ranging from the Mesolithic to the later Neolithic/early Bronze Age. The flint cores and tools from all prehistoric periods are broadly distributed in the southern, western and north-western sectors of the site. The bulk of the assemblage comprises debitage or waste flakes with limited diagnostic potential but their distribution again reflects the worked flint being located in the western, southern and northern sectors of the site.*

*A single sherd (20g) of late Bronze Age to early Iron Age pottery was recovered from Find Spot...145 on the far western side of the site. Sixteen abraded medieval...sherds were found on the western and eastern sides of the site and may be attributed to manuring'. (Egan 2012, 5)*



### Geophysical Survey (Figs. 3-4)

*'The geophysical survey...identified a number of features indicating the presence of prehistoric activity within the survey area. Rectilinear enclosures in the north western region of the site suggest the presence of Iron Age or prehistoric settlement or farmstead activity and two circular features may be related to prehistoric monuments'. (Smalley 2013, 4)*

### Trial Trench Evaluation (Fig. 4)

*'...archaeological features...were found within the northern half of the site. The range of features included pits, gullies and ditches with the latter being the most common...A kiln...was recorded in Trench 17.*

*...struck flint of Neolithic date was found in several features in Trenches 9, 15 and 16. These trenches are adjacent, and the lithic technology is consistent suggesting homogeneity.*

*...pottery dating to the late Saxon and medieval period was consistently found'. (Fairclough 2014, 4)*

## 7 METHODOLOGY

6.1 The brief required a 'strip, map and sample' investigation of the area around Evaluation Trenches 2, 3-4, 7-9 and 16-17 (Figs. 4-5). The site was stripped under close archaeological supervision and control using a mechanical 360° excavator fitted with a toothless ditching bucket. Thereafter, exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. The stripped areas were scanned by a metal detector and excavated spoil was searched for finds.

## 8 DESCRIPTION OF RESULTS

### Chronological Phasing

8.1 Four chronological phases of activity were interpreted at the site based on the stratigraphic sequence and diagnostic artefact assemblage (pottery and struck flint; Table 1; Figs. 6-10). The earliest finds from the site comprise Mesolithic microliths; however, no features of this date were present and the majority of the struck flints were present as residual material within later contexts. The earliest dated feature was a single pit containing a Neolithic flint sickle. The prehistoric evidence was indirectly followed by two overlapping phases of activity spanning the Saxo-Norman to post-medieval periods, while the latest phase was represented by a small number of early modern/ modern features. Some features that did not yield diagnostic material were phased based on their stratigraphic or spatial relationships with dated features, while a number of unphased features/ deposits were also encountered.

Phase	Period	Date
1	Early Neolithic	4300 to 3300 BC
2	Saxo-Norman to High Medieval	10 <sup>th</sup> to 13 <sup>th</sup> / 14 <sup>th</sup> century AD
3	High Medieval to Post-medieval	15 <sup>th</sup> to 17 <sup>th</sup> century AD
4	Early Modern/ Modern	18 <sup>th</sup> century+ AD

Table 1: Chronological Phasing

### Phase 1: Early Neolithic (4300 to 3300 BC)

8.2 The earliest feature containing securely stratified material was Pit F2119 (Grid Square K5-K6; Table 2; DP3; Figs. 7 and 15). The single fill of this feature (L2120) contained a worked flint sickle of early Neolithic character (SF3). Additional struck flint of a similar age was present as residual material within later contexts (see *The Struck Flint*). This extremely limited evidence accords with known finds of this date from the local area and may attest to little more than transient (possibly seasonal) activity.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Grid Square(s)	Comments/ relationships	Finds
2119	2120	Sub-circular/ gently sloping sides, concave base (2.40 x 1.98 x 0.42m)	Friable, mid grey brown silty sand with occasional small sub-rounded stone and charcoal flecks. Environmental sample 2.90 taken	U10-U11	Pit; cut L2003; sealed by 2001	<b>SF3</b> struck flint (23g)

Table 2: Phase 1 Pit F2119

### Phase 2: Saxo-Norman to High Medieval (10<sup>th</sup> to 13<sup>th</sup>/ 14<sup>th</sup> century AD)

#### Summary

8.3 The Saxo-Norman to High medieval period was the principal phase of past activity at the site. This period was characterised by a complex system of intercutting enclosure ditches/ gullies, mostly following a north to south or east to west alignment (Fig. 8). A number of discrete enclosures are visible in plan (Fig. 8) although these have not yet been fully interpreted or numbered. It is very likely, given the high incidence of recorded intercutting, that the Phase 2 boundaries could be stratigraphically divided into two or more 'episodes' of enclosure as part of the continuing post-excavation programme. Activity within the Phase 2 enclosures included pit dig, particularly along the northern site boundary, and an agricultural kiln (Kiln 1) with associated structure.

8.4 The Phase 2 pottery assemblage incorporates Thetford ware and Thetford type ware, broadly dated between the mid 9<sup>th</sup> and 12<sup>th</sup> centuries AD (Thompson *pers. comm.*) with production at Norwich having been dated between the late 10<sup>th</sup> and early 12<sup>th</sup> centuries (Jennings 1983, 93; Jennings 1981, 22). Grimston and Hollesley type coarse wares and unprovenanced coarse wares are also present (Thompson *pers. comm.*). These sherds include a thumb decorated rim and neck from a deep bowl (with no close parallels in the literature) and together span the late 10<sup>th</sup> to 14<sup>th</sup> centuries AD (*ibid.*). Medieval glazed wares from the site are dominated by Grimston wares with a glazed Hollesley-type jug neck and a white ware sherd with a yellow glaze also present (*ibid.*). The latter is probably from an imported Rouen jug of mid 13<sup>th</sup> to 14<sup>th</sup> century date (*ibid.* after Jennings 1981, 35). Overall, the glazed wares span the 12<sup>th</sup> to 14<sup>th</sup> centuries AD.

## The Phase 2 Ditches and Gullies

8.5 A large number of ditches and gullies were assigned to Phase 2 (Table 3; Fig. 8). These were distributed across the site but were particularly prevalent in the north and east. The ditches/ gullies mostly followed a north to south or east to west alignment, together forming a complex series of rectilinear enclosures. The high incidence of intercutting observed between features strongly suggests more than one episode of enclosure within Phase 2; a full assessment of the stratigraphic sequence may allow for the identification of individual sub-phases of enclosure at the site. In some cases the recutting of individual alignments was recorded, demonstrating the possible long-term use and habitual maintenance of certain boundaries.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Findings
2006	2007	Linear/ moderately sloping sides, flattish base (6.00+ x 0.80 x 0.40m)	Friable, mid orange brown, silty sand with occasional gravel. Environmental sample 2.7 taken	Ditch; cut by F2029; sealed by L1001	Struck flint (5g)
2021	2022	Linear/ moderately sloping to steep sides, concave base (42.00+ 1.84 x 0.62m)	Friable, mid orange brown/ dark grey brown silty sand with occasional gravel. Environmental samples 2.14,2.15,2.18 2.31 and 2.38 taken	Gully; cut L2060 and L2068; sealed by L2001	Pottery (7g)
2039 =2402	2040 =2403	Linear/ gently sloping sides, flattish to irregular base (50.00 x 0.87 x 0.23m)	Friable, mid red brown silty sand with occasional gravel. Environmental sample 2.39 taken	Gully; cut L2046; sealed by L2001	Shell (18g)
2043	2044	Linear/ moderately sloping sides, flattish base, (25.00 x 0.80 x 0.45m )	Friable, light to mid yellow brown, silty sand with occasional gravel	Gully; cut L2046; sealed by L2001	-
2045	2046	Linear/ moderately sloping sides, flattish base, (20.00 x 1.90 x 0.27m)	Friable, mid yellow brown silty sand with occasional gravel. Environmental samples 2.42 and 2.45 taken	Gully; cut L2046; sealed by L2001	Pottery (3g); struck flint (12g)
2047 =2196	2048 =2197	Linear/ moderately sloping sides, concave base (125.00 x 1.90 x 0.30m)	Friable, light yellow brown/ mid grey brown silty sand with occasional gravel. Environmental sample 2.44 taken	Gully; cut L2046; sealed by L2001	Animal bone (25g)
2083	2084	Curvilinear/ steep sides, flattish base (4.00+ x 0.80+ x 0.77m)	Compact, dark brown grey silty sand with occasional gravel	Ditch; cut L2018; cut by F2059	-
2088	2089	Curvilinear/ moderately sloping to steep sides, concave base (14.0+ x 2.21+ x 1.13m)	Friable, mid grey brown silty sand with occasional clay mottles, medium rounded stone and chalk lumps. Environmental samples 2.75 and 2.79 taken	Ditch; cut L2018 and L2102; cut by F2010, F2090=F2029 and F2098	Pottery (230g)
2104	2105	Linear/ steep to moderately sloping sides, concave base (16.00+ x 0.60 x 0.30m)	Friable, mid to dark brown grey sandy silt with occasional gravel	Gully; cut L2018; cut by F2098	-
2110	2111	Linear/ moderately sloping sides, concave base (11.00 x 0.40 x 0.14m)	Compact, dark grey brown silty sand with occasional gravel	Gully; cut L2018; cut by F2004 and F2112; sealed by L2017	-
2129	2130	Linear/ moderately sloping sides, concave base (70.00+ x 1.22 x 0.46m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2129, F2159 and F2198	Struck flint (3g)
2135 =2400	2136 =2401	Curvilinear/ moderately sloping	Friable, mid grey brown/ dark grey brown silty sand	Ditch; cut L2138 and L2140; cut by F2039=2402,	Pottery (24g)

		sides, concave base (80.00+ x 1.40 x 0.32m)	with occasional gravel	F2163, F2167 and F2173	
2137	2138	Linear, moderately sloping sides, concave base (16.00 x 0.54 x 0.24m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2038=2287; cut by F2135=2400	-
2139 =2186	2149 (primary)	Curvilinear/ moderately sloping to steep sides, flattish base (125.00+ x 1.30 x 0.80m)	Friable, dark grey brown silty sand with occasional gravel	Ditch; cut L2176=2193 and L2187; cut by F2135=2400, F2137 and F2153	Pottery (13g); animal bone (29g); clay pipe (3g)
	2140=2187 (uppermost)		Friable, mid grey brown silty sand with occasional gravel		
2141	2142	Curvilinear/ moderately sloping sides, concave base (7.00+ x 0.75 x 0.35m)	Loose, light brown yellow sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-
2153	2154	Linear/ moderately sloping sides, flattish base (9.00+ x 0.68 x 0.40m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2140=2187 and L2156; sealed by L2001	-
2155	2156	Linear/ moderately sloping sides, irregular base (9.00+ x 1.02 x 0.37m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2155	-
2159	2160	Curvilinear/ gently sloping sides, concave base (35.00+ x 1.77 x 0.46m)	Friable, dark red brown silty sand with occasional gravel, chalk flecks and charcoal flecks	Ditch; cut L2130 and L2158; sealed by L2001	Pottery (44g)
2167	2168	Curvilinear/ moderately sloping to steep sides, concave base (40.00+ x 1.10 x 0.40m)	Friable, mid to dark grey brown silty sand with occasional gravel	Ditch; cut L2136=2401, F2166 and L2172=2389; cut by F2169	Pottery (2g)
2169	2170	Linear, moderately sloping sides, concave base (15.00+ 1.04 x 0.14m)	Friable, light grey brown silty sand with occasional gravel	Gully; cut L2166 and L2168; sealed by L2001	-
2171 =2398	2172 =2399	Curvilinear/ moderately sloping sides, concave base (45.00+ x 0.40 x 0.80m)	Friable, mid grey brown silty sand with occasional gravel	Gully; cut L2003; cut by F2039=2402 and F2167; sealed by L2001	-
2175 =2192	2176 =2193	Curvilinear/ moderately sloping to steep sides, concave base (115.00+ x 1.10 x 0.70m)	Friable, mid grey brown silty sand with occasional gravel and ash. Environmental sample 2.137 taken	Ditch; cut L2447; cut by F2135=2400, F2139=2186	Animal bone (94g)
2188	2189	Linear/ moderately sloping sides, concave (15.00 x 0.80 x 0.24m)	Compact, dark grey brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	Animal bone (10g); struck flint (15g)
2190	2191	Linear/ moderately sloping sides, flattish base (35.00 x 1.05 x 0.33m)	Friable, mid red brown silty sand with frequent gravel	Ditch; cut L2395=2460 and L2291=2441=2443; cut by F2159.	-
2277	2278	Linear/ moderately sloping sides, concave base (13.50+ x 0.40 x 0.15m)	Friable, mid grey brown silty sand with occasional gravel and occasional charcoal flecks. Environmental sample 2.116 taken	Ditch; cut L2222 and L2235=2329; cut by F2355	Pottery (15g); animal bone (64g)
2279	2280	Linear/ moderately sloping sides, concave base (2.40 x 0.56 x 0.21m)	Friable, mid grey brown silty sand with occasional gravel	Gully; cut L2003; sealed by L2001	-
2281 =2328	2282 =2329	Curvilinear/ moderately sloping sides, (28.00+ x 0.42 x 0.41m)	Friable, mid grey brown, silty sand with moderate gravel	Ditch; cut L2222; cut by F2277 and F2330	Pottery (6g)

2290 =2440 =2442	2291 =2441 =2443	Linear/ moderately sloping to steep sides, concave base (64.00+ x 1.00 x 0.43m)	Compact, mid grey brown silty sand with occasional gravel	Gully; cut L2413; cut by F2127, F2190 and F2410=2368	-
2292	2293	Linear/ moderately sloping sides, concave base (6.00+ x 0.47 x 0.20m)	Friable, mid yellow brown sandy silt, occasional gravel. Environmental sample 2.107 taken	Ditch; cut L2003; cut by F2294, F2296 and F2298	-
2294	2295	Linear/ moderately sloping sides, concave base (14.6 x 0.60 x 0.25m)	Friable, mid to dark yellow brown silty sand with occasional gravel. Environmental sample 2.108 taken	Ditch; cut L2293; cut by F2296 and F2298	Pottery (6g); struck flint (4g)
2296	2297	Linear/ moderately sloping sides, flattish base (45.00+ x 1.00 x 0.19m)	Friable, mid yellow/ grey brown silty sand with occasional gravel and charcoal flecks. Environmental sample 2.106 taken	Ditch; cut L2293 and L2295; cut by F2359, F2370 and F2392	Pottery (8g)
2298	2299	Linear/ moderately sloping sides, concave base (30.00+ x 1.20 x 0.27m)	Friable, mid yellow/ grey brown silty sand with occasional gravel. Environmental sample 2.104 taken	Ditch; cut L2293 and L2295; cut by F2359, F2370 and F2392	Animal bone (174g); struck flint (21g)
2316	2469	Linear/ moderately sloping sides, flattish base (18.00+ x 1.00 x 0.21m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2125	-
2317	2318	Linear/ moderately sloping sides, concave base (6.00+ x 0.75 x 0.26m)	Friable, mid red brown silty sand with occasional gravel and charcoal flecks	Ditch; cut L2003; sealed by L2001	Struck flint (56g)
2324	2325	Curvilinear/ moderately sloping sides, concave base (105.00+ x 1.60 x 0.40m)	Compact, dark grey brown sandy silt with occasional gravel and charcoal flecks	Ditch; cut L2003; sealed by L2001	Pottery (75g); struck flint (49g)
2347	2348	Linear/ steep sides, flattish base (6.40 x 0.45 x 0.30m)	Loose, mid red brown silty sand with moderate gravel	Ditch; cut L2003; sealed by L2001	Pottery (44g)
2351	2352	Linear/ steep sides, concave base (5.00+ x 0.67 x 0.43m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2350; cut by F2277	Pottery (41g)
2355	2356	Linear/ moderately sloping sides, concave base (3.8 x 0.64 x 0.14m)	Friable, mid red brown silty sand with occasional gravel and charcoal flecks	Ditch; cut L2362 and L2278; sealed by L2001	-
2366	2367	Linear/ moderately sloping sides, concave base (42.00 x 1.45 x 0.33m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2370 and F2324=2368=2410	-
2368 =2410	2369 =2411	Curvilinear/ moderately sloping sides, concave base (105.00+ x 1.00 x 0.35m)	Compact, dark grey brown silty sand with occasional gravel	Ditch; cut L22417=2437, L2367 and L2413=2443=2291; cut by F2370	Animal bone (2g); struck flint (47g)
2370 =2357	2371 =2358	Curvilinear/ moderately sloping sides, irregular base (67.00+ x 0.90 x 0.47m)	Friable, dark grey brown/ mid yellow brown silty sand	Ditch; cut L2297, L2299, L2367, L2369=2411, L2417=2437 and L2425=2439; sealed by L2001	Pottery (11g); animal bone (31g)
2374	2375	Linear/ moderately sloping sides, concave base (9.40+ x 0.80 x 0.20m)	Friable, mid grey brown silty sand with moderate gravel	Ditch; cut L2003; sealed by L2001	Pottery (51g); animal bone (251g)
2392	2393	Linear/ steep sides, flattish base (13.20 x 0.55 x 0.40m)	Friable, mid grey brown silty sand occasional gravel and charcoal flecks	Ditch; cut L2297 and F2299; sealed by L2001	Pottery (13g); struck flint (10g)
2394 =2459	2395 =2460	Linear/ moderately sloping sides, concave base (13.20	Friable, mid orange brown silty sand with occasional gravel and chalk flecks	Gully; cut L2003; cut by F2190	-

		x 1.10 x 0.50m)			
2396	2397	Linear/ moderately sloping sides, flattish base (15.00 x 1.10 x 0.13m)	Friable, mid grey brown silty sand with occasional gravel	Gully; cut L2003; sealed by L2001	-
2412	2413	Linear, moderately sloping sides, concave base (45.00+ x 0.55 x 0.19m)	Friable, dark grey brown silty sand with occasional gravel	Gully; cut L2003; cut by F2240=2442 and F2368=2410	Animal bone (111g); struck flint (158g)
2414	2415	Linear, moderately sloping sides, concave base (7.00+ x 0.25 x 0.13m)	Friable, light grey brown silty sand with occasional gravel	Gully; cut L2003; sealed by L2001	-
2416 =2436	2417 =2437	Linear, gently sloping sides, flattish base (43.00+ x 0.71 x 0.31m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2357=3270, F2418 and F2424=2438	-
2418	2418	Linear, gently sloping sides, irregular base (1.20 x 0.48 x 0.13m)	Friable, mid grey brown silty sand with occasional gravel	Gully; cut L2417=2437; sealed by L2001	-
2424 =2438	2425 =2439	Curvilinear/ moderately sloping sides, flattish to concave base (38.00+ x 1.00 x 0.35m)	Compact, mid to dark grey brown sandy silt with occasional gravel and burnt clay	Ditch; cut L2417=2437 and L2427; cut by F2370	Animal bone (7g)
2426	2427	Linear/ steep sides, flattish base (19.00m x 0.40 x 0.19m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2424=2438 and F2428	Pottery (25g)
2444	2445	Curvilinear/ gently sloping sides, concave base (15.00+ x 0.60 x 0.17m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-
2446	2447	Curvilinear/ gently sloping sides, concave base (15.00+ x 1.10 x 0.32m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2175=2192	Pottery (6g); struck flint (96g); lava stone (194g)
2449	2450	Linear/ moderately sloping sides, concave base (14.00+ x 1.00 x 0.43m)	Friable, mid brown/ black silty sand with occasional gravel	Ditch; cut L2454; cut by F2451	-
2453 =2455	2454 =2456	Sub-circular/ moderately sloping sides, concave base (26.00+ x 1.40+ x 0.44m)	Compact, mid brown/ black silty sand and mid yellow brown, silty sand with moderate gravel	Ditch; cut L2003; cut by F2449	-
2466	2467	Linear, gently sloping sides, flattish base (5.50 x 0.30 x 0.17m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-

Table 3: The Phase 2 Ditches and Gullies

### Kiln 1

8.6 Of particular interest within the Phase 2 landscape was the remains of an agricultural kiln (Kiln 1), located close to the eastern edge of the excavation (Grid Square M2-M3 and N2-N3; Table 4; DPs 4-5; Figs. 8 and 16). The kiln comprised a shallow, circular cut (L2319) housing a built-up clay wall (M2475); F2319 cut the fill of unphased Pit F2388 (L2389). The kiln wall was between c. 0.15m and 0.67m thick and survived to a height of approximately 0.52m. The central firing chamber measured some 1.85m in diameter and contained two consecutive fills (L2320 and L2321), both of which were oxidised in appearance. Uppermost Fill L2321 contained occasional lumps of charcoal, possibly associated with the last firing of the kiln. A collapsed flue (M2476) linked the firing chamber to a small, sub-oval stoke hole to

the west (F2363). The single, charcoal-rich fill of F2363 (L2364=2365) was devoid of finds.

8.7 Environmental samples from Kiln 1 and associated features (see below) suggest the drying of cereals for storage or export, with a predominance of oat and barley, with rye also commonly encountered (see *The Environmental Samples*). Wheat was also recorded but appears to have comprised a 'marginal' component of the assemblage (*ibid.*). Possible gorse charcoal might suggest a significant contribution to the kiln's fuel.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Finds
2319	2475	Circular/ vertical sides, flat base (2.40 x 2.05 x 0.13m)	Kiln wall: compact, mid grey clay with frequent chalk flecks and lumps	Construction cut; cut 2389; sealed by L2001	-
	2320 (primary)		Compact, mid to light orange red chalky clay with frequent grey chalky clay mottles and moderate small to medium sub-rounded to sub-angular flint. Environmental sample 2.109 taken		Lava stone (134g)
	2321 (uppermost)		Compact, dark red/ black fired clay with occasional small angular chalk, gravel and charcoal lumps. Environmental sample 2.110 taken		Animal bone (24g); struck flint (6g)
2363	2364=2365	Sub-oval/ moderately sloping sides, concave base (1.63 x 0.70 x 0.25m)	Friable, mottled mid to dark yellow brown/ grey sandy silt with frequent charcoal flecks and occasional small sub-angular stone. Environmental sample 2.117 taken	Stoke hole; cut 2389; sealed by L2001	-
2476	2320 (primary)	(0.15 x 0.10 x ?m)	As above	Flue (collapsed)	-
	2321 (uppermost)		As above		-

Table 4: Kiln 1

8.8 Kiln 1 was associated with structural remains (Structure 1) located immediately to the north (Grid Square M2-M3 and N2-N3; Table 5; DPs 4-5; Figs. 8 and 16). Structure 1 comprised a sub-rectangular cut (F2359) and five/ six associated postholes (F2378, F2380, F2382, F2384, F2390 and F2461). F2359 cut the fill of unphased Pit F2388 (L2389) and was contemporary with the construction cut for Kiln 1 (F2319). Five of the associated postholes – thought to have housed upright timbers – were cut through the base of F2359. Their fills were sealed by the fills of F2359, however, indicating that any structural timbers had either decayed or had been removed prior to the backfilling of the latter. Posthole F2461 was located beyond the confines of F2359, immediately south of Kiln 1 and may not have formed part of Structure 1. F2359 contained three consecutive fills (L2360, L2386 and L2387). Primary Fill L2387 contained frequent charcoal flecks and may have derived from use of Kiln 1 or its demolition and subsequent levelling. A large fragment of redeposited kiln structure (M2465) – equivalent to Kiln Wall M2475 – was present within Fill L2387 (DP6).

8.9 It is possible that Structure 1 comprised a simple shelter or enclosed space associated with the use of Kiln 1. The interior of the kiln may have been directly accessible from within the structure at a level above the preserved archaeological horizon. The stratigraphic relationship between F2359 and the kiln's construction cut (F2319) was difficult to determine, although it is possible that they were contemporary.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Findings
2359	2387 (primary)	Sub-rectangular/ steep sides, flattish base (3.80 x 3.20 x 0.48m)	Friable, dark grey/ black sandy silt with frequent charcoal flecks and occasional gravel. Environmental samples 2.124 and 2.125 taken	Structure; cut L2389; sealed by L2001	Animal bone (194g)
	2386		Friable, dark grey brown sandy silt with occasional gravel. Environmental sample 2.121 taken		Pottery (71g); animal bone (36g)
	2360 (uppermost)		Friable, mid grey brown sandy silt with occasional gravel. Environmental samples 2.119, 2.120, 2.121, 2.122 and 2.123 taken		Pottery (29g); animal bone (316g); struck flint (25g); glass (3g)
2378	2379	Circular/ moderately sloping sides, concave base (0.26 x 0.25 x 0.07m)	Friable, dark grey brown silty sand with occasional gravel. Environmental sample 2.126 taken	Posthole; cut L2003; sealed by L2386	Animal bone (238g)
2380	2381	Circular/ steep sides, concave base (0.20 x 0.18 x 0.22m)	Friable, dark grey brown silty sand with occasional gravel	Posthole; cut L2003; sealed by L2386	-
2382	2383	Circular/ steep sides, concave base (0.18 x 0.17 x 0.45m)	Friable, dark grey brown, silty sand with occasional gravel	Posthole; cut L2003; sealed by L2387	-
2384	2385	Circular/ steep sides, concave base (0.12 x 0.10 x 0.29m)	Friable, dark grey brown silty sand with occasional gravel	Posthole; cut L2003; sealed by L2386	-
2390	2391	Circular/ steep sides, concave, base (0.27 x 0.25 x 0.40m)	Friable, dark grey brown, silty sand with occasional gravel	Posthole; cut L2003; sealed by L2387	-
2461	2462	Circular/ steep sides, concave base (0.35 x 0.4 x 0.21m)	Friable, mid yellow brown, silty sand with occasional gravel	Posthole; cut L2003; sealed by L2001	-

Table 5: Structure 1

### The Phase 2 Pits/ Postholes

8.9 A large number of pits and postholes were assigned to Phase 2 (Table 6; DP 7; Fig. 8). The majority of these features were located in the northern part of the site, while a few were also identified close to the south-western corner of the excavation, in the area of a post-medieval (Phase 3) windmill (see below). Although the majority of the Phase 2 pits and postholes were devoid of finds, they were tentatively dated based on their probable association with dated features, including the Phase 2 enclosure system. Some features were also phased based on their stratigraphic relationships with dated features/ contexts, e.g. Pits F2106 and F2114.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Findings
2013	2014	Sub-oval/ moderately sloping sides, concave base (3.20 x 0.84 x 0.38m)	Friable, mid orange brown silty sand with occasional gravel. Environmental sample 2.9 taken	Pit; cut L2018; sealed by L2001	-
2023	2024	Sub-oval/ moderately sloping to steep sides, flattish base (4.40 x 1.53 x 0.29m)	Friable, light grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2025	2026	Sub-rectangular/ moderately sloping sides, flattish base (0.33 x 0.38 x 0.07m)	Compact, mid grey brown silty clay with frequent chalk and occasional gravel. Environmental sample 2.16 taken	Pit; cut L2016=2064; sealed by L2001	-
2052	2053	Oval/ steep sides, flattish base (2.10 x 1.10 x 0.26m)	Friable, light yellow brown sandy silt with occasional gravel	Pit; cut L2003; sealed by L2001	-
2054	2056 (primary)	Sub-rectangular/ moderately sloping	Friable, dark grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-



		sides, irregular base (1.39 x 1.40 x 0.53m)	and charcoal flecks. Environmental sample 2.47 taken		
	2055 (uppermost)		Friable, mid grey brown silty sand with occasional gravel, burnt clay and charcoal flecks. Environmental sample 2.46 taken		-
2057	2058	Oval/ steep sides, irregular base (1.70 x 0.80 x 0.40m )	Friable, dark red brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2062	2063	Sub-oval/ steep sides, concave base (1.94 x 1.50 x 0.60m)	Friable, dark brown yellow silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2065	2066	Oval/ moderately sloping to steep sides, concave base (1.39 x 1.38 x 0.40m)	Friable, dark brown grey silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2069	2070	Sub-circular/ moderately sloping sides, concave base (1.10 x 1.00 x 0.30m)	Compact, mid yellow brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2071	2072 (primary)	Sub-circular/ moderately sloping sides, concave base (2.05 x 1.06 x 0.38m)	Compact, mid yellow brown silty sand with occasional gravel. Environmental sample 2.63 taken	Pit; cut L2003; sealed by L2001	-
	2073 (uppermost)		Friable, dark brown/ black silty sand with frequent charcoal flecks. Environmental sample 2.64 taken		-
2075	2079 (primary)	Circular/ moderately sloping sides, concave base (0.20+ x 0.53 x 0.15m )	Compact, dark red brown silty sand with moderate gravel. Environmental sample 2.67 taken	Posthole; cut L2018; cut by F2010	-
	2076 (uppermost)		Compact, dark brown/ black silty sand with occasional gravel		-
2081	2082	Sub-circular/ steep sides, irregular base (1.00+ x 0.80+ x 0.57m)	Compact, light brown yellow sandy silt with moderate gravel	Pit; cut F2010; cut by F2059	-
2085	2086	Rectangular/ moderately sloping to vertical sides, flattish base (1.50+ x 0.68 x 0.95m)	Compact, dark grey brown silty sand with occasional gravel and clay mottles. Environmental sample 2.72 taken	Pit; cut L2003; cut by F2010	-
2102	2103	Sub-circular/ steep sides, concave base (1.00+ x 0.60+ x 0.52m)	Compact, mid brown grey clay with occasional charcoal flecks	Pit; cut L2018; cut by F2088	-
2106	2107	Sub-circular/ moderately sloping sides, flattish base (0.50 x 0.24 x 0.29m)	Friable, dark grey/ black silty sand with moderate charcoal flecks and occasional gravel	Pit; cut L2018; sealed by L2017	-
2108	2109	Sub-circular/ steep sides, concave base (0.23 x 0.27 x 0.59m)	Friable, dark grey/ black silty sand with moderate charcoal flecks and occasional gravel. Environmental sample 2.88 taken	Posthole; cut L2018; sealed by L2017	-
2112	2118 (primary)	Sub-oval/ steep sides, concave base ( 1.40 x 0.88 x 0.65m)	Compact, dark grey brown silty sand	Pit; cut L2111; sealed by L2017	-
	2117		Compact mid brown/ black silty sand		-
	2116		Compact, dark grey brown silty sand		-
	2113 (uppermost)		Compact, mid grey brown silty sand. Environmental sample 2.84 taken		-
2114	2115	Sub-rectangular/ gently sloping sides, flattish base (0.40 x 0.26 x 0.02m)	Friable, light grey brown silty sand with occasional charcoal flecks	Pit; cut L2018; sealed by L2017	-
2221	2122	Sub-circular/ gently sloping sides, concave base (1.30 x 1.35 x	Friable, dark grey brown silty sand with occasional gravel and charcoal flecks.	Pit; cut L2003; sealed by L2001	-

		0.18m)	Environmental sample 2.91 taken		
2133	2134	Sub-circular/ gently sloping sides, concave base (4.00 x 3.00 x 0.27m)	Loose, mid yellow brown sand with occasional gravel	Pit; cut L2003; cut by F2027	Pottery (166g)
2150	2152 (primary)	Sub-circular/ steep sides, concave base (0.50+ x 0.39 x 0.29m)	Friable, mid grey brown silty sand with occasional gravel	Posthole; cut L2003; cut by F2139=2186	-
	2151 (uppermost)		Friable, light grey brown silty sand with occasional gravel		-
2157	2158	Sub-rectangular/ gently sloping sides, irregular base (1.20 x 0.72+ x 0.21m)	Friable, light grey brown silty sand with occasional gravel	Pit; cut L2003; cut by F2059	Pottery (138g)
2165	2166	Oval/ moderately sloping to steep sides, concave (1.70+ x 0.65 x 0.31m)	Friable, mid yellow brown sandy silt with occasional gravel	Pit; cut L2003; cut by F2167 and F2169	-
2173	2174	Sub-oval, gently sloping sides, flattish base (1.80 x 0.28+ x 0.15m)	Friable, mid red brown silty sand with occasional gravel	Pit; cut L2003; cut by F2135=2400	-
2179	2180	Circular/ moderately sloping sides, flattish base (4.10 x 4.10 x 0.33m)	Compact, mid grey brown silty clay with occasional gravel	Pit; cut L2182; sealed by L2001	Pottery (11g); animal bone (53g)
2181	2183 (primary)	Circular/ moderately sloping sides, concave base (1.20 x 1.30 x 0.55m)	Compact, dark brown/ black sand with occasional gravel	Pit; cut L2003; cut by F2181	-
	2182 (uppermost)		Compact, mid brown/ black sand with occasional gravel		-
2198	2199	Sub-circular/ moderately sloping sides, concave base (1.35 x 1.55 x 0.50m)	Compact, dark grey brown silty sand with frequent gravel	Pit; cut L2030; sealed by L2001	-
2200	2202 (primary)	Sub-circular/ steep sides, concave base (1.70 x 1.70 x 0.71m)	Compact, dark red brown silty sand with occasional gravel and clay mottles	Pit; cut L2003; sealed by L2001	Pottery (10g); animal bone (3g)
	2201 (uppermost)		Friable, mid grey brown silty sand with occasional gravel		Pottery (35g)
2237	2238	Sub-circular, moderately sloping sides and a concave base (0.90 x 0.60 x 0.78m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint. Environmental sample 2.98 taken	Posthole; cut 2003; cut by F2283	Pottery (9g)
2283	2284	Irregular/ moderately sloping to steep sides, concave base (0.50 x 1.26 x 0.51m)	Compact, dark grey brown silty sand with frequent gravel and occasional clay mottles	Pit; cut L2238; sealed by L2001	Animal bone (93g)
2300	2301	Oval/ steep sides, concave base (0.70 x 0.50 x 0.34m)	Compact, mid blue grey clay with moderate chalk	Posthole; cut L2003; sealed by L2001	Shell (11g)
2306	2307	Sub-circular/ moderately sloping sides, concave base (1.80 x 0.60x 0.30m)	Compact, dark yellow brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2308	2309	Sub-circular/ moderately sloping sides, concave base (3.10+ x 3.30 x 0.69m)	Compact, dark grey brown silty sand with occasional chalk and gravel	Pit; cut L2003; sealed by L2001	Whetstone (500g)
2310	2311	Oval/ moderately sloping sides, concave base (0.60 x 0.80 x 0.17m)	Compact, mid red brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2312	2313	Sub-oval/ steep to moderately sloping sides, concave base (1.70 x 0.30 x 0.35m)	Compact, mid grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001.	-
2314	2315	Sub-circular/ moderately sloping sides, irregular base (1.69 x 1.30 x 0.42m)	Compact, dark grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2326	2327	Sub-circular/ steep sides, concave base (1.30 x 1.26 x 0.52m)	Friable, mid grey brown silty sand with occasional gravel and charcoal flecks	Pit; cut L2003; sealed by L2001	Pottery (62g)
2332	2333	Sub-circular/ moderately sloping sides, irregular base (1.60 x 1.40 x	Compact, dark yellow brown silty sand with occasional gravel, chalk and charcoal	Pit; cut L2003; sealed by L2001	Pottery (101g); animal bone (3g); struck flint

		0.45m)	flecks		(32g)
2349	2350	Sub-circular/ steep sides, concave base (1.20 x 0.66 x 0.41m)	Friable, mid grey brown silty sand with occasional gravel and charcoal flecks	Pit; cut L2003; cut by F2351	-
2353	2354	Sub-circular/ gently sloping to steep sides, irregular base (0.30+ x 2.40 x 0.32m)	Compact, dark grey brown sandy clay with moderate chalk and gravel	Pit; cut L2003; sealed by L2001	Pottery (38g); animal bone (16g)
2404	2404	Oval/ moderately sloping sides, concave base (2.50 x 1.70 x 0.70m)	Friable, mid yellow brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2406	2407	Sub-circular/ steep sides, concave base (0.47 x 0.50 x 0.24m)	Friable, dark grey brown silty sand with moderate charcoal flecks and occasional gravel	Pit; cut L2003; cut by F2408	-
2408	2409	Sub-circular/ steep sides, concave base (2.30 x 0.86 x 0.36m)	Friable, mid yellow brown silty sand with occasional gravel	Pit; cut L2407; sealed by L2001	-

Table 6: Phase 2 pits/ postholes

8.10 The only finds of note from the Phase 2 pits and postholes comprise modest quantities of pottery and animal bone. Pit F2308 (L2309) also yielded a whetstone. This pit was partially obscured by the northern excavation edge (Grid Square M5; Fig. 15) and occupied a probable medieval enclosure.

