



University of
Leicester

Archaeological Services

**An Archaeological Evaluation
For The Leicester City Riverside
Flood Relief Management Scheme,
Belgrave, Leicester**

**NGR SK 5970 0796
(NE) to SK 5906 0678 (SW)**



Roger Kipling


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**An Archaeological Evaluation for The Leicester City
Riverside Flood Relief Management Scheme, Belgrave, Leicester**

(NGR SK 5970 0796 (NE) to SK 5906 0678 (SW))

Roger Kipling

For: URS

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Summary

An archaeological trial trench evaluation was undertaken in November 2014 in the Belgrave area of Leicester, by University of Leicester Archaeological Services on behalf of URS. The fieldwork was undertaken in response to proposed works at five option sites associated with the Leicester Flood Risk Management Scheme in order to assess the potential impact of the development on any archaeological remains that might be present.

The archaeological evaluation produced neither artefactual or structural archaeological evidence, reflecting the findings of the watching brief undertaken on the same sites during the excavation of geotechnical pits earlier in 2014. Whilst alluvial material was identified at a number of sites, some containing visible organic material, the presence of ceramic building material and other debris indicated that these deposits are modern in origin. The evaluation did, however, offer further data regarding the depths of riverine alluvial deposits.

The site archive will be deposited with Leicester City Council under accession reference number A29.2014.

Introduction

An archaeological evaluation was undertaken on land in Belgrave area of Leicester by University of Leicester Archaeological Services on behalf of URS. The fieldwork was undertaken in response to proposed works at five option sites associated with the Leicester Flood Risk Management Scheme in order to assess the potential impact of the development on any archaeological remains that might be present.

In consequence the planning authority recommended the need for a programme of evaluation trenching in order to provide further indications of the character and extent of any buried archaeological remains in order that the potential impact of the development on such remains might be assessed. Fieldwork was carried out in November 2014 and involved the machine excavation of thirteen trial trenches in order to provide the sample of the development area stipulated in the brief.

The archaeological evaluation was undertaken in accordance with National Planning Policy Framework Section 12: Conserving and Enhancing the Historic Environment (DCLG March 2012). All archaeological work was in accordance with the Institute for Archaeologists (IfA) Code of Conduct (2010) and adhered to their *Standard and Guidance for Archaeological Field Evaluation* (2008). The *LCC Guidelines and Procedures for Archaeological work Leicestershire and Rutland* (1997) was also adhered to.

Site Description, Topography and Geology

The archaeological evaluation was undertaken across five sites ranged along the course of the River Soar in the Belgrave area of Leicester (Figure 3). The British Geological Survey for England and Wales indicates that the underlying geology along the Soar Valley in Leicester largely consists of undifferentiated Triassic bedrocks (Mudstone, Siltstone and Sandstone), overlain by Alluvium along the eastern valley side and River Terrace deposits (sand and gravel) along the western side. The sands and gravels (including Birstall Member) were formed up to two million years ago in the Quaternary Period and deposited by rivers. As such they have the potential to contain material of Palaeolithic date (c. 700 000 to 10 000 years ago) (http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html).

