HS2 Phase 1 Central Section, Archaeological Works, North of Field Cottage, Southam, Warwickshire, Site Code 1C18NFCAR, Fieldwork Report

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C01	27.07.2018	Kirsty Smith and Peter Vellet	Richard Brown	Iain Williamson	First draft for comment

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1 Executive Summary

1.1.1 The archaeological recording addressed one area of land (CR01083) located c. 500m south-west of Southam, Warwickshire. The aims of the archaeological recording were to assess the archaeological potential of the Site to contain artefacts, deposits or features of archaeological significance, particularly those of Roman and medieval date.

1.1.2 The Site comprises one area of land, in use as an arable field which encompasses an area of c. 0.69ha. The Site is required for the proposed ecological mitigation works including the construction of mitigation ponds, hibernacula and reptile basking banks as well as woodland planting to the north of the Site and grassland planting over the remainder of the Site.

1.1.3 Warwickshire HER recorded that Roman pottery and coins had previously been found on the Site, reported by a member of the public. A geophysical survey of 2017 indicated the presence of several ditches across the Site and a number of enclosures in the area to the south (Site Code 1C17NFCMG). A geophysical survey in 2011 identified ridge and furrow within fields directly south-east of the Site, orientated NW-SE and WNW-ESE.

1.1.4 The archaeological recording was required to identify the location, extent, survival and significance of any heritage within the Site and to contribute to the following specific GWSI: Historic Environment Research and Delivery Strategy (HERDS) objectives:

- Objective KC15: Can we identify regional patterns in the in the form and location of Late Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure.
- Objective KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.
- Objective KC35: Investigate the impacts on rural communities of social and economic shocks in the mid -14th century and thereafter and their contribution to settlement desertion.
- Objective KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century.

1.1.5 The archaeological recording comprised two large trenches (Trenches 9 and 10) in the areas of the two proposed mitigation ponds. Trench 9 contained a ditch that produced Roman pottery, along with a furrow. The Roman ditch within Trench 9 may have been part of a Roman rural settlement, the focus of which may have been to the south-west of the Site. Trench 10 contained two furrows. The furrows found in Trenches 9 and 10 are very likely part of a ridge

and furrow field system dating to the medieval or post-medieval period. The furrows contained 18th-19th century pottery suggesting they had gone out of use by this date.

1.1.6 Following completion of the archaeological recording the AWE1 ecological contractor was required to relocate the southern of the two proposed mitigation ponds beyond the area investigated by Trench 9. The works comprised topsoil stripping carried out under archaeological monitoring within the footprint of a relocated mitigation pond. The area stripped (Trench 11) contained a Roman ditch previously identified during the archaeological recording, which was truncated by an undated furrow. A second undated furrow and a tree-throw hole were also identified.

2 Introduction

2.1.1 COPA were commissioned by Fusion to undertake archaeological recording on land north of Field Cottage, Southam, Warwickshire (Project Plan for Trial Trench Investigations at Project Plan for Trial Trench Investigations at Windmill Hill (LS093/94) and Southam (LS122) Document No.: 1EW03-FUS-EV-REP-CS07_CL24-002689). The fieldwork was conducted in two phases with an initial phase between 17-18th January 2018 with Trenches 9 and 10 excavated. The second phase of work was conducted on the 16th April 2018 and comprised Trench 11. The second phase of investigation was required due to the relocation of the southern of the proposed mitigation ponds beyond area investigated by Trench 9. The methodology for the additional works is set out in the Change Control for Archaeological Monitoring at Southam LS122 (Document No.: 1EW03-FUS-EV-CCR-CS07_CL24-0008172). The change control document established the scope and methodology to be employed for the archaeological monitoring.

2.1.2 The archaeological recording addressed one area of land (CR01083) located c. 500m south-west of Southam, Warwickshire; hereafter described as ‘the Site’ (Figure 1). The Site is centred at NGR 440904 260876 and measures 0.69ha. It is bound to the north by an industrial estate, to the east by Kineton Road (the B4451) and to the south and west by agricultural fields surrounding The Old Coach House and The Fields House. The parcel of land is occupied by a single arable field.

2.1.3 The land parcel is required for the proposed ecological mitigation works including the construction of mitigation ponds, hibernacula and reptile basking banks as well as woodland planting to the north of the Site and grassland planting over much of the Site (Figure 2). The locations for the archaeological recording have been selected to address construction programme risk to land required for the two proposed mitigation ponds. The initial phase of fieldwork comprised two trenches (Tr9 and Tr10), Trench 9 was 13.5m (l) by 7.7m (w) and Trench 10 was 16.5m (l) by 10m (w) (Figure 4). The additional second phase comprised archaeological monitoring of the topsoil strip of the revised pond location (Trench 11,

measuring 22.5m (l) by 15.8m (w)). This report serves as a final report of the results of the archaeological recording.

3 Project Background

3.1 Background

3.1.1 High Speed Two (HS2) is a new railway network proposed by Government to provide a new link between London, the West Midlands, the East Midlands, South Yorkshire, Leeds and Manchester. Phase One of HS2 will involve the construction of a new railway approximately 230km (143 miles) in length between London and the West Midlands. Powers for the construction, operation and maintenance of Phase One are conferred by the High Speed Rail (London - West Midlands) Act 2017.

3.1.2 The overall framework within which archaeological work will be undertaken is set out in the Environmental Minimum Requirements (EMR), in particular the Heritage Memorandum, the Code of Construction Practice (CoCP) for HS2 Phase One and the GWSI: HERDS. Accordingly the nominated undertaker or the Archaeological Contractor are required to implement appropriate and reasonable measures to identify, avoid or where practicable reduce impacts to the significance of heritage assets prior to the start of construction.

4 Previous Work(s)

4.1 Project Plan for Southam and 2017 Geophysical Survey

4.1.1 A Project Plan detailing the scope, aims and methodologies required to address specific GWSI: HERDS research objectives identified as being applicable to this Site was prepared for the works (Project Plan for Trial Trench Investigations at Project Plan for Trial Trench Investigations at Windmill Hill (LS093/94) and Southam (LS122)). This Project Plan summarised information in the Cultural Heritage Baseline Report for Community Forum Area CFA16 Ladbroke and Southam (ES.3.5.2.16.4-7). The Site was included in a remote sensing survey (interpretation of aerial photographs, hyperspectral imagery and LiDAR imagery) as part of the Environment Statement (ES). A geophysical survey of land parcel 1083 and the Site took place in December 2017, after the Project Plan was completed. The results of this geophysical survey will therefore be discussed below (Geophysical Survey Report for North of Field Cottage (1083), Doc No: 1EW03-FUS-EV-REP-CS07_CL24-002684). The results of the geophysical survey are shown in Figure 3 alongside the location of Trenches 9-11. In addition a magnetometer geophysical survey had been undertaken in 2011 to the east of the Site on land between Banbury Road and Kineton Road (Project Plan, Figure 4).

4.1.2 There is limited evidence for activity during the Palaeolithic, Mesolithic, Neolithic and Bronze Age periods in close proximity to the Site. There is some evidence for Iron Age activity in the vicinity, with a possible roundhouse located 400m east of the Site (Project Plan, Figure 2, MWA19300). In addition, a single Iron Age coin was found just north of the Site in the industrial estate straddling the B4451.

4.1.3 The 2017 geophysical survey identified a complex of ditches and enclosures across land parcel 1083 and to the north within the Site (Figure 3). In the centre of area 1083 a number of circular or sub-circular enclosures were identified. Towards the east of this area these appeared to be fragmentary in nature and may represent several phases of activity (features 10, 14, 15, 16, 18, 19 and 21). A possible trackway was identified to the west of 1083 (2) which was probably cut by a later ditch (3). There may be two broad phases of activity within the Site as there are a number of rectilinear enclosures to the west, which may post-date or be contemporary with some of the circular enclosures. The rectilinear enclosures include features 3, 5, 9, 8, and 24. A possible trackway was also identified to the west of this area (4) and a possible boundary ditch (26) to the north-east of 1083, in the area of the Site. In addition an area of strong magnetic activity was identified (22) which may have been a focus of metal working. There were also clusters of small anomalies to the centre and south-west of 1083 which may represent smaller archaeological features such as pits. These features may represent a later prehistoric or Roman farmstead or rural settlement.