### The Phase 2 Buried Soils

8.11 Three buried soil horizons (L2016=2064, L2017 and L2018; Table 7) were present in the south-western corner of the site. Two of these contexts were spread across a relatively wide area and all were stratigraphically earlier than ditches encircling the Phase 3 windmill (see below); L2017 was confined to the immediate area of the windmill. The preservation of early soils in this area may, in part, be due to the later construction of the windmill mound. The mound would probably have served as a physical obstacle to cultivation well in to the post-medieval period and possibly beyond. The stratigraphically earliest soil (L2018) contained three early medieval pottery sherds (10g), including a sagging base from a cooking pot or jar (Thompson *pers. comm.*). The overlying soils yielded nine sherds (28g) of Thetford ware including a 16cm cooking pot rim, and 20 sandy coarse ware sherds (122g) broadly dated between the 11<sup>th</sup> and 14<sup>th</sup> centuries AD (*ibid.*).

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Finds
-	2016=2064	Irregular (? x ? x 0.35m)	Friable, mid to dark grey brown sandy silt with occasional gravel	Buried soil; sealed L2018. Sealed by L2017	Pottery (405g); animal bone (2g); coal (7g); struck flint (129g); Fe fragments (28g)
-	2017	Irregular (? x ? x 0.35m)	Friable, mid grey brown sandy silt with occasional gravel	Buried soil; sealed L2016=2064; sealed by L2015; cut by F2010	Pottery (405g); animal bone (46g); struck flint (52g)
-	2018	Irregular (? x ? x 0.15m)	Friable, light yellow grey sandy silt with occasional gravel	Buried soil; sealed L2003; sealed by L2016=2064	Pottery (10g); struck flint (4g)

Table 7: Phase 2 buried soils

## Phase 3: High Medieval to Post-Medieval (15<sup>th</sup> to 17<sup>th</sup> Century AD)

### Summary

8.12 Phase 3 was dominated by the remains of a windmill mound located in the far south-western area of the site (Figs. 9 and 12). A small number of linear ditches – again defining a system of enclosures – were also present; mostly confined to the

north-eastern site area. To the south of these enclosures were the remains of a second agricultural kiln (Kiln 2). Three Phase 3 pits (excluding 'internal' features associated with the windmill mound) were identified in the south-western area of the site. Excluding the windmill and Kiln 2, Phase 3 witnessed a significant reduction in activity at the site – compared to preceding Phase 2 – and an opening up of the previously enclosed landscape.

8.13 The Phase 3 pottery assemblage comprised late medieval and transitional wares and post-medieval wares, together spanning the 15<sup>th</sup> to 17<sup>th</sup> centuries AD (Thompson *pers. comm.*). The late medieval wares include examples probably deriving from the Waveney Valley (c. 15<sup>th</sup> to 16<sup>th</sup> century) and 17 sherds of imported German stoneware (*ibid.*). The post-medieval wares comprise red earthenware, two sherds of green glazed Border ware (c. mid 16<sup>th</sup> to 17<sup>th</sup> century) and one or two sherds of Frechen stoneware (*ibid.*).

### *The Phase 3 Ditches*

8.14 A small number of Phase 3 ditches were identified (Table 8), mostly confined to the north-eastern area of the site where they appeared to define at least one rectilinear enclosure (Fig. 9). The exception was Ditch F2029 (=2090; Table 8) which ran parallel to the line of Browston Lane, to the west of the Phase 3 windmill mound (Figs. 9 and 12). F2029 (=2090) was wider and deeper than the other Phase 3 ditches and may have originally demarcated the route of Browston Lane, immediately to the west. The modern lane is raised slightly above the level of the surrounding land.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Findings
2029= 2090	2091 (primary)	Linear/ moderately sloping to steep sides, concave base (42.00+ x 1.50 x 0.66m)	Compact, dark grey brown sandy clay with occasional gravel	Ditch; cut L2007, L2089 and L2095; cut by F2008 and F2094	-
	2092		Compact, mid grey brown, silty clay with occasional gravel		-
	2030=2093 (uppermost)		Friable, light brown yellow silty sand with occasional gravel. Environmental sample 2.74 taken		Struck flint (100g); Fe fragments (9g)
2125	2126	Curvilinear/ moderately sloping to steep sides, concave base (45.00 x 1.10 x 0.50m)	Friable, mid to dark grey brown silty sand with occasional gravel	Ditch; cut L2291=2243=2441, L2297 and L2317; cut by F2127	Pottery (127g); animal bone (16g)
2127	2128	Linear/ moderately sloping sides, flattish base (40.00 x 1.00 x 0.47m)	Friable, mid red brown silty sand with occasional gravel	Ditch; cut L2003, L2130, L2126, L2291=2243=2441; sealed by L2001	Clay pipe (3g)
2330	2331	Linear/ moderately sloping sides, concave base (16.00+ x 0.87 x 0.30m)	Friable, mid grey brown silty sand with frequent gravel and charcoal flecks	Ditch; cut L2282=3329 and L2337; sealed by L2001	-
2336	2337	Curvilinear/ moderately sloping sides, concave (4.80 x 0.30 x 0.20m)	Friable, light grey brown silty sand with frequent gravel	Ditch; cut L2003; cut by F2330	Pottery (6g); clay pipe (2g)

Table 8: Phase 3 ditches

### *Kiln 2*

8.15 A second agricultural kiln (Kiln 2; Table 9) was located close to the eastern edge of the excavation (DP8; Figs. 9 and 17). Kiln 2 was less completely preserved

than its Phase 2 predecessor, with very little of its original superstructure surviving intact. Construction Cut F2372 contained a primary, silty sand 'foundation' deposit (L2373) into which the kiln's clay lining (M2470) had been set. M2470 survived as a layer of compact clay with a slightly oxidised appearance that would have formed the base of the central firing chamber. This material appeared to rise towards its outer edge suggesting that it had originally also formed the kiln's walls; no evidence of a flue was present. Silty sand L2471 was the only surviving fill of the firing chamber. This fill did not appear oxidised and contained only sparse charcoal flecks. However, the kiln's stoke hole (F2376), located immediately to the north-east had a charcoal-rich fill containing charred cereal grains dominated by oat and rye (see *The Environmental Samples*).

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationships	Finds
2372	2373 (primary)	(2.70 x 2.25 x 0.3m)	Friable, light grey/ white silty sand with occasional gravel and charcoal flecks. Environmental sample 2.127 taken	Construction cut; cut L2003; sealed by L2001	Pottery (11g); animal bone (10g)
	2470		Compact, mid orange brown clay with frequent gravel and chalk		-
	2471 (uppermost)		Friable, light brown grey, silty sand with occasional gravel and charcoal flecks. Environmental samples 2.128 and 2.131 taken		-
2376	2377	Sub-circular/ moderately sloping sides, concave base (1.73 x 0.81 x 0.20m)	Friable, dark grey/ black silty sand with frequent charcoal and occasional gravel. Environmental samples 2.129 and 2.130 taken	Stoke hole; cut L2470; sealed by L2471	Pottery (7g); Fe fragments (5g)

Table 9: Kiln 2

### The Phase 3 Pits

8.16 Excluding two 'internal' pits associated with the windmill mound (see below), only three pits were assigned to Phase 3 (Table 10; Fig. 9). These were all located in the south-western corner of the site and pre-dated the construction of the windmill mound. Finds from these pits include four iron nails from Pit F2008 (L2009) and five sherds (267g) of pottery from F2094 (L2096).

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ Relationship (s)	Finds
2008	2009	Oval/ moderately sloping to steep sides, concave base (2.75 x 1.00+ x 0.65m)	Friable, mid grey brown silty sand with occasional gravel. Environmental sample 2.8 taken	Pit; cut L2012; cut by L2029	Fe nails (26g); struck flint (20g)
2037	2038	Sub-circular/ steep sides, flattish base (1.20 x 1.20 x 0.66m)	Friable, mid grey brown sandy silt with occasional gravel. Environmental sample 2.28 taken	Pit; cut L2018; cut; sealed by L2017	-
2094	2095 (primary)	Sub-circular/ steep sides, concave base (3.20+ x 2.25 x 0.90m)	Friable, mid to dark brown grey sandy silt with occasional gravel	Pit; cut L2093; cut by F2098	-
	2096		Compact, mid blue grey silty clay with occasional gravel. Environmental sample 2.78 taken		Pottery (267g)
	2097 (uppermost)		Friable, mid to dark brown grey sandy silt with occasional gravel. Environmental sample 2.77 taken		-

Table 10: Phase 3 Pits

## The Windmill

8.17 Features demarcating the windmill mound were clearly visible on the geophysical survey plot (Smalley 2013; Figs. 3-4) and were initially thought to represent a probable Bronze Age ring-ditch. However, the associated pottery group is predominantly late medieval to post-medieval in date (15<sup>th</sup> century and later) and lacks a prehistoric component. The surviving archaeological remains comprised an encircling ring-ditch (F2010) which had been later re-cut by three segmented, curvilinear ditches (F2050, F2059 and F2472; Table 11; DPs 9-10; Figs. 9 and 12). The primary ditch (F2010) was cut through Phase 2 Buried Soil L2017, which in turn sealed similar soil horizons of Saxo-Norman to High medieval date (L2016=2064 and L2018; see above). Notable finds from the ring-ditches include a whetstone from the uppermost fill of Ditch F2059 (L2060). A thin layer of redeposited chalky clay (L2015), mainly confined to the area within the ring ditches, overlay Buried Soil L2017 and may have represented the ploughed-out remnants of an artificial mound upon which the windmill was built. In places, L2015 was truncated by primary Ring-Ditch F2010, which suggests that the mound predated this feature. Regional windmill mounds/ hills of medieval or later date include two possible examples at Walpole and Beeston Regis (NHERs 2219 and 6394) and the site of a post mill in the Breckland parish of Thompson (NHER 8952). The Thompson mill mound is thought to still be visible in the landscape; the associated mill was destroyed by a storm in 1895.

Feature	Fills(s)/ contexts(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationship(s)	Finds
2010	2011 (primary)	Curvilinear/ moderately sloping to steep sides, flattish base (72.00m x 3.00 x 1.10m)	Friable, mid to dark orange brown silty sand with occasional small to medium sub-rounded to sub-angular flint/ stone and charcoal flecks. Environmental sample 2.11 taken	Ditch; cut L2022, L2038, L2086 and L2111; cut by F2050; 2059; F2098 and F2472	Pottery (2g)
	2061 (primary)		Friable, dark orange brown, silty sand with occasional small to medium rounded flint		-
	2087 (primary)		Friable, dark grey brown, silty sand with occasional small to medium sub-rounded to sub-angular flint/ stone		-
	2012		Friable, light brown yellow, silty sand with moderate small to medium sub-rounded to sub-angular stone and chalk flecks. Environmental samples 2.12, 2.21, 2.22, 2.30, 2.32, 2.34, 2.36, 2.40, 2.49, 2.52, 2.53, 2.56, 2.59, 2.68 and 2.69 taken		Pottery (378g); animal bone (160g); struck flint (2g); clay pipe (2g); Fe fragments (70g); lava stone (441g); rubber (1g)
	2032		Friable, dark yellow brown silty sand with moderate small to medium sub-angular stone. Environmental samples 2.29 and 2.73 taken		Pottery (23g)
	2074		Friable, mid red brown, silty sand with very compacted frequent gravel		-
	2031 (uppermost)		Friable, light brown yellow, silty sand with frequent chalk flecks and moderate small sub-angular stone. Environmental samples 2.23, 2.55 and 2.61 taken		-
-	2015	Irregular (? x ? x 0.10m)	Compact, mid to dark blue grey chalky clay with occasional	?Mill mound; sealed L2017; cut by F2010	-

			small to medium sub-rounded to sub-angular stone		
2027	2028	Sub-rectangular/ steep sides, flattish base (2.26+ x 1.02 x 0.15m)	Friable, mottled light grey brown/ orange silty sand with occasional small sub-rounded to sub-angular gravel and flint, chalk flecks and charcoal flecks. Environmental sample 2.19 taken	Pit; cut L2016=2064; sealed by L2001	<b>SF1</b> Fe fragment (40g); pottery (49); animal bone (4g); Fe fragment (4g)
2041	2042	sub-oval/ gently sloping to steep sides, flattish base (0.90 x 1.00 x 0.10m)	Compact, mid blue grey clay with occasional small sub-rounded to sub-angular stone and chalk flecks. Environmental sample 2.31 taken	Pit; cut L2016=2064; sealed by L2001	-
2050	2051	Curvilinear/ moderately sloping to steep sides, concave base (70.72 x 1.95 x 0.60m)	Friable, mid grey brown silty sand with occasional sub-angular gravel. Environmental samples 2.35, 2.37 and 2.41	Ditch; cut L2038 and L2012; sealed by L2001	Pottery (94g); struck flint (17g); Fe frags (47g); fired clay (220g)
2059	2080 (primary)	Curvilinear/ steep sides, concave base (20.82 x 2.90 x 0.83m)	Friable, dark brown/ black silty sand with frequent charcoal flecks and lumps, and small rounded stone; environmental sample 2.66 taken	Ditch; cut L2031; cut by F2077	Pottery (530g); animal bone (108g); Fe fragments (37g); lava stone (244g); shell (336g)
	2060 (uppermost)		Friable, mid to dark grey brown silty sand with moderate small to medium sub-rounded to sub-angular stone and occasional chalk flecks. Environmental samples 2.57, 2.58, 2.62, 2.65 and 2.70 taken		<b>SF2</b> whetstone (66g); pottery (705g); animal bone (720g); struck flint (23g); Fe fragments (98g); lava stone (1039g); shell (4g)
2472	2473	Curvilinear; steep sides, concave base (8.40 x 1.60 x 0.56m)	Friable, dark grey brown silty sand with occasional small to medium sub-rounded to sub-angular stone. Environmental samples 2.33, 2.50, 2.51 and 2.54 taken	Ditch; cut L2012; sealed by L2001	Pottery (52g); Fe fragment (18g)

Table 11: The Windmill

8.18 Two Phase 3 pits (F2027 and F2041) were enclosed by the ring-ditches (Table 11; Figs. 9 and 12). The more notable feature, Pit F2027, was sub-rectangular in plan with a square cut profile (Figs 12 and 25) and yielded a modest collection of finds including two sherds of medieval pottery. Its central position and profile suggest that it may have formed part of a footing for a post mill. Characteristic cross-shaped footings, often visible as cropmarks, are a feature of such structures (e.g. NHERs 9028 and 31444). However, the footing at Bradwell (if genuine) was less well preserved than some other examples. Pit F2041 lacked finds and was assigned to Phase 3 on stratigraphic grounds alone.

#### Phase 4: Early Modern/ Modern (18<sup>th</sup> Century+ AD)

8.19 Only five features were dated to the early modern/ modern era (Table 12; Figs. 6 and 10). Three of these (Gullies F2004 and F2067, and Pit F2098) were located in the western area of the site, close to the line of Browston Lane, while the remaining features (Pits F2131 and F2345) were more dispersed. This dearth of archaeologically visible activity is in keeping with the primarily agricultural use of the modern landscape, with large open fields having apparently been established by the later medieval period (see above).

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationship(s)	Findings
2004	2005	Curvilinear/ moderately sloping sides, concave base (35.00+ x 1.00 x 0.45m)	Friable, mid to dark orange brown/ grey brown silty sand with occasional gravel. Environmental samples 2.1 and 2.6 taken	Gully; cut L2009, L2022, L2060, L2068 and L2111; sealed by L1001	Clay pipe (5g)
2067	2068	Linear/ moderately sloping sides, concave base (9.00+ x 1.45 x 0.45m)	Friable, mid grey brown silty sand with occasional small to medium sub-rounded gravel	Gully; cut L2018; cut by F2004	Pottery (4g)
2098	2099 (primary)	Irregular/ steep sides, flattish base (7.20 x 3.50 x 0.74m)	Friable, mid brown yellow silty sand with occasional gravel. Environmental samples 2.76 and 2.80 taken	Pit; cut L2012 and L2097; sealed by L2001	Glass bead (<1g)
	2100		Friable, mid grey brown silty sand with occasional gravel		-
	2101 (uppermost)		Friable, light orange yellow silty sand with occasional gravel. Environmental sample 2.81 taken		Fe fragment (10g)
2131	2132	Sub-circular/ gently sloping sides, flattish base (2.10 x 2.17 x 0.24m)	Friable, mid grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	Pottery (61g); animal bone (2g); clay pipe (12g); Fe fragment (2g)
2345	2346	Rectangular/ steep sides, flattish base (5.60 x 3.80 x 0.25m)	Compact, mid grey brown silty sand with occasional large sub-rounded flint and gravel	Pit; cut L2433; sealed by L2001	Pottery (36g); struck flint (24g)

Table 12: Phase 4 features

## Unphased Features

8.20 Fifty nine features remain unphased (Table 13). The vast majority comprised discrete pits and postholes and were devoid of finds. A number of features located in the north-eastern corner of the site (Figs. 15 and 17) contained identical fills and may have been related to one another. No obvious structural outline was observed, however, and the features did not appear to relate to the surrounding Phase 2/ 3 boundaries. Six features yielded small quantities of struck flint, including a backed knife (79g) from Pit F2428 (L2429), although no close dating of this material was possible. Trace amounts of animal bone were present in two features.

Feature	Fill(s)/ context(s)	Plan/ profile (dimensions)	Fill description	Comments/ relationship(s)	Findings
2019	2020	Sub-rectangular/ moderately sloping to steep sides, flattish base (0.92 x 0.78 x 0.20m)	Friable, mid orange brown silty sand with occasional gravel. Environmental sample 2.12 taken	Pit; cut L2018; sealed by L2001	-
2033	2034	Circular/ moderately sloping sides, concave base (0.40 x 0.35 x 0.13m)	Friable, mid orange brown silty sand with occasional gravel. Environmental sample 2.25 taken	Posthole; cut L2018; sealed by L2001	-
2123	2124	Sub-circular/ gently sloping sides, concave base (1.60 x 1.27 x 0.3m)	Friable, mid grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2143	2144	Sub-circular/ moderately sloping sides, flattish base (1.40 x 1.20 x 0.40m)	Loose, mid brown yellow sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2145	2146	Sub-circular/ moderately sloping sides, flattish base (0.80 x 1.30 x 0.41m)	Loose, mid brown yellow sand with occasional gravel	Pit; cut L2003; sealed by L2001	-
2147	2148	Sub-circular/ steep sides, flattish base (0.85 x 0.70 x 0.45m)	Loose, dark grey brown silty sand with occasional gravel	Pit; cut L2003; sealed by L2001	Animal bone (165g)



2161	2162	Linear/ moderately sloping sides, flattish base (9.0+ x 0.65 x 0.35m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-
2163	2164	Linear/ moderately sloping sides, concave base (18.00+ x 1.30 x 0.35m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2136=L2401; sealed by L2001	-
2177	2178	Linear/ moderately sloping sides, flattish base (6.00m x 2.20 x 0.70m)	Compact, mid yellow brown silty sand with occasional gravel. Environmental sample 2.94 taken	Gully cut L2003; sealed by L2001	-
2184	2185	Sub-circular/ moderately sloping to steep sides, concave base (0.75 x 1.20 x 0.46m)	Compact, dark red brown silty sand with frequent gravel and occasional small clay mottles	Pit; cut L2003; sealed by L2001	-
2194	2195	Sub-circular/ moderately sloping sides, concave base (1.25 x 1.25 x 0.60m)	Friable, mid grey brown silty sand with occasional gravel	Tree Hollow; cut L2176=2193; sealed by L2001	-
2196	2197	Linear/ gently sloping sides, concave base (6.25+ x 0.9 x 0.30m)	Friable, dark yellow brown silty sand with occasional small sub-angular gravel	Ditch; cut L2003; sealed by L2001	-
2203	2204	Linear/ gently sloping sides, flattish base (10.00 x 0.55 x 0.08m)	Friable, mid grey brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-
2205	2206	Sub-circular, moderately sloping sides, concave base (0.52 x 0.56 x 0.07m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2207	2208	Sub-circular, moderately sloping sides, concave base (0.61 x 0.73 x 0.41m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint. Environmental sample 2.102 taken	Posthole; cut 2003; sealed by L2001	Animal bone (1g); struck flint (3g)
2209	2210	Sub-circular, moderately sloping sides, concave base (0.40 x 0.32 x 0.19m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2211	2212	Sub-circular, moderately sloping sides, concave base (0.49 x 0.45 x 0.32m)	Friable, mid grey brown, silty sand with frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2213	2214	Sub-circular, moderately sloping sides, concave base (0.45 x 0.35 x 0.34m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2215	2216	Sub-circular, moderately sloping sides, concave base (0.25 x 0.22 x 0.18m)	Friable, mid grey brown silty sand with frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2217	2218	Sub-circular, moderately sloping sides, concave base (0.44 x 0.55 x 0.07m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2219	2220	Sub-circular, moderately sloping sides, concave base (0.50 x 0.55 x 0.22m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2221	2222	Sub-circular, moderately sloping sides, concave base (0.30 x 0.31 x 0.08m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut L2278; cut by F2281=2328	-
2223	2224	Sub-circular, moderately sloping sides, concave base (0.50 x 0.40 x 0.26m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint. Environmental sample 2.100 taken	Posthole; cut 2003; sealed by L2001	-
2225	2226	Sub-circular, moderately sloping sides, concave base (0.55 x 0.59 x 0.38m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2227	2228	Sub-circular, moderate sloping sides and a concave base (0.4 x 0.34	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-

		x 0.39m)			
2229	2230	Sub-circular, moderately sloping sides, concave base (0.47 x 0.35 x 0.07m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2231	2232	Sub-circular, moderately sloping sides, concave base (0.65 x 0.80 x 0.78m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint. Environmental sample 2.99 taken	Posthole; cut 2003; sealed by L2001	-
2233	2234	Sub-circular, moderately sloping sides, concave base (0.52 x 0.59 x 0.24m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2235	2236	Sub-circular, moderately sloping sides, concave base (0.46 x 0.49 x 0.15m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	Struck flint (2g)
2239	2240	Sub-circular, moderately sloping sides, concave base (0.32 x 0.49 x 0.39m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut L2282=2329; sealed by L2001	Struck flint (1g)
2241	2242	Sub-circular, moderately sloping sides, concave base (0.48 x 0.46 x 0.20m)	Friable, mid grey brown, silty sand with moderate to frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2243	2244	Sub-circular, moderately sloping sides and a concave base (0.62 x 0.61 x 0.20m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2245	2246	Sub-circular, moderately sloping sides, concave base (0.70 x 0.69 x 0.18m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2247	2248	Sub-circular, moderately sloping sides, concave base (0.40 x 0.35 x 0.15m)	Friable, mid grey brown, silty sand with moderate to frequent small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2249	2250	Sub-circular, moderately sloping sides, concave base (0.39 x 0.40 x 0.09m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2251	2252	Sub-circular, moderately sloping sides, concave base (0.56 x 0.49 x 0.10m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2253	2254	Sub-circular, moderately sloping sides, concave base (0.55 x 0.65 x 0.48m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint. Environmental sample 2.97 taken	Posthole; cut 2003; sealed by L2001	Struck flint (3g)
2255	2256	Sub-circular, moderately sloping sides, concave base (0.44 x 0.45 x 0.15m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2257	2258	Sub-circular, moderately sloping sides, concave base (0.46 x 0.51 x 0.38m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2259	2260	Sub-circular, moderately sloping sides, concave base (0.52 x 0.57 x 0.15m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2261	2262	Sub-circular, moderately sloping sides, concave base (0.80 x 0.52 x 0.47m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; cut by F2355 sealed by L2001	-
2263	2264	Sub-circular, moderately sloping sides, concave base (0.45 x 0.55 x 0.54m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2265	2266	Sub-oval, moderately sloping sides, concave base (0.74 x 0.53 x 0.38m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint. Environmental sample 2.101 taken	Posthole; cut 2003; sealed by L2001	-
2267	2268	Sub-oval, moderately	Friable, mid grey brown, silty	Posthole; cut 2003;	-

		sloping sides, concave base (0.50 x 0.80 x 0.10m)	sand with small sub-angular gravel and flint	sealed by L2001	
2269	2270	Sub-circular, moderately sloping sides, concave base (0.42 x 0.69 x 0.22m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2271	2272	Sub-circular, moderately sloping sides, concave base (0.29 x 0.30 x 0.10m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2273	2274	Sub-circular, moderately sloping sides, concave base (0.40 x 0.36 x 0.10m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2275	2276	Sub-circular, moderately sloping sides, concave base (0.42 x 0.38 x 0.09m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2285	2286	Sub-circular, moderately sloping sides and a concave base (0.33 x 0.34 x 0.10m)	Friable, mid grey brown, silty sand with small sub-angular gravel and flint	Posthole; cut 2003; sealed by L2001	-
2288	2289	Linear/ moderately sloping sides, concave base (5.10 x 0.31 x 0.10m)	Friable, light grey brown silty sand with occasional gravel. Environmental sample 2.103 taken	Ditch; cut L2003; sealed by L2001.	Struck flint (4g)
2302	2303	Linear/ moderately sloping sides, concave base (0.56+ x 0.35 x 0.10m)	Friable, light red brown silty sand with occasional gravel	Ditch; cut L2003; sealed by L2001	-
2304	2305	Sub-circular/ steep sides, concave base (0.91 x 0.90 x 0.31m)	Friable, light grey brown silty sand	Pit; cut L2003; sealed by L2001	-
2322	2323	Linear/ steep to moderately sloping sides, uneven base (3.50 x 0.39 x 0.27m)	Friable, dark brown/ black sand with frequent gravel and charcoal flecks. Environmental samples 2.111 and 2.112 taken	Pit; cut L2003; sealed by L2001	-
2428	2429	Sub-circular/ gently sloping sides, concave base (1.0 x 1.10 x 0.13m)	Friable, mid yellow brown silty sand with moderate gravel	Pit; cut L2427; sealed by L2001	Struck flint (79g)
2430	2431	Circular/ moderately sloping side, concave base (0.50 x 0.45 x 0.14m)	Friable, dark grey brown sandy silt with moderate small angular burnt flint and charcoal flecks	Pit; cut L2003; sealed by L2001	-
2432	2433	Linear/ moderately sloping sides, concave base (10.00+ x 0.60 x 0.25m)	Compact, mid grey brown silty sand with occasional gravel	Gully; cut L2003; cut by F2345	-
2434	2435	Curvilinear/ moderately sloping sides, concave base (3.00+ x 0.35 x 0.18m)	Compact, mid grey brown silty sand with occasional gravel	Gully; cut L2003; sealed by L2001	-
2451	2452	Sub-circular/ moderately sloping sides concave base (1.70 x 1.60 x 0.80m)	Friable, dark brown/ black silty sand with occasional gravel	Pit; cut L2450; sealed by L2001	-
2457	2458	Linear/ moderately sloping sides, irregular base (14.9 x 0.70 x 0.38m)	Friable, mid yellow brown silty sand with occasional gravel	Ditch; cut L2003; cut by F2139=2186 and F2175=2192	-

Table 13: Unphased features

## 9 CONFIDENCE RATING

9.1 It is not felt that any factors inhibited the identification of archaeological features or the recovery of finds.

## 10 DEPOSIT MODEL

10.1 Topsoil L2000 was present across the site and comprised friable, mid to dark brown sandy silt with occasional small to medium flint nodules and pebbles (0.25 to 0.45m thick). L2000 overlay Subsoil L2001, comprising friable mid grey brown silty sand with occasional small to medium flint nodules and rounded pebbles (0.15 to 0.25m thick). Natural L2003 was also ubiquitous across the site, comprising loose, mid orange yellow sand with occasional small to medium sub-rounded to sub-angular stone and flint. The natural horizon was encountered at between 0.30m and 1.00m below the modern ground surface.

## 11 SPECIALIST FINDS AND ENVIRONMENTAL ASSESSMENTS

### The Small Finds

A report on the small finds is pending. Finds have been submitted to Nicholas J. Cooper (University of Leicester Archaeological Services) for conservation (where necessary) and full reporting.

### The Pottery

*Peter Thompson*

#### Summary of Results

The archaeological fieldwork at Bradwell recovered 416 sherds weighing 4430g (Table 14).

Type of investigation	Sherd Number	Fabric Weight (g)
Field Walking	19	289
Trial Trenching	44	292
Excavation	353	3849
<i>Total</i>	<i>416</i>	<i>4430</i>

*Table 14: Quantification of pottery by field work method*

The assemblage is multi-period, but mainly of late Anglo-Saxon/ Saxo-Norman and medieval date (74%) (Table 15).

Period	Date Range	Sherd Number	Fabric Weight (g)	Mean sherd weight (g)
<b>Bronze Age to Iron Age</b>	2 <sup>nd</sup> to 1 <sup>st</sup> millennia BC	14	71	5
<b>Late Iron Age to early Roman</b>	Late 1 <sup>st</sup> century BC to late 1 <sup>st</sup> century AD	1	4	4
<b>Saxo-Norman</b>	Mid 9 <sup>th</sup> -mid 12 <sup>th</sup> centuries	36	196	5.4
<b>Medieval</b>	11 <sup>th</sup> -14 <sup>th</sup> centuries	273	2775	10.1
<b>Late medieval and transitional</b>	15 <sup>th</sup> -16 <sup>th</sup> centuries	38	589	15.5
<b>Post-medieval</b>	16 <sup>th</sup> -18 <sup>th</sup> centuries	45	716	15.9
<b>Early modern to modern</b>	Mid 18 <sup>th</sup> centuries+	9	79	8.8
<i>Total</i>		<i>416</i>	<i>4430</i>	

*Table 15: Quantification of sherds by period*

### *Summary of Potential*

The assemblage is of moderate size and therefore can contribute towards the understanding of local and regional patterns of pottery use and distribution.

