



**SKYLARK MEADOW SOLAR PARK
CHAPMAN'S FARM
BOURN
CAMBRIDGESHIRE**

ARCHAEOLOGICAL TRIAL TRENCHING

Project: SM1747
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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

Acknowledgements

The project was commissioned by Oakes Environmental on behalf of UK Solar Parks Ltd. It was monitored by Dan McConnell of the Cambridgeshire Archaeology, Planning and Countryside Advice office.

This report has been prepared by Richard Gregson (Archaeological Supervisor), who also undertook the fieldwork. Illustrations were prepared by Joan Lightning (CAD Technician).

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1.0	01/02/11	n/a

Key Terms

Throughout this report the following terms or abbreviations are used:

CAPCA	Cambridgeshire Archaeology, Planning and Countryside Advice office
CCC	Cambridgeshire County Council
CHER	Cambridgeshire Historic Environment Record
IfA	Institute for Archaeologists
LPA	Local Planning Authority



Non-Technical Summary

This document has been prepared by Albion Archaeology for Oakes Environmental on behalf of UK Solar Parks Ltd. It reports on archaeological trial trenching undertaken in January 2011. The work was occasioned by the proposed construction of a solar park.

The site comprises open arable land, located approximately 11km to the west of Cambridge, midway between Cambourne and the village of Bourn. It is centred on grid reference TL3213 5801

The site sits within an extensive landscape of medieval ridge and furrow, with further associated medieval features such as a droveway and field systems. In addition, during evaluation to the north in 1999, a small mid-Iron Age to early Romano-British farmstead was discovered. To the south-east, an enclosure of unknown date was identified during an aerial photographic survey.

Elements of the proposed development that were likely to impact potential archaeological remains were evaluated by three trial trenches. Two medieval/post-medieval cultivation furrows were identified in the trenches. No other archaeological features or deposits of interest were found. The results of the trial trenching indicate that the proposed construction of the solar park is unlikely to have an impact upon significant archaeological remains.



1. INTRODUCTION

1.1 *Planning Background*

UK Solar Parks Ltd is proposing to build a solar park on land at Chapman's Farm, Bourn, Cambridgeshire.

Due to the high archaeological potential of the site, the Cambridgeshire Archaeology Planning and Countryside Advice office (CAPCA) advised that a scheme of archaeological work should be carried out at the site.

CAPCA issued a brief (CAPCA 2010) outlining the requirements for an archaeological evaluation as the first stage of the work. The evaluation was to comprise trial trenching, the results of which would be used to characterise the archaeological potential of the site and determine whether there was any need for further investigation.

1.2 *Site Location, Topography and Geology*

The site comprises open arable land, located approximately 11km to the west of Cambridge, midway between Cambourne and the village of Bourn. It is centred on grid reference TL3213 5801 (Figure 1).

The ground lies at a height of *c.*54m OD. The geology of the area comprises Woburn Sands deposits.

The proposed solar park will comprise the construction of removable arrays of photovoltaic panels, three electrical transformers on concrete hard standings, access tracks and cabling to connect the facility to an existing electricity sub-station (Figure 1).

1.3 *Archaeological Background*

The site sits within an extensive landscape of medieval ridge and furrow (CHER MCB11377) with further associated medieval features such as a droveway and field systems (CHER MCB4231). In addition, during evaluation to the north in 1999, a small mid-Iron Age to early Romano-British farmstead (CHER MCB 15432) was discovered directly to the north of the site. To the south-east, an enclosure of unknown date (CHER MCB15583) was identified during an aerial photographic survey.

1.4 *Project Objectives*

The principal objective of the evaluation was to determine whether archaeological remains were present at the proposed development site and, if so, to determine their extent, condition, nature and significance. This information was to be used in the formulation of an appropriate mitigation strategy for the archaeological remains, if present.

The broader objective of the project was to add to the knowledge and understanding of the origins and nature of settlement in the area and to produce an archive report that fully described the archaeological works.



2. METHODOLOGY

2.1 Introduction

Only one element of the solar park construction will involve groundworks that have the potential to impact upon archaeological remains — the creation of the three hard-standing areas to support the electrical transformers. These areas were therefore targeted by trial trenching.

The installation of solar panels will impact the upper levels of the topsoil only, with the associated cabling being buried just below the ground surface to facilitate maintenance. The construction of the access road will comprise the laying of crushed stone on existing surfaces.

