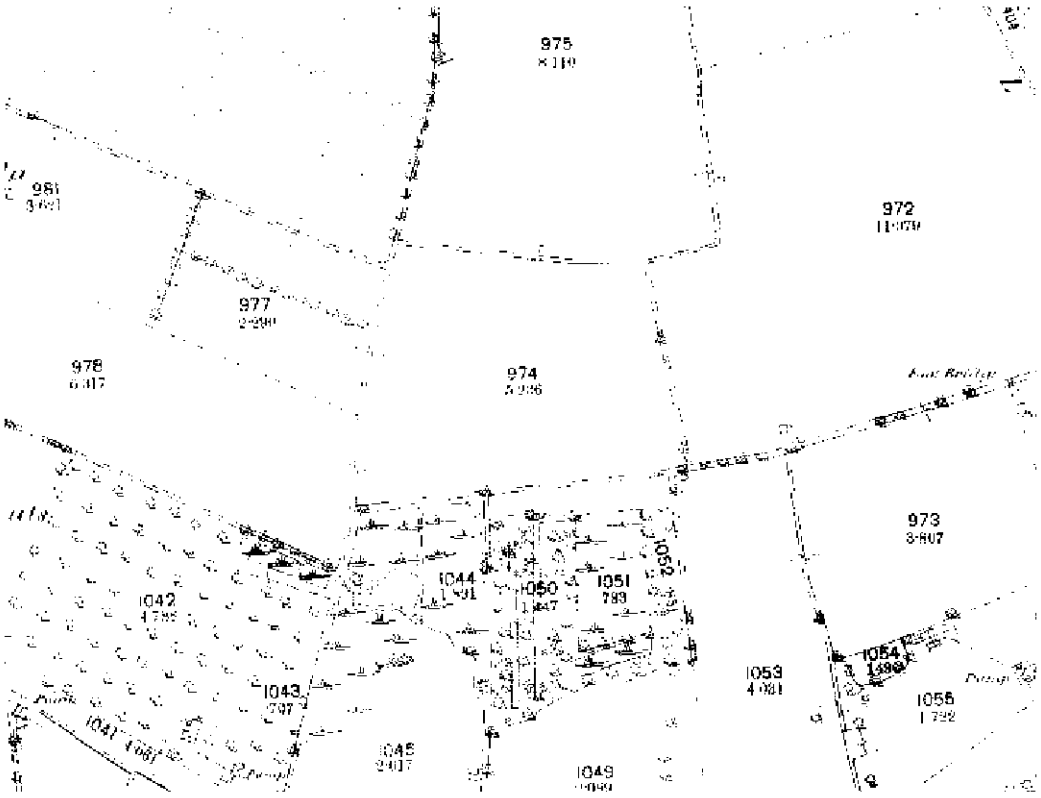
Archaeological Evaluation Report

Land at Spalding Lincolnshire

For SAS Energy, EDF Renewables' C&I Solar Division



Author: D Garner

Report Number: 25-0013

Dee Archaeological Services

Archaeological Evaluation Report

Land at Spalding Lincolnshire

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Abstract

Planning permission has been secured (H16-0871-24) for ground mounted solar PV panels and associated works at the site in Spalding. In line with a request for pre-determination archaeological evaluation trenching this document outlines the results of the excavation of nine trenches across the site, as laid out in an approved written scheme of investigation (Wessex Archaeology, 2025b).

The archaeological fieldwork was carried out between the 17th to 26th of September 2025 by Dee Archaeological Services Ltd (DAS) on behalf of SAS Energy, EDF Renewables' C&I Solar Division.

All of the geophysical anomalies targeted by the trial trenching were positively identified and the excavated evidence generally served to support the interpretations offered in the Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a).

The majority of the archaeological features identified were of Post-medieval date and agricultural in nature.

The only feature of demonstrably early date was linear feature [108] in Trench 1 but for the reasons listed above it seems unlikely that this is anomaly 4002 identified in the Magnetic Gradiometer Survey Report.

Anomaly 4002 is probably represented by linear features [107] and [405] in Trench 1 and 4 respectively. The fills of these features remain undated.

A small group of undated features were identified within Trenches 1, 2 and 4 in LP_002 which were not detected by the magnetic gradiometer survey. The lack of evidence for domestic activity within the fills of these features may support an agricultural function such as drainage or land division.

The dating of feature [108] places it within the later Roman and earlier Anglo-Saxon period (sometimes referred to as the Late Antique). The data recovered from the evaluation trenching makes a small contribution to the East of England Research Framework.

1 Introduction

1.1 This report details the results of an Archaeological Evaluation carried out land adjacent to Pilgrim's Pride Limited, Fulney Lane, North Spalding, Lincolnshire. The archaeological fieldwork was carried out between the 17th to 26th of September 2025 by Dee Archaeological Services Ltd (DAS) on behalf of SAS Energy, EDF Renewables' C&I Solar Division.

1.2 Planning permission has been secured (H16-0871-24) from South Holland District Council (SHDC) for the change of use of agricultural land and development for Solar array of up to 1.64 MWp and associated infrastructure including connection to Pilgrim's Pride Factory adjacent north.

1.3 This document has been prepared in response to Planning Conditions 9 and 10 which require a programme of archaeological work commencing with trial trenching and geoarchaeological sondages in accordance with an archaeological brief supplied by the Lincolnshire County Council Historic Environment Team (LCC HET). A total of 9 trenches and 9 geoarchaeological sondages were excavated at predetermined locations in line with an approved written scheme of investigation (WSI) (Wessex Archaeology, 2025b).

1.4 The site is located on land between the Coronation Channel and Low Road (A16), to the immediate west of Spalding, at NGR (TF) 526258, 323083 (Figure 1 & Figure 2). A site code of 25-0013 was assigned by Dee Archaeological Services prior to works commencing.

1.5 The work was carried out in accordance with a WSI (Wessex Archaeology, 2025b) approved by LCC HET. Works were carried out in line with the Chartered Institute for Archaeologists (CIfA) Code of Conduct (CIfA, 2022). All works were carried out in line with the CIfA standard for archaeological field evaluation (CIfA, 2023a) and universal guidance for archaeological field evaluation (CIfA, 2023b).

2 Planning Background

2.1 Planning

2.1.1 In December 2024 the Department for Levelling Up, Housing & communities issued the revised National Planning Policy Framework (NPPF) (DLUHC, 2024). Chapter 16 of the NPPF sets out policies for the conservation and enhancement of the historic environment.

2.1.2 The NPPF indicates planning decisions should be made based on the significance of Heritage Assets. These are defined as buildings, monuments, sites, places, areas or landscapes positively identified as having a degree of significance meriting consideration in planning decisions.

2.1.3 In considering any planing applications the Local Planning Authority is South Holland District Council (SHDC) who take archaeological advice from Ruben Lopez Catalan of Historic Environment Team at Lincolnshire County Council (LCC HET).

2.1.4 Planning permission has been granted (H16-0871-24) for the change of use of agricultural land and development for Solar array of up to 1.64 MWp and associated infrastructure including connection to Pilgrim's Pride Factory adjacent north.

2.1.5 The planning permission had two conditions attached which are relevant to archaeology these state:

Condition 9

No development shall take place until a written scheme of archaeological investigation has been submitted to and approved in writing by the Local Planning Authority. This scheme should include the following and should be in accordance with the archaeological brief supplied by the Lincolnshire County Council Historic Environment advisor on behalf of the Local Planning Authority:

1. An assessment of significance and proposed mitigation strategy (i.e. preservation by record, preservation in situ or a mix of these elements).
2. A methodology and timetable of site investigation and recording
3. Provision for site analysis
4. Provision for publication and dissemination of analysis and records
5. Provision for archive deposition
6. Nomination of a competent person/organisation to undertake the work
7. The scheme to be in accordance with the Lincolnshire Archaeological Handbook.

The archaeological site work shall only be undertaken in accordance with the approved written scheme.

Reason: To ensure the preparation and implementation of an appropriate scheme of archaeological mitigation in accordance with Section 16 of the National Planning Policy Framework, December 2024. This issue is integral to the development and therefore full

details need to be finalised prior to the commencement of works. This Condition is imposed in accordance with Policy 29 of the South East Lincolnshire Local Plan, 2019.

Condition 10

The applicant shall notify the Lincolnshire County Council Historic Environment Department in writing of the intention to commence at least fourteen days before the start of archaeological work required in connection with Condition 9 above in order to facilitate adequate monitoring arrangements.

Reason: To ensure satisfactory archaeological investigation and retrieval of archaeological finds in accordance with Section 16 of the National Planning Policy Framework, December 2024. This Condition is imposed in accordance with Policy 29 of the South East Lincolnshire Local Plan, 2019.

2.1.6 Consultation with SHDC and LCC HET was undertaken following the submission of a historic environment desk based assessment and geophysical survey. These documents identified the potential for archaeological remains dating to the Romano-British and medieval period. As such pre-determination trenching and geo-archaeological investigation was recommended to determine the nature of the potential features.

2.1.7 This report seeks to address the requirements of conditions 9 and 10.

2.2 Previous Work

2.2.1 Wessex Archaeology submitted a Historic Environment Desk Based Assessment (Wessex Archaeology, 2024) in 2024, which was followed by a geophysical survey in 2025 (Wessex Archaeology, 2025a).

2.2.2 The HEDBA identified the site lay within an area of archaeological potential, derived from Romano-British activity within a 1km radius and potential medieval agricultural activity within the site.

2.2.3 The geophysical survey identified several previously mapped and unmapped agricultural features in the form of field boundaries, ditches, drainage, and an area of former coppice and marshland.

2.3 Statutory Designations

2.3.1 The site does not lie within a conservation area, nor are there any listed buildings, scheduled monuments, registered parks and gardens, or registered battlefields in the site. To the east of the site is the Spalding Conservation Area which covered the town centre and historic settlement.

2.4 Geology & Topography

2.4.1 The site lies in an area comprising Oxford Clay Formation – mudstone, with superficial deposits of Tidal flat clay and silt (British Geological Survey, 2025).

2.4.2 The site is located on a parcel of land to the east of the main settlement, between the Coronation Channel and the A16, the ring road around Spalding. To the

north and east are large expanses of fen and agricultural land, with the site itself agricultural and currently used for grazing sheep.

2.4.3 The site is spread across two fields, sub-rectangular in shape and 4.95 hectares in size. The fields are relatively flat with an average elevation of approximately 2.5m aOD (above Ordnance Datum).

3 Archaeological & Historic Background

3.1 This section should be seen as a summary of the development of the site and relevant surrounding area, and should not be seen as a complete history of the area.

3.2 An in-depth historic environment desk based assessment was completed by Wessex (Wessex Archaeology, 2024) in 2024, below is a summary of those findings.

Period	From		To
Palaeolithic	450,000		12,000 BC
Mesolithic	12,000		4,000 BC
Neolithic	4,000		1,800 BC
Bronze Age	1,800		600 BC
Iron Age	600 BC		43 AD
Roman	43		410 AD
Early Medieval	410		1066 AD
Medieval	1066		1485 AD
Post Medieval	1485		1750 AD
Industrial	1750		1901 AD
Modern	1901		Present

Table 1 - Time periods used in this report

3.2.1 No Prehistoric activity has been identified within the site. During this period it would likely have been an area of natural marshes and forestry, with gradual clearance from the late Neolithic onwards.

3.2.2 Roman activity has been recorded to the north and east of the site, finds of briquetage suggesting salt working; deposits and features; pottery and a possible burial have all been identifed.

3.2.3 During the early medieval period Lincolnshire was settled by tribal units, one of which is recorded as the 'Spalda peoples' in the vicinity of Spalding. An established settlement was recorded in the 1086 Domesday Survey with 116 families, as well as, markets, salt-pans, woods and fisheries. The original settlement lay 1km to the west of the site.

3.2.4 The 14th century town was one of wealth, acting as a commercial centre and port for the local area. Ditches trackways and pits have been identified, with evidence of hops processing and ironworking to the north of the site. Field systems

and pottery has also been recovered from the wider area, the site was thought to be part of the agricultural landscape during this period.

3.2.5 Spalding remained an important place of commerce, growing throughout the post medieval period; it was connected by an important water network, including the River Welland which was canalised in 1743. Archaeological evidence suggests the site remained on the edge of the settlement, which was slowly spreading towards the west of the site.

3.2.6 Historic mapping shows that in 1888 the site was agricultural land with an area of marsh in the south. Minor changes to field boundaries are seen on the 1931 Ordnance Survey (OS), with the marshy area reduced but still present. The 1968 OS shows the site in its present (2025) state.

4 Aims & Objectives

4.1 Aims

4.1.1 The aims of the evaluation were:

- provide information about the archaeological potential of the site; and
- inform either the scope and nature of any further archaeological work that may be required, or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource) or management strategy.

4.2 Objectives

4.2.1 The objectives of the project were:

- determine the presence or absence of archaeological features, deposits, structures,
- artefacts or ecofacts within the specified area;
- establish, within the constraints of the evaluation, the extent, character, date, geo-archaeological context, condition and quality of any surviving archaeological remains;
- place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and
- make available information about the archaeological resource within the site by reporting on the results.

4.3 Specific Objectives

4.3.1 All archaeological projects aim to feed information into the East of England Research Framework (Research Frameworks, 2024) to help develop areas of research relating to the historic environment that require attention. The specific objectives were to:

- test the results of the geophysical survey (Wessex Archaeology, 2025a);
- examine evidence for remains of Post-medieval field boundaries (known from historic maps) and assess if this has impacted on any earlier remains.

5 Methodology

5.1 The detailed methodology can be found in the approved WSI (Wessex Archaeology, 2025b). A summary of the site methodology can be found below. A total of 9 trenches were excavated across the site based on an approved trench layout set out in the WSI. All trenches locations were recorded with Trimble GPS equipment. The trenches were 50m by 1.8m in length, across two fields and located to ensure geophysical anomalies were targetted.

5.2 The evaluation trenching involved the monitoring of removal of overburden and modern fill deposits by machine, until archaeological features, or natural deposits, were exposed. All features were cleaned and investigated by hand and located by Trimble GPS equipment.

5.3 Trenches were excavated by machine under archaeological supervision in spits. Where features or significant deposits were identified, these were cleaned using hand tools and recorded to determine extent, function, date and relationship to adjacent features. All features were cleaned and recorded via pro-forma context sheets, drawn records at 1:10 and 1:50 on permatrace, and a full photographic record, with a register maintained on site.

5.4 All finds recovered were cleaned and recorded in accordance with Standards and Guidance for the collection, documentation, conservation and research of Archaeological Materials (CIfA, 2020).

5.5 Geoarchaeological sondages were excavated in the one end of each archaeological trench. Excavation was done by a mechanical excavator in spits, under the supervision and instruction of the geo-archaeological specialist, Matthews Law.

5.6 Works were carried out in line with the Chartered Institute for Archaeologists (CIfA) Code of Conduct (CIfA, 2022). All works were carried out in line with the CIfA standard for archaeological field evaluation (CIfA, 2023a) and universal guidance for archaeological field evaluation (CIfA, 2023b). All works were carried out in accordance with the Historic England guidance document MoRPHE (Historic England, 2015).

5.7 The site code 25-0013 was allocated by DAS and was used on all documentary archives.

5.8 In accordance with current Museum Service standards born-digital data, such as this report, digital photographs, database and GIS data, with appropriate metadata, will be deposited with a CoreTrustSeal Repository, currently the Archaeology Data Service (ADS), making the archive publicly accessible. Each report, once approved, is subsequently made available for inclusion and publication by digital means through the Archaeological Data Service (ADS) via OASIS.

6 Results

6.1 A series of 9 trenches, measuring 50m by 1.8m in plan, were excavated across the site (Figure 2). The trenches were all excavated in line with the approved WSI (Wessex Archaeology, 2025b).

6.2 The upper stratigraphic sequence in all nine trenches was identical with a surface layer of turf and topsoil up to 150 mm thick and an underlying cultivation soil up to 250mm thick. The clay-rich cultivation soil was generally very dry and compact and tended to break up in lumps during mechanical excavation rather than becoming loose and granular. This is assumed to be the result of the warm dry weather conditions during the spring/summer of 2025. The cultivation soil directly overlay deep deposits of alluvium which are termed 'natural' in the results section. These deposits are described in greater detail in the geoarchaeological section (see also Appendix 2) of this report. Trench specific archaeological results are detailed by trench as follows.

6.3 Trench 1

6.3.1 Trench 1 (Plate 1) was located towards the northwest corner of the site and aligned northeast to southwest. It was located to investigate geophysical anomaly '4002' (Wessex Archaeology, 2025a, pp 6 and Figure 3) and more generally to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.3.2 Two relatively large linear features [107] and [108] were identified cutting in to the natural alluvium across Trench 1 within the vicinity (and on the alignment) of geophysical anomaly '4002'. These features were fairly parallel to one another and both were roughly aligned northwest to southeast; only being separated by a distance of approximately 1.5m. As such, there was no physical relationship between these features to clarify if they were contemporary or if one succeeded the other. Both of these features were investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.3.3 Linear feature [107] was fairly shallow being 2.9m wide and up to 0.4m deep (Plate 2). The primary fill (109) consisted of interleaved lenses of blue/grey silty clay and light yellow/brown silty sand up to 0.1m thick which appeared to line the base of the cut. Upper fill (104) was a mid yellow/brown sandy silt up to 0.3m thick. No artefacts or other forms of dating evidence were recovered from these fills.

6.3.4 Linear feature [108] was more substantial being 4.2m wide and in excess of 1.8m deep (Plate 3). The base of the feature was not reached within the machine excavated sondage but the sides could be seen to be tapering towards a base at the limit of excavation. The lower fill (106) consisted of a mid blue/grey silty clay with lenses of black organic material within it. Upper fill (105) was a fairly sterile mid

yellow/brown sandy clay with occasional lenses of white sand and a thickness of up to 1.5m. No artefacts or other forms of dating evidence were recovered from these fills. However, a bulk sample was recovered from lower fill (106) and organic material (a small twig fragment) was submitted for C14 dating providing a date of 363-538 cal AD (94.8% probability) (BETA 779479).

6.3.5 To the southwest of linear feature [108] two shallow archaeological features [111] and [112] were identified cutting in to the natural alluvium (Plate 4). The first was a broken curvilinear feature [111] represented by four individual segments which formed an arc approximately 5m long. The northeastern segment of [111] was sample excavated and characterised as a 'U' shaped profile 0.7m wide and 0.35m deep. The fill (103) was a mid yellow/brown sandy silt with patches of dark reddish brown iron mineralisation and lenses of pale yellow sand (Plate 5); which produced no artefacts or other forms of dating evidence. A bulk sample was taken from fill (103) which was unproductive.

6.3.6 The second feature was a linear feature [112] roughly aligned northwest to southeast. Linear [112] cut across curvilinear feature [111] at a point between the broken segments of [111] and it was therefore not possible to confidently establish the stratigraphic relationship between the two. The southeastern end of [112] was sample excavated and characterised as a 'V' shaped profile 0.9m wide and 0.38m deep. The fill (102) was a mottled mid yellow/brown and mid blue grey sandy silt with flecks of white shell and a lens of pale yellow sand (Plate 6); which produced no artefacts or other forms of dating evidence. A bulk sample was taken from fill (102) which was unproductive.

6.3.7 At the northeastern end of Trench 1 two shallow linear features [113] and [114] were identified cutting in to the natural alluvium on a northeast to southwest alignment (Plate 7). The features were roughly parallel and approximately 5m apart. The northeastern most feature [113] was sample excavated and characterised as a 'U' shaped profile with a stepped base 0.6m wide and 0.32m deep. The fill (101) was a was a mid yellow/brown sandy silt with patches of dark reddish brown iron mineralisation (Plate 8); which produced no artefacts or other forms of dating evidence. A bulk sample was taken from fill (101) which was unproductive.

6.3.8 The southwestern feature [114] on investigation was found to have virtually no depth and had largely been removed by previous cultivation on the site.

6.4 Trench 2

6.4.1 Trench 2 was located towards the northeast corner of the site and aligned northeast to southwest. It was located to investigate geophysical anomaly '4006' (Wessex Archaeology, 2025a, pp 6 and Figure 3) and more generally to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.4.2 A relatively large linear feature [203] was identified cutting in to the natural alluvium across Trench 2 within the vicinity (and on the alignment) of geophysical anomaly '4006'. The geophysical survey report noted that this feature was "in the same position as a former field boundary recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) and is no longer recorded on the 1931 OS map" (Wessex Archaeology, 2025a, pp 6). The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.4.3 Linear feature [203] was located towards the south western end of Trench 2 and was aligned northwest to southeast. The cut was characterised as having a 'U' shaped profile being 2.6m wide and up to 1.2m deep (Plate 9). The primary fill (208) consisted of a blue/grey silty clay up to 0.6m thick. Above this was a band of dark grey/brown silty clay (207) which was up to 0.2m thick. Upper fill (204) was a mid yellow/brown sandy silt up to 0.4m thick. No artefacts or other forms of dating evidence were recovered from these fills.

6.4.4 A smaller linear feature [205] was aligned at right angles to linear [203] on a northeast to southwest alignment. It was established that the northeastern end of [205] had been truncated by linear [203]; making it a stratigraphically earlier feature. A section of [205] was sample excavated and characterised as having a profile with sloping sides and a flat base 1.4m wide and 0.48m deep. The fill (206) was a mid yellow/brown sandy silt with patches of dark reddish brown iron mineralisation and lenses of pale yellow sand (Plate 10); which produced no artefacts other than some fragments of animal bone. A bulk sample was taken from fill (206) which was unproductive.

6.5 Trench 3

6.5.1 Trench 3 (Plate 11) was located towards the central western side of the site and aligned northwest to southeast. It was located to investigate geophysical anomaly '4000' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3) and more generally to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.5.2 A relatively large linear feature [305] was identified cutting in to the natural alluvium across Trench 3 within the vicinity (and on the alignment) of geophysical anomaly '4000'. The geophysical survey report noted that this feature was "likely to be the remains of a former unmapped field boundary predating the available mapping" (Wessex Archaeology, 2025a, pp 5-6). The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.5.3 Linear feature [305] was located at the south eastern end of Trench 3 and was aligned northeast to southwest (Plate 12). The cut was characterised as having a 'U' shaped profile being 3.8m wide and up to 0.9m deep (Plate 13). The primary fill (304) consisted of a blue/grey silty clay up to 0.4m thick. Upper fill (303) was a

mid yellow/brown sandy silt up to 0.5m thick. A ceramic land drain (307) of later 19th or 20th century date had been inserted in to upper fill (303). No artefacts or other forms of dating evidence were recovered from these fills.

6.5.4 To the northwest of linear [305] a series of three ceramic land drains (308), (309) and (310) were identified at regular intervals cutting in to the top of the natural alluvium. All three were on a similar alignment to linear [305] and were of later 19th or 20th century date.

6.5.5 To the southeast of linear [305] a modern blue plastic water pipe (306) was located on an east to west alignment. This was assumed to be a 'live' service but was not damaged or tested during the archaeological work.