### *Project Aim*

The project aim is to record and quantify the pottery as outlined below (see *Recording Strategy*). The wares present will be discussed by fabric and form with particular reference to the features containing the most pottery. A short discussion will summarise the findings and any chronological or distributional patterns that may be evident.

### *Presentation for Publication*

Headings:

1. Overview of the pottery assemblage
2. Methodology
3. Quantification of fabrics and forms
4. Dating of features containing the largest groups of pottery
5. Discussion summarising any chronological or distributional patterns
5. List of Illustrations
6. Bibliography

### *Method Statement*

#### Recording strategy

The pottery will be recorded following guidelines of the *Post-medieval Pottery Research Group* (Slowikowski 2001). The pottery will be examined under a x35 binocular microscope, or visually when it is evident that the fabric/ vessel present in a context is all the same. The sherds will be recorded by context into an *Excel* spreadsheet, including information such as sherd number and weight, fabric type, vessel or profile type, decoration, diameter (rim, base), and date.

Fabrics will be identified and described using a x35 binocular microscope and assigned fabric codes used in the Suffolk Post-Roman fabric series 9 (also relevant to Norfolk).

Forms will be described according to the *Medieval Pottery Research Group* guidelines (1998) with reference to the main Suffolk Post-Roman pottery rim types (also relevant to Norfolk), and published material from the Norwich area.

### **The Struck Flint**

*Andrew Peachey*

Excavations recovered a total of 172 pieces (3085g) of struck flint, entirely in a fresh, un-patinated condition (Table 16). The technological traits of these flakes and implements indicate a chronological range spanning prehistory, from the Mesolithic

to the early Bronze Age; however the struck flint is sparsely distributed as un-stratified material, and in medieval and post-medieval field systems or related agricultural features.

Struck flint type	F	W
Core	3	266
Core fragment	2	54
Roughout	1	148
Chopping tool	1	260
Sickle	1	23
Backed knife	2	124
Piercer	1	8
Scraper	23	723
Utilised flake	1	19
Microburin	2	5
Blade	12	86
Debitage	123	1369
<i>Total</i>	<i>172</i>	<i>3085</i>

Table 16: Quantification of struck flint implements and debitage by frequency (F) and weight (W, in grams)

### *Methodology and Terminology*

The flint was quantified by fragment count and weight (g), with all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive. Flake type (see 'Dorsal cortex,' below) or implement type, patination, colour and condition were also recorded as part of this data set, along with free-text comments.

The term 'cortex' refers to the natural weathered exterior surface of a piece of flint, and the term 'patination' to the colouration of a flaked surface exposed by human or natural agency. Dorsal cortex is categorised after Andrefsky (2005, 104 and 115) with 'primary flake' referring to those with cortex covering 100% of the dorsal face; 'secondary flake' with 50-99%; 'tertiary' with 1-49% and 'un-corticated' to those with no dorsal cortex. A 'blade' is defined as an elongated flake whose length is at least twice as great as its breadth, often exhibiting parallel dorsal flake scars (a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/breadth ratio). Terms used to describe implement and core types follow the system adopted by Healy (1988, 48-9).

### *Summary*

#### Raw material

The bulk of the flint has a mid to dark grey core and appears to have been sourced from local Crag Group gravels; although occasional near black pieces may represent Breckland flint. There does not appear to be any bias in the exploitation of raw material between pieces assigned to different chronological periods.

#### Mesolithic

Mesolithic flint technology is represented by the bi-products of microlith production, though finished points are absent, and includes a long blade and microburins that preserve evidence for notches worked into lateral edges. A long re-touched blade in Ditch F1067 comprises a backed knife, while a single core tool constitutes a chopper formed on a pebble.

## Earlier Neolithic

The earlier Neolithic flint work includes blade cores, probably manufactured on pebbles or cobbles rather than larger nodules, which were rotated to exploit multiple platforms resulting in sub-cuboid profiles. A single core is certainly exhausted, while the remainder exhibit scars that suggest they were abandoned due to mis-hits or shattering. The bulk of the blades in the assemblage have dimensions and proportions consistent with these cores, and also largely exhibit traces of wear on one lateral edge, indicating they were produced to meet a demand, rapidly used and discarded. The debitage flakes present also almost entirely have blade-like dimensions, and are tertiary or un-corticated, suggesting they are were earlier Neolithic bi-products, though a small group of bladelets in Ditch F2392 may potentially be of Mesolithic origin.

Larger implements of probably earlier Neolithic origin include a diverse range of types, notably a D-shaped backed knife, a roughout, a sickle and numerous scrapers. The D-shaped backed knife, in Pit F2428 is notable for being manufactured on very high quality black Breckland flint; while the roughout probably represents a stage of axe manufacture, though it cannot be discounted as a crude tool in itself. The sickle, in Pit F2119 represents the most highly-finished implement in the assemblage, and the greatest investment of prehistoric time and skill. Manufactured on a large blade, it has been bi-facially, invasively re-touched, with a thickness of c.4mm and a cutting edge slightly more convex than the straighter 'back'. The cutting edge preserves a c.2mm wide band of edge gloss, possibly produced by the processing of silica-rich plants; while the context and condition of the sickle: isolated and unbroken, identifies it as of intrinsic interest.

## Later Neolithic to early Bronze Age

The later Neolithic and early Bronze Age flint technology is dominated by hard-hammer struck flakes removed from multi-directional or unsystematic cores, and includes a significant number subsequently modified into scrapers. A single core could be attributed to this period: a Levallois-type core, with at least two disc scrapers and two flakes in the assemblage clearly produced using this reduction technique. The scrapers present are predominantly end or horseshoe types, although side and thumbnail types are also present, as is a single piercer or graver.

## *Research Potential*

The East Anglian region was rich in natural flint resources in the Neolithic and Bronze Age and the density of its distribution, as *in situ* or residual material, can prove informative of land use strategies and the impact of human activity on the landscape (Brown and Murphy 1997, 12). This is particularly true away from monumental sites (Medlycott 2011, 14 and 21) and the evidence from the east Norfolk/ Suffolk coastal regions is much more limited than that from river valleys or coastal areas in Essex or north-wets Norfolk (Brown and Murphy 1997, 14). Thus despite the apparently residual nature of the bulk of this assemblage; it has a limited potential to contribute to our understanding or areas of prehistoric activity, while the possible deliberate placement of a flint sickle may be related to more structured deposits.

## Research questions

- How can the groups defined by technological traits be characterised compared with other larger prehistoric assemblages in the region?
- Can technological, chronological or depositional parallels be found for the highly-finished implements, notably the sickle?
- Can the presence of these implements and flakes be associated with seasonal activity or particular functions in this coastal area?

## **The Animal Bone**

*Dr Julia E.M. Cussans*

### *Introduction*

A moderately sized assemblage was recovered from excavations at Bradwell with bones deriving from a total of 33 contexts from 31 features including, ditches, pits, postholes and the two kilns and their associated features. The assemblage is dominated by a collection of goose bones, largely recovered from a single Posthole F2378 (L2379); a selection of mammal bones was also present and largely derived from Phases 2 and 3. No bones were recovered from Phase 1 and only a single bone was attributed to Phase 4; a small number of bones derived from undated contexts.

### *Method*

The entire animal bone assemblage was scanned one context or context segment at a time and the results recorded on a bone scan pro-forma. The pro-forma took into account observations on bone condition including general preservation, colour, abrasion, fresh breaks and gnawing. Bone identifications were made using the in house reference collection and with the aid of reference manuals (e.g. Cohen and Serjeantson 1996; Hillson 1992; Pales and Garcia 1981 a & b; Pales and Lambert 1971 a & b; Schmid 1972). Mammal bones were quantified by species where possible or where this was not possible by size category, where large indicates cattle or horse sized, medium is sheep/goat, pig or large dog sized and small mammal is cat or hare sized. The presence of bird, fish and other small fauna could also be noted. For the identified mammal species the dominance of particular body parts was noted as was the presence of butchery, ageable mandibles and teeth, unfused epiphyses, measurable bones and those displaying pathologies. The presence of such features was noted in a semi-quantitative manner (none, few, some, many). Further to this, notes were made on any particular points of interest. Once recorded the data from the scan was entered into an MS Excel spreadsheet along with context descriptions, spot dates and phasing to assist with data processing and analysis.



## Results

### Taphonomy

Bone preservation was quite variable across the assemblage with bone being rated from very poor through to good on a five point scale from very poor through to excellent. The largest preservation group was ok and the smallest good, even numbers of contexts were rated as poor and very poor. Bone abrasion and fresh breakages were fairly common, but dog gnawing was only present in one context, L2060 (Phase 3) which happened to include a substantial number of dog bones.

### Quantification and species present

Table 17 shows the taxa present by phase. No animal bone was attributed to Phase 1 and only a single fragment came from Phase 4; a small quantity is currently unphased. The usual suite of domestic mammal taxa was present including cattle, sheep/goat, pig, horse and dog. One bone was thought to possibly belong to fox; further examination is needed to confirm this. A significant proportion of the assemblage could only be identified as large (cattle or horse sized) or medium (sheep or pig sized) mammal. The largest proportion of the assemblage however was made up of a collection of goose bones, the majority of which derived from Posthole F2378 (F2379); these are described more fully below.

	Phase 2	Phase 3	Phase 4	Undated	Total
Cattle	19	13	0	0	32
Sheep/goat	2	8	0	0	10
Pig	2	5	0	0	7
Horse	10	2	0	1	13
Dog	1	15	0	0	16
Bird	283	0	0	0	283
Large mammal	65	59	0	0	124
Medium mammal	13	72	1	6	92
<i>Total</i>	<i>395</i>	<i>174</i>	<i>1</i>	<i>7</i>	<i>577</i>

Table 17: Quantification of animal bones by phase

Cattle were represented by a mix of elements including a small number of butchered bones some displaying heavy blade chops. A number of ageable teeth and epiphyses were present as were a small number of pathological bones. These included a tooth with uneven wear, an asymmetrical distal metatarsal and a second phalange displaying minor eburnation and lipping.

Sheep/goat was also represented by a mix of elements, none of which could be identified to species. Butchery marks were noted on some sheep/goat bones including a chopped axis (neck bone), and a small number of ageable elements were present. No pathological bones were noted.

Pig was only represented by head and foot elements and no butchered, ageable or pathological elements were noted. At least three canine teeth were present in the pig assemblage all of which were male.

Horse bones were mostly head elements but feet and limbs were also represented. No butchery marks or pathological modifications were noted but some of the teeth present were thought to be deciduous, indicating a relatively young animal.

Dog/ fox bones were present in two contexts. A single mandible that was thought to possibly belong to a fox was found in L2048C and a possible associated bone group (ABG) of dog hind limb and foot elements was recovered from L2060S. No butchery or pathology was noted on any of these bones.

Bird remains were unusually the most common identified taxa and derived from three fills. The majority of the bird bones came from Posthole Fill L2379, associated with Kiln 1 (Sample 126) which contained the partial remains of at least four geese. A further substantial collection of goose remains derived from L2386A (also associated with Kiln 1) and a single bird rib came from L2149. The goose bones from L2379 included some butchered elements and some fragments showing medullary bone indicating egg laying females.

### *Summary and Statement of Potential*

This small assemblage is dominated by a deposit of goose remains associated with Kiln 1. Aside from this a small quantity of domestic mammal remains was present and possibly a fox mandible. A small amount of economic evidence may be derived from the domestic mammal bone collection but of most interest from this assemblage is the collection of goose bones and their association with Kiln 1.

Aside from being able to elucidate some aspects of site economy from the domestic mammal fauna it is felt the greatest potential of this assemblage lies in the analysis of the goose bones and their association with Kiln 1. Further work will concentrate on these deposits and look for parallels and possible explanations as to the presence of these bones in association with the kiln.

### *Method Statement*

Following this assessment domestic mammal bones will be revisited to record further details on features of interest such as butchered, ageable or pathological elements. Butchery marks will be recorded as cuts, chops or saw marks and their locations and possible functions described. Tooth eruption and wear will be recorded following Grant (1982) and age stages assigned following Halstead (1985) for cattle, Payne (1973) for sheep/ goat and Hambleton (1999) for pig. Epiphysial fusion will be assigned to age stages (Early, Intermediate, Late) following O'Connor (1989). Pathological lesions will be located and described. The goose bone assemblage will be recorded in detail including element, end and side present and the exact nature of any butchery marks, medullary bone and any other features of interest. Elements present will be quantified in relation to the minimum number of individuals (MNI), to examine element representation and what proportion of the bird is present.

### *Publication Synopsis*

- Introduction
- Method
- Results
  - Taphonomy
  - Species Present and Quantification
  - Domestic mammal economy
  - Goose bone deposits
- Discussion
  - Insights into the site economy
  - Geese and Kilns, meaning and purpose
- Conclusions
- References

## The Shell

*Dr Julia E.M. Cussans*

A small quantity of marine shell was recovered from excavations at Bradwell. In total 41 pieces of oyster shell (*Ostrea edulis*) were recovered from four contexts/ context segments (Table 18), the majority of which came from Phase 3 Ditch F2059. Shell preservation was rated as ok or poor on a five point scale from very poor through to excellent, and shells were noted as being chalky and fairly abraded. A small number of shells were noted as having evidence for polychaete worm infestations. None of the shells were noted as having any obvious human modifications. Upper and lower valves were roughly evenly represented and the shells were noted to vary considerably in size. No other species were present and it is not felt that any further work is merited on this small assemblage.

Feature	Context	Description	Phase	Oyster			NISP	MNI
				Lower	Upper	Frag		
2300	2301	Pit	2		1		1	1
2059	2060S	Ditch	3		1		1	1
	2060T		3			2	2	1
	2080T		3	10	11	16	37	11
			<i>Total</i>	<i>10</i>	<i>13</i>	<i>18</i>	<i>41</i>	<i>13</i>

Table 18: Quantification of oyster shells by context and segment; NISP = number of identified specimen; MNI = minimum number of individuals

## The Environmental Samples

*Dr John R. Summers*

### Introduction

Excavations of medieval archaeological deposits at Bradwell resulted in 132 bulk soil samples (3060 litres) for environmental archaeological assessment. The sampled features included a medieval agricultural kiln and the ditches associated with a medieval/ post-medieval windmill. This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains recovered.

### Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

In the first instance, all samples >10 litres were 50% sub-sampled. These were assessed by the present author while excavation and processing was ongoing. All samples that had the potential to produce >30 identifiable specimens or contained substantial concentrations of charcoal were fully processed. The volumes shown in the data tables that follow represent the final processed sample volumes.

## Results

Table 19 shows the distribution of samples by Phase, while the assessment data from the bulk sample light fractions are presented in Appendix 2.

Phase	Number of samples	Volume (litres)
Phase 1 - Neolithic (4300-2100BC)	1	20
Phase 2 - Saxo-Norman to High Medieval (10th to 13th/14th century AD)	51	1250
Phase 3 - High medieval to post-medieval (14th/ 15th to 17th century AD)	53	1250
Phase 4 - Early modern/ modern (18th century+ AD)	10	220
Undated	17	320
<b>Total</b>	<b>132</b>	<b>3060</b>

Table 19: The distribution of samples by phase

### Phase 1: Early Neolithic (4300-3300 BC)

A single sample was present from Phase 1 pit fill L2120 (F2119). No remains of archaeological significance were recovered.

### Phase 2: Saxo-Norman to High Medieval (10<sup>th</sup> to 13<sup>th</sup>/ 14<sup>th</sup> century AD)

Phase 2 activity was prevalent across the site and 51 samples were taken and processed from these medieval deposits. Cereal remains were quite commonly recorded and included hulled barley (*Hordeum* sp.), free-threshing type wheat (*Triticum aestivum/ turgidum* type), oat (*Avena* sp.) and rye (*Secale cereale*). In addition were a number of pea/ bean (Fabaceae) seeds, which are also likely to represent crop remains.

Of the cereals, wheat was probably the least abundant and least commonly recorded. This is at odds with the expected pattern for the period (e.g. Moffett 2006; Ballantyne 2005; Carruthers 2008; Fryer and Summers forthcoming) but is similar to other medieval sites in Norfolk (e.g. Summers 2012a; b). Sandy soils prevail in the vicinity of Bradwell (Soilscapes 2015) and would have been at a high risk of summer drought, to which wheat is poorly adapted. Barley, oats and rye are all much more drought tolerant than wheat and able to withstand slightly higher soil salinity. Rye was often grown as an alternative to wheat as the primary winter cereal in areas unsuitable for wheat cultivation, although it is likely to have been a lower status crop (Campbell and Overton 1993, 57-58). Norfolk was responsible for a significant barley export during the medieval period (Campbell and Overton 1993, 55), which reflects the focus of the region's cereal economy.

A number of rich samples were recorded, the majority of which were from Kiln 1 and its associated activity area. Oat and barley predominated, with rye also commonly encountered. Wheat appears to have been very much a marginal component in the kiln assemblage. Non-cereal taxa included goosefoot (*Chenopodium* sp.), knotweed (*Persicaria* sp.), black bindweed (*Fallopia convolvulus*), dock (*Rumex* sp.), wild

radish (*Raphanus raphanistrum*), vetch/ wild pea (*Vicia/ Lathyrus* sp.), scentless mayweed (*Tripleurospermum inodorum*), stinking chamomile (*Anthemis cotula*), sedge (*Carex* sp.), chess (*Bromus secalinus* type) and other wild grasses (Poaceae). Goosefoot, knotweed and dock tend to prefer more fertile soils and may reflect amendment of cultivated land. Scentless mayweed and wild radish are more common on free-draining soils.

It seems likely that the kiln was being used to dry locally grown cereals for storage or export. The identification of probable gorse charcoal (cf. *Ulex* sp.) in a number of the samples indicates that gorse constituted a significant proportion of the kiln's fuel supply. Gorse is a fast burning fuel that can provide a high temperature. It is also has the benefit of being readily available from scrub habitats, which are likely to have existed in the vicinity of the site. As part of further work, it may be possible to examine the spatial variation of the plant macrofossil deposits, which may allow the identification of debris from different firing episodes to facilitate a more detailed investigation of kiln use and the way products were treated.

Other rich samples were recovered from posthole fill L2238, and ditch fills L2278D and 2187D. These also predominantly contained hulled barley, oat and rye in comparable proportions to the kiln deposits.

### Phase 3: High medieval to post-medieval (14<sup>th</sup>/ 15<sup>th</sup> to 17<sup>th</sup> century AD)

The remains from Phase 3 are quite comparable to those from Phase 2, with hulled barley, oats, rye and wheat all recorded. Although wheat was still the least common cereal, its presence appears more pronounced than in Phase 2. Wheat could have been grown on the more fertile soils north of Bradwell (Soilscapes 2015), which may have been better drained in later periods. The presence of a mill is likely to have led to the import of cereals from quite a wide area to the site for processing, which may also explain higher proportions of wheat than in Phase 2.

A large number of samples were taken from the Phase 3 windmill ditches. Most of these contained only small numbers of carbonised remains or were blank. This suggests an input of carbonised material as background debris from activities on the site, rather than discrete dumps of material. The exception to this was from fills L2060 and L2080 in ditch segment 2059T. Material from these fills contained numerous cereal grains, predominantly barley, along with some free-threshing type wheat, oats and rye. Pea/ bean seeds were also present, along with arable weeds goosefoot (*Chenopodium* sp.) and dock (*Rumex* sp.). These could represent the remains of a processing or storage accident.

Remains from the fill of the Kiln 2 stokehole (L2377) suggest a dominance of oat and rye in this feature, although full quantification would give greater detail. Non-cereal taxa included knotweed (*Persicaria* sp.) and wild radish (*Raphanus raphanistrum*).

### Phase 4: Early modern/ modern (18<sup>th</sup> century+ AD)

The ten Phase 4 samples produced very few carbonised plant macrofossils. This most likely reflects a decline in the association of arable processing activities with the site.

## Unphased features

Archaeobotanical remains in the 17 samples from undated deposits were quite comparable to those from both Phase 2 and Phase 3. A number of quite rich samples were recovered. The material from Pit Fill L2323 (F2322) was particularly rich, with a large volume of cereal remains likely to represent a significant cereal drying or storage accident. This deposit was dominated by hulled barley and oat. This was also the case for three undated postholes (F2207, F2253 and F2265). Should any of these deposits be dated through further post-excavation analysis, the results will be integrated with those from the other Phase 2 and 3 deposits.

### *Discussion and Conclusions*

The site at Bradwell was a focal point for agricultural activity throughout much of the medieval period and, during Phase 3, may have been a focal point for the import and processing of cereals from a wide area, with activity focussed on a windmill. Locally produced cereals appear to have been dominated by the hardier, more drought tolerant types, barley, oat and rye. Pulses also appear to have been locally cultivated as part of the broader mixed economy. Kiln 1 demonstrates bulk processing of cereals during Phase 2. It is most likely that these were locally produced cereals being processed for local consumption and local markets. The relatively modest scale of the kiln (c. 2m diameter of drying chamber) and the mixed range of crops associated with it support this interpretation. The wide distribution of carbonised cereals across the site and occasional rich deposits demonstrate that cereals were in common usage at the site and being handled in sufficient quantities to result in occasional drying and storage accidents.

## Further work

A number of samples have been identified that are rich in carbonised remains and would merit further sorting, identification and quantification. It is considered that results from this work would allow a more detailed analysis of the nature of the medieval arable economy at Bradwell. Further work will focus on the relative importance of the identified cereal and non-cereal cultivars in Phases 2 and 3, and examine whether there were any changes over time and the reasons for such developments. More detailed identification and quantification of non-cereal taxa will also facilitate the investigation of crop husbandry practice, specifically soil and climatic conditions, and potential sowing, harvesting and processing methodologies.

Phase	Feature	Samples
1	-	-
2	F2186	138
	F2237	98
	F2277	116
	Kiln 1	115, 117, 119, 120, 121, 122, 123, 124, 125
3	F2059	65, 66
	Kiln 2	129, 130
4	-	-
Unphased	F2207	102
	F2253	97
	F2265	101
	F2322	111, 112
<i>Total</i>	<i>10 features/ structures</i>	<i>21 samples</i>

*Table 20: Samples to be taken to full recording and analysis*

A full list of samples to be taken to full analysis is presented in Table 20. Undated samples will only be examined in more detail if it is possible to phase the deposits through further post-excavation analysis.

## 12 DISCUSSION

### *Summary*

12.1 Based on known sites/ findspots in the area and the results of the geophysical survey, fieldwalking and trial trenching (see *Archaeological and Historical Background*) the site was considered to have good archaeological potential, particularly for remains of prehistoric and Saxo-Norman/ medieval date. In the event, the excavation predominantly encountered features and contexts dating to the Saxo-Norman and medieval/ post-medieval periods, collectively spanning the 10<sup>th</sup> to 17<sup>th</sup> centuries AD. Most of the encountered features dated between the 10<sup>th</sup> and 14<sup>th</sup> centuries AD and included a complex rectilinear system of enclosures and a kiln (probably agricultural in nature). A second kiln and features consistent with a windmill mound were dated to the High medieval to post-medieval period. Evidence of prehistoric and early modern/ modern activity was extremely sparse.

12.2 Correlation between the excavated evidence and the findings of the geophysical survey and trial trenching was mixed (Figs. 3-5). For example, a linear anomaly (28) in the vicinity of Trial Trench 2 partly aligned with features forming the north-western circuit of the Phase 3 windmill. Similarly, an L-shaped positive anomaly in the central northern area of the site (traversing Trial Trench 7) appeared to correlate well with excavated Ditch F2125. Further correlation between positive anomalies and excavated ditches/ gullies was also evident, but was not wholly consistent. Possible reasons for poor correlation – where apparent – will be sought as part of the ongoing post-excavation analysis.

### *Phase 1: Early Neolithic (4300 to 3300 BC)*

12.3 The only Phase 1 feature (Pit F2119 (L2120)) was located close to the northern edge of the excavation. This feature was tentatively dated based on the presence of an early Neolithic worked flint sickle (SF3) in its fill. This extremely limited evidence accords with known Neolithic finds from the local area, but attests to little more than transient (possibly seasonal) activity.

### *Phases 2-3: Saxo-Norman to Post-Medieval (10<sup>th</sup> to 17<sup>th</sup> century AD)*

12.4 Of particular significance was the encountered Saxo-Norman to post-medieval (Phase 2-3) activity. The earlier part of this range was defined by a series of rectilinear, ditched enclosures, particularly across the northern and eastern areas of the site (Fig. 8). These apparently agricultural enclosures (see below) occupied land between two known medieval villages (Gorleston-on-Sea and Browston; [www.opendomesday.org](http://www.opendomesday.org)) and probably formed part of a nearby farmstead. No domestic structures were encountered within the excavated area, however. Also belonging to this earlier medieval phase were the remains of an agricultural kiln (Kiln 1) and an associated, post-built structure (Structure 1). The environmental evidence

associated with the kiln suggests the drying of locally produced cereal crops for storage or export, with oat and barley dominating the assemblage. The possible use of gorse to fire the kiln was also suggested. One of the Structure 1 postholes also yielded a concentration of goose bones. This feature was centrally located within the floor of the structure and may have been a small rubbish pit, rather than housing an upright timber.

12.5 Regional examples of medieval agricultural kilns/ ovens include an excavated example at Old Hall Farm, on the route of the Bacton to King's Lynn gas pipeline (Clay and Wilson 2012, 154-5). The kiln at this site – dated between the 11<sup>th</sup> and 14<sup>th</sup> centuries – underwent three phases of construction/ use, the earlier of which were probably associated with the drying of cereal grains (*ibid.*). Also identified at this site was a possible sunken floored building of unknown date (*ibid.* 170). The building was not thought to be Anglo-Saxon (as its form implied), owing to the total lack of supporting, datable evidence (*ibid.*) and there remains a strong possibility that it was also of medieval date. Medieval corn drying kilns from further afield include a stone built example from Kilnsey Green, North Yorkshire (Johnson *et al.* 2009). Structures of this type were a common feature of the medieval British landscape, especially in northern areas where a damp climate often inhibited the air drying of grain (*ibid.* 20). Abundant Romano-British corndriers are also recorded across East Anglia and formed a major part of the rural economy at this time (Upex 2008, 164).

12.6 A second kiln (Kiln 2) was associated with the Phase 3 landscape at Bradwell. This kiln was less well preserved than Kiln 1, with little of its floor or primary fill remaining *in situ*. However, environmental sampling of Stoke Hole Fill L2377 yielded abundant charred cereal grains, dominated by oat and rye. Raistrick (1972, 90) highlighted the relationship between mills and drying kilns (after Johnson 2009, 21), and it is conceivable that grain processed in Kiln 2 was also milled at the site. The Phase 3 windmill lay c. 260m to the west. It has been noted that wet grains, particularly oats, cannot be effectively milled and require thorough drying beforehand (Johnson *et al.* 2009, 20). Drying oats also allows for effective dehussing (*ibid.*).

12.7 The Phase 3 windmill was represented by two phases of intercutting, ring-ditches, truncating buried soils of Saxo-Norman to High medieval date (Figs. 9 and 12). The earlier ring-ditch (F2010) formed a continuous circuit, while the latter 'boundary' was segmented (formed by Ditches F2050, F2059 and F2472) with the broadest opening or 'causeway' to the west (facing Browston Lane). A possible remnant of the mill mound/ hill (L2015) was present within the area of the ring-ditches, although appeared heavily ploughed out. The blue/ grey colour and chalky clay consistency of L2015 was dissimilar to the underlying sandy strata, possibly suggesting that it had been purposefully imported from elsewhere. In places, L2015 was truncated by Ring-Ditch F2010 which suggests that the latter post-dated the construction of the mound, although not necessarily by much. 'Internal' features were sparse, although included square-cut Pit F2027 which may have formed part of a footing for a post mill.

12.8 Medieval and post-medieval post mills are a common feature of the Norfolk landscape, with numerous examples recorded by the county's Historic Environment Record. Excavated examples include a medieval mill hill at Mount Close, Swaffham (NHER 2655). The part excavation of this monument in 1958 revealed made ground



layers dating between the 13<sup>th</sup> and 17<sup>th</sup> centuries AD (*ibid.*), and the site was also labelled as 'Millhill piece' on the tithe map of 1843 (*ibid.*). The site of a possible medieval/ post-medieval mill was also excavated at Witton, near North Walsham (NHER 7071; Lawson 1983, 90). In this instance, the monument comprised a circular ditch with V-shaped profile and causeways to the north-west and south. The ditch was c. 1.5m wide and formed a cropmark some 18.2m in diameter (*ibid.*), only marginally smaller than the Bradwell ditches which were c. 20m in diameter. The only finds from Witton were late medieval pot sherds consistent with wares being produced at Potter Heigham (*ibid.*), some 13km to the south-east; an industry that dates between the 12<sup>th</sup> and 15<sup>th</sup> centuries AD (NHER 8388). The site of the Witton mill is accessible via a road marked on Faden's map of 1797, although the mill was no longer in use by this time (Lawson 1983, 90).

12.9 Unexcavated mill hills are more numerous and include examples at Shropham (NHER 9028) and Broome (NHER 31444). The cropmarks forming these examples comprise ring-ditches with characteristic central crosses (representing a pair of cross beams or 'cross-tree' (English Heritage 2011, 3-4)). The mound of the Shropham mill was still extant in 1976 but had been ploughed out by the mid 1990's (NHER 9028). Surviving windmill mounds include a low example at Beeston with Bittering (NHER 18227), associated with surface finds of medieval pottery and mill stone/ quern, and a possible mound in the Breckland parish of Thompson (NHER 8952). Additional ploughed out examples include one at Tivetshall St Mary (NHER 12186). Within the immediate vicinity of the current site, a medieval post mill possibly set within a Bronze Age barrow is recorded on Dorothy Avenue, c. 1.3km to the north-east.

12.10 Post mills were often sited on hills or mounds (Hills 1996, 42). In later examples the mound is thought to have allowed the mill to catch more wind, while in earlier mills – with lighter structures – the mound would have acted as an anchoring mechanism, designed to encase the mill's cross-tree (English Heritage 2011, 4; Hills 1996, 42). Encircling ditches were also a common feature and may have acted as boundaries, designed to exclude livestock which 'might have been hit by the sails' (Hills 1996, 42-3). Good road access is also a feature of windmills, allowing for the effective import of grain and export of flour (English Heritage 2011, 3). The Bradwell windmill site sits adjacent to modern Browston Lane, an earlier incarnation of which may have been delimited to the east by Phase 3 Ditch F2029 (Figs. 9 and 12).

#### *Phase 4: Early Modern/ Modern (18<sup>th</sup> century+ AD)*

12.11 The Phase 4 evidence was sparse and laced features or finds of note. The low number of features is thought to reflect the current, open agricultural nature of the site.

#### *The Economic Evidence*

12.12 During the main periods of occupation (Phases 2 and 3) the site appears primarily agricultural in nature with the structural evidence attesting to the processing of cereal grains on a significant scale. Systematic environmental sampling produced common cereal remains, including hulled barley, free-threshing wheat, oat and rye (see *The Environmental Samples*). In Phase 2, pea/ bean remains also represent a

possible cultivar (*ibid.*). Wheat was poorly represented in both phases, probably reflecting the site's location on sandy soils, to which barley, oats and rye – all drought resistant species – are far better suited (*ibid.*). A number of rich Phase 2 samples, mostly from Kiln 1/ Building 1 were apparent and attest to the predominance of oat and barley; a similar pattern was displayed by a sample from the stoke hole of Kiln 2. Wheat, although still poorly represented, appears to have increased in importance from the High medieval period, and may have been grown on the more fertile soils to the north of the site; the Phase 3 windmill would no doubt have processed grains from the wider area.

12.13 The recovered animal bone assemblage is small. Most of the bone is from Phase 2 and 3 features and includes the usual suite of domestic mammals; no bone was associated with Phase 1 activity (see *The Animal Bone*). A significant part of the assemblage cannot be identified to species. Of the identified bone, the majority is derived from a collection of goose bones – representing at least four birds – from Structure 1 Posthole F2378 (F2379). A further substantial collection of goose bones was also found within the secondary fill of Structure 1 (L2386). The remains display some butchery and attest to the presence of egg laying females. Dog/ fox bones were present in two contexts (*ibid.*). Although some level of animal husbandry is evident at the site, it does not appear to have formed the mainstay of the early medieval to post-medieval economy.

## **PART II: UPDATED PROJECT DESIGN**

### **13 UPDATE OF AIMS AND OBJECTIVES**

13.1 The original aims and objectives of the project are presented in Section 2. Following the completion of fieldwork, these remain broadly valid. Alterations to the phasing (as proposed by the evaluation report) have been made, however. Aims and objectives are expanded upon by the *Updated Aims and Objectives* presented in Section 14. These are derived from assessments of the stratigraphic, artefactual and environmental evidence, presented in Part I of this report, and have been developed with reference to the updated regional research framework (Medlycott 2011). A bibliography, comprising material for comparison and reference, is presented in Section 15.

