

**Archaeological Evaluation Report
Fitzalan Link Road (South)
Littlehampton, West Sussex**

**NGR: 503117 103038
(TQ 03117 03038)**

Planning Ref: LU/63/11
Reserved Matters Ref: LU.234/16/RES
ASE Project No: 160459
Site Code: LNR 16
ASE Report No: 2016340
OASIS id: archaeol6-262419



By Catherine Douglas and Hayley Nicholls

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Abstract

Archaeology South-East was commissioned by Armour Heritage to undertake an archaeological evaluation in advance of the construction of the proposed Fitzalan link road (South), Littlehampton, West Sussex. The site was centred on National Grid Reference 503117 103038.

Seventeen trenches were excavated across the site to reveal the underlying natural geology at a maximum elevation to the north and south of the site at 6.67m AOD and 8.15m AOD respectively, with a gradual fall towards the centre with the lowest point at 4.2m AOD.

The evaluation identified archaeological features in only 2 of the 17 trenches. A single (possibly) prehistoric ditch terminus was identified in the centre of the site and a large medieval quarry pit.

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1.0 INTRODUCTION

1.1 site Background

- 1.1.1 Archaeology South-East was commissioned by Armour Heritage Ltd to undertake an archaeological evaluation on the Fitzalan Link Road (South), Littlehampton, West Sussex, centred on National Grid Reference: 503117 103038 (Figure 1).

1.2 Geology and Topography

- 1.2.1 The site is located in North Littlehampton, between Bognor Regis to the West and Worthing to the east, on the flat and low-lying coastal plain in West Sussex. It forms a narrow corridor of land between the B2187 East Street and the A259 Worthing Road, Littlehampton. It is currently undeveloped open land under rough grass.
- 1.2.2 It is bounded to the north by Worthing Road and to the south by a road forming the newly created access route to the Littlehampton Academy. The Academy, along with residential development and open space, combines to form the eastern boundary of the site. To the west, the area is bounded by the rear garden fences of residential properties along Highdown Drive.
- 1.2.3 The topography of the area is relatively flat, rising gently from the seafront. Although some areas of the town centre are below the 5m AOD level, the average height above sea level of the town is between 5-10m AOD. After the Black Ditch to the north of the site, the ground starts to rise more steeply as it meets the South Downs National Park.
- 1.2.4 The underlying geology of the site is described by the British Geological Survey (BGS 2016) as Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation, a sedimentary bedrock formed approximately 71 to 94 million years BP. Superficial geological deposits are recorded as River Terrace Deposits: Sand, Silt and Clay. The superficial deposits were formed up to 3 million years BP.

1.3 Planning Background

- 1.3.1 Outline planning consent (LU/63/11) (Reserved Matters reference LU.234/16/RES) was granted by Arun District Council for the construction of the Fitzalan Link Road between the A259 Worthing Road and the East Street / Fitzalan Road roundabout. The outline consent was granted on condition (condition 15) that a programme of archaeological work be undertaken in advance of the works. The condition stated:

“No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority. Reason: In order to ensure that archaeological features on the site will be properly recorded before development.”

- 1.3.2 A Desk Based Assessment (WYG 2009) for the site was prepared.
- 1.3.3 A Written Scheme of Investigation (Armour Heritage 2016) was prepared, setting out the methodologies and standards to be employed by ASE in order to undertake the archaeological trial trench evaluation. All work was carried out in accordance with this document, as well as the *Sussex Archaeological Standards* (ESCC 2015) document and the Chartered Institute for Archaeologists' *Standards and Guidance for Archaeological Field Evaluation* (CIfA 2014a, 2104b).

1.4 Scope of Report

- 1.4.1 This report discusses the results of the archaeological evaluation undertaken by ASE on Fitzalan Link Road, Littlehampton between the 15th and the 24th August 2016.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following background information has been drawn from the Desk Based Assessment (WYG 2009) and from the Written Scheme of Investigation (AH 2016).

2.2 General

- 2.2.1 The archaeological potential of the site was detailed in the Desk Based Assessment (WYG 2009), which identified the potential for prehistoric to post-medieval and modern activity within the site. Subsequent phased trial trench evaluations and mitigation within the associated North Littlehampton development to the north of the site have confirmed extensive prehistoric and Romano-British activity within the area.

2.3 Prehistoric

- 2.3.1 Although the majority of Palaeolithic activity is restricted to the raised beaches of the coastal plain, such as Boxgrove, other finds have been retrieved from the chalk downland and river terrace gravels. A possible burin of late Palaeolithic or early Mesolithic date is recorded on the West Sussex HER from a palaeochannel at Barn Close to the north of the site.
- 2.3.2 Neolithic activity is similarly sparse, with isolated finds recorded, including two flint axes found in 1960 at Toddington, and a small concentration of Neolithic worked flint, including scrapers and other flint tools, collected during fieldwalking at Wick. A boundary ditch identified during trial trenching on land formerly occupied by Toddington Nurseries to the east of the site contained Neolithic pottery and worked flint of similar or possibly Bronze Age date.
- 2.3.3 Evidence of Bronze Age activity is more widespread across the coastal plain, with pits, worked flints and a bucket urn also recorded during trial trenching at the Toddington nursery site. Further worked flints have been recorded to the east along with a cluster of features including a ditch, gully and pits found during evaluation trenching.
- 2.3.4 Extensive activity has also been recorded during evaluation and excavation at the North Littlehampton development site. Three areas (AP1-AP3) have been investigated and the results have broadly confirmed evidence of Bronze Age, Iron Age and Romano-British settlement and related activity across the area.

2.4 Romano-British

- 2.4.1 There is extensive evidence of Romano-British activity in close proximity to the site. Two villas are recorded within close proximity to the site and include the Littlehampton Roman Villa located to the southeast and the Scheduled Angmering Villa approximately 2.5km to the northeast.

- 2.4.2 The Angmering Villa is a more substantial complex, and was built between AD65 and AD75. It contained an extensive bath house with eight heated rooms was partly constructed from white stone imported from Italy.
- 2.4.3 Further funerary and settlement activity was recorded at the Arun Community Hospital site to the south of the site, which produced two Romano-British cremation urns, pits and ditches. During building work in 1901 to the west of the site a likely cremation was also recorded and several late 1st century and 2nd century burials were found in 1908 in the vicinity of the Library.
- 2.4.4 Domestic debris, pits, structural evidence and several ditches were recorded at the Watersmead development, to the north east of the site. More widely there is a general scatter of Roman material throughout the Littlehampton area and typical findspots are represented by pottery and coinage.