6.5.6 No other archaeological features were identified in Trench 3.

6.6 Trench 4

6.6.1 Trench 4 (Plate 14) was located towards the central eastern side of the site and aligned northwest to southeast. It was located to investigate geophysical anomalies '4001' and '4002' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3) and more generally to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.6.2 A relatively large linear feature [405] was identified cutting in to the natural alluvium across the southeastern end of Trench 4 within the vicinity (and on the alignment) of geophysical anomaly '4002'. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.6.3 Linear feature [405] was fairly shallow being 3m wide and up to 1m deep (Plate 15) and was aligned northwest to southeast. The primary fill (409) consisted of interleaved lenses of blue/grey silty clay, light yellow sand and light yellow/brown silty sand up to 0.2m thick which appeared to line the base of the cut. Upper fill (406) was a mid yellow/brown sandy silt up to 0.8m thick. No artefacts or other forms of dating evidence were recovered from these fills. The similarity of the dimensions and fills of linear [405] with linear [107] in Trench 1 are likely to be significant.

6.6.4 Towards the centre of Trench 4 a second large linear feature [403] was also identified aligned northwest to southeast. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket. The cut was characterised as having a slightly stepped profile being 2.8m wide and up to 0.9m deep (Plate 16). The primary fill (410) consisted of a dark grey silty clay up to 0.1m thick. Above this was a fill (411) consisting of interleaved lenses of grey silt and white sand up to 0.2m thick. Upper fill (404) was a mid yellow/brown sandy silt up to 0.4m thick. A ceramic land drain (412) of later 19th or 20th century date had been

inserted in to upper fill (404). No artefacts or other forms of dating evidence were recovered from these fills.

6.6.5 A smaller linear feature [407] was identified towards the northwestern end of Trench 4 on a northwest to southeast alignment. It was established that the southeastern end of [407] had been truncated by a modern service [413]; making it a stratigraphically earlier feature. A section of [407] was sample excavated and characterised as having a profile with sloping sides and a flat base 1.4m wide and 0.46m deep. The fill (408) was a mid yellow/brown sandy silt with patches of dark reddish brown iron mineralisation and lenses of pale yellow sand (Plate 17); which produced no artefacts other forms of dating evidence. A bulk sample was taken from fill (408) which was unproductive.

6.6.6 Immediately to the southeast of linear [407] was another linear feature [413] on an east to west alignment. Linear [413] could be seen to truncate the southeastern end of linear [407]. Sample excavation of the fill (414) demonstrated that the linear contained a modern orange corrugated plastic pipe (Plate 18).

6.6.7 To the northwest of linear [405] a modern service trench [415] was located on an east to west alignment. This was assumed to be a 'live' water service (as seen in Trench 3) but was not damaged or tested during the archaeological work.

6.6.8 No other archaeological features were identified in Trench 4.

6.7 Trench 5

6.7.1 Trench 5 (Plate 19) was located towards the central western side of the site and aligned northeast to southwest. It was located to investigate a linear geophysical anomaly which was not numbered in the survey but is discussed in relation to anomaly '4005' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3). The geophysical survey report noted that "Given the orientation it may be another former field boundary however its weak and narrow nature is more reminiscent of a drain or cultivation trend" (Wessex Archaeology, 2025a, pp 6). The trench was also located to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.7.2 A relatively large linear feature [505] was identified cutting in to the natural alluvium across Trench 5 within the vicinity (and on the alignment) of geophysical anomaly. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.7.3 Linear feature [505] was located at the southwestern end of Trench 5 and was aligned east to west. The cut was characterised as having a 'V' shaped profile being 2.9m wide and up to 1.3m deep (Plate 20). The primary fill (504) consisted of a blue/grey silty clay up to 0.6m thick. Upper fill (503) was a mid yellow/brown silty clay up to 0.7m thick. A ceramic land drain (506) of later 19th or 20th century date

had been inserted in to upper fill (503). No artefacts or other forms of dating evidence were recovered from these fills.

6.7.4 To the northeast of linear [505] a series of five ceramic land drains (508) to (512) were identified at regular intervals cutting in to the top of the natural alluvium. All five were on a similar alignment to linear [505] and were of later 19th or 20th century date.

6.7.5 No other archaeological features were identified in Trench 5.

6.8 Trench 6

6.8.1 Trench 6 (Plate 21) was located towards the centre of the site and aligned northeast to southwest. It was located to investigate a linear geophysical anomaly '4005' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3). The geophysical survey report noted that "This anomaly corresponds with a former ditched field boundary recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) to 1955" (Wessex Archaeology, 2025a, pp 6). The trench was also located to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.8.2 A relatively large linear feature [601] was identified cutting in to the natural alluvium across Trench 6 within the vicinity (and on the alignment) of geophysical anomaly '4005'. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.8.3 Linear feature [601] was located at the southwestern end of Trench 6 and was aligned northeast to southwest. The cut was characterised as having a 'V' shaped profile being 1.8m wide and up to 1.2m deep (Plate 22). The fill (602) consisted of a black organic clay silt with fragments of wood and pieces of modern plastic. Artefacts from (602) were dominated by complete and semi-complete glass bottles of 20th century date. On investigation it was identified that linear feature [601] had cut through the fill (604) of an earlier linear feature [603] on the same alignment. Linear feature [603] had been partly removed by linear [601] but was approximately 1.6m wide and 0.7m deep with a 'U' shaped profile. The fill (604) was a mid yellow/brown silty clay which contained rare fragments of Post-medieval ceramic building material.

6.8.4 Linear feature [605] was located at the northeastern end of Trench 6 and was aligned northeast to southwest (Plate 23). The cut was characterised as having a 'V' shaped profile being 2.9m wide and up to 1.3m deep (Plate 24). The primary fill (606) consisted of a blue/grey silty clay up to 0.6m thick. A ceramic land drain (607) of later 19th or 20th century date had been inserted in to upper fill (606). No artefacts or other forms of dating evidence were recovered from these fills.

6.8.5 To the southwest of linear [605] a series of two ceramic land drains (608) and (609) were identified at regular intervals cutting in to the top of the natural alluvium. Both were on a similar alignment to linear [605] and were of later 19th or 20th century date.

6.8.6 No other archaeological features were identified in Trench 6.

6.9 Trench 7

6.9.1 Trench 7 (Plate 25) was located towards the south western side of the site and aligned north to south. It was located to investigate linear geophysical anomalies '4004' and '4005' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3). The geophysical survey report noted that anomalies '4004' and '4005' correspond with former water management ditches and a field boundary recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) to 1955 (Wessex Archaeology, 2025a, pp 6). The trench was also located to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.9.2 A relatively large linear feature [701] was identified cutting in to the natural alluvium across Trench 6 within the vicinity (and on the alignment) of geophysical anomaly '4005'. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket.

6.9.3 Linear feature [701] was located at the northern end of Trench 7 and was aligned east to west. The cut was characterised as having a 'V' shaped profile being 1.8m wide and up to 1.2m deep (Plate 26). The fill (702) consisted of a black organic clay silt with fragments of wood and pieces of modern plastic. Artefacts from (702) were dominated by complete and semi-complete glass bottles of 20th century date. On investigation it was identified that linear feature [701] had cut through the fill (704) of an earlier linear feature [703] on the same alignment. Linear feature [703] had been partly removed by linear [701] but was approximately 1.6m wide and 0.7m deep with a 'U' shaped profile. The fill (704) was a mid yellow/brown silty clay which contained rare fragments of Post-medieval ceramic building material.

6.9.4 Linear feature [705] was located towards the centre of Trench 7 within the vicinity (and on the alignment) of an element of geophysical anomaly '4004'. The feature was investigated with a mechanically excavated sondage using a 1m wide toothless bucket. Linear feature [705] was aligned east to west. The cut was characterised as having steep sides and a flat base being 4.8m wide and up to 0.7m deep (Plate 27). The fill (706) consisted of a dark grey/brown silty clay which contained modern material including the handle bars from a bicycle.

6.9.5 A second element of geophysical anomaly '4004' was identified at the southern end of Trench 7 where it was seen as a north to south aligned linear feature [707] which ran along the western edge of the trench for a distance of 6m

before disappearing under the trench edge. The fill (708) of this feature was notable for containing numerous intact coconut shells.

6.9.6 Trench 7 also contained a series of four ceramic land drains (709) to (712) were identified at regular intervals cutting in to the top of the natural alluvium. All four were on a similar alignment to linear [705] and were of later 19th or 20th century date.

6.9.7 No other archaeological features were identified in Trench 7.

6.10 Trench 8

6.10.1 Trench 8 (Plate 28) was located towards the central southern end of the site and aligned northeast to southwest. It was located to investigate geophysical anomalies '4003' and '4004' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3). The geophysical survey report noted that anomalies '4003' and '4004' "correspond with an area of marshland '4003' and two ditches '4004' for water management that ran between an area of coppice that are recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) to 1955" (Wessex Archaeology, 2025a, pp 6). The trench was also located to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.10.2 A large rectangular feature [802] was identified cutting in to the natural alluvium over the northeast half of Trench 8 within the vicinity (and on the alignment) of geophysical anomaly '4003'. The feature was not investigated fully due to the presence of asbestos cement tiles and other potential contaminants within its fill (801).

6.10.3 Rectangular feature [802] was located over the northeastern half of Trench 8 and was aligned east to west. The cut was seen to extend over an area of at least 20m north-south and was 0.6m deep. The fill (801) consisted of a dark yellow brown sandy silt with numerous intact coconut shells (Plate 29 and Plate 30), fragments of wood, brick, asbestos cement tiles and pieces of modern plastic. A ceramic field drain (805) was inserted in to fill (801) on a northwest to southeast alignment at the northeastern end of the trench.

6.10.4 An element of geophysical anomaly '4004' was identified at the southwestern end of Trench 8 where it was seen as a north to south aligned linear feature [804] which ran across the corner of the trench for a distance of 2m before disappearing under the trench edge. The fill (803) of this feature was a light grey silt notable for containing a rusted sheet of corrugated metal and numerous intact coconut shells.

6.10.5 Trench 8 also contained a ceramic land drain (806) which was identified cutting in to the top of the natural alluvium on a similar alignment to field drain (805) and was of later 19th or 20th century date.

6.10.6 No other archaeological features were identified in Trench 8.

6.11 Trench 9

6.11.1 Trench 9 (Plate 31) was located towards the central southern end of the site and aligned northeast to southwest. It was located to investigate geophysical anomalies '4003' and '4004' (Wessex Archaeology, 2025a, pp 5-6 and Figure 3). The geophysical survey report noted that anomalies '4003' and '4004' "correspond with an area of marshland '4003' and two ditches '4004' for water management that ran between an area of coppice that are recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) to 1955" (Wessex Archaeology, 2025a, pp 6). The trench was also located to investigate the potential for archaeological features which were not detected by non-invasive archaeological techniques.

6.11.2 Two large parallel linear features [903] and [905] were identified cutting in to the natural alluvium at the western end of Trench 9 within the vicinity (and on the alignment) of geophysical anomaly '4004'. Both linear features were aligned north to south and each one was 4m wide and separated by a distance of approximately 10m. The fills (904) and (906) consisted of a dark yellow brown sandy silt (Plate 32 and Plate 33) with numerous intact coconut shells, fragments of wood, brick, asbestos cement tiles and pieces of modern plastic. The features were not investigated fully due to the presence of asbestos cement tiles and other potential contaminants within the fills (904) and (906). However, the depth of linear feature [903] was demonstrated within a geo-archaeological sondage to be 0.6m deep.

6.11.3 Trench 9 also contained three ceramic land drains (907), (908) and (909). Land drains (907) and (908) were identified cutting in to the top of fill (904) (Plate 32) and the natural alluvium on a similar alignment to linear features [903] and [905]. Land drain (909) ran along the southern edge of Trench 9 on an east to west alignment and cut in to the top of fill (906) (Plate 33). These ceramic drains were of later 19th or 20th century date.

6.11.4 The southern edge of geophysical anomaly '4003' was not identified within the eastern half of Trench 9. No other archaeological features were identified in Trench 9.

7 Finds

7.1 Finds

7.1.1 The site produced a small assemblage of finds, totalling 38 objects (weighing 3.485 kg) from the fills of features across the site. These included pottery, glass and clay tobacco pipe.

7.1.2 A total of 20 sherds of pottery, weighing 572g were recovered from six contexts (503), (602), (604), (606), (702) and (902) in Trenches 5, 6, 7 and 9 respectively. These are described below by context:

- A rim sherd of industrial slipware (weighing 5g) from a bowl with a blue slipped band on the external surface was recovered from ditch fill (503) in Trench 5. The ware is broadly dated to the late 18th to 20th century.
- A small assemblage of pottery amounting to 10 sherds (weighing 179g) were recovered from ditch fill (602) in Trench 6. This included two sherds of Basalt ware with moulded floral decoration (tea ware); a rim sherd from a dish in a porcellaneous bodied ware; and seven sherds of pearl-glazed earthenware decorated with blue transfer print. One of the sherds of pearl-glazed earthenware was from a gaming piece with numbers marked by a series of circular depressions as commonly seen on dominoes. The wares are broadly dated to the late 18th to 20th century.
- A small assemblage of pottery amounting to two sherds (weighing 31g) were recovered from ditch fill (604) in Trench 6. This included a sherd of red earthenware with an underglaze white slip on the internal surface; and a rim sherd from a jar in a pearl-glazed earthenware. The wares are broadly dated to the late 18th to 20th century.
- A small assemblage of pottery amounting to five sherds (weighing 179g) were recovered from ditch fill (606) in Trench 6. This included two sherds of pearl-glazed earthenware; a sherd of industrial slipware with a blue slipped band on the external surface; a sherd of unglazed red earthenware; and a sherd of slip-coated buff ware. The wares are broadly dated to the mid 18th to 19th century.
- A base sherd from a stoneware bottle (weighing 295g) was recovered from ditch fill (702) in Trench 7. The sherd had part of a black transfer printed text reading "... SPALDING". There was also part of a stamp reading "... NE/DENBY" indicating that the bottle was made at the Denby Pottery in Derbyshire. The stamp suggests a production date of c.1850 to 1970.
- A rim sherd of unglazed earthenware (weighing 50g) was recovered from cultivation soil (902) in Trench 9. The sherd is probably from a plant pot dating to the 19th to 20th century.

7.1.3 A total of 15 glass objects, weighing 2.908 kg were recovered from four contexts (602), (702), (803) and (904) in Trenches 6, 7, 8 and 9 respectively. These are described below by context:

- A small assemblage of glass amounting to 10 objects (weighing 1.809 kg) were recovered from ditch fill (602) in Trench 6. This included four complete bottles, two complete jars and four bottle fragments. Amongst the bottles was a clear glass bottle with a screw top and moulded lettering "MELLINS FOOD". Mellin's Food was a brand of infant food that was marketed as a "perfect substitute for mother's milk" in the late 19th and early 20th centuries. There was also a small hexagonal cobalt blue 'poison' bottle with moulded ridges down two sides and the words "NOT TO BE TAKEN" on one side; the base was marked "½ Oz". Amongst the remaining incomplete glass objects was the base of a bottle with a partial moulded logo reading "P ... SONS/ WISBECH".
- A small assemblage of glass amounting to three objects (weighing 472g) were recovered from ditch fill (702) in Trench 7. This included one complete bottle and two bottle fragments.
- A complete glass bottle weighing 293g was recovered from fill (803) in Trench 8. The bottle was marked around the base with moulded lettering reading "SCHWEPPES/SCHWEPPES".
- A complete glass bottle weighing 334g was recovered from fill (904) in Trench 9. The bottle was marked with moulded lettering reading "STEWARD & PATTERSON LTD NORWICH". This refers to the Steward & Patterson Ltd, Pockthorpe Brewery, Norwich, which operated between 1895 and 1963.

7.1.4 Three fragments of clay tobacco pipe weighing (5g) were recovered from cultivation soil (502) in Trench 5 and ditch fill (604) in Trench 6. These were all unmarked stem fragments.

7.1.5 A total of 12 fragments of animal bone weighing 91g were collected from contexts (206) and (904), in trenches 2 and 9 respectively. The 11 pieces from (206) were part of a single proximal femur of a large mammal. The proximal end of probable deer tibia was identified in (904), evidence of the epiphyseal was present suggesting a sub adult.

7.1.6 The finds assemblage is small and dominated by glass and ceramics from demonstrably modern contexts. As such, the assemblage has little potential to contribute further to an understanding of the site beyond what has already been recorded in terms of the range of types and their chronology.

7.1.7 Data has been collected to an appropriate archive level, and no further analysis or publication is recommended. The assemblage could be discarded, in line with DAS Archive Retention Policy.

8 Samples

8.1 Summary

8.2 Air dried flot and residue from a ten litre bulk sediment sample taken from the fill of a linear feature revealed during archaeological trenching at Spalding, Lincolnshire were assessed. The sample contained a low number of seeds of goosefoot, a single shell of an amphibious snail, a single tooth of a field vole, and an unidentified piece of wood which was radiocarbon dated to 363-538 cal AD (94.8% probability). Rhizocretions within the residue are indicative of a seasonally high water table.

8.3 Introduction

8.4 The air dried flot and residue from a ten-litre bulk sediment sample taken from the fill of a linear feature revealed during archaeological trenching at Spalding, Lincolnshire were presented for assessment. The sample had been processed using a Siraf-style flotation tank. The flot and residue were weighed, and their volume measured, before being scanned under a low-power binocular microscope.

8.5 Results

8.6 Results of the assessment are presented in Table 2. Most of the flot and residue were dominated by unidentifiable herbaceous material, suggestive of some preservation through waterlogging. No charred remains were present. Identifiable biological remains were limited to five seeds of goosefoot (*Chenopodium sp.*), a single shell of the amphibious snail *Anisus leucostoma*, and a loose molar of a field vole (*Microtus agrestis*). A single twig was recovered which was unidentifiable due to degradation of its anatomical structure This twig was radiocarbon dated to 363-538 cal AD (1640 +/- 30 BP; Beta 779479). The residue contained a number of reddish brown rhizocretions.

8.7 Discussion

8.8 The biological remains are too few to carry interpretive weight, although the presence of *Anisus leucostoma* suggests at least seasonal standing water. Goosefoot and field voles suggest a broadly open environment with some areas of taller vegetation. Rhizocretions are mineral accretions that accumulate around roots in waterlogged sediments, and are further evidence of a waterlogged burial environment.

8.9 Statement of Potential and Recommendations

8.10 The sample reveals only limited information about environmental conditions while the feature was filling. No further work is recommended, and the material need not be retained.

Context Number	106	
Sample Number	1	
Sample Volume	10L	
	Flot	Residue
Volume after processing (ml)	18	110
Dry weight after processing (g)	2.93	56.32
Estimated % modern roots	5	
PLANT REMAINS		
Chenopodium sp., goosefoot. Seeds		5
Wooden twig, degraded not identifiable		1
MOLLUSCA		
Anisus leucostoma	1	
MAMMALIA		
Microtus agrestis, field vole. molar		1
RHIZOCRETIONS		++

Table 2 - Results of the sample assessment

9 Geo-Archaeological Sondages

9.1 Introduction

9.1.1 Following an archaeological evaluation at land of the A16, Spalding, Lincolnshire (NGR: TF 26267 23155), a series of laterally extensive alluvial deposits were identified across the site. In order to investigate the nature and extent of these deposits, nine test pits were excavated for geoarchaeological recording.

9.1.2 The fieldwork was carried out by Dr Matt Law in September 2025

9.1.3 The work was carried out in accordance with the Written Scheme of Investigation drawn up by Wessex Archaeology (2025).

9.2 Aims

9.2.1 The general aims of the geoarchaeological test pitting were to:

- establish the broad presence/absence, nature, character, distribution, extent and depth of alluvial deposits across the site
- develop a preliminary assessment of the potential for organic preservation at the site.

9.2.2 The objective of the test pitting was to:

- ascertain (where alluvial deposits are encountered) their extent, depth below ground surface, and character

9.3 Methodology

9.3.1 Nine geoarchaeological test pits (denoted Tr 1 – Tr 9) were excavated at the site. The pits were excavated using a tracked mechanical excavator to depths ranging from 2.3m to 3.8m below ground level.

9.3.2 Sediment description was undertaken in the field. Sedimentary components are described using the modified Troels-Smith protocol of Aaby and Berglund (1986). The elements of this relevant to this report are summarised in Table 3.

Abbreviation	Element Name	Description
As	*Argilla steatodes*	Particles of clay
Ag	*Argilla granosa*	Particles of silt
Ga	*Grana arenosa*	Particles of sand

Table 3 - Modified Troels-Smith nomenclature used in this report

9.4 Results

9.4.1 A narrative summary of the lithostratigraphy for the test pits is set out below. For full lithostratigraphic descriptions for the test pits refer to the full report in the appendices.

9.4.2 The test pits revealed a remarkably consistent stratigraphic sequence across the site, comprising topsoil, subsoil, and thick alluvial deposits extending beyond depths of 2.3m to 3.8m below ground level (bgl). Ground surface elevations ranged from 2.37m to 2.97m aOD.

9.4.3 All test pits exhibited a thin topsoil layer (0.1m to 0.23m thick) of uniform light greyish brown silty clay with organo-mineral content, fine sand, common herbaceous roots, and rare ceramic building material (CBM) fragments. This was consistently underlain by a subsoil layer of similar composition but mineral in character, with rare fine roots and no inclusions.

9.4.4 Below the subsoil, substantial alluvial deposits were encountered across all test pits. These deposits displayed a consistent vertical progression in redox characteristics. The upper portions typically comprised firm light yellowish brown silty clay with moderate to frequent light blue-grey mottles, indicating periods of oxidation. With increasing depth, these deposits transitioned to predominantly dark bluish grey clay with common to frequent black mottles, reflecting increasingly reducing conditions associated with waterlogging.

9.4.5 Modern agricultural intervention was evident in several test pits, with field drains recorded at depths of approximately 0.8m below ground level in Tr 1, Tr 2, and Tr 9.

9.4.6 Two test pits contained deposits of particular interest. In Tr 6, a degraded organic layer (0.16m thick) was identified at 1.04m to 1.2m below ground level (1.363m to 1.203m aOD). This very dark grey-black silty clay was organo-mineral in character and well humified, with no inclusions. It was sharply bounded above and below by alluvial clay. This deposit may represent an episode of peat formation within a topographic hollow, perhaps associated with a former channel.

9.4.7 Tr 8 revealed dumped fill between 0.37m and 1.43m below ground level, comprising mid greyish-brown silty clay with moderate charcoal flecks and CBM fragments increasing with depth. The deposit contained frequent coconut shells and wood fragments, clearly indicating modern disturbance and infilling.

9.4.8 The consistency of the alluvial stratigraphy, the clear redox zonation, and the lateral extent of deposits indicate deposition within a low-lying floodplain environment, consistent with the site's location within the Lincolnshire Fens.

9.5 Discussion

9.5.1 The test pit excavations revealed a uniform stratigraphic sequence across the site comprising topsoil, subsoil, and substantial alluvial clay deposits extending to

considerable depth. The alluvial deposits display characteristic redox features, with oxidised yellowish-brown upper portions transitioning to reduced bluish-grey sediments at depth, indicating fluctuating water tables and prolonged waterlogging typical of fenland environments.

9.5.2 The presence of field drains at consistent depths across multiple test pits demonstrates ongoing agricultural management of this low-lying landscape. The modern disturbance recorded in Tr 8, containing materials such as coconut shells alongside CBM and charcoal, indicates localised infilling activities.

9.5.3 The degraded organic layer identified in Tr 6 is of particular interest. This well-humified deposit, occurring as a discrete lens within the alluvial sequence, may represent a former stable land surface or episode of organic accumulation during a period of reduced alluviation. Such horizons can provide valuable palaeoenvironmental evidence and dating opportunities for understanding landscape development in this part of the Fens.