4.1.4 The Site is located 5.4km south-east of the early Roman boundary and road, the Fosse Way. This road is associated with a network of villas and farmsteads (the nearest such complex at Radford Semele lies c. 5.5km to the west), although the evidence of Roman activity in the Site environs is limited. The Warwickshire HER records that Roman pottery (including Samian ware) and coins were found within the Site (MWA19204). There is limited information about this record as the information was given by a member of the public about an event which occurred in the past[1]. This record taken with the geophysical survey suggests that some of the features located on the Site and within parcel 1083 may be Roman.

4.1.5 During the medieval period the character of the area was predominantly rural. There was no urban centre, although Southam, which is mentioned in the Domesday survey, did have a market from 1227 and would have acted as a minor local centre. The area was heavily depopulated at the end of the medieval period as many villages were abandoned, fields enclosed, and estates turned over to extensive pasture for grazing. This process preserved the former villages, and their open fields of ridge-and-furrow, as earthworks, fossilised within the new grasslands. Despite late medieval to modern enclosure and amalgamation and alteration, evidence for medieval field systems still survive in the pattern of modern fields within the local

[1] Our Warwickshire, 2018 Southam: Possible Roman site with pottery and coins reported in area to south of Alko Works, Kineton Road, Southam (MWA19204) https://www.ourwarwickshire.org.uk/content/catalogue_her/possible-roman-site-south-of-alko-works-kineton-road-southam

landscape. The 2011 geophysical survey noted the presence of surviving ridge and furrow on a WNW-ESE alignment in fields to the east of the Site (Project Plan, Figure 4). This suggests that the Site and environs may have been used for agricultural purposes and been part of the medieval agricultural landscape focussed on settlement of Southam.

4.1.6 During the post-medieval period it is very likely that the Site retained an agricultural use and was located on the outskirts of Southam. Map regression using early Ordnance Survey editions (Project Plan, Figure 5) and earlier tithe and estate maps demonstrates that some of the modern field boundaries represent far older boundaries (Project Plan, Figure 4). Relict field boundaries of possible medieval date may equally be post-medieval in date.

5 Geology and Topography

5.1 Geology

5.1.1 The bedrock geology of the Site is mapped by the British Geological Survey (BGS) as interbedded limestone and mudstone deposits of the Rugby Limestone Member. No superficial, or drift, geology is recorded within the Site[2]. The parent material gives rise to highly lime-rich loamy and clayey soils with impeded drainage within the Site[3].

5.2 Topography

5.2.1 The topography of the Site is relatively flat, sloping gently from c. 87m AOD at the B4451 to c. 92m AOD at the western boundary.

6 Specific Project Objectives

6.1 Objectives

6.1.1 Section 4 of the Project Plan identifies the contribution the results of the archaeological recording can make to a number of specific research objectives set out in the GWSI: HERDS, however these have been reviewed following the completion of evaluation within the Change Control for Archaeological Monitoring at Southam (LS122). Archaeological recording and monitoring provides the most suitable method for the recovery of archaeological evidence to inform the research objectives. Section 5 of the Project Plan provides a methodology and deliverables for the archaeological recording.

[2] British Geological Society 2018 Geology of Britain viewer, http://mapapps.bgs.ac.uk/geologyofbritain/home.html
[3] Cranfield Soil and Agrifood Institute 2018 Soilscapes, http://www.landis.org.uk/soilscapes/

6.1.2 The GWSI: HERDS objectives and the contribution the archaeological recording will make to meet them have been revised within the Change Control. They are repeated here for reference:

- Objective KC15: Can we identify regional patterns in the in the form and location of Late Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure.
- Objective KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.
- Objective KC35: Investigate the impacts on rural communities of social and economic shocks in the mid -14th century and thereafter and their contribution to settlement desertion.
- Objective KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century.

7 Scope and Methodology

7.1 Scope

7.1.1 The scope and method for the initial phase of the trial trench evaluation is set out in Section 5 of the Project Plan for Southam and Windmill Hill. Two trenches were positioned to target the proposed mitigation ponds (Tr9 and Tr10) in January 2018. This Site was subject to a works variation which meant the size of the trenches increased to allow for the whole area of the ecological mitigation ponds to be sampled. This altered the area of Trench 9 to 13.5m (l) by 7.7m (w) and Trench 10 to 16.5m (l) by 10m (w) (Figure 3).

7.1.2 Subsequently, the Site was subject to a phase of archaeological recording in May 2018. The scope of the archaeological monitoring, required due to the relocation of the southern of the mitigation ponds, was set out in the Change Control for Archaeological Monitoring at Southam (LS122). The southern mitigation pond (where Trench 9 of the archaeological recording was located) was moved 10m to the north-east of its original location. Due to the late notification and critical programme associated with the new mitigation pond location, it was proposed that topsoil stripping for the pond be conducted under archaeological monitoring. The new pond location (Trench 11) was ovoid in shape and measured 22.5m (l) by 15.8m (w) (Figure 3).

7.2 Methodology

7.2.1 The scope and method for the initial phase of the trial trench evaluation (Trenches 9 and 10) are set out in Section 4 of the Project Plan for Trial Trench Investigations at Windmill Hill (LS093/94) and Southam (LS122). A location specific written scheme of investigation (LSWSI) was also prepared, which included all of the urgent works sites (HS2 Doc no: 1EW03-FUS-EV-REP-C000-002691). The LSWSI was prepared in accordance with the standards and guidance provided by the GWSI: HERDS, the Technical Standards for Specification for historic environment project plans and location specific written schemes of investigation (Document No. HS2-HS2-EVSTD-000-000036) and Specification for Historic Environment Investigations (Document No. HS2-HS2-EV-STD-000-000035) and relevant CIfA Standards including the Code of Conduct (CIfA 2014a) and the Standard and Guidance for Archaeological Field Evaluation (CIfA 2014b).

7.2.2 Both trenches were excavated using an eight-tonne tracked excavator fitted with a toothless bucket. This equipment was deemed to be the most appropriate for the job given the weather and ground conditions.

7.2.3 The method for the second phase of works, the archaeological recording of Trench 11, was set out in the Change Control for Archaeological Monitoring at Southam (LS122), which was to be read in conjunction with Section 4 of the Project Plan for Trial Trench Investigations at Windmill Hill (LS093/94) and Southam (LS122).

7.2.4 Prior to the start of the trial trench evaluation a site meeting and walkover was held between the Contractor and the Archaeological Contractor to confirm that each of the indicative trench locations remained accessible and clear of obstruction. Access routes, safe working areas and any constraints to the archaeological recording works were also identified.

7.2.5 The on-site archaeological recording and recovery techniques were in line with the methods set out in the Project Plan, the LSWSI and current industry best practice and were fully understood by all working on the site. All paper and digital records made during the course of the archaeological evaluation, and the treatment of artefacts and environmental remains, were reviewed continuously. Record checking and collation was completed at regular intervals, as appropriate, and before an area was considered complete, abandoned, backfilled or the site closed.

7.3 Works Variations

7.3.1 Details of the variation at the trial trenching stage were discussed in detail previously and are summarised in Para. 7.1.1. No works variations were required for the archaeological recording.

8 Results and Observations

8.1 Archaeology

8.1.1 The initial phase of the investigation comprised Trench 9 which was located to the southern edge of the Site and Trench 10 was located in the central/south-eastern part of the Site. Both were located to sample the area of the two proposed mitigation ponds (Figure 2, Figure 4). The second phase of the archaeological works comprised Trench 11 which monitored an area to the north-east of Trench 9 in the area of the pond relocation. Due to the small distance over which the mitigation pond was relocated, the south-western extent of Trench 11 coincided with Trench 9. While this resulted in a previously mitigated area undergoing archaeological monitoring, the greater extent of Trench 11 provided a more comprehensive understanding of the excavated archaeology in Trench 9. As no additional archaeological features of any significance were identified, no interventions were excavated during the course of the monitoring of Trench 11. A single test intervention was excavated through one of the two furrows identified.