Throughout the project the standards set out in the following documents were adhered to:

• Albion Archaeology	<i>Procedures Manual: Volume 1 Fieldwork</i> (2nd edn, 2001).
• ALGAO (east)	<i>Standards for Field Archaeology in the East of England</i>
• CCC	<i>Deposition of Archaeological Archives in the Cambridgeshire County Council Archaeology Store</i> (HER 2004/1).
• English Heritage	<i>Management of Research Projects in the Historic Environment (MoRPHE)</i> (2009)
	<i>Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation</i> (2002/01)
• IfA	<i>By-Laws and Code of Conduct</i>
	<i>Standard and Guidance for Archaeological Field Evaluation</i>

2.2 Trial Trenching

The trial trenching was carried out in January 2011 and comprised the excavation of three trenches located within each of the footprints of the proposed transformer hard-standing areas (Figures 1 and 2).

The total area of trenching equated to 96m². This represented a 5.5% sample of the combined c.0.17ha hard-standing areas.

The trenches were opened by a mechanical excavator, fitted with a flat-edged ditching bucket, operated by an experienced driver, under the supervision of an appropriately experienced archaeologist.

Overburden was removed down to the top of undisturbed geological deposits. The spoil heaps were scanned for artefacts. The bases of the trenches were cleaned to help reveal any potential archaeological features. All deposits were recorded in a unique number sequence, using Albion Archaeology's *pro forma* sheets. The trenches were subsequently drawn and photographed as appropriate.



3. RESULTS

Summary descriptions of the deposits encountered are provided below. Full details are set out in Appendix 1. The findings are illustrated in Figure 2.

3.1 Trench 1

Trench 1 was 30m long and 1.6 m wide. It was excavated to a depth of 0.9m, onto geological deposits of silty clay (102). A portion of a single cultivation furrow, 1.35m wide, was revealed towards the NE end of the trench. No other archaeological features or deposits were encountered.

3.2 Trench 2

Trench 2 was 15m long and 1.6m wide. Undisturbed silty clay deposits (202) were encountered at a depth of 0.70m below ground level. A modern ceramic field drain was uncovered stretching the length of the trench. No other archaeological features or deposits were encountered.

3.3 Trench 3

Trench 3 was 15m long and 1.6m wide. Undisturbed silty clay deposits (202) were encountered at a depth of 0.50m below current ground level. A single, 0.6m wide furrow was located towards the NE end of the trench. No other archaeological features or deposits were encountered.



4. CONCLUSIONS

The evaluation trenches revealed two cultivation furrows, associated with medieval or post-medieval agricultural activity, and a modern field drain. Cultivation furrows are common in the region and are of only local archaeological significance. The modern field drain is of no archaeological interest. No other archaeological remains or deposits were encountered in the trenches.

The results of the evaluation indicate that the construction of the proposed electrical transformer hard-standing areas is unlikely to have an impact upon significant archaeological remains.



5. REFERENCES

Albion Archaeology 2011. *Skylark Meadow Solar Park, Bourn, Cambridgeshire: Project Design for Archaeological Trial Trenching*. Ref 2011/04.

CAPCA 2010. *Brief for Archaeological Evaluation: Skylark Meadow Solar Park, Bourn*. December 22nd 2010.



6. APPENDIX 1: TRENCH SUMMARY



Trench: 1

Max Dimensions: Length: 30.00 m. Width: 1.60 m. Depth to Archaeology Min: 0.7 m. Max: 0.9 m.

Co-ordinates: OS Grid Ref.: TL (Easting: 32123: Northing: 58021)

OS Grid Ref.: TL (Easting: 32097: Northing: 58005)

Reason: To evaluate area

Context:	Type:	Description:	Excavated:	Finds Present:
100	Topsoil	Firm dark brown grey clay silt occasional flecks charcoal, occasional small stones 0.40m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
101	Subsoil	Firm mid orange brown clay silt occasional small stones 0.50m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102	Natural	Firm light brown grey silty clay frequent small-medium chalk	<input type="checkbox"/>	<input type="checkbox"/>
103	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 1.35m, max depth 0.15m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
104	Fill	Firm mid grey brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Trench: 2

Max Dimensions: Length: 15.00 m. Width: 1.60 m. Depth to Archaeology Min: 0.7 m. Max: 0.7 m.