9.6 Conclusions

9.6.1 A series of nine test pits were excavated at Spalding, Lincolnshire, under geoarchaeological supervision. The site revealed a consistent sequence of alluvial clay deposits with overlying topsoil and subsoil, with depths extending beyond 3.8m below ground level. The alluvial deposits display clear redox zonation reflecting the waterlogged nature of this fenland environment.

9.6.2 A degraded organic layer was identified in Tr 6, representing a potential former peat deposit perhaps infilling a topographic hollow.

9.6.3 With the exception of the organic layer in Tr 6, there was generally poor potential for organic preservation in these deposits, which are predominantly oxidised in their upper portions and highly reduced at depth.

10 Discussion & Conclusions

10.1 Planning permission has been secured (H16-0871-24) for ground mounted solar PV panels and associated works at the site in Spalding. In line with a request for pre-determination archaeological evaluation trenching this document outlines the results of the excavation of nine trenches across the site, as laid out in an approved written scheme of investigation (Wessex Archaeology, 2025b).

10.2 The archaeological fieldwork was carried out between the 17th to 26th of September 2025 by Dee Archaeological Services Ltd (DAS) on behalf of SAS Energy, EDF Renewables' C&I Solar Division.

10.3 The Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a) divided the site in to three land parcels which were numbered LP_001 to LP_003. The evaluation trenches were distributed between LP_001 and LP_002 (essentially the lower two fields on the site). The results of the evaluation trenches can to some extent be divided between the two land parcels.

10.4 The southern most field (LP_001) contained Trenches 3, 5, 6, 7, 8 and 9. Trenches 7 to 9 were located to investigate geophysical anomalies **4003** and **4004** which corresponded with an area of marshland and two ditches for water management that were recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) to 1955. The area of marshland **4003** was identified in Trench 8 and appeared to be a manmade feature [802] up to 0.6m deep. The two ditches **4004** associated with the area of marshland were identified in Trenches 7 to 9 as linear features [705], [707], [804], [903] and [905]. The backfill of these features contained modern material including plastic and asbestos cement tiles which supported the evidence from the mapping for backfilling post 1955. A complete glass bottle recovered from fill (904) in Trench 9 suggested a date no later than 1963. One unusual recurring item from the backfilling of these features was intact coconut shells; it was noted that in some cases these coconuts had been perforated with a single hole perhaps to remove the coconut milk prior to them being discarded.

10.5 Trenches 6 and 7 were located to investigate geophysical linear anomaly **4005** which was in the same position as a former field boundary recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) but was no longer recorded on the 1931 OS map. This feature was located in both trenches as a backfilled 'V' shaped ditch [601] and [701]. The backfill of this feature contained modern material including glass bottles dating to the late 19th and 20th centuries. In both cases the 'V' shaped ditch was seen to have cut an earlier boundary ditch [603] and [703]; the fill (604) of which produced Post-medieval pottery.

10.6 Trench 5 was located to investigate a geophysical linear anomaly running parallel to **4005** but 20m to the north of it. This feature was located in trench 5 as a backfilled

ditch [505]; the fill (503) of which produced Post-medieval pottery. The result supports the Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a) which suggested that this feature was a former unmapped field boundary predating the available mapping but likely Post-medieval in date. This boundary ditch was also identified in Trench 6 as ditch [605]; the fill (606) of which also produced Post-medieval pottery.

10.7 Trench 3 was located to investigate geophysical linear anomaly **4000**. This feature was located in trench 3 as a backfilled ditch [305]; the fill (303) of which contained a modern ceramic land drain. The result supports the Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a) which suggested that this feature was a former unmapped field boundary predating the available mapping but likely Post-medieval in date.

10.8 The only other archaeological features noted within Trenches 3 and 5 to 9 in LP_001 were ceramic land drains which in some cases had been set within the backfilled field boundary ditches. In Trenches 8 and 9 some of the ceramic land drains had been laid within the backfill of the marshland feature [802] as well as associated ditches [903] and [905]. This indicated that at least some of these ceramic drains post-dated the 1950s.

10.9 The northern most field (LP_002) contained Trenches 1, 2 and 4. Trenches 1 and 4 were located to investigate geophysical anomaly **4002** a diffuse linear anomaly crossing the site north-west to south-east. Trench 1 identified two features that could have represented anomaly **4002**: shallow linear [107] and deeper linear [108]. No datcable artcfacts were rccovcrcd from cithcr of thcsc fcaturcs and thc fills wcrc generally sterile. However, a machine excavated sondage to find the base of linear [108] did encounter a lower fill (106) which had some organic preservation. Organic material from fill (106) provided a C14 date of 363-538 cal AD (BETA 779479) and the environmental sample suggested at least seasonal standing water in the feature. This evidence would support the interpretation of the feature as a man-made drainage channel.

10.10 Trench 4 identified one linear feature [405] that could have represented anomaly **4002**. However, this feature was fairly shallow and exhibited a similar profile and character of fills to linear feature [107] in Trench 1. This would suggest that features [405] and [107] represent anomaly **4002** and that feature [108] probably does not; terminating somewhere between Trenches 1 and 4. The Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a) noted that the magnetic properties of anomaly **4002** change along its length; it exhibited negative properties in the north, positive in the south, and was very weak centrally. This fluctuation in the magnetic properties may have been caused by the presence of two features in the north but only one in the south.

10.11 Trench 2 was located to investigate geophysical linear anomaly **4006** which was in the same position as a former field boundary recorded on the OS mapping from 1887 (Lincolnshire CXXXIV.SW) and is no longer recorded on the 1931 OS map. This feature was located in trench 2 as a backfilled ditch [203].

10.12 Trench 4 each located a backfilled ditch [403]; the fill (404) contained a modern ceramic field drain. The feature probably represents another unmapped field boundary predating the available mapping but likely Post-medieval in date.

10.13 Four smaller linear features [113], [114], [206] and [407] were identified in Trenches 1, 2 and 4. All four features were aligned roughly east-west and sample excavation failed to identify any ceramic land drains within these features. The features were generally devoid of any finds with the exception of some fragments of animal bone recovered from the fill (206) of linear [205] and they are broadly undated. Stratigraphic relationships can only show that linear [205] was cut by Post-medieval field boundary ditch [203] whilst linear [407] was cut by modern service trench [413]. The profiles of linear features [205] and [407] were very similar with steep sides and a flat base possibly suggesting that they were for a similar function. The predominantly agricultural nature of the archaeological evidence from the site would suggest that these features are related to either drainage or earlier land division.

10.14 Two ephemeral features [111] and [112] were identified at the southwestern end of Trench 1; neither feature produced any dateable artefactual evidence. Linear feature [112] was on a roughly northwest to southeast alignment and parallel to linear feature [108] which may imply some contemporaneity. Curvilinear feature [111] was represented by a series of short segments and may be the result of bioturbation rather than being a man-made feature. Despite the overlying nature of features [111] and [112] it was not possible to establish a stratigraphic relationship between them and it remains uncertain as to which is the earlier feature.

10.15 In conclusion:

- All of the geophysical anomalies targeted by the trial trenching were positively identified and the excavated evidence generally served to support the interpretations offered in the Magnetic Gradiometer Survey Report (Wessex Archaeology, 2025a).
- The majority of the archaeological features identified were of Post-medieval date and agricultural in nature.
- The only feature of demonstrably early date was linear feature [108] in Trench 1 but for the reasons listed above it seems unlikely that this is anomaly **4002** identified in the Magnetic Gradiometer Survey Report.
- Anomaly **4002** is probably represented by linear features [107] and [405] in Trench 1 and 4 respectively. The fills of these features remain undated.

- A small group of undated features were identified within Trenches 1, 2 and 4 in LP_002 which were not detected by the magnetic gradiometer survey. The lack of evidence for domestic activity within the fills of these features may support an agricultural function such as drainage or land division.

10.16 The dating of feature [108] places it within the later Roman and earlier Anglo-Saxon period (sometimes referred to as the Late Antique). The data recovered from the evaluation trenching makes a small contribution to the East of England Research Framework. The Early Anglo-Saxon Research Agenda has a number of relevant research questions regarding this period such as:

- E-Sax 02: What impact did the Late Antique Little Ice Age have on the region?
- E-Sax 03: What happened in the fifth century?
- E-Sax 12: What did the Early Anglo-Saxon landscape look like?
- E-Sax 26: How can we improve our understanding of Early Anglo-Saxon agricultural practices?

11 Archives

11.1 Site Archive

11.1.1 The site archive will be deposited with Lincoln Museum. An accession code had previously been obtained, in advance of the fieldwork (LCNCC: 2025.64), the Museum Site Code is SDG25.

11.1.2 The site archive consists of:

- 108 x Digital Photographs
- 20 x Trench plan and sections drawing permatrace Sheets
- 1 x Context Register
- 90 x Context sheets
- 1 x box of artefacts (pottery, glass & clay tobacco pipe)

11.1.3 The assemblage has a low research potential, it is recommended that the finds could be discarded, following discussion with the receiving Museum.

11.2 Digital Archive

11.2.1 A copy of the report will be digitally deposited with the HER and OASIS.

11.2.2 For sites with a digital only archive, a full (selected) archive will be deposited with the Archaeological Data Service (ADS); for sites with a companion paper archive, only selected born digital data will be deposited with the ADS.

Bibliography

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CIfA (2023b) 'Universal Guidance for Archaeological Field Evaluation'. Chartered Institute for Archaeologists.

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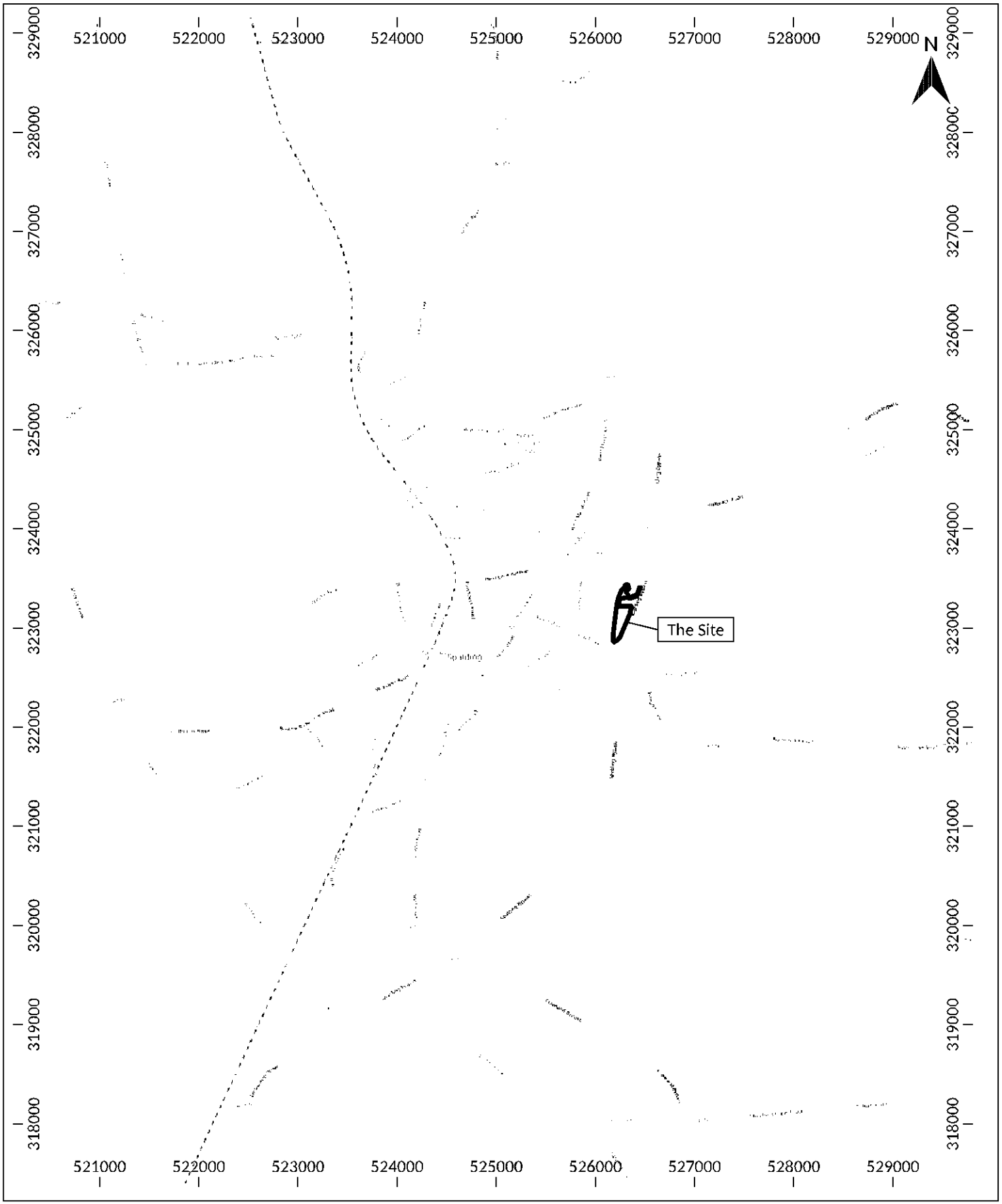
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Wessex Archaeology 2025a. Spalding Solar, Spalding, Lincolnshire, Magnetic Gradiometer Survey Report. Sheffield: unpublished report, ref. 268222.

Wessex Archaeology 2025b. Spalding Solar, Spalding, Lincolnshire, Written Scheme of Investigation for Archaeological Evaluation. Sheffield: unpublished report, ref. 278521.1.

Figures



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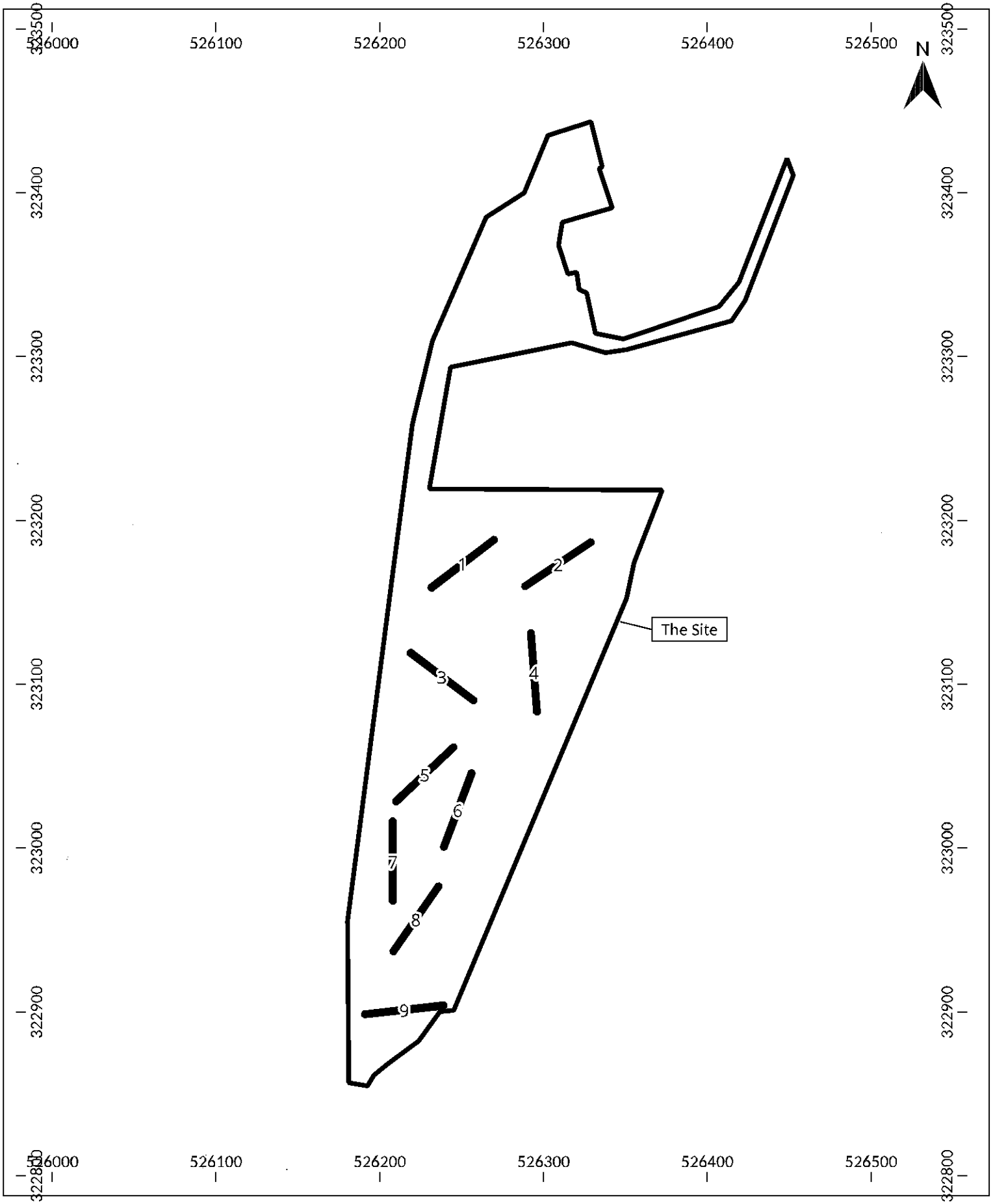
Dee Archaeological Services

Figure 1: Site Location

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1

*Open OS Data: Contains Ordnance Survey data © Crown copyright and database right [2025]
**Contains public sector information licensed under the Open Government License v3.0



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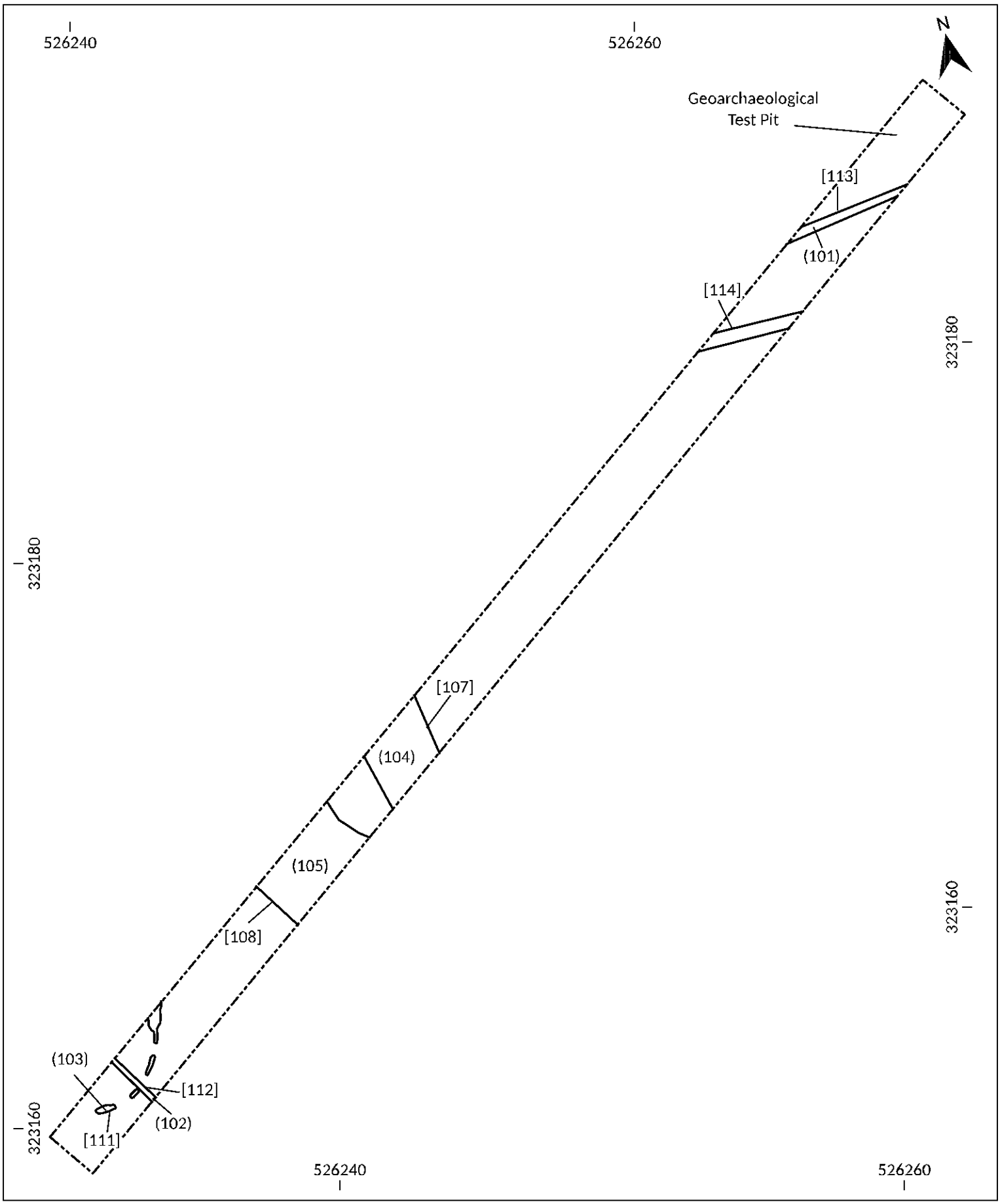
Dee Archaeological Services

Figure 2: Site Location with Trench Plan

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1

*Open OS Data: Contains Ordnance Survey data © Crown copyright and database right [2025]
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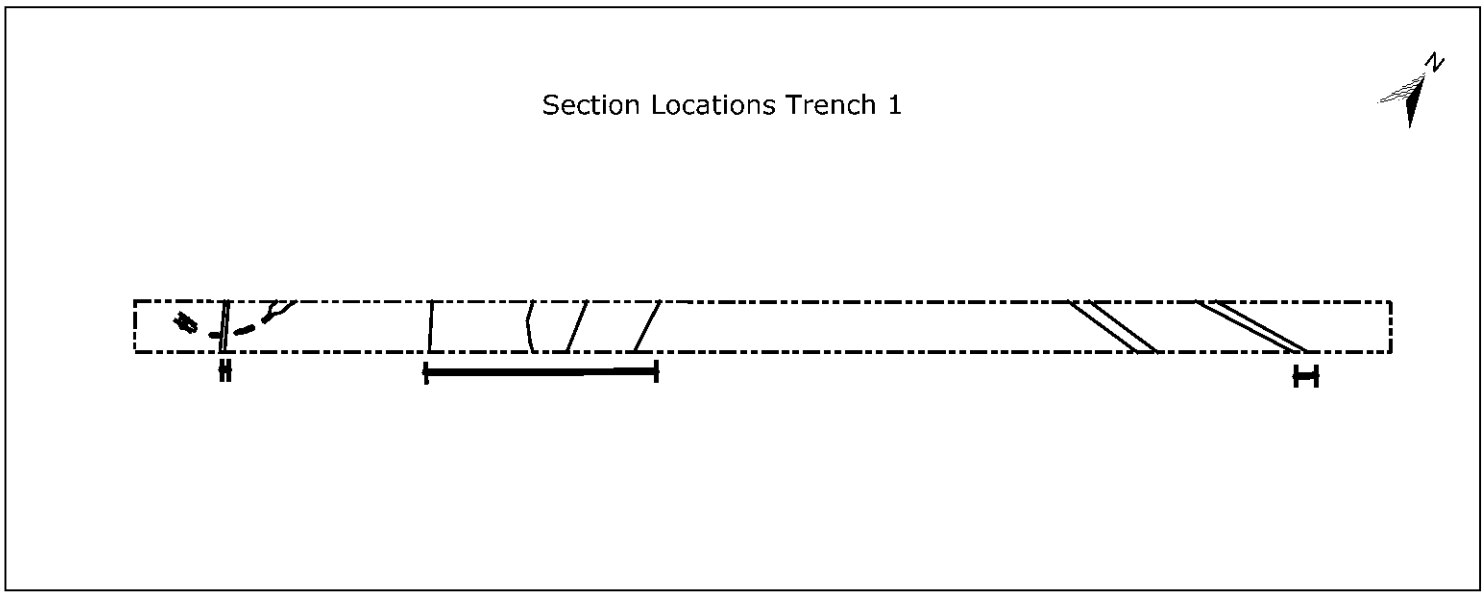
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Dee Archaeological Services