8.1.2 A report on the finds recorded is included in Section 19.1 and a report on the animal bone is included in Section 19.2. A contextual summary is listed in the appendix (Section 20). Due to the limited number of archaeological features this evaluation will be discussed by trench and not by phase. Three possible phases were observed including a Roman ditch (903) and a number of medieval to post-medieval furrows (907, 1003 and 1005) and a modern land drain (909).

Trench 9

8.1.3 Trench 9 contained a ditch (903) orientated NW-SE, which was identified during the geophysical survey. Ditch 903 was 2.60m wide and 0.60m deep with a concave gully at the bottom, flat steps on either side of the base and moderately sloping sides (Figure 5). The ditch contained two fills (905 and 906). Lower fill 906 comprised a blue yellow grey clay with moderate amount of stones up to 0.12mm diameter. This fill contained one sherd of pottery dating to the Roman period. Fill 906 may have therefore formed by a weathering of the natural (902). Fill 905 was a mid-brown grey silty clay with frequent stones, up to 0.14mm diameter. Fill 905 contained five sherds of pottery dating to the Roman period and a scrap of clay which was undated.

8.1.4 Initially it was thought that fill 904 was the upper fill of Ditch 903, but it was reinterpreted (following excavation of Trench 11) as fill of furrow 911, which truncated the ditch 903 (Figure 3 and Figure 4, Section 9.1). This furrow was not as wide as the Roman Ditch 903 and cuts it at an oblique angle. This is discussed further in Section 8.1.9.

8.1.5 Fill 904 was a mid-dark grey silty clay with rare stones up to 20mm diameter. It contained one sherd of pottery dating to the mid 1st to early/mid 2nd century AD, and one sherd of broadly dated Roman pottery. It is therefore also probable that the finds within fill 904 must be residual as the furrow must have intersected Ditch 903 at this location. Animal bones of a large mammal (possibly horse/cattle) were also found with contexts 904-6.

8.1.6 Furrow 911 was sealed by subsoil 901. The subsoil was cut by later land drain 909, which also truncated the fills of the furrow 911 and ditch 903. The fill of land drain 909 was 910 and contained residual Roman pottery and an 18th century clay pipe.

8.1.7 Trench 9 also contained a furrow orientated WNW-ESE (907). This furrow was 3.6m wide and 0.28m deep and had a flat base and shallow sides. The furrow contained one fill (908) of mid brown grey clay. This fill contained one sherd of residual Roman pottery and one sherd of 18th-early 19th century pottery.

Trench 10

8.1.8 Trench 10 contained two furrows, both on a WNW-ESE alignment (1003 and 1005). Furrow 1003 was 1.6m wide and 0.12m deep with shallow sides and a flat base. It contained one fill (1004) of mid brown grey clay with few small natural stones. Fill 1004 contained one sherd of 17th-early 19th century pottery and a fragment of late medieval to early post-medieval roof tile. Furrow 1005 was 2.4m wide and 0.14m deep, with shallow sides and a flat base. It contained one fill (1006) of mid brown clay with small natural stones.

Trench 11

8.1.9 The NW-SE aligned Roman ditch (903) and WNW-ESE aligned furrow 911 that truncated it (excavated in Trench 9) were clearly visible running across Trench 11. A test intervention was excavated through the furrow to confirm the feature typology including a shallow profile. The furrow 911 was 2.54m wide and 0.2m deep and contained a single fill, comprised of a moderately firm mid brownish grey silty clay. No artefactual material was recovered from the test intervention, and finds within 904 recorded in Trench 9 have been interpreted as residual. The furrow appears to be similar to Furrow 907 within Trench 9 (Figure 5, Section 9.1).

8.1.10 A second WNW-ESE aligned furrow was partially observed running across the northern extent of the trench. This furrow was not excavated.

8.1.11 A tree-throw hole was observed immediately south of the intercutting Roman ditch and furrow and was not excavated.

8.2 Discussion

8.2.1 One feature on the Site is dated to the Roman period (Ditch 903). This ditch was orientated NW-SE and the two lower fills of this ditch (905, 906) contained Roman pottery. This evidence

for Roman Ditch 903, together with the geophysical survey suggests that there is likely to have been a Roman farmstead or rural settlement within area 1083 and the Site. Ditch 903 may have been a boundary ditch delineating the northern extent of the settlement. During the monitoring of Trench 11 no further probable Roman features were observed, only a furrow, which supports this theory relating to the extent of the Roman settlement. The geophysical survey also indicated there may be circular and rectilinear enclosures within area 1083 and the Site. These may represent several phases of activity and could be late prehistoric and or Roman in date. In addition the record in the Warwickshire HER of Roman coins and pottery being found on the Site may have been imprecise but does indicate that there may be more evidence of Roman activity on the Site, with further evidence provided by the residual Roman pottery recovered from fill 904 of furrow 911.

8.2.2 The presence of the ridge and furrow features across the site orientated WNW-ESE fits with the 2017 geophysical survey which noted ridge and furrow on a similar alignment to the south-west of the Site. The 2011 geophysical survey of fields to the east of the Site also noted ridge and furrow on the same alignment (Project Plan, Figure 4). The Site and the fields to the east may have been part of a large open field system and may have predated the construction of a road or track along the alignment of the B4551. Indeed, the Ordnance Survey First Series, Sheet 53 of 1834[4] shows that there was no road on the alignment of the B4551 but a track to the north of the Site leading from Southam to the farmhouses north-west of the Site. The track was orientated north-east to south-west and probably formed the boundary of the Site to the north-west. A turnpike road was constructed south of the Site in 1852 along the line of the later B4551. It is likely that the ridge and furrow went out of use before 1852 as pottery was found within the fills of the furrows dating to the 17th-early 19th century.

9 Stratigraphic Report

9.1 Stratigraphic sequence

9.1.1 The stratigraphic sequence was relatively straightforward with a topsoil above subsoil and this overlaying the natural geology at 0.34-0.39m depth. The topsoil of dark grey brown silty clay was 0.20-0.28m thick (900, 1000, 1100) whilst the subsoil comprised mid orange grey brown silty clay and was 0.08-0.15m thick (901, 1001, 1101). The natural geology varied slightly between the trenches with limestone within a matrix of mid brown grey silty clay with patches of yellow brown silty clay in Trench 9 (902) and a large stones with light yellow brown silty clay

[4] A Vision of Britain Through Time, 2018: Ordnance Survey, 1834 First Series, Sheet 53 http://www.visionofbritain.org.uk/maps/series?xCenter=3251897.13101&yCenter=2884875.29385&scale=63360&viewScale=11338.5888&mapLayer=nineteenth&subLayer=first_edition&title=Ordnance%20Survey%20and%20Ordnance%20Survey%20of%20Scotland%20First%20Series&download=true

and brown clay in Trench 10 (1002). Within Trench 11 the natural comprised mixed light to mid brownish grey silty clay and limestone in a light to mid brownish grey silty clay matrix (1102).

10 Interpretation of results against original expectations and Specific Objectives

10.1 Objectives

10.1.1 The archaeological recording successfully confirmed the presence, date and extent of archaeological features within the area of two ponds and confirmed the accuracy of the geophysical survey.

10.1.2 The objectives below were in part fulfilled by the fieldwork and subsequent reporting. The limited archaeological features on the Site will make a small contribution towards the wider understanding of Southam during the Roman, medieval and post-medieval period. The objectives are repeated below along with reasons for the partial success in meeting these objectives:

10.1.3 Objective KC15: Can we identify regional patterns in the in the form and location of Late Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure.

- There was no data that could contribute towards this objective.