Co-ordinates: OS Grid Ref.: TL (Easting: 32132: Northing: 57942)

OS Grid Ref.: TL (Easting: 32138: Northing: 57929)

Reason: To evaluate area

Context:	Type:	Description:	Excavated:	Finds Present:
200	Topsoil	Firm dark brown grey clay silt occasional flecks charcoal, occasional small stones 0.30m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
201	Subsoil	Firm mid brown grey silty clay moderate small chalk, moderate small stones 0.40m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
202	Natural	Firm light brown grey silty clay frequent small-medium chalk	<input type="checkbox"/>	<input type="checkbox"/>



Trench: 3

Max Dimensions: Length: 15.00 m. Width: 1.60 m. Depth to Archaeology Min: 0.45 m. Max: 0.5 m.

Co-ordinates: OS Grid Ref.: TL (Easting: 32200: Northing: 57865)

OS Grid Ref.: TL (Easting: 32187: Northing: 57857)

Reason: To evaluate area

Context:	Type:	Description:	Excavated:	Finds Present:
300	Topsoil	Firm dark brown grey clay silt occasional flecks charcoal, occasional small stones 0.30m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
301	Subsoil	Firm mid brown grey silty clay moderate small chalk, moderate small stones 0.20m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
302	Natural	Firm light brown grey silty clay frequent small-medium chalk	<input type="checkbox"/>	<input type="checkbox"/>
303	Furrow	Linear NW-SE dimensions: max breadth 0.6m	<input type="checkbox"/>	<input type="checkbox"/>
304	Fill	Firm mid grey brown silty clay occasional small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>



7. APPENDIX 2: OASIS DATA FORM

OASIS ID: albionar1-91860

Project details

Project name	Skylark Meadow Solar Park, Bourn
Short description of the project	The site comprises open arable land located approximately 11km to the west of Cambridge, midway between Cambourne and the village of Bourn, and centred on grid reference TL3213 5801 The site sits within an extensive landscape of medieval ridge and furrow, (CHER MCB11377), with further associated medieval features such as a driveway and field systems (CHER MCB4231). In addition, during evaluation to the north in 1999, a small mid-Iron Age to early Romano-British farmstead (CHER MCB 15432) was discovered directly to the north of the site. To the south-east, an enclosure of unknown date (CHER MCB15583) was identified during an aerial photographic survey. Because of the archaeological potential of the site, a condition was placed on the planning consent requiring the implementation of a programme of archaeological works. A design brief issued by the Cambridgeshire Archaeology, Planning and Countryside Advice office (CAPCA 2010) stated that further information on the archaeological impact of the work was required. The archaeological potential of the proposed development was evaluated by three trenches. Two furrows were identified and recorded within two of the trenches. No other archaeologically significant features or deposits were located within the trenches.
Project dates	Start: 26-01-2011 End: 26-01-2011
Previous/future work	No / No
Any associated project reference codes	SM1747 - Contracting Unit No.
Type of project	Field evaluation
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	FURROWS Medieval
Significant Finds	NONE None
Methods & techniques	'Sample Trenches'
Development type	Solar park
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)

Project location

Country England



Site location CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE BOURN Skylark Meadow Solar Park, Bourn
 Study area 2909.00 Square metres
 Site coordinates TL 3213 5081 52.1393369247 -0.06904803962660 52 08 21 N 000 04 08 W Point

Project creators

Name of Organisation Albion Archaeology
 Project brief originator Local Authority Archaeologist and/or Planning Authority/advisory body
 Project design originator Albion Archaeology
 Project director/manager Robert Wardill
 Project supervisor Richard Gregson
 Type of sponsor/funding body Developer

Project archives

Physical Archive Exists? No
 Digital Archive recipient Albion Archaeology
 Digital Contents 'other'
 Digital Media available 'Database', 'Images raster / digital photography', 'Text'
 Paper Archive recipient Cambs County Archaeological Store
 Paper Contents 'other'
 Paper Media available 'Context sheet', 'Correspondence', 'Drawing', 'Microfilm', 'Miscellaneous Material', 'Photograph', 'Plan', 'Report', 'Section'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
 Entered by Helen Parslow (hl.parslow@albion-arch.com)
 Entered on 28 January 2011

