

Land at Wick Farm
Wick Road
Burnham-on-Crouch
Essex



Archaeological
Evaluation Report



April 2015

Client: Countryside Renewables

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Land at Wick Farm, Wick Rd, Burnham-on-Crouch, Essex

Archaeological Evaluation

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Summary

Between 24th and 26th March 2015, Oxford Archaeology East (OA East) carried out an archaeological evaluation on land at Wick Farm, Burnham-on-Crouch (TQ 9604 9567). A total of five trenches totalling to 180 metres were excavated, targeting anomalies seen on a geophysical survey. Two prehistoric boundary ditches, a palaeochannel, tree throw and a pit were sealed beneath varying depths of alluvial deposits. These alluvial deposits were recorded in all trenches, with a depth of 1.5m in the southernmost trenches, receding to a depth of 0.4m in the northernmost trenches. A thin deposit of Red Hill material was recorded between alluvial layers in Trench 2. No archaeological features found in the evaluation matched anomalies in the geophysical survey.

A small assemblage of early Roman briquetage was recovered from the alluvial layer in Trench 3, and a small assemblage and fired clay/briquetage was recovered from the pit, ditch and tree throw in Trench 4. A single sherd of prehistoric pottery was recovered from the ditch in Trench 5. The only ecofacts recovered from environmental samples came from the palaeochannel in Trench 1, where various preserved seeds from plants such as bramble and sour cherry were recovered. All other samples were sterile.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted at Wick Farm, Wick Road, Burnham-on-Crouch (TQ 9604 9567).
- 1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Maria Medleycott of Essex County Council, supplemented by a Written Scheme of Investigation (WSI) prepared by OA East (Stocks-Morgan 2015).
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by Essex County Council, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The site is located on the north bank of the River Crouch, 1km from the estuary. The ground is relatively level at 3m OD and formed of reclaimed salt marsh. The site is currently used as arable farmland.
- 1.2.2 The superficial geological deposits on site consist mainly of river terrace deposits, but tidal flat deposits are recorded at the southern edge. These glacio-fluvial deposits overlay a bedrock of London Clay (British Geological Survey: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, accessed 23/03/15).

1.3 Archaeological and historical background

- 1.3.1 A thorough archaeological background was written in the Desk-Based Assessment undertaken last year (Stocks-Morgan 2014) and is referenced below.

Prehistoric

- 1.3.2 The earliest archaeological remains recorded in the HER within 1km of site are cropmarks of a rectilinear enclosure and associated features. Excavations revealed that the enclosure comprised a ditch and bank system of Iron Age date. A north to south aligned ditch was also encountered, which is thought to be Bronze Age in date (EHER 11339).

Roman

- 1.3.3 Salt making was a long established industry in the Dengie peninsula and is known to have begun in the Roman period. Evidence for this activity is characterised by large spreads of red burnt clay deposits, known as 'Red Hills', which have been recorded directly to the north-west of site by aerial photography (EHER 11315). An excavation carried out on this Red Hill in 1976 by Burnham Local History Society recorded burnt clay mounds and associated gullies along with a small assemblage of putative Roman briquetage and pottery, though no written record of the excavation is available (Smith, pers. comm.).

Medieval to Modern

- 1.3.4 The site lies on former salt marsh. Several records in the HER relate to monuments associated with the draining of the land, such as the tractor driven drainage pump (EHER 45883) and to the maintenance of the sea defences (EHERs 45879, 45880, 45881 and 45882). Other features typical of a riverside location are also located nearby, such as mooring posts (EHER 45878), which have been encountered as surviving timber structures within tidal deposits.
- 1.3.5 Modern monuments within the area related to military activity during the two World Wars. During the First World War, a flight station and landing ground (EHER 19347) was built 0.3km to the north of the site. During the Second World War a pill box was built into the sea wall (EHER 21275) as part of the field defence systems meant to protect Britain from invasion.

1.4 Acknowledgements

- 1.4.1 Thanks are extended to Countryside Renewables, who commissioned and funded the archaeological works. John Dunlop and Dr Denis Gross of Countryside Renewables, visited site and showed a great interest in the archaeology. The work was monitored and visited by Maria Medleycott from the Essex County Council Historic Environment Management Team. The site was managed by James Drummond-Murray. Excavation and recording of the archaeological features was undertaken by the author with the assistance of Lyndsey Kemp and Daria Tsybaeva. Machine excavation was undertaken by Danbury Plant Hire.
- 1.4.2 Generous thanks are also given to the landowner Martin Smith, who showed considerable interest in the works and whose local knowledge was of great value to the author.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area along with evaluating the accuracy of the geophysical results.

2.2 Methodology

- 2.2.1 The WSI specified that a total of 5 cross-shaped trenches were to be excavated in the location of anomalies noted on the geophysical survey. These trenches measured a total of 170 linear metres (Fig 2). Upon excavation, Trench 2 was extended by 6x5m to clarify the extent of deposits recorded in the trench.
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a 20 tonne tracked 360-type excavator using a toothless ditching bucket.
- 2.2.3 The site survey was carried out using a Leica GS08 GPRS receiving a rectified location from a base station on a known point.
- 2.2.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.6 Environmental samples were taken from any archaeological features or deposits deemed at having the potential for preserved ecofactual remains.
- 2.2.7 Weather conditions were generally dry, apart from persistent heavy rain during the final day of works. Ground conditions were good.

3 RESULTS

3.1 Introduction

3.1.1 Trenches are discussed below in numerical order. A full trench and context inventory can be found in Appendix A. All trenches were sealed by a mid yellowish brown clay subsoil layer varying in depth between 0.2m and 0.35m thick and a dark brown topsoil 0.3m thick, unless otherwise stated.

3.2 Trench 1 (Figs 2A and 4)

3.2.1 This was the south-westernmost trench excavated, targeted on anomalies thought to be archaeological in origin. The trench measured 15m long north-west to south-east and 15m long north-east to south-west. An east-north-east to west-south-west aligned palaeochannel was located in the trench, sealed by two thick alluvial layers.

3.2.2 Palaeochannel **16** was aligned east-north-east to west-south-west and measured 2.1m wide and at least 0.5m deep, with a steeply sloping side. The single fill encountered (17) was a dark greyish brown silty clay with a high amount of organic remains surviving throughout. Environmental sample 2 was taken from this fill and contained waterlogged plant remains including elder, bramble and sour cherry seeds.