10.1.4 Objective KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route

- A ditch observed in Trench 9 (903), which was orientated NW-SE and measuring 2.60m wide and 0.60m deep, contained Roman pottery. This may have been a boundary ditch or drainage ditch and does indicate the presence of Roman activity on the Site. This evidence together with the geophysical survey of 2017, the Warwickshire HER entry (MWA19204) and further residual finds recovered from the Site indicates there may have been a Roman settlement or farmstead on the Site and the area directly south. The focus of the settlement may have been to the south-west of the Site. The geophysical survey indicates rounded and rectilinear features, ditches and trackways with land parcel 1083 and these may represent late prehistoric and or Roman enclosures and settlement activity.

10.1.5 Objective KC35: Investigate the impacts on rural communities of social and economic shocks in the mid -14th century and thereafter and their contribution to settlement desertion

- There was no data that could contribute towards this objective

10.1.6 Objective KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century

- It is difficult to date the furrows that are orientated WNW-ESE on the Site although they may have been part of a medieval open field system associated with the settlement of Southam. One piece of medieval to post-medieval roof tile was found within one of the fills of the furrows.

11 Review of Evaluation Strategy

11.1 Strategy Appraisal

11.1.1 The archaeological recording and monitoring investigated the areas of intrusive construction impact, targeting both geophysical anomalies and blank areas and comprising a 9.01% sample of the ecological mitigation site. The strategy was appropriate given the nature of the construction impact at the Site.

12 Recommendations and Research Aims for Further Investigation

12.1.1 The results of the archaeological recording confirmed the presence of Roman activity on the Site, which had been indicated by the geophysical survey. While the geophysical survey may not have identified the actual density and extent of features across the Site (as it is likely the geophysical survey did not reveal all of the archaeological features across the Site), the archaeological recording and monitoring did fully investigate and identify the extent and density of surviving archaeology within the areas of construction impact.

12.1.2 The geophysical survey identified two possible phases of settlement activity (of later prehistoric or Roman date) within the Site and the area immediately to the south. The archaeological recording only confirmed the presence of remains associated with one phase of activity, in the form of a boundary ditch which dates to the Romano-British period. The evaluation also confirmed the presence of ridge and furrow features on the Site, which may have been part of a larger field of medieval or post-medieval date.

12.1.3 Whilst not all features at the Site were subject to investigation as part of the archaeological recording, no further intrusive works will take place within the habitat mitigation site so the remaining geophysical anomalies and archaeological remains will be preserved within the habitat site.

12.1.4 The results of the archaeological recording add to the understanding of the wider geophysical survey results and will inform the research objectives for any future archaeological investigation within the wider HS2 land take to the south in areas where intrusive works will impact upon the buried archaeological remains.

13 Conclusions

13.1.1 The archaeological remains from Trench 9 and Trench 11 indicate the presence of a Roman ditch and this suggests there may be more Roman activity on the Site. Roman pottery and coins were already reported to be found on the Site and this evaluation confirms evidence for Roman occupation. Furrows were also shown to be present on the Site which were orientated WNW-ESE and would have been part of a series of ridge and furrow features. These features may have been part of a medieval field system extending to the south-east. This large, open field may have been truncated in the mid-19th century when the turnpike road was built directly south of the Site.

14 Statement of Potential of Archaeology

14.1.1 The results of the archaeological recording indicated the presence of a previously tentatively known Roman site indicating Roman activity close to Southam. The geophysical survey of 1083 and the Site along with the Roman ditch found during the evaluation indicates that this may be a Roman rural site. The geophysical survey also suggested there may be several phases of activity within 1083 as there were both rounded and rectilinear enclosures in this area, and some of the rectilinear features appeared to be of a later date. Potentially there may be later prehistoric activity on the Site or alternatively the features may all be Roman in date.

14.1.2 There may be more in situ Roman remains on the Site, given the evaluation sampled 9.01% of the Site. In addition there is a very high probability of archaeological remains in the field south of the Site (parcel 1083) of late prehistoric and or Roman date. If more Roman activity was found on the Site it would be of importance as the wider area within a 1km of the Site has a limited number of known Roman sites.

14.1.3 The ridge and furrow features found on the Site likely date to the late medieval or early post medieval period. The presence of the ridge and furrow on the Site does add to the understanding of the use of the landscape around Southam in the medieval and post-medieval period. The furrows themselves are of lesser importance than the potential Roman activity on the Site.

14.1.4 Figure 6 is a soil contour plan exhibiting the thickness of topsoil across the Site. The number of data points is very limited with only three trenches so this model cannot be considered to be accurate except for the areas in close proximity to trenches 9-11. The model suggests that

the topsoil is thinner (in red) around Trench 10 with c. 0.20m thickness and thicker around Trenches 9 and 11 at c. 0.26m thickness. Any further works required for the habitat creation site will not penetrate deeper than c. 0.26m and therefore any further archaeological features within the Site will be preserved in situ.

15 Assessment of Achievement of Survey Objectives

15.1 Summary

15.1.1 The survey has achieved a reliable indication of the presence of archaeological remains which appear to survive at a depth of c. 0.20-0.28m below the surface.

16 Evaluation of Methodology employed and Results Obtained

16.1 Evaluation Methodology

16.1.1 The methodology overall has shown that Trenches 9 and 11 indicated previously unknown Roman activity on the Site. Furrows were also found within Trenches 9, 10 and 11 that were part of a medieval to post-medieval ridge and furrow system.

16.1.2 The methodology employed appears to have been suitable to allow assessment of the presence/absence of archaeological remains in the area of the two proposed mitigation ponds.

17 Publication and Dissemination Proposals

17.1.1 The results of the archaeological recording indicate a moderate amount of archaeology. It is likely that furrows extend over much of the Site and there is very likely to be more Roman activity on the Site.

17.1.2 It is not anticipated that further dissemination of the results of the archaeological recording other than those contained within this report (which will be publicly available and will inform the County HER) will be necessary.

18 References

18.1 Glossary of terms

18.1.1 The following terms have been used in this report:

- Archaeological Contractor - the organisation undertaking the specific historic environment works for the Contractor.
- Contractor – Fusion; the organisation undertaking the Enabling Works for Area Central on behalf of the Employer.
- Detailed Desk Based Assessment (DDBA) – analytical document that builds on the information gathered previously in the Environmental Statement to address particular issues, questions or uncertainties within a given area. It may be developed to provide a more detailed understanding of the resource in an area to inform design development or construction programming.
- Employer – HS2 Ltd, the organisation responsible for delivery of HS2 Phase One Scheme and all terms and conditions, policies, procedures, and payments
- Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS) – the framework for delivering all historic environment investigations undertaken as part of the HS2 Phase 1 programme.
- Location – a specific HS2 worksite or group of worksites that are being addressed as a combine historic environment investigation programme of assessment, evaluation and investigation.
- Location Specific Written Scheme of Investigation (LSWSI) - specification document assembling one or more Project Plans within an area of land defined primarily for construction programme purposes. The LS-WSIs will be agreed with the Project Manager and would provide a costed and programmed approach to delivering outcomes.
- Project Plans – specification document for each specific package of activity (e.g. a survey, desk based assessment, excavation, recoding project). The plans would respond to the Specific Objectives set out in the GWSI: HERDS and be delivered within an agreed budget.
- Works – the specific historic environment assessment, evaluation or investigation works at each location.

