EAST PARK ENERGY

East Park Energy

EN010141

Preliminary Environmental Information Report

Volume 2 – Technical Appendices

Appendix 6-6: Archaeological Targeted Trial Trench Evaluation

September 2024

Version 01

EAST PARK ENERGY, CAMBRIDGESHIRE

Archaeological Targeted Trial Trench Evaluation

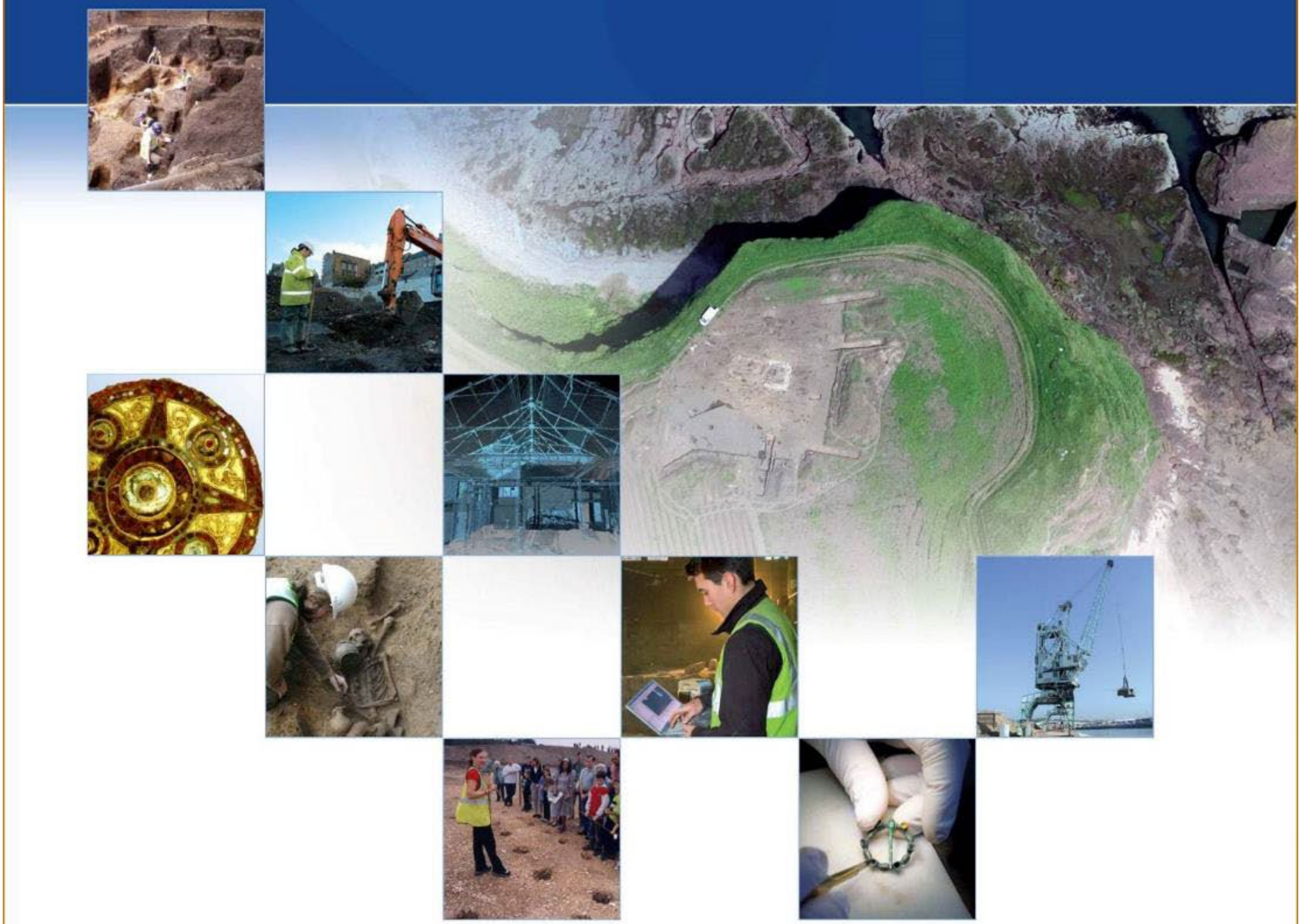
Interim Report

National Grid Reference: TL 13098 63859 (Centred)

AOC Project No: 34835

Site Code: ECB7315

Date: June 2024



AOC Archaeology Group

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EAST PARK ENERGY, CAMBRIDGESHIRE

Archaeological Targeted Trial Trench Evaluation Interim Report

On Behalf of:	**RNA Energy Ltd** **16 Stratford Place,** **London W1C 1BF**
National Grid Reference (NGR):	**TL 13098 63859**
AOC Project No:	**34835**
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Date:	**June 2024**

This document has been prepared in accordance with AOC standard operating procedures.

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EXECUTIVE SUMMARY

This interim report has been prepared on behalf of RNA Energy Ltd to support a proposal for the proposed East Park Energy comprising a new ground-mounted solar photovoltaic energy generating station and an associated on-site Battery Energy Storage System (BESS) on land to the north-west of St Neots, Cambridgeshire (the Scheme).