Figure 3: Plan of Trench 1

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



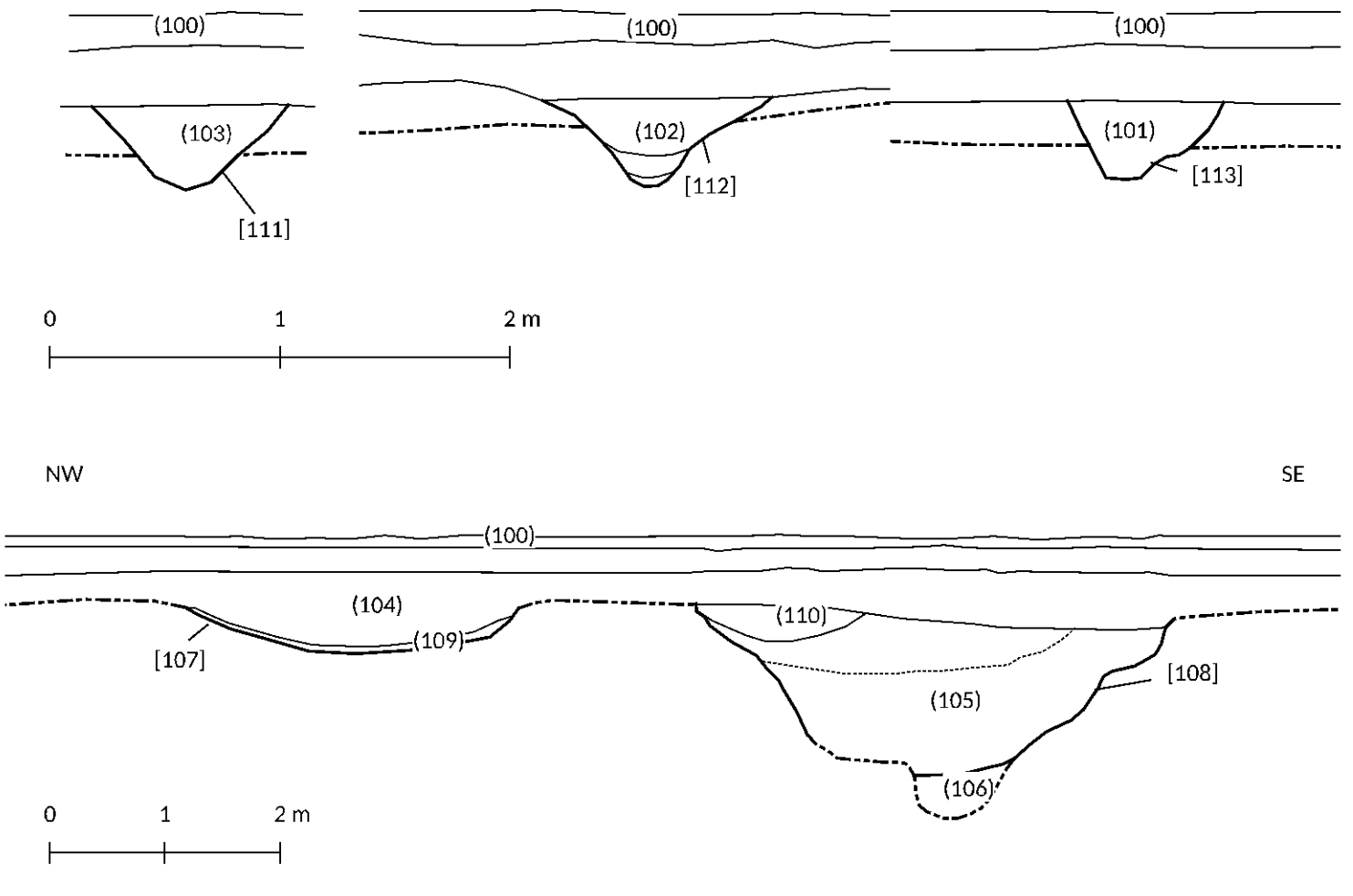


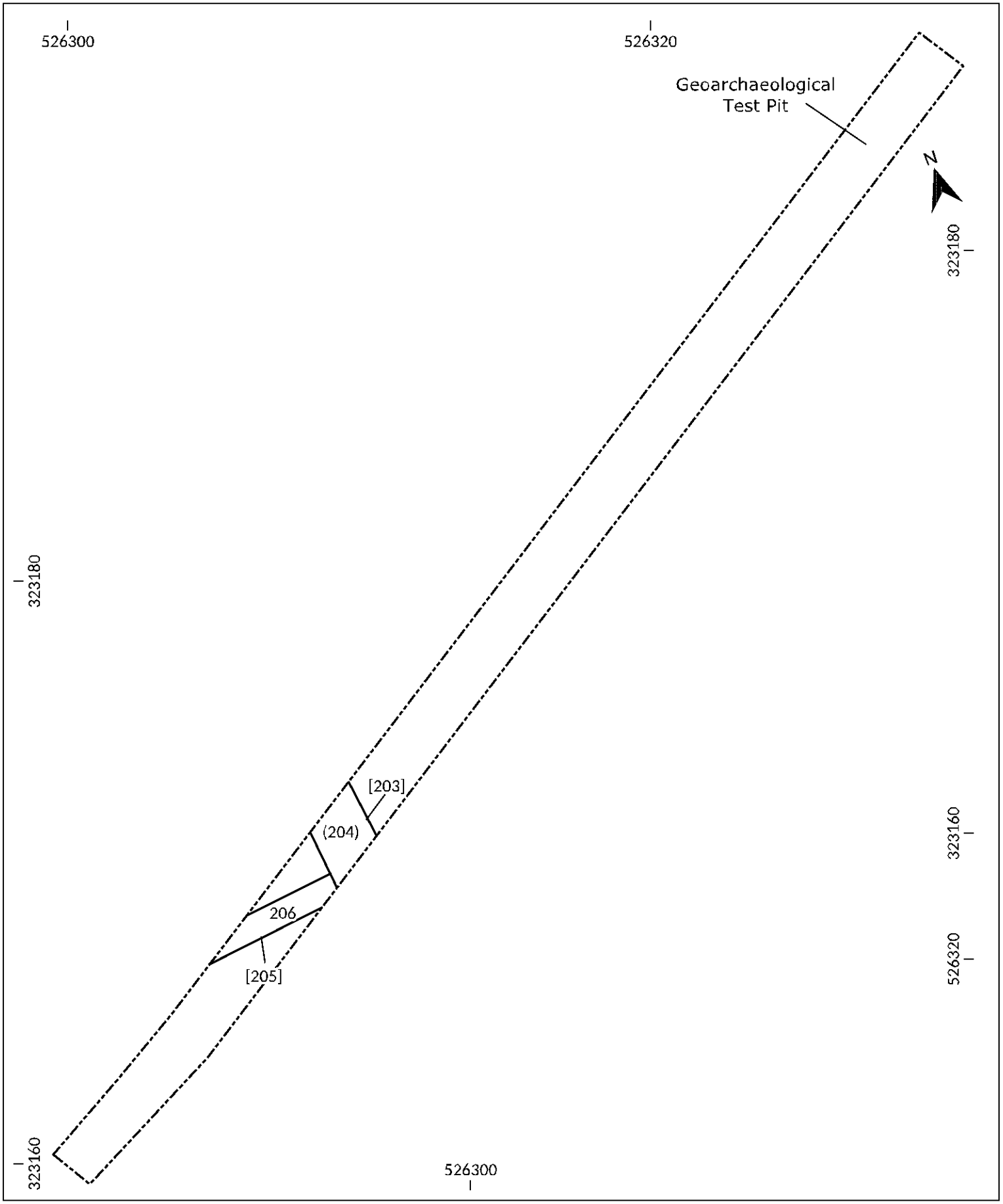
Figure 4: Trench 1 Sections

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Report ref: 25-0013-AER-v1

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Dee Archaeological Services



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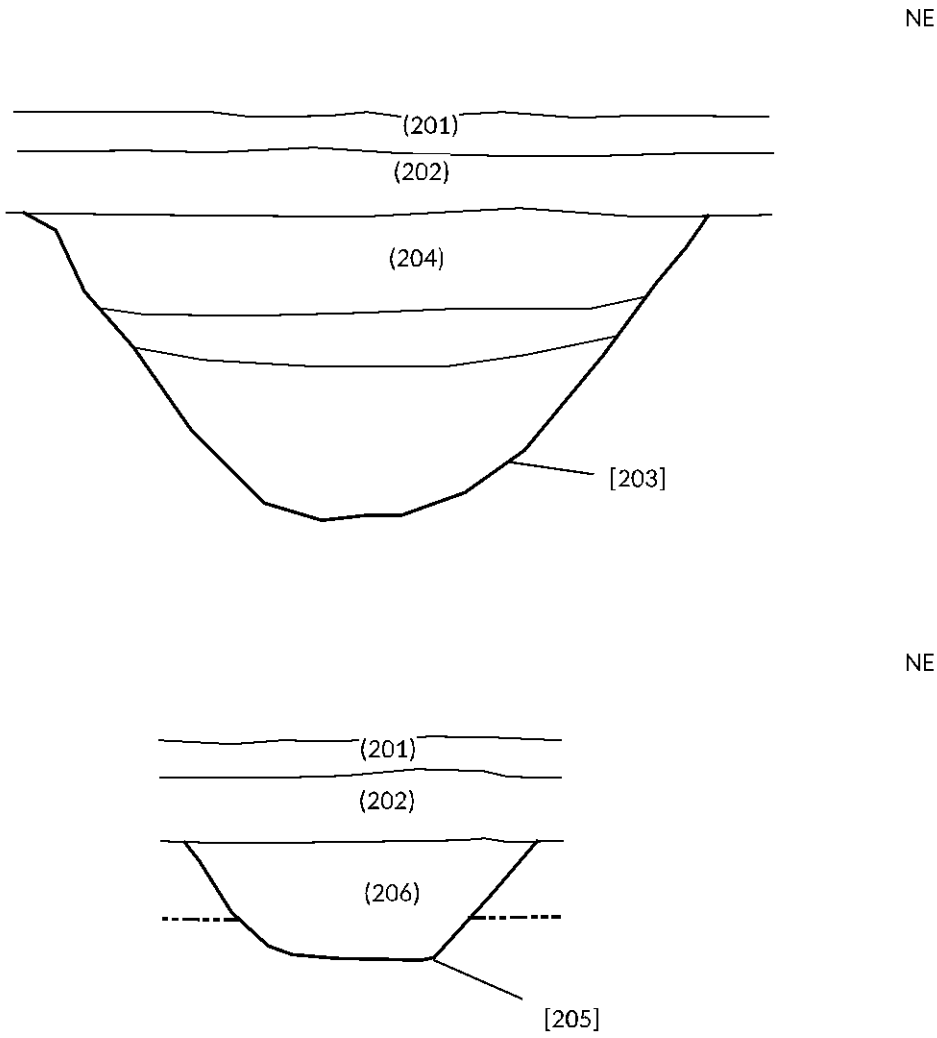
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Dee Archaeological Services

Figure 5: Plan of Trench 2

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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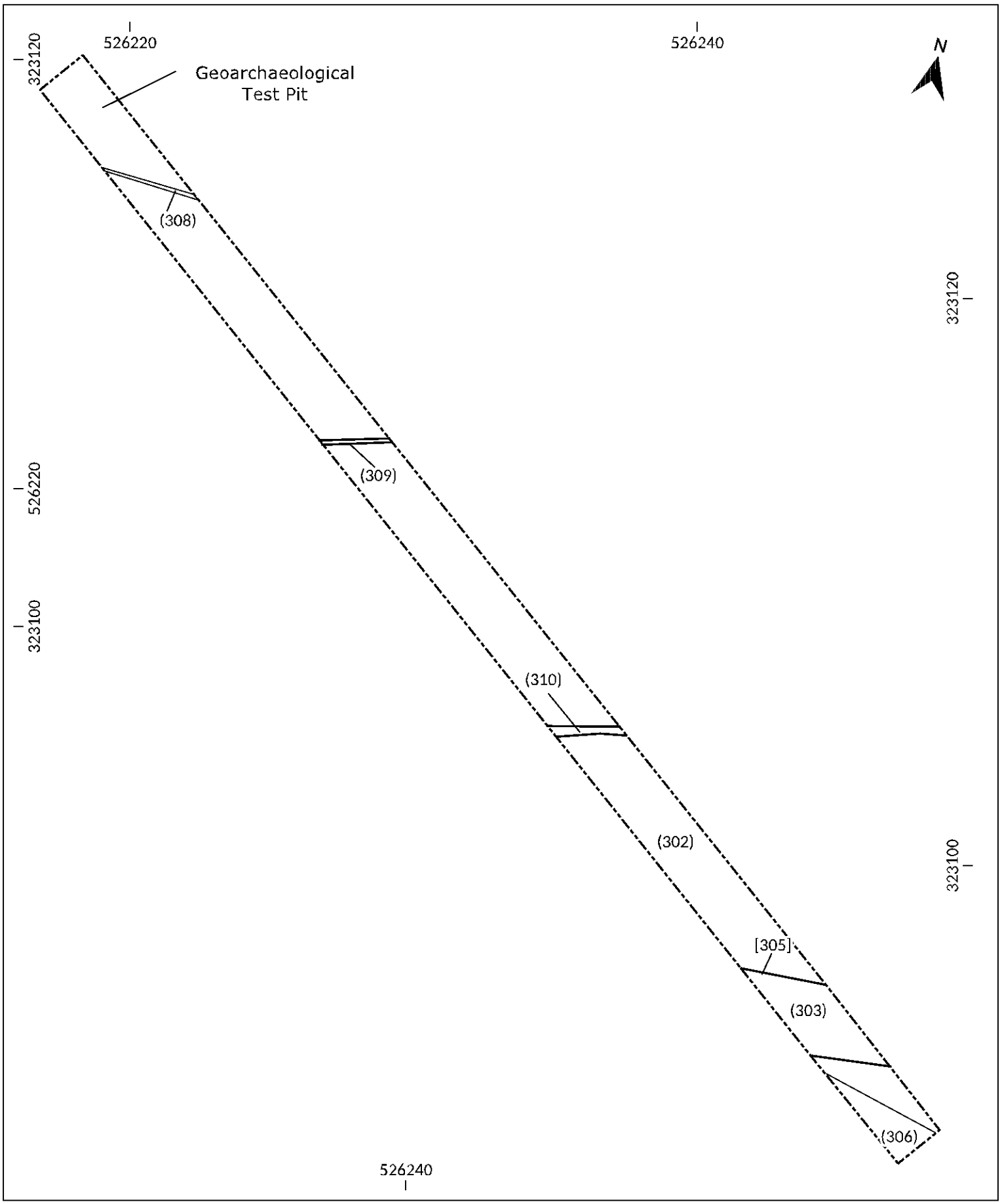
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Dee Archaeological Services

Figure 6: Trench 2 & 3 Sections

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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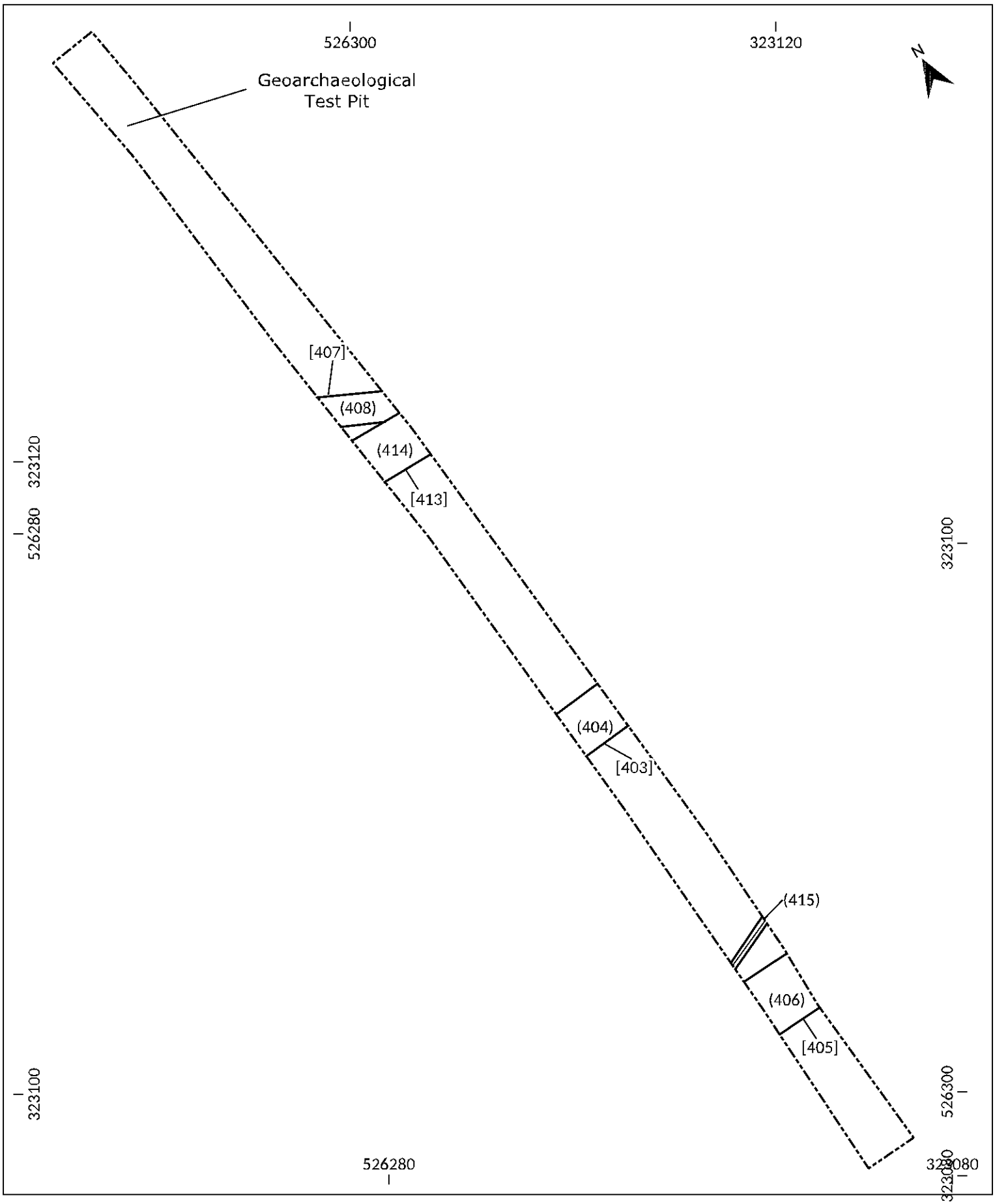
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Dee Archaeological Services

Figure 7: Plan of Trench 3

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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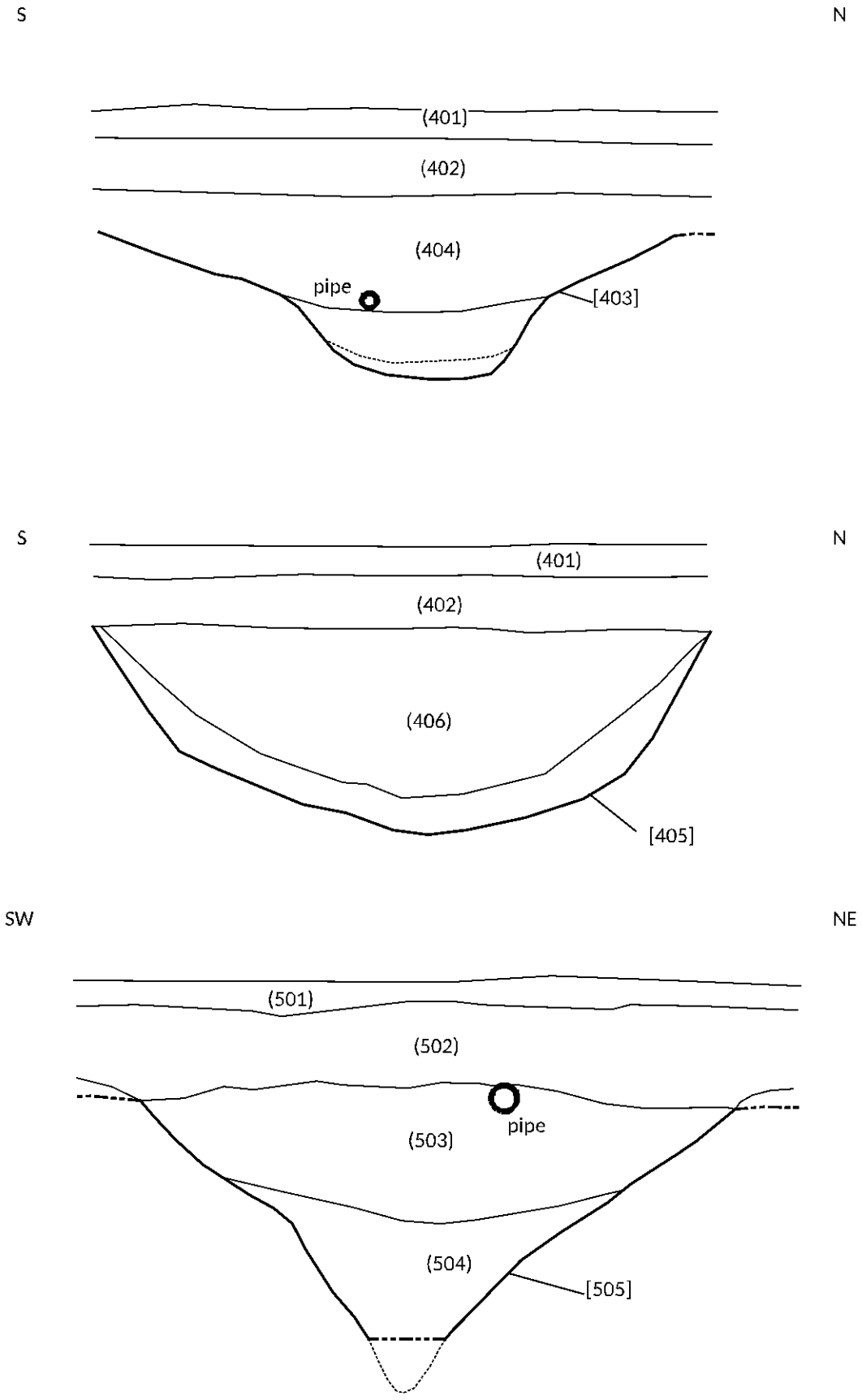
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Dee Archaeological Services