### **14 UPDATED AIMS AND OBJECTIVES**

14.1 Notable finds from the site include early lithic technology, two agricultural kilns, a Saxo-Norman to High medieval sunken-featured building and a medieval to post-medieval windmill. Although a summary and brief discussion of the early modern/ modern material from the site will be included within the research archive report, the updated aims and objectives stated herein are focussed solely on the earlier material.

## **Phase 1: Early Neolithic (4300 to 3300 BC)**

14.2 Place the early Neolithic activity (and residual prehistoric finds) in context with the known activity of these dates in the surrounding area:

- Full analysis, illustration and publication of the struck flint and prehistoric pottery assemblages will allow for a detailed comparison with other local/ regional assemblages.
- Investigate the potential of the prehistoric lithic assemblage, through comparison with other known assemblages, to inform regarding the nature of local activity in this coastal area, whether seasonal or otherwise.

## **Phase 2: Saxo-Norman to High Medieval (10<sup>th</sup> to 13<sup>th</sup>/ 14<sup>th</sup> century AD)**

14.3 Place the Saxo-Norman to High medieval activity in context with the known activity of these dates in the surrounding area:

- A detailed review of similarly dated local/ regional sites, beginning with those referenced above (see Section 5), will enhance our understanding of the nature and development of the local early to High medieval landscape.

14.4 Characterise the nature of the Phase 2 activity:

- Through comparison with applicable regional examples, investigate the possible function(s) of Kiln 1 and Building 1. Investigating the form and function of medieval rural buildings is a regional research priority (Medlycott 2011, 70).
- Through analysis of the ecofactual data, assess the possible functions of the Phase 2 enclosures. Investigating possible links between medieval field size and function(s) is also a regional research priority (Medlycott 2011, 70).

14.5 identify topographical/ geological/ geographical influences on the layout and development of the Phase 2 activity present within the current site and in the surrounding area:

- A review of the early to High medieval site's topographical, geological and geographical location, with comparison to other regional sites of this type may help to define any determining factors underpinning its layout and development. These will no doubt also be reflected in the site's economy.
- Medlycott (2011, 70) points out the need to investigate any links between medieval rural and urban sites. A more detailed review of the evidence from nearby Bradwell and Gorleston-on-Sea (both villages recorded in the Domesday Book) should facilitate a more thorough understanding of the current site within its local economic context. It may also prove possible to discuss wider economic links, with local market centres for example.

### **Phase 3: High Medieval to Post-Medieval (14<sup>th</sup>/ 15<sup>th</sup> to 17<sup>th</sup> Century AD)**

14.6 Place the High medieval to post-medieval activity in context with the known activity of these dates in the surrounding area:

- A detailed review of similarly dated local/ regional sites, beginning with those referenced above (see Section 5), will enhance our understanding of the nature and development of the local High medieval to post-medieval landscape.

14.7 Characterise the nature of the Phase 3 activity:

- Phase 3 was dominated by the remains of a windmill, located close to the western edge of the site and modern Browston Lane. A second agricultural kiln (Kiln 2) was also present, adjacent to the eastern site boundary. Comparison with other regional examples should allow the function of Kiln 2 to be better understood. A detailed review of medieval/ post-medieval mills, focussing on excavated examples from the Midlands and East Anglia (where possible), should assist in better characterising the Bradwell example.
- Through analysis of the ecofactual data, assess the overall nature of the Phase 3 economy. The remains of Kiln 2 and the windmill will be central to this investigation. Possible enclosures were also apparent, close to the northern site boundary, but no estimation of size was possible.

14.8 identify topographical/ geological/ geographical influences on the layout and development of the Phase 3 activity present within the current site and in the surrounding area:

- A review of the High medieval to post-medieval site's topographical, geological and geographical location, with comparison to other regional sites of this type may help to define any determining factors underpinning its layout and development. The remains of the windmill and Kiln 2 will be central to this line of enquiry.

### **Non-Phase Specific**

14.9 Attempt environmental reconstruction:

- The programme of environmental sampling recovered a variety of cereal and non-cereal taxa, especially from Phase 2 features/ contexts. Some of these display specific environmental tolerances which may help to define the character of the earlier medieval landscape; for example, scentless mayweed is commonly occurring on disturbed ground and as an arable weed (Harrap 2013, 282), preferring free-draining soils. Full quantification, analysis and reporting of the archaeobotanical assemblage may help to characterise the environment of the Phase 2 site and its immediate hinterland.

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## **16 RESEARCH ARCHIVE REPORT**

16.1 The research archive report (RAR) will result from the completion of the project's updated aims and objectives (see Section 14). The RAR will constitute an exhaustive presentation of the project outcomes including:

- Background: circumstances of the project; location, topography and geology; archaeological and historical background; excavation and sampling strategy; methodology for post-excavation analysis and phasing. This section will make detailed reference to earlier archaeological work undertaken in the area, including the earlier phases of the current project. Elements of this work have already been completed.
- Narrative: including incorporation of any changes of interpretation arising from post-excavation analysis and research, and fuller integration of the finds and environmental evidence. The narrative will make detailed reference to the findings of earlier archaeological projects in the immediate area with a view to broader integration of earlier work at the publication stage (see Section 17).
- Specialist reports: format, edit and incorporate completed specialist reports. Include full specialist data tables as appendices where necessary.
- Discussion: discussion of the project's findings with reference to the research themes presented in Section 14 (above). Interpretations and conclusions will be presented based on the primary record, specialist reports and appropriate comparative material.
- Appendices, plates and figures.

16.2 The RAR will be completed within six months of the approval of the updated aims and objectives by NCC HES.

## **17 PUBLICATION SYNOPSIS**

### **Summary**

17.1 The most significant elements of the site are the windmill, agricultural kilns, post-built structure and enclosures belonging to the medieval to post-medieval period. As such, the proposed publication will comprise a focussed account of the Phase 2 and 3 archaeology, within its immediate context (see Section 5), concentrating on the industrial evidence and the recovered pottery assemblage, including full description of the ceramic groups present. Appropriate vehicles for

publication would be the county journal, *Norfolk Archaeology*, or the period-specific journal, *Medieval Settlement Research*.

17.2 The publication will present a brief project background, contain a focussed description and analysis of the key features and finds, and conclude with a synthetic discussion of the site's significance within the local/ regional medieval/ post-medieval landscape. Specialist information will be integrated/ referenced within the archaeological narrative as appropriate.

### **Estimated Report Breakdown**

#### *Abstract (c. 150 words)*

- Contents: summary of phasing, features, finds and interpretation
- Tables: N/A
- Figures: N/A
- Plates: N/A

#### *Introduction (c. 300-500 words)*

- Contents: Circumstances of the project and summary of background information; site description; summary of archaeology/ phasing (including brief reference to the prehistoric and early modern/ modern phases)
- Tables: chronological phasing
- Figures: site location/ detailed site location plan; phased 'all features' plan
- Plates: N/A

#### *Description of results (c. 2000-3000 words)*

- Contents: overview and synthetic description of the medieval/ post-medieval features and their distribution; introduction to interpretations (integrating specialist information)
- Tables: N/A
- Figures: Phase 2 and 3 plan; selected pottery illustrations
- Plates: Structure 1; Kiln 1; Kiln 2; the windmill

#### *Discussion (c. 1000-1200)*

- Contents: Thematic discussion of the project's findings with reference to the research questions presented in Section 14 (above). Interpretations and conclusions will be presented based on the primary record, specialist reports and appropriate comparative material
- Tables: N/A
- Figures: N/A
- Plates: N/A



## 18 DEPOSITION OF THE ARCHIVE

18.1 Archive records, with an inventory, will be deposited at Norwich Castle Museum. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

18.2 The archive will be deposited within six months of the conclusion of the fieldwork. It will be prepared in accordance with the UK Institute for Conservation's *Conservation Guideline No. 2*.

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## APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Segment	Description	Spot Date	Pottery	Animal Bone (g)	Other
2000			Topsoil				Str. Flint (32) - 1141g
2001			Subsoil		(2) 16g		Str. Flint (35) - 562g
2004	2005	H	Fill of Gully				Clay Pipe Stem (1) - 5g
2006	2007	B	Fill of Ditch				Str. Flint (1) - 5g
2008	2009		Fill of Ditch				Fe. Nail (4) - 26g Str. Flint (2) - 20g
2010			Ditch	12th-15th C	(3) 35g		
		F				5	
		H					
		L					
		Q					
		X					
	2011	C	Fill of Ditch	10th/11th-13th C	(1) 2g	48	Fe. Frag (1) - 23g Fe. Frag (1) - 15g
	2012	A	Fill of Ditch	11th-14th C	(1) 4g		
		E		15th-16th C	(2) 22g		
		F					Rubber - 1g
		G		14th-16th C	(1) 6g		Clay Pipe Stem (1) - 2g Fe. Frag (1) - 3g
		L					
		M		12th-15th C	(1) 13g		
		N		11th-14th C	(5) 53g		
		P		15th-16th/early 17th C	(3) 24g	16	Fe. Frag (1) - 5g Str. Flint (1) - 2g Lavastone - 441g Fe. Frag (1) - 6g
		Q		15th-16th C	(1) 26g		
		T		15th-16th C	(9) 165g	91	Fe. Frag (1) - 6g
		U		15th-16th C	(4) 24g		
		X					Fe. Frag (1) - 18g
	2032	X	Fill of Ditch	15th-16th C	(1) 23g		
2016			Barrow Mound	12th-15th C	(19) 405g	2	Coal - 7g Fe. Frags (2) - 28g Str. Flint (11) - 129g
2017			Buried Soil Layer	12th-15th C	(3) 8g		Str. Flint (2) - 52g

		X				46	
2018		D U X	Natural II	10th/11th-13th C 11th-13th C	(1) 5g (2) 5g		Str. Flint (2) - 4g
2021	2022	D	Fill of Gully	10th-13th C	(1) 7g		
2027	2028		Fill of Pit	11th-13th C	(2) 4g	4	<b>SF1</b> Fe. Frag - 40g Fe. Frag (1) - 4g
2029	2030		Fill of Ditch				Str. Flint (3) - 100g
2039	2040		Fill of Gully				O. Shell - 18g
2045	2046	A B	Fill of Gully	12th-14th C	(1) 3g		Str. Flint (2) - 12g
2047	2048	C	Fill of Gully			25	
2050	2051	E  F G	Fill of Ditch	13th-15th /early 16th C  Mid 16th-17th C 15th-16th C	(7) 24g  (8) 85g (7) 85g		F. Clay - 220g Fe. Frags (2) - 16g Str. Flint (1) - 17g Fe. Frags (3) - 31g
2059	2060	C K L P  Q R  S T	Fill of Ditch	15th-16th C 13th/14th-early 16th C 15th-16th C   15th-16th C 15th-16th C	(1) 46g (1) 6g (3) 16g   (11) 145g (19) 492g	500  57  6  4 153	Fe. Frag (1) - 18g Fe. Frag (1) - 4g Lavastone - 747g  Fe. Frag (3) - 33g <b>SF2</b> Whetstone - 66g Fe. Frag (2) - 20g Fe. Frag (2) - 23g Lava Stone - 292g O. Shell - 4g Str. Flint (1) - 23g Fe. Frag (3) - 37g Lavastone - 244g O. Shell - 336g
	2080	T	Fill of Ditch	15th-16th C	(19) 530g	108	
2067	2068	E	Fill of Ditch	?19th C+	(1) 4g		

2077	2078	P	Fill of Feature			40	
2088	2089	U V	Fill of Ditch	Mid 16th-17th C 13th-14th C	(1) 16g (27) 214g		
2090	2093	X	Fill of Ditch				Fe. Frag (2) - 9g
2094	2096	W	Fill of Ditch	15th-16th C	(3) 267g		
2098	2099	V	Fill of Ditch				Glass Bead - <1g
2098	2101	U	Fill of Feature				Fe. Frag (1) - 10g
2119	2120		Fill of Pit				<b>SF3</b> Flint Blade - 23g
2125	2126	B	Fill of Ditch	12th-15th C 12th-15th C	(1) 43g (2) 84g	16	
2127	2128		Fill of Ditch				Clay Pipe Stem (1) - 3g
2129	2130	C	Fill of Ditch				Str. Flint (1) - 3g
2131	2132		Fill of Pit	Modern	(11) 61g	2	Clay Pipe Stem (4) - 12g Fe. Frag (1) - 2g
2133	2134		Fill of Pit	13th-14th C	(8) 166g		
2135	2136	D	Fill of Ditch	10/11th-12th C	(3) 24g		
2148	2149		Fill of Posthole			165	
2157	2158		Fill of Pit	12th-14th C	(5) 138g		
2159	2160	B C	Fill of Ditch	10th/11th-13th C 11th- 13th /14th C 11th -14th C	(1) 15g (1) 17g (2) 12g		
2167	2168	B	Fill of Gully	11th-13th C	(1) 2g		
2179	2180		Fill of Pit	12th-14th C	(2) 11g	53	
2186	2187	B C	Fill of Ditch	10th- 12th /13th C	(1) 13g	29	Clay Pipe Stem (1) - 3g
2188	2189	B	Fill of Ditch			10	Str. Flint (1) - 15g
2192	2193	A	Fill of Ditch			94	
2200	2201 2202		Fill of Pit Fill of Pit	12th-14th C 12th-15th C	(6) 10g (2) 35g	3	
2207	2208		Fill of Posthole			1	Str. Flint (2) - 3g
2235	2236		Fill of Posthole				Str. Flint (1) - 2g
2237	2238		Fill of Posthole	11th-14th C	(1) 9g		
2239	2240		Fill of Posthole				Str. Flint (1) - 1g
2253	2254		Fill of Posthole				Str. Flint (1) - 3g



2277	2278	C D E	Fill of Ditch	10th/11th-13th C 12th-14th C	(2) 5g (3) 10g	64	
2283	2284		Fill of Ditch			93	
2288	2289		Fill of Gully				Str. Flint (1) - 4g
2294	2295	A B	Fill of Ditch	11th-14th C	(8) 6g		Str. Flint (2) - 4g
2296	2297	A	Fill of Ditch		(3) 8g		
2298	2299	B C D	Fill of Ditch			138 36	Str. Flint (1) - 16g Str. Flint (1) - 5g
2300	2301		Fill of Pit				O. Shell - 11g
2308	2309		Fill of Pit	11th-14th C	(2) 26g		Whetstone - 500g
2317	2318	A B	Fill of Ditch				Str. Flint (1) - 24g Str. Flint (1) - 32g
2319	2320 2321		Fill of Kiln Fill of Kiln			24	Lava Stone - 134g Str. Flint (1) - 6g
2324	2325		Fill of Ditch	11th-13th C	(4) 75g		Str. Flint (8) - 49g
2326	2327		Fill of Pit	12th-13th C	(5) 62g		
2328	2329	B	Fill of Ditch	12th-14th C	(1) 6g		
2332	2333		Fill of Pit	12th-14th C	(8) 101g	3	Str. Flint (1) - 32g
2336	2337	B C	Fill of Ditch	Late 12th-15th C	(1) 6g		Clay Pipe Stem (1) - 2g
2345	2346		Fill of Feature	?LBA	(6) 36g		Str. Flint (3) - 24g
2347	2348		Fill of Ditch	11th-13th C	(11) 44g		
2351	2352	B	Fill of Ditch	11th-14th C	(2) 41g		
2353	2354		Fill of Ditch	Late 12th-14th C	(9) 38g	16	
2357	2358		Fill of Ditch	10th/11th-13th C	(1) 4g		
2359	2360  2386	B C A B	Fill of Stoking Pit  Fill of Stoking Pit	14th-16th C  10th/11th-12th C	(1) 29g  (6) 65g (1) 6g	2 314 36	Glass (1) - 3g Str. Flint (3) - 11g Str. Flint (1) - 14g

	2387	C	Fill of Stoking Pit			98	
2368	2369	D A	Fill of Ditch			96 2	
2370	2371	H	Fill of Ditch	10th/11th-12th C	(1) 7g	31	
2372	2373	B	Fill of Kiln	Late 12th-15th C	(2) 11g	10	
2374	2375	A B	Fill of Ditch	11th- 13th C	(4) 51g	137 114	
2376	2377		Fill of Stoking Pit	13th 16th C	(2) 7g		Fe. Frag (1) - 5g
2378	2379		Fill of Posthole			238	
2388	2389		Fill of Pit			3	
2392	2393	C	Fill of Ditch	10th/11th-13th C	(2) 13g		Str. Flint (4) - 10g
2410	2411	B	Fill of Gully				Str. Flint (1) - 47g
2412	2413	A	Fill of Gully			111	Str. Flint (2) - 158g
2422	2423		Fill of Ditch				Str. Flint (2) - 30g
2424	2425	B	Fill of Ditch			7	
2426	2427		Fill of Ditch	12th-15th C	(2) 25g		
2428	2429		Fill of Pit				Str. Flint (1) - 79g
2446	2447	A	Fill of Ditch	11th-13th/14th C	(1) 6g		Lavastone - 194g Str. Flint (3) - 96g
U/S	U/S		Unstratified			2	Cu. Alloy ?Spoon Bowl - 61g

## APPENDIX 2 ENVIRONMENTAL SAMPLE DATA

Sample number	Context	Feature	Description	Phase	Volume taken (litres)	Volume processed (litres)	% processed	Cereals			Non-cereal taxa		Hazelnut shell	Charcoal		Molluscs		Contaminants					Other remains
								Cereal grains	Cereal chaff	Notes	Seeds	Notes		Charcoal > 2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	
<b>Phase 1 – Neolithic (4300-2100BC)</b>																							
90	2120	2119	Fill of Pit	1	20	20	100%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	
<b>Phase 2 - Saxo-Norman to High Medieval (10th to 13th/14th century AD)</b>																							
7	2007B	2006	Fill of Ditch	2	40	40	100%	X	-	Trit (1), Culm (1)	X	cf. <i>Cladium mariscus</i> (1)	-	X	-	-	-	X	-	X	-	-	
9	2014	2013	Fill of Pit	2	40	40	100%	X	-	Oat (1)	-	-	-	XX	<i>Quercus</i> sp.	-	-	XX	-	XX	X	-	
13	2022A	2021	Fill of Gully	2	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	-	X	-	-	
14	2022B	2021	Fill of Gully	2	20	20	50%	-	-	-	-	-	-	-	-	-	-	X	-	XX	-	-	
15	2022C	2021	Fill of Gully	2	20	10	50%	X	-	NFI (1)	-	-	-	-	-	-	-	X	-	X	-	-	
16	2026	2025	Fill of Pit	2	10	10	100%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	
17	2007C	2006	Fill of Ditch	2	40	20	50%	-	-	-	-	-	-	-	-	-	-	XX	-	-	-	-	
18	2022D	2021	Fill of Gully	2	40	20	50%	-	-	-	-	-	-	-	-	-	-	XX	-	X	-	X	
38	2022E	2021	Fill of Gully	2	40	40	100%	X	-	Rye (1), Trit (1), NFI (2)	-	-	-	X	-	-	-	X	-	X	-	-	
39	2040	2039	Fill of Gully	2	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	-	X	-	-	
42	2046C	2045	Fill of Gully	2	40	40	100%	X	-	Trit (1), NFI (1)	-	-	-	-	-	-	-	X	-	X	-	-	
44	2048B	2047	Fill of Gully	2	10	10	100%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	
45	2046B	2045	Fill of Gully	2	10	10	100%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	
48A	2022D	2021	Fill of Gully	2	20	20	100%	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	
48B	2055	2054	Fill of Pit	2	40	40	100%	-	-	-	X	<i>Chenopodiaceae</i> (1), <i>Anthemis cotula</i> (2)	-	XX	Coniferous wood	-	-	X	-	X	-	-	
49B	2056	2054	Fill of Pit	2	20	20	100%	-	-	-	-	-	-	X	Coniferous wood	-	-	X	-	-	-	-	
63	2072	2071	Fill of Pit	2	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	-	X	-	-	
64	2073	2071	Fill of Pit	2	20	20	100%	-	-	-	-	-	-	XXX	Coniferous wood	-	-	X	-	-	-	-	Indet. Carb
71	2076	2075	Fill of Posthole	2	10	10	100%	-	-	-	-	-	-	-	-	-	-	X	-	XX	X	-	

72	2086X	2085	Fill of Pit	2	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
75	2089V	2088	Fill of Ditch	2	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
79	2089U	2088	Fill of Ditch	2	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
84	2113	2112	Fill of Pit	2	20	10	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
95	2187C	2186	Fill of Ditch	2	40	20	50%	X	-	HB (1), Trit (1), NFI (8)	X	Chenopodium sp. (2), Medium Fabaceae (2), Potamogeton sp. (1), Carex sp. (3), Small Poaceae (1)	-	X	-	-	-	-	X	-	XX	-	-	-
96	2193A	2192	Fill of Ditch	2	10	10	100%	-	-	-	X	Large Fabaceae (1)	-	-	-	-	-	-	X	-	-	-	-	-
98	2238	2237	Fill of Posthole	2	20	20	100%	XXX	-	HB (XX), Oat (XXX)	X	Chenopodium sp. (X)	-	X	Quercus sp.	-	-	-	X	-	-	-	-	-
104	2299B	2298	Fill of Ditch	2	10	10	100%	-	-	-	-	-	-	X	-	-	-	-	XX	-	X	-	-	-
105	2295B	2294	Fill of Ditch	2	20	10	50%	X	-	Oat (1)	-	-	-	X	-	-	-	-	X	-	X	-	-	-
106	2297A	2296	Fill of Ditch	2	20	10	50%	-	-	-	-	-	-	X	-	-	-	-	XX	-	X	-	-	-
107	2293A	2292	Fill of Ditch	2	20	10	50%	X	-	Oat (1), NFI (1)	-	-	-	-	-	-	-	-	X	-	X	-	-	-
108	2295A	2294	Fill of Ditch	2	20	20	100%	X	-	Hord (1), Oat (1)	-	-	-	X	-	-	-	-	XX	-	X	-	-	-
109	2321	2319	Fill of Firing Chamber - Kiln 1	2	30	20	67%	X	-	Hord (1), Oat (1), NFI (2)	X	Bromus sp. (1)	-	XX	Quercus sp.	-	-	-	XX	-	X	X	-	-
110	2320	2319	Fill of Firing Chamber - Kiln 1	2	80	80	100%	XX	-	HB (2), Trit (1), Oat (3), Rye (2), NFI (14)	-	-	-	X	-	X	Trichia hispidia group	XX	XX	X	-	-	-	
113	2333	2332	Fill of Pit	2	40	40	100%	X	-	HB (3), cf. Oat (1), NFI (2)	X	Large Fabaceae (3), Large Poaceae (1)	-	X	-	-	XX	Helicella itala, Vallonia sp.	XX	XX	XX	-	-	-
114	2358	2357	Fill of Ditch	2	20	10	50%	X	-	NFI (1)	-	-	-	-	-	-	-	-	X	-	-	-	-	-
115	2360	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XX	-	HB (XX), Oat (X), Rye (X)	X	Chenopodium sp. (X), Carex sp. (X)	-	XX	Quercus sp.	-	-	-	XX	-	XX	-	-	-
116	2278D	2277	Fill of Ditch	2	20	20	100%	XX	-	HB (XX), Oat (XX), Rye (XX)	X	Chenopodium sp. (X), Carex sp. (X)	-	XX	Quercus sp.	X	Pupilla muscorum	XX	-	X	-	-	-	Heather charcoal (XX)
117	2365	2363	Fill of Stokehole - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Trit (X), Oat (XX), Rye (X)	XX	Chenopodium sp. (X), Fallopia convolvulus (X), Raphanus raphanistrum (X), Bromus secalinus (X)	-	XX	Diffuse porous	-	-	-	XX	-	X	-	-	Heather charcoal (XX)
118	2354	2354	Fill of Pit	2	10	10	100%	X	-	FTW (1)	X	Large Fabaceae (1), Carex sp. (1)	-	X	-	-	-	-	X	X	X	-	-	-

119	2360A	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Trit (X), Oat (XX), Rye (X)	X	<i>Rumex</i> sp. (X)	-	X	-	-	-	XX	-	X	-	-	-
120	2360B	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Oat (XX), Rye (XX)	XX	<i>Fallopia convolvulus</i> (X), <i>Raphanus raphanistrum</i> (X), <i>Anthemis cotula</i> (X)	-	X	-	-	-	XX	-	X	-	-	-
121	2386B	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Trit (X), Oat (XX), Rye (XX)	XX	<i>Chenopodium</i> sp. (X), Medium Fabaceae (X), <i>Tripleurospermum inodorum</i> (X)	-	X	Diffuse porous	X	<i>Vallonia</i> sp.	XX	-	X	-	-	-
122	2360C	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Trit (X), Oat (XX), Rye (XX)	XX	<i>Rumex</i> sp. (X), <i>Raphanus raphanistrum</i> (X), <i>Vicia/ Lathyrus</i> sp. (X), <i>Anthemis cotula</i> (X)	-	XX	<i>Quercus</i> sp., Diffuse porous	-	-	XX	-	X	-	-	-
123	2386C	2359	Fill of Kiln Activity Area - Kiln 1	2	40	40	100%	XXX	-	HB (XX), Oat (XX), Rye (XX)	XX	<i>Fallopia convolvulus</i> (X), <i>Rumex</i> sp. (X), <i>Vicia/ Lathyrus</i> sp. (X)	-	XX	cf. <i>Ulex</i> sp.	-	-	X	-	X	-	-	-
124	2387C	2359	Fill of Kiln Activity Area - Kiln 1	2	20	20	100%	XXX	-	HB (XX), Oat (XX), Rye (XX)	XX	<i>Rumex</i> sp. (X), <i>Vicia/ Lathyrus</i> sp. (X), <i>Anthemis cotula</i> (X)	-	XX	cf. <i>Ulex</i> sp.	-	-	X	-	X	-	-	-
125	2387D	2359	Fill of Kiln Activity Area - Kiln 1	2	30	30	100%	XXX	-	HB (XXX), Oat (XXX), Rye (XX)	XX	<i>Raphanus raphanistrum</i> (X), <i>Vicia/ Lathyrus</i> sp. (X)	-	XX	cf. <i>Ulex</i> sp.	-	-	XX	-	X	X	-	-
126	2379	2378	Fill of Posthole - Kiln 1	2	10	10	100%	XX	-	HB (1), Hord (4), Rye (5), NFI (13)	X	Medium Fabaceae (2), <i>Bromus</i> sp. (1)	-	X	-	-	-	X	-	X	-	-	Root/ tuber (1), Bone (X)
132	2320+2321	2319	Fill of Firing Chamber - Kiln 1	2	40	20	50%	X	-	NFI (1)	-	-	-	X	-	-	-	XX	X	-	-	-	-
134	2176G	2175	Fill of Ditch	2	40	40	100%	X	-	Hord (1), Rye (1)	X	Chenopodiaceae (1), Medium Fabaceae (1)	-	X	cf. <i>Ulex</i> sp.	-	-	XX	X	X	X	-	-
137	2193C	2192	Fill of Ditch	2	40	20	50%	X	-	Oat (2), NFI (1)	X	<i>Anthemis cotula</i> (1)	-	X	Diffuse porous	-	-	XX	-	-	-	-	-
138	2187D	2186	Fill of Ditch	2	40	40	100%	XX	-	HB (XX), Trit (X), Oat (X), Rye (XX)	XX	<i>Vicia/ Lathyrus</i> sp. (XX), <i>Potamogeton</i> sp. (X)	-	XX	Diffuse porous	-	-	XX	X	X	-	-	Heather charcoal (X)

Phase 3 - High medieval to post-medieval (14th/ 15th to 17th century AD)																								
8	2009	2008	Fill of Pit	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
10	2012A	2010	Fill of Ditch - Windmill	3	40	40	100%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	X	-	Indet. Carb (X)
11	2011A	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
19	2028	2027	Fill of Pit	3	40	20	50%	X	-	Oat (1), cf. Oat (1), NFI (1)	-	-	-	-	-	-	X	-	XX	-	-	-	-	-
20	2011C	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	Hord (1)	-	-	-	-	-	-	-	-	X	-	XX	-	-	-
21	2012C	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	XX	-	XX	X	X	-
22	2012B	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	HB (1), Hord (1)	-	-	-	-	-	-	-	-	XX	-	X	X	-	Indet. Carb (X)
23	2031	2010	Fill of Ditch - Windmill	3	40	20	50%	X	-	NFI (1)	-	-	-	-	-	-	-	-	XX	-	X	-	-	-
24	2030	2029	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	X	Quercus sp.	-	-	X	-	-	-	-	-
26	2012I	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	HB (1), Trit (1), NFI (1)	-	-	-	-	X	Quercus sp. Heartwood	-	-	X	-	X	-	-	-
28	2038	2037	Fill of Pit	3	40	20	50%	-	-	-	-	-	-	-	X	-	-	-	X	-	-	-	-	-
29	2032B	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	2012D	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	Hord (1), Trit (1)	-	-	-	-	X	Quercus sp.	-	-	XX	-	XX	-	-	-
32	2012M	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
33	2473M	2472	Fill of Ditch - Windmill	3	40	20	50%	X	-	NFI (2)	-	-	-	-	-	-	-	-	X	-	X	-	-	-
34	2012E	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	X	-	-
35	2051E	2050	Fill of Ditch - Windmill	3	40	20	50%	X	-	Trit (1)	X	Large Fabaceae (1)	-	-	-	-	-	-	X	-	X	X	-	-
36	2012F	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
37	2051F	2050	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	X	Indet roundwood	-	-	X	-	X	-	-	-
40	2012G	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
41	2051G	2050	Fill of Ditch - Windmill	3	40	40	100%	X	-	Oat (1), NFI (2)	X	Large Fabaceae (1)	-	-	-	-	-	-	X	-	X	-	-	-
49A	2012J	2010	Fill of Ditch - Windmill	3	40	10	25%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
50	2051J	2050	Fill of Ditch - Windmill	3	40	10	25%	X	-	NFI (1)	-	-	-	-	-	-	-	-	X	-	-	-	-	-
51	2473K	2472	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
52	2012K	2010	Fill of Ditch - Windmill	3	40	10	25%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
53	2012L	2010	Fill of Ditch - Windmill	3	40	10	25%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
54	2473L	2472	Fill of Ditch - Windmill	3	40	10	25%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
55	2012Q	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	HB (1), NFI (2)	-	-	-	-	X	-	-	-	X	-	X	-	-	-

56	2012P	2010	Fill of Ditch - Windmill	3	40	10	25%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
58	2012P	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	Trit/ Rye (1)	-	-	-	-	-	-	-	-	X	-	-	-	-	-
59	2012N	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	X	-	-	-	-	X	-	-	-	-	-
61	2031O	2010	Fill of Ditch - Windmill	3	40	40	100%	X	-	NFI (2)	X	<i>Potamogeton</i> sp. (1)	-	X	Heather	-	-	-	X	-	X	-	-	-
62	2060O	2059	Fill of Ditch - Windmill	3	40	40	100%	-	-	-	X	<i>Danthonia decumbens</i> (1)	-	-	-	-	-	X	-	X	-	-	-	
65	2060T	2059	Fill of Ditch - Windmill	3	40	40	100%	XX	-	HB (XX), FTW (X), Oat (X)	X	Large Fabaceae (X), <i>Chenopodium</i> sp. (X)	-	XXX	<i>Quercus</i> sp., Diffuse porous	X	<i>Pupilla muscorum</i>	XX	-	X	-	-	-	Bone (X), Fish bone (XX), Fish scales (X)
66	2080T	2059	Fill of Ditch - Windmill	3	20	20	100%	XX	-	HB (XX), FTW (X), Oat (X), Rye (X)	X	Large Fabaceae (X), <i>Rumex</i> sp. (X)	-	XX	Ring porous, Diffuse porous	-	-	XX	-	X	-	-	-	Bone (X)
68	2012R	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
69	2012S	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
70	2060S	2059	Fill of Ditch - Windmill	3	40	20	50%	X	-	HB (2), FTW (1), NFI (2)	X	<i>Chenopodium</i> sp. (1)	-	XX	Diffuse porous	-	-	XX	-	X	-	-	-	-
74	2093X	2090	Fill of Ditch - Windmill	3	40	20	50%	X	-	Rye (1)	-	-	-	X	-	-	-	-	XX	-	-	-	-	-
77	2097W	2094	Fill of Pit	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
78	2096W	2094	Fill of Pit	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
82	2017U	-	Layer	3	20	10	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
83	2012U	2010	Fill of Ditch - Windmill	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
85	2016	-	Buried Soil	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
86	2017	-	Layer	3	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
89	2017B	-	Layer	3	40	20	50%	-	-	-	-	-	-	X	-	-	-	-	X	-	-	-	-	-
92	2016	-	Buried Soil	3	30	10	33%	-	-	-	-	-	-	X	-	-	-	-	XX	X	-	-	-	-
93	2016	-	Buried Soil	3	40	40	100%	X	-	Rye (2), NFI (4)	-	-	-	XX	<i>Quercus</i> sp., cf. <i>Ulex</i> sp.	-	-	XX	X	X	-	-	-	-
127	2373	2372	Below Firing Chamber - Kiln 2	3	40	20	50%	X	-	Oat (3), Rye (2), NFI (8)	X	<i>Chenopodium</i> sp. (2)	-	X	-	-	-	X	XX	X	-	-	-	Root/ tuber (1)
128	2371	2372	Fill of Firing Chamber - Kiln 2	3	40	20	50%	X	-	Oat (1), NFI (2)	-	-	-	X	-	-	-	X	XX	X	-	-	-	-
129	2377	2376	Fill of Stokehole - Kiln 2	3	30	30	100%	XXX	-	HB (X), Trit (X), Oat (XX), Rye (XX)	XX	<i>Persicaria</i> sp. (XX)	-	XX	Diffuse porous	-	-	XX	XX	-	-	-	-	-
130	2377E	2376	Fill of Stokehole - Kiln 2	3	40	40	100%	XX	-	HB (X), Oat (X), Rye	X	<i>Raphanus raphanistrum</i> (X)	-	XX	cf. <i>Ulex</i> sp., Diffuse porous	-	-	XX	XX	X	-	X	-	-