The works were undertaken to assess the presence or absence of archaeological remains, depth, condition and significance as suggested by the geophysical survey previously undertaken by AOC Archaeology (AOC 2024). A Written Scheme of Investigation (WSI) was prepared by AOC Archaeology (AOC 2024), which detailed the scope and methodology of the archaeological evaluation. The works were conducted by AOC Archaeology in accordance with current and best practices, standards, and guidelines. The works were monitored by the Historic England (HE) Inspector for Ancient Monuments and Senior Archaeologist at the Cambridgeshire Historic Environment Team (CHET) at Cambridgeshire County Council (CCC)

The archaeological evaluation comprised four targeted trenches located in Area C. The targeted trenches were designed to target different geophysical anomalies and characterise these rather than evaluate a percentage sample of the Scheme (Figure 2). Archaeological remains were present in all four trenches. The provisional results of the targeted trial trench evaluation indicate the majority of the features recorded dated to the Roman period. The archaeological features may have been truncated but most remains are fairly well preserved. Along with the high confidence in the geophysical survey, it is likely the Roman settlement indicated by the geophysics is present across the Site with fairly good preservation. The upper levels of Roman occupation lie directly beneath the modern ploughsoil which was up to 0.30m deep.

1 SITE LOCATION

1.1 The Scheme comprises a new ground-mounted solar photovoltaic energy generating station and an associated on-site Battery Energy Storage System (BESS) on land to the north-west of St Neots, Cambridgeshire. The Scheme is across two administrative areas: Bedford Borough Council, and Huntingdonshire District Council. The Scheme boundary measures approximately 768 ha and is subdivided into East Park Sites A to D.

1.2 The British Geology Survey (BGS) (2024) identifies the solid geology of the Site as Oxford Clay Formation. BGS mapping of superficial geology shows a diversity of deposits. This includes terrace deposits of sand and gravel near to the River Kym, covering northern areas of East Park Site C. Outside of this, Oxford Clay may protrude at or near to the ground surface over much of the Site area (BGS 2024).

1.3 The Site is predominantly flat, lying between 25-30m above Ordnance Datum (aOD), but rising at the southern boundary up to approximately 50m aOD. The land use of Site C has a generally more open character and comprises arable farmland with fields divided by drainage ditches, set around a rectangular block of woodland at its centre.

2 METHODOLOGY

2.1 The archaeological evaluation was conducted according to the detailed methodology laid out in the WSI (AOC 2024).

2.2 The WSI outlined a proposed four trial trenches to be excavated across the Scheme. In total four trenches were excavated during the evaluation; each measuring 20m x 3.6m.(Figure 2).

2.3 The trenches were opened by a mechanical excavator under the supervision of a competent member of AOC staff. Excavation occurred in successive spits down to the first significant archaeological horizon, or natural substratum, whichever was encountered first. All trenches, and any archaeological features found were recorded using AOC Archaeology's pro-form context and trench record sheets, and surveyed to be tied to the national grid using a Trimble GPS. An Event number (ECB7315) was issued by Cambridgeshire Historic Environment Record (CHER) and used as a site code.

3 FACTUAL SUMMARY OF ARCHAEOLOGICAL FINDINGS

3.1 A range of archaeological features were encountered in all four trenches during the evaluation, a summary of which follows for each trench.

Trench 1 (Figure 3)

3.2 The natural geology in Trench 1, consisted of firm yellow orange sand clay (114) encountered at a height, on average, of 23.90m aOD.

3.3 Trench 1 contained six archaeological features, two pits and four ditches. At the northwest end of the trench, a deposit of light brownish grey silty clay with chalk flecks (110) overlay the natural geology. The deposit extended beyond the limitations of the trench and was shallow, at 0.05m in depth. Fragments of bone were recovered from the deposit, and it was interpreted as the remnants of a subsoil. This was the earliest deposit in the trench.

3.4 Layer (110) was overlain by what appeared to be a widespread layer of dark brown sandy clay silt (123), through which the features were cut. Near the northeast of the trench, (123) was cut by two intercutting pits. Pit [106] was oval, measuring 0.68m by 0.55m and 0.15m deep, filled by a firm light greyish brown silty clay (105). This was truncated by an oval pit [104], measuring 0.72m by 0.54m and 0.19m deep which contained two fills; a primary fill of dark brownish grey silt clay (103), with frequent charcoal flecks; and a secondary fill of lighter brownish grey silt clay (102), again with frequent charcoal flecking. Finds of pottery, metal fragments and animal bone were recovered from both fills (102) and (103).

3.5 Three ditches were recorded in Trench 1, all of which were approximately oriented northeast-southwest. The earliest of these [117/ 120] was located in the centre of the trench, with only a northwest edge identified but much cut away by a later ditch [115], and only visible in its edge. The fill in the lower part of the ditch [117], was by dark brown clayey sand (116), whereas at the upper edge, two deposits were present comprising a soft light grey yellow silty clay (121), with rare charcoal flecking and fragments of pot, animal bone, overlain by dark grey brown silty clay (109), with frequent charcoal and fragments of pot, bone and metal, as well as a registered find of an iron nail (RF20). The edge of this cut was distorted by a later cut, possibly a beam slot [119].

3.6 This early ditch was overlain by a 1.5m wide compact layer of yellow brown gravelly clay (118) which was 0.10m thick. The deposit was retained in situ and represents a gravel surface between a ditch [115] with a well-defined edge and a rougher edge against towards a beam slot [119].

3.7 Ditch [115], located on the southeast of the gravel surface [115], measured 1.90m wide and 0.37m deep, aligned north to south and on a slightly different alignment for the other ditches recorded in the trench. The ditch was filled primarily by a brown silty clay (122), which contained no finds. The upper fill was dark brown silty clay (111) which contained fragments of pottery, animal bone, glass (RF19), CBM and building material.