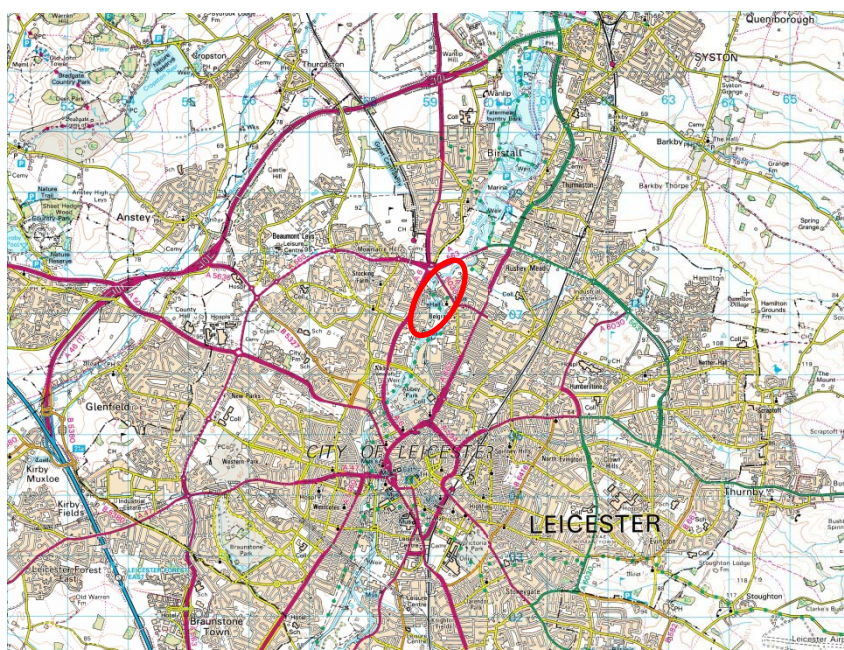


Figure 1: Site Location (Scale 1:50 000)

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Archaeological and Historical Background

General

The archaeological evaluation trenches were situated in the northern part of the City of Leicester in an area defined in a recent desk-based assessment (ULAS report 2013-202) as containing two important foci; namely, Belgrave and Abbey Meadows. Belgrave contains the surviving remains of a medieval stone packhorse bridge – at what was once an important crossing point of the Soar for the route from Belgrave to Thurcaston (MLC222). To the north and east of Leicester Abbey, in the flood plain of the Soar, were the Abbey Meadows, now completely built over. This type of location is often found to be a focus for prehistoric

activity, being on low-lying ground adjacent to a river. Features such as burnt mounds, in similar positions adjacent to the river, have been found elsewhere in the Soar Valley. The survival of environmental remains was also deemed possible, especially in view of the probable waterlogged nature of deposits close to the river.

In addition to prehistoric activity, numerous Roman finds and some burials may point to satellite occupation around the town rather than relating to the town cemeteries themselves. The 19th-century Abbey Pumping Station and the Canal provide evidence of the importance of Leicester's industrial past.

The Leicester HER therefore lists several archaeological monuments close to the works; these include the Leicester Canal (MLE1598) (the course of late 18th century river navigation improvement); the 'Roman' Bridge (MLC222), the medieval and post-medieval stone multi-span bridge, which is located at Thurcaston Road and the New Bridge, a brick and cast iron bridge over River Soar, which is located at Loughborough Road (MLC2073). None of these standing remains are likely to be affected by the proposed pits.

A 1st-century Roman coin has been previously found at Bath Street (MLC1241), which is also the site of a mud-walled building dating to the medieval/post-medieval period (MLC492).

Site-Specific

Site 1 Co-operative Society Sports Pitches lies within "Area 1" as covered within the desk-based assessment. The assessment identifies the area as having a high potential for prehistoric remains. In addition, Iron Age and Roman occupation has been identified and the line of the Roman Foss Way passes south of the area.

Site 1 lies to the south of the historic core of Birstall. The place-name is derived from the Old English '*burhstall*' meaning '*the site of a stronghold*' (Mills 2003). The village was relatively small until the arrival of the Great Central Railway in 1899 (Nichols 1804). From then onwards development has continued and still continues to-day; between 1901 and 2001 the population grew from 611 to over 11,000. An examination of the previous Ordnance Survey maps of the area indicated that prior to the site being used as sports pitches the land (and surrounding area) was utilised as fields.

A geophysical survey was undertaken by Stratascan in 2014 within the confines of Site 1 Co-operative Society Sports Pitches (Stratascan 2014). The survey produced anomalies indicative of magnetic debris, with a large number of magnetic spikes. These features are typically caused by modern metallic objects. A number of strong linear features were identified in the Co-op site and have been interpreted as relating to underground services. No geotechnical data was available within the confines of Site 1.

