NWCC18

NORTH-WEST CREWE PACKAGE

ARCHAEOLOGICAL EVALUATION OF LAND SOUTH OF SMITHY LANE, CREWE

PLANNING REF. 18/15195

commissioned by Jacobs
on behalf of Cheshire East Council

October 2018

HEADLAND ARCHAEOLOGY

REGISTERED ORGANISATION CIfA

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This report adheres to the quality standard of ISO 9001:2015

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HEADLAND ARCHAEOLOGY

PROJECT SUMMARY

Archaeological field evaluation, via trial trenching, was undertaken by Headland Archaeology (UK) Ltd on land south of Smithy Lane, Crewe, on the route of the proposed North West Crewe Package. Two trial trenches were excavated to investigate a series of pit-type anomalies which were identified by an earlier geophysical survey and tentatively interpreted as a possible prehistoric pit alignment. No archaeological remains were encountered in the area of the pit-type anomalies and therefore the planned excavation of a further two trial trenches was abandoned. The geophysical anomalies were caused by magnetically enhanced material used to separate and support a series of field drains from a larger drain pipe.

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LIST OF ILLUSTRATIONS

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ILLUS 1 Site location

NORTH-WEST CREWE PACKAGE

ARCHAEOLOGICAL EVALUATION OF LAND SOUTH OF SMITHY LANE, CREWE

1 INTRODUCTION

This report presents the results of an archaeological evaluation on land south of Smithy Lane, Crewe. Archaeological trial trenching was undertaken to evaluate the archaeological potential of pit-type anomalies identified on an earlier geophysical survey along the route of a proposed road scheme (Dyulgerski 2018).

2 PLANNING BACKGROUND

Headland Archaeology were commissioned by Jacobs (UK) Ltd, on behalf of Cheshire East Council, to undertake an archaeological evaluation on land south of Smithy Lane, Crewe. A geophysical survey of the site, undertaken between June and July 2018 (Dyulgerski 2018), identified a series of pit-type anomalies immediately south of Leighton Hospital (and Smithy Lane) which were interpreted as a possible prehistoric pit alignment. A programme of archaeological trial trenching was commissioned to confirm the interpretation of the geophysical survey results and contribute to the baseline and assessments of value of archaeological remains for an Environmental Statement.

The work relates to the proposed North West Crewe Package (NWCP) and was undertaken in accordance with a Specification for Archaeological Trial Trenching prepared by Jacobs (Jacobs 2018a).

2.1 SITE LOCATION, DESCRIPTION AND SETTING

The proposed highway will extend in southerly direction from a new roundabout junction at Leighton Hospital (SJ 6850 5750) ending at another roundabout which will connect into the A530 Middlewich Road (SJ 6785 5709) to the west, and Minshull New Road (SJ 6876 5722) to the east. In addition, a new section of road north of Leighton Hospital will connect the A530 Middlewich Road (SJ 6796 5859) to the B5076 Flowers Lane (SJ 6816 5854).

The archaeological evaluation area was immediately south of Leighton Hospital and Smithy Lane and comprised of four trial trenches within two arable fields (Illus 1).

The underlying bedrock consisted of Sidmouth Mudstone Formation, belonging to the Mercia Mudstone Group (British Geological Survey (BGS) 2018). The superficial geological deposit was Devensian Glacial Till (BGS 2018). The soils across the entire proposed development area were classified in the Soilscape 18 association, characterised as slowly permeable, seasonally wet slightly acid but base-rich loamy and clayey soils (Cranfield University 2017).

2.2 ARCHAEOLOGICAL BACKGROUND

An Environmental Impact Assessment Scoping Report (Jacobs 2018b, Chapter 7) identified Roman, post-medieval and modern activity in the vicinity of the road corridor, but none within the corridor itself. This includes a Roman Road located on the north-west side of the corridor, a series of post-medieval (AD 1540-1901) sand pits, a number of barrage balloon sites and two crash sites of British aircraft brought down by collisions with barrage balloon cables (Jacobs 2018b, Chapter 7).

A geophysical survey undertaken along the route of the proposed development identified a row of pit-type anomalies aligned north-west/south-east between Smithy Lane and a north/south field boundary.