3.8 To the northwest of the gravel surface, a probable beam slot was oriented on a northwest-southeast orientation, with near-vertical sides and a flat base [119]. This was filled with greyish yellow silty clay (108), which contained fragments of animal bone and glass, and a second, mixed deposit (107) which had slumped over the top from the edge of the surface, containing fragments of pot, bone, metal and CBM, along with registered finds of two coins (RF14, RF15), a nail (RF16) and a fragments of sheet metal (RF17).

3.9 Further southeast, the last cut feature in the trench was a ditch [113] aligned northeast to southwest that contained a single fill of brown silt clay (112), which contained fragments of pottery and bone.

Plate 1: Possible beamslot [119] and ditch edge [120] in Trench 1, looking northeast

3.10 Overlying the natural and features within Trench 1, was 0.25-0.30m depth of firm mid-greyish brown silt clay ploughsoil containing occasional small sub-angular stones. It was noted the topsoil also contained occasional fragments of pottery and ceramic building material (CBM), as well as a registered find of a Cu alloy brooch.

Trench 2 (Figure 4)

3.11 The natural geology in Trench 2 consisted of firm yellow brown silty clay (217), which was only observed in the base of a ditch [216]. Overlying the natural, where not truncated, was a layer of light greyish brown silty sandy clay subsoil (218), which was encountered at a height, on average, of 24.95m aOD.

3.12 Trench 2 contained seven archaeological features, being two roads or yard surfaces, two ditches, two pits and one posthole. One ditch, the southeast of the trench was left unexcavated as agreed with CHET and HE.

3.13 In the centre south of the trench, the earliest feature was a small pit or large posthole [220], which was seen cutting the natural geology where the subsoil had been truncated. This measured c.0.90m in diameter and 0.37m deep, with steep sides and flat base. The feature was filled by light greenish brown silty clay (219), with frequent charcoal inclusions and a registered find of an iron nail (RF21). This pit was cut by a vertically driven posthole (207), measuring 0.11m diameter and containing a fill of dark brown silty clay (206).

3.14 At the northwest end of the trench, a spread of medium to large rounded pebbles were set in yellowish brown silty clay and acted as a bed for a more finely sorted layer of gravel (221) which is likely to represent a Roman period road or yard surface. This was left unexcavated. Cutting (221), was an irregular shallow tree pit, [203], filled by a mid brownish grey silty clay (202). The finds are thought to be residual but probably derive from disturbed Roman deposits.

3.15 At the southeastern end of the trench, a second patch of sandy clay and gravel (222) is likely to represent another occupation layer, either road or yard area.

3.16 Between the northwest and southeast areas of gravel surfaces, a broad ditch [216] with slumped edges, cut through the earlier posthole and pit, and was bound by the gravel. The ditch was oriented north-south and western side much less steep than the eastern side. The primary fill of the ditch was a thin deposit (0.15m) of firm black silty clay (215), with abundant charcoal and fragments of pottery. The secondary fill was a greyish brown silty clay (214), with charcoal flecking and finds of pottery; some of which was Samian Ware. Three further fills overlay (214) and recorded as (213), (212) and (211). All contained charcoal and fragments of pottery, suggesting the gradual backfilling of the ditch with waste material. The topmost fill spread beyond the limits of the ditch and may represent gradual accumulation at the end of Roman use of the site. This was dark brown sandy clay silt (210) containing fragments of pottery, slag and bone.

Plate 2: Ditch [216] in Trench 2, looking north

3.17 Overlying the whole of the trench was a firm mid-greyish brown silt clay plough soil (201), containing occasional small sub-angular stones. It was noted the topsoil also contained occasional fragments of pottery and ceramic building material (CBM), as well as a registered finds of copper wire, a potential iron bride fragment, a glass sherd and a metal object. The ploughsoil depth was, on average, 0.25m.

Trench 3 (Figure 5)

3.18 The natural geology in Trench 3 consisted of yellow brown silty clay (317), which was only observed in the base of an auger test hole. Overlying the natural were lenses of gravels and clays (325), (324), and (323). These deposits were observed in an excavated sondage to test the natural geologies. The earliest feature in the trench was a large ditch [329], filled by brown sandy clay (328), which was only revealed in the base of a later phase ditch. Overlying deposit (323) and ditch [329], was a layer of dark brown silty clay (322) observed across the trench, in which archaeological features were cut into at a height, on average, of 24.80m aOD, and this can be equated to (306/ 309) to the north.

3.19 At the northeastern end of the trench, a robbed out wall [315] was orientated northwest to southeast and was filled by dark greyish brown silty clay (314),with eight large rounded stones contained within the fill. The large stones were thought to be associated with the discarded remains of a wall structure which had been removed for salvage.

Plate 3: Ditch [315] in Trench 3, looking northwest

3.20 To the southwest of [315], a large deposit of firm dark brown silty clay (306/309) was recorded spreading for 8.60m along the trench was interpreted as an occupation horizon in which a pit [305] and ditch [303] were cut. Pit [305] was circular in plan and was filled by a single fill of dark yellow brown silty clay with grog inclusions and a concentration of worked clay in the south of the pit, indicating preparation for an industrial activity. Ditch [303] was orientated on the same alignment as ditch [315], was filled by a single fill of dark brownish grey silt clay (302), with charcoal inclusions which contained a registered find of an iron nail (RF22).

3.21 In the centre of the trench, a ditch oriented northeast-southwest [327], had a gentle slope and a single fill of dark yellowish brown silty clay (326). This was recut by a larger, deeper ditch [321/311] which contained three fills; a primary fill of greyish brown silty clay (320), which contained pottery; a secondary fill of dark brown silty clay (319), which was notably sterile; and a final fill of dark brown silty clay (318/310), which contained pottery also. Cut into the final fill (318/310) was a large posthole [313], measuring 0.40m in diameter, filled by dark brown silty clay (312) which contained animal bone, pottery and fragments of iron.