18.2 References

Title	Reference
A Vision of Britain Through Time, 2018: Ordnance Survey, 1834 First Series, Sheet 53	http://www.visionofbritain.org.uk/maps/series?xCenter=325189 7.13101&yCenter=2884875.29385&scale=63360&viewScale=113 38.5888&mapLayer=nineteenth&subLayer=first_edition&title= Ordnance%20Survey%20and%20Ordnance%20Survey%20of% 20Scotland%20First%20Series&download=true
Booth, P, 1996 Tiddington Roman settlement: Iron Age, Roman and Anglo-Saxon pottery, archive report, Warwickshire Museum	
Booth, P, 2016 Oxford Archaeology Roman pottery recording system: an introduction, unpublished, updated November 2016	
British Geological Survey, Geology of Britain viewer	http://mapapps.bgs.ac.uk/geologyofbritain/home.html
Country South Combined Utility Drawing Sheet 40	C222-ATK-UT-DPL-020-211700-FPD
Cranfield Soil and Agrifood Institute, Soilscapes	http://www.landis.org.uk/soilscapes/index.cfm
Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy	HS2-HS2-EV-STR-000-000015
HS2 Phase One Environmental Statement and Supplementary Environmental Statements	ES 3.5.2.16.4 ES 3.5.2.16.5 ES 3.5.2.16.6 CH-002-016
HS2 Ltd, 2015. Heritage Risk Model Phase 1 Review 2014 - Volume I	C253-ATK-EV-REP-000-000002
HS2 2017 Southam Ecological Mitigation Site LS122, general arrangement (environmental)	1EW03-AEC-EV-DGA-CS07_CL24-034300
HS2 Technical Standard: Cultural Heritage GIS Specification	HS2-HS2-GI-SPE-000-000004
HS2 Technical Standard: Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy	HS2-HS2-EV-STR-000-000015
HS2 Urgent Works Package 1 Quality Plan	1EW03-FUS-QY-PLN-C000-000022
HS2 Technical Standard: Specification for historic environment investigations	HS2-HS2-EV-STD-000-000035
HS2 Technical Standard: Historic Environment Physical	HS2-HS2-EV-STD-000-000039

Archive Procedure	
HS2 Technical Standard: Historic Environment Digital Data Management and Archiving Procedure	HS2-HS2-EV-STD-000-000040
HS2 Enabling Works Information WI0200 General Constraints	1E001-HS2-PR-ITT-000-000098
HS2 Phase 1 EWC Central Geophysical Survey Report for North of Field Cottage (1803), Warks, Site Code 1C17NFCMG	1EW03-FUS-EV-REP-CS07_CL24-002684
HS2 Project Plan for Trial Trench Investigations at Project Plan for Trial Trench Investigations at Windmill Hill (LS093/94) and Southam (LS122)	1EW03-FUS-EV-REP-CS07_CL24-002689
HS2 Location Specific Written Scheme of Investigation for additional Urgent Works Trial Trench Investigations in Buckinghamshire, Northamptonshire and Warwickshire	1EW03-FUS-EV-REP-C000-002691, Revision: P02
HS2 2017 Change Control for Archaeological Monitoring at Southam (LS122)	1EW03-FUS-EV-CCR-CS07_CL24-0008172
Our Warwickshire, 2018 Southam: Possible Roman site with pottery and coins reported in area to south of Alko Works, Kineton Road, Southam (MWA19204)	https://www.ourwarwickshire.org.uk/content/catalogue_her/possible-roman-site-south-of-alko-works-kineton-road-southam
Roman Kilns Database, nd The pottery kilns of Roman Britain by Vivien Swan, https://romankilns.net/	

18.3 List of acronyms

AOD	Above Ordnance Datum
BGS	British Geological Society
BPGL	Below Present Ground Level
CBM	Ceramic Building Material
CFA	Community Forum Area
CIfA	Chartered Institute for Archaeologists
CoCP	Code of Construction Practice
DDBA	Detailed Desk Based Assessment
EMR	Environmental Minimum Requirements
ES	Environment Statement
EVE	Estimated Vessel Equivalent
GWSI: HERDS	Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy
HER	Historic Environment Record
LiDAR	Light Detection and Ranging
LSWSI	Location Specific Written Scheme of Investigation
MYA	Million Years Ago

NGR National Grid Reference
NISP Number of Identified Specimens
NSP Number of Specimens

19 Specialist Contributions

19.1 Finds Report

Roman Pottery

By Edward Biddulph

19.1.1 Artefactual material recovered from the evaluation is discussed below. All finds have been cleaned and quantified by material type in each context. The pottery was sorted by fabric and quantified by count, weight, and, where rims were present, estimated vessel equivalent (EVE), which measures rim percentage. Roman fabrics were assigned standard OA codes (Booth 2016). Table 1 illustrates the finds concordance.

Table 1 : Description of the Roman pottery by context

Context	Class	Description	Fabric code	Count	Weight (g)	Date
904	Pottery	Sandy reduced ware bead-rimmed jar (0.05 EVE)	R20	1	4	Mid C1-early/mid C2 AD
904	Pottery	Sandy oxidised ware with grey core and vesicular surface from organic inclusions (?shell)	O20	1	6	Roman
905	Pottery	Medium sandy reduced wares	R30	5	9	Roman
906	Pottery	Medium sandy reduced ware	R30	1	1	Roman
908	Pottery	Medium sandy reduced ware	R30	1	3	Roman
910	Pottery	Sandy oxidised ware	O20	1	1	Roman

Description

19.1.2 Ten sherds of pottery, weighing 24g, were dated to the Roman period. A bead-rimmed jar from context 904 is likely to date to the early Roman period. The remaining pottery cannot be closely dated, although one sherd from context 905 matches the description of Warwickshire

fabric R21 (Booth 1996), which was produced in Tiddington some 20km to the west during the 2nd century AD. Other kiln sites, however, are known at roughly the same distance away to the north, east and south of Southam (Roman Kilns Database, nd), and may have been among the sources of the pottery recorded here. The condition of the pottery is poor. The mean sherd weight (weight / sherd count) is just 2.4g, indicating an assemblage of very small, fragmented sherds. One sherd (context 908) is residual, and the rim sherd (context 904) is worn. These factors suggest that the pottery has undergone multiple episodes of redeposition and was found away from core areas of settlement.

Post-Roman Pottery

By John Cotter

19.1.3 Artefactual material recovered from the evaluation is discussed below. All finds have been cleaned and quantified by material type in each context. The pottery was sorted by fabric and quantified by count and weight. Table 2 illustrates the pottery description.

Table 2: Description of the Post-Roman pottery by context

Context	Class	Description	Fabric code	Count	Weight (g)	Date
908	Pottery	Midlands blackware	BLACK	1	3	18-E19C
908	Pottery	Misc. Roman greyware	ROM	1	3	Roman
1004	Pottery	Midlands blackware	BLACK	1	22	17-E19C
910	Clay pipe	Clay pipe		1	2	18C?

19.1.4 Four sherds of pottery (28g) were recovered from deposits 908 and 1004. These are fully described in the catalogue above. They comprise two body sherds of post-medieval Midlands blackware and a small worn body sherd of hard grey miscellaneous Roman sandy ware (residual in 908).

Other Ceramic Finds

19.1.5 A single small piece of clay tobacco pipe stem was recovered from deposit 910. The date is probably 18th century.

Ceramic Building Material and Fired Clay

By Cynthia Poole

19.1.6 The material was sorted by fabric and quantified by count and weight. Table 3 illustrates the ceramic building material and the fired clay.

Table 3: CBM and fired clay

Context	Class	Description	Fabric code	Count	Weight (g)	Date
905	Fired clay	Amorphous scrap	Clay	1	2	Undated
1004	CBM	Roof tile	Sandy	1	124	Late mediaeval – early post-medieval

Ceramic Building Material

19.1.7 A single fragment of ceramic building material was recovered from one deposit (905). It is a fragment of flat roof tile, probably part of a peg tile. It has a fairly crude finish and measures 15mm thick. It is made in an orange fine sandy clay containing sparse mica, rounded quartz sand up to 0.8mm, occasional black or red ferruginous inclusions up to o.5mm and rare small stone grits up to 2mm. Dating is necessarily imprecise, but it is probably late medieval - early post-medieval.

Fired Clay

19.1.8 A single fragment of fired clay (2g)was recovered from one deposit (905). It is made in smooth fine clay containing rounded clay pellets and rare shell grit inclusions up to 2mm and has been fired red, brown and black in colour. The piece retains no deliberately shaped surfaces and measures 7mm thick and 22mm long. Its function cannot be determined, but it is most likely to derive from oven or hearth structure.