Site 2 Bath Street lies within 'Area 2' as covered within the desk-based assessment. The assessment identifies the area as the type of location which is often found to be the focus for prehistoric activity, being low-lying ground adjacent to a river. Features such as burnt mounds, in similar positions adjacent to the river have been found elsewhere in the Soar Valley. The survival of environmental remains is also possible, especially in view of the probable waterlogged nature of the site. The assessment also indicates that the site of a 'mud-

walled' building was observed along Bath Street, approximately 100m to the south-east of Site 2.

Site 2 lies to the north of the historic settlement core of Belgrave. The name Belgrave appears not to have existed until the time of William I. The prefix 'bel' seems to be of Norman French origin and can be translated as 'fine grove'. The older name for the area appears to have been Merdegrave 'marten grove'. The woodland is described in Domesday surveys, and probably lay west of the village. An examination of previous Ordnance Survey maps of the area indicated that the land was utilised as open fields on the First Ordnance Survey map dated 1888. There is no geophysical survey data available for Site 2.

ULAS undertook an archaeological watching brief during the excavation of geotechnical trial holes within Site 2 (ULAS 2014), during which no archaeological deposits of significance were observed (Browning 2014). Four out of the eight trial pits observed were recorded as having palaeo-environmental potential, the uppermost horizons of which were encountered from a depth of between 0.7m to 2.4m below ground level.

Site 3 Loughborough Road Bridge lies again within 'Area 2' as covered within the desk-based assessment. In 1834 the Turnpike road was straightened between Van's Corner in Belgrave to the foot of Birstall Hill to its present course and Loughborough Bridge was built across the Soar. The road was opened in 1835. There are no heritage assets noted within close proximity to the bridge mentioned within the desk-based assessment. Analysis of the First Ordnance Survey map dated 1886 shows the bridge and land surrounding the bridge utilised as open fields.

There is no geophysical survey data available for Site 3.

ULAS undertook an archaeological watching brief during the excavation of geotechnical trial holes between Thurcaston Road and Loughborough Road bridges (Browning 2014), which produced no archaeological deposits of significance. Waterlogged deposits (alluvial clays containing preserved organic) were observed at approximately 3.0m below ground level.

Site 4 Thurscaston Road Bridge lies again within 'Area 2' as covered within the desk-based assessment. Thurscaston Bridge is a medieval packhorse bridge. There are no other assets noted within close proximity to the bridge mentioned within the desk-based assessment. However, analysis of the First Edition Ordnance Survey map dated 1886 indicates a complex of structures located directly to the east of the river labelled as 'Belgrave Wharf' including buildings and a leat.

There is no available geophysical survey data available for Site 4. ULAS undertook an archaeological watching brief during the excavation of geotechnical trial holes between Thurcaston Road and Loughborough Road bridges (Browning 2014), during which no archaeological deposits of significance were observed. Waterlogged deposits (alluvial clays containing preserved organic) were observed at approximately 3.0m below ground level.

Site 5 Beaumanor Open Space/Abbey Meadows lies again within 'Area 2' as covered within the desk-based assessment. The Abbey Meadows area has produced a variety of archaeological artefacts, although many of the finds are of uncertain location. Neolithic stones axes, a middle Bronze Age rapier and a human skull of unknown date have been found in Abbey Meadows (the latter in 1879). Flint tools of this period have also been found in the

area, including barbed and tanged arrowheads. Roman finds including coins, brooches, pottery and human bone have also been found within Abbey Meadows.

In the medieval period Abbey Meadows lay within the meadows and open fields to the north of the town and its suburbs outside the precinct of Leicester Abbey ('Abbey Meadows'). Medieval pottery and building material has also been found, perhaps unsurprisingly given the proximity of Leicester Abbey. Analysis of the First Ordnance Survey map dated 1886 indicates that the land was utilised as open fields.

A geophysical survey was undertaken by Stratascan in 2014 within the confines of Site 5 Beaumanor Open Space/Abbey Meadows (Stratascan 2014). A number of positive linear features are apparent, but their isolated and weak nature makes further interpretation difficult. The Meadows site also contains a former cricket strip, a possible field boundary and a large amount of magnetic disturbance in the form of scattered debris, made ground and strong anomalies caused by ferrous objects.