3.22 Towards the south of the trench, an oval pit [317], on a northwest to southeast alignment, was filled by a dark brown silty clay (316) which contained fragments of pottery.

3.23 The topmost deposit was firm mid-greyish brown silt clay plough soil (301), containing occasional rounded stones. The topsoil contained registered finds of a copper alloy pin (RF5), an iron nail (RF6), a glass body sherd (RF7) and copper alloy wire (RF8). The trench depth was, on average, 0.25m.

Trench 4 (Figure 6)

3.24 The natural geology in Trench 4 consisted of yellow brown silty clay with bands of gravel (402) observed at a height, on average, of 24.70m aOD. There was less of an occupation horizon present that had characterised trenches 1-3.

3.25 Trench 4 contained eight archaeological features: six ditches and two postholes. The ditches recorded across the trench were on various alignments and showed a clear sequence of being established and becoming filled, before the next in the sequence was excavated, making interpretation within the trench difficult.

3.26 The earliest ditch in the sequence [414], was orientated northwest to southeast and was filled by a dark brown silt clay (413), which contained no finds. Ditch [414] was truncated by the second ditch in the sequence, ditch [409/407/421], which was orientated roughly north to south and was filled by a yellow brown silty clay (408/410/420), which contained fragments of pottery, animal bone and a coin (RF23).

3.27 Two ditches orientated northeast to southwest, truncated the ditch [409/407/421]; ditch [404/406] and ditch [419/424]. Ditch [404/406] was filled by dark brown silt clay (403/405), which was mottled with orange clay. A mid greyish brown silty clay occupation layer (422) obscured ditches [414] and [404/406] at their eastern ends within the trench and was not present further south.

3.28 Towards the southwest of the trench, a ditch on a more north-south alignment [426] was up to 2m wide and 0,.30m deep, with a broad, rounded profile. It had a single fill of dark greyish brown gravel clay (425) which contained no finds. This was cut by the stratigraphically latest ditch in the sequence [419/ 424].

3.29 Ditch [419/424] was more oriented east-west and more substantial, with a depth of 0.90m. This ditch contained multiple fills (417/418/423) which represent dump material and silting of the ditch feature over a period of time. Finds recovered from the ditch included pottery and animal bone. This ditch was re-established or maintained on the same alignment [416], with a fill of bluish grey silty clay which may have alluvial origins.

Plate 4: Ditch [416/419] in Trench 4, looking west

3.30 Ditch [412], was located near the southern end of the trench, orientated on a northwest to southeast alignment and was filled by a dark greyish brown gravel clay (411), which contained no finds. Given the large quantities of finds of Roman date in other features, this may indicate that this is a feature more peripheral to the main settlement, or be of a different date. It is stratigraphically isolated between the natural geology and the plough soil.

3.31 Two postholes were located between ditch [412] and [426]. Postholes [428] and [430] were 0.15m in diameter and similarly filled by dark brown gravel clays (427) and (429). No finds were recovered. The shallowness of these features is indicative of past horizontal truncation of the archaeological horizons in the trench

3.32 Overlying the natural geology and the archaeological features was a firm mid-greyish brown silt clay plough soil (401) containing occasional rounded stones. The topsoil contained registered finds of a copper alloy lump (RF10), an iron objects (RF 11, 12), and an iron nail (RF13). The trench depth was, on average, 0.25m.

4 INTERIM ARTEFACTUAL SUMMARY

4.1 The quantification of the finds assemblage and spot dates has not yet been undertaken, however from the Registers Find List and Bulk Finds list the assemblage contains pottery (including Samian Ware), animal bone, glass, copper alloy objects, iron objects, coins, CBM, daub, metal waste material and shell.

4.2 Full quantification and assessment will be undertaken for the final report.

5 PROVISONAL INTERPRETATION AND DISCUSSION

5.1 The archaeological remains found during the targeted trial trenching evaluation show evidence of activity in all four trenches excavated across the Site: the majority of which likely date to the Roman period. There may be some suggestion of earlier activity pre-dating the Roman period (in Trench 4), however this was not definitive within the confines of the trenches.

5.2 The archaeological features comprised ditches, pits and postholes and gravel surfaces that represent roads or yard areas; it was suggested during excavation some of the ditches may be associated with beam slots or even bedding trenches for vines. The archaeological features recorded were largely in keeping with the anomalies recorded through geophysical survey, indicating a high confidence rating in the geophysical survey results.

5.3 Preservation across the trenches was fairly good with ditch features surviving up to a depth of 0.90m. The depth of the topsoil was shallow at c. 0.25m and the lack of subsoil across the site is notable and to be expected as a result of long-lived agricultural regime within the area. However, although some features were shallow in depth, the preservation of the archaeology overall does not seem to have been heavily truncated.

6 PROVISIONAL CONTRIBUTION TO SPECIFIC OBJECTIVES

6.1 The following section provides an interim review of the significance of the results of the targeted trial trench evaluation in relation to the objectives laid out in the WSI (AOC 2024).