3.2.3 This palaeochannel was sealed by a layer of alluvium (23). This layer was a dark greyish blue clay, 0.26m thick, with occasional gravel inclusions. Above this was a light greyish blue alluvial clay (22), 0.35m thick, with rare gravel inclusions. This was sealed by subsoil and topsoil.

3.3 Trench 2 (Figs 2B and 3)

3.3.1 This was the south-easternmost trench excavated, targeted on anomalies thought to be archaeological in origin. The trench measured 15m north-north-west to south-south-east and 15m east-north-east to west-south-west. A further area measuring 6m by 5m was excavated off the south-east corner of the trench to uncover any more possible Red Hill deposits. Thick bands of alluvial clay were encountered, with occasional lenses of Red Hill deposits located between the layers of alluvium.

3.3.2 The lowest layer of alluvium (15) was a dark blue grey clay, 0.39m thick, with occasional gravel inclusions. Sample 3 was taken from this deposit and contained no preserved plant remains. This was sealed by a light grey alluvial clay (14), 0.15m thick, with no inclusions. The Red Hill deposits were found between this lower deposit and upper alluvial layer 21. The Red Hill deposits (12 and 13; Plates 1 and 2) were a light red loam, between 0.01m and 0.02m thick, with occasional clay inclusions. No briquetage survived within the deposits well enough for retrieval. The alluvial layer sealing these small Red Hill deposits (21) was a light yellowish grey clay measuring 0.41m thick. This was sealed by subsoil and topsoil.

3.4 Trench 3 (Figs 2A and 3, Plate 3)

3.4.1 Trench 3 was located immediately south of the set-aside to the north-west of the development area. The trench measured 20m east-north-east to west-south-west and 15m north-north-west to south-south-east. No archaeological features were encountered within the trench, although an alluvial layer containing Roman briquetage was recorded throughout.

3.4.2 Alluvial layer 25 (Fig. 3, Plate 3) was a light blue grey clay which varied in thickness between 0.1m to 0.4m. A small assemblage of relatively fresh fragments of briquetage was recovered from the layer. Sample 5 was taken from the deposit, and contained no preserved plant remains. This layer was sealed by subsoil and a mid reddish brown loam topsoil.

3.5 Trench 4 (Figs 2C and 4, Plate 4)

3.5.1 This was located to the north of Trench 2 and east of Trench 3 and measured 30m north-north-west to south-south-east and 15m east-north-east to west-south-west. A furrow, also seen in Trench 5, cut the alluvial layer and a ditch, tree throw and pit were sealed by the alluvium. All features were located in the southern half of the trench.

3.5.2 Boundary ditch **6** was linear in plan, aligned north-east to south-west and measured 1.05m wide and 0.25m deep, with a stepped U-shape profile. The single fill (7) was a light yellowish grey silty clay, with moderate charcoal inclusions slumping in on the northern edge near to tree throw **8**. A small amount of fired clay was recovered from the ditch.

3.5.3 Directly next to ditch **6** was tree throw **8**. This was irregular in plan, 1.3m in diameter and 0.1m deep, with gently sloping sides. The single fill (9) was a mid blue grey silty clay with moderate charcoal and fired clay inclusions.

3.5.4 Just to the south of ditch **6** was pit **10** (Plate 5). This pit was 1.05m in diameter and circular in plan, with a depth of 0.22m. The fill (11) was a dark blue grey silty clay with moderate charcoal inclusions. A small assemblage of fired clay was recovered from the fill. Sample 1 was taken from the fill and found to contain a small amount of fired clay.

3.5.5 These features were sealed by an alluvial deposit (18). This layer was a mid blue grey clay measuring 0.44m thick. A furrow (same as furrow **3** in Trench 5) truncated the alluvium. This furrow was then sealed by subsoil and topsoil.

3.6 Trench 5 (Figs 2C and 4, Plate 6)

3.6.1 This was the northernmost trench excavated, located near to the northern trackway leading past the field. The trench measured 15m north-north-west to south-south-east and 15m east-north-east to west-south-west. A ditch was sealed by the alluvium and a furrow truncated the alluvial layer.

3.6.2 Ditch **20** (Fig. 3, Plate 6) was linear in plan and aligned north-west to south-east. The feature measured 1.15m wide and 0.32m deep with gently sloping sides. The single fill (26) was a light yellowish grey silty clay, from which a single small sherd of prehistoric pottery was recovered. Sample 4 was taken from the fill and contained no preserved plant remains.

3.6.3 The ditch was sealed by alluvial layer 24; a light greyish blue clay, 0.22m thick, with no inclusions. This deposit was truncated by later furrow **3**. This feature was aligned north-east to south-west and measured 2m wide and 0.18m deep with a wide U-shaped profile. Shell was recovered from the fill. This was sealed by subsoil and topsoil.

3.7 Finds Summary

3.7.1 A small assemblage of early Roman briquetage was recovered from the alluvial layer (25) in Trench 3 and a small sherd of prehistoric pottery from ditch **20** in Trench 5. An assemblage of fired clay/briquetage was recovered from the features located in Trench 4.

3.8 Environmental Summary

- 3.8.1 The environmental results were relatively poor, with the only preserved plant remains being recovered from the sample taken from palaeochannel **16**. Sour cherry, bramble and elder seeds were recovered from the sample, which are indicative of hedgerow fauna that may have been growing alongside the channel.

4 DISCUSSION AND CONCLUSIONS

4.1.1 The archaeological remains uncovered during the evaluation are of interest and indicate that industrial activity may have been undertaken in the vicinity even prior to the Iron Age and Roman salt making that was known to be nearby. The geophysical results do not appear to correlate with any of the archaeology seen in the trenches (Fig. 5). It is probable the anomalies are variations in the consistency and depths of the alluvial clay deposits spread across the site (Bartlett 2014).

4.2 Prehistoric Activity

4.2.1 The features sealed by the alluvial deposits across site are thought to be prehistoric in date. The two ditches aligned north-east to south-west located in Trenches 4 and 5 (Plate 6) may be remnants of a Middle Bronze Age field system on the edge of the estuary, which would have existed prior to the land being flooded by rising sea levels, causing it to be sealed by alluvium. The small fragment of prehistoric pottery from ditch **20** supports this date, though as the sherd is small and undiagnostic this is by no means secure.