(XX)																								
131	2371	2372	Fill of Firing Chamber - Kiln 2	3	40	20	50%	X	-	HB (1), Trit (1), NFI (3)	-	-	-	-	-	-	-	-	XX	XX	-	-	-	-
<b>Phase 4 - Early modern/ modern (18th century+ AD)</b>																								
1	2005A	2004	Fill of Gully	4	40	20	50%	X	-	NFI (1)	-	-	-	X	Diffuse porous	-	-	-	X	-	X	-	-	-
2	2005B	2004	Fill of Gully	4	40	20	50%	-	-	-	-	-	-	X	-	-	-	-	X	-	X	-	-	-
3	2005C	2004	Fill of Gully	4	40	20	50%	-	-	-	-	-	-	X	-	-	-	-	X	-	X	-	-	-
4	2005D	2004	Fill of Gully	4	40	40	100%	X	-	Trit (1)	X	<i>Plantago lanceolata</i> (1)	-	X	-	-	-	-	X	-	X	X	-	Indet. Carb (X)
5	2005E	2004	Fill of Gully	4	40	20	50%	-	-	-	-	-	-	X	-	-	-	-	X	-	X	-	-	Indet. Carb (X)
6	2005F	2004	Fill of Gully	4	40	40	100%	-	-	-	X	<i>Potentilla</i> sp. (1)	-	-	-	-	-	-	X	-	X	-	-	-
60	2068B	2067	Fill of Gully	4	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
76	2099V	2098	Fill of Pit	4	40	20	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
80	2099U	2098	Fill of Pit	4	20	10	50%	-	-	-	-	-	-	X	Coniferous wood	-	-	-	X	-	-	-	-	-
81	2101U	2098	Fill of Pit	4	20	10	50%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
<b>Unphased Features</b>																								
12	2020	2019	Fill of Pit	-	40	20	50%	X	-	NFI (1)	-	-	-	-	-	-	-	-	X	-	-	-	-	-
25	2034	2033	Fill of Posthole	-	10	10	100%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
31	2042	2041	Fill of Pit	-	20	10	50%	X	-	HB (1), NFI (1)	X	<i>Vicia faba</i> var. <i>minor</i> (1)	-	-	-	-	-	-	X	-	X	-	-	Root/ tuber (X)
87	2107	2106	Fill of Pit	-	10	10	100%	-	-	-	-	-	-	-	-	-	-	-	XX	-	-	-	-	-
88	2109	2108	Fill of Posthole	-	10	10	100%	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
94	2178A	2177	Fill of Ditch	-	40	40	100%	-	-	-	-	-	-	XXX	<i>Quercus</i> sp.	-	-	-	XX	-	X	-	-	-
97	2254	2253	Fill of Posthole	-	20	20	100%	XXX	-	HB (XX), Oat (XX)	X	<i>Bromus</i> sp. (X)	-	XX	<i>Quercus</i> sp.	-	-	-	XX	-	X	-	-	-
99	2232	2231	Fill of Posthole	-	10	10	100%	XX	-	Oat (3), NFI (5)	-	-	-	X	-	-	-	-	X	-	-	-	-	-
100	2224	2223	Fill of Posthole	-	10	10	100%	XX	-	Oat (8), cf. Oat (7), Rye (4), NFI (8)	X	<i>Vicia/ Lathyrus</i> sp. (1), <i>Carex</i> sp. (1)	-	X	-	-	-	-	X	-	X	-	-	-
101	2266	2265	Fill of Posthole	-	10	10	100%	XX	-	HB (X), Oat (XX)	-	-	-	X	<i>Quercus</i> sp.	-	-	-	X	-	-	-	-	-
102	2208	2207	Fill of Posthole	-	20	20	100%	XXX	-	HB (XX), Oat (XXX), Rye (X)	X	<i>Vicia/ Lathyrus</i> sp. (X), Small Poaceae (X)	-	X	<i>Quercus</i> sp.	-	-	-	X	-	X	-	-	-
103	2289B	2288	Fill of Ditch	-	20	20	100%	X	-	HB (3), Oat (2), Rye	X	<i>Bromus</i> sp. (1)	-	X	-	-	-	-	X	-	X	-	-	-



									(1), NFI (3)														
111	2323A	2322	Fill of Pit	-	40	40	100%	XXX	-	HB (XXX), Oat (XXX), Trit (X)	XX	<i>Chenopodium</i> sp. (X), <i>Spergula arvensis</i> (XX), <i>Fallopia</i> <i>convolvulus</i> (X), <i>Raphanus</i> <i>raphanistrum</i> (X), <i>Vicia/ Lathyrus</i> sp. (X)	-	XX	<i>Quercus</i> sp., Diffuse porous	-	-	X	-	X	-	-	-
112	2323B	2322	Fill of Pit	-	20	20	100%	XXX	-	HB (XXX), Oat (XXX)	XX	<i>Chenopodium</i> sp. (X), <i>Spergula arvensis</i> (X), <i>Raphanus</i> <i>raphanistrum</i> (X), <i>Vicia/ Lathyrus</i> sp. (X)	-	XX	Diffuse porous	-	-	X	-	X	-	-	-
133	2431	2430	Fill of Pit	-	10	10	100%	-	-	-	X	Cyperaceae (1)	-	XX	Diffuse porous	-	-	XX	-	-	-	-	-
135	2458B	2457	Fill of Ditch	-	40	40	100%	X	-	Oat (2), Rye (2), NFI (4)	X	Medium Fabaceae (1)	-	XX	<i>Quercus</i> sp.	-	-	XX	-	X	-	-	-
136	2458C	2457	Fill of Ditch	-	40	20	50%	X	-	NFI (2)	X	Medium Fabaceae (1)	-	-	-	-	-	XX	-	-	-	-	-

Results from the assessment of bulk sample light fractions from South Bradwell. Abbreviations: HB = hulled barley (*Hordeum* sp.); Hord = barley (*Hordeum* sp.); E/S = emmer/ spelt wheat (*Triticum dicoccum/ spelta*); FTW = free-threshing type wheat (*Triticum aestivum/ turgidum*); Trit = wheat (*Triticum* sp.); Oat (*Avena* sp.); Rye (*Secale cereale*); NFI = not formally identified (indeterminate cereal grain)

## PHOTOGRAPHIC INDEX



1: Site shot (under excavation), looking NW



2: Site shot (under excavation), looking N



3: Pit F2119 (post-excitation), looking SW



4: Kiln 1 and Building 1 (mid excavation), looking NNW



5: Kiln 1 and Building 1 (mid excavation), looking SW



6: Redeposited Kiln Structure M2465 (post-excitation), looking N



*7: Pit 2314 (post-excavation), looking W*



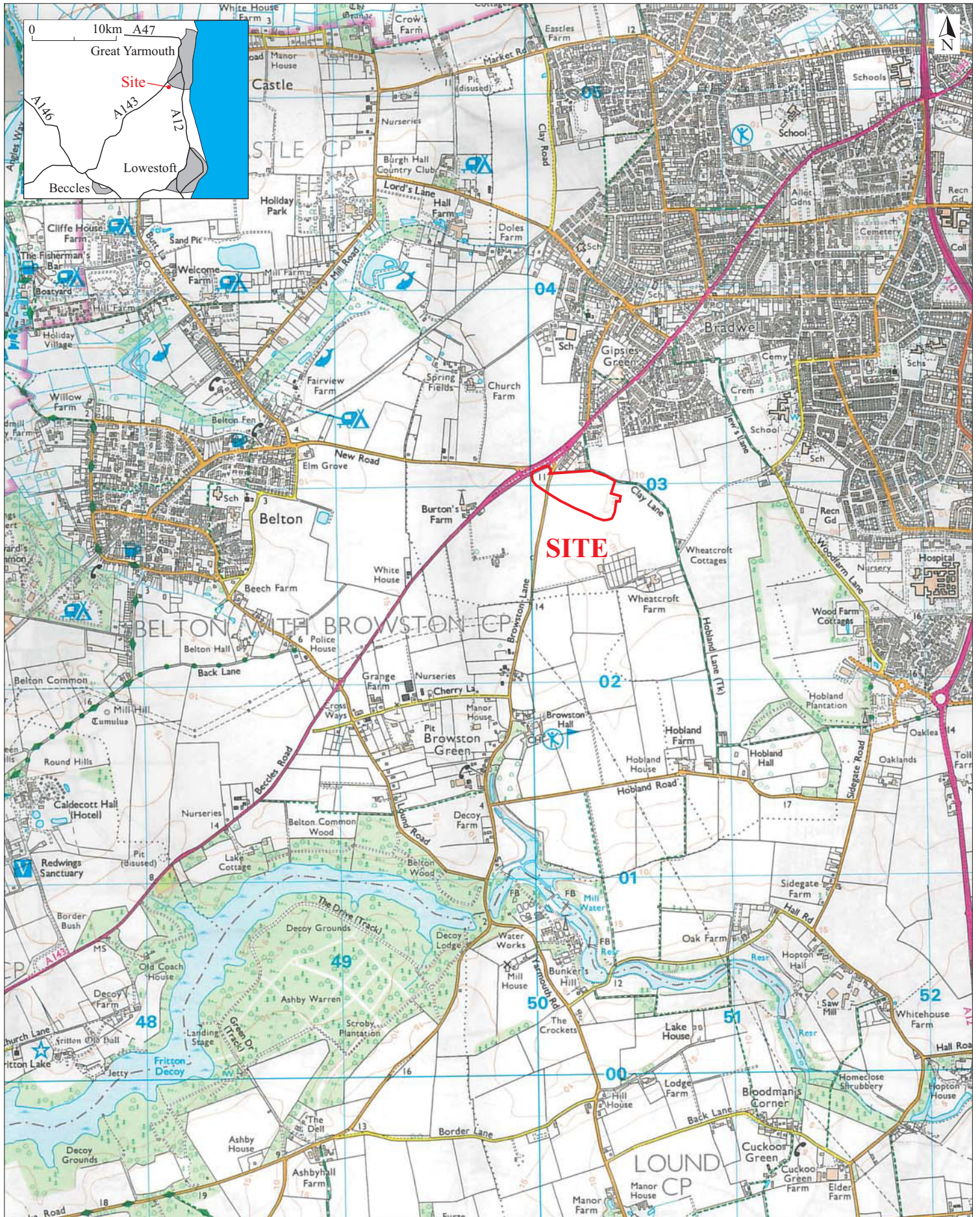
*8: Kiln 2 (post-excavation), looking W*



*9: The windmill (post-excavation), looking N*

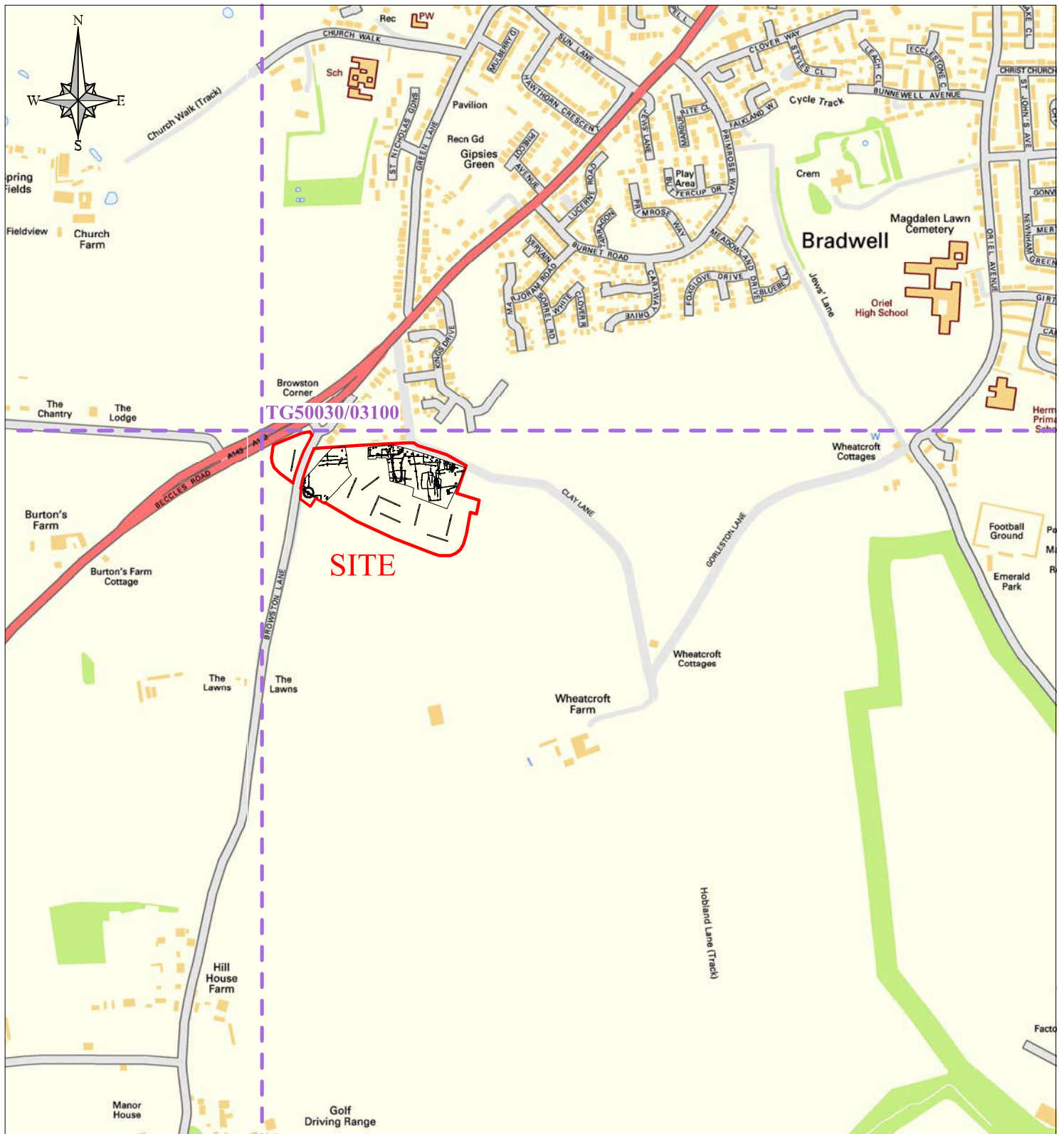


*10: The windmill (post-excavation), looking NW*



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**Fig. 1 Site location plan**  
 Scale 1:25,000 at A4  
 South Bradwell, Norfolk (P4837)



*Archaeological Solutions Ltd*

**Fig. 2 Detailed site location plan**

Scale 1:10,000 at A4

South Bradwell, Norfolk (P4837)

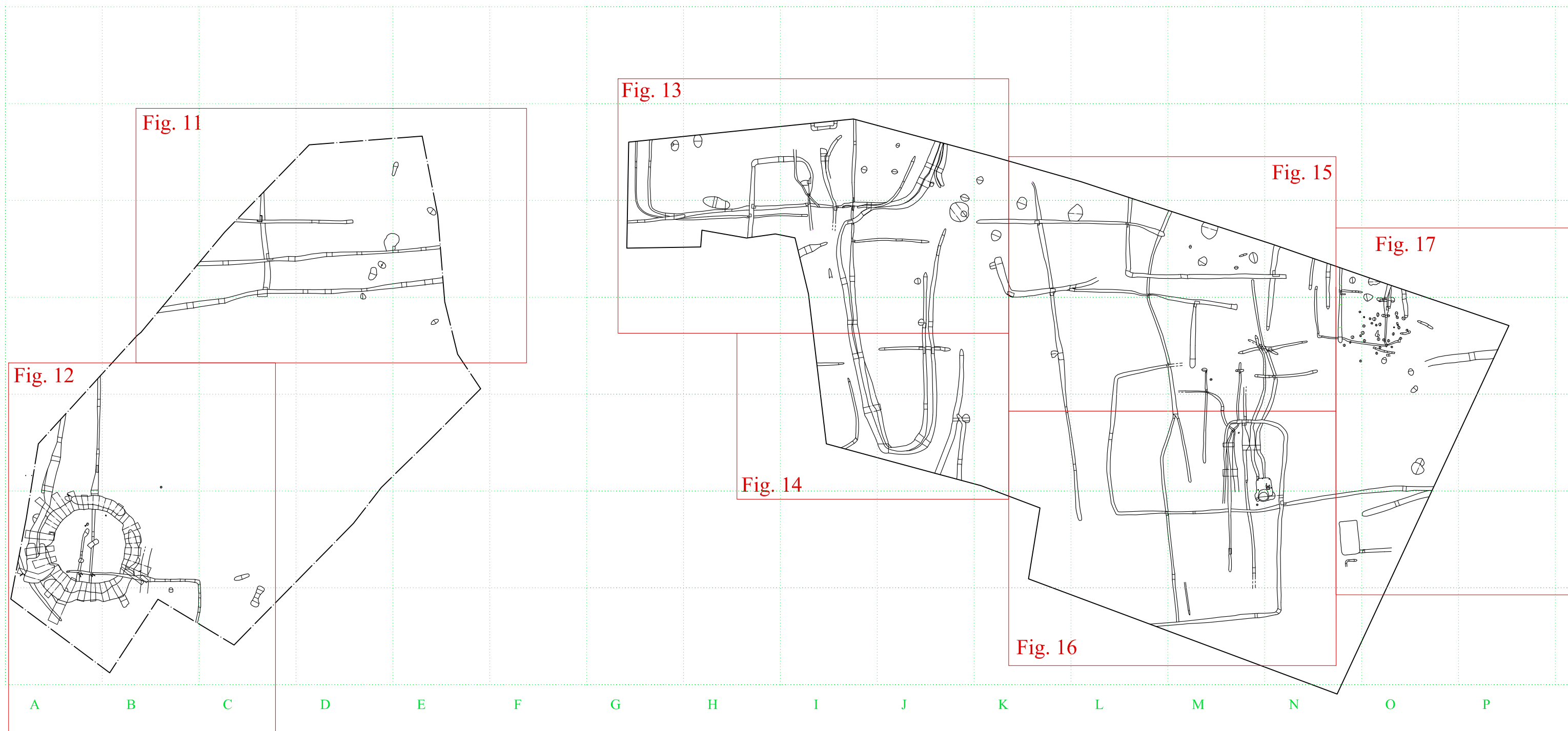


PROBABLE ARCHAEOLOGY	
	Positive anomaly / weak positive anomaly - probable cut feature of archaeological origin
	Negative anomaly / weak negative anomaly - probable bank or earthwork of archaeological origin
	Linear anomaly likely to be related to former field boundary
	Widely spaced curving parallel linear anomalies - probably related to ridge-and-furrow
POSSIBLE ARCHAEOLOGY	
	Positive anomaly / weak positive anomaly - possible cut feature of archaeological origin
	Area of discrete positive anomalies possibly related to pits
	Negative anomaly / weak negative anomaly - possible bank or earthwork of archaeological origin
OTHER ANOMALIES	
	Magnetic spike - probable ferrous object
	Closely spaced parallel linear anomalies - probably related to agricultural activity such as ploughing
	Linear anomaly - probably related to pipe, cable or other modern service
	Linear anomaly - possibly related to land drain
	Magnetic disturbance associated with nearby metal object such as service or field boundary
	Strong magnetic debris - possible disturbed or made ground
	Scattered magnetic debris
	Area of amorphous magnetic variation - probable natural (e.g. geological or pedological) origin
Client	
ARCHAEOLOGICAL SOLUTIONS	
Project Title	Job No. 3243
GEOPHYSICAL SURVEY - SOUTH BRADWELL, GREAT YARMOUTH	
Subject	
ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- VIEWPORT 1	
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**Fig. 3 Geophysical survey**  
 Scale 1:1250 at A3  
 South Bradwell, Norfolk (P4837)



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**Fig. 4 Geophysical survey with trial trenches**  
 Scale 1:1250 at A3  
 South Bradwell, Norfolk (P4837)



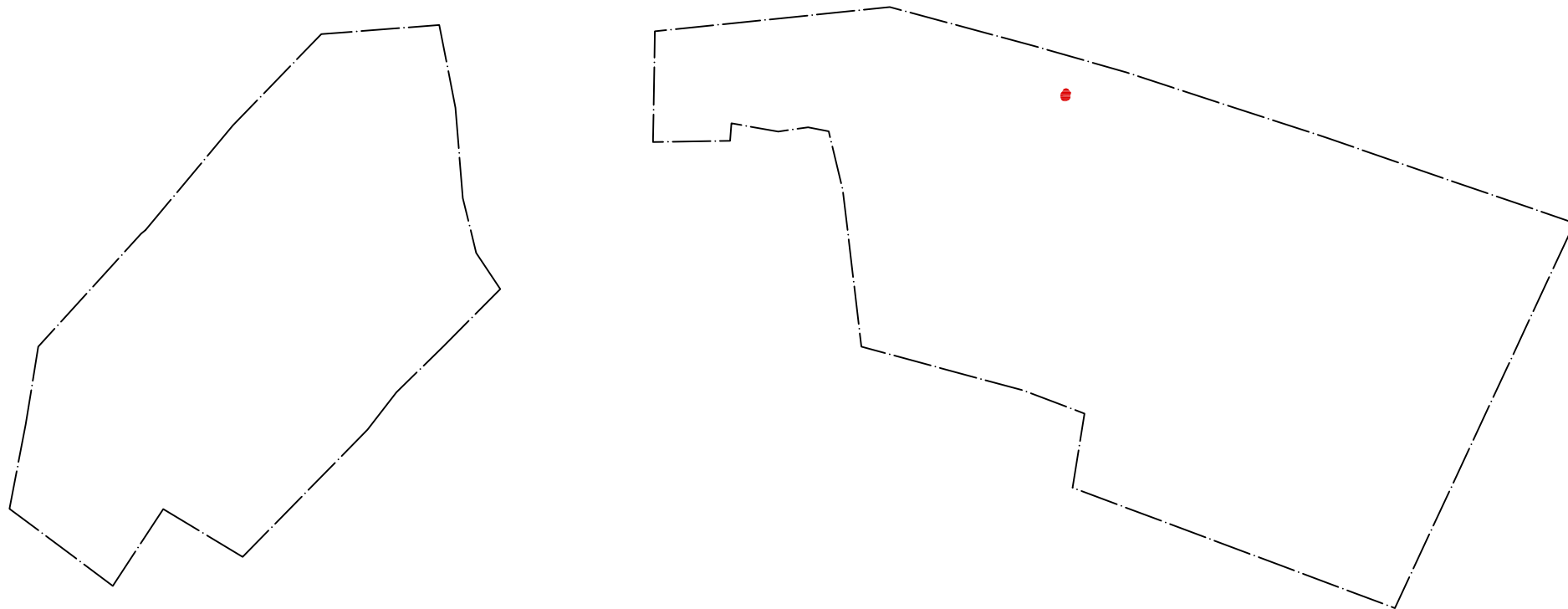
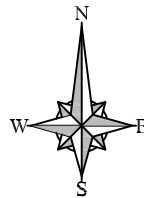
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**Fig. 5 All features plan**  
Scale 1:800 at A3  
South Bradwell, Norfolk (P4837)



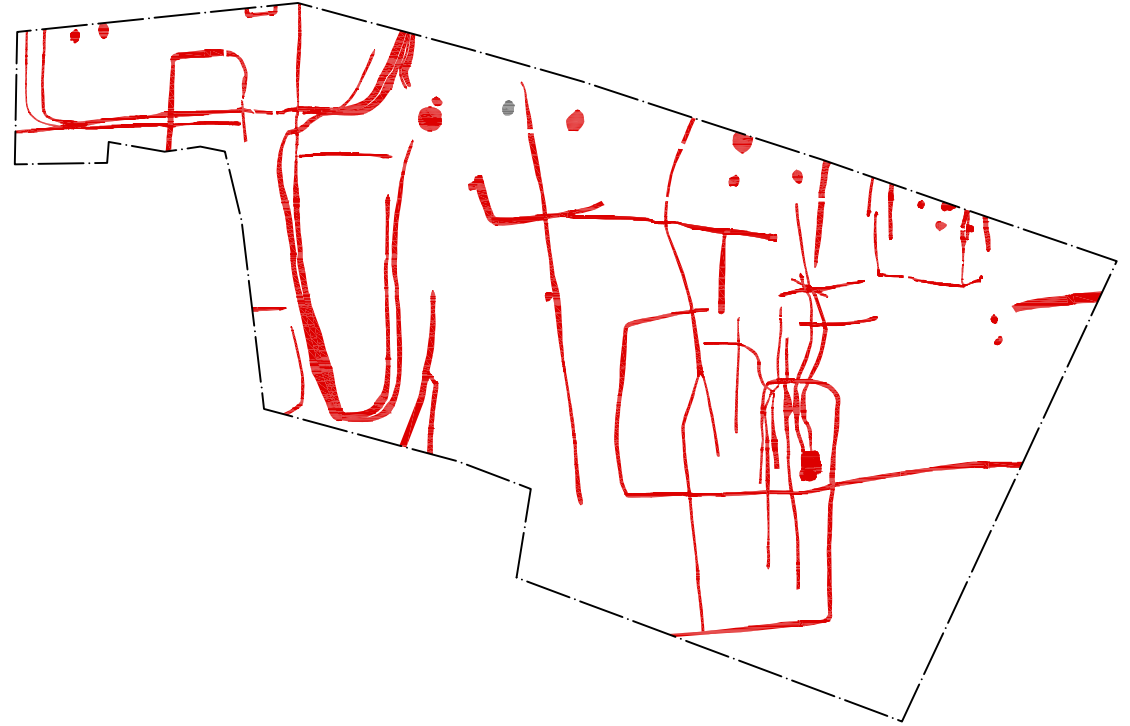
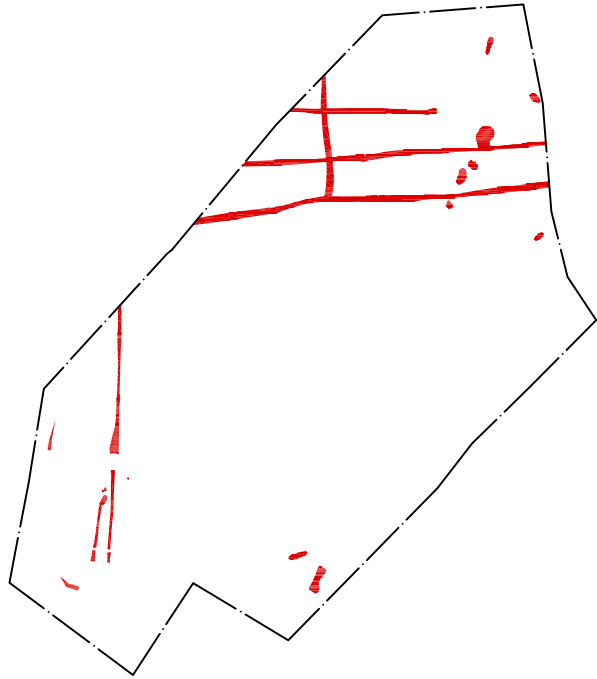
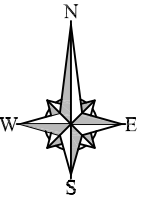


- Phase 1: Early Neolithic
- Phase 2: Saxo-Norman to High Medieval
- Phase 3: High Medieval to Post-medieval
- Phase 4: Early Modern/ Modern
- Unphased

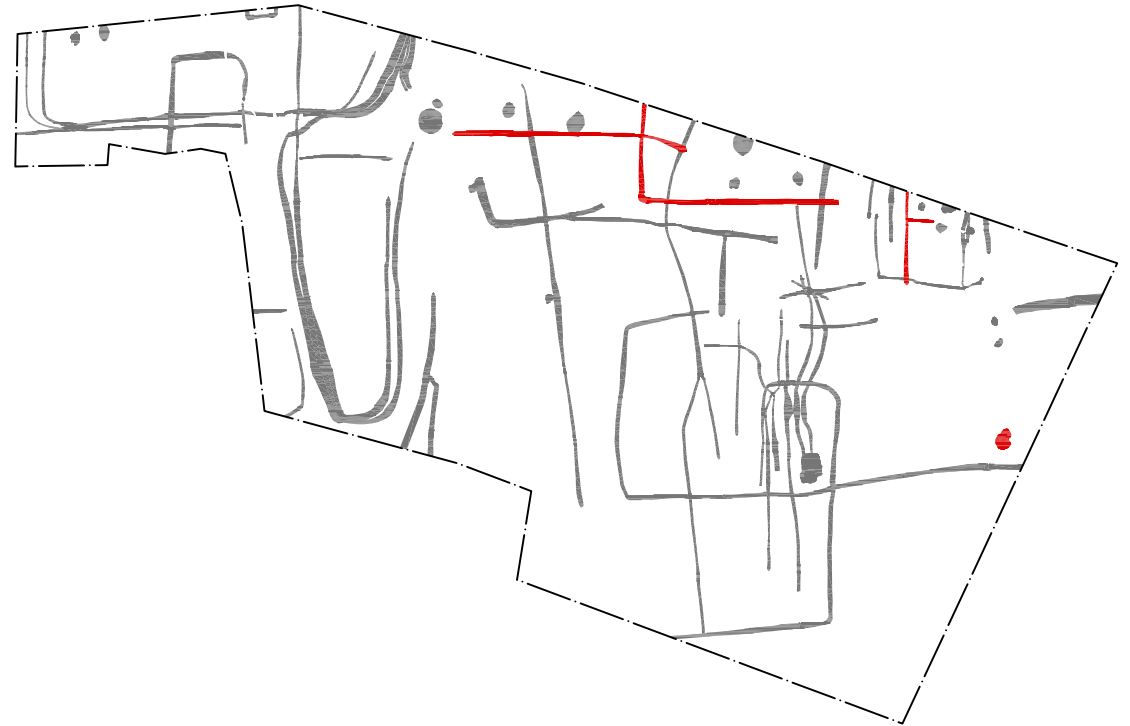
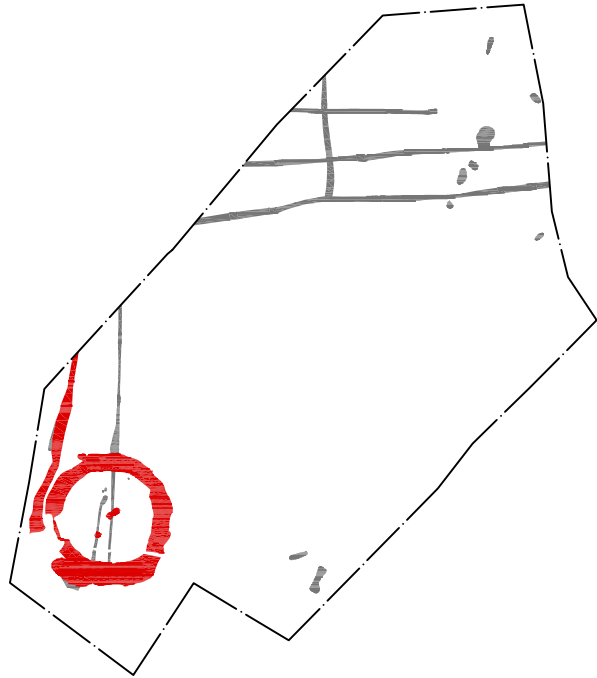
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<b>Fig. 6 Multi-Phase plan</b>
Scale 1:800 at A3
South Bradwell, Norfolk (P4837)