ULAS undertook an archaeological watching brief during the excavation of geotechnical trial holes within Site 5 (Browning 2014). No archaeological deposits of significance were observed. Five out of the seven trial pits observed were recorded as having palaeo-environmental potential starting at a depth of between 1.2m and 1.8m below ground level.

Aims and Objectives

The general aims of the evaluation were as follows:

- to clarify the results of the geophysical survey within Site 1;
- to determine the nature, extent, date, condition, state of preservation, significance, and complexity, of palaeo-environmental remains within Site 1;
- to determine the state of preservation of the archaeological resources within Site 4 (Belgrave Wharf);
- to determine the level of risk the archaeological resource would present (if found) within all sites to the construction programme and aid the determination of any additional mitigation work specification and programme if required.

The evaluation was undertaken in order to enable reasoned and informed recommendations to be made to the local planning authority and, if appropriate, a suitable mitigation strategy for the proposed development to be formulated.

The design specification conforms to the requirements of the National Planning Policy Framework (2012). It has been designed in accordance with current best archaeological practice and the appropriate national standards and guidelines including:

- *Management of Archaeological Projects* (English Heritage, 1991);
- *Model Briefs and Specifications for Archaeological Assessments and Field Evaluations* (Association of County Archaeological Officers, 1994);
- *Code of Conduct* (Institute for Archaeologists, 2010);
- *Standard and Guidance for Archaeological Field Evaluations* (Institute for Archaeologists, 2010);

- *Standards for Field Archaeology in the East of England (Association of Local Government Officers, 2003);*
- *Guidelines and Procedures for Archaeological work in Leicestershire and Rutland (Leicestershire County Council 1997)*

Archaeological research potential

It was considered that the investigations had the potential to contribute to the following research topics identified in the East Midlands Research Agenda and Strategy (Knight et al 2012):

6.3 Neolithic and Early-Middle Bronze Age:

6.3.4 Exploitation of different landscape zones

6.3.5 Settlement patterns

6.3.7 Riverine monuments and ritual foci

6.4 Late Bronze Age and Iron Age

6.4.7 Ritual and structured deposition and religion

6.4.8 Agricultural economy and landscape

6.5 Romano-British

6.5.4 Rural settlement patterns and landscapes

6.5.5 The Agricultural economy

6.5.7 Roads and waterways

6.7 High medieval

6.7.7 The agrarian landscape and food-producing economy

6.8 Post-Medieval

6.8.3 Agricultural landscapes

6.8.4 Rural settlement patterns

6.8.5 Industry and communications

Methodology

Archaeological Trial Trenches

Prior to the commencement of works an Accession Code was obtained from Leicester City Museum Service and the required archive deposition forms completed. An OASIS online record was initiated and the key fields completed on Details, Location and Creator forms.

Following the brief prepared by URS on behalf of the client and agreed with the City Archaeologist, a programme of archaeological field evaluation by trial trenching was undertaken, comprising 13 trenches ranged across the five sites as indicated in Figure 2.