Figure 8: Plan of Trench 4

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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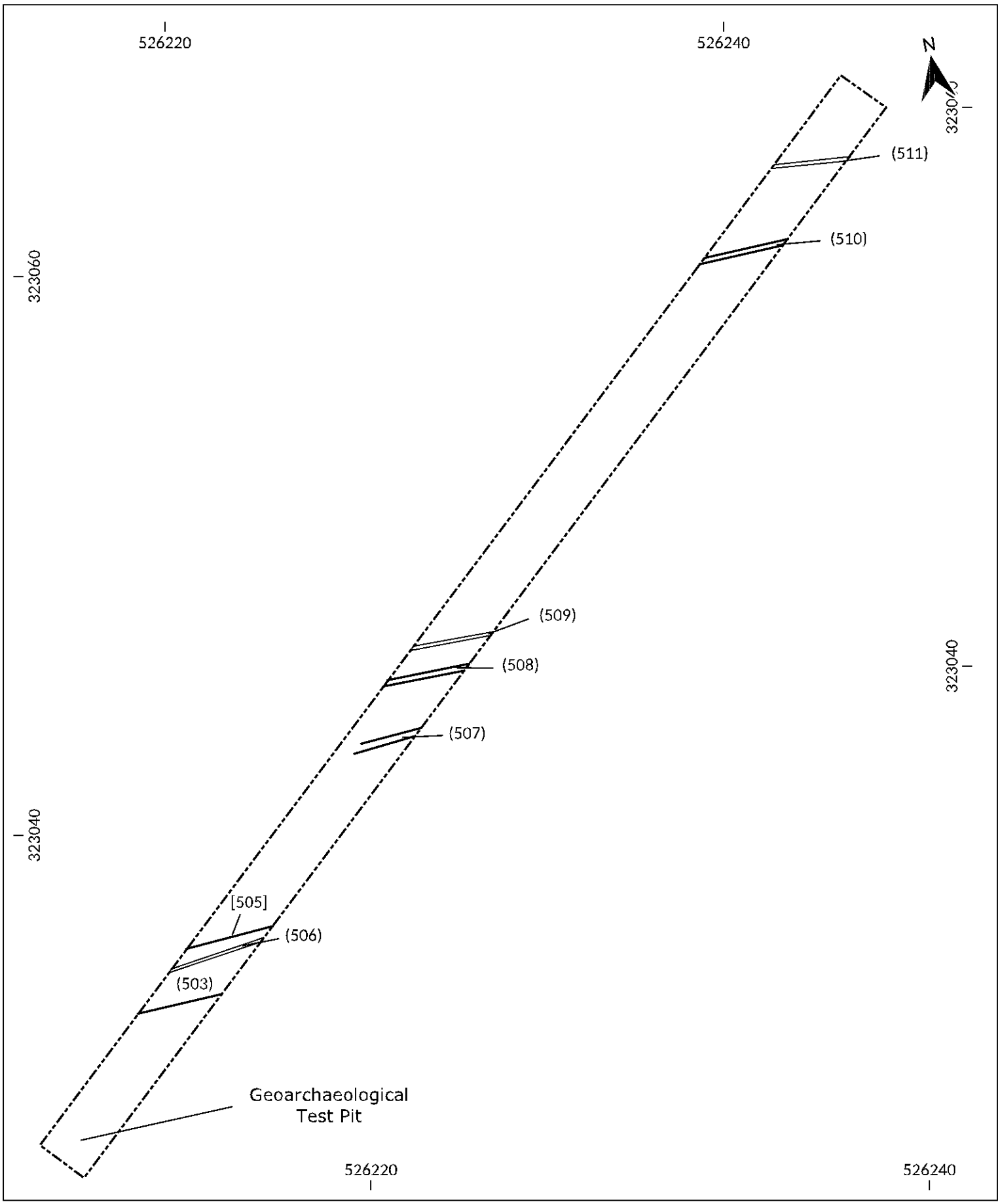
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Dee Archaeological Services

Figure 9: Trench 4 & 5 Sections

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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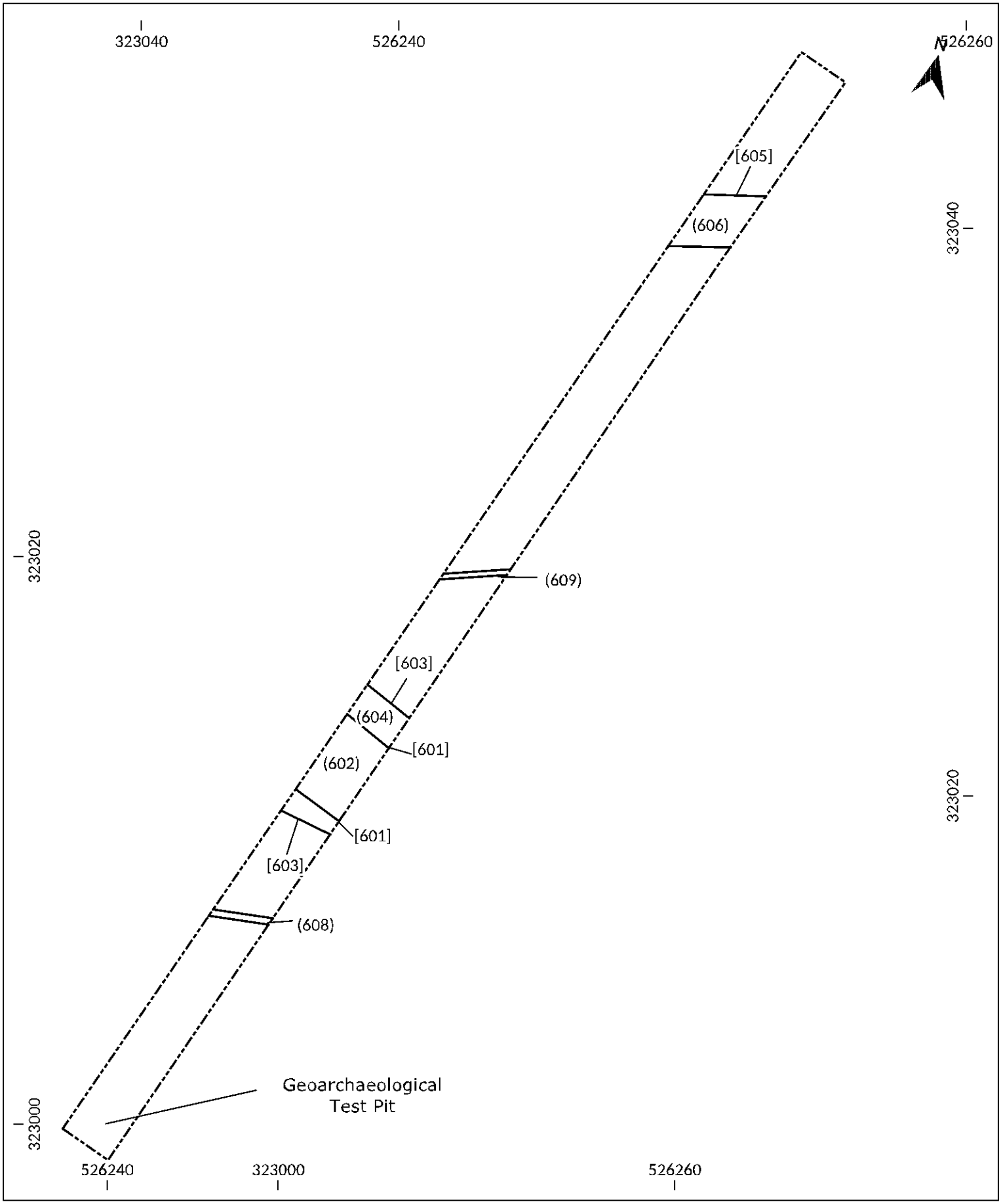
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Dee Archaeological Services

Figure 10: Plan of Trench 5

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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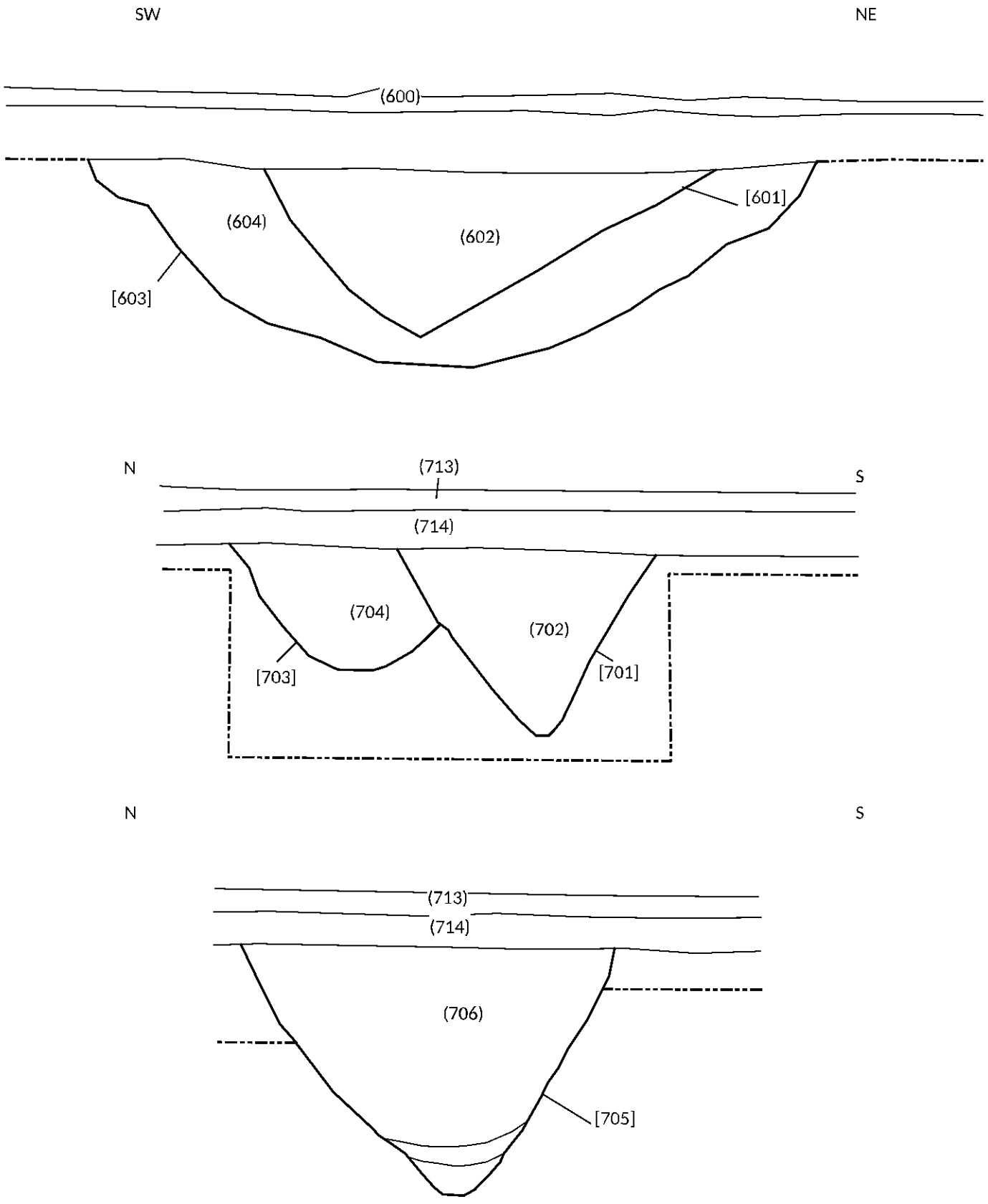
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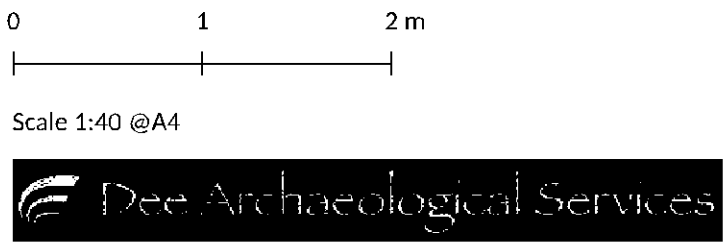
Dee Archaeological Services

Figure 11: Plan of Trench 6

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1





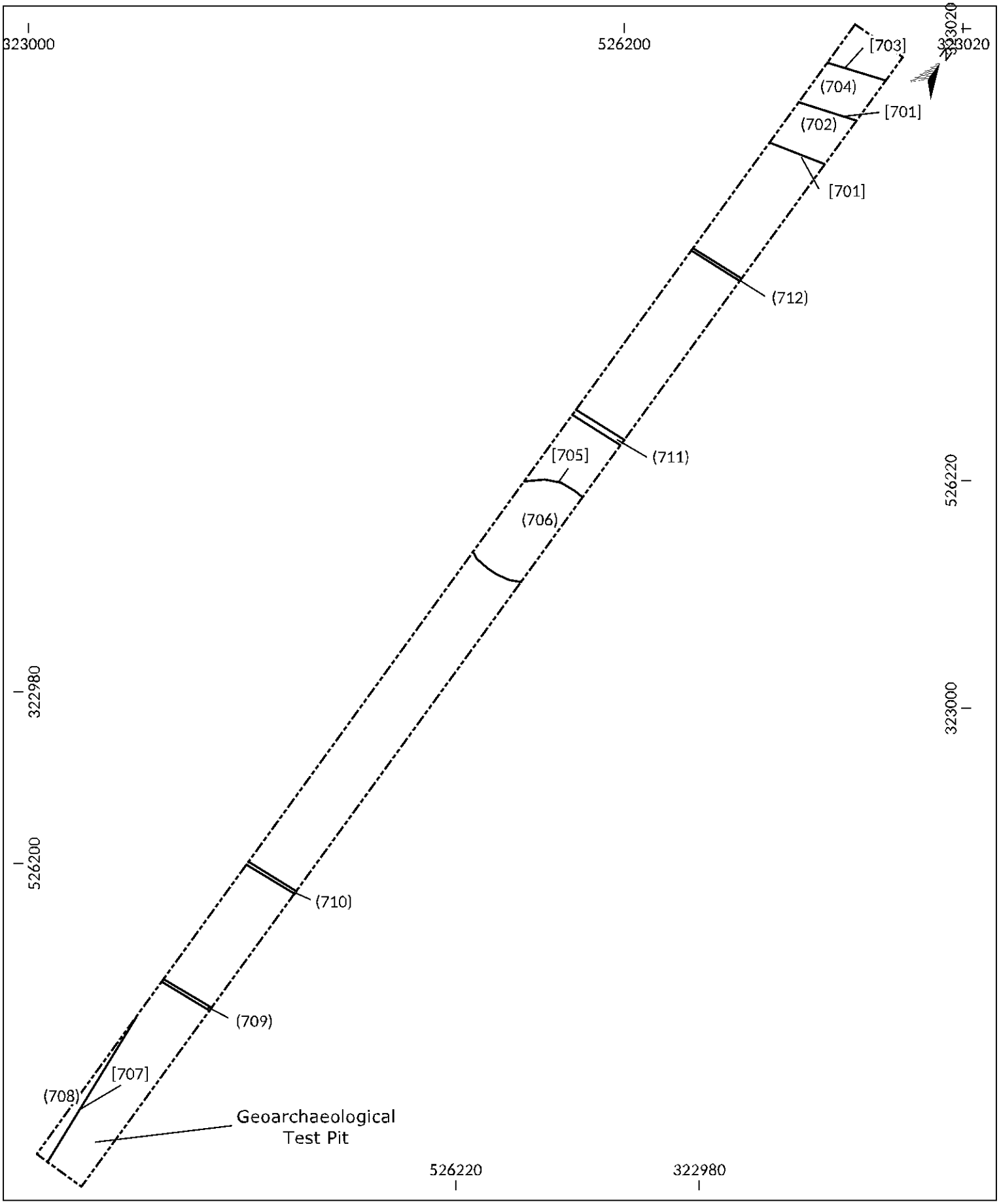
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Dee Archaeological Services

Figure 12: Trench 6 & 7 Sections

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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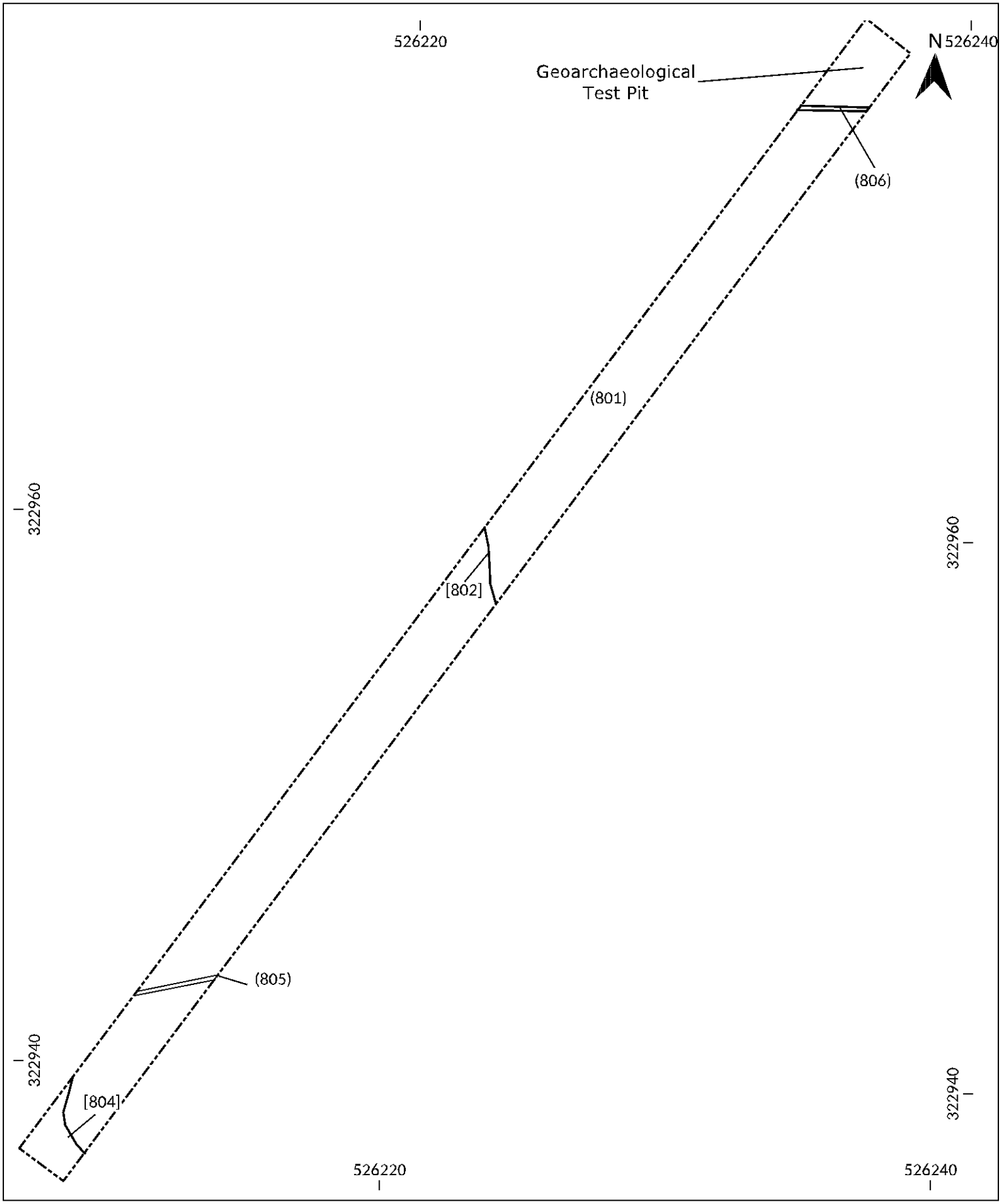
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Dee Archaeological Services

Figure 13: Plan of Trench 7

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



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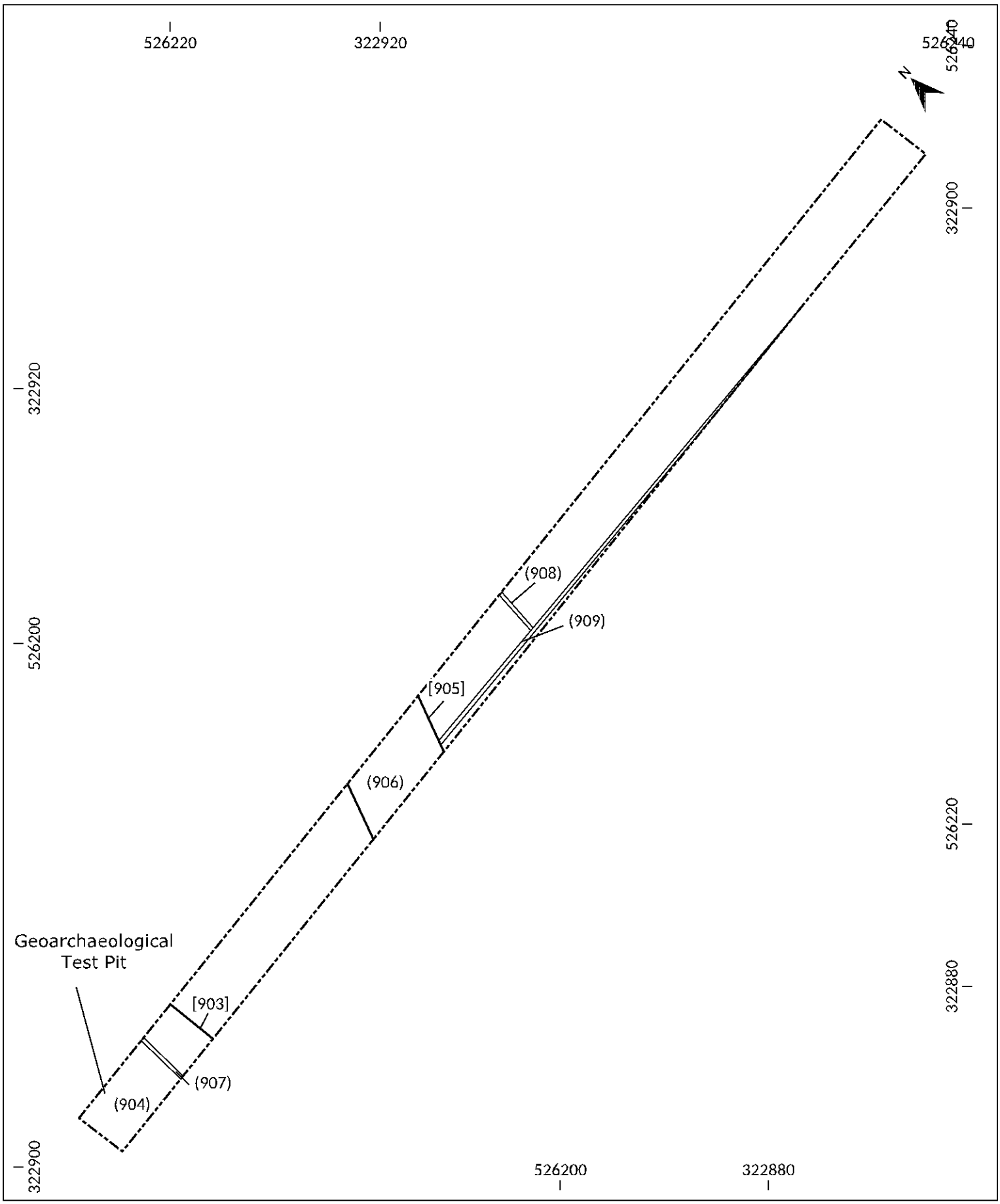
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Dee Archaeological Services