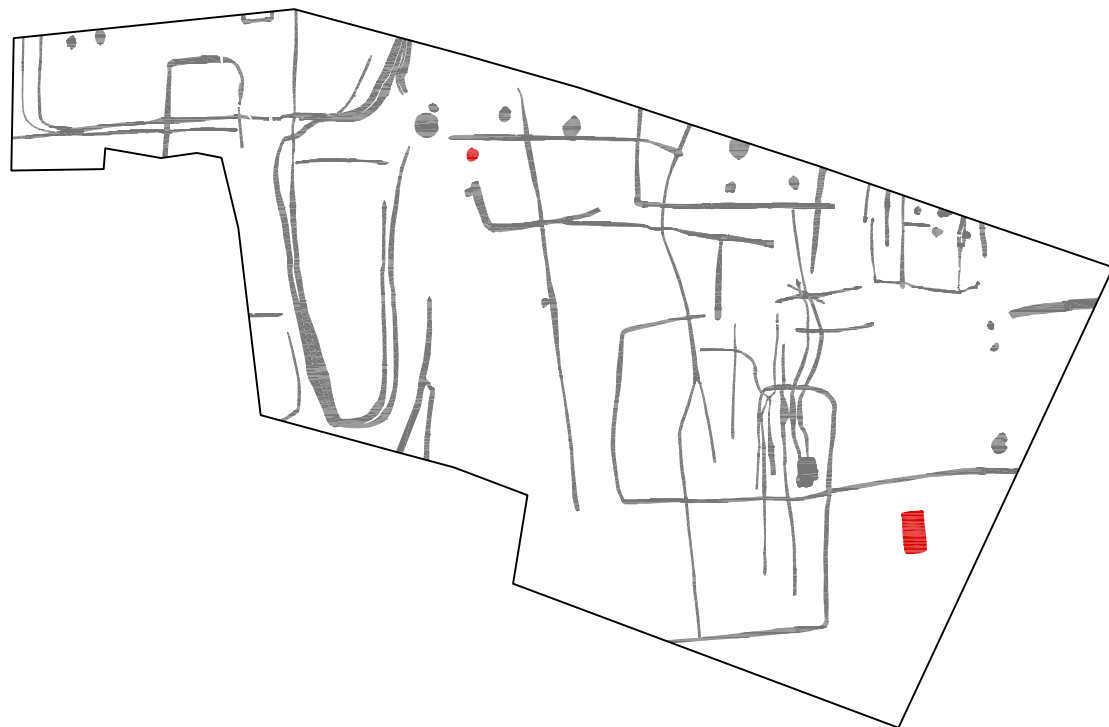
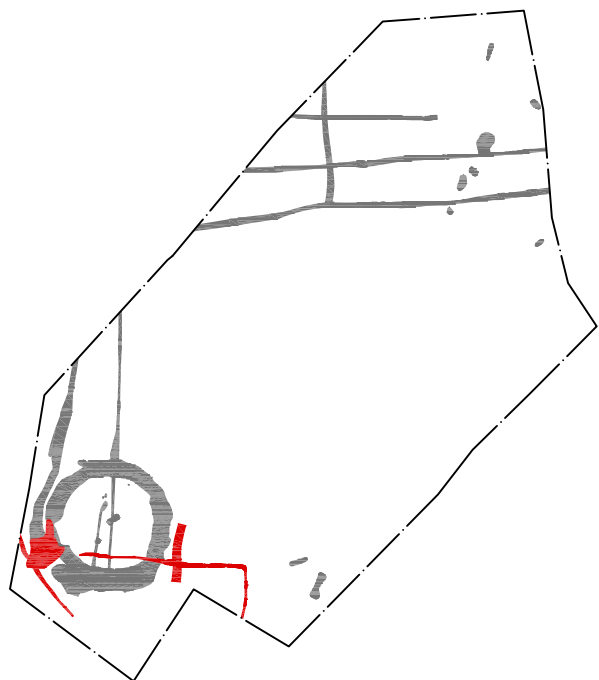
<i>Archaeological Solutions Ltd</i>
<b>Fig. 7 Phase 1: Early Neolithic</b>
Scale 1:1250 at A4
South Bradwell, Norfolk (P4837)



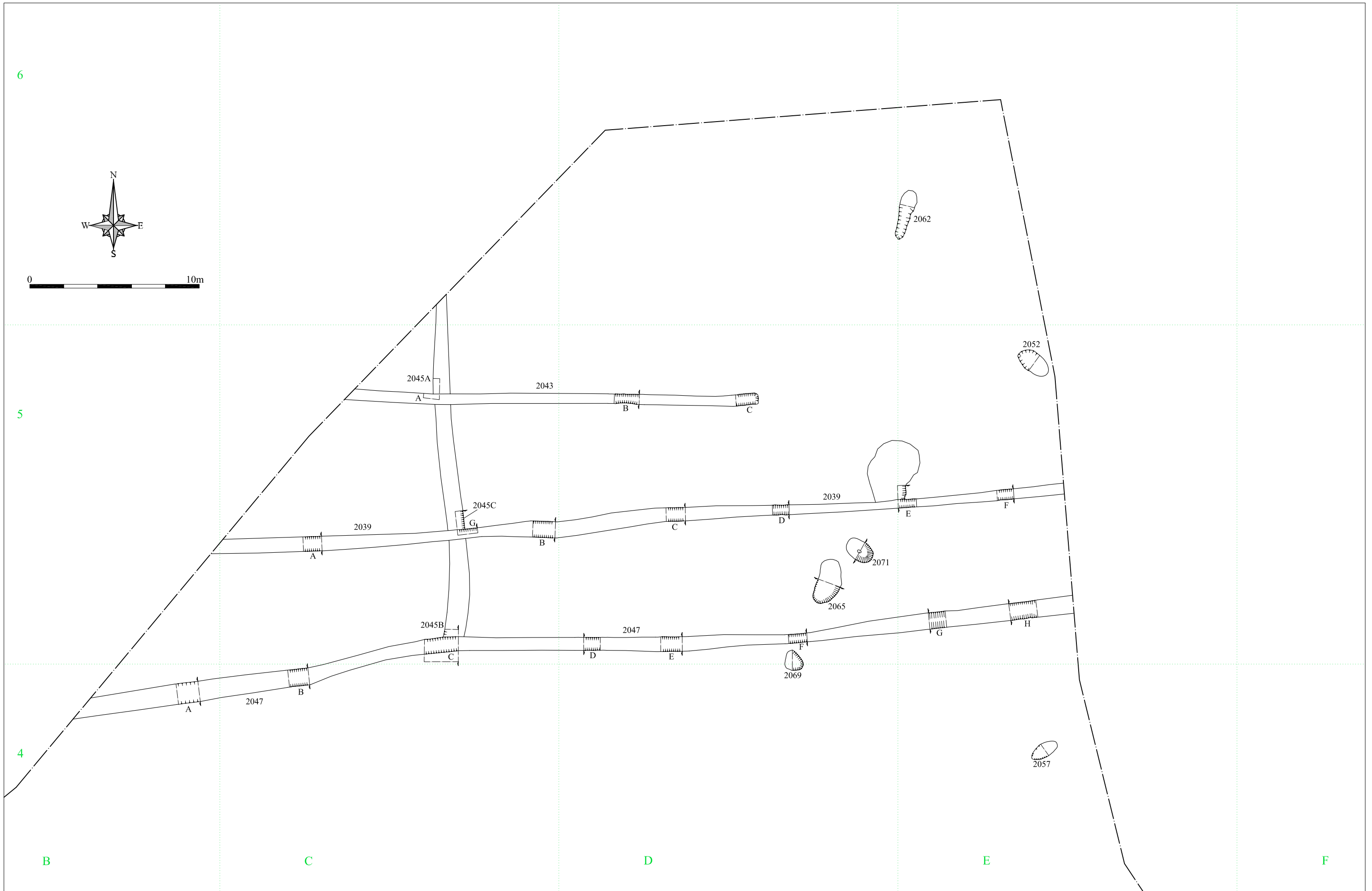
*Archaeological Solutions Ltd*  
**Fig. 8 Phase 2: Saxo-Norman to High Medieval**  
Scale 1:1250 at A4  
South Bradwell, Norfolk (P4837)



*Archaeological Solutions Ltd*  
**Fig. 9 Phase 3: High Medieval to Post-medieval**  
Scale 1:1250 at A4  
South Bradwell, Norfolk (P4837)



*Archaeological Solutions Ltd*  
**Fig. 10 Phase 4: Early Modern/ Modern**  
Scale 1:1250 at A4  
South Bradwell, Norfolk (P4837)



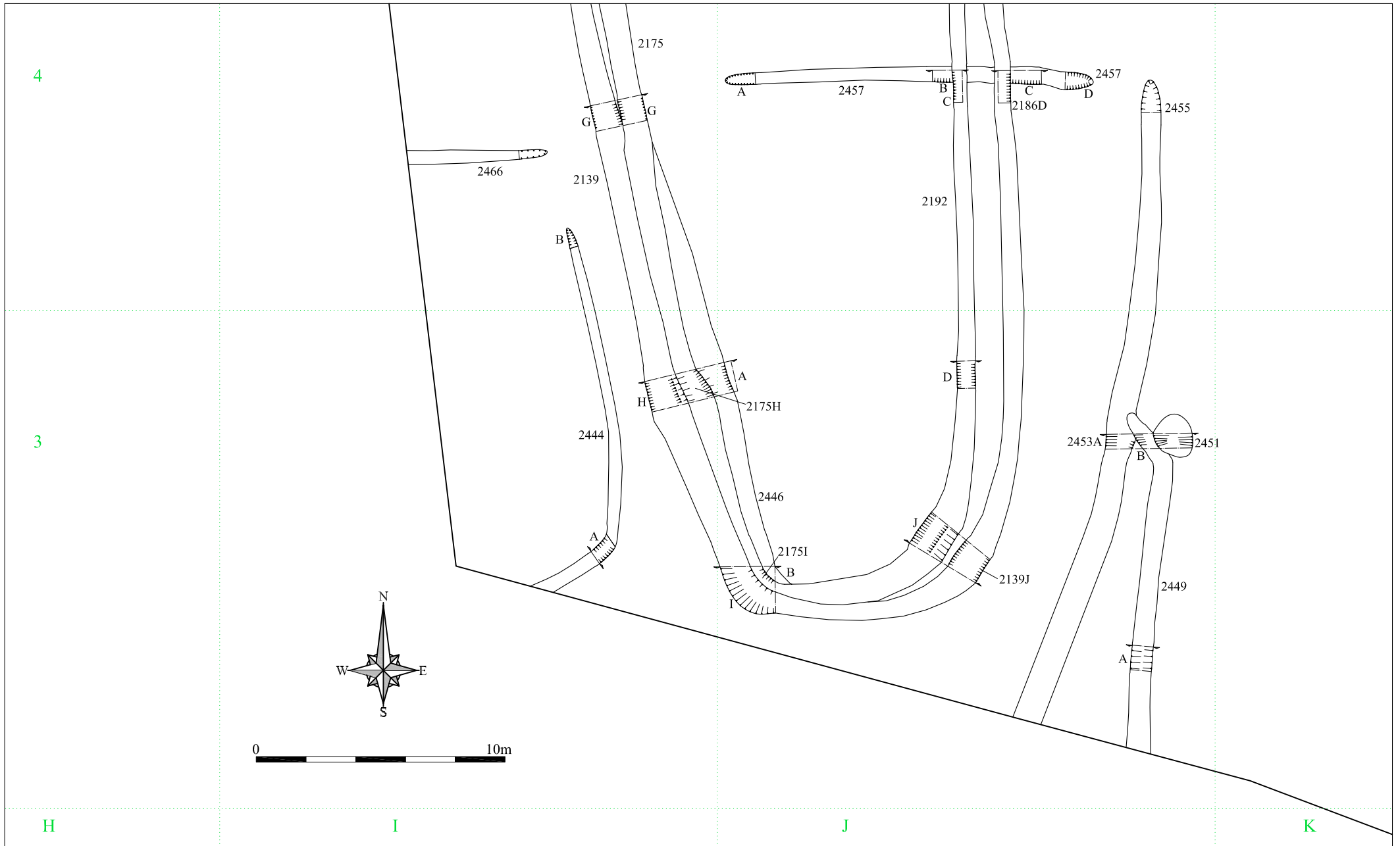
Archaeological Solutions Ltd  
**Fig. 11 Excavation plan**  
 Scale 1:200 at A3  
 South Bradwell, Norfolk (P4837)



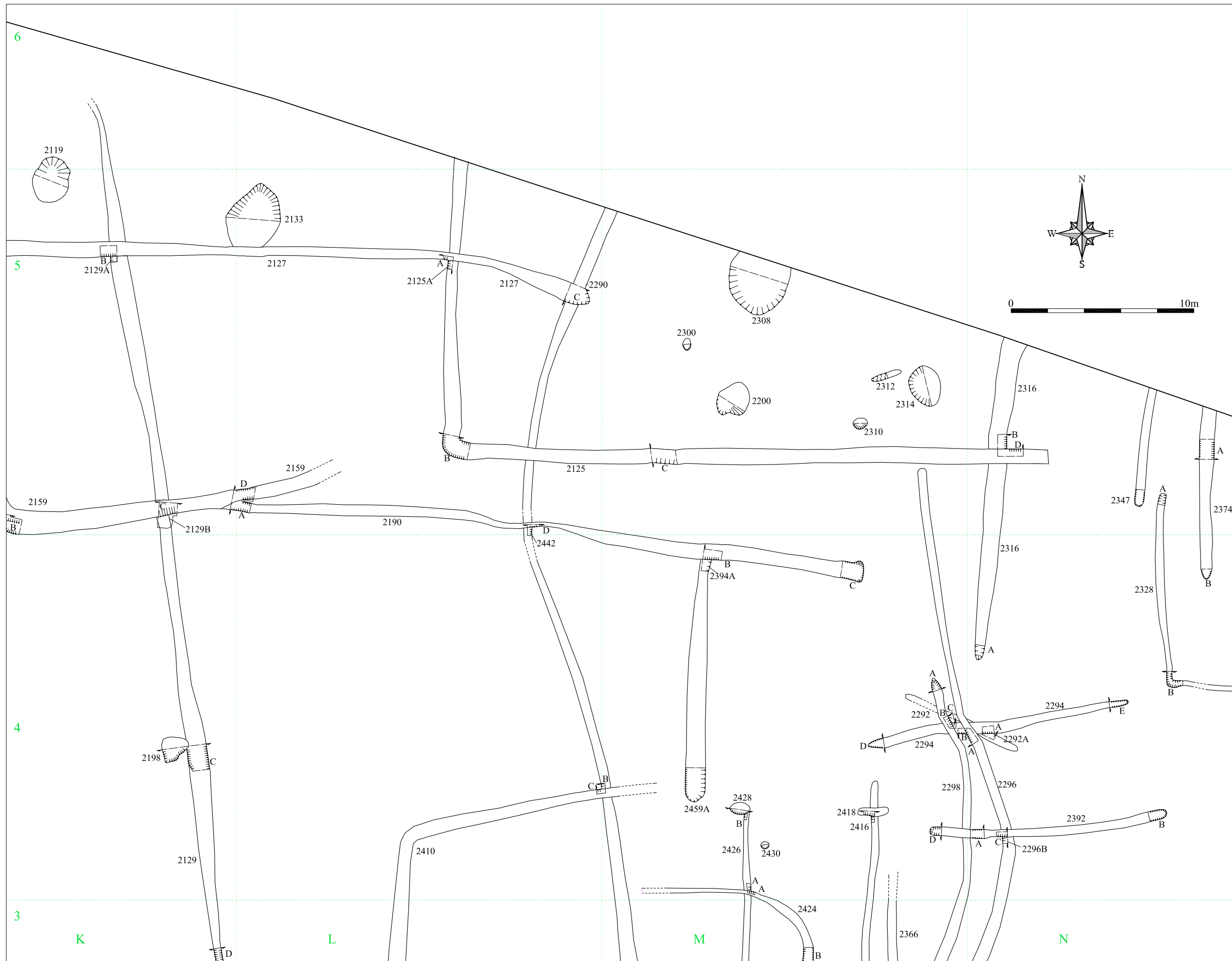


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**Fig. 13 Excavation plan**  
 Scale 1:200 at A3  
 South Bradwell, Norfolk (P4837)





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**Fig. 14 Excavation plan**  
 Scale 1:200 at A4  
 South Bradwell, Norfolk (P4837)

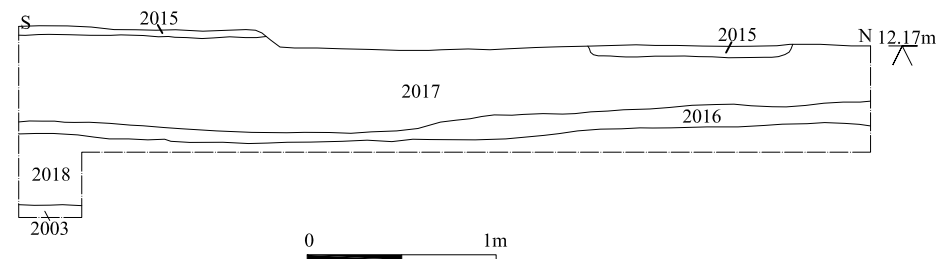
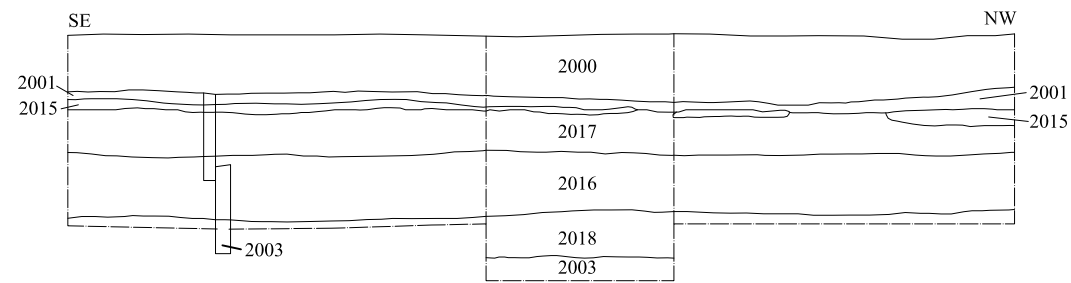
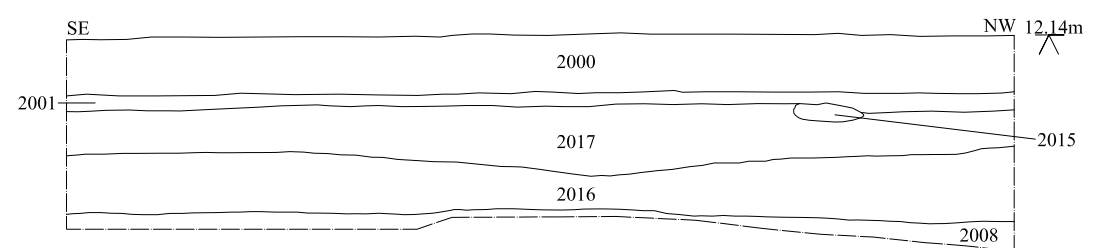
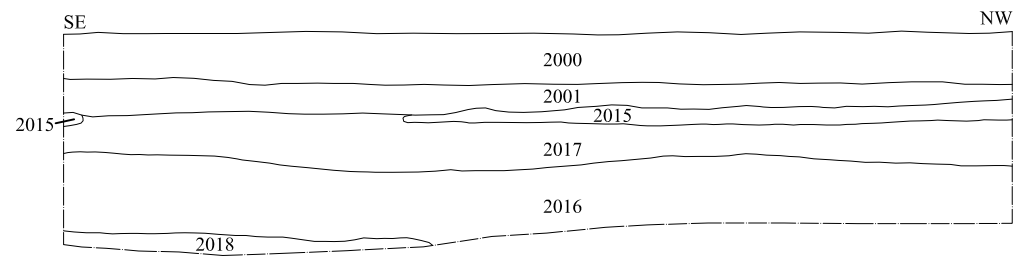
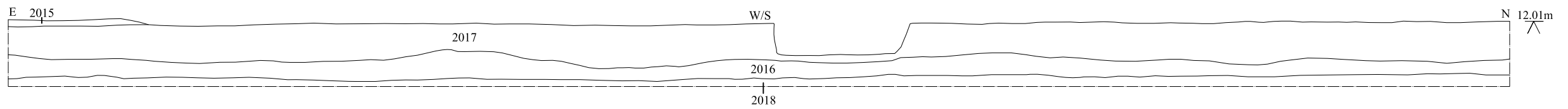
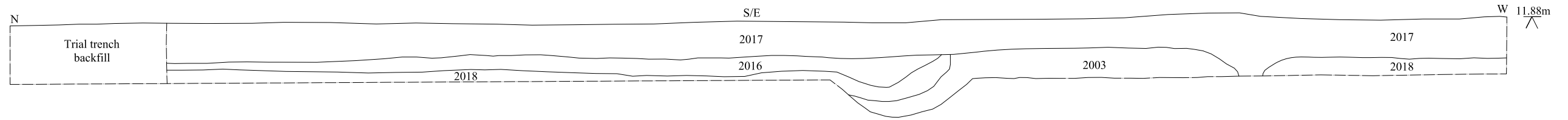


Archaeological Solutions Ltd  
**Fig. 15 Excavation plan**  
 Scale 1:200 at A3  
 South Bradwell, Norfolk (P4837)

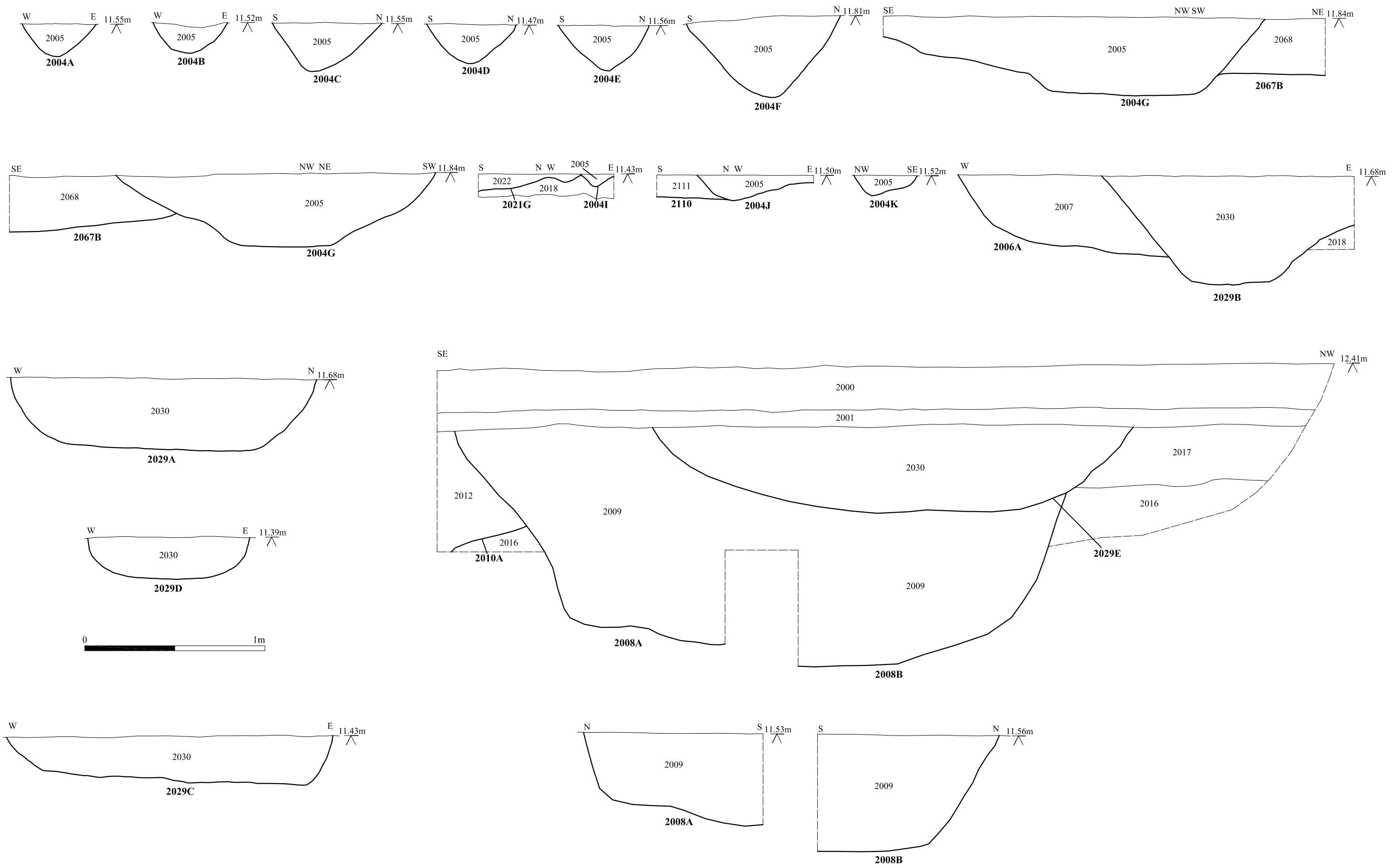




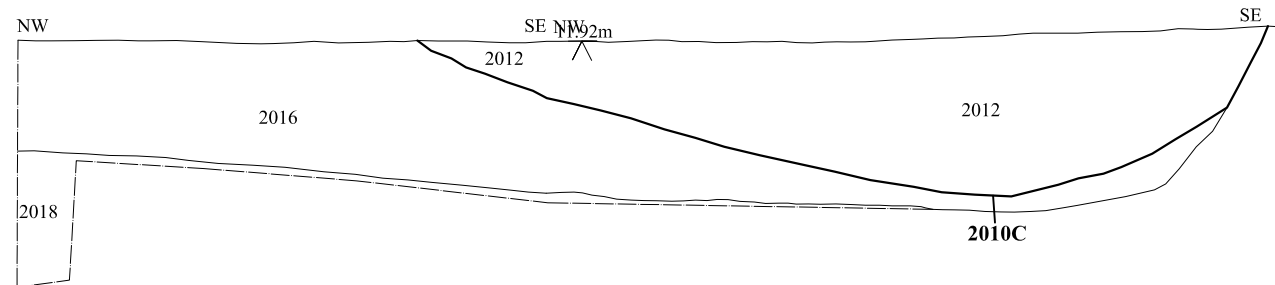
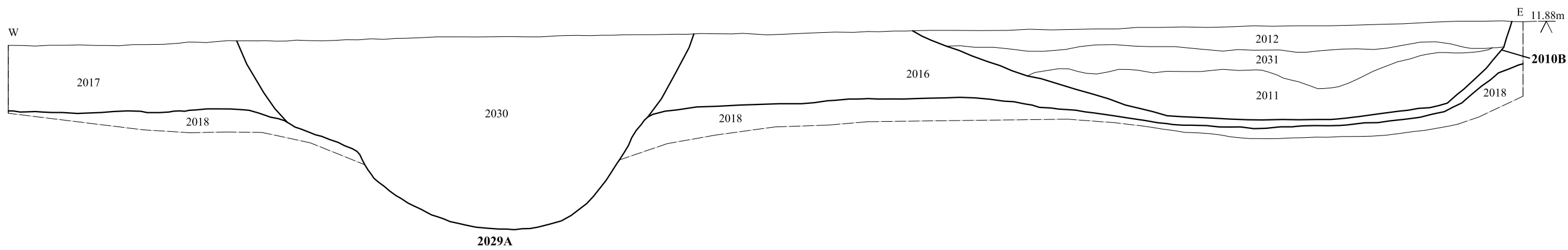
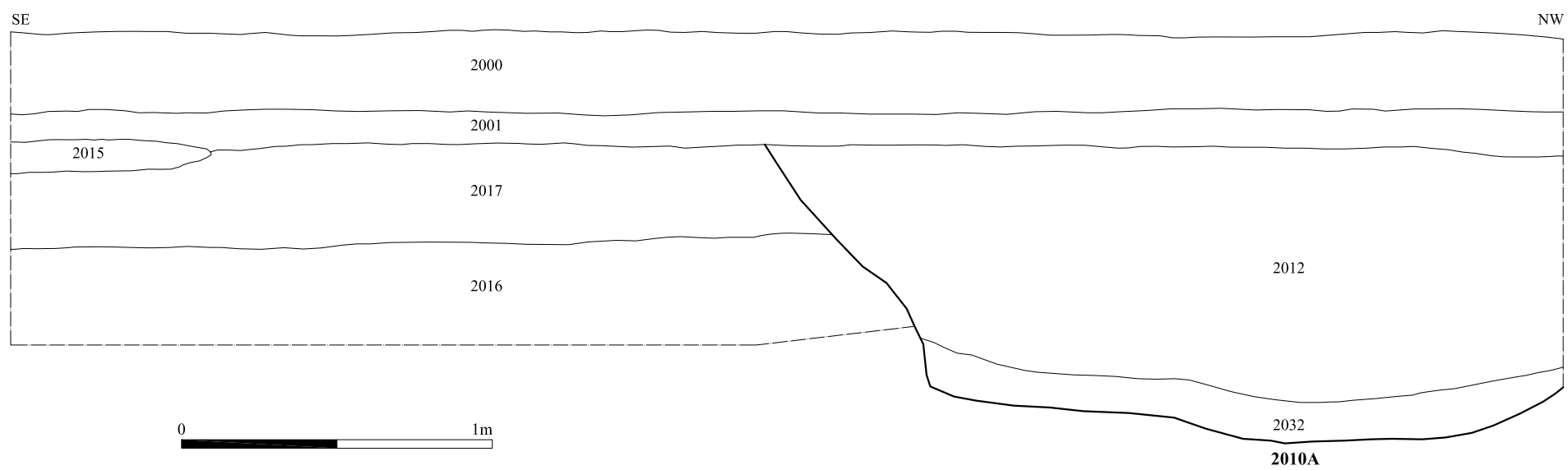
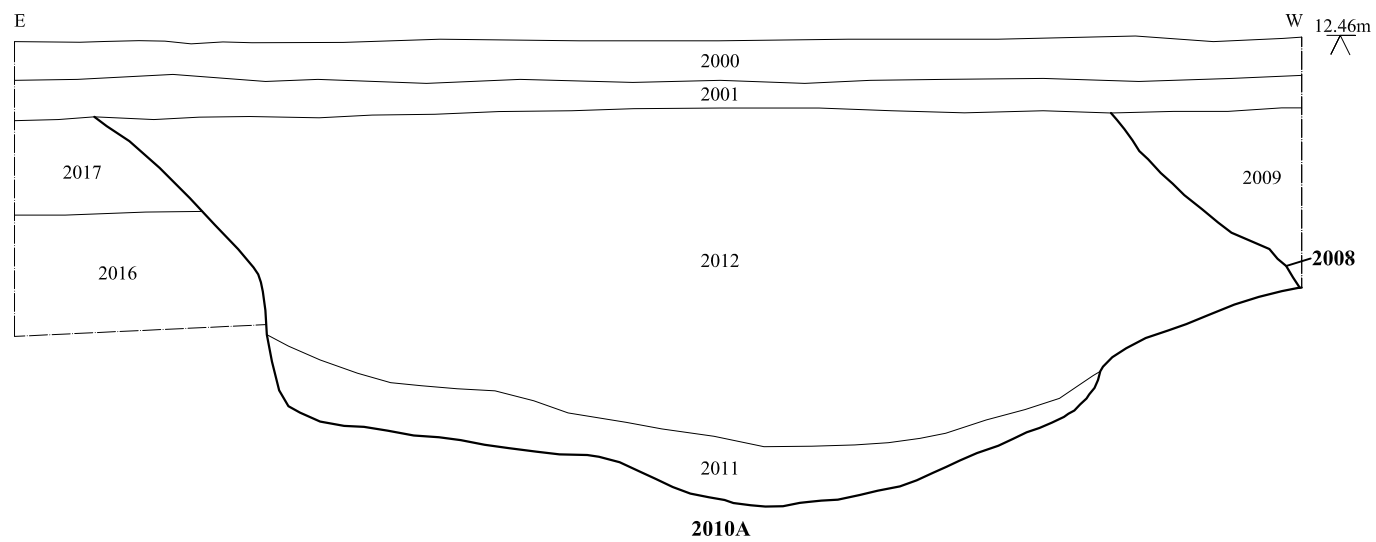
Archaeological Solutions Ltd  
**Fig. 17 Excavation plan**  
 Scale 1:200 at A3  
 South Bradwell, Norfolk (P4837)