Table 1 Contribution to objectives

Objective	Potential Contribution
To test the results of the geophysical survey	The archaeological features recorded were largely in keeping with the anomalies recorded through geophysical survey, indicating a high confidence rating in the geophysical survey results.
To investigate the potential Roman settlement indicated by the geophysical survey.	The majority of the features recorded were thought to date to the Roman period from finds evidence. Along with the high confidence in the geophysical survey, it is likely the Roman settlement indicated by the geophysics is present across the Site.
To determine the character and composition of any structural remains	No confirmed structural remains were recorded in the evaluation, however some of the 'ditches' could have been suggestive of beam slots of robbed out wall cuts.
To determine the date, function and nature of any cut features.	The function of the majority of the features recorded in the evaluation are unknown due to the confines of the trenches, however the majority of features are presumed to be Roman in date for the finds present (eg. Samian Ware), There may be some features which pre-date the Roman period.
To identify any in-situ internal or external surfaces present.	There is a suggestion of surfaces present within the evaluation but not definitive.
To retrieve datable material when available.	A large amount of datable material was retrieved from the trenches within this evaluation.

Can we identify any industrial activity?	No industrial activity was recorded within the evaluation, however metal working waste material was recovered across the trenches, indicating activity was taking place within the vicinity.
Are any in situ remains of roads or tracks present?	Gravel surfaces in trenches 1 and 2 were slightly plough damaged, but largely intact
Are any alluvial or colluvial deposit present?	No colluvial or alluvial layers were present, but the latest fill of the largest ditch in Trench 4 had alluvial character
Is there any variation of date or function of the remains across the site. Are any activity zones present?	No activity zones were defined within the trenching. The majority of features are presumed to be Roman in date for the finds present (eg. Samian Ware), however there may be features present which pre-date the Roman period. This was unable to be determined due to the lack of dating evidence in these potential earlier features.
Is there a greater level of archaeology than indicated in the geophysical survey?	The archaeological features recorded were largely in keeping with the anomalies recorded through geophysical survey, particularly ditch features. Small pit features were not noted on the geophysics, but not to a large or unexpected extent. What was apparent was that the latest archaeological horizons overlay and masked earlier features, which accounts for the absence of some of the features seen on geophysical survey, given that as much was retained *in situ* as practicable, whilst characterising the latest cut features and deposits.
To determine how the results of the evaluation can contribute to the Revised framework for the East of England (2011). In particular to topics related to Roman Towns, Infrastructure and Finds Studies.	The archaeological features and finds recovered within the four targeted trenches could contribute to the growing corpus of knowledge on Roman activity within the region, however it would be limited. Should further investigation take place and the activity recorded within this evaluation be present across the site, as suggested by the geophysics, it is presumed the results will contribute to the framework in a great number of areas, particularly for Roman settlement, or Roman Towns.

7 PROVISIONAL CONCLUSION

7.1 The provisional results of the targeted trial trench evaluation indicate the majority of the features recorded dated to the Roman period. Along with the high confidence in the geophysical survey, it is likely the Roman settlement indicated by the geophysics is present across the Site with fairly good preservation. Remains found may have the potential to contribute to a number of the specific objective as outlined above. The process of identifying further works will be discussed with stakeholders.