2.5 Saxon and later

- 2.5.1 Fieldwork at the former Toddington Nurseries site and The Poplars to the east have both identified quantities of Saxon pottery, with the latter also confirming ditches and pits.
- 2.5.2 To the northwest of Littlehampton, a Priory of Benedictine Nuns was founded at Lyminster in c. 1082 and dissolved in c. 1414. The church is still in ecclesiastical use.
- 2.5.3 Evidence for medieval activity in and around the study area can be seen from a general scatter of 14th century and later medieval pottery found during a watching brief on a warehouse construction site on the Watersmead Industrial estate. Further general scatters have been recorded to the west and north.
- 2.5.4 In 1671-72 the town contained a church, manor house and 14 dwellings. The harbour outlet, which probably lay somewhere east of the town, was a constant problem due to shifting shingle banks. The present outlet was dug between 1733-36. The town became a resort in the early 1800s and by 1825 a large estate had been built on new ground to the south east of the town. The two were linked by development in 19th century.

2.6 Project Aims and Objectives

2.6.1 The aims of the archaeological fieldwork, as set out in the WSI, (Armour Heritage 2016) were to:

- Clarify the presence / absence and extent of any buried archaeological remains within the site that may be impacted by development
- Identify, within the constraints of the evaluation, the date, character, condition and depth of any surviving remains within the site
- Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits
- Produce a report which will present the results of the evaluation in sufficient detail to allow an informed decision to be made concerning the site's archaeological potential, and inform an archaeological mitigation strategy

3.0 ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork Methodology

- 3.1.1 Seventeen trenches, each measuring 25m x 1.8m were excavated as set out in the WSI (Armour Heritage 2016; Figure 2). Trench 205 was shortened by 5m to avoid electric services at the southwest end of the trench.
- 3.1.2 The trenches were accurately located using a Global Positioning System (DGPS) (Leica System 1200 GPS).
- 3.1.3 The trenches were scanned prior to excavation using a Cable Avoidance Tool (CAT) operated by accredited ASE personnel.
- 3.1.4 The trenches were excavated under archaeological supervision using a suitable 360° mechanical excavator equipped with a toothless ditching bucket.
- 3.1.5 Only undifferentiated topsoil, subsoil and layers of underlying made ground were removed by machine and were kept separately. The excavation was taken, in spits of no more than 0.25m, down to the top of the first significant archaeological horizon or the top of the underlying geology, whichever was uppermost.
- 3.1.6 A machine excavated step was added to the northeast side of Trench 200 to facilitate the safe hand excavation of a sondage through the deep quarry pit. The sondage was then further excavated using the mechanical excavator, before being immediately backfilled.
- 3.1.7 On conclusion of the excavation, the spoil was backfilled by machine, in appropriate sequence, spread evenly and compacted to ensure a surface flush or nearly flush with the ground surface.

3.2 Archive

3.2.1 The site archive is currently held at the offices of ASE and will be deposited at a suitable museum in due course. The contents of the archive are tabulated below (Table 1).

Context sheets	15
Section sheets	1
Plans sheets	0
Colour photographs	0
B&W photos	0
Digital photos	104
Context register	Contexts registered on trench record forms
Drawing register	1
Watching brief forms	0
Trench Record forms	17

Table 1: Quantification of site paper archive

Bulk finds (quantity e.g. 1 bag, 1 box, 0.5 box 0.5 of a box)	0.25 box
Registered finds (number of)	0
Flots and environmental remains from bulk samples	0.25 box
Palaeoenvironmental specialists sample samples (e.g. columns, prepared slides)	0
Waterlogged wood	0
Wet sieved environmental remains from bulk samples	0

Table 2: Quantification of artefact and environmental samples

4.0 RESULTS

4.1 Geology and Overburden

- 4.1.1 Natural chalk was only encountered in Trench 200. In all of the other trenches superficial geological deposits were encountered comprising red sandy clay.
- 4.1.2 The superficial deposits were encountered at their highest to the north and south of the site at 6.67m AOD and 8.15m AOD respectively, with a gradual fall towards the centre with the lowest point at 4.2m AOD (Trench 200).
- 4.1.3 In Trenches 192 – 204 natural geology was immediately overlain by a layer of subsoil comprised of mid reddish brown silty sandy clay, which measured a thickness of 0.50m. Layers of made ground were encountered in Trenches 205 – 208, discussed below in Section 4.4.
- 4.1.4 The subsoil was immediately overlain by a layer of topsoil, comprised of mid brown silty clay, containing occasional stones and chalk nodules.

4.2 Trench 200 (Figure 3)

4.2.1 Trench 200 measured a length of 25m by a width of 1.80m and was excavated to a maximum depth (in a machine excavated sondage) of 2.70m below topsoil surface level, to 2.41m AOD. All contexts encountered in Trench 200 have been summarised in Table 3, below.

Context	Type	Interpretation	Length m	Width m	Thickness m	Height m AOD
200/001	Layer	Topsoil	trench	trench	0.19-0.27	5.11-5.28
200/002	Layer	Subsoil	trench	trench	0.33-0.45	
200/003	Layer	Drift geology	trench	trench	N/A	4.20-4.54
200/004	Cut	Pit, quarry	20	1.8	2.3	4.50
200/005	Fill	Fill, upper	2.25	1.8	0.84	
200/006	Fill	Fill	0.95	1.8	0.33	
200/007	Fill	Fill (same as 200/006)	1.8	1.8	0.69	
200/008	Fill	Fill, primary (same as 200/012)	1.8	1.8	1.42	
200/009	Cut	Pit, quarry (same as 200/004)	20	1.8	1.42	
200/010	Fill	Fill, tertiary	3.25	1	0.26	
200/011	Fill	Fill, secondary	2.49	1.8	0.5	
200/012	Fill	Fill, primary (same as 200/08)	1.12	1.8	0.64	

Table 3: Trench 200 list of recorded contexts

4.2.2 The chalk geology was encountered at 2.41m AOD in a machine excavated sondage in the centre of the trench.

4.2.3 The chalk was overlain by superficial drift geology [200/003] comprised of reddish brown sandy silty clay, which was encountered at 0.74m below the topsoil surface level, at c. 4.37m AOD.

4.2.4 The superficial deposit [200/003] was truncated by a very large cut feature [200/004] which measured a length of 20m by a width of greater than 1.80m and a depth of 2.30m. Given the nature of the deposit, and the sheer size of the feature, it is likely to have functioned as a quarry pit. The pit contained a series of fills, which all appeared to have been 'tipped' or backfilled from the northwest end of the pit.