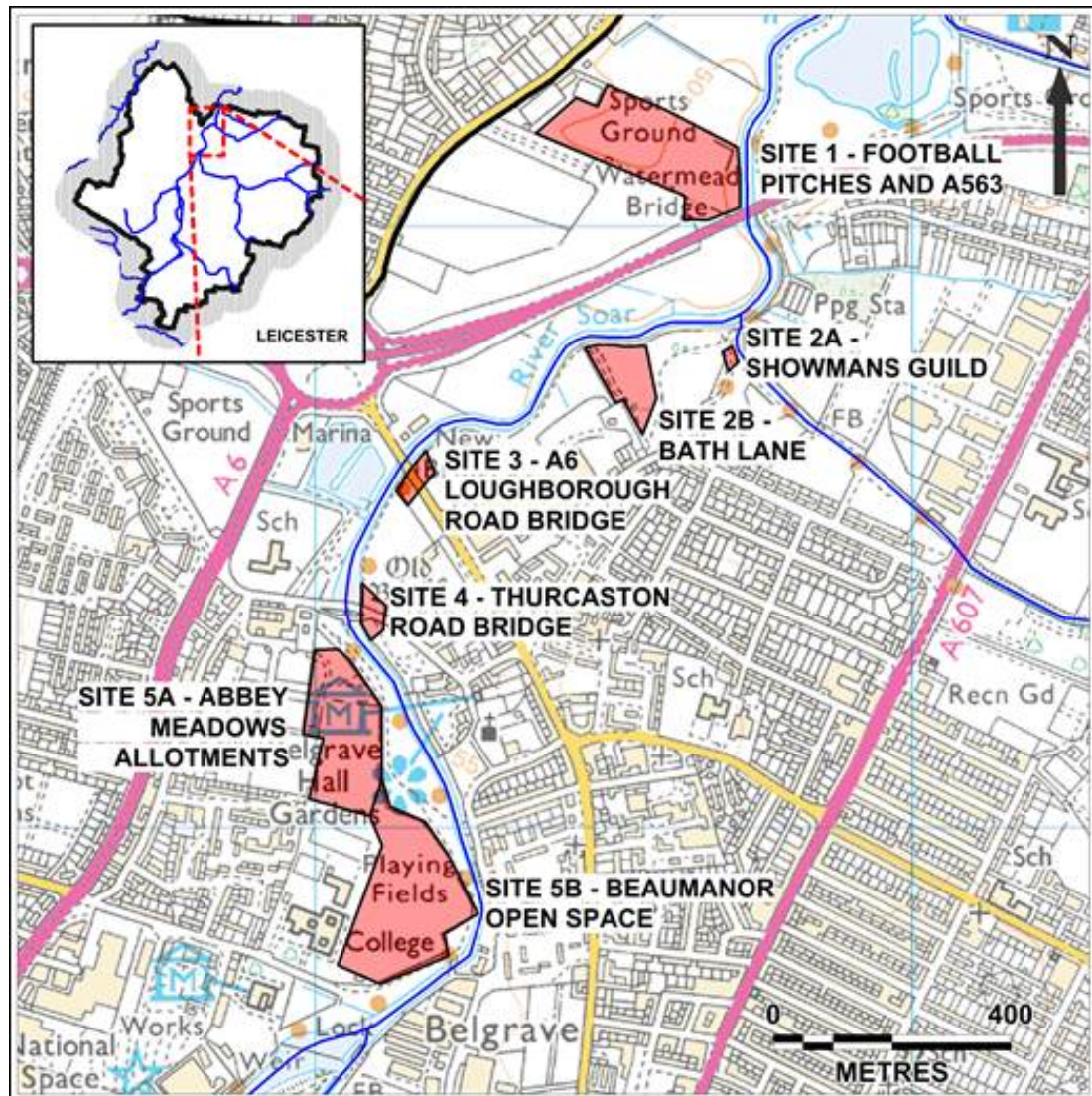


Figure 2: locations of Sites 1-5

Topsoil and overburden was removed by a JCB 3CX mechanical excavator using a toothless ditching bucket (c.1.80m wide), under archaeological supervision down to the top of alluvial deposits. Selective removal of these deposits was undertaken in order to record their depths and the height of underlying river gravels. The spoil generated during the evaluation was mounded away from the edges of each trench. Topsoil and subsoil was stored separately. Mechanical excavation ceased at undisturbed natural deposits.

The trenches were recorded at an appropriate scale by measured drawing and photography and were located to Ordnance Survey National Grid. A photographic record, utilising black and white negative film, supplemented by high resolution digital data capture, was maintained during the course of the fieldwork and included:

- the site during work, showing specific stages of fieldwork;
- the sites following backfilling

Upon completion of the evaluation trenching, the excavated trenches were backfilled and loosely compacted.