4.2.2 Similarly, the fired clay recovered from ditch **6**, tree throw **8** and pit **10** (Plate 5) is suggestive of salt making in the prehistoric period, an industry that has not been recorded in the vicinity prior to the late Iron Age. Most of the fired clay recovered from these features does not have any form indicative of briquetage (e.g. pedestals – apart from one fragment from pit **10**), but the location of the features so close to the estuary would suggest the material was coming from salt making processes, as opposed to pottery kilns or similar features.

4.2.3 Bronze Age salt making is uncommon, but has been recorded at sites such as Brigg's Farm near Thorney, Peterborough (Pickstone and Mortimer 2011), where Middle Bronze Age salt making was recorded in close proximity to settlement activity. Similarly, the large scale excavations at Mucking, Essex, during the 1970's also recorded significant assemblages of briquetage and features related to salt making dating to the later Bronze Age, if not earlier (Fawn *et al.* 1990, Evans and Lucy 2008).

4.2.4 The palaeochannel located in Trench 1 (Fig. 2) was undated, though can be presumed to be prehistoric, as it was sealed by the alluvial layers that are thought to be early Roman in date. The feature had relatively good environmental remains recovered from the baulk sample, indicating the channel had hedgerow plants in the vicinity during the period it was active. This suggests the land was drier during the period, and this channel would have been a small tributary running to the estuary. The channel was then inundated during the later prehistoric period resulting in it being sealed by the alluvial deposits related to the salt marsh.

4.3 Early Roman Salt making

4.3.1 After the Bronze Age, sea levels began to rise and by the Roman period the site would have been salt marsh, as indicated by the alluvial deposits encountered in all of the trenches. The thickness of this alluvium in Trenches 4 and 5 suggests the edge of the salt marsh would likely be very close to where the modern trackway currently runs (Fig. 1) and the area would be well suited to the production of salt.

- 4.3.2 The briquetage recovered from alluvium in Trench 3 has likely washed into the deposit during high tides and does not indicate any *in-situ* salt making activity taking place within the development area. The Red Hill is thought to be located within the area of set-aside directly to the north of the development area, where it was seen on aerial photography (EHER 11315) and was excavated in 1970 by the local history group (Fawn *et al.* 1990, Smith pers. comm.). Furthermore, the topsoil of Trench 3 has a dark red hue to it. This along with the relatively large fragments of briquetage recovered from the alluvium would support the idea that the Red Hill is located within that area, directly on the edge of where the salt marsh would have been during the Roman period.
- 4.3.3 The Red Hill deposits seen in Trench 2 are unlikely to be *in-situ* and have probably been deposited in small eddies that would form in the salt marsh. There is a possibility a small Red Hill may have been located here, which has then been washed away by tidal surges during the deposition of the alluvium sitting above. The limited amount of Red Hill material found however, would indicate the former interpretation is more likely.
- 4.3.4 The date of the Red Hill deposits and briquetage is difficult to discern, due to a lack of well datable finds from the stratigraphic deposits. An early Roman date is likely, due to the fact that other Red Hills in the area dating from the late Iron Age through to the late 2nd Century (Biddulph 2012).

4.4 Significance

- 4.4.1 The limited archaeological remains excavated at Wick Farm are locally significant, with the remains helping further understanding of local land use in the past. The prehistoric activity is of interest and the possibility of Bronze Age salt making being located within the vicinity is important, as evidence for the industry has not been noted in the area prior to the Iron Age.
- 4.4.2 The data also shows a sequence of deposits that inform us of the changing landscape of the area. The land went from a relatively dry area utilized in prehistory for agriculture and industry, to salt marsh in later prehistory and this was how it remained throughout the Roman period before the land was finally reclaimed during the post-medieval period.
- 4.4.3 This pattern of wetland utilisation recorded on site fits well with the model proposed by Stephen Rippon (Rippon 2000, 52, fig. 19). This model begins with seasonal coastal prehistoric settlements, which would gather the natural resources offered by the wetlands. The Roman period sees an intensification of this activity, with modifications to the land such as the cutting of drainage ditches to increase the level of activity permitted by the landscape. In the late medieval period the final activity on site takes place, with the transformation of the wetland into arable farmland by the construction of sea walls to stop tidal influence on the area.

4.5 Recommendations

- 4.5.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description				Orientation	NE-SW and NW-SE	
Trench contained a palaeochannel. Consisted of topsoil, subsoil and alluvial deposits overlying natural sands and gravels.				Avg. depth (m)	1.11	
				Width (m)	2	
				Length (m)	15 and 15	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.28	Topsoil	-	-
2	Layer	-	0.22	Subsoil	-	-
16	Cut	2.1	0.5+	Palaeochannel	-	-
17	Fill	-	0.5+	Palaeochannel	-	-
22	Layer	-	0.35	Alluvium	-	-
23	Layer	-	0.26	Alluvium	-	-
Trench 2						
General description				Orientation	NNW-SSE and ENE-WSW	
Trench contained Red Hill deposits. Consisted of topsoil, subsoil and alluvial deposits overlying natural sands and gravels.				Avg. depth (m)	1.45	
				Width (m)	2	
				Length (m)	15 and 15	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.3	Topsoil	-	-
2	Layer	-	0.24	Subsoil	-	-
12	Layer	-	0.01	Red hill deposit	-	-
13	Layer	-	0.02	Red hill deposit	-	-
14	Layer	-	0.11	Alluvium	-	-
15	Layer	-	0.39	Alluvium	-	-
21	Layer	-	0.41	Alluvium	-	-

Trench 3

General description	Orientation	ENE-WSW and NNW-SSE
Trench devoid of archaeology. Consisted of topsoil, subsoil and alluvial deposits overlying natural sands and gravels.	Avg. depth (m)	1.02
	Width (m)	2
	Length (m)	20 and 15

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.32	Topsoil	-	-
2	Layer	-	0.3	Subsoil	-	-
25	Layer	-	0.4	Alluvium	Briquetage	Early Roman