4.2.5 The primary fill [200/012] comprised silty clay containing frequent medium sized chalk inclusions. It measured a length greater than 1.12m by a width of 1.8m and a thickness of 0.64m. A single sherd of medieval pottery of AD 1150-1250 date was recovered from the fill along with three pieces of fire cracked flint (FCF). A small amount of unidentified charcoal and a single caryopsis of possible brome was retrieved from the bulk soil sample taken from this fill.

4.2.6 This deposit was immediately overlain by [200/011] which comprised mid-dark

grey brown sandy silty clay, containing occasional chalk inclusions. This measured a length greater than 2.49m by a width greater than 1.80m and a thickness of 1.40m. Two residual, undiagnostic pieces of prehistoric struck flint and six pieces of FCF were recovered from the fill, along with a piece of Hythe Beds Sandstone (Lower Greensand) which was almost certainly from a quern.

- 4.2.7 This was overlain by fill [200/010] which comprised mottled mid-dark grey brown and yellow brown mixed sand and silty clay. This mixed deposit may be an indication of trampling within the quarry pit. This measured a length greater than 3.25m by a width greater than 1m and a thickness of 0.26m.
- 4.2.8 [200/010] was immediately overlain by fill [200/006] which comprised light to mid yellow brown sandy clay, containing occasional large chalk fragments. This measured a length greater than 1.80m by a width of greater than 0.95m and a thickness of 0.33m. A single piece of residual, undiagnostic prehistoric struck flint was recovered from the fill.
- 4.2.9 The uppermost fill [200/005] comprised mid-dark orange brown silty clay containing occasional small sub-angular flint inclusions and occasional small chalk nodules. Three pieces of struck flint, nine sherds of medieval pottery of AD 1225 – 1350 date and ten pieces of FCF.
- 4.2.10 The upper fill [200/005] was immediately overlain by a layer of subsoil [200/002] comprised of mid reddish brown silty sandy clay. This, in turn, was immediately overlain by a layer of topsoil [200/006] comprised of mid brown silty clay, containing occasional stones and chalk nodules.
- 4.2.11 The form of the feature and the dating evidence recovered from it correspond closely with medieval quarry pits identified to the north of this site in the Toddington Lane Area AP4 (ASE, 2016).

4.3 Trench 202 (Figure 4)

4.3.1 Trench 202 measured a length of 25m by a width of 1.80m and was excavated to a maximum depth of 1.07m below topsoil surface level, at 4.85m AOD. All contexts encountered in Trench 202 have been summarised in Table 4, below.

Context	Type	Interpretation	Length m	Width m	Thickness m	Height m AOD
202/001	Layer	Topsoil	trench	trench	0.23-0.29	5.73 – 5.99
202/002	Layer	Subsoil	trench	trench	0.41-0.54	
202/003	Layer	Drift geology	trench	trench	0.26	4.85 – 5.23
202/004	Cut	Ditch terminus	2.09	0.57	0.25	5.15
202/005	Fill	Fill, single	2.09	0.57	0.25	

Table 4: Trench 202 list of recorded contexts

4.3.2 The drift geology was encountered at c. 5m AOD. This was a superficial deposit comprised of reddish brown sandy silty clay.

4.3.3 The only identified feature was a single ditch terminus [202/04] which extended beyond the south-west limit of the trench. The ditch was aligned east-west and measured a length of greater than 2.09m by a width of 0.57m and a depth of 0.25m. It contained a single fill [202/05] comprised of mid reddish greyish brown sandy silty clay, containing occasional small flint inclusions. A very small pot fragment considered to be of Middle to Late Bronze Age date was retrieved from the fill.

4.4 Archaeologically negative trenches 192 – 199, 201 and 203 - 208

- 4.4.1 No archaeological finds or features were identified in Trenches 192, 193, 194, 195, 196, 197, 198, 199, 201, 203, 204, 205, 206, 207 or 208. All contexts encountered in these trenches have been summarised in Appendix 1 at the back of this report.
- 4.4.2 In Trenches 192 – 204 the natural comprised superficial drift geology comprised of reddish brown sand, silt and clay. In these trenches the subsoil remained intact, and the lack of archaeological features appeared to reflect a true paucity of archaeological activity within the northern end of the site. Fire cracked flint was recovered from subsoil contexts in Trenches 194, 196, and 199, whilst a single piece of ceramic building material of mid-late 19th century date or later was recovered from topsoil in Trench 198.
- 4.4.3 In Trenches 205 - 208, the upper 0.22 – 0.26m of the superficial drift geology appeared to have experienced leaching, staining the deposit blue. In these trenches this was immediately overlain by various layer of modern made ground comprised of loose silt and gravels, containing modern demolition material such as brick fragments, concrete, tar and general demolition waste materials. It is possible the superficial drift geology had been slightly truncated in these trenches, prior to the deposition of the made ground. In trenches 205 and 208, small areas within the superficial drift geology were clearly truncated by concrete foundation blocks. Trenches 206 – 208 were all partially overlain by a modern concrete road or pathway.

5.0 THE FINDS

5.1 Summary

- 5.1.1 A small assemblage of finds was recovered during the current phase of evaluation at the Fitzalan Link Road (South). All finds were washed and dried or air dried as appropriate. The hand-collected finds were subsequently quantified by count and weight and were bagged by material and context (Table 5). No further conservation is required.

Context	Lithics	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Stone	Weight (g)	Fire Cracked Flint	Weight (g)
194/002									4	121
196/002									1	74
198/001					1	9				
199/002									1	31
200/005	3	21	9	41					10	348
200/007	1	7								
200/011	2	70					2	167	6	169
200/012			1	15					3	42
202/005			1	1						
Total	6	98	10	57	1	9	2	167	25	785

Table 5: Quantification of hand-collected bulk finds

5.2 The Flintwork by Karine Le Hégat

- 5.2.1 Ten pieces of struck flint weighing 34g were recovered from five numbered contexts in trench 200. A small amount of burnt unworked flint (785g) was also recovered from seven numbered contexts in four trenches. The small assemblage of struck flints comprises four flakes, two of which are minimally retouched, a blade and five chips. The condition of the flint varies, but overall they display moderate to poor edge damage indicating that the material has been subject to some movement.
- 5.2.2 The flintwork is technologically poor. Even the blade can't be dated with any certainty. It displays blade scar removals on the dorsal face, but it is quite thick with a slight hinged termination. Only a broad Mesolithic / Neolithic date would be appropriate for this piece.
- 5.2.3 The small assemblage provides limited evidence for the use of flint during the prehistoric period, but it can't be closely dated on technological and morphological grounds.