Results

Site 1: Co-Operative Society Sports Pitches

Archaeological investigation at Site 1 comprised three evaluation trenches located on the northern, western and southern edges of a football pitch and each measuring 30m long by 1.80m wide. **Trench 1** was orientated north-west to south-east and measured 1m-1.05m in depth. The uppermost deposit of 0.20-0.30m of mid grey-brown clay loam topsoil overlay 0.70-0.90m of mid brown clay-silt subsoil containing modern ceramic building material, representing levelling material associated with construction of the football pitches. Removal of this material revealed a mid orange-brown silty natural clay. **Trench 3** produced comparable results, with 1.0-1.20m of topsoil and makeup material overlying bluish-grey natural clay. **Trench 2**, located between the football pitches, lacked levelling material, with 0.27-0.30m of topsoil and subsoil over pale brown clay natural.

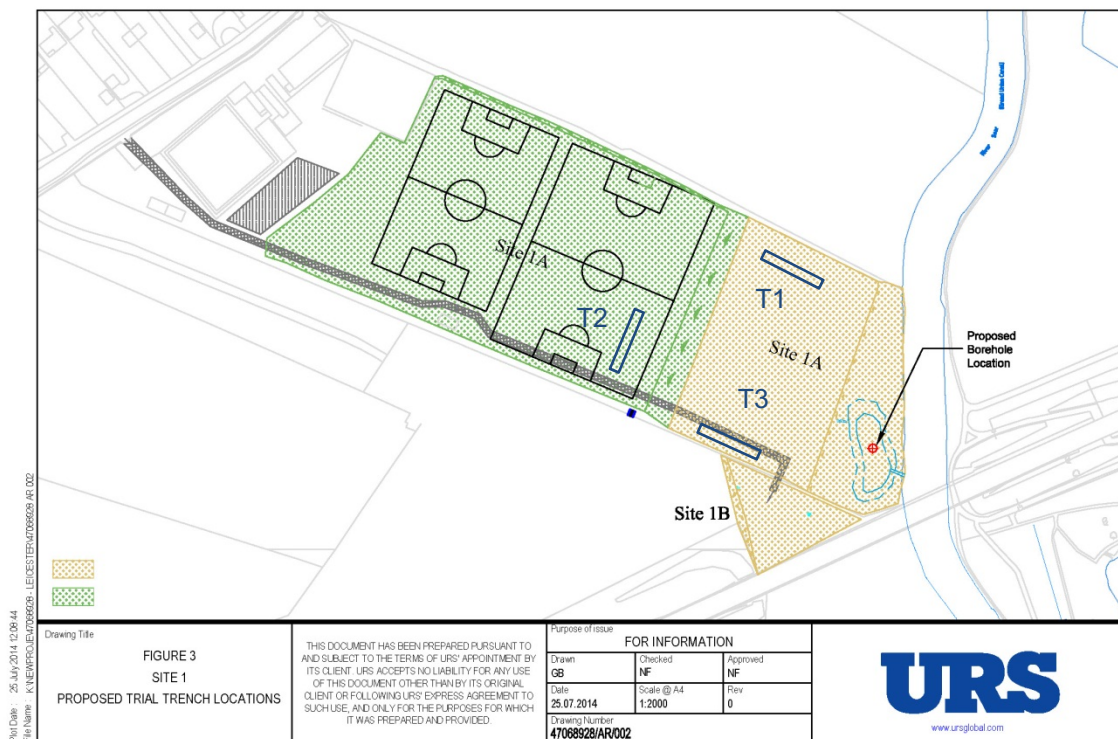


Figure 3: Site 1: trench locations



Figure 4: Trench 1: view south-east (2m scale)



Figure 5: Trench 3: view south-west (2m scale)

Site 2: Bath Street

Trenches 4 & 5 at Site 2 were located in scrub adjacent to the south bank of the River Soar and measured 30m by 1.80m. Machine removal of 0.20-0.50m of mid grey-brown clay topsoil and 1.0-1.65m of ‘made ground’ consisting of a grey-brown silty clay containing modern ceramic building material (CBM) and charcoal inclusions revealed underlying alluvial deposits. Sondages through this material revealed a 0.50-1.0m accumulation of pale brown and grey-brown clays overlying a dark-grey organic alluvial deposit; the latter contained 20th-century glass vessel fragments. A clean grey-brown natural clay was identified at the base of the trenches at 0.20-2.30m depth.