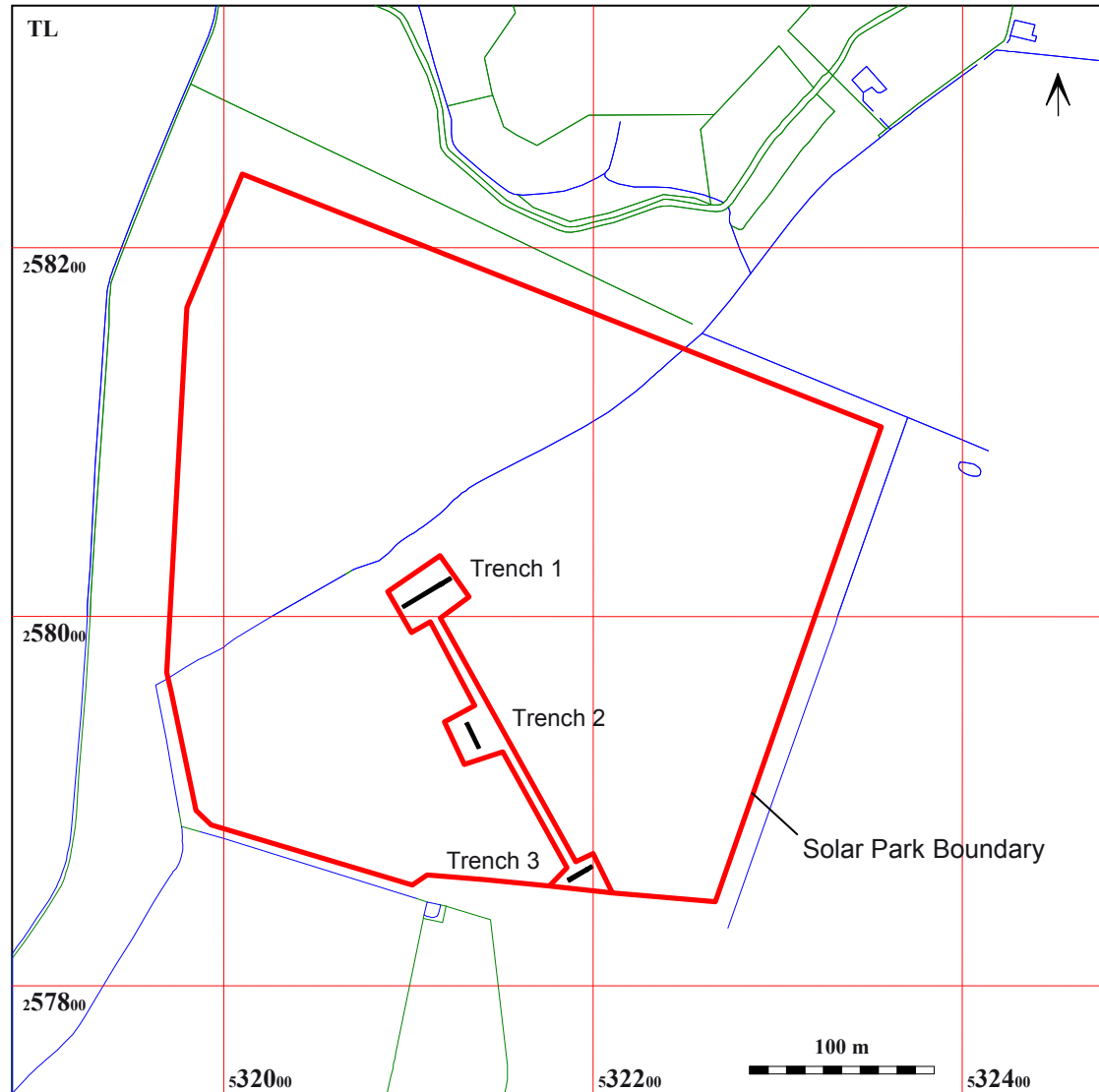
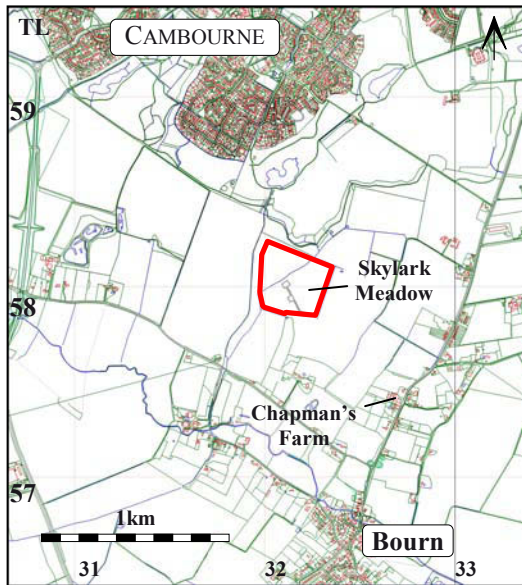
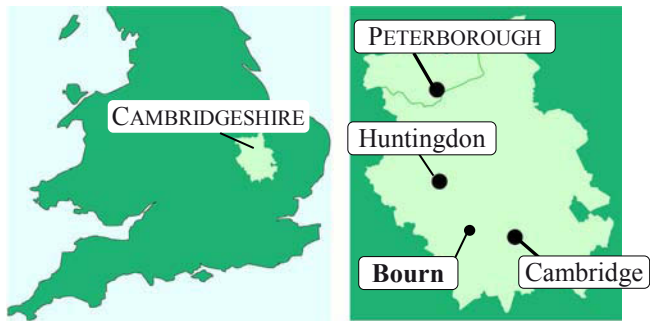