5.3 The Prehistoric Pottery by Anna Doherty

- 5.3.1 A single fragment of prehistoric pottery, weighing just 1 gram, was recovered from context [202/005]. Although the sherd is too small and undiagnostic to date with confidence, the presence of some very coarse flint inclusions of up to 6mm in size is fairly characteristic of Middle/Late Bronze Age assemblages. In contrast, most of the other prehistoric flint-tempered pottery found in the previous phase of evaluation (Trenches 1-207), was notably much finer and better-sorted, belonging largely to the Early Iron Age.

5.4 The Post-Roman Pottery by Luke Barber

- 5.4.1 The evaluation recovered just 10 sherds of post-Roman pottery, weighing 56g, from one of two individually numbered contexts. The majority were recovered from context [200/005] that produced eight fresh sherds (32g) of oxidised fine/medium sandy ware (from a cooking pot and bowl with green glaze on its base interior). These sherds can be placed between c. 1225 and 1350. The other sherd from [200/005] is more abraded and apparently residual (8g). It consists of an oxidised medium sandy ware with sparse chalk inclusions to 2mm. A mid-12th to early 13th century date is suspected.
- 5.4.2 Context [200/012] produced a single sherd (16g) of oxidised medium sandy ware from a cooking pot with everted bulbous club rim. Although the fabric is not closely datable such rim types are more common between c. 1150 and 1250.

5.5 The Ceramic Building Material by Isa Benedetti-Whitton

- 5.5.1 A single fragment of flat tile weighing 11g was collected from [198/001]. It was made of a dense orange fabric with moderate-common medium sub-angular quartz. There was no moulding sand in evidence; both tile surfaces were smooth and appeared slightly polished, which suggests a machine-made tile of mid-late 19th century date or later.

5.6 The Glass by Luke Barber

- 5.6.1 The environmental residue from context [200/008] produced a tiny (<1g) granule of colourless 20th- century glass that is likely to be intrusive to this deposit.

5.7 The Slag by Luke Barber

- 5.7.1 The environmental residue from context [200/008] produced tiny amounts of slag from both the hand-sorted residue and the magnetic fraction. The former consists of 17 tiny granules (<1g) of aerated matt black clinker from coal burning that may well be intrusive. The magnetic material consists of <1g of magnetic fines (well-rounded ferruginous siltstone granules) as well as three flakes and four spheres of hammerscale. This material could also easily be intrusive.

5.8 The Geological Material by Luke Barber

- 5.8.1 Stone was recovered from just two contexts. A weathered piece of chalk (68g) and amorphous lump of Hythe Beds Sandstone (Lower Greensand) (100g) were recovered from context [200/011]. The latter piece is almost certainly from a quern but no features survive. The remaining stone was recovered from the environmental residue from [200/008] and consists of six tiny granules (<1g) of coal that are probably intrusive to the deposit.

6.0 THE ENVIRONMENTAL SAMPLES by Mariangela Vitolo

6.1 Introduction

- 6.1.1 One bulk soil sample was taken from the lowest fill of a possible palaeochannel to recover environmental material such as charred plant macrofossils, wood charcoal, fauna and Mollusca as well as to assist finds recovery. The following report summarises the contents of the samples and discusses the information provided by the charred plant remains and charcoal on diet, agrarian economy, vegetation environment and fuel selection and use.

6.2 Methodology

- 6.2.1 The sample was processed in its entirety in a flotation tank and the residue and flot were retained on 500µm and 250µm meshes respectively before being air dried. The residue was passed through graded sieves of 8, 4 and 2mm and each fraction sorted for environmental and artefactual remains (Table 6). Artefacts recovered from the sample were distributed to specialists, and are incorporated in the relevant sections of this volume where they add further information to the existing finds assemblage. The flot was scanned under a stereozoom microscope at 7-45x magnifications and their contents recorded (Table 7). Preliminary identifications of macrobotanical remains were made with reference to modern comparative material and published reference atlases (Cappers *et al.* 2006, NIAB 2004). Nomenclature used follows Stace (1997).

6.3 Results

Sample <3> [200/008]

- 6.3.1 The flot was dominated by uncharred vegetative matter, such as rootlets, twigs and seeds of goosefoots (*Chenopodium* sp.). This material is likely to represent modern contaminants that infiltrated the deposit through root action. One caryopsis of possible brome (cf *Bromus* sp.) was recovered from the residue.
- 6.3.2 The heavy residue contained a small amount of charcoal. This was not deemed to be useful in terms of providing meaningful information and no identification work was carried out. No other environmental remains were present and finds included fire cracked flint, magnetic material, glass, burnt clay, flint, coal and industrial material.

6.4 Discussion

- 6.4.1 The bulk soil sample from the this phase of the evaluation has not yielded enough charred plant material to allow for a discussion on diet, economy and vegetation environment. This could however be due to the nature of the sampled feature and/or circumstances of deposition. More sampling would be needed and any future work at the site should continue to include sampling, targeting primary deposits.

Table 6: Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

Sample Number	Context	Parent context	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charcoal Identifications	Charred botanicals (other than charcoal)	Weight (g)	Other (eg ind, pot, cbm)
3	200/08	200/009	40	40	*	<1	**	<1		* cf <i>Bromus</i> sp. (1)	<1	FCF **/ 1g - Mag. mat. **/ <1g - glass */ <1g - burnt clay */ <1g - flint */ 1g - coal */ <1g - industrial mat. **/ 2g

Table 7: Flot quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal <2mm
3	200/08	1	30	30	80	10	* <i>Chenopodium</i> sp.	*

7.0 DISCUSSION AND CONCLUSIONS

7.1 Overview of stratigraphic sequence

- 7.1.1 The superficial drift geology encountered across the site comprised a mid-red sand clay. The height of the natural geology varied in line with that of the topsoil with the greatest heights to the north and south, 6.67m and 8.15m AOD respectively falling to a low of 4.2m AOD in the centre of the area (Trench 200).
- 7.1.2 In Trenches 192 – 204 the superficial drift geology was immediately overlain by a layer of subsoil comprised of mid reddish brown silty sandy clay, which measured a thickness of 0.50m. This was immediately overlain by a layer of topsoil.
- 7.1.3 Layers of made ground of varying thicknesses overlay the superficial drift geology in Trenches 205 – 208. The made ground was generally overlain by topsoil which measured a thickness of 0.13 – 0.18m.
- 7.1.4 Two features were encountered in the central part of the site. A large quarry pit was encountered in Trench 200, and an east-west oriented ditch terminus was encountered in Trench 202.
- 7.1.5 The methodology, as set out in the WSI (AH 2016), was successfully employed during the evaluation. The conditions on site were conducive to confident and efficient identification and recording of archaeological features and as such it is considered that this evaluation and report has successfully achieved its objective.