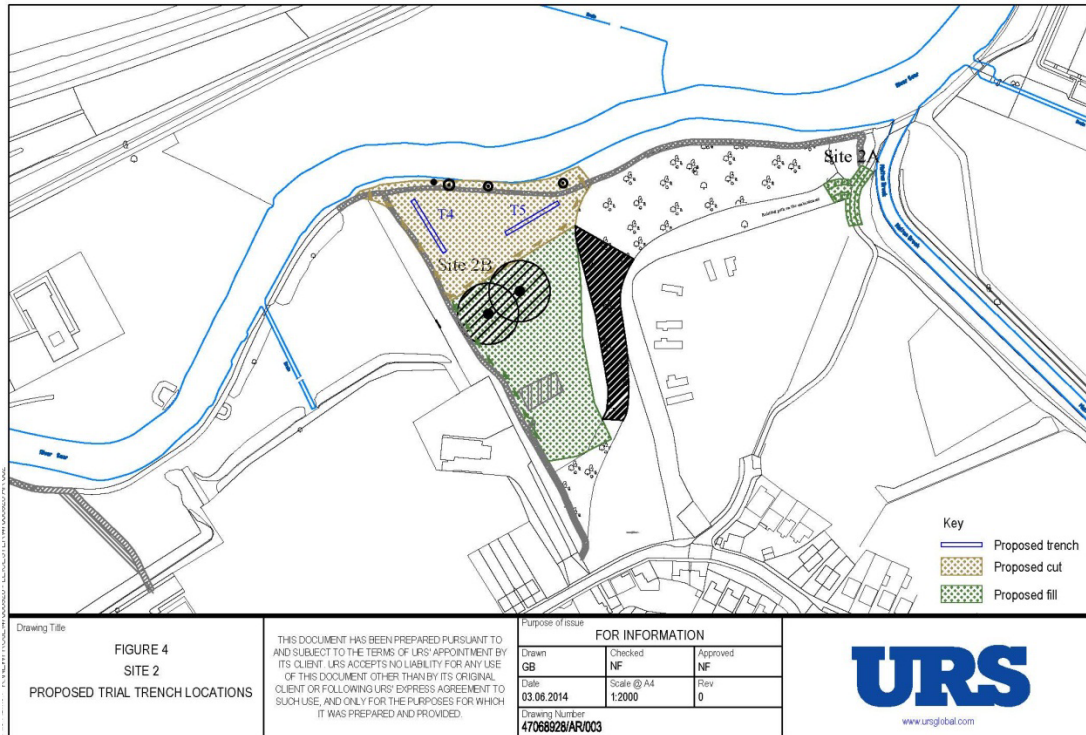


Figure 6: Site 2: trench locations



Figure 7: Stratigraphic sequence at northern end of Trench 4; view east (2m scale)

Site 3: Loughborough Road Bridge

Site 3 comprised three trenches; two (**Trench 6 & Trench 7**) to the north of the Loughborough Road bridge over the Soar and a third (**Trench 8**) adjacent to the bridge on its south side. **Trenches 6** and **7**, each measuring 30m by 1.80m, produced similar results: namely a 0.20-0.40m dark-brown clay silt top soil with an underlying 0.40-0.90m of pale orange-brown clay silt subsoil onto a 0.90-1.20m thick bluish organic clay deposit. The latter

produced no organic or archaeological materials. Coarse river gravels were revealed beneath the latter at 2.20-2.70m depth. A 1.10m-thick accumulation of dark bluish-grey richly organic material was encountered in **Trench 8**, containing visible twigs and leaves but also 19th or 20th century CBM and glass bottle fragments. The trench base again comprised coarse rounded river gravels.