Figure 1: Site location plan

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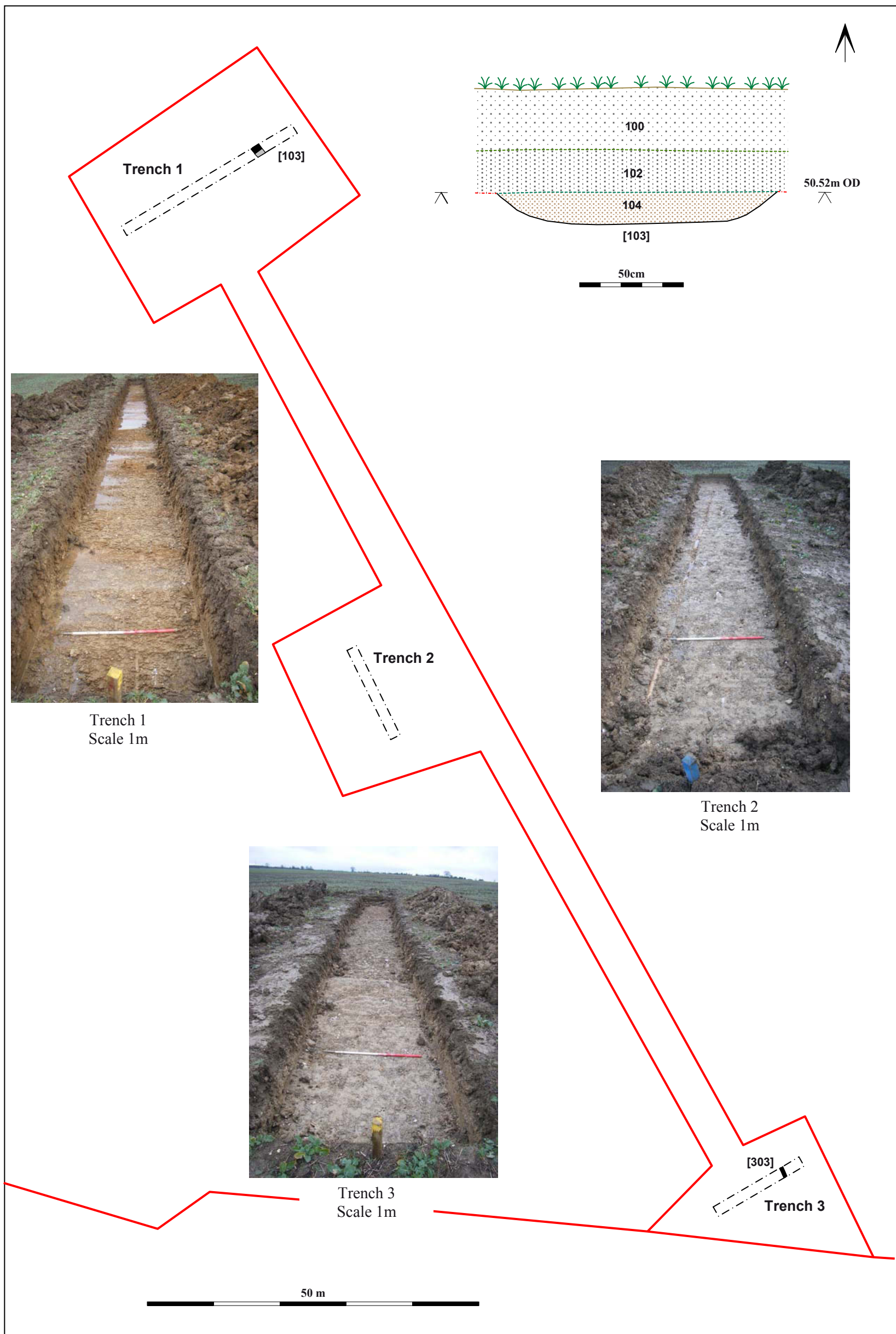


Figure 2: Trenching results