7.2 Deposit survival and existing impacts

- 7.2.1 In the majority of trenches (Trenches 192 – 204) the archaeological horizon remained intact and the subsoil showed no visible sign of truncation or disturbance.
- 7.2.2 In Trenches 205 - 208, the upper 0.22 – 0.26m of the superficial drift geology appeared to have experienced leaching, staining the deposit blue. The superficial drift geology was immediately overlain by various layers of modern made ground comprised of loose silt and gravels, containing modern demolition material such as brick fragments, concrete and tar. It is possible the natural had been slightly truncated in these trenches, prior to the deposition of the made ground. In trenches 205 and 208, small areas within the superficial drift geology were clearly truncated by concrete foundation blocks. Trenches 206 – 208 were all partially overlain by a modern concrete road or pathway.

7.3 Discussion of archaeological remains by period

Prehistoric

- 7.3.1 A (possibly) prehistoric ditch terminus was identified in the central part of the site, orientated on an east to west alignment. No other possible features of this period were identified.

Medieval

- 7.3.2 A large medieval quarry pit was also identified in the centre of the site and appears to hold parallels with further medieval quarry pits identified to the north on the Toddington Lane AP4 site, both in form and date (ASE 2016).

7.4 Consideration of research aims

- 7.4.1 The aims of the archaeological fieldwork, as set out in the WSI, (Armour Heritage 2016) were to:

- Clarify the presence / absence and extent of any buried archaeological remains within the site that may be impacted by development;

The evaluation has clarified that there are minimal archaeological deposits present. All those identified were focussed within the centre of the site.

- Identify, within the constraints of the evaluation, the date, character, condition and depth of any surviving remains within the site;
- Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits;

Two archaeological features were identified, comprising a prehistoric ditch terminal and a large medieval quarry pit with depths of 0.25m and 2.3m respectively. The deposits in each features showed minimal contamination.

Research Aims

- 7.4.4 Upon completion of the evaluation, it has been possible to update the archaeological research aims of the project as it progresses, bringing them in line with those discussed in the South East Research Framework (SERF 2008). This will provide a focus for the research aims of any necessary mitigation work:
- 7.4.5 With relation to the 12th to 14th century medieval quarry pit, it has been highlighted that much work needs to be done to understand what other activities were occurring on the hinterlands of industrial areas, for example where and how people lived while undertaking some of these industrial tasks (Weeks 2008, 7). To what extent can this site improve our understanding of these activities?

7.5 Conclusions

- 7.5.1 The evaluation identified archaeological features in only 2 of the 17 trenches. A single (possibly) prehistoric ditch terminus was identified in the centre of the site and a large medieval quarry pit.

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HER Summary

site code	LNR16					
Project code	160459					
Planning reference	LU/63/11					
site address	Fitzalan Link Road (South), Littlehampton, West Sussex					
District/Borough	West Sussex					
NGR (12 figures)	503117 103038					
Geology	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation overlain by River Terrace Deposits.					
Fieldwork type	EVAL					
Date of fieldwork	15 th -24 th August 2016					
Sponsor/client	Armour Heritage					
Project manager	Paul Mason					
Project supervisor	Catherine Douglas					
Period summary		MESOLITHIC	NEOLITHIC	BRONZE AGE		
			MEDIEVAL			
Project summary	The evaluation identified archaeological features in only 2 of the 17 trenches. A single (possibly) prehistoric ditch terminus was identified in the centre of the site and a large medieval quarry pit.					

OASIS Form

OASIS ID: archaeol6-262419

Project details

Project name	Fitzalan Link Road (South), Littlehampton, West Sussex
Short description of the project	Archaeology South-East was commissioned by Armour Heritage to undertake an archaeological evaluation in advance of the construction of the proposed Fitzalan link road, Littlehampton, West Sussex. 17 trenches were excavated across the site to reveal the underlying natural geology at a maximum elevation to the north and south of the site at 6.67m AOD and 8.15m AOD respectively, with a gradual fall towards the centre with the lowest point at 4.2m AOD. The evaluation identified archaeological features in only 2 of the 17 trenches. A single (possibly) prehistoric ditch terminus was identified in the centre of the site and a large medieval quarry pit.
Project dates	Start: 15-08-2016 End: 24-08-2016
Previous/future work	Not known / Not known
Any associated project reference codes	LNR16 - Sitecode
Type of project	Field evaluation
site status	None
Current Land use	Other 11 - Thoroughfare
Monument type	DITCH Late Prehistoric
Monument type	PIT Medieval
Methods & techniques	"Sample Trenches"
Development type	Road scheme (new and widening)
Prompt	Planning condition
Position in the planning process	After outline determination (eg. As a reserved matter reference (LU.234/16/RES))
Project location	
Country	England
site location	WEST SUSSEX ARUN LITTLEHAMPTON Fitzalan Link Road (South), Littlehampton, West Sussex
Study area	1.88 Hectares
site coordinates	TQ 503117 103038 50.872082878381 0.13655849423 50 52 19 N 000 08 11 E Point
Height OD / Depth	Min: 4.2m Max: 8.15m
Project creators	
Name of Organisation	Archaeology South-East
Project brief originator	Consultant
Project design originator	Archaeology South-East
Project director/manager	Paul Mason

Project supervisor Catherine Douglas

Type of
 sponsor/funding body Client

Name of
 sponsor/funding body Armour Heritage

Project archives

Physical Archive recipient Littlehampton Museum

Physical Contents "Ceramics","Environmental","Glass","Industrial"

Digital Archive recipient Littlehampton Museum

Digital Media available "Database","GIS","Images raster / digital photography","Survey","Text"

Paper Archive recipient Littlehampton Museum

Paper Media available "Context sheet","Correspondence","Diary","Photograph","Plan","Report","Section","Survey","Unpublished Text"

Project bibliography1

Publication type Grey literature (unpublished document/manuscript)

Title An Archaeological Evaluation at Fitzalan Link Road (South), Littlehampton, West Sussex

Author(s)/Editor(s) Douglas, C. and Nicholls, H

Other bibliographic details 2016340

Date 2016

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Place of issue or publication Portslade