Figure 14: Plan of Trench 8

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1



0 5 10 m

Scale 1:180 @A4

Dee Archaeological Services

Figure 15: Plan of Trench 8

Project: 25-0013 Spalding Lincolnshire

Report ref: 25-0013-AER-v1

Plates



Plate 1: Trench 1, looking northeast. Scales 1 x 2m, 1 x 1m

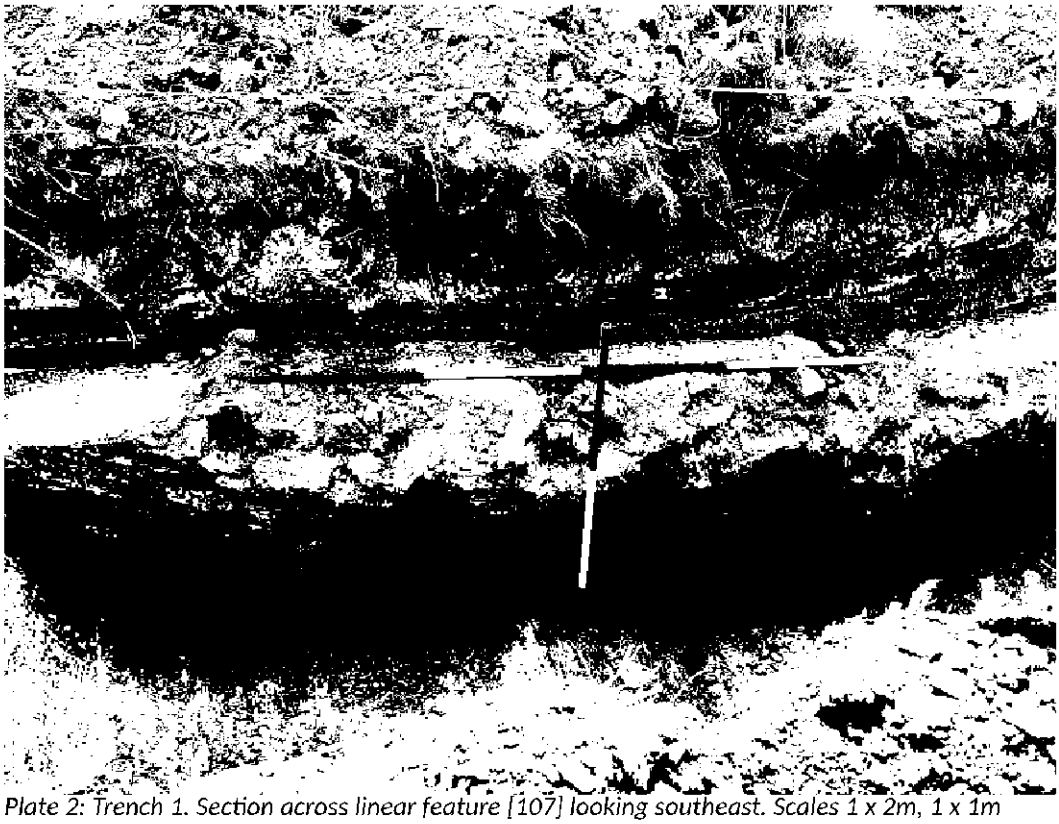


Plate 2: Trench 1. Section across linear feature [107] looking southeast. Scales 1 x 2m, 1 x 1m

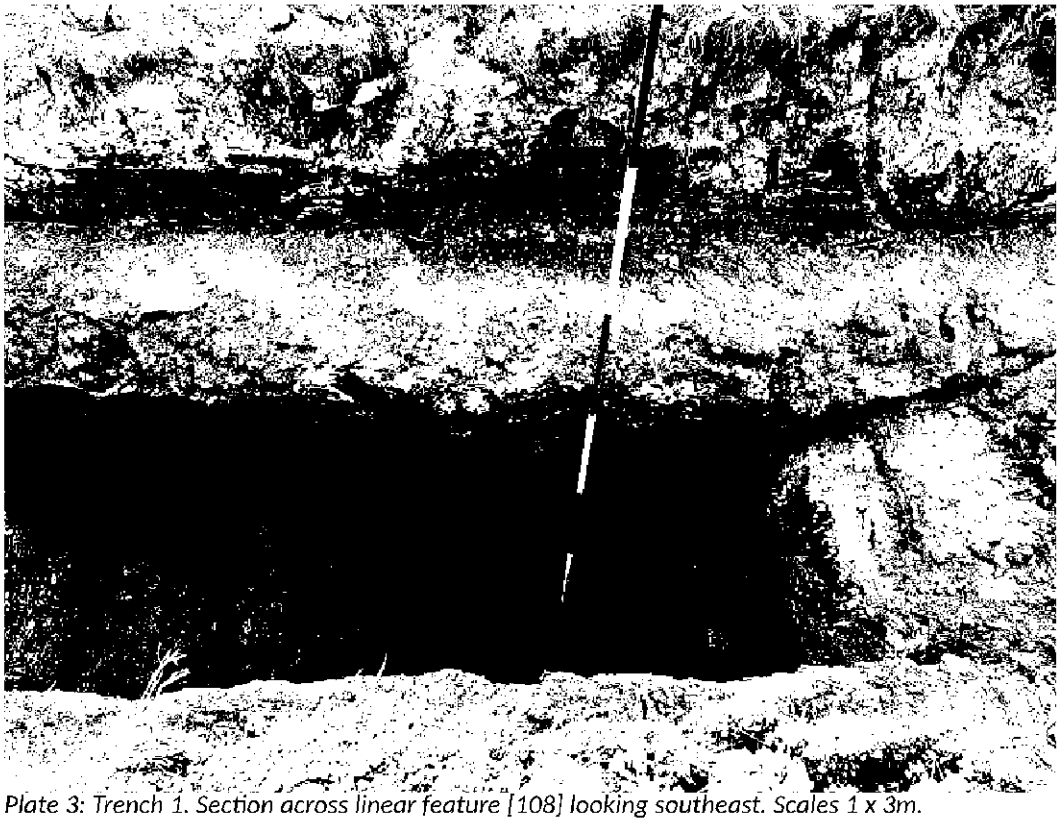


Plate 3: Trench 1. Section across linear feature [108] looking southeast. Scales 1 x 3m.



Plate 4: Trench 1. Curvilinear feature [111] and linear feature [112] looking northwest. Scales 1 x 2m, 1 x 1m



Plate 5: Trench 1. Section through curvilinear feature [111] looking north. Scale 1 x 0.4m.



Plate 6: Trench 1. Section through linear feature [112] looking southeast. Scale 1 x 0.3m.



Plate 7: Trench 1. Linear feature [113] looking west. Scale 1 x 2m.



Plate 8: Trench 1. Section through linear feature [113] looking west. Scale 1 x 0.2m.

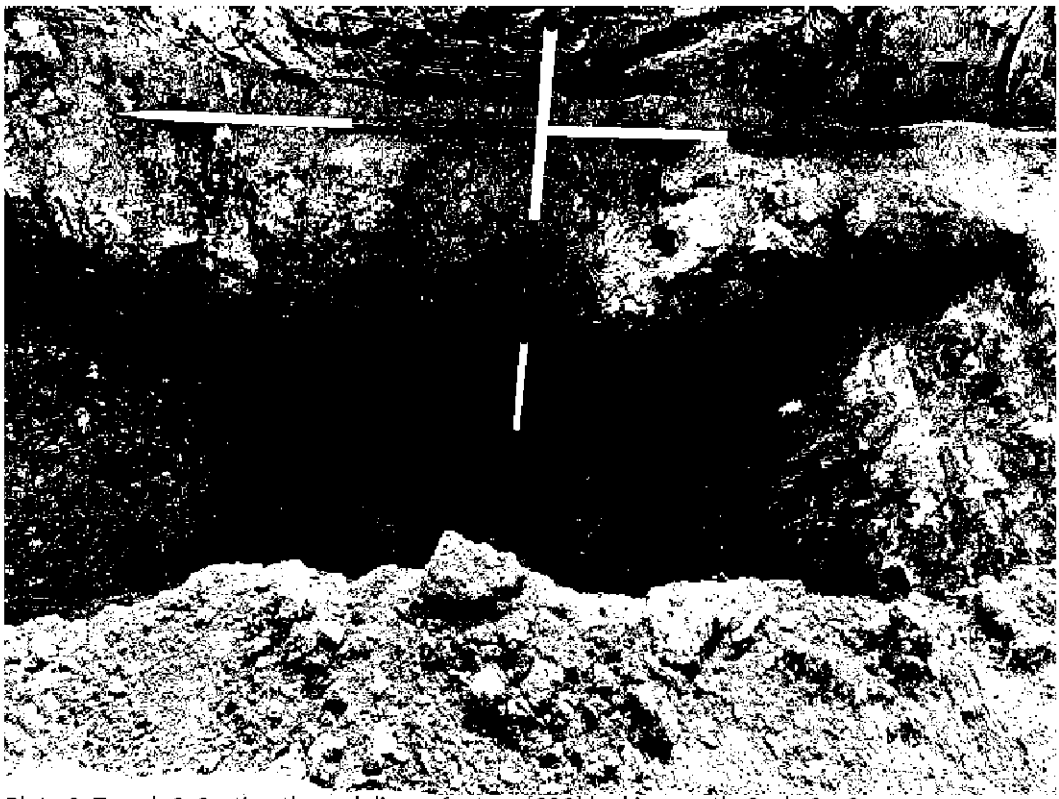


Plate 9: Trench 2. Section through linear feature [203] looking south. Scale 2 x 2m.



Plate 10: Trench 2. Section through linear feature [205] looking east. Scale 1 x 2m.



Plate 11: Trench 3 looking northwest. Scale 1 x 2m, 1 x 1m.



Plate 12: Trench 3. Linear feature [305] looking east. Scales 1 x 2m, 1 x 1m.

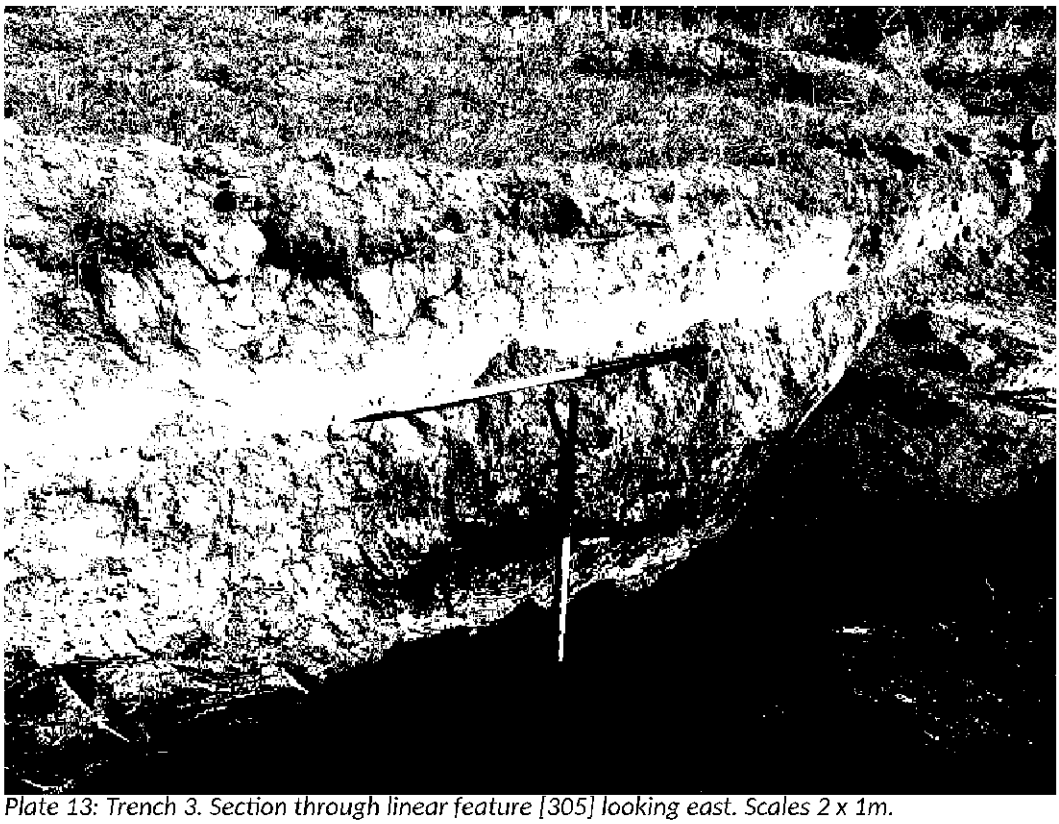


Plate 13: Trench 3. Section through linear feature [305] looking east. Scales 2 x 1m.



Plate 14: Trench 4 looking southeast.



Plate 15: Trench 4. Section through linear feature [405] looking east. Scales 2 x 2m.

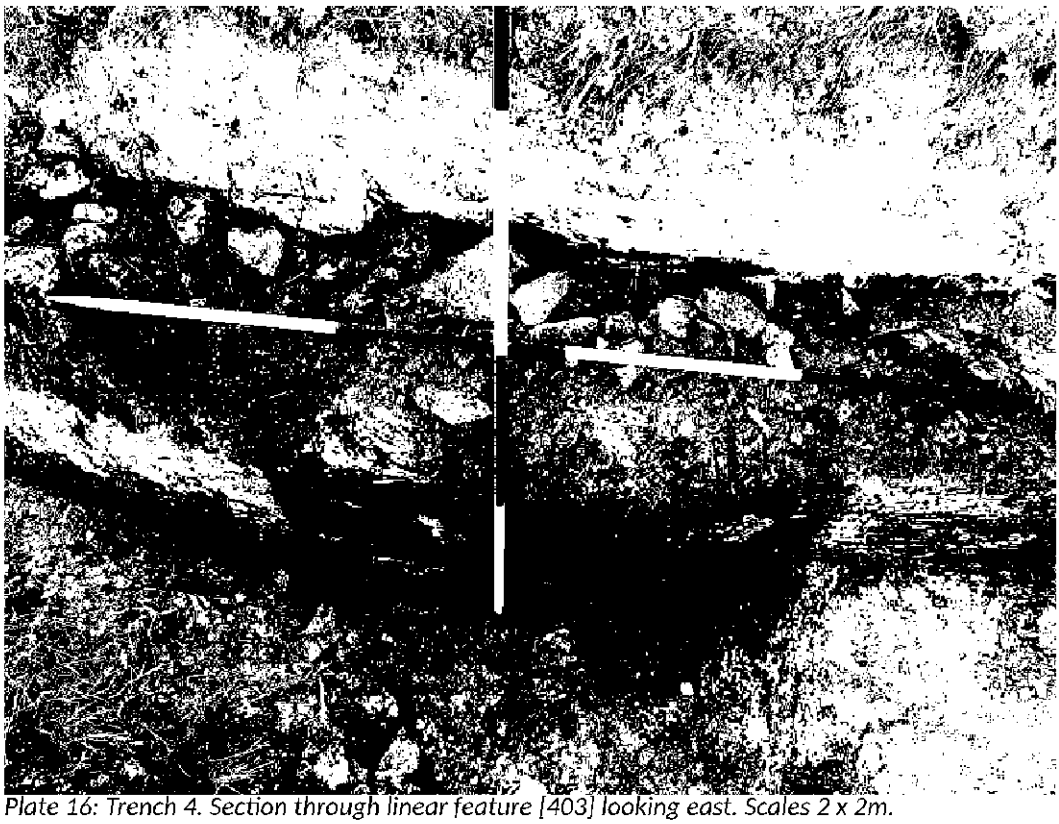


Plate 16: Trench 4. Section through linear feature [403] looking east. Scales 2 x 2m.

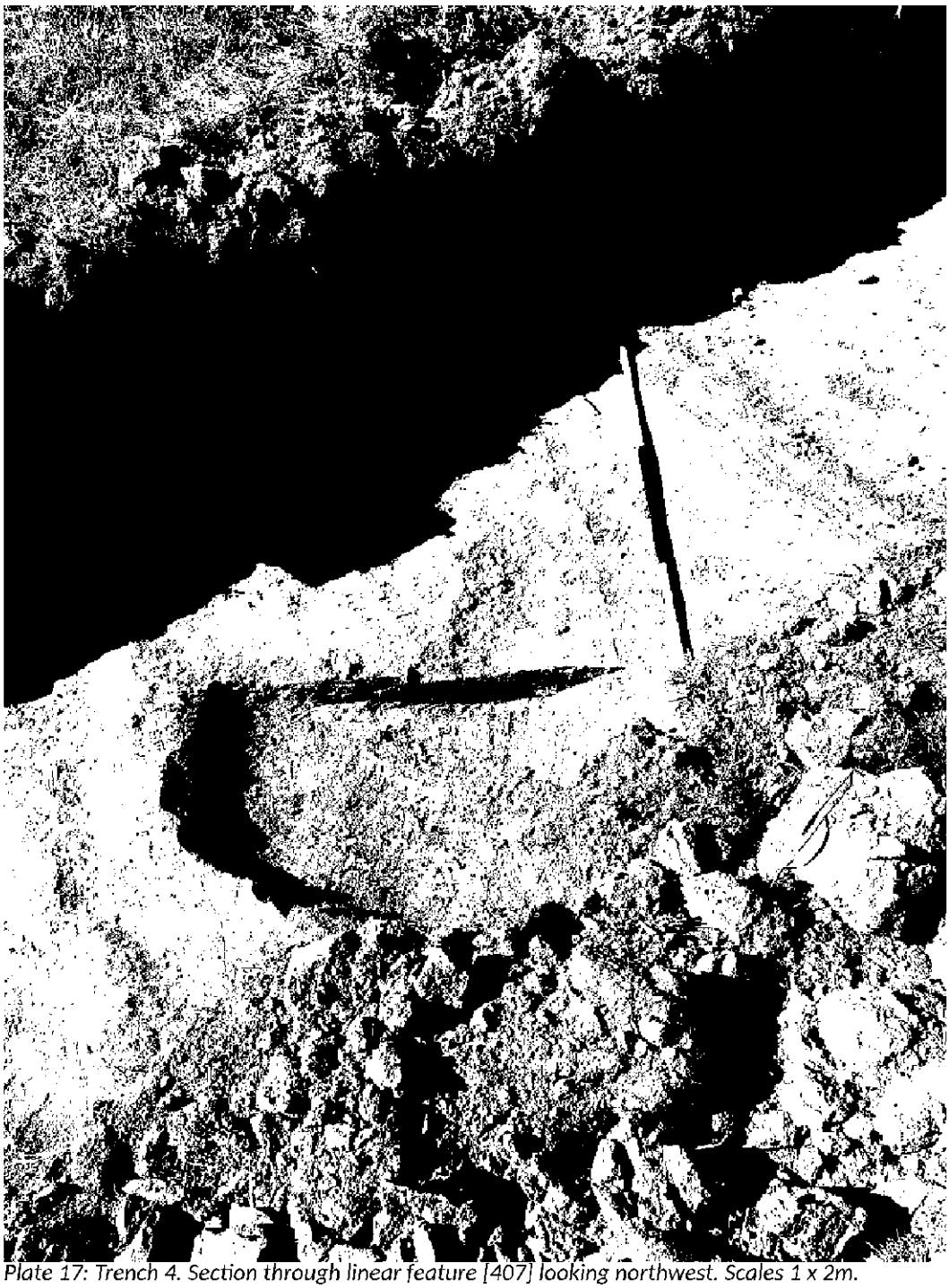


Plate 17: Trench 4. Section through linear feature [407] looking northwest. Scales 1 x 2m.

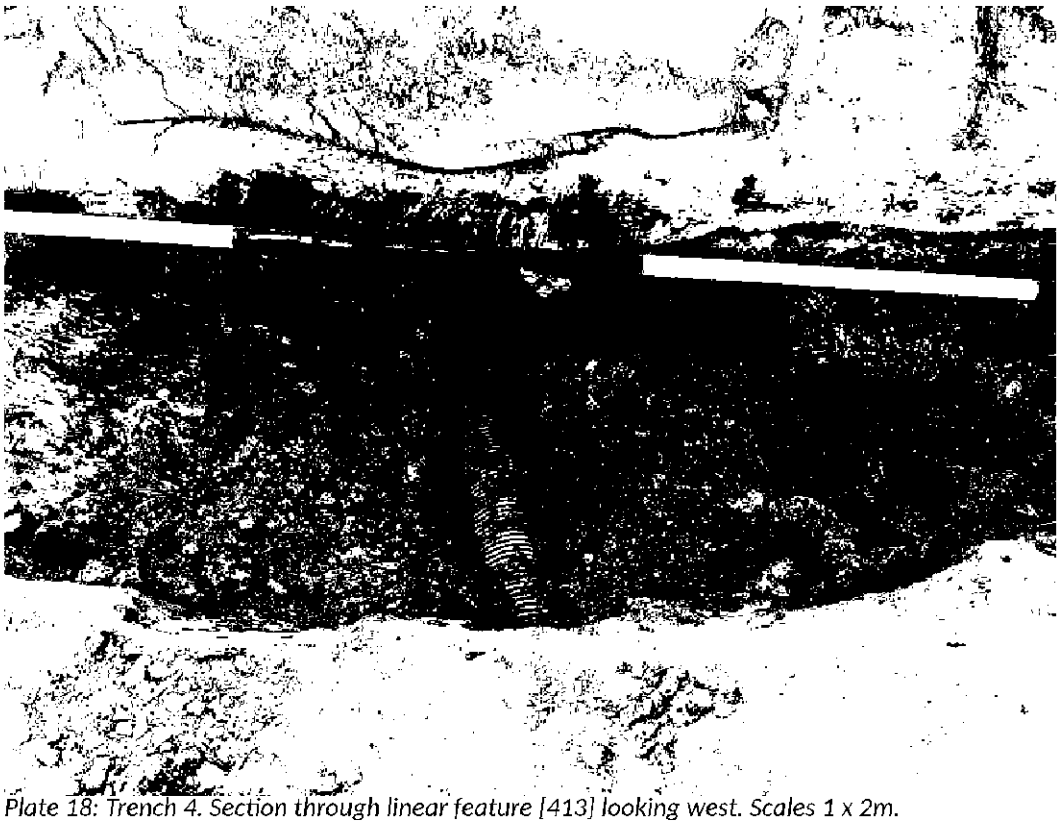


Plate 18: Trench 4. Section through linear feature [413] looking west. Scales 1 x 2m.



Plate 19: Trench 5 looking southwest. Scales 1 x 2m, 1 x 1m.