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9 FIGURES

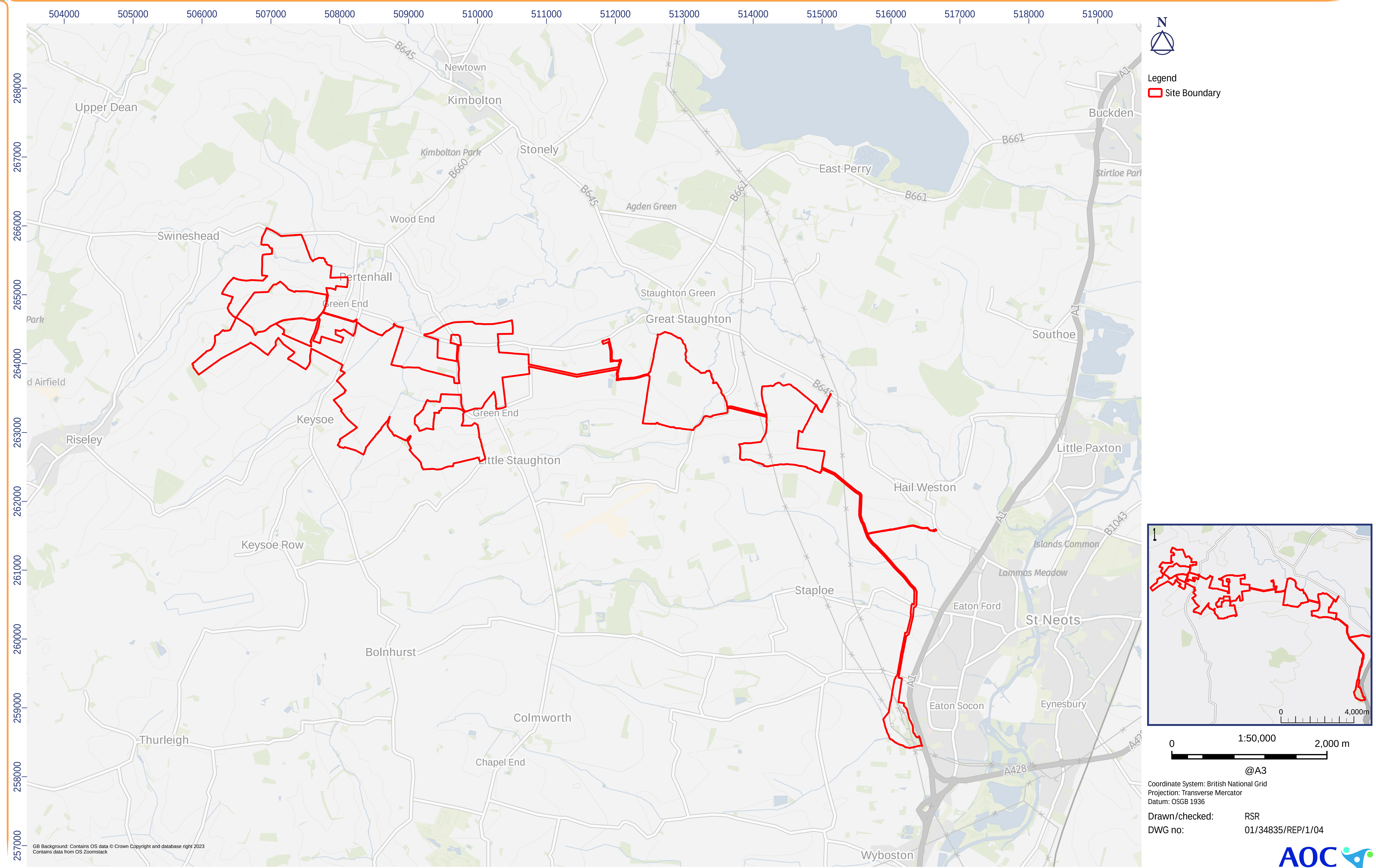


Figure 1: Site Location Plan

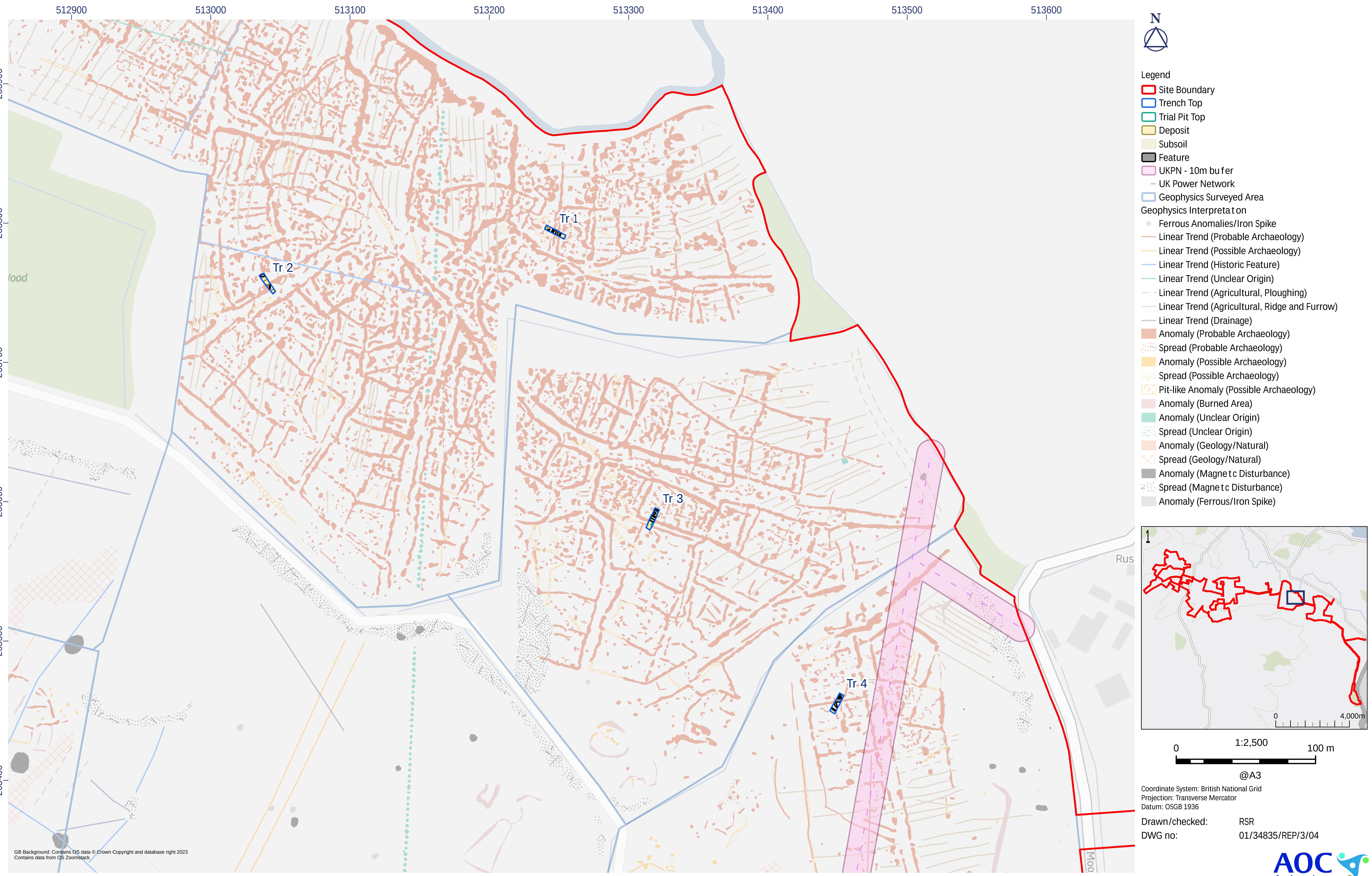