Metal

By Ian R Scott

19.1.9 A single small hand-forged nail, was recovered from deposit 910. Not closely datable.

19.2 Environmental Reports

Animal Bone

By Lee G. Broderick

19.2.1 A total of 55 animal bone specimens were recovered from the Site (Tables 4 and 5), all collected by hand. In general, the specimens were both fragmentary and in very poor condition.

Description

19.2.2 The material was spot-dated on the basis of ceramic finds (seriation), none of which were recovered from contexts which also contained animal bone, meaning that these could not be dated. The specimens themselves were in a very poor condition and could not be identified

any further than a broad 'large mammal' (horse/cow size) category, to which all of the specimens belonged.

Conclusions

19.2.3 Being both unidentifiable and undated, it is not possible to draw any meaningful conclusions from the assemblage.

Recommendations regarding the conservation, discard and retention of material

19.2.4 The assemblage should not be considered for retention and no further work on the assemblage is recommended.

Table 4: Total NISP (Number of Identified Specimens) and NSP (Number of Specimens) figures per period

	Undated
large mammal	55
Total NISP	55
Total NSP	55

Table 5: NSP and total mass per context

Context	NSP	Mass (g)
904	1	23
905	53	50
906	1	9

20 Appendices

20.1 Appendix 1 - Contextual Summary by Trench

Trench 9						
General description					Orientation	N-S
Trench had a NW-SE ditch with three fills and a NW-SE furrow. Also had a modern land drain which cut ditch 903. Consists of topsoil, subsoil and natural geology of limestone in a matrix of brown grey silty clay.					Length (m)	13.5
					Width (m)	7.5
					Avg. depth (m)	0.4
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
900	Topsoil		0.26-0.28	Loose dark grey brown silty clay		
901	Subsoil		0.06-0.08	Firm mid orange grey brown silty clay		
902	Natural			Limestone in a mid-brown grey silty clay matrix with patches of yellow brown silty clay		
903	Cut	2.60	0.60	Ditch orientated NW-SE. Concave gully at the base and flat steps on each side. Truncated partly by land drain 909.		
904	Fill	2.54	0.20	Fill of furrow 911 (Initially thought to be upper fill of 903). Mid dark grey silty clay. Rare stones up to 20mm. Note during post-excavation, following excavation of Trench 11, this deposit was reinterpreted as the fill of a furrow 911 with the same profile as Furrow 907 (flatish base, shallow sides). Cut number 911 given in post-excavation	Pottery, animal bone	Mid C1-early/mid C2 AD (residual? – unclear)
905	Fill	2.60	0.28	Middle fill of 903. Mid brown grey silty clay. Frequent small stones up to 0.14mm	Pottery, animal bone	Roman

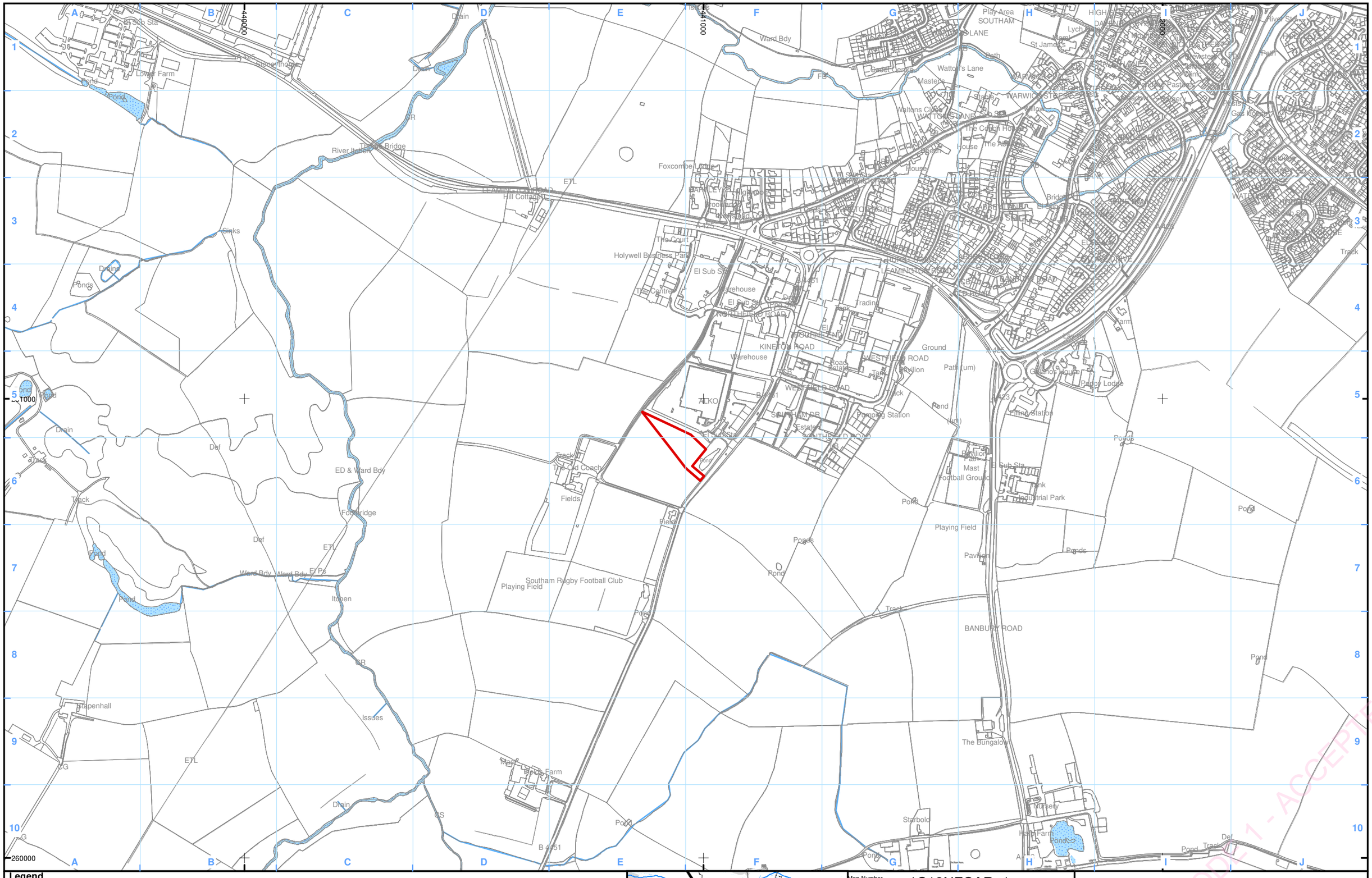
906	Fill	0.60	0.14	Lower fill of 903. Blue yellow grey clay with moderate amount of stones up to 0.12mm. Natural weathering of natural?	Pottery, animal bone	Roman
907	Cut	3.6	0.28	Furrow orientated WNW-ESE. Part of ridge and furrow seen across the area. Flat base, shallow sides		
908	Fill		0.28	Fill of 907. Mid brown grey clay.	Pottery (also residual Roman)	18th-early 19th century
909	Cut	0.40	0.58	Land drain		
910	Layer			Fill of land drain 909	Pottery (residual Roman), clay pipe	18th century?
911	Cut	2.54	0.20			

Trench 10						
General description					Orientation	N-S
Trench contained two WNW-ESE furrows. Consists of topsoil, subsoil and natural geology of light yellow brown silty clay and brown clay.					Length (m)	16.5
					Width (m)	10
					Avg. depth (m)	0.35
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1000	Topsoil		0.2	Dark brown silty clay		
1001	Subsoil		0.15	Brown grey clay		
1002	Natural			Mixed natural deposit consisting of large Cornbrash stones in a light yellow brown silty clay and brown clay deposits		
1003	Cut			Furrow. WNW-ESE aligned. Shallow sides, flat base. Part of wider ridge and furrow across the site		
1004	Fill			Fill of furrow 1003. Mid brown grey clay. Few small natural stones	Pottery, roof tile	Pottery: 17th-early 19th century. Roof tile: late med

						to early post-med
1005	Cut	2.4	0.14	Furrow. WNW-ESE aligned. Shallow sides, flat base.		
1006	Fill			Mid brown clay with small natural stones		