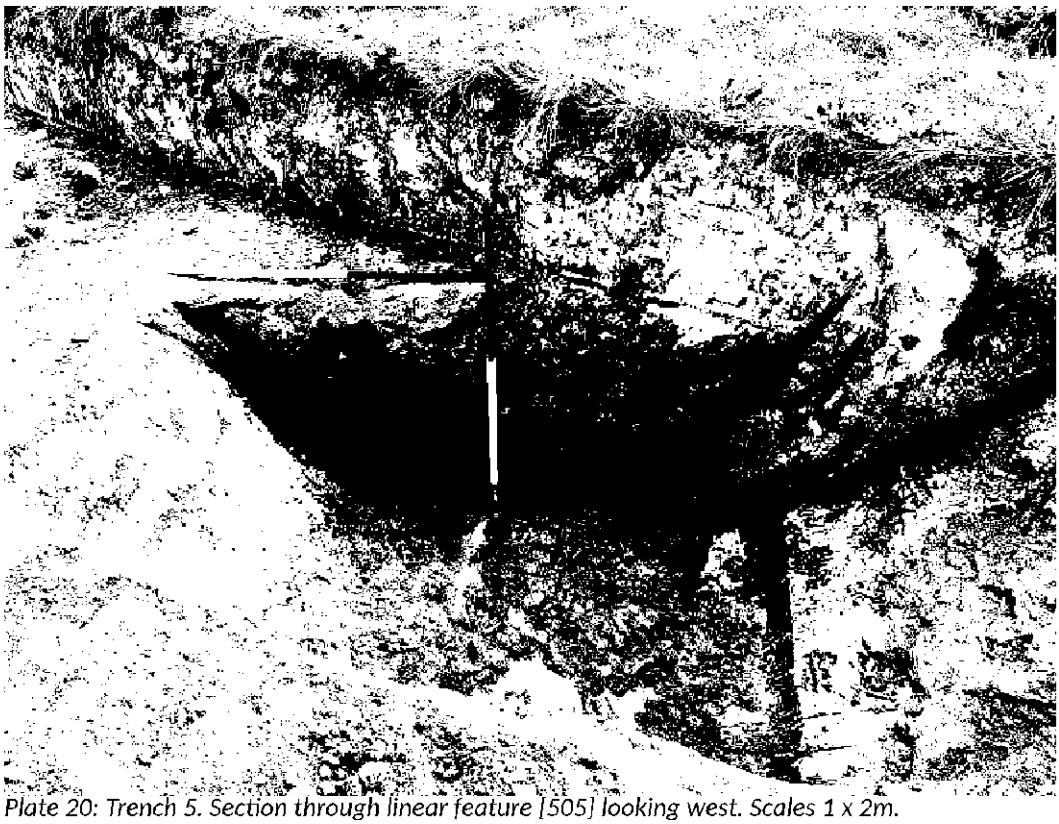


Plate 20: Trench 5. Section through linear feature [505] looking west. Scales 1 x 2m.



Plate 21: Trench 6 looking northeast. Scales 1 x 2m, 1 x 1m.

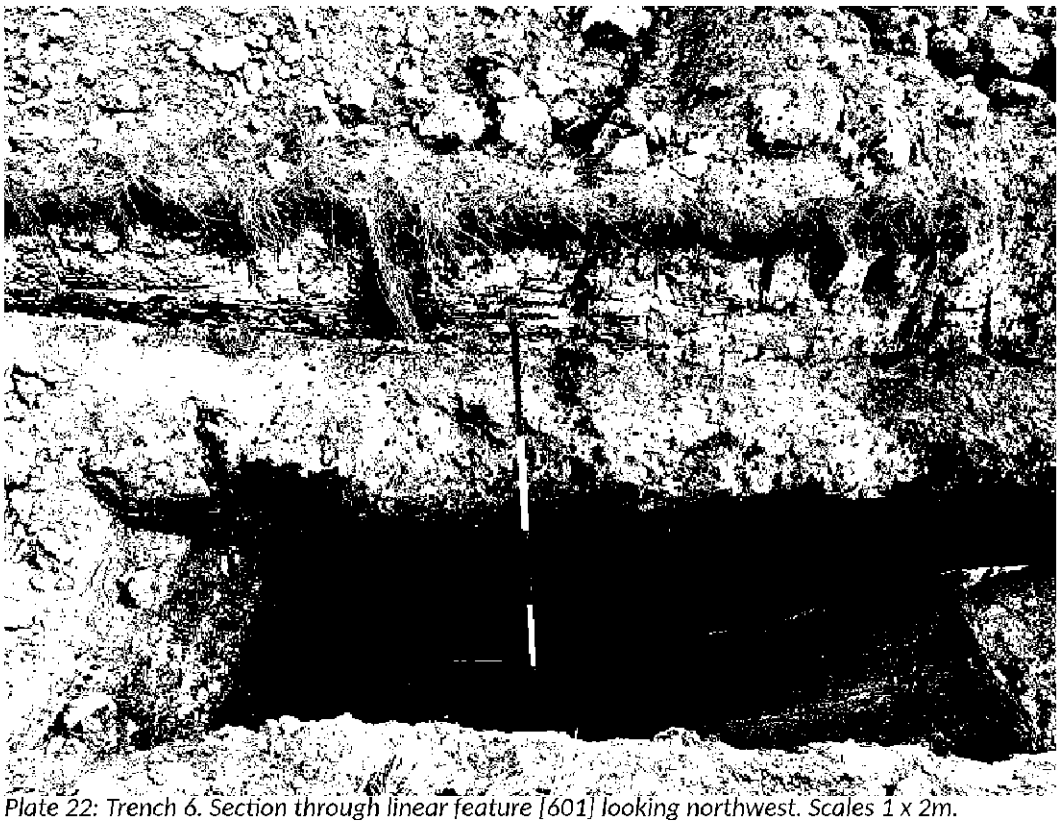


Plate 22: Trench 6. Section through linear feature [601] looking northwest. Scales 1 x 2m.



Plate 23: Trench 6. Linear feature [605] looking southwest. Scales 1 x 2m, 1 x 1m.

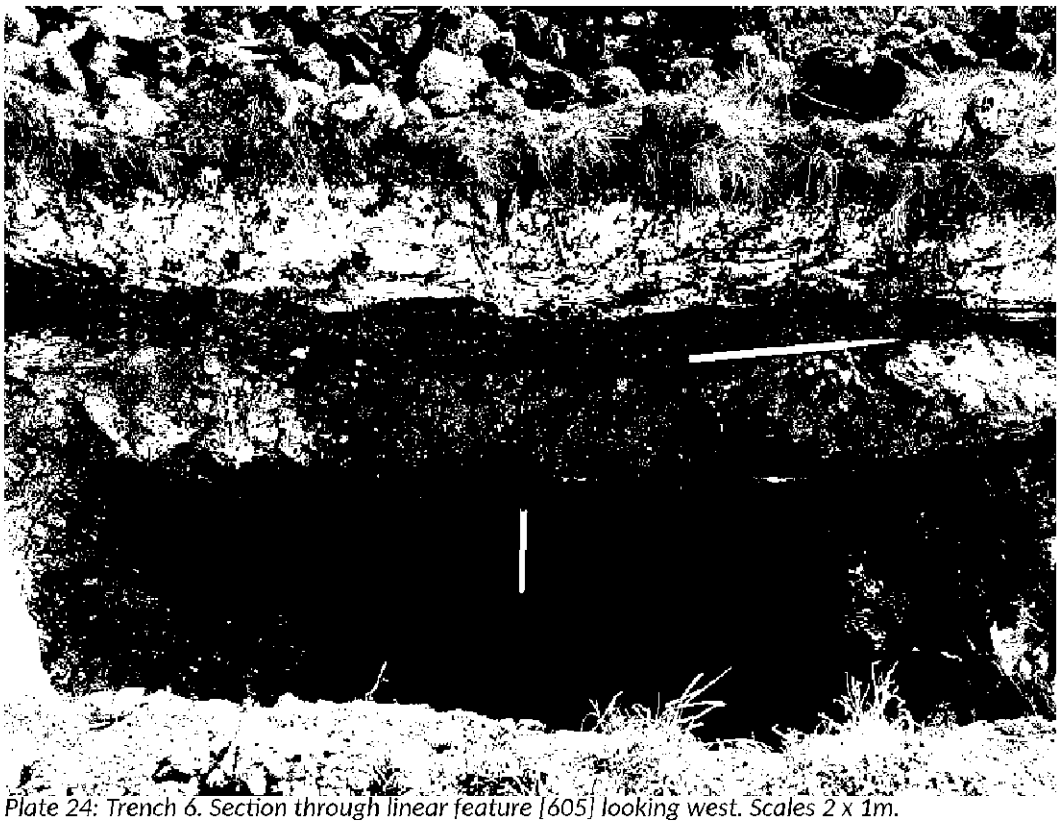


Plate 24: Trench 6. Section through linear feature [605] looking west. Scales 2 x 1m.



Plate 25: Trench 7 looking north. Scales 1 x 2m, 1 x 1m.



Plate 26: Trench 7. Section through linear feature [701] looking east. Scales 1 x 2m.



Plate 27: Trench 7. Section through linear feature [705] looking east. Scales 1 x 2m.



Plate 28: Trench 8 looking southwest. Scales 1 x 2m, 1 x 1m.

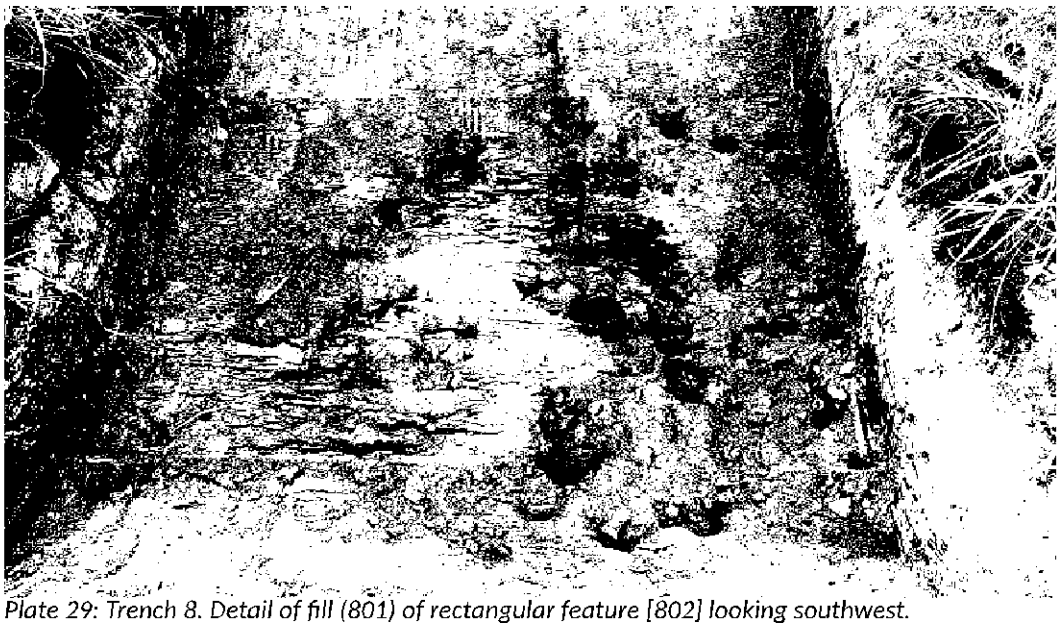


Plate 29: Trench 8. Detail of fill (801) of rectangular feature [802] looking southwest.



Plate 30: Trench 8. Coconuts recovered from fill (801) of rectangular feature [802].



Plate 31: Trench 9 looking east. Scales 1 x 2m, 1 x 1m.



Plate 32: Trench 9. Fill (904) of linear feature [903] cut by land drain (907). looking north. Scales 2 x 1m.



Plate 33: Trench 9. Fill (906) of linear feature [905] cut by land drain (909). looking south. Scales 2 x 1m.

Appendices

Appendix 1 – Radiocarbon Dating Results

Beta Analytic, LLC
4985 SW 74th Court
Miami, FL 33155 USA
Tel: (305) 667-5167
info@betalabservices.com

ISO/IEC 17025:2017-Accredited Testing Laboratory

BetaCal 5.0

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method: INTCAL20)

(Variables: d13C = -26.44 o/oo)

Beta-Laboratory Number **779479**

Conventional Radiocarbon Age (BP) **1640 +/- 30 BP**

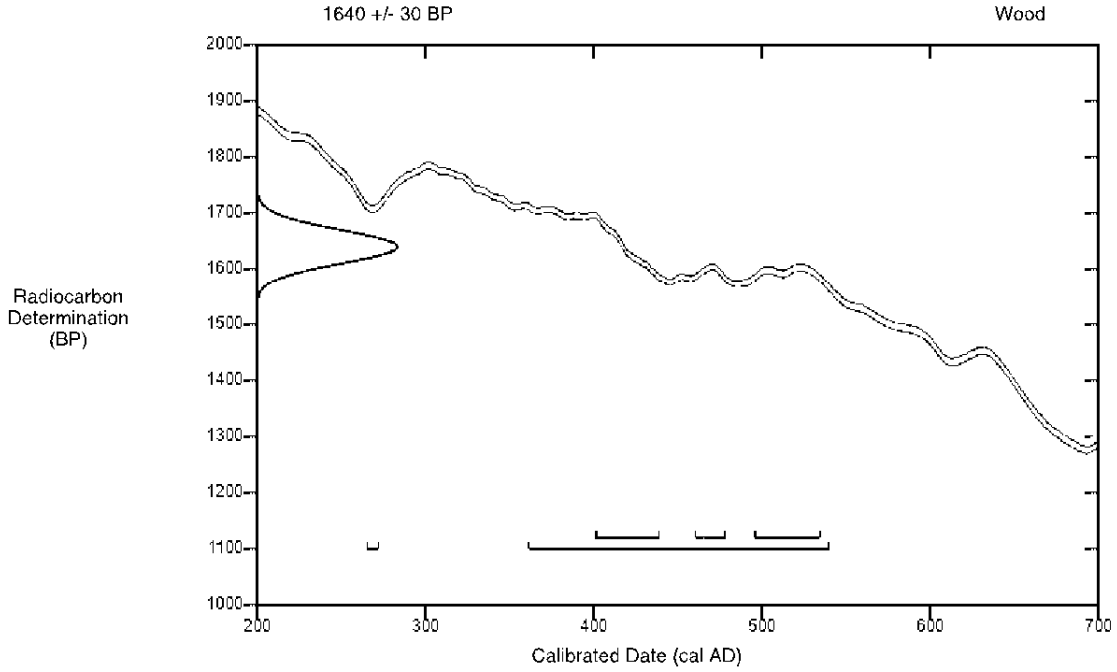
95.4% Probability Calibrated Range(s)

(94.8%)	363 - 538 cal AD	(1587 - 1412 cal BP)
(0.6%)	267 - 270 cal AD	(1683 - 1680 cal BP)

68.2% Probability Calibrated Range(s)

(36.5%)	403 - 437 cal AD	(1547 - 1513 cal BP)
(22.2%)	498 - 533 cal AD	(1452 - 1417 cal BP)
(9.5%)	462 - 476 cal AD	(1488 - 1474 cal BP)

25-0013-106



Database Used

INTCAL20

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.

References to Database INTCAL20

Reimer, et al., 2020, Radiocarbon 62(4): 725-757.

Appendix 2 – Geoarchaeological Test Pit Results

Geoarchaeological Test Pits at Spalding, Lincolnshire

Matt Law, PhD ACIfA FRGS

On behalf of Dee Archaeological Services Ltd

1. Introduction

1.1 Following an archaeological evaluation at land of the A16, Spalding, Lincolnshire (NGR: TF 26267 23155), a series of laterally extensive alluvial deposits were identified across the site. In order to investigate the nature and extent of these deposits, nine test pits were excavated for geoarchaeological recording.

1.2 The fieldwork was carried out by Dr Matt Law in September 2025

1.3 The work was carried out in accordance with the Written Scheme of Investigation drawn up by Wessex Archaeology (2025).

2. Aims

2.1 The general aims of the geoarchaeological test pitting were to:

- establish the broad presence/absence, nature, character, distribution, extent and depth of alluvial deposits across the site
- develop a preliminary assessment of the potential for organic preservation at the site.

2.2 The objective of the test pitting was to

- ascertain (where alluvial deposits are encountered) their extent, depth below ground surface, and character

3. Methodology

3.1 Nine geoarchaeological test pits (denoted Tr 1 – Tr 9) were excavated at the site. The pits were excavated using a tracked mechanical excavator to depths ranging from 2.3m to 3.8m below ground level.

3.2 Sediment description was undertaken in the field. Sedimentary components are described using the modified Troels-Smith protocol of Aaby and Berglund (1986). The elements of this relevant to this report are summarised in Table 1.

Table 1: Modified Troels-Smith nomenclature used in this report

Abbreviation	Element Name	Description
As	*Argilla steatodes*	Particles of clay
Ag	*Argilla granosa*	Particles of silt
Ga	*Grana arenosa*	Particles of sand

4. Results

4.1 Lithostratigraphic descriptions for the test pits are set out below.

NARRATIVE SUMMARY OF THE LITHOSTRATIGRAPHY

4.2 The test pits revealed a remarkably consistent stratigraphic sequence across the site, comprising topsoil, subsoil, and thick alluvial deposits extending beyond depths of 2.3m to 3.8m below ground level (bgl). Ground surface elevations ranged from 2.37m to 2.97m aOD.

4.3 All test pits exhibited a thin topsoil layer (0.1m to 0.23m thick) of uniform light greyish brown silty clay with organo-mineral content, fine sand, common herbaceous roots, and rare ceramic building material (CBM) fragments. This was consistently underlain by a subsoil layer of similar composition but mineral in character, with rare fine roots and no inclusions.

4.4 Below the subsoil, substantial alluvial deposits were encountered across all test pits. These deposits displayed a consistent vertical progression in redox characteristics. The upper portions typically comprised firm light yellowish brown silty clay with moderate to frequent light blue-grey mottles, indicating periods of oxidation. With increasing depth, these deposits transitioned to predominantly dark bluish grey clay with common to frequent black mottles, reflecting increasingly reducing conditions associated with waterlogging.

4.5 Modern agricultural intervention was evident in several test pits, with field drains recorded at depths of approximately 0.8m below ground level in Tr 1, Tr 2, and Tr 9.

4.6 Two test pits contained deposits of particular interest. In Tr 6, a degraded organic layer (0.16m thick) was identified at 1.04m to 1.2m below ground level (1.363m to 1.203m aOD). This very dark grey-black silty clay was organo-mineral in character and well humified, with no inclusions. It was sharply bounded above and below by alluvial clay. This deposit may represent an episode of peat formation within a topographic hollow, perhaps associated with a former channel.

4.7 Tr 8 revealed dumped fill between 0.37m and 1.43m below ground level, comprising mid greyish-brown silty clay with moderate charcoal flecks and CBM fragments increasing with depth. The deposit contained frequent coconut shells and wood fragments, clearly indicating modern disturbance and infilling.

4.8 The consistency of the alluvial stratigraphy, the clear redox zonation, and the lateral extent of deposits indicate deposition within a low-lying floodplain environment, consistent with the site's location within the Lincolnshire Fens.

Tr 1

Table 2: Lithostratigraphy in Tr 1

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.717	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.1	2.617	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.38	2.337	Firm light yellowish brown silty clay (As3 Ag1) with moderate light blue-grey mottles, mineral, no inclusions. Field drain at 0.84m bgl. Frequency of blue-green colouration increases below 1m bgl	Alluvium
1.48	1.237	Continuation of above but predominantly dark bluish grey with common light yellowish brown mottles	Alluvium
2.3	0.417	Bottom of test pit	



Figure 1: Test pit in Tr 1, looking NE

Tr 2

Table 3: Lithostratigraphy of Tr 2

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.817	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.14	2.677	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.38	2.437	Firm light yellowish brown silty clay (As3 Ag1 Ga+) with moderate light blue-grey mottles, mineral, no inclusions. Some fine to medium sand	Alluvium
0.68	2.137	Continuation of above becoming light bluish grey	Alluvium
0.77	2.047	Continuation of above becoming mid yellowish-brown sandy clay (As3 Ag1). Plastic land drain at 0.81m bgl	Alluvium
0.86	1.957	Dark reddish brown silty clay (As3 Ag1) with common dark grey blue mottles	Alluvium
2	0.817	Dark bluish grey silty clay (As3 Ag1) with common black mottles	Alluvium
2.5	0.317	Bottom of test pit	

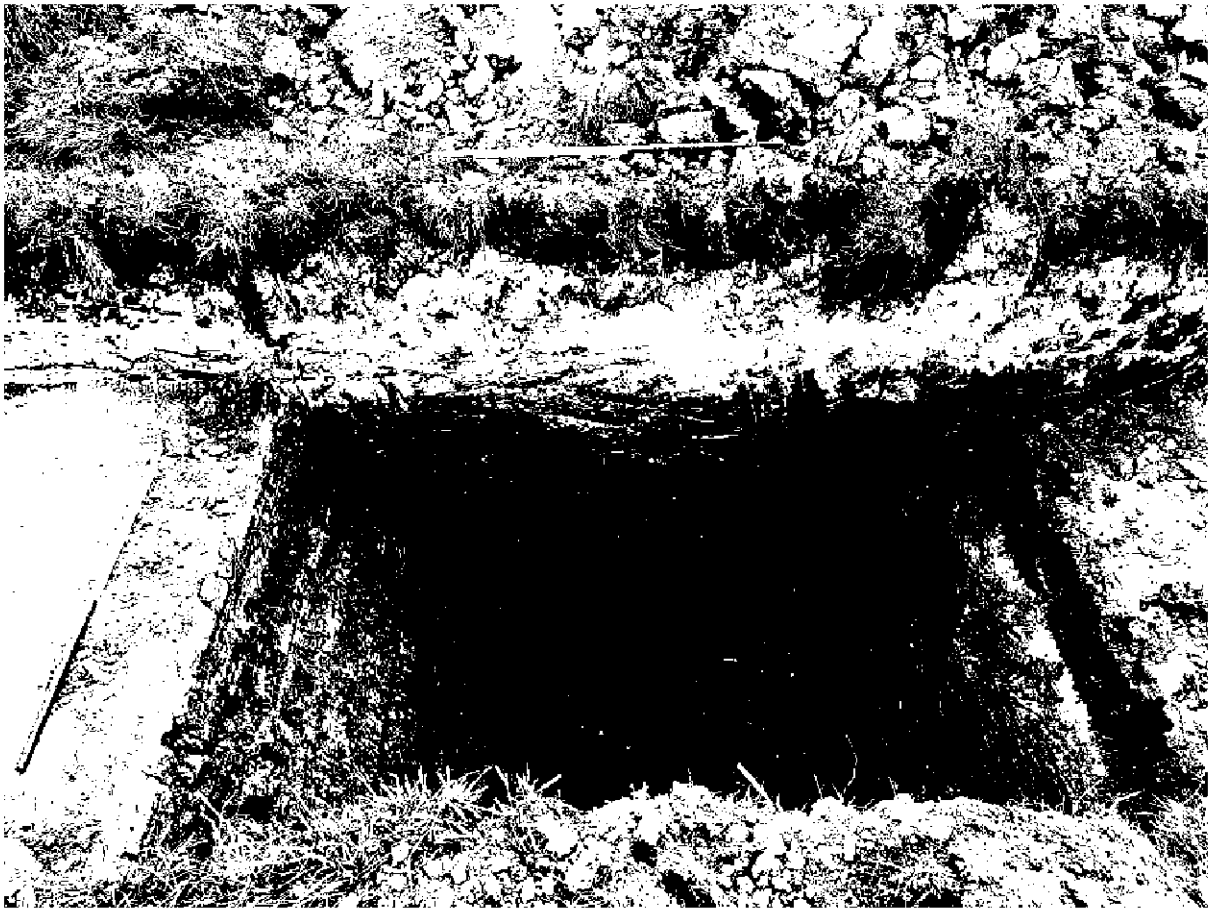


Figure 2: Test pit in Tr 2, looking S

Tr 3

Table 4: Lithostratigraphy of Tr 3

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.617	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.1	2.517	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.46	2.157	Firm light yellowish brown silty clay (As3 Ag1) with moderate light blue-grey mottles, mineral, no inclusions. Frequency of blue-grey mottles increases with depth. Gradual transition to	Alluvium
0.82	1.797	Continuation of above with common dark reddish-brown flecks	Alluvium
2.2	0.417	Dark bluish-grey clay (As4) with common mid yellowish brown mottles. Mineral. No inclusions	Alluvium
3.8	-1.183	Bottom of test pit	