Trench 4

General description	Orientation	NNW-SSE and ENE-WSW
Trench contained a furrow (also seen in Trench 5), ditch, pit and tree throw. Consisted of topsoil, subsoil and alluvial deposits overlying natural sands and gravels.	Avg. depth (m)	0.96
	Width (m)	2
	Length (m)	30 and 15

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.3	Topsoil	-	-
2	Layer	-	0.22	Subsoil	-	-
6	Cut	1.05	0.25	Ditch	-	-
7	Fill	-	0.25	Ditch	Fired clay	Prehistoric
8	Cut	1.3	0.1	Tree throw	-	-
9	Fill	-	0.1	Tree throw	Fired Clay	Prehistoric
10	Cut	1.05	0.22	Pit	-	-
11	Fill	-	0.22	Pit	Pottery & Fired clay	Prehistoric
18	Layer	-	0.44	Alluvium	-	-

Trench 5

General description	Orientation	NNW-SSE and ENE-WSW
Trench contained a furrow and ditch. Consisted of topsoil, subsoil and alluvial layers overlying natural sands and gravels.	Avg. depth (m)	0.67
	Width (m)	2
	Length (m)	15 and 15

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.22	Topsoil	-	-
2	Layer	-	0.23	Subsoil	-	-
3	Cut	2	0.18	Furrow	-	-
4	Fill	-	0.18	Furrow	Shell	?Post-med
20	Cut	1.15	0.32	Ditch	-	-
24	Layer	-	0.22	Alluvium	-	-
26	Fill	-	0.32	Ditch	Pottery	Prehistoric

APPENDIX B. FINDS REPORTS

B.1 Pottery

By Sarah Percival

Introduction and methodology

- B.1.1 A total of three scraps of pottery weighing 1g was collected from context (26), the fill of ditch 20, trench 5.
- B.1.2 The assemblage was analysed in accordance with the Guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 2010). The total assemblage was studied and a full catalogue was prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. Fabric codes were prefixed by a letter code representing the main inclusion present (F representing flint, G grog and Q quartz). Vessel form was recorded; R representing rim sherds, B base sherds, D decorated sherds and U undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Decoration and abrasion were also noted. The pottery and archive are curated by OAE

Nature of the Assemblage

- B.1.3 The small, scraps are made of flint-tempered fabric and are extremely abraded having no surviving surfaces.
- B.1.4 Flint-tempered fabrics were used extensively in the region, in particular in the Early Neolithic, Later Bronze Age and Early Iron Age, but these sherds are too small and abraded to be closely datable.

B.2 Fired Clay and Briquetage

By Sarah Percival

Introduction and methodology

- B.2.1 A total of 79 pieces of briquetage weighing 1,553g was collected from four excavated contexts. The assemblage is mostly small and poorly preserved.
- B.2.2 The assemblage was analysed and recorded using the methodology devised for the briquetage recovered during the Fenland Management Project (Lane and Morris 2001) using the typology described in Fawn *et al.* (1990). The complete assemblage was analysed and the briquetage recorded by context, grouped by class, form and fabric, and counted and weighed to the nearest whole gram. Diameter, width and height of pedestals and other supports were noted where complete measurements were available. The thickness of a sample of structural pieces was recorded. The archive is held by OAE

Nature of the Assemblage

- B.2.3 The assemblage comprises two fragments from possible pedestals or supports, fourteen slab-like pieces of hearth lining or furniture and 63 miscellaneous, undiagnostic lumps.

Context	Trench	Feature	Feature type	Class	Form	Fabric	Quantity	Weight (g)	Thickness	Width
7	4	6	Ditch	Misc	Misc	V1	1	28		
7	4	6	Ditch	Misc	Misc	S1	10	18		
9	4	8	Tree throw	Misc	Misc	V1	25	97		
11	4	10	Pit	Misc	Misc	V1	24	254		
11	4	10	Pit	S	Ped /bar	V1	1	118	35	
25	3	25	Alluvium	Misc	Misc	Q1	3	4		
25	3	25	Alluvium	ST	Slab/ Lining	V1	14	860	28	
25	3	25	Alluvium	S	Ped/ bar	V1	1	174	37	42
Total							79	1553		

Table 1: Quantity and weight of briquetage by context, class, form and fabric.

- B.2.4 The pedestal fragments are made of organic tempered fabric V1 which contains numerous elongated voids from chopped chaff or grass, common lenticular impressions of grains or husks and occasional angular chalk pieces. The most complete fragment is 37mm thick and 47mm wide and has four flattened surfaces forming a rectangular section. The ends of the support are missing. Both fragments are dark orange with pale buff surfaces.
- B.2.5 Fourteen fragments are slab-like with two opposing flattened surfaces. The average thickness of the slabs is 28mm. The upper surfaces are coloured pale cream to pink indicating direct exposure to brine during salt winning. The lower surfaces are buff orange and the core is orange.
- B.2.6 The remainder of the assemblage comprises undiagnostic fragments in a range of fabrics. Most are vegetable tempered being similar to the slabs and pedestals and the remainder are sandy (fabric Q1) or contain sparse shell or chalk fragments (S1) though the small abraded lumps make exact identification of the latter fabric uncertain.

Discussion

- B.2.7 This small briquetage assemblage suggests salt production at or near the site, though the absence of *in-situ* hearths or other structures confirms that the assemblage is redeposited.
- B.2.8 The distinctive orange, white and pink/lilac surfaces exhibited by the briquetage indicate exposure to brine during salt production. The assemblage includes miscellaneous debris which may be from a hearth structure plus possible pedestals and slabs representing hearth wall or flooring. No container sherds were found.
- B.2.9 The square sectioned pedestals and slab-like pieces are made of vegetable tempered fabric with distinct chaff and grain impressions. Excavations in Lincolnshire suggest that vegetable tempering came into use in that region in the later Iron Age but that coarse chaff-tempered fabrics, like those found here, were most prevalent in the Roman period (Lane and Morris 2001, 352). Roman pottery finds associated with briquetage found in the late 1880s at Little West Wick, Burnham suggest an early Roman date for the salt production there (Fawn *et al.* 1990, RH219, 76). Slabs similar to those found here were also present at Little West Wick (Fawn *et al.* 1990, RH 219, 71) indicating a similar early Roman date for the briquetage from both sites.