Figure 2: Trench Location Plan

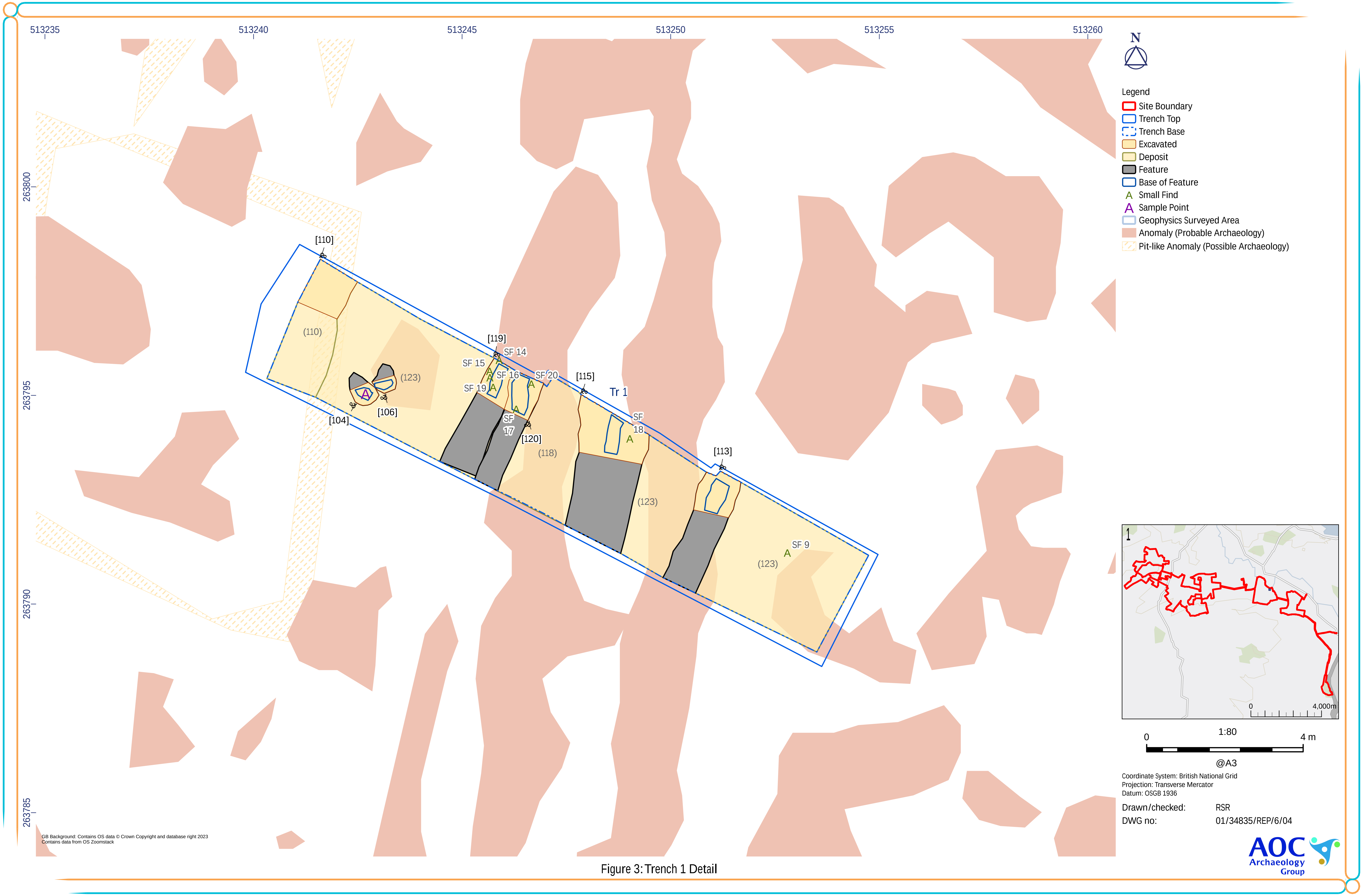


Figure 3: Trench 1 Detail

Figure 4: Trench 2 Detail

Figure 5: Trench 3 Detail