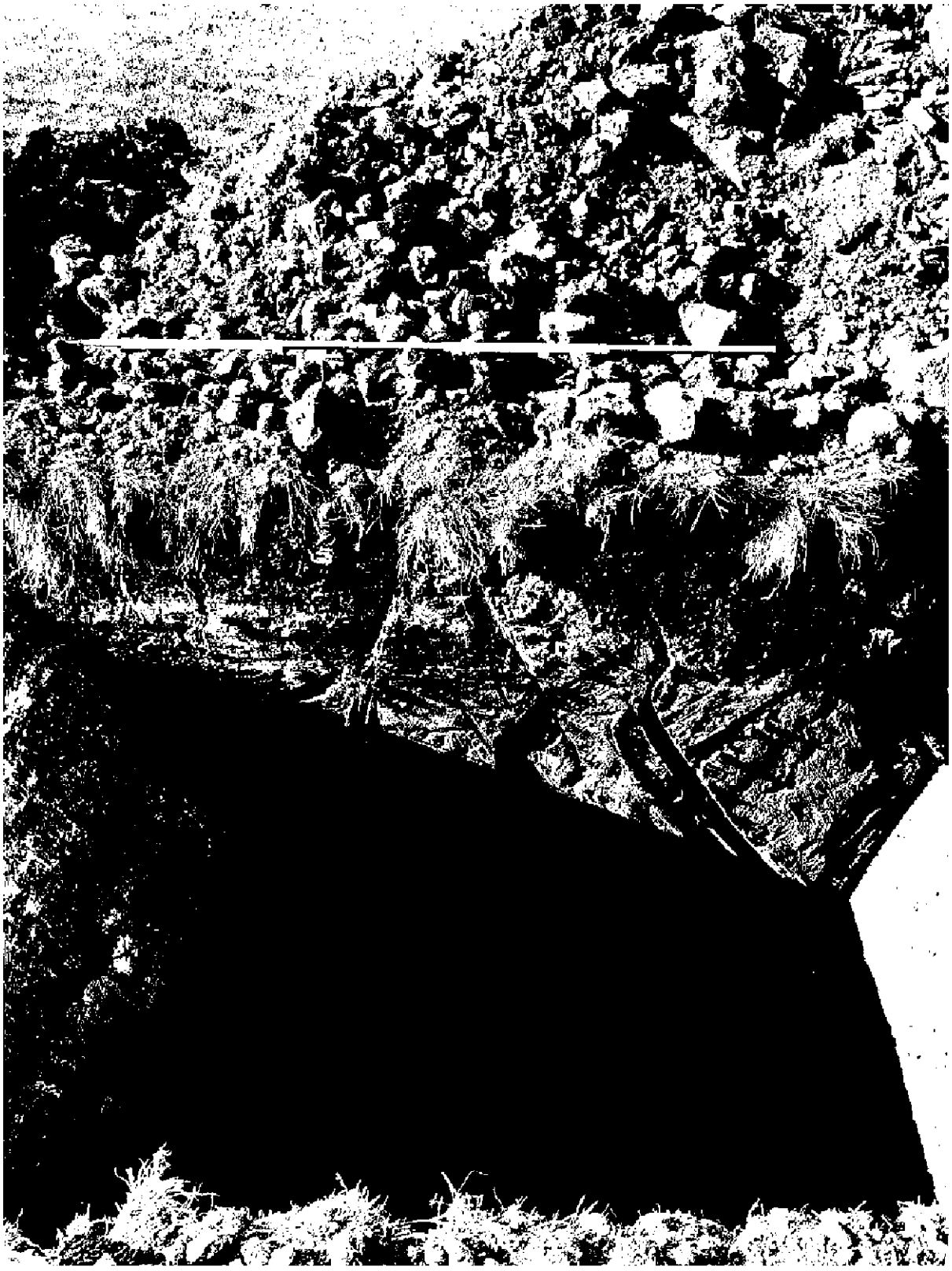


Figure 3: Test pit from Trench 3, looking SW

Tr 4

Table 5: Lithostratigraphy of Tr 4

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.97	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.11	2.86	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.43	2.54	Light yellowish brown sandy clay (As3 Ag1 Ga+), fine sand, common light bluish grey mottles	Alluvium
1.77	1.2	Continuation of above becoming dark greyish-brown. Frequency of blue mottles increases below 2m bgl, and predominantly blue by 2.5m bgl	Alluvium
2.6	0.37	Bottom of test pit	



Figure 4: Test pit in Tr 4, looking SE

Tr 5

Table 6: Lithostratigraphy of Tr 5

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.37	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.16	2.21	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.48	1.89	Firm light yellowish brown silty clay (As3 Ag1) with common light blue-grey mottles, mineral, no inclusions. Frequency of blue-grey mottles increases with depth. Clay is more blue towards the western end of the pit	Alluvium
1	1.37	Continuation of above but predominantly mid bluish-grey with common black mottles. Silt component decreases with depth. Very gradual transition to	Alluvium
2.2	0.17	Dark bluish grey clay (As4) with common black mottles. Mineral. No inclusions	Alluvium
3.3	-0.93	Bottom of pit	

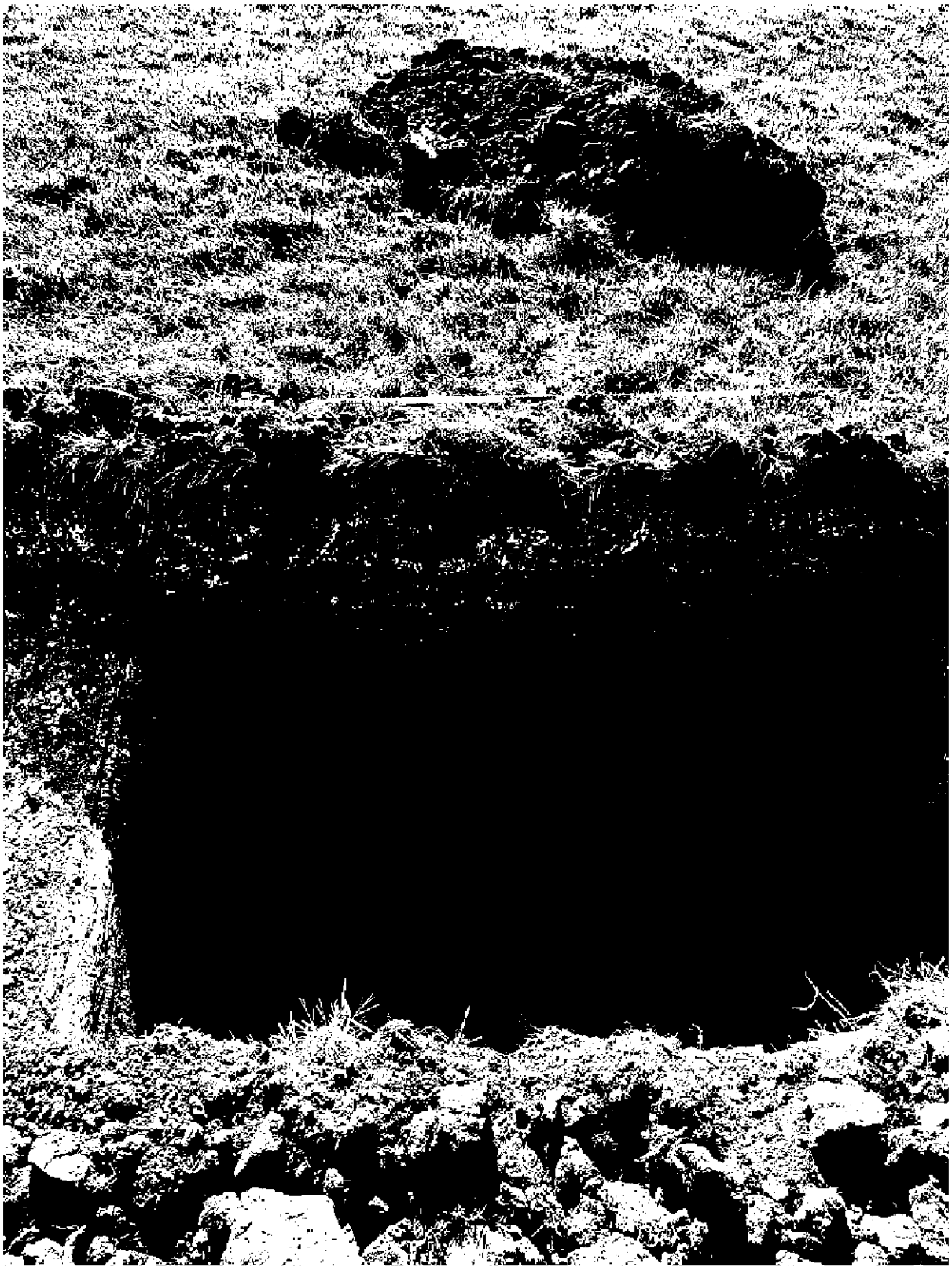


Figure 5: Test pit in Trench 5, looking SW.

Tr 6

Table 7: Lithostratigraphy of Tr 6

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.403	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.18	2.223	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.32	2.083	Firm light yellowish brown silty clay (As3 Ag1) with moderate light blue-grey mottles, mineral, no inclusions. Frequency of blue-grey mottles increases with depth. Abrupt boundary to	Alluvium
1.04	1.363	Very dark grey-black silty clay (Ag3 As1). Organo-mineral. Well humified. No inclusions. Sharp boundary to	Degraded organic layer
1.2	1.203	Mid greyish-blue clay (As4) with common black mottles	Alluvium
3.3	-0.897	Bottom of test pit	



Figure 6: Test pit in Tr 6, looking S

Tr 7

Table 8: Lithostratigraphy of Tr 7

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.5	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.23	2.27	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Sharp boundary to	Subsoil
0.63	1.87	Firm light yellowish brown silty clay (As3 Ag1) with frequent light blue-grey mottles, mineral, no inclusions	Alluvium
1.39	1.11	Continuation of above but predominantly mid bluish-grey	Alluvium
2.5	0	Bottom of test pit	



Figure 7: Test pit in Tr 7, looking S

Tr 8

Table 9: Lithostratigraphy of Tr 8

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.457	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.37	2.087	Uniform mid greyish-brown silty clay (As2 Ag2) with moderate charcoal flecks and CBM fragments below 0.68m bgl. Frequent coconuts and wood fragments. Very sharp transition to	Dumped fill
1.43	1.027	Mid bluish grey clay (As4) with some black staining in the upper 0.2m. Common black mottles	Alluvium
2.5	-0.043	Bottom of test pit	

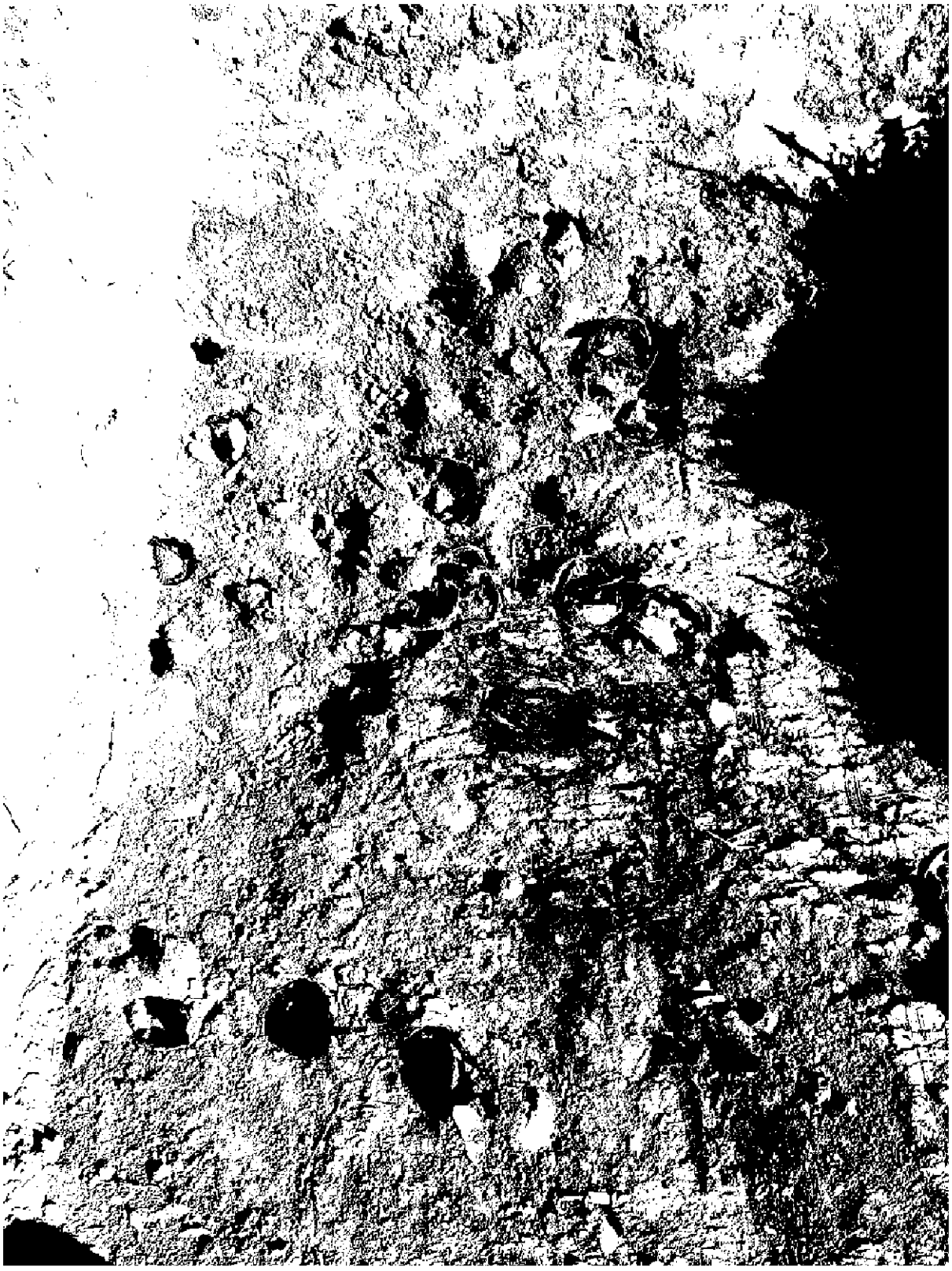


Figure 8: Coconuts in fill within Trench 8



Figure 9: Test pit in Tr 8, looking S

Tr 9

Table 10: Lithostratigraphy of Tr 9

Depth below ground level (m bgl)	Level (m aOD)	Description	Interpretation
0	2.388	Uniform light greyish brown silty clay (As2 Ag2 Ga+), organo-mineral, some fine sand, common fine herbaceous roots, rare CBM fragments. Sharp boundary to	Topsoil
0.22	2.168	Uniform light greyish brown silty clay (As3 Ag1), mineral, rare fine herbaceous roots. No inclusions. Cut at SW end by modern feature. Sharp boundary to	Subsoil
0.6	1.788	Firm light yellowish brown silty clay (As3 Ag1) with moderate light blue-grey mottles, mineral, no inclusions. Frequency of blue-grey mottles increases with depth. Field drain at 0.82m bgl in western section	Alluvium
0.92	1.468	Continuation of above but predominantly mid bluish-grey	Alluvium
2.65	-0.262	Bottom of test pit	



Figure 10: Test pit in Tr 9, looking WSW

5. Discussion

5.1 The test pit excavations revealed a uniform stratigraphic sequence across the site comprising topsoil, subsoil, and substantial alluvial clay deposits extending to considerable depth. The alluvial deposits display characteristic redox features, with oxidised yellowish-brown upper portions transitioning to reduced bluish-grey sediments at depth, indicating fluctuating water tables and prolonged waterlogging typical of fenland environments.

5.2 The presence of field drains at consistent depths across multiple test pits demonstrates ongoing agricultural management of this low-lying landscape. The modern disturbance recorded in Tr 8, containing materials such as coconut shells alongside CBM and charcoal, indicates localised infilling activities.

5.3 The degraded organic layer identified in Tr 6 is of particular interest. This well-humified deposit, occurring as a discrete lens within the alluvial sequence, may represent a former stable land surface or episode of organic accumulation during a period of reduced alluviation. Such horizons can provide valuable palaeoenvironmental evidence and dating opportunities for understanding landscape development in this part of the Fens.

6. Conclusions

6.1 A series of nine test pits were excavated at Spalding, Lincolnshire, under geoarchaeological supervision. The site revealed a consistent sequence of alluvial clay deposits with overlying topsoil and subsoil, with depths extending beyond 3.8m below ground level. The alluvial deposits display clear redox zonation reflecting the waterlogged nature of this fenland environment.

6.2 A degraded organic layer was identified in Tr 6, representing a potential former peat deposit perhaps infilling a topographic hollow.

6.3 With the exception of the organic layer in Tr 6, there was generally poor potential for organic preservation in these deposits, which are predominantly oxidised in their upper portions and highly reduced at depth.

Reference cited

Aaby, B. and Berglund, B.E., 1986. Characterization of peat and lake deposits. In: Berglund, B.E. (ed.) *Handbook of Holocene Palaeoecology and Palaeohydrology*. Chichester: John Wiley & Sons, pp. 231-246.

Appendix 3 – Data Management Plan

Version	Author	Date	Summary
1.0	R Matthews	10/12/25	Draft

Project Description:	An archaeological evaluation at land off Spalding Lincolnshire was undertaken in September 2025.		
Project code:	25-0013	**Oasis Id:**	
Digital Repository	Archaeological Data Service (ADS)	**ADS Id:**	TBC
Physical Repository	None	**Accession Number:**	N/A
Project Manger:	D Garner	**Data Manger:**	TBC
Archive Manager:	R Matthews		
Related Polices:	• Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, CIfA (2020) • Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials, CIfA (2020) • Selection Toolkit for Archaeological Archives, CIfA (2018) • Guides to Good Practice, ADS (2023) • Guidelines For Depositors v.4.0, ADS (2020) • ADAPt project 6896, (Historic England) Digital Preservation Policy (2016) • DAS Digital Data and Preservation Policy (pending) • DAS Archival Selection, Retention and Disposal Policy (pending)		

1. Data Collection

1.1. The archaeological work consisted of an archaeological evaluation. The key archaeological techniques undertaken were excavation, recording and reporting.

1.1.1. Given the nature of the work the following data types were created and stored.

- Images

Type	Format	Volume
Digital SLR Images	.jpg / .tiff/ .raf	83 files 581.3MB

- Written and drawn

Type	Format	Volume
Text/documents -Reports	.pdf	2 files 26MB
Text/documents - site fieldwork sheets and drawings)	.pdf	36 files 105MB
Spreadsheets	.xlsx / .pdf	3, avg size 300KB

- Survey

Type	Format	Volume
Shapefiles	.shp	9 files including associated layers, 112MB

1.2. The standard method of data collection was applied throughout the project to all born data and digitised records, these adhered to the project Written Scheme of investigation (WSI), Best Practice, Standards and Guidelines, as well as, DAS Archaeology's in-house styles and policies.

1.2.1. External contractors and specialists are required to confirm to these standards and methods.

1.2.2. All born digital data and digitised records are kept within a specific project folder on Dee Archaeological Services (DAS) secure drive. These folders are organised using an in-house style, named with an identifier, descriptor and version.

1.3. To ensure quality assurance, all equipment and site data is regularly checked and reviewed by the appropriate project staff during the life or the project; with project folders maintained and back up by DAS in-house team.

2. Documentation and Metadata

2.1. The data collected includes standard formats, which abide by the project brief Museum Deposition Guidelines or Digital Repository Guidelines, and conform to the FAIR data principles: findable, accessible, interoperable and reusable.

2.2. Data will retain, as far as possible, the original metadata ascribed during creation. All metadata that is incorporated in the creation of the file, particularly date of creation, will be retained.

3. Ethics and legal compliance

3.1. DAS has policies regarding the ethical use of its data which comply with National law and Industry Guidelines. All data shared and preserved by DAS adheres to GDPR as specified in DAS GDPR Policy (2025).

3.2. DAS and any external contractors will not use Generative AI to collect or produce data, as per DAS Policies.

3.3. Copyright for all data collected or created the project team belongs to DAS.

3.4. The copyright from data collected and created from external specialists/contractors, as engaged by DAS, belong to DAS and will be specified in relevant contacts.

3.5. Data used under licence from external data providers, such as OS or HER, will only be used in terms of the licence and will not be included in the site archive unless permitted by the terms of the licence.

4. Data Security: Storage and Backup

4.1. DAS uses internal file servers and a cloud storage service provider, this is managed by an in-house team, with regular offline physical backups.

4.2. The server is accessible by staff on and off site through a secure log-in.

4.3. The physical site archive is the responsibility of the project manager, who will on completion of the work, upload the relevant information to the project folder.

5. Selection and Preservation

5.1. All data relating to the archaeological understanding of the site is kept within the working project archive.

5.1.1. It is understood that not all data accumulated needs to be retained and deposited with the Archaeological Archives. Prior to deposition a selection strategy and DMP will be reviewed and agreed with the appropriate stakeholders, with all relevant data then deposited.

5.1.2. Any de-selected data which is considered to have intrinsic value, may be kept by DAS within a secure company server. Any material selected for deletion will comply with the standards laid out within DAS in-house standards.

5.2. The long term preservation plan for the dataset is for safe storage with DAS until it is securely deposited with Archaeological Data Service (ADS) and OASIS, or another appropriate digital repository.

5.3. The relevant Museum will be contacted at the project initiation stage, with confirmation of depositing with a trusted digital repository. ADS will be notified of the intended repository and updated at an appropriate time.

5.4. Exacting costs of the deposition of digital data are not possible to produce prior to commencement of works. All archaeological projects have the potential to produce a wide range and size of data sets, depending on the scale of the archaeological resource found, the techniques required to record and other environmental factors during works.

5.5. Taking into consideration our understanding of the site and the type of archaeological works being undertaken, this project is considered unlikely to produce data in excess of what can be submitted through ADS-Easy. These costs have been estimated and included into the project budget..

6. Data Sharing

6.1. Data will be uploaded to OASIS and ADS, a Core Seal Trust approved repository (unless otherwise stated), within 12 months of project completion.

6.2. The ADS will disseminate the digital archive online under a Creative Commons licence and the dataset will be assigned a unique identifier (DOI).

6.3. There are no known restrictions on data sharing.

7. Responsibilities

7.1. Data capture, metadata production and data quality is the responsibility of the Project Team, assured by the Project Manager.

7.2. Storage and backup of data in the field is the responsibility of the field team.

7.3. Once data is incorporated into the DAS server, it's storage and backup is managed by an in-house team.

7.4. Data archiving is undertaken by the project team under the guidance of the Archives manager who is responsible for the transfer of the Archaeological Project Archive to the agreed repository.

Appendix 4 – OASIS Form

OASIS Summary for deearcha1-539143

OASIS ID (UID)	deearcha1-539143
Project Name	Evaluation at Spalding
Sitename	Spalding
Sitecode	25-0013
Project Identifier(s)	Land at Spalding Lincolnshire
Activity type	Evaluation
Planning Id	
Reason For Investigation	Planning: Between application and determination
Organisation Responsible for work	
Project Dates	
Location	Spalding NGR : TF 26258 23083 LL : 52.79055480559934, -0.129106173951487 12 Fig : 526258,323083
Administrative Areas	Country : England County/Local Authority : Lincolnshire Local Authority District : South Holland Parish : South Holland, unparished area
Project Methodology	
Project Results	
Keywords	
Funder	
HER	Lincolnshire HER - unRev - STANDARD
Person Responsible for work	
HER Identifiers	
Archives	

Report generated on: 09 Dec 2025, 12:30