Trial trench 3 was positioned to target anomalies of potential archaeological origin identified by the geophysical survey (Dyulgerski 2018). Trenches 1, 2 and 4 were positioned to investigate

'blank' areas for the presence of archaeological remains associated with the identified anomalies which may be either too subtle to be detected, or masked by background magnetic activity.

3 AIMS AND OBJECTIVES

In general, the purpose of the evaluation was to investigate a linear series of geophysical anomalies in order to determine whether they were of an archaeological nature, and If so, was there any associated activity to either side. As the responses ended at a current field boundary, a trench located further along the projected line would establish if the anomalies continued beyond those that had been identified.

Any evidence retrieved during the works will be analysed in light of the objectives contained in The North-West of England Archaeological Research Assessment (Brennand et al, 2006) and a Research Agenda and Strategy (Brennand et al, 2007).

The general aim of the evaluation as outlined in the Specification for Archaeological Trial Trenching (McNaught 2018). was to gather sufficient information to establish the presence/absence, extent, condition, depth, character, quality and date of any archaeological deposits in the additional areas of land take to establish the impact of the development on the archaeological resource of these areas.

More specifically, the aims and objectives were:

- To identify, investigate and record any such archaeological remains to the extent possible by the methods put forward in the Specification;
- To clarify the date, character and extent of those remains within the additional areas of land take;
- to determine (so far as possible) the stratigraphic sequence and dating of deposits or features identified; and
- to establish any ecofactual and environmental potential of archaeological deposits and features.

The results of the evaluation will be used to describe the significance of heritage assets potentially affected by the development, allowing the planning authority to make an informed assessment of any potential impacts on the historic environment in line with Paragraph 128 of the National Planning Policy Framework.

Since no archaeological remains were identified, it is suggested that the archive is in the form of this report deposited with the Cheshire HER.

4 METHOD

The fieldwork was conducted in accordance with the Specification for Archaeological Trial Trenching, the method statement prepared by Headland Archaeology (Webb 2018) and with the following documents:

- Code of Conduct (Chartered Institute for Archaeologists, 2014a)
- Standards and Guidance for Archaeological Field Evaluations (Chartered Institute for Archaeologists, 2014b)
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England 2015)

A total of four trenches were marked out for excavation. The trenches were targeted on and around a linear series of discrete geophysical anomalies. Trench 3 and Trench 1 were found to contain no archaeological deposits and therefore, following discussion with Jacobs, who consulted the Cheshire Archaeology Planning Advisory Service (CAPAS), Trenches 2 and 4 were not excavated.

The work was carried out on the 12thand 13th September 2018. Prior to excavation, utility plans were consulted, and a cable avoidance tool was used to check for the presence of potential buried services. Trenches were excavated using a wheeled mechanical excavator fitted with a bladed ditching bucket to depths where archaeological features were identified, or geological deposits encountered.

The general stratigraphy of the site and interventions made were recorded photographically and digitally surveyed.

The recorded contexts were assigned unique numbers and recording was undertaken on Headland Archaeology pro forma trench and context record sheets. Digital photographs were taken of all trenches and identified features, with a graduated metric scale clearly visible. An overall site plan of the trenches and recorded features was digitally produced. Digital surveying was undertaken using a Trimble dGPS system using Virtual Reference Station (VRS) real-time corrections. This allowed all survey data to be accurately tied into the Ordnance Survey National Grid, and the height of all points to be established relative to the Newlyn datum. The accuracy of this dGPS equipment is greater than 0.01m.