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Environmental samples

By Rachel Fosberry

Introduction

- C.1.1 Five bulk samples were taken from features within the evaluated areas at Wick Farm, Burnham-on-Crouch, Essex in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.
- C.1.2 Features sampled are predominantly dated to the prehistoric and Roman periods and include palaeochannel **16**, pit **10**, ditch **20** and alluvial layers 15 and 25.

Methodology

- C.1.3 Ten litres of each bulk sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The samples were initially soaked in a solution of sodium carbonate to deflocculate the clay matrix. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and a list of the recorded remains is presented in table x. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* and the authors' own reference collection. Nomenclature is according to Stace (1997).

Methodology

- C.1.4 Sample 2, fill 17 of palaeochannel **16** is the only sample to contain preserved plant remains. Preservation is by waterlogging in which plant remains have remained in a wet, anoxic environment. Seeds of small trees/shrub such as elder (*Sambucus nigra*), bramble (*Rubus* sp.) and sour cherry (*Prunus cerasus*) along with argrimony (*Agrimonia eupatoria*) are all likely to be indicative of hedgerow flora. All of the other samples were devoid of plant remains.

Sample No.	Context No.	Cut No.	Feature Type	Trench No.	Volume processed (L)	Contents
1	11	10	Pit		10	Fired clay/briquetage
2	17	16	Palaeochannel		10	Waterlogged plant remains
3	15				10	None
4	26	20	Ditch	5	10	None
5	25			3	10	None

Table 2: Environmental samples from BCWF15

Discussion

- C.1.5 The plant remains recovered from palaeochannel **16** are all indicative of hedgerow flora which suggests that these plants were growing alongside the channel. The lack of any other preserved plant remains may be due to the heavy clay component of the soils being unfavourable for preservation or, most likely, there is no human occupation in the area. The recovery of briquetage from this site suggests that this was a salt-making area and used for industry rather than habitation.

APPENDIX D. BIBLIOGRAPHY

- Bartlett, A. D. H. 2014 *Proposed Solar Farm at Wick Farm (Eastern Plot), Wick Road, Burnham-on-Crouch. Archaeological Geophysical Survey*
- Biddulph, E. 2012 *London Gateway: Iron Age and Roman Salt Marking in the Thames Estuary. Oxford Archaeology Monograph no. 18*
- Foreman, S.,
Stafford, E.,
Stansbie, D. and
Nicholson, R.,
- Cappers, R.T.J., 2006 *Digital Seed Atlas of the Netherlands*
Bekker, R.M. and
Jans, J.E.A. Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands.
www.seedatlas.nl
- Evans, C. and Lucy, 2008 *Mucking Excavations, Essex. Archive and Publication Project – Prehistoric and Roman – Overview and Assessment.*
S.
- Fawn, A. J., Evans, 1990 *The Red Hills of Essex: Salt-making in Antiquity*
K. A., McMaster, I. Colchester
Archaeology Group
And Davies, G. M.
R.
- Lane, T. and Morris, 2001 *A Millennium of Saltmaking: Prehistoric and Romano-British salt Production in the Fenland.* Lincolnshire Archaeology and Heritage Reports Series No 4.
E.
- Pickstone, A. and 2011 *The Archaeology of Brigg's Farm, Prior's Fen, Thorney, Peterborough* OA East unpublished report 1094
Mortimer, R.
- Prehistoric Ceramic 2010 *The Study of Later Prehistoric Pottery: General Policies and Research Group Guidelines for analysis and Publication.* Occasional Paper No1 and No 2. Revised 3rd edition.
- Rippon, S. 2000 *The transformation of coastal wetlands: exploitation and management of marshland landscapes in North West Europe during the Roman and medieval periods* Oxford University Press, Oxford
- Stace, C. 1997 *New Flora of the British Isles.* Second edition. Cambridge University Press
- Stocks-Morgan, H. 2014 *Proposed Solar Farm at Wick Farm (Eastern Plot), Wick Road, Burnham-on-Crouch.* OA East unpublished report 1635
- Stocks-Morgan, H. 2015 *Specification for Archaeological Evaluation. Wick Farm, Burnham-on-Crouch, Essex.*

APPENDIX E. OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3-207990		
Project Name	Evaluation at Wick Farm, Burnham-on-Crouch		
Project Dates (fieldwork) Start	24-03-2015	Finish	26-03-2015
Previous Work (by OA East)	No	Future Work	No

Project Reference Codes

Site Code	BCWF15	Planning App. No.	FUL/MAL/14/00775
HER No.	BCWF15	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt	Direction from Local Planning Authority - PPS 5
Development Type	Service Infrastructure

Please select all techniques used:

<input type="checkbox"/> Aerial Photography - interpretation	<input type="checkbox"/> Grab-Sampling	<input type="checkbox"/> Remote Operated Vehicle Survey
<input type="checkbox"/> Aerial Photography - new	<input type="checkbox"/> Gravity-Core	<input type="checkbox"/> Sample Trenches
<input type="checkbox"/> Annotated Sketch	<input type="checkbox"/> Laser Scanning	<input type="checkbox"/> Survey/Recording Of Fabric/Structure
<input type="checkbox"/> Augering	<input type="checkbox"/> Measured Survey	<input checked="" type="checkbox"/> Targeted Trenches
<input type="checkbox"/> Dendrochronological Survey	<input type="checkbox"/> Metal Detectors	<input type="checkbox"/> Test Pits
<input type="checkbox"/> Documentary Search	<input type="checkbox"/> Phosphate Survey	<input type="checkbox"/> Topographic Survey
<input type="checkbox"/> Environmental Sampling	<input type="checkbox"/> Photogrammetric Survey	<input type="checkbox"/> Vibro-core
<input type="checkbox"/> Fieldwalking	<input type="checkbox"/> Photographic Survey	<input type="checkbox"/> Visual Inspection (Initial Site Visit)
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Ditch	Bronze Age -2.5k to -700	Briquetage	Roman 43 to 410
Pit	Bronze Age -2.5k to -700	Pottery	Late Prehistoric -4k to 43
Palaeochannel	Late Prehistoric -4k to 43		Select period...