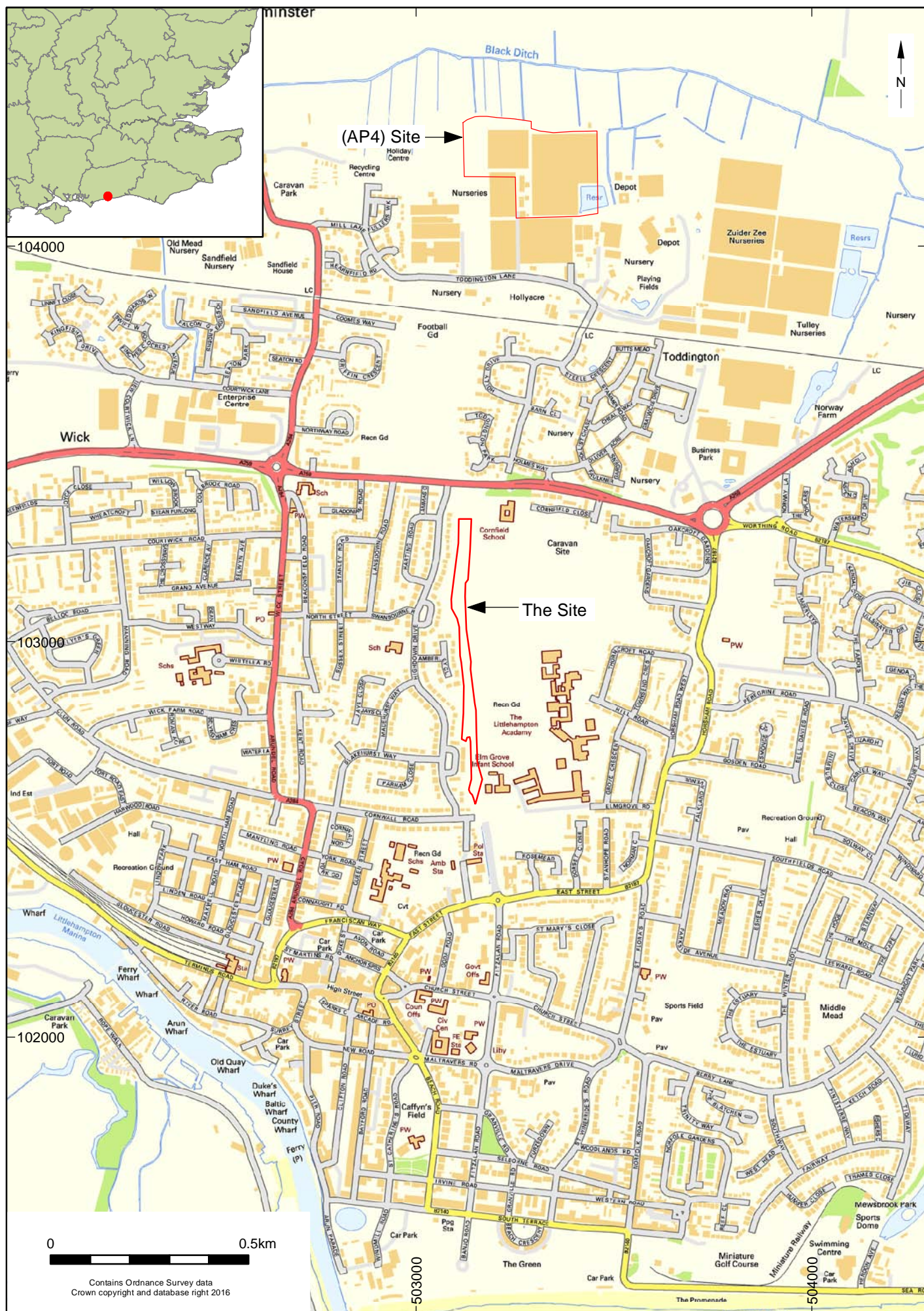
Entered by Hayley Nicholls (h.nicholls@ucl.ac.uk)

Entered on 13 September 2016

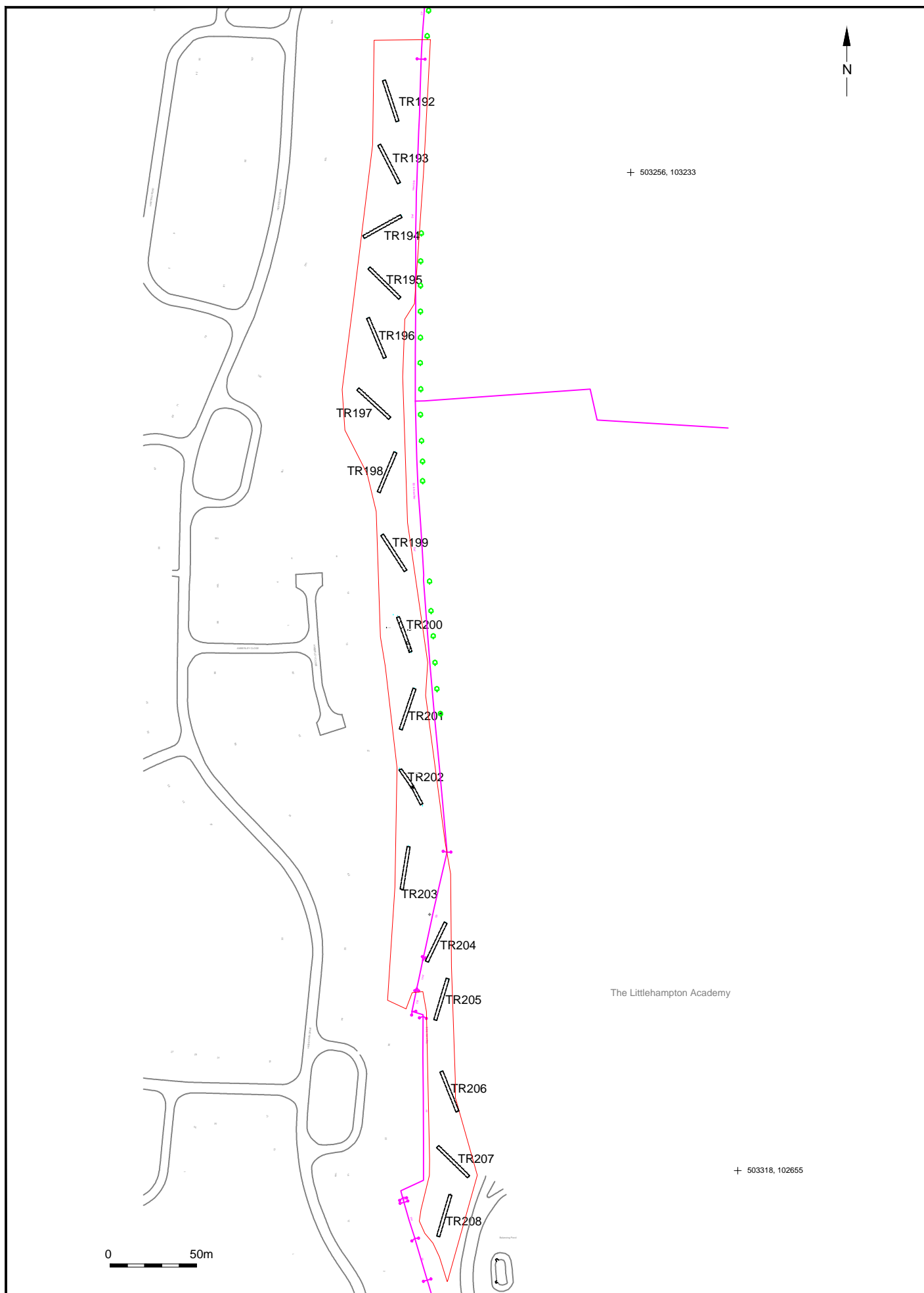
Appendix 1: Archaeologically negative trenches list of recorded contexts