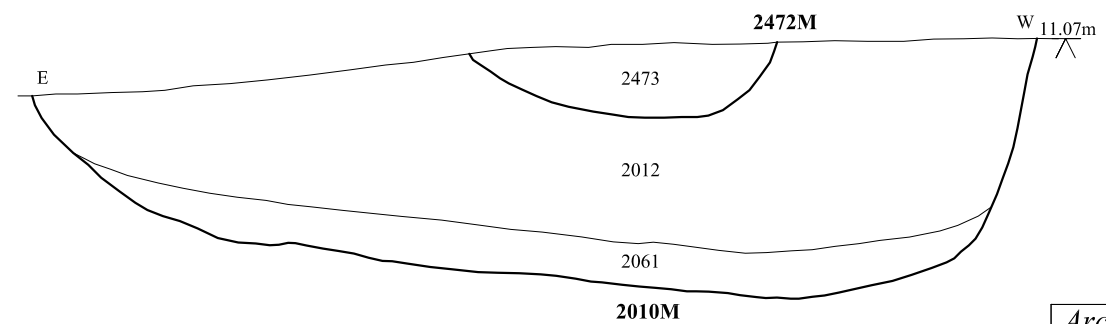
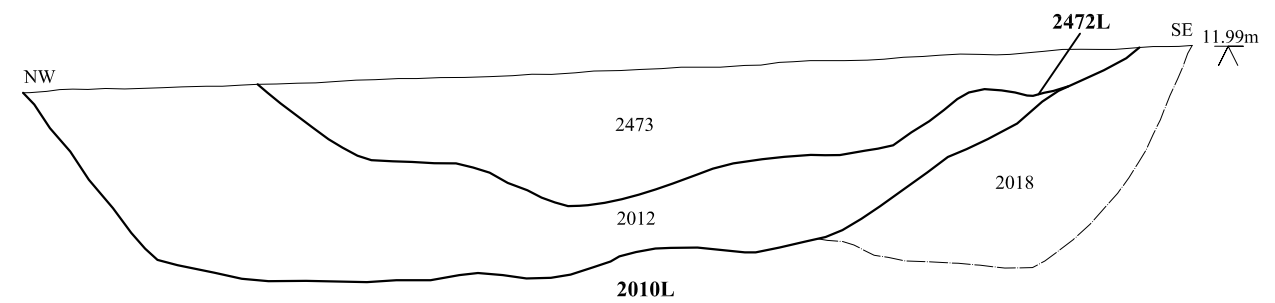
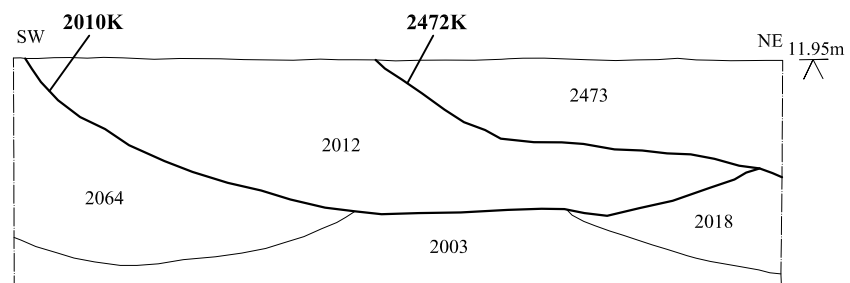
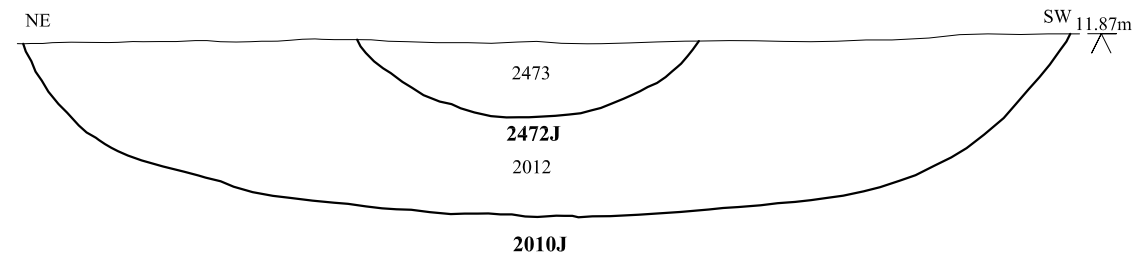
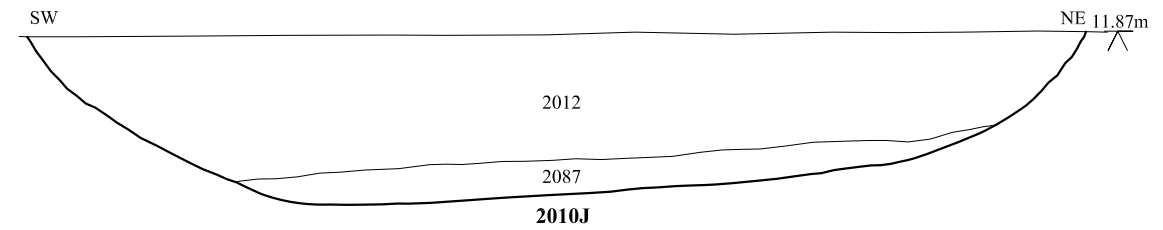
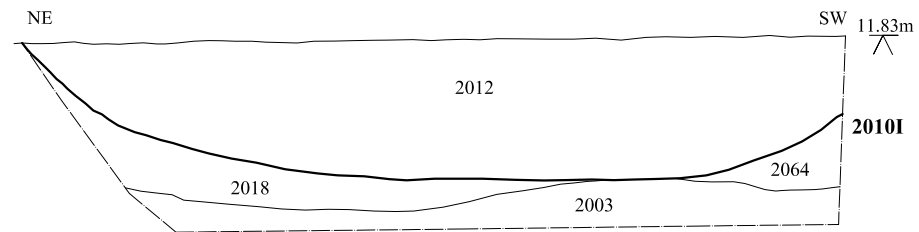
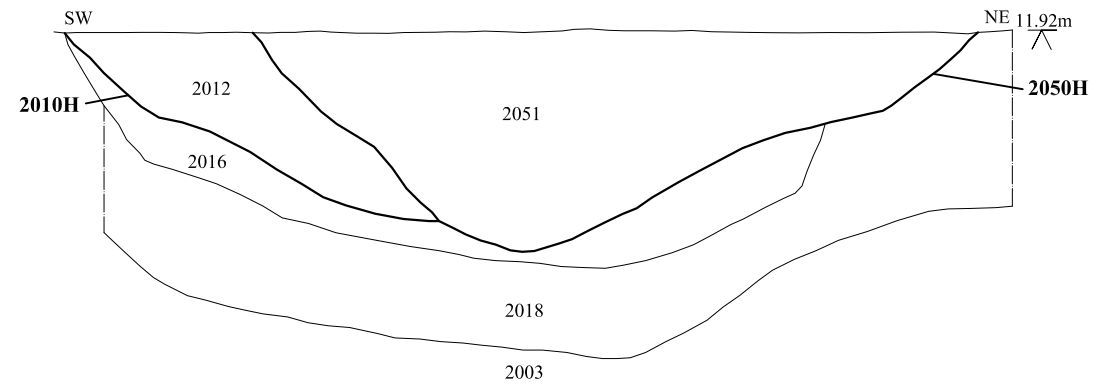
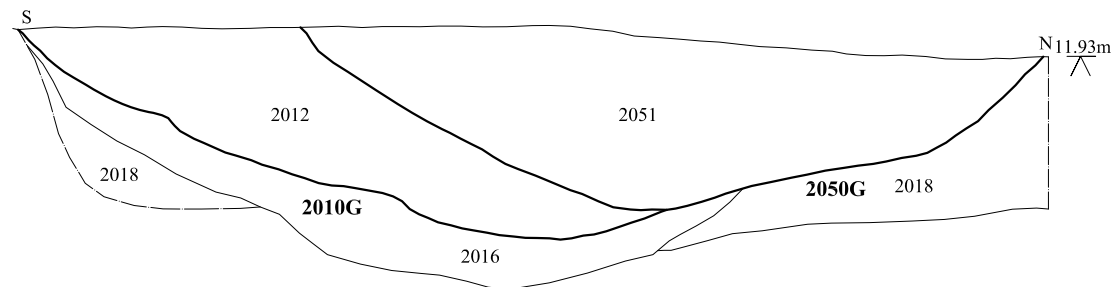
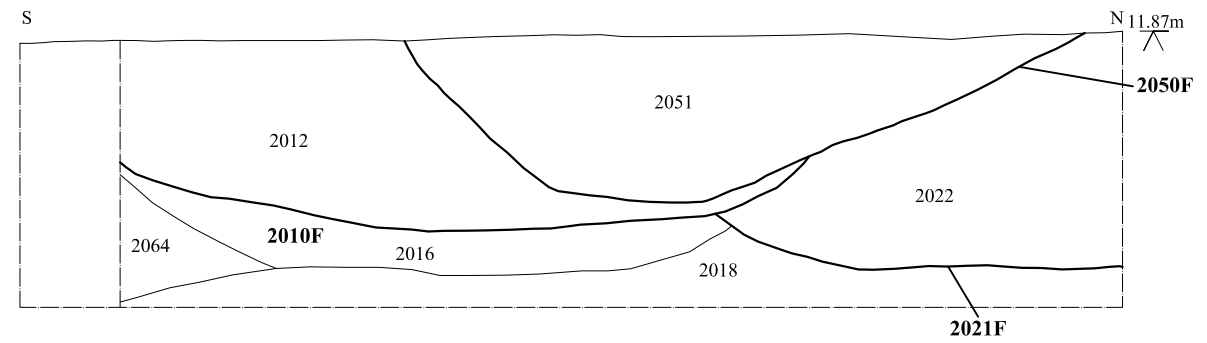
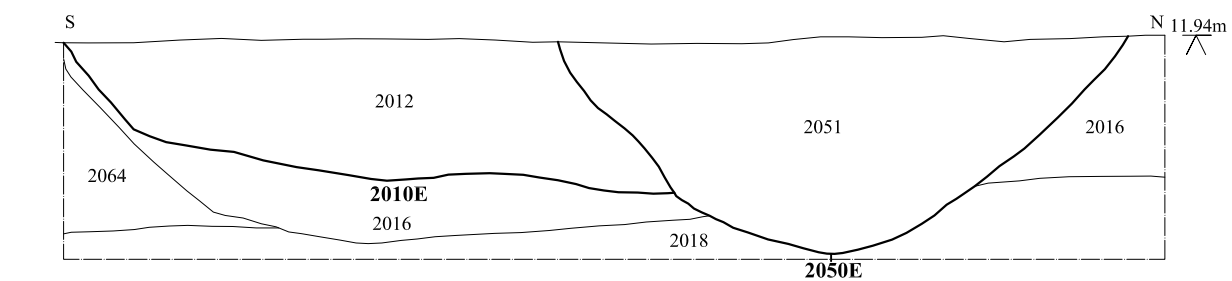
Archaeological Solutions Ltd  
**Fig. 18 Sections**  
 Scale 1:40 at A3  
 South Bradwell, Norfolk (P4837)



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**Fig. 19 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)

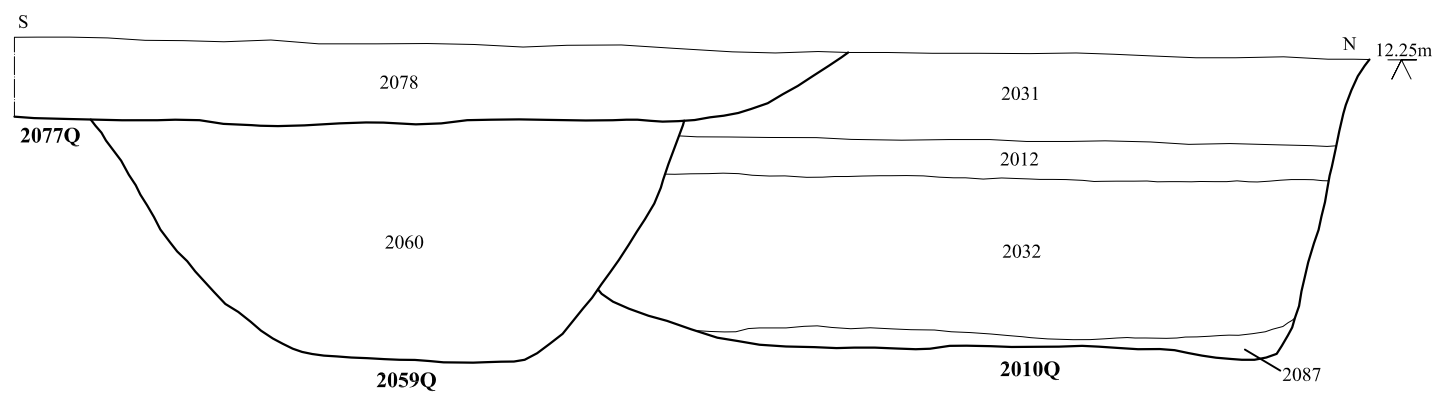
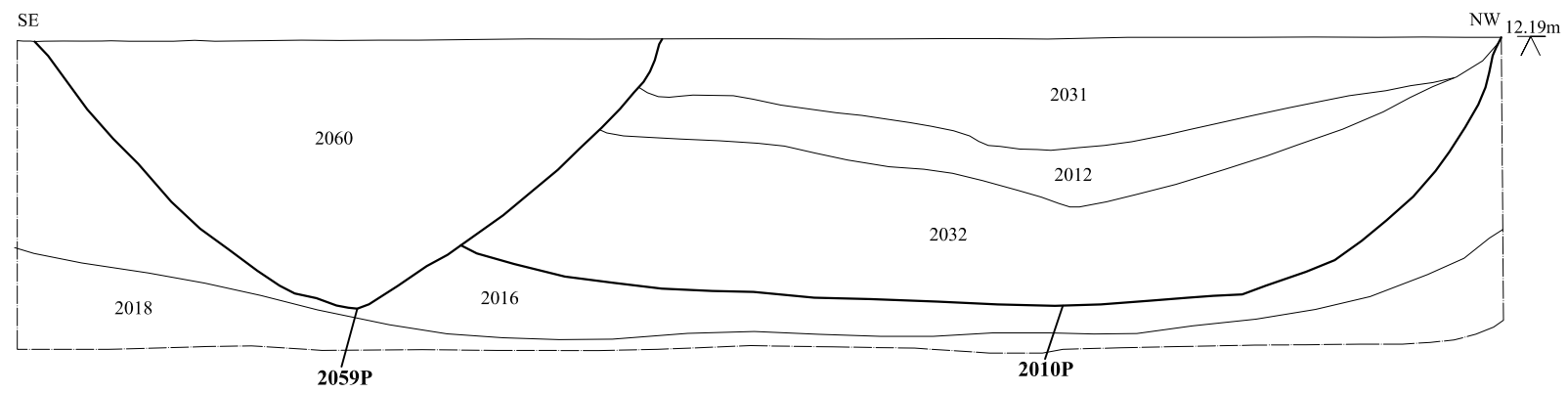
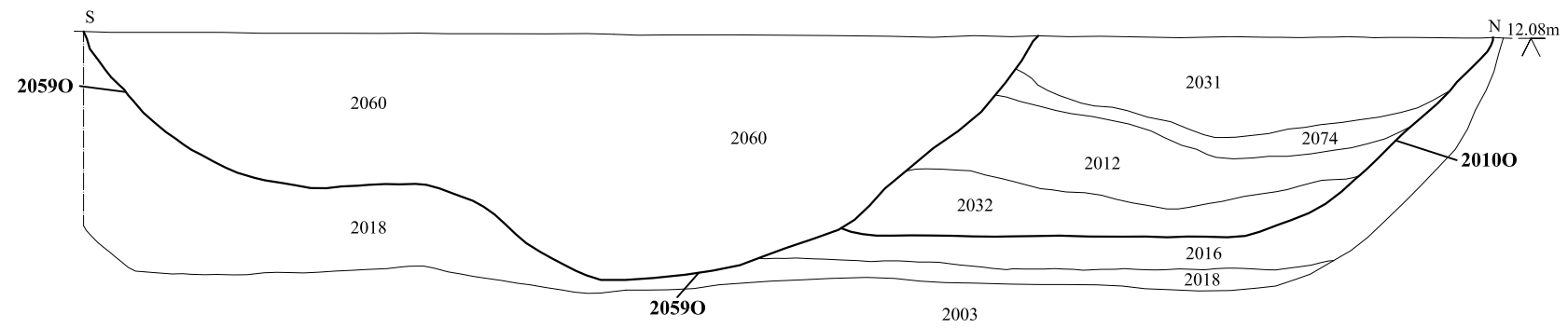
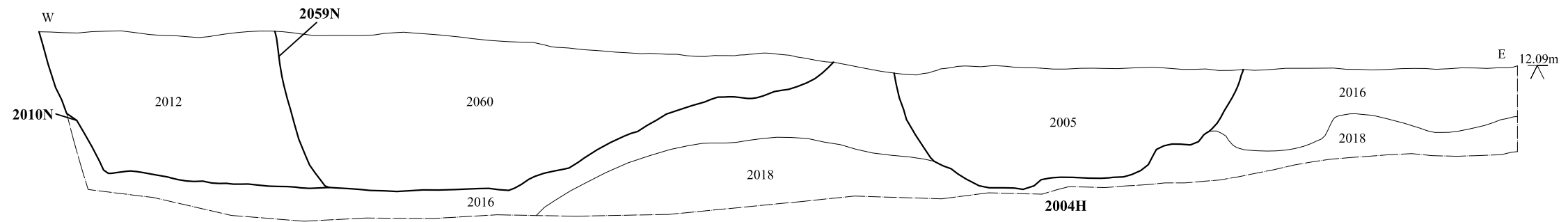


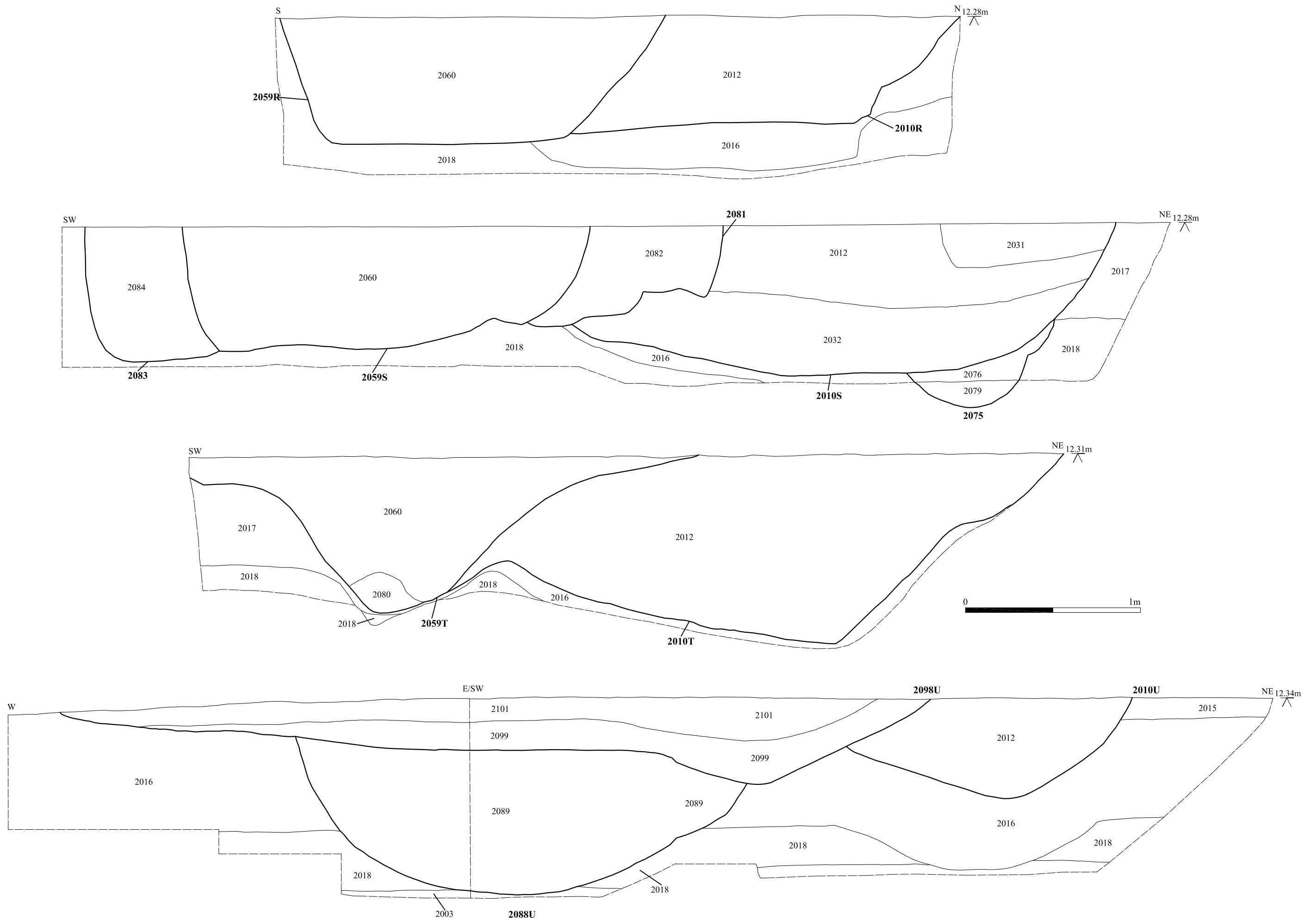
Archaeological Solutions Ltd  
**Fig. 20 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



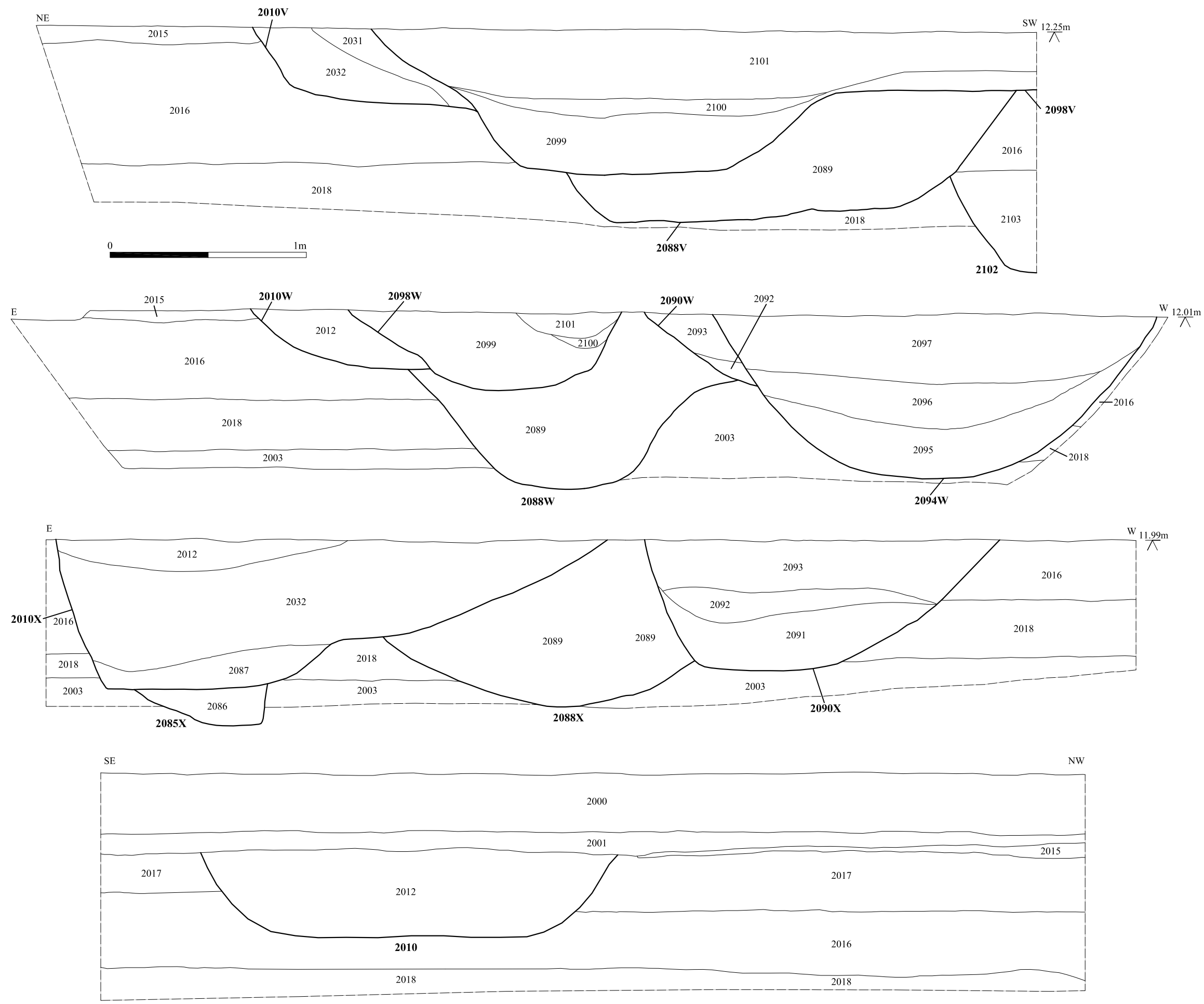
Archaeological Solutions Ltd  
**Fig. 21 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



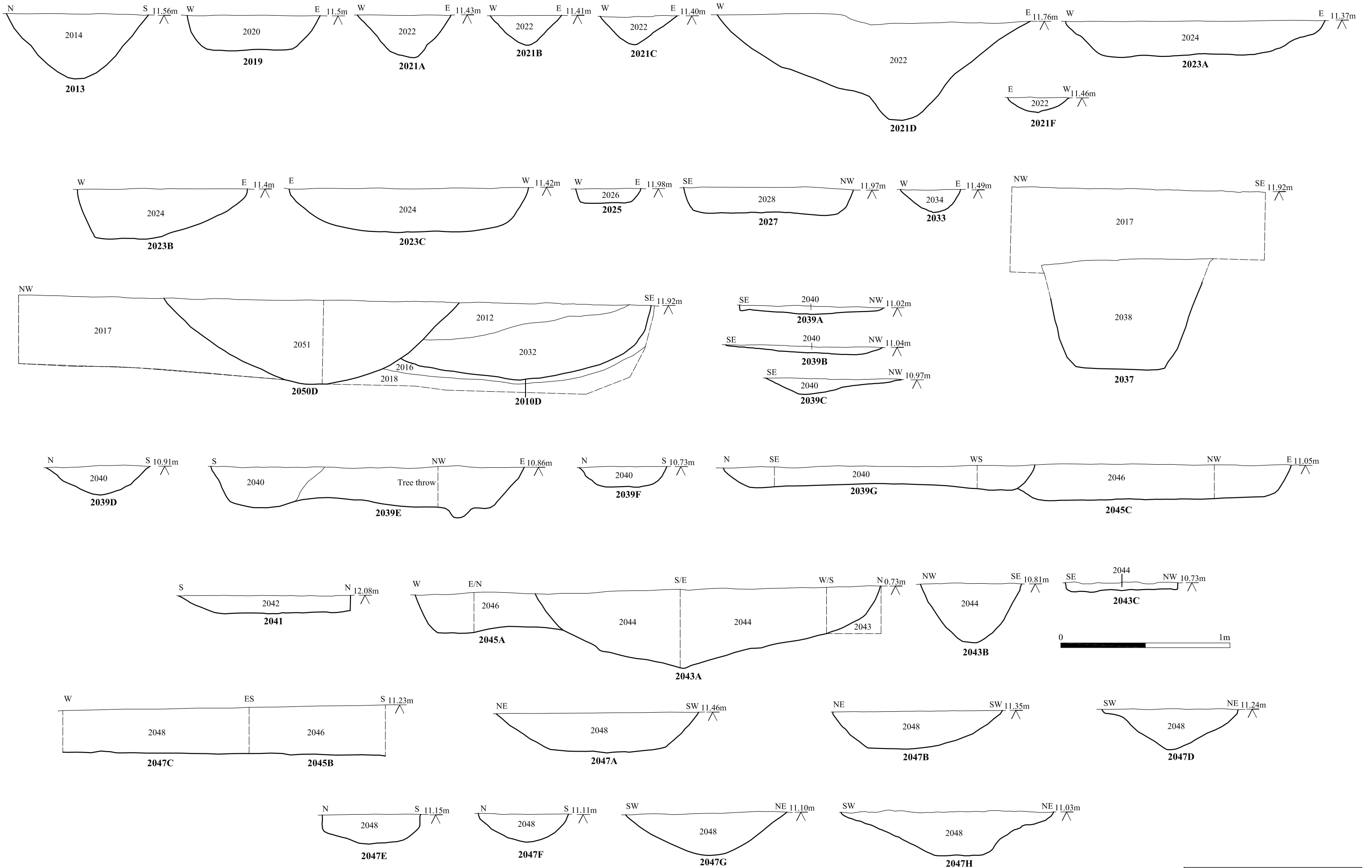




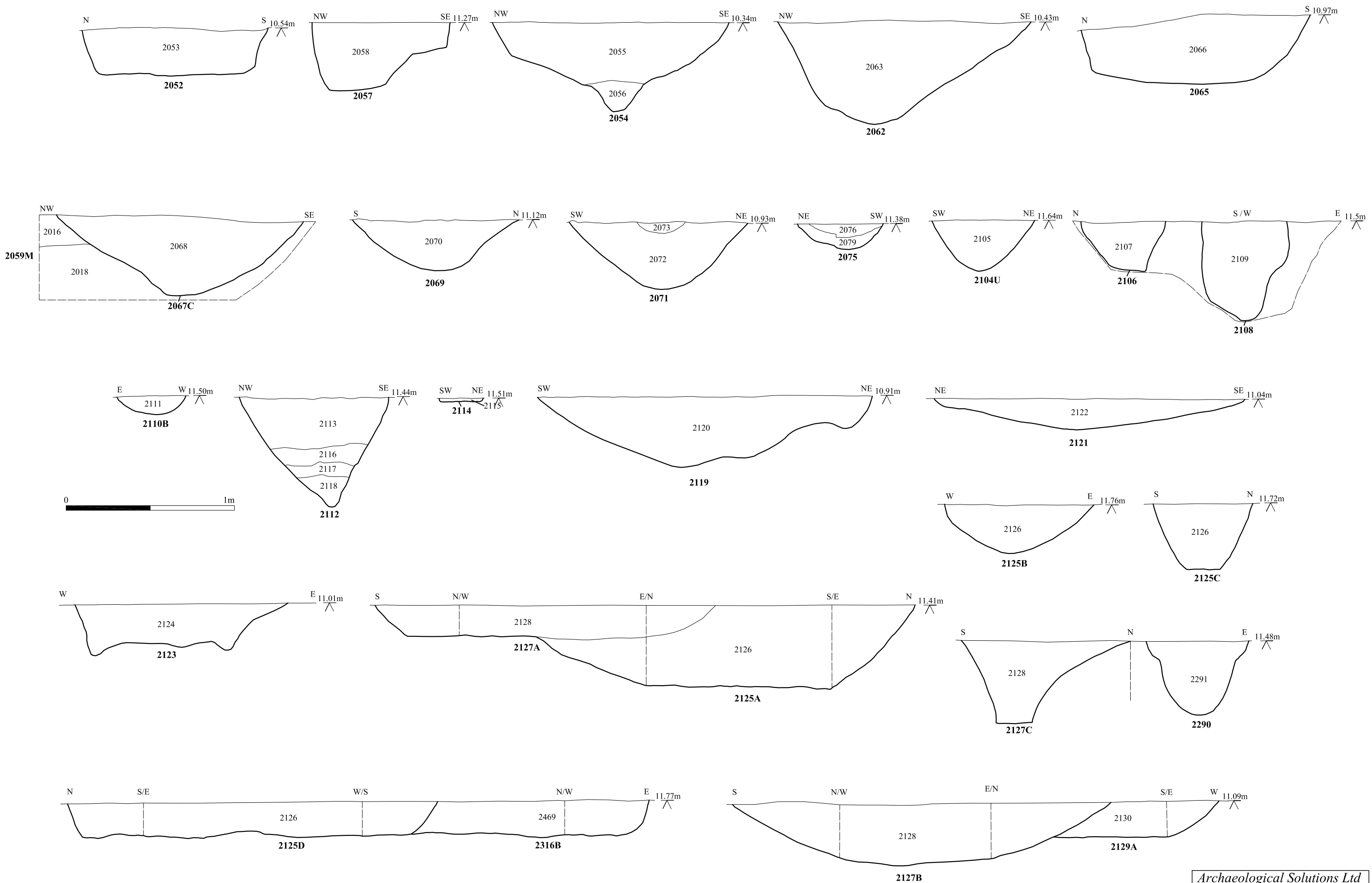
Archaeological Solutions Ltd  
**Fig. 23 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