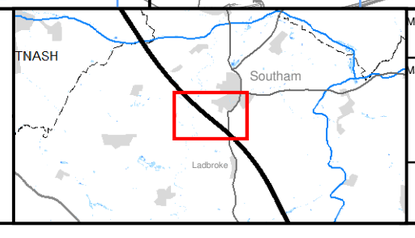
Trench 11						
General description					Orientation	NNE-SSW
Trench contained a ditch, two furrows and a tree throw, none of which were excavated. A test intervention was excavated through one of the furrows, although this was not recorded. Consisted of topsoil and subsoil overlying a natural geology of limestone in a matrix of brown grey silty clay.					Length (m)	22.50
					Width (m)	15.80
					Avg. depth (m)	0.39
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1100	Layer	-	0.28	Topsoil: loose, dark brownish grey, silty clay	-	-
1101	Layer	-	0.11	Subsoil: moderately firm, mid to dark orange brown, silty clay	-	-
1102	Layer	-	-	Natural geology: mixed light to mid brownish grey silty clay and limestone in a light to mid brownish grey silty clay matrix	-	-

20.2 Appendix 2 - Figures



Legend

- Site Extent
- Watercourse
- Water Body



Map Number: 1C18NFCAR_1

Map Name:

Southam
SITE LOCATION PLAN

Community Forum Area (CFA16)
Ladbroke & Southam

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway, Birmingham B4 6GA.

Scale at A3: 1:7,500

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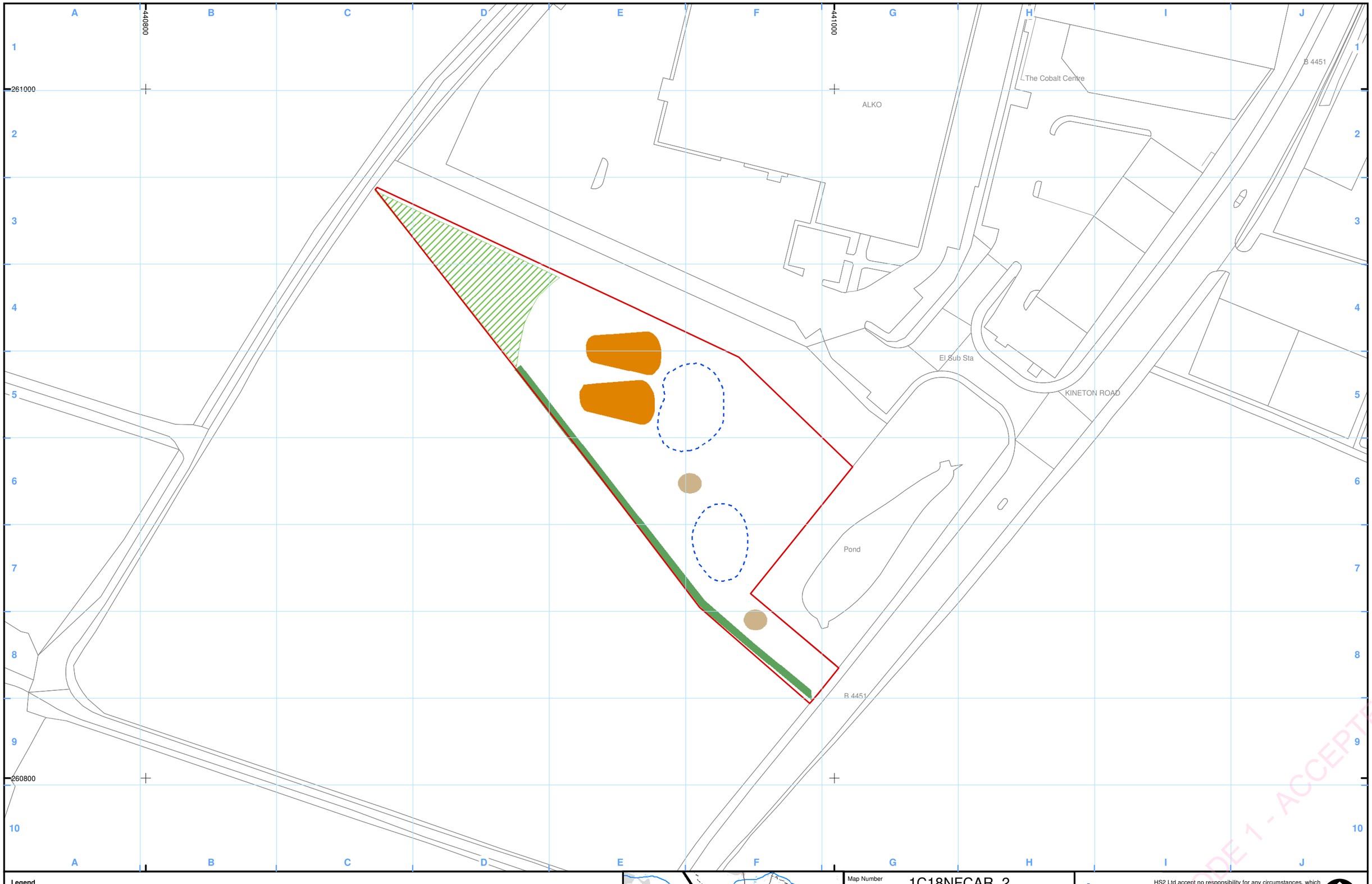
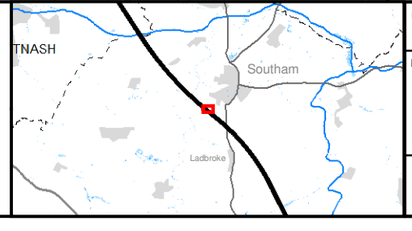


Legend

- Site Extent

Engineering Design

- Habitat mitigation pond
- Reptile basking bank
- Hibernacula
- Woodland planting
- Boundary hedge



Map Number: 1C18NFCAR_2

Map Name

Southam
ENGINEERING DESIGN PLAN

Community Forum Area (CFA16)
Ladbroke & Southam

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Metres

Doc Number: Figure 2
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Date: 11/07/18