Trench	Context	Type	Interpretation	Thickness m	Height m AOD
192	192/001	Layer	Topsoil	0.23	7.05-7.26
192	192/002	Layer	Subsoil	0.35-0.43	
192	192/003	Layer	Superficial drift geology	0.48	6.41-6.67
192	193/001	Layer	Topsoil	0.09-0.15	6.68-6.98
193	193/002	Layer	Subsoil	0.42-0.53	
193	193/003	Layer	Superficial drift geology	0.06	6.13-6.36
194	194/001	Layer	Topsoil	0.14-0.20	6.57-6.59
194	194/002	Layer	Subsoil	0.46	
194	194/003	Layer	Superficial drift geology	0.09	5.88-5.95
195	195/001	Layer	Topsoil	0.18-0.23	6.34-6.41
195	195/002	Layer	Subsoil	0.33-0.48	
195	195/003	Layer	Superficial drift geology	0.03-0.09	5.70-5.73
196	196/001	Layer	Topsoil	0.18-0.25	6.20-6.36
196	196/002	Layer	Subsoil	0.40-0.56	
196	196/003	Layer	Superficial drift geology	0.08	5.54-5.62
197	197/001	Layer	Topsoil	0.06-0.11	6.19-6.21
197	197/002	Layer	Subsoil	0.51-0.64	
197	197/003	Layer	Superficial drift geology	0.04	5.51-5.52
198	198/001	Layer	Topsoil	0.13-0.27	6.23
198	198/002	Layer	Subsoil	0.46-0.60	
198	198/003	Layer	Superficial drift geology	0.05-0.10	5.52
199	199/001	Layer	Topsoil	0.18-0.23	5.73-6.0
199	199/002	Layer	Subsoil	0.37-0.52	
199	199/003	Layer	Superficial drift geology	0.04-0.08	5.13-5.30
201	201/001	Layer	Topsoil	0.15-0.23	5.61-5.94
201	201/002	Layer	Subsoil	0.42-0.60	
201	201/003	Layer	Superficial drift geology	0.05	4.96-5.11
203	203/001	Layer	Topsoil	0.15-0.23	6.20
203	203/002	Layer	Subsoil	0.30-0.37	
203	203/003	Layer	Superficial drift geology	0.1	5.75
204	204/001	Layer	Topsoil	0.15-0.19	6.45-6.89
204	204/002	Layer	Subsoil	0.30-0.38	
204	204/003	Layer	Superficial drift geology	0.18	6.0-6.4
205	205/001	Layer	Topsoil	0.15-0.23	7.25-7.53
205	205/002	Layer	Made ground	0.55-0.64	
205	205/003	Layer	Made ground	0.15-0.42	
205	205/004	Layer	Superficial drift geology	0.19	6.35
206	206/001	Layer	Topsoil	0.13-0.18	7.58-7.60
206	206/002	Layer	Subsoil	0.34-0.78	

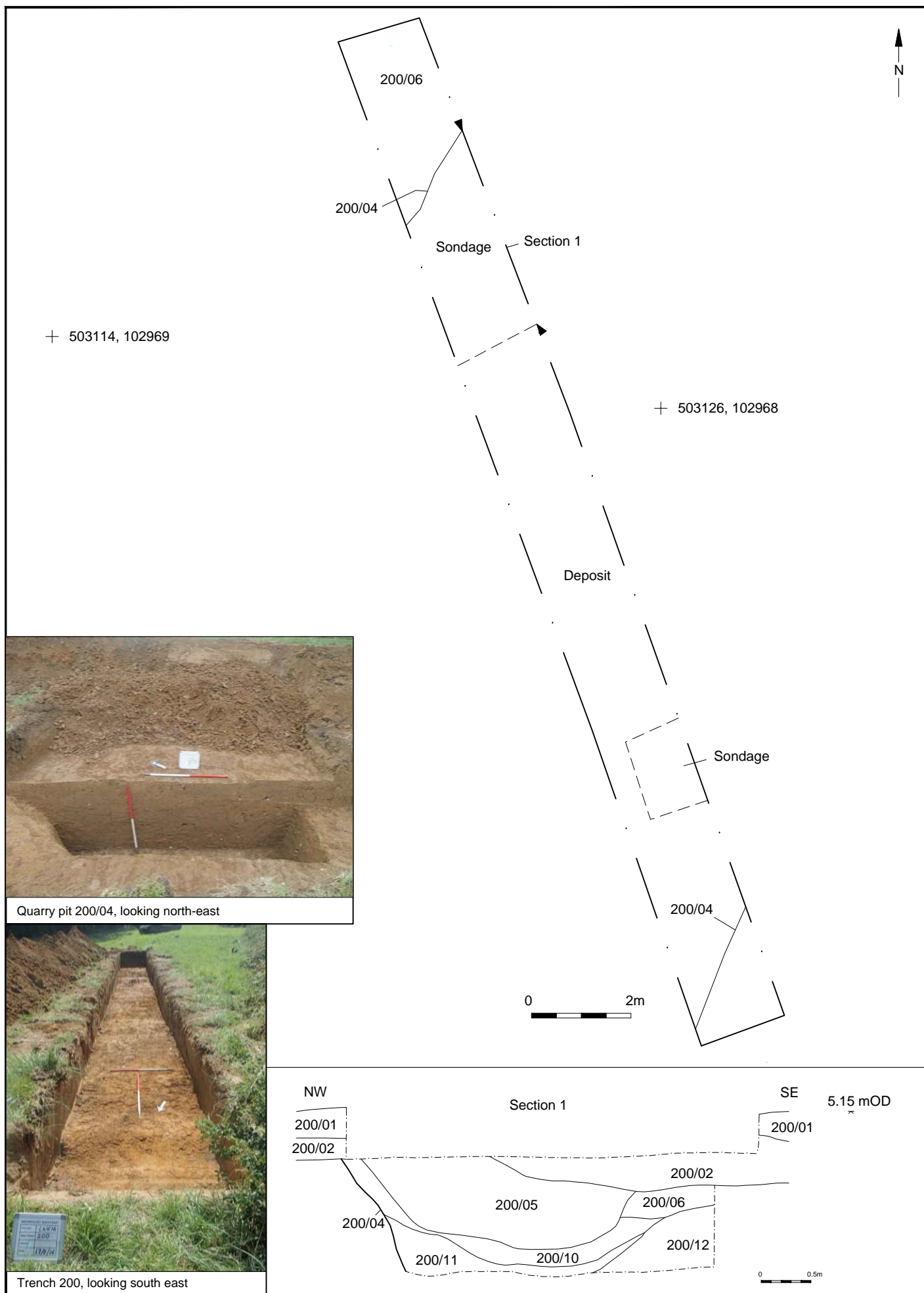
Trench	Context	Type	Interpretation	Thickness m	Height m AOD
206	206/003	Layer	Made ground	0.26	
206	206/004	Layer	Superficial drift geology	0.02	6.47-6.65
206	206/005	Layer	Made ground	0.34	
207	207/001	Layer	Topsoil	0.15-0.24	7.31-7.72
207	207/002	Layer	Subsoil	0.42-0.68	
207	207/003	Layer	Superficial drift geology	0.05	6.45
207	207/004	Layer	Made ground	0.02	
207	207/005	Layer	Subsoil	0.2	
208	208/001	Layer	Topsoil	0.24	8.05-8.84
208	208/002	Layer	Made ground	0.41-0.70	
208	208/003	Layer	Superficial drift geology	0	7.42-8.15