Project Location

County	Essex	Site Address (including postcode if possible)
District	Maldon	Wick Farm, Burnham-on-Crouch CM0 8SQ
Parish	Burnham-on-Crouch	
HER	Essex HER	
Study Area	12.05ha	National Grid Reference
		TQ 9604 9567

Project Originators

Organisation	OA EAST
Project Brief Originator	Maria Medleycott
Project Design Originator	Helen Stocks-Morgan
Project Manager	James Drummond-Murray
Supervisor	Pat Moan

Project Archives

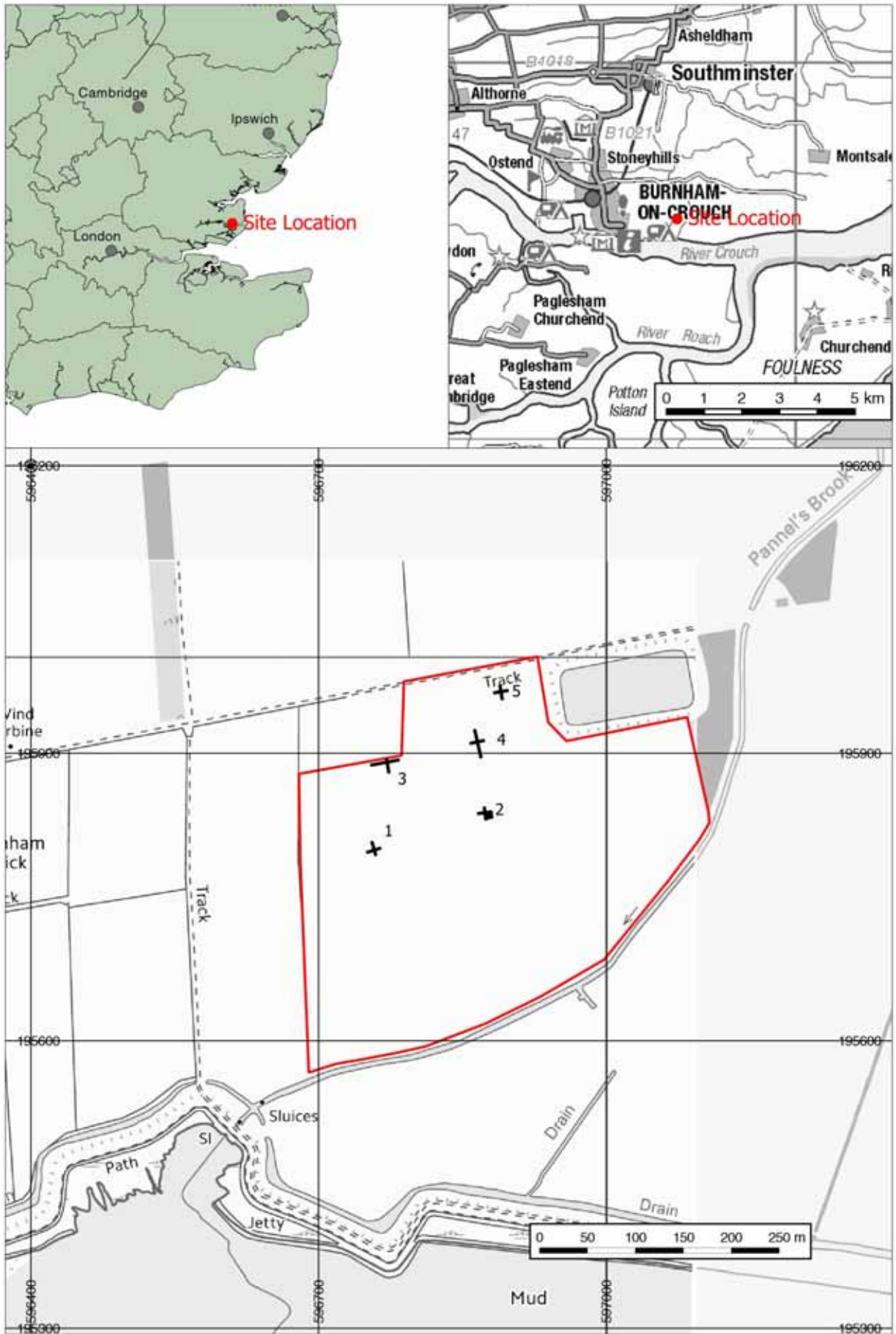
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Essex County Stores	OA East	Essex County Stores
BCWF15	XEXBUN15	BCWF15

Archive Contents/Media

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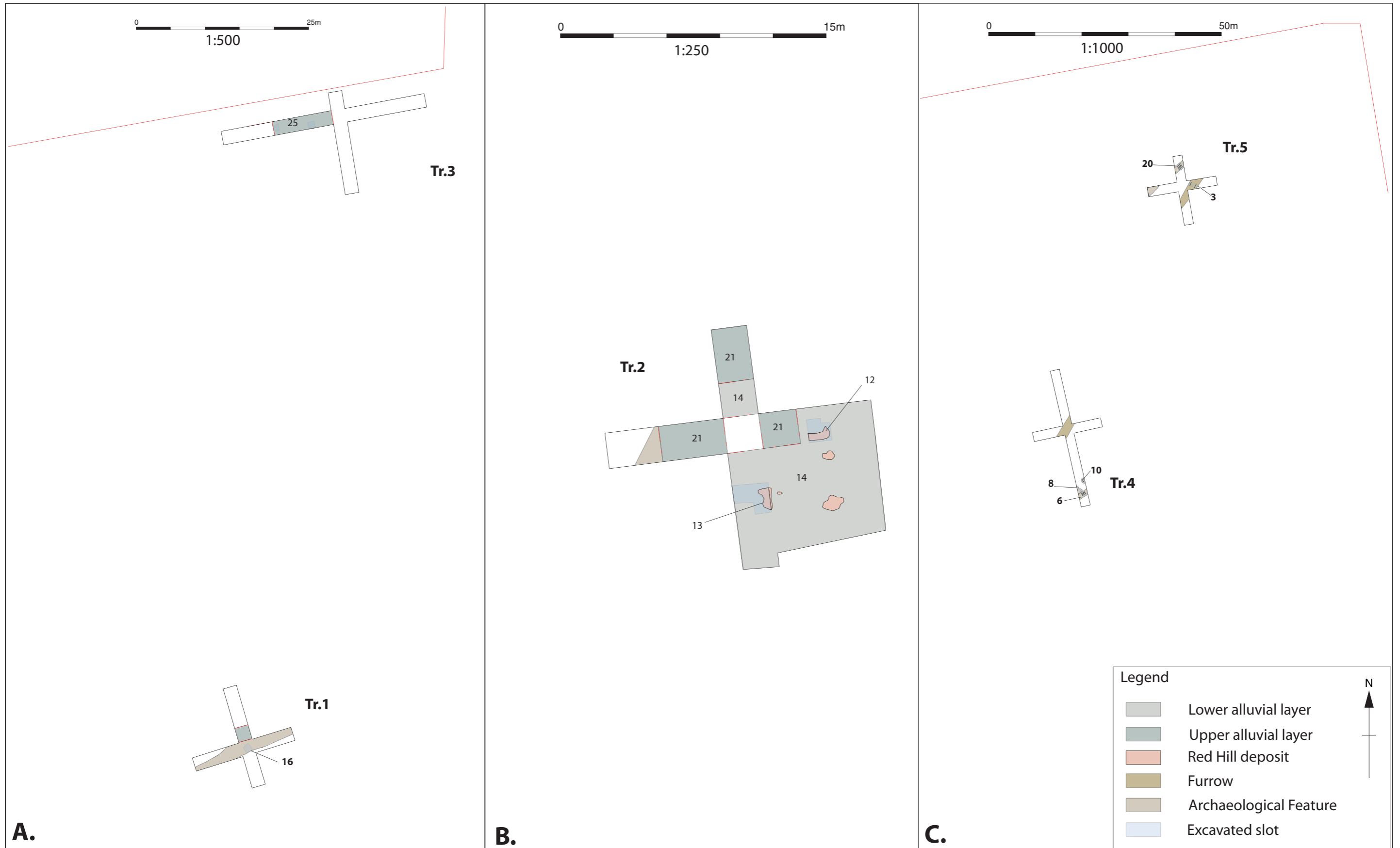
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	<input checked="" type="checkbox"/> Report
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	<input type="checkbox"/> Survey