261000 440800 441000 260800

ALKO

El Sub Sta

KINETON ROAD

Pond

B 4451

The Old Coach House

The Fields House

7 8 23 22 25 24 9 10 11 13 26 20 14 4 15 19 17 21

Legend

- Site Extent
- Evaluation trench

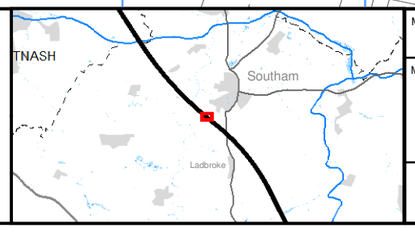
Interpretation
- 5 Labels

Former Cultivation
- Ridge and furrow
- Other

Linear Fills
- Probable
- Possible

Discrete Fills
- Probable

Areas
- Highlighted area
- Texture



Map Number 1C18NFCAR_3

Map Name

Southam

TRENCH LOCATION AND GEOPHYSICAL SURVEY

Community Forum Area (CFA16)
Ladbroke & Southam

Scale at A3: 1:1,000

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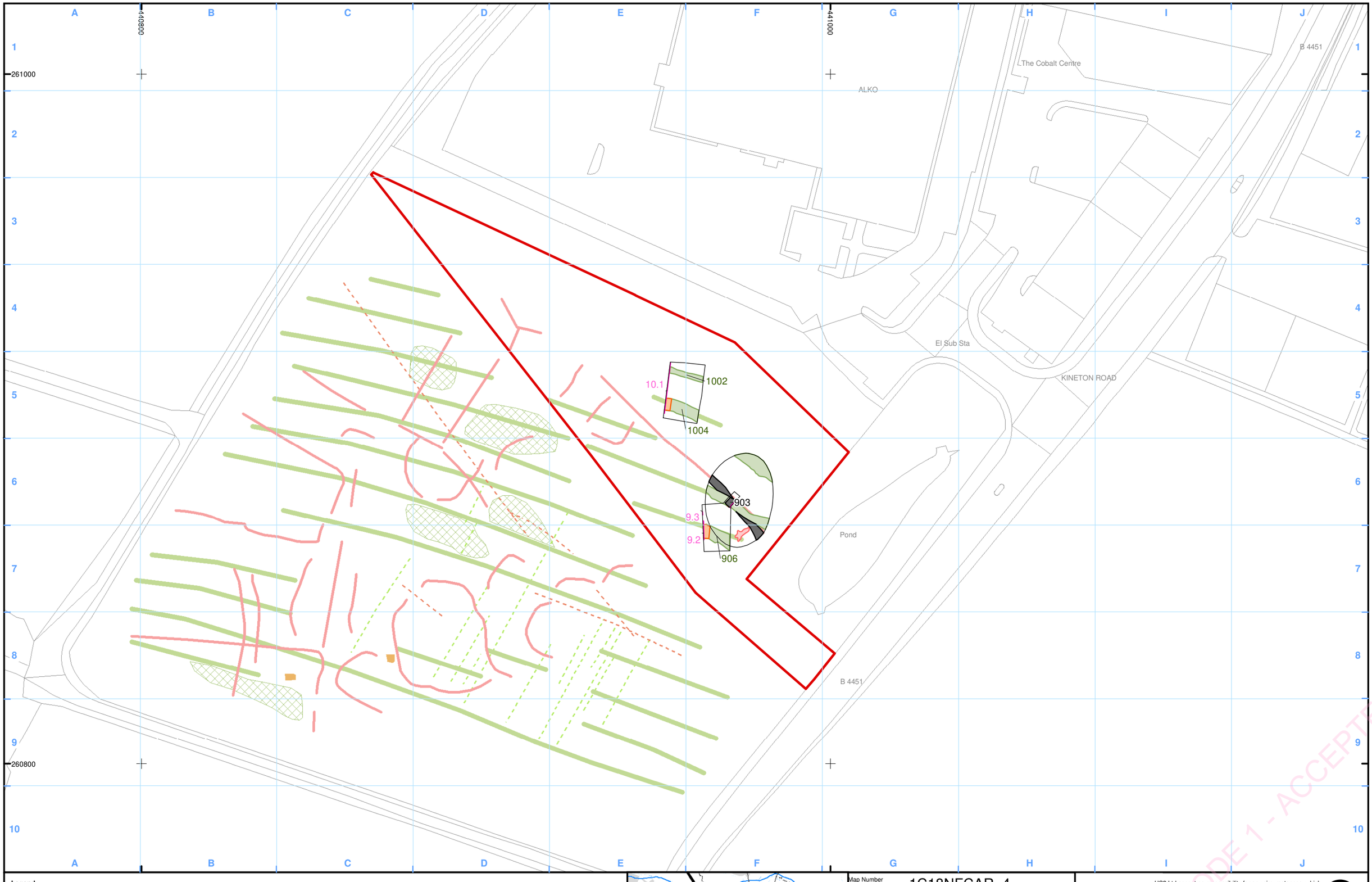
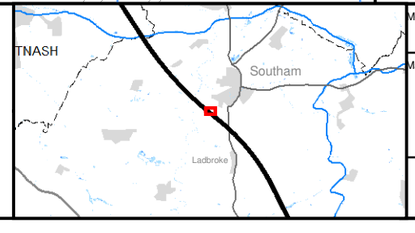
Doc Number: Figure 3
This figure forms part of report 1EW03-FUS-EV-REP-CS07_CL24-007835. Rev C01

Date: 11/07/18



Legend

- Site Extent
- Evaluation trench
- Section line
- Cut feature
- Excavated intervention
- Treethrow
- Furrow
- Possible linear fill
- Probable linear fill
- Probable discrete fill
- Ridge and furrow
- Former cultivation other
- Texture



Map Number: 1C18NFCAR_4

Map Name:

Southam
EVALUATION TRENCH RESULTS

Community Forum Area (CFA16)
Ladbroke & Southam

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Doc Number: Figure 4
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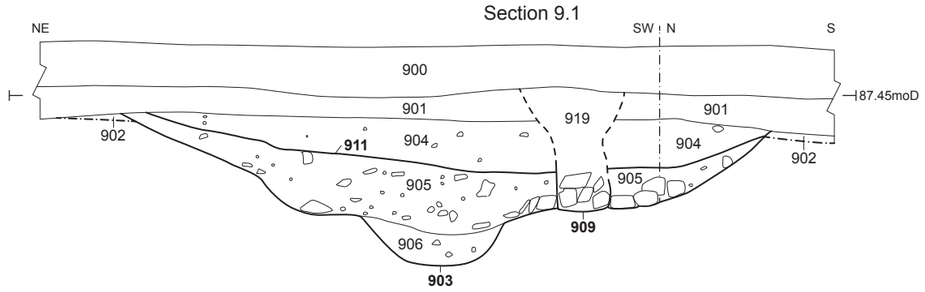
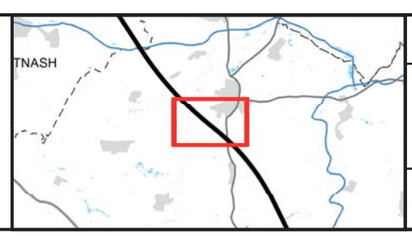


Trench 9. Ditch 903 facing south-east

Legend

Stones



Map Number 1C18NFCAR_5

Map Name

Southam
Selected section and photo

Community Forum Area CFA16
Ladbroke and Southam

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Doc Number: Figure 5

Date: 02/02/18

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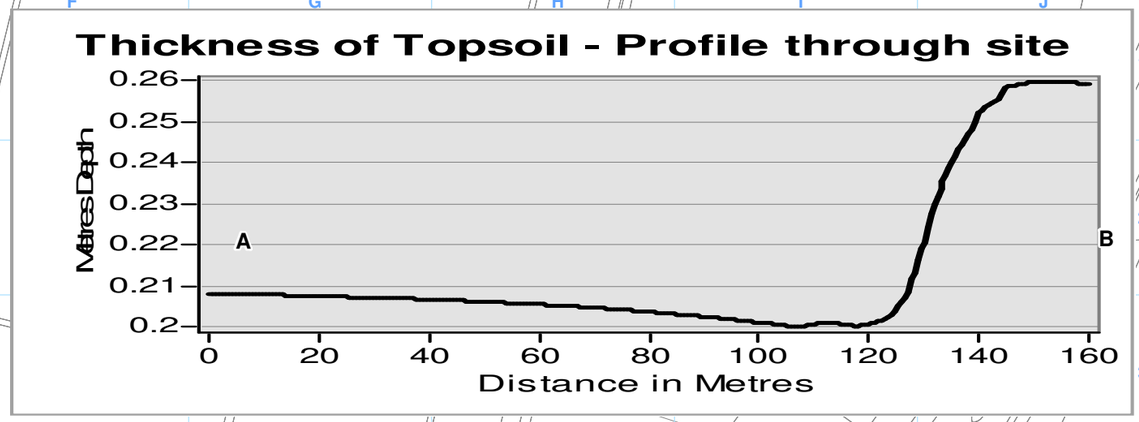


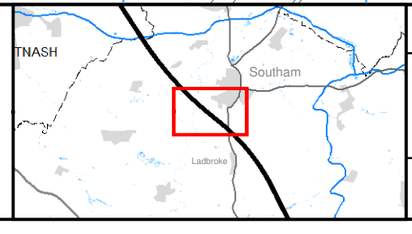
Legend

- Site boundary
- Trench location

Depth in Metres

0.27

0.2



Map Number 1C18NFCAR_6

Map Name

Southam
SOIL CONTOUR PLAN

Community Forum Area (CFA16):
Ladbroke & Southam

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Scale at A3: 1:1,000

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Metres

Doc Number: Figure 6
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Date: 11/07/18