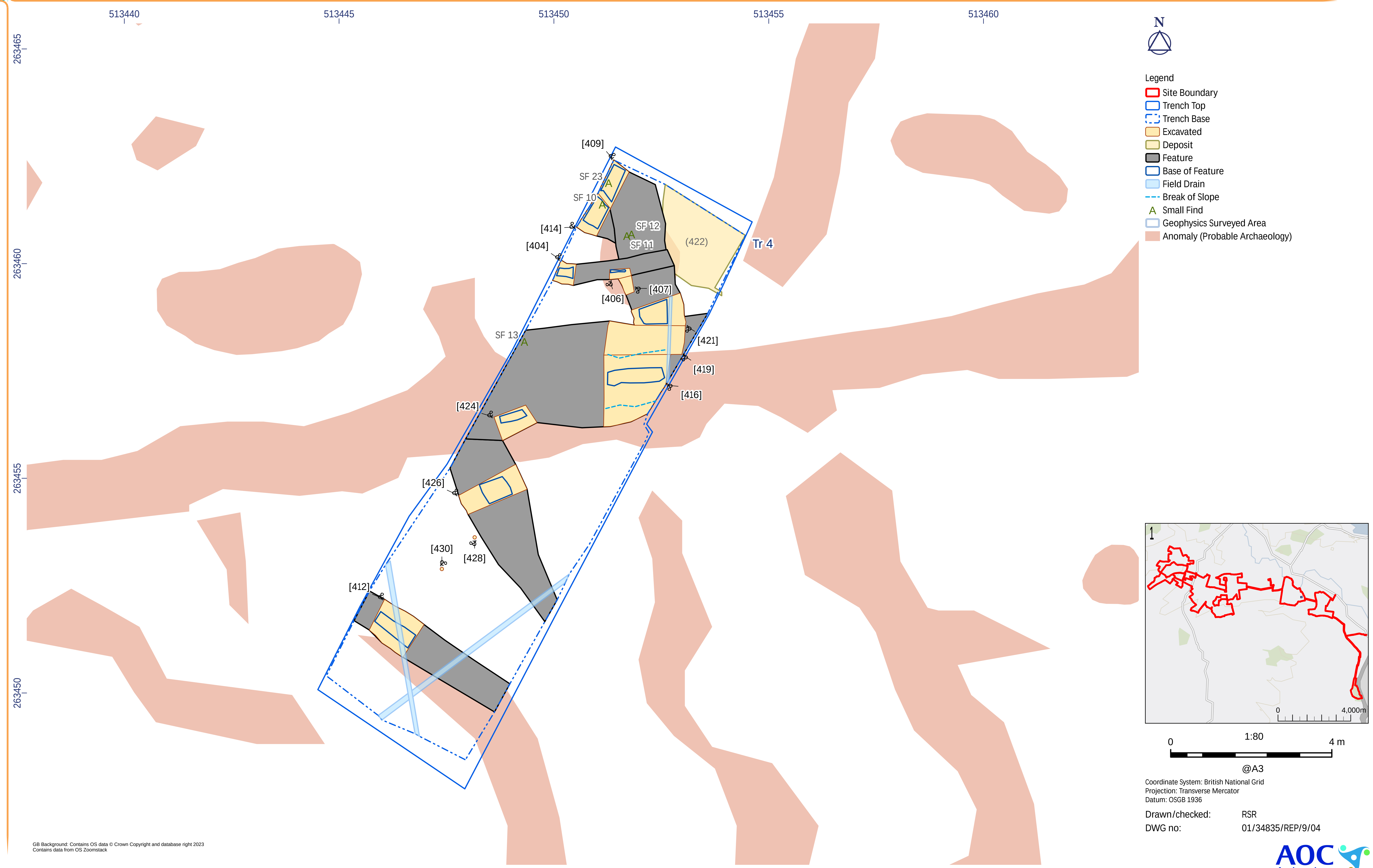
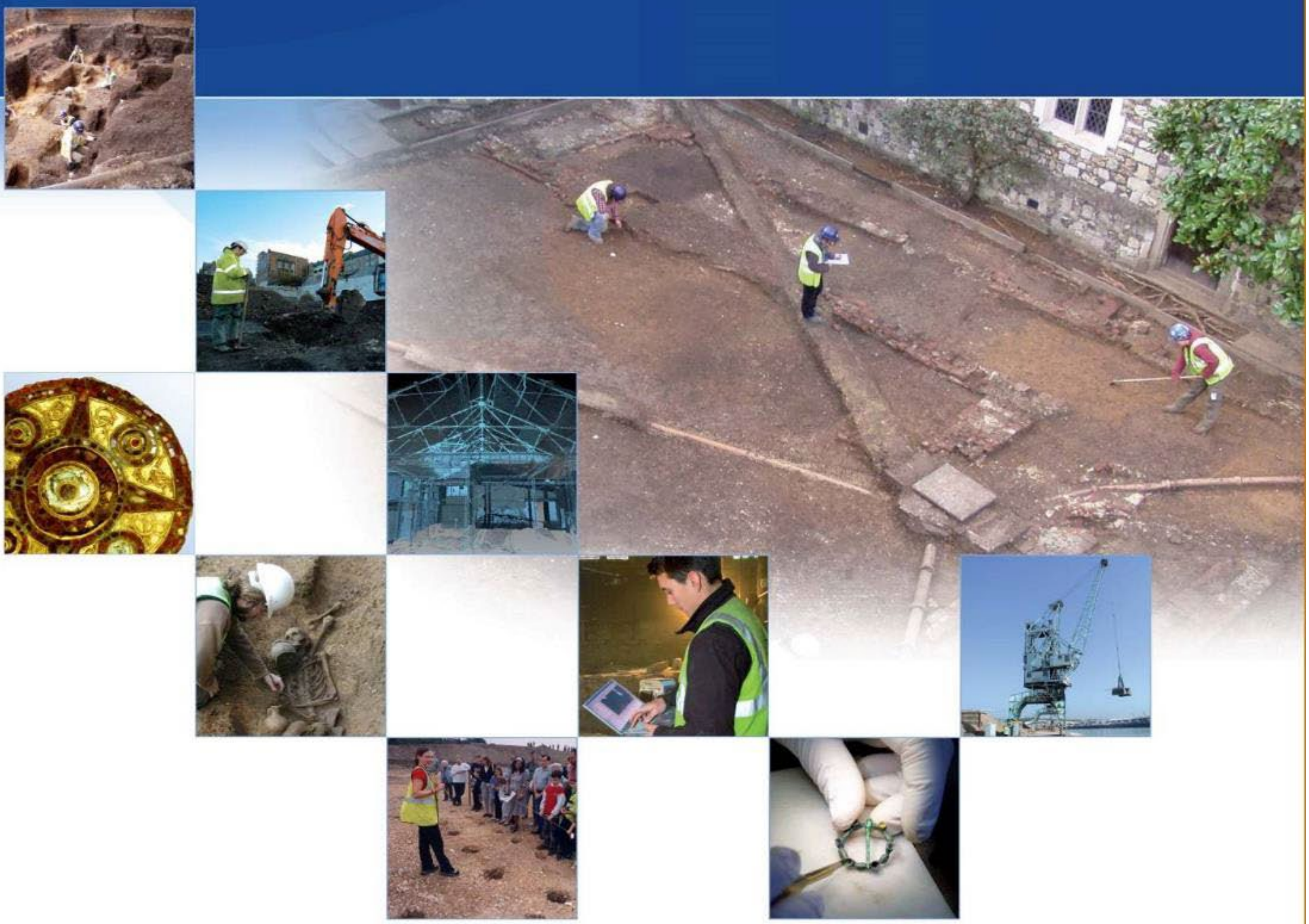


Figure 6: Trench 4 Detail



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