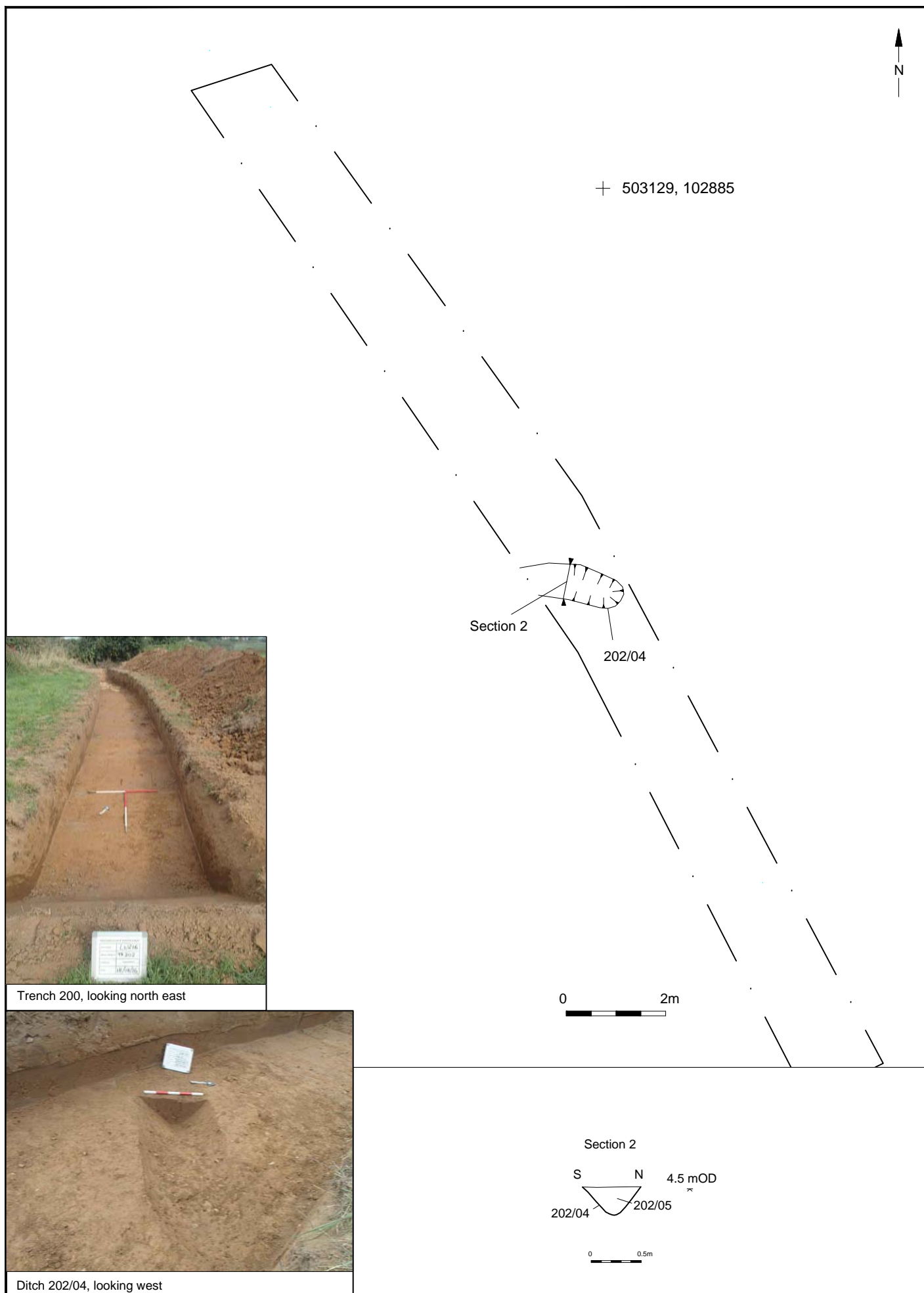
© Archaeology South-East		Fitzalan Link Road (South) Littlehampton, West Sussex	Fig. 1
Project Ref: 160459	Sep 2016	Site location	
Report Ref: 2016340	Drawn by: AR		



© Archaeology South-East		Fitzalan Link Road (South), Littlehampton, West Sussex	Fig.2
Project Ref: 160459	Sep 2016	Trench location	
Report Ref: 2016340	Drawn by: AR		



© Archaeology South-East		Fitzalan Link Road (South), Littlehampton, West Sussex	Fig.3
Project Ref: 160459	Sep 2016	Trench 200 plan, section and photograph	
Report Ref: 2016340	Drawn by: AR		



© Archaeology South-East		Fitzalan Link Road (South), Littlehampton, West Sussex	Fig.4
Project Ref: 160459	Sep 2016	Trench 202 plan, section and photographs	
Report Ref: 2016340	Drawn by: AR		

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