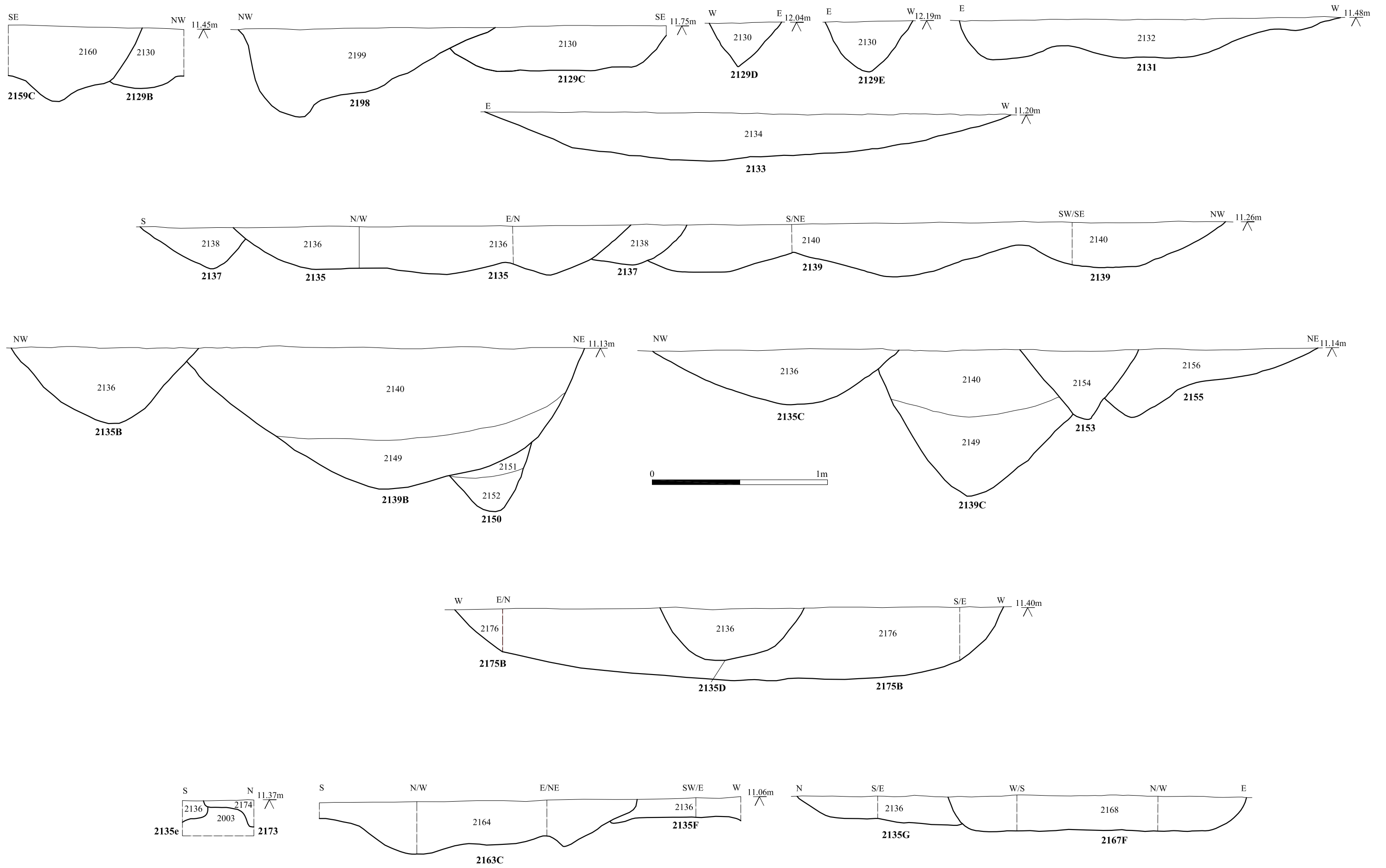
Archaeological Solutions Ltd  
**Fig. 24 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



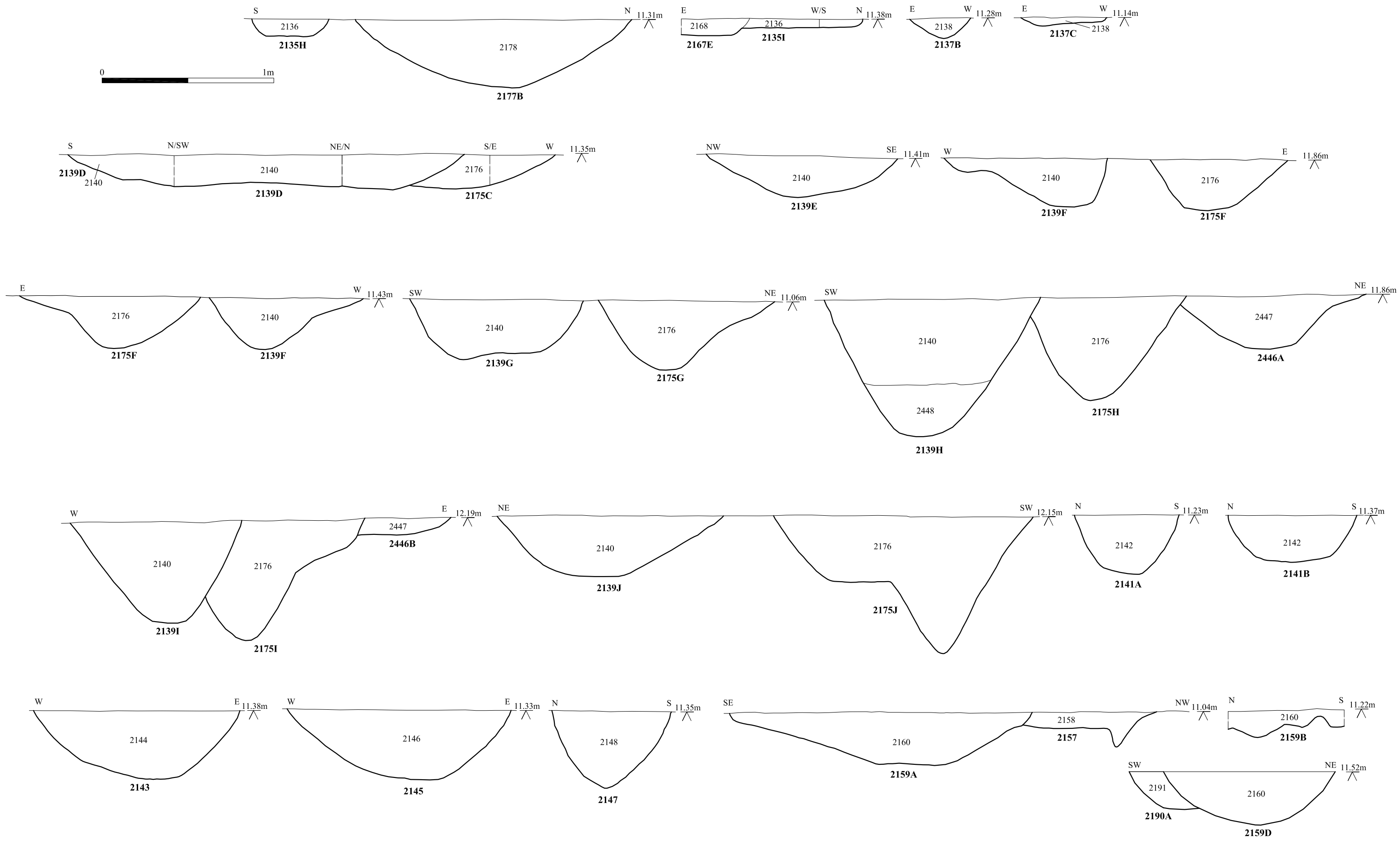
Archaeological Solutions Ltd  
**Fig. 25 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



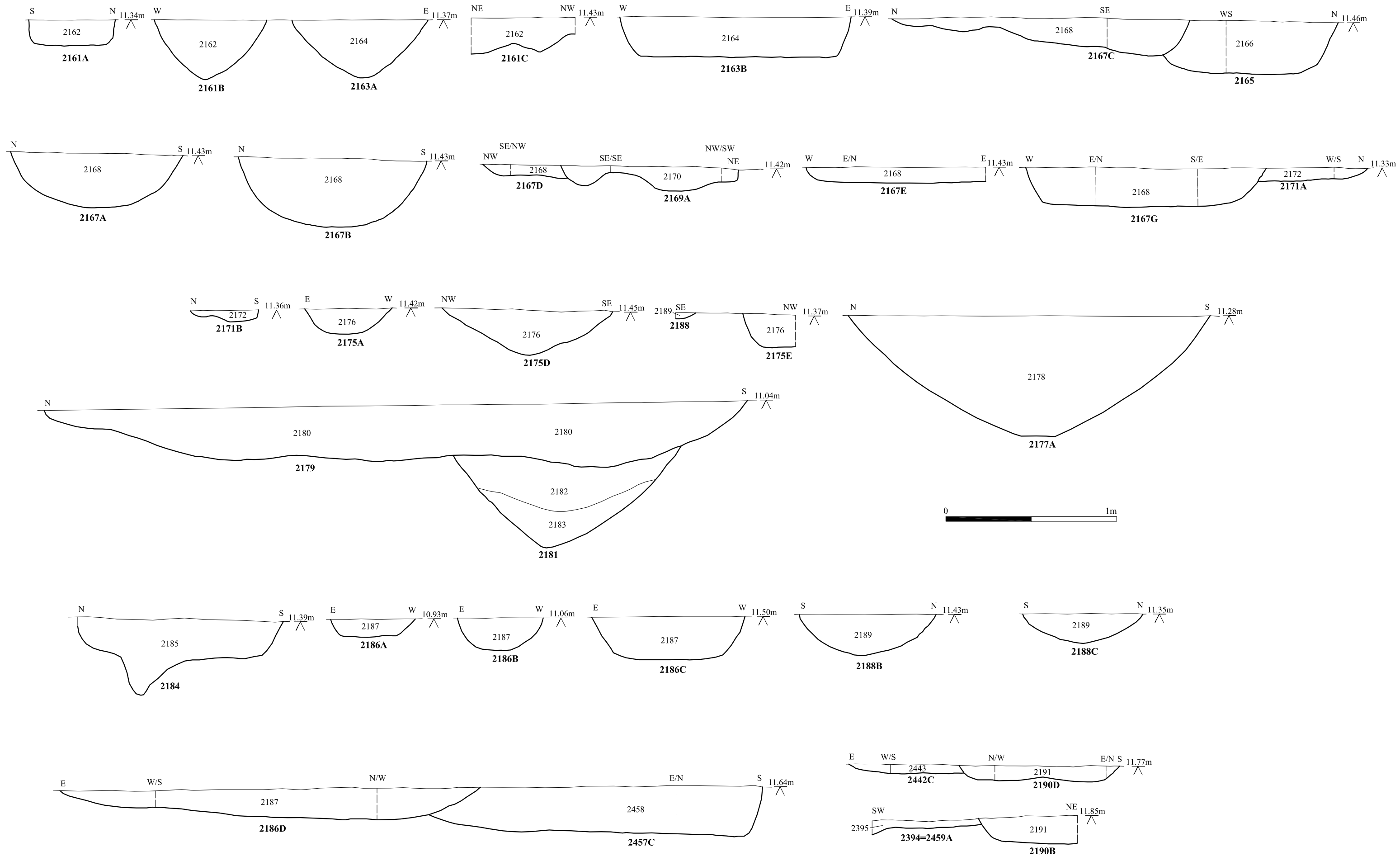
Archaeological Solutions Ltd  
**Fig. 26 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



Archaeological Solutions Ltd  
**Fig. 27 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)

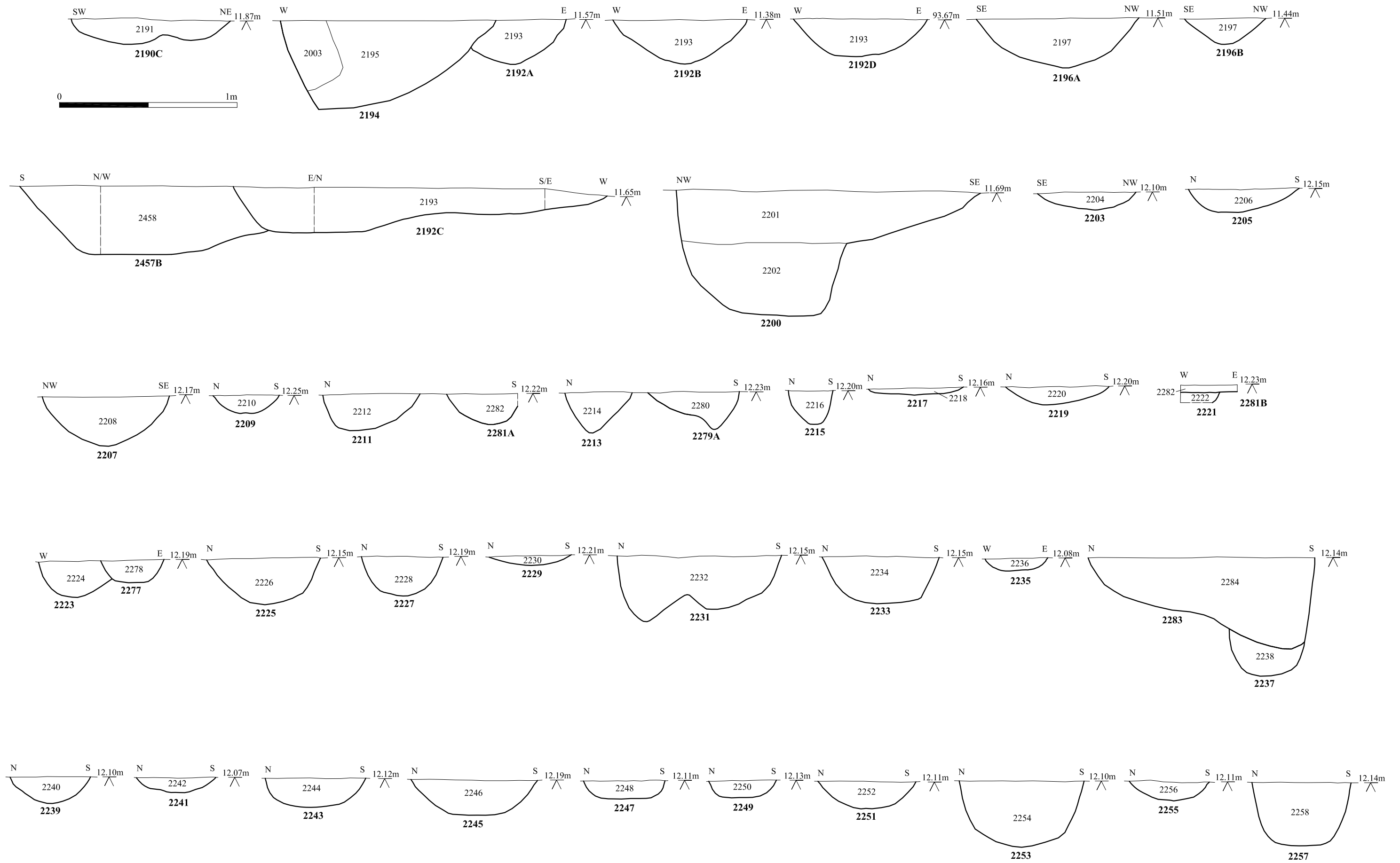


Archaeological Solutions Ltd  
**Fig. 28 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)

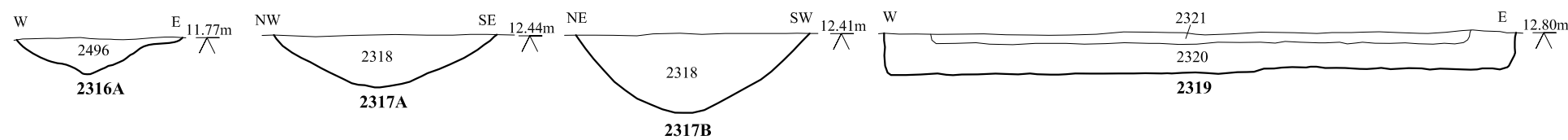
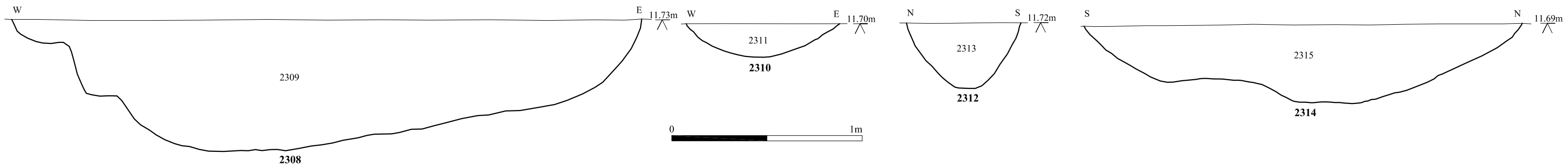
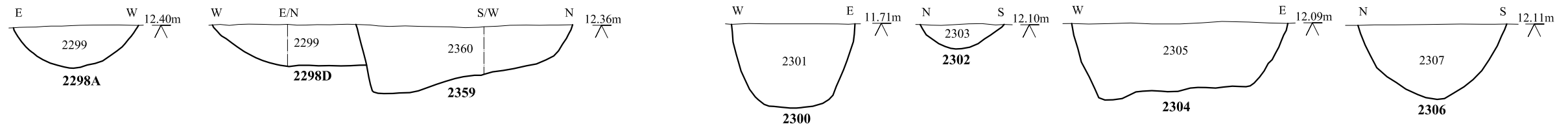
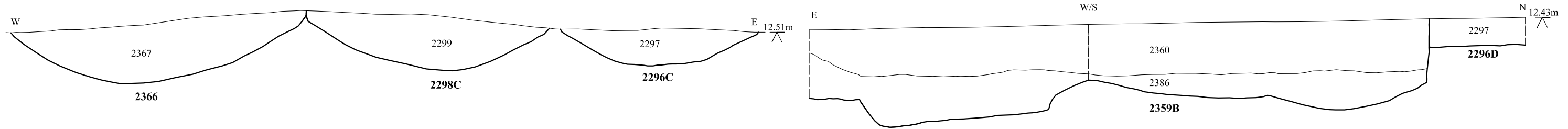
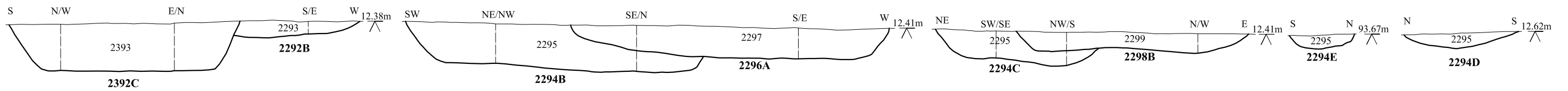
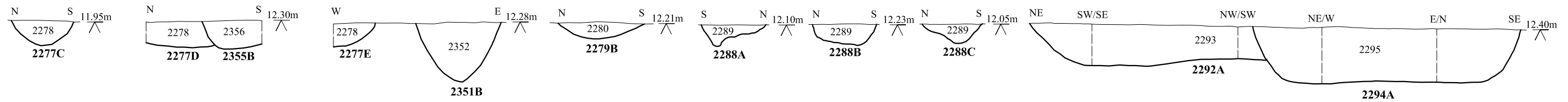
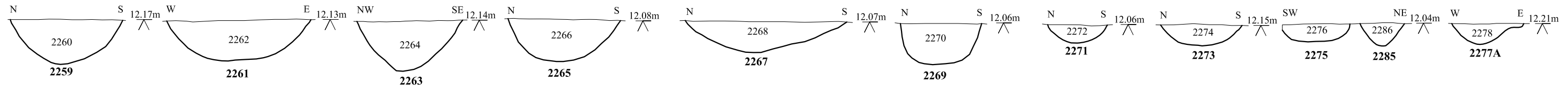


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**Fig. 29 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)

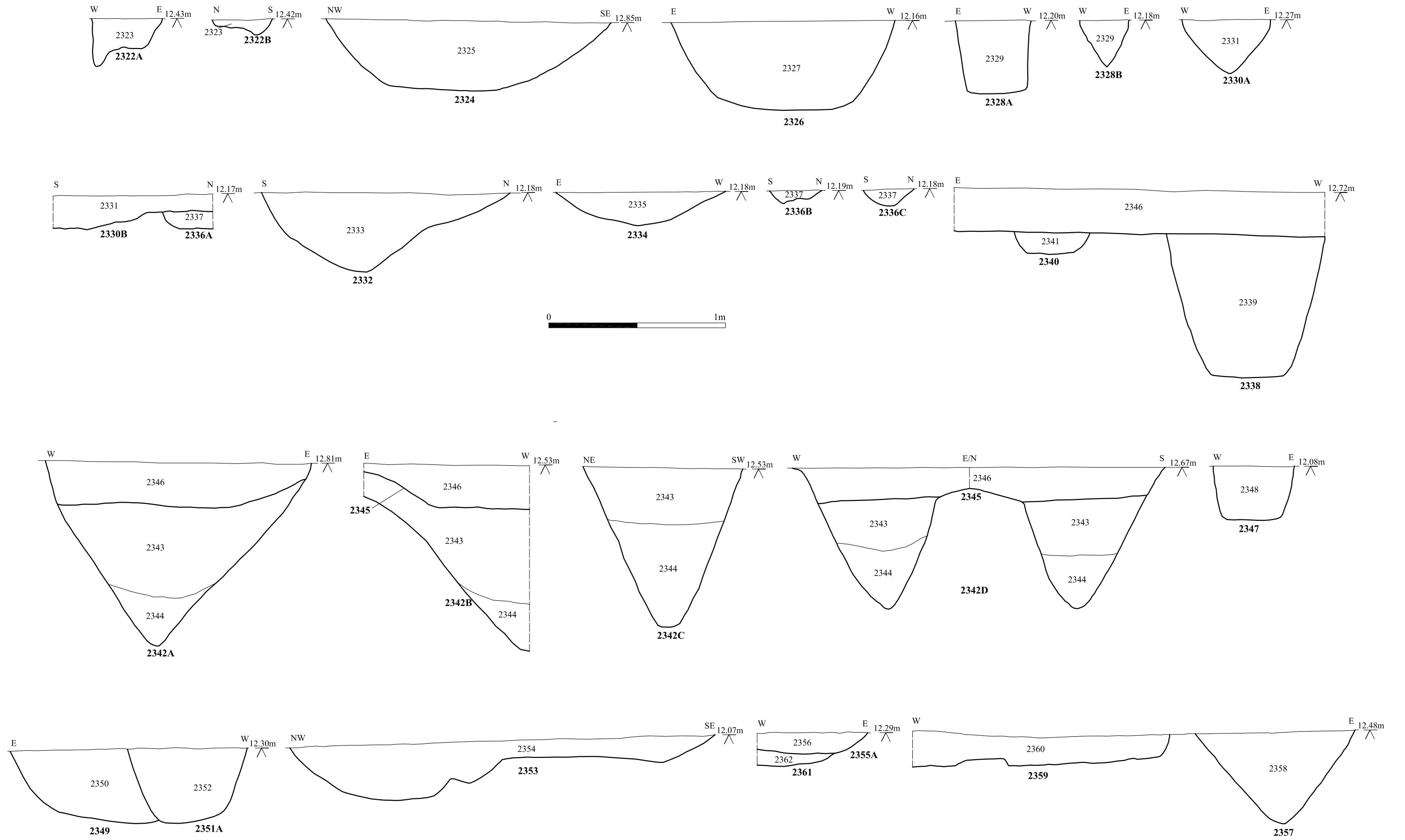




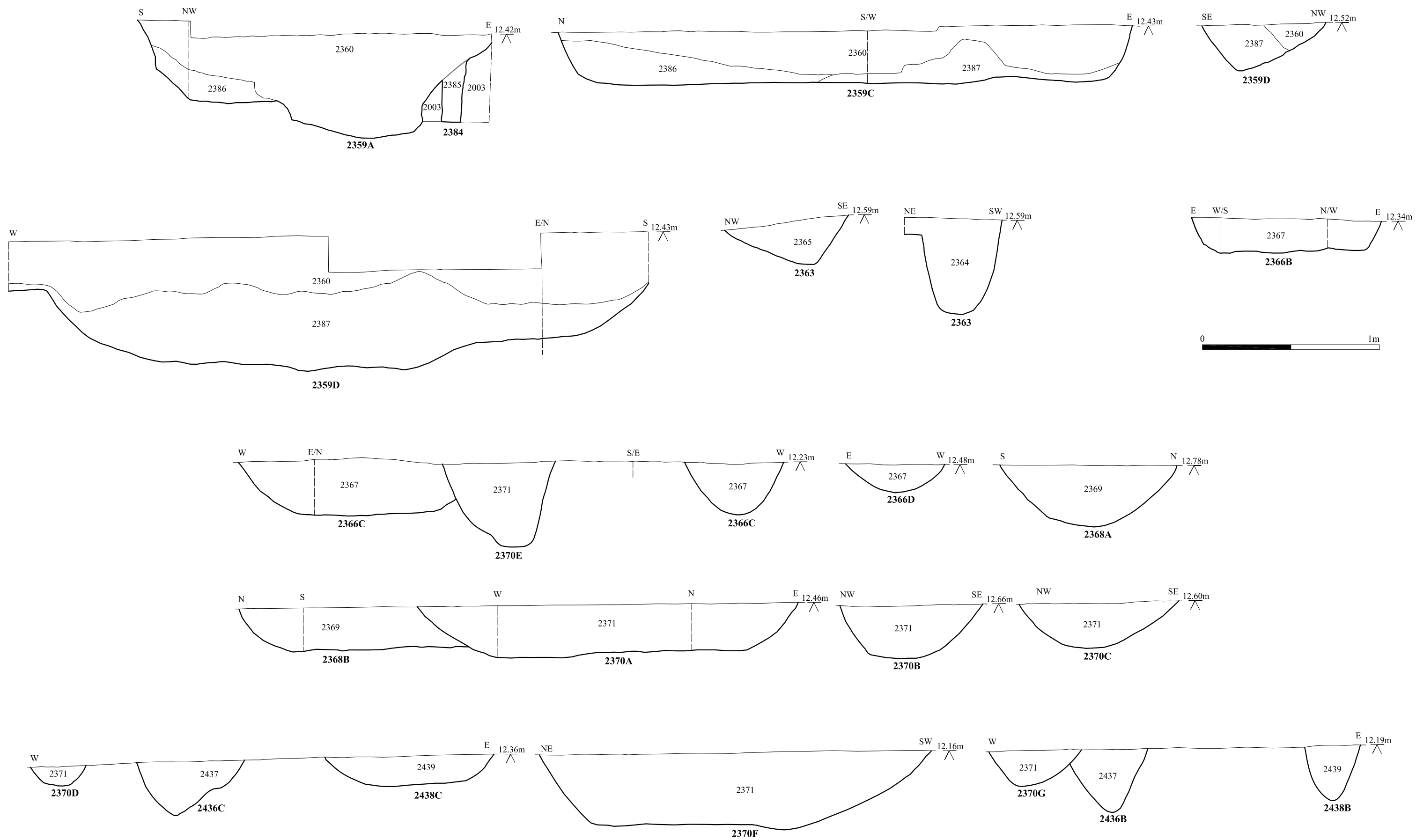
Archaeological Solutions Ltd  
**Fig. 30 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



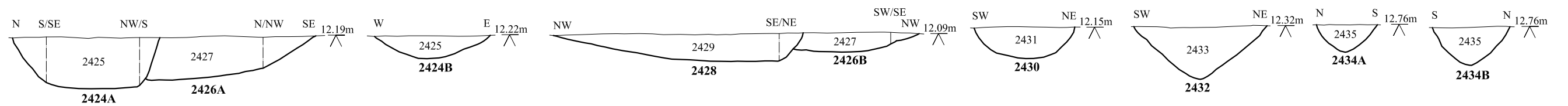
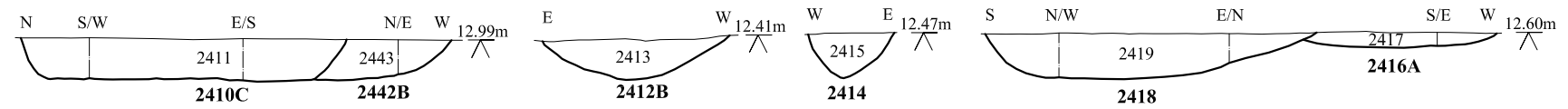
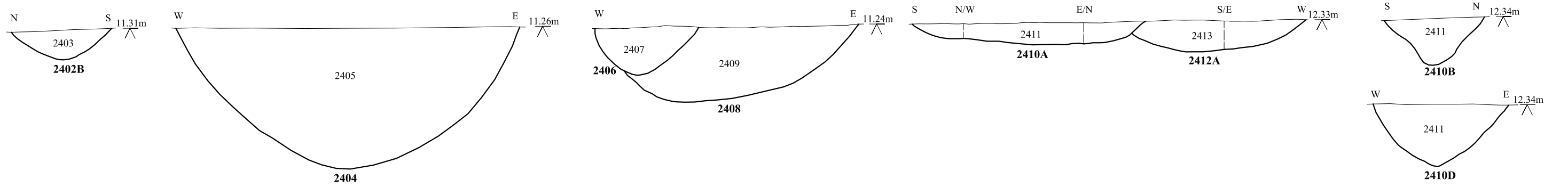
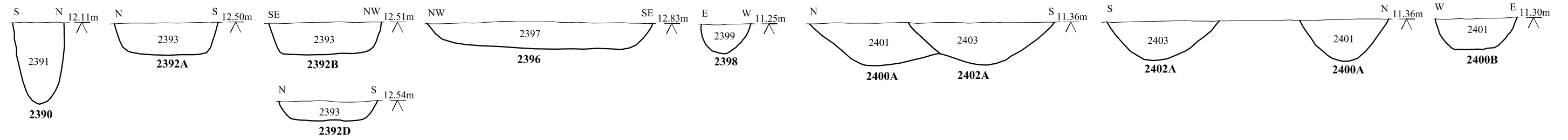
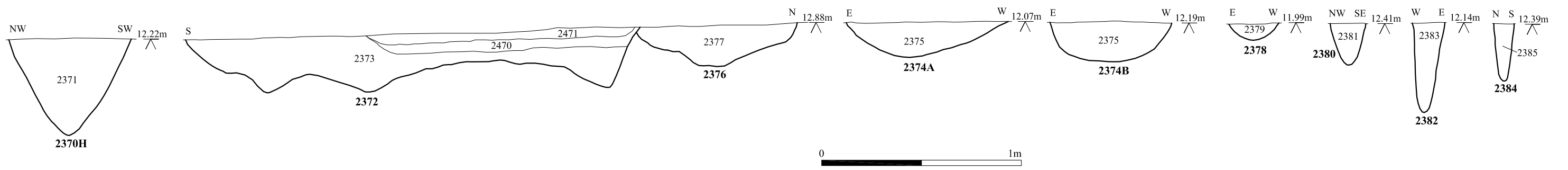
Archaeological Solutions Ltd  
**Fig. 31 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



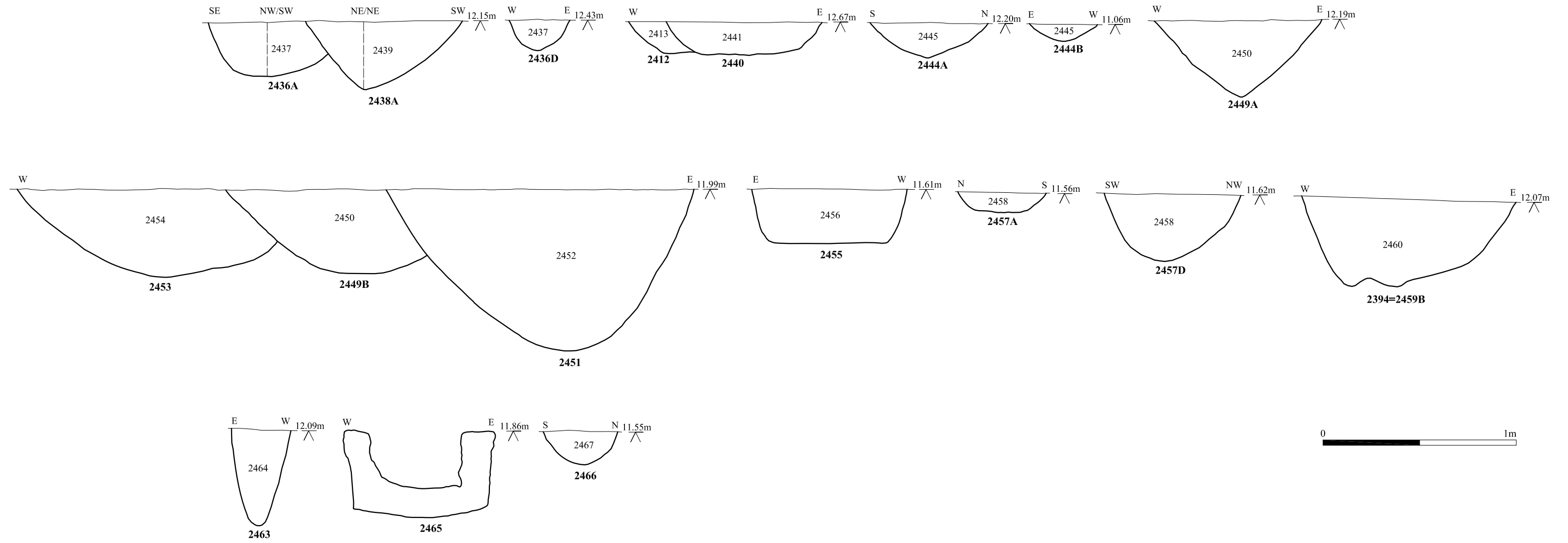
Archaeological Solutions Ltd  
**Fig. 32 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



Archaeological Solutions Ltd  
**Fig. 33 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



Archaeological Solutions Ltd  
**Fig. 34 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)



Archaeological Solutions Ltd  
**Fig. 35 Sections**  
 Scale 1:20 at A3  
 South Bradwell, Norfolk (P4837)