Notes:



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Figure 1: Site location showing archaeological trenches (black) in development area (red)



Figures 2A, B and C: Trench Plans

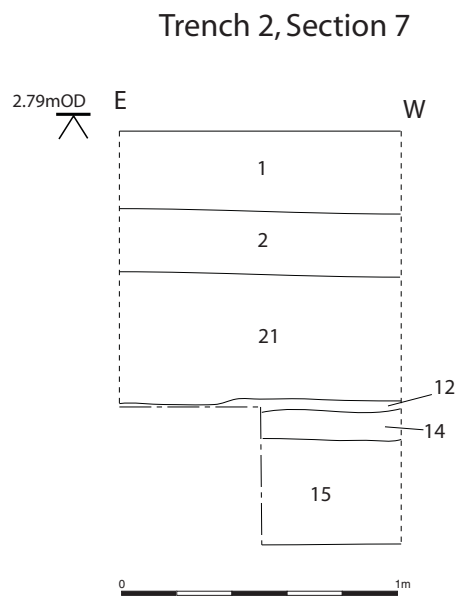
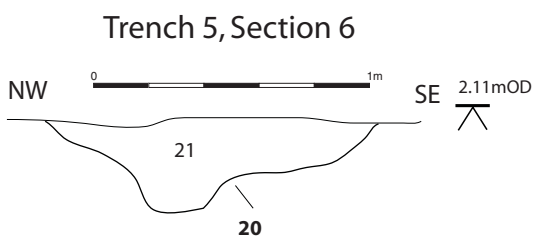
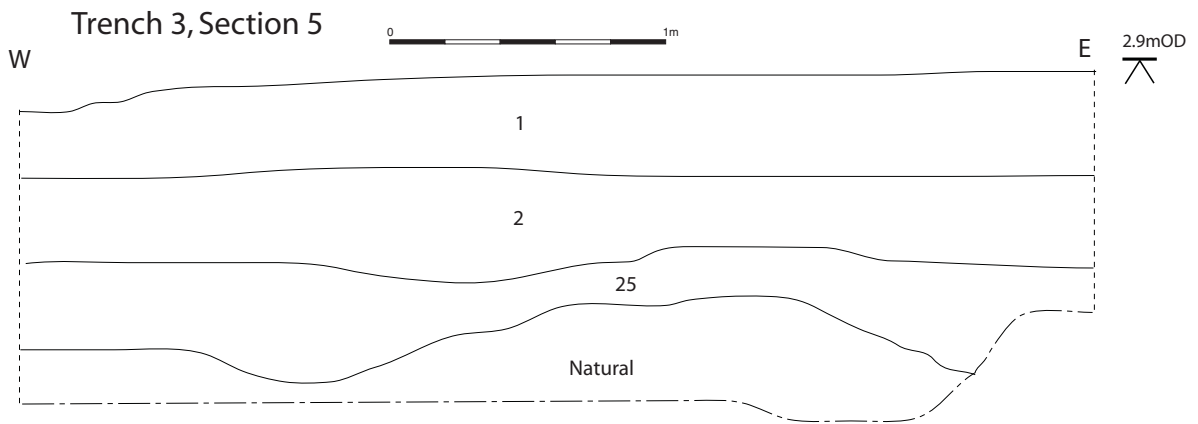
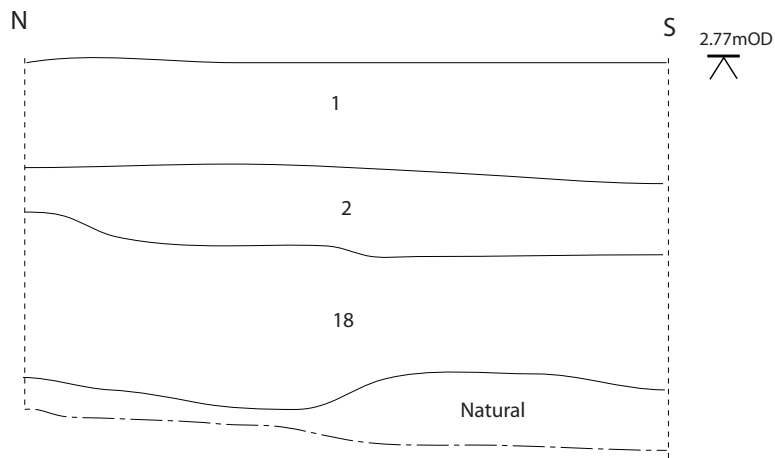
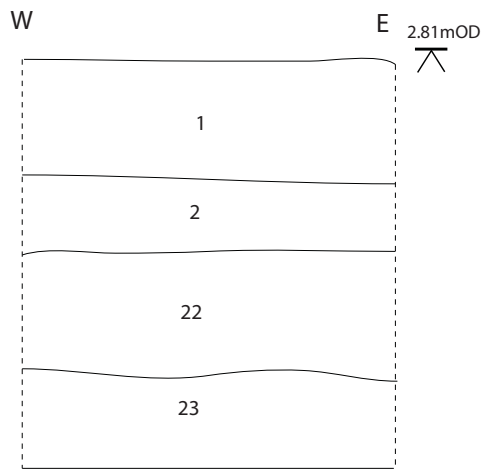