5 RESULTS

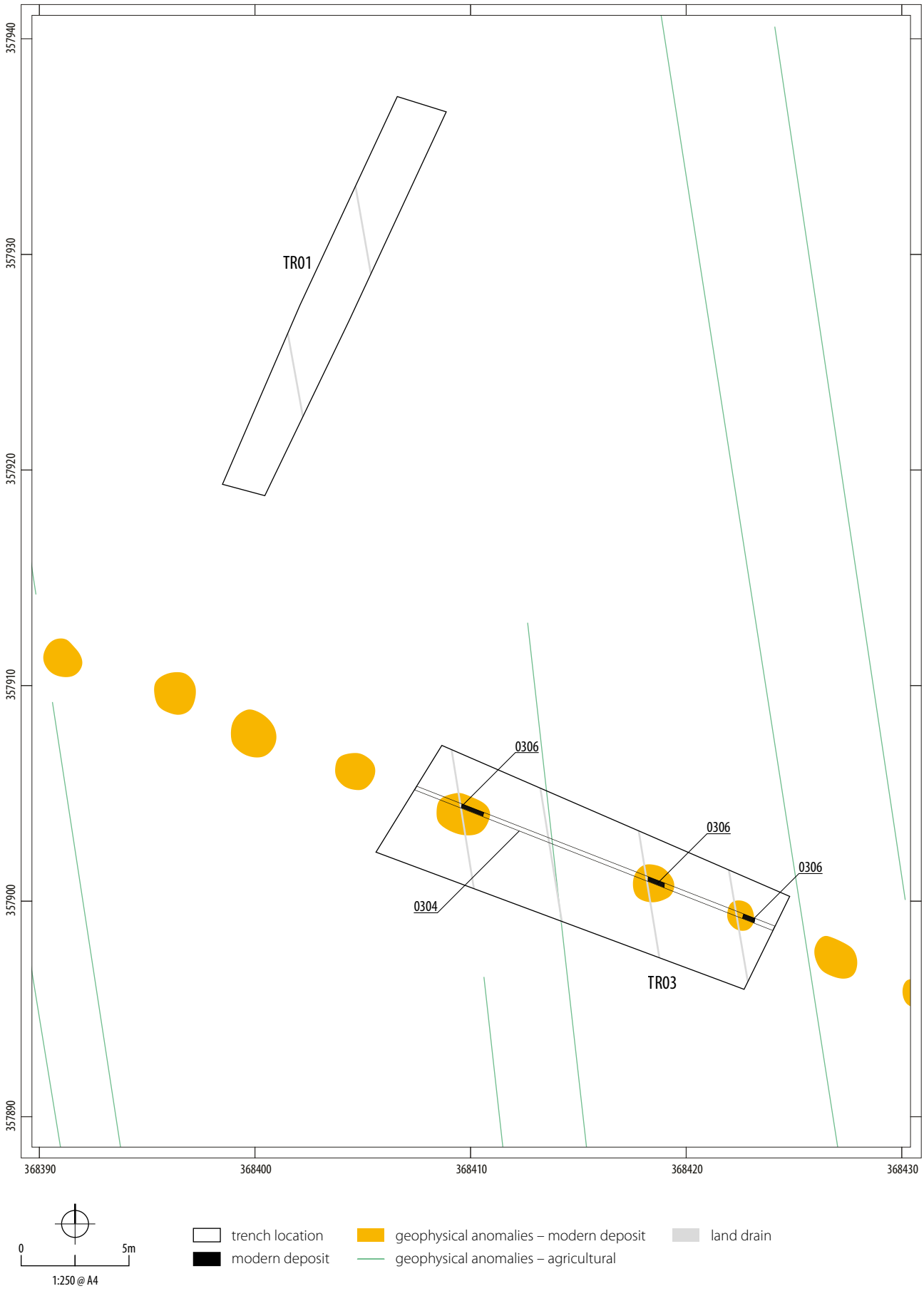
Results are presented below with a preceding summary and description of the general stratigraphy across the evaluation area. Geological deposits were generally encountered between 0.24 and 0.37m below ground level.

A summary of trenches and recorded contexts is presented as Appendix 1.

5.1 GENERAL STRATIGRAPHY

The earliest deposit encountered represented geological deposition and was represented by a mid-orange – red silty clay with mid grey patches (103, 203). Narrow linear deposits representing the fill of modern land drains broadly north-south and c 3.8m apart were observed in both trenches.

The geological deposit was overlain by a variably thick, 0.09–0.17m deep, brown humic silty clay subsoil (102, 302). The topsoil was a 0.11–0.21m thick mid to dark brown silty loam (101, 301).