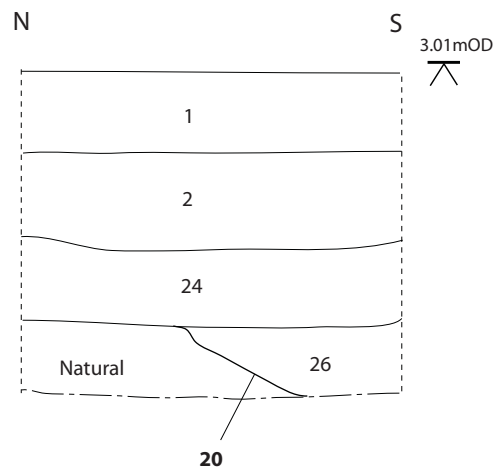
Figure 3: Section 5, 6 and 7



Trench 4 Bulk Section



Trench 1 Bulk Section



Trench 5 Bulk Section



Figure 4: Trenches 1, 4 and 5 bulk sections

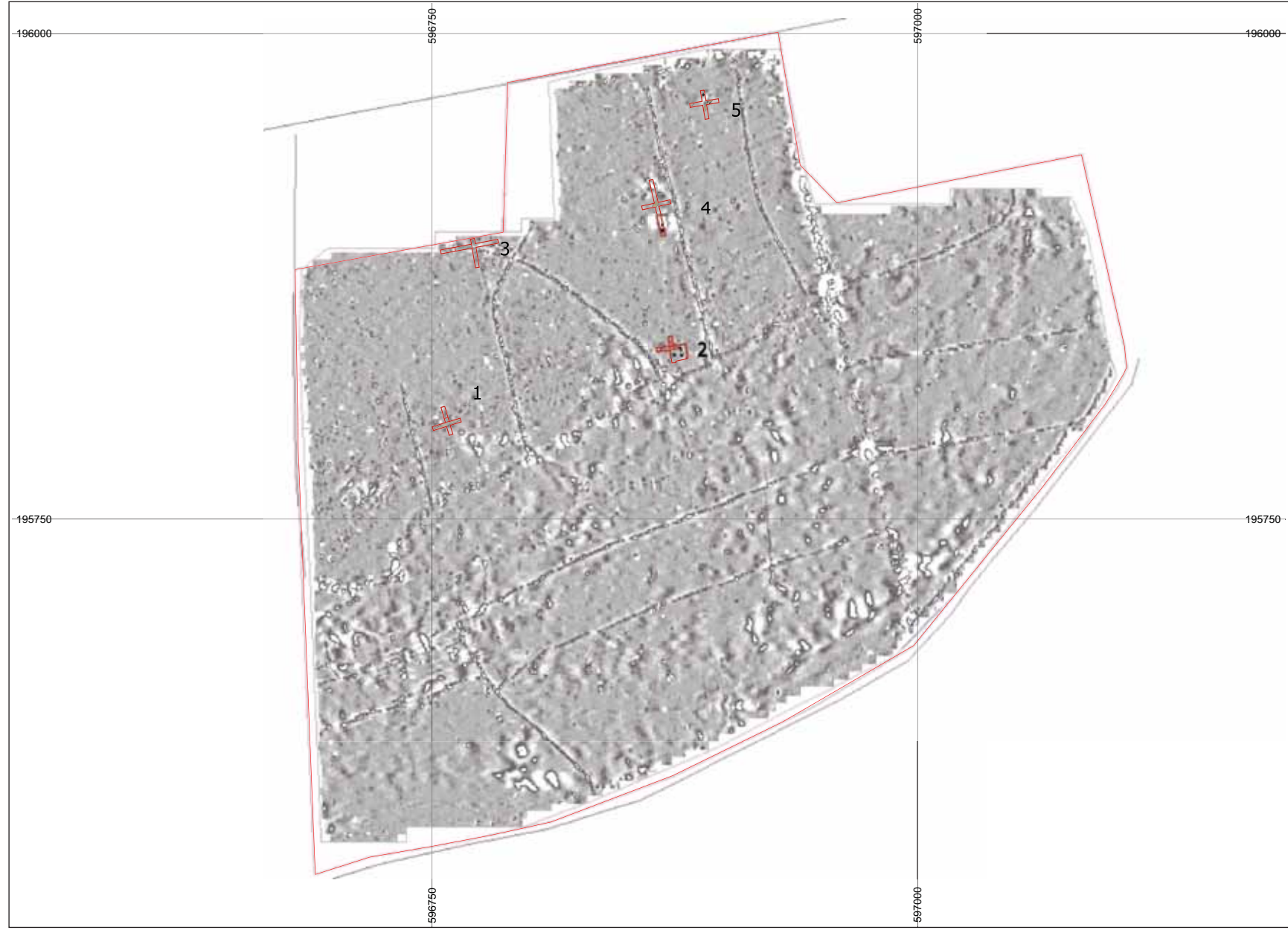


Figure 5: Trench plan overlain on geophysics



Plate 1: Red Hill Deposit 12, Trench 2, looking South



Plate 2: Red Hill Deposit 13, Trench 2, looking East



Plate 3: Trench 3 baulk section, showing alluvial deposit 25



Plate 4: Trench 4, looking North



Plate 5: Pit 10, sealed by alluvium 18, Trench 4, looking East



Plate 6: Ditch 20 sealed by alluvium 24, Trench 5, looking North-East



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