ILLUS 2 Trench plan

ILLUS 3 Modern service/land-drain in Trench 3, looking west **ILLUS 4** Trench 3, looking north-west showing deposit (306), the source of the geophysical anomalies **ILLUS 5** Trench 3, looking south-west showing intersection between service (304) crossing land drain with gravel (306) to east side of intersection

Very rare ceramic building material, and old ceramic land drain fragments were observed within both the sub and plough-soil layers though not retained. A single sherd of post-Medieval white glazed pottery was observed but not retained, in the topsoil of Trench 3.

5.2 ARCHAEOLOGICAL FEATURES

No archaeological remains were encountered in Trench 1 or 3, although a series of land drains was identified buried below the subsoil in both trenches.

6 DISCUSSION

Trenches 1 and 3 were excavated to the surface of the geological deposit with neither containing any archaeological remains.

Trench 3, which targeted three discrete geophysical pit-type anomalies, revealed three deposits of evenly-sized, clast supported sub-spherical granules (306) (Illus 3) within the fill of a modern linear feature; probably a land drain (Illus 4). The granules were approximately 8mm in diameter and are likely to be some form of industrial waste product, quite possibly from a very high heat process which resulted in them producing higher magnetic field responses than the surrounding deposits. Each of the deposits (306) was situated immediately east of a land drain crossing / crossed by the linear feature containing them (Illus 5). This deposit was probably used to separate and protect the pipes from each other.

Close inspection of a series of plans showing field drain positions provided by the land owner show a single pipe in approximately the right position and alignment, which upon reaching the boundary between the two fields in the trial trenching area then turns and follows the boundary southwards.

As the main aim of the trial trenching was to establish the nature of the geophysical anomalies, and to investigate them further if they had been of an archaeological nature, it was decided, following discussion with CAPAS, that there would be no benefit in continuing to strip further trenches.

The paucity of cultural material of any period was noted, as were the shallow depths of top and sub-soils. This suggests that the area was not subject to regular or deep ploughing, and may not have been manured, nor been the site of any intensive activity or occupation.

7 CONCLUSION

Archaeological evaluation of geophysical anomalies on land south of Smithy Lane, Crewe, has established that no archaeological remains were present. The evaluation corroborated the results of the geophysical survey, clearly demonstrating that the anomalies corresponded to magnetically enhanced sub-surface deposits. The deposits identified were modern in origin and were the result of modern pipe laying activity.

8 REFERENCES

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9 APPENDICES

APPENDIX 1 TRENCH AND CONTEXT REGISTER

DBGL = Depth below ground level

TR1	ORIENTATION	L (M)	W (M)	AV. D (M)
	NE-SW	20	2	0.37
CONTEXT	DESCRIPTION			DBGL (M)
101	Topsoil – Mid to dark brown fine grained silty loam with rare small sub-rounded stone inclusions.			0-0.21
102	Subsoil – Mid brown humic clay with occasional small to medium sub-rounded stone inclusions.			0.21-0.38
103	Natural geology – Orange–red silty clay with mid grey patches containing small to large sub-rounded stone inclusions.			0.38+ (LOE)
SUMMARY: NO ARCHAEOLOGICAL REMAINS				

TR3	ORIENTATION	L (M)	W (M)	AV. D (M)
	WNW-ESE	20	5	0.35
CONTEXT	DESCRIPTION			DBGL (M)
301	Topsoil – Mid to dark brown fine grained silty loam with rare small sub-rounded stone inclusions.			0.00-0.11
302	Subsoil – Mid brown humic clay with occasional small to medium sub-rounded stone inclusions.			0.11-0.21
303	Natural geology – Orange–red silty clay with mid grey patches containing small to large sub-rounded stone inclusions.			0.21+ (LOE)
304	Cut for land drain/modern service running ENE-WSW. Not excavated.			0.21+
305	Fill of [304] – Reddish brown silty clay. Contained some old broken ceramic land drain sherds. Not excavated			0.21+
306	Fill of [304] – Grey clast supported spherical granules c8mm in diameter. Cause of high Mag. responses in geophysical survey.			0.21+
SUMMARY: NO ARCHAEOLOGICAL REMAINS.				

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