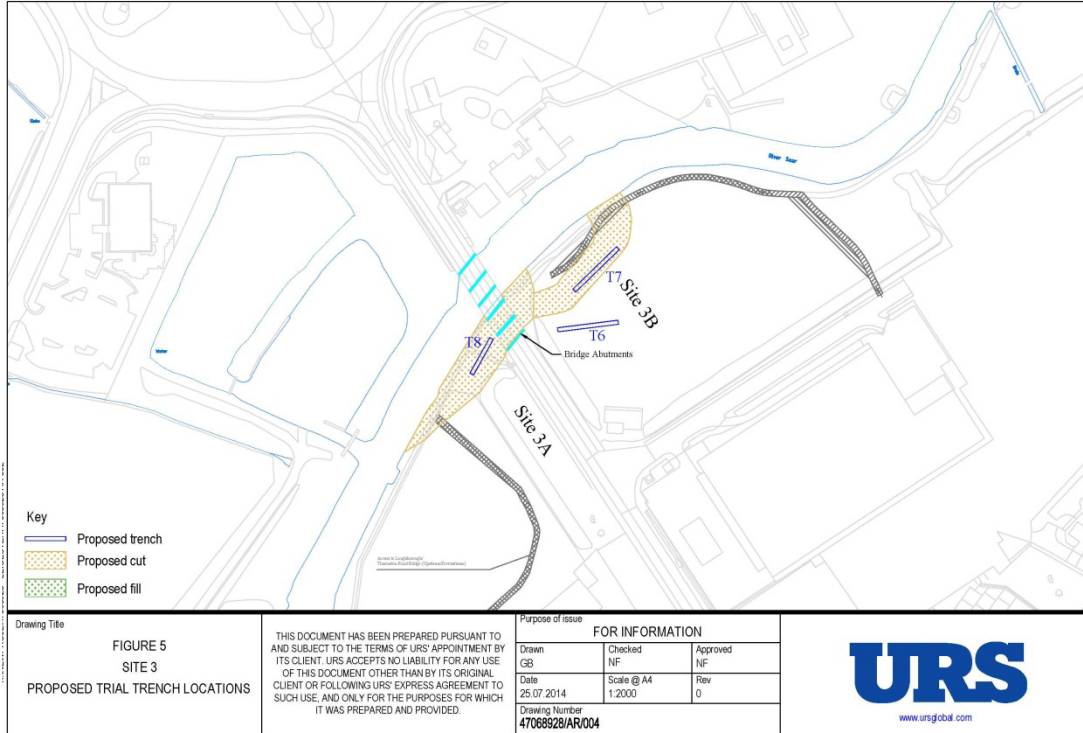


Figure 8: Site 3: trench locations



Figure 9: Trench 6; stratigraphic sequence; view north (2m scale)



Figure 10: Stratigraphic sequence at northern end of Trench 7; view north (2m scale)



Figure 11: Trench 8: general view north-east (2m scale)

Site 4: Thurcaston Road Bridge

Site 4 and **Trenches 9-11** targeted the Thurcaston Road bridge section of the Soar, with the additional research aim of seeking to identify 19th-century wharfage on the southern side of the bridge.

Trench 9 (Figure 12) measured 30m by 1.80m by 1.60-1.80m deep and produced a 0.70-0.95m thick accumulation of non-organic pale brown silty clay alluvial material overlying a clean pale brown natural clay. Two additional short trenches (**10 & 11**) were opened south of the bridge and measured 5m by 1.80m by 2.0-2.70m deep and 5m by 1.80m by 1m deep respectively and revealed considerable accumulations (up to 2.70m) of modern building rubble and, in the case of **Trench 11**, a substantial pit containing 20th-century bottle debris. A 1m accumulation of silty clay organic alluvial material grading gradually from pale orange-brown to blue-grey overlay riverine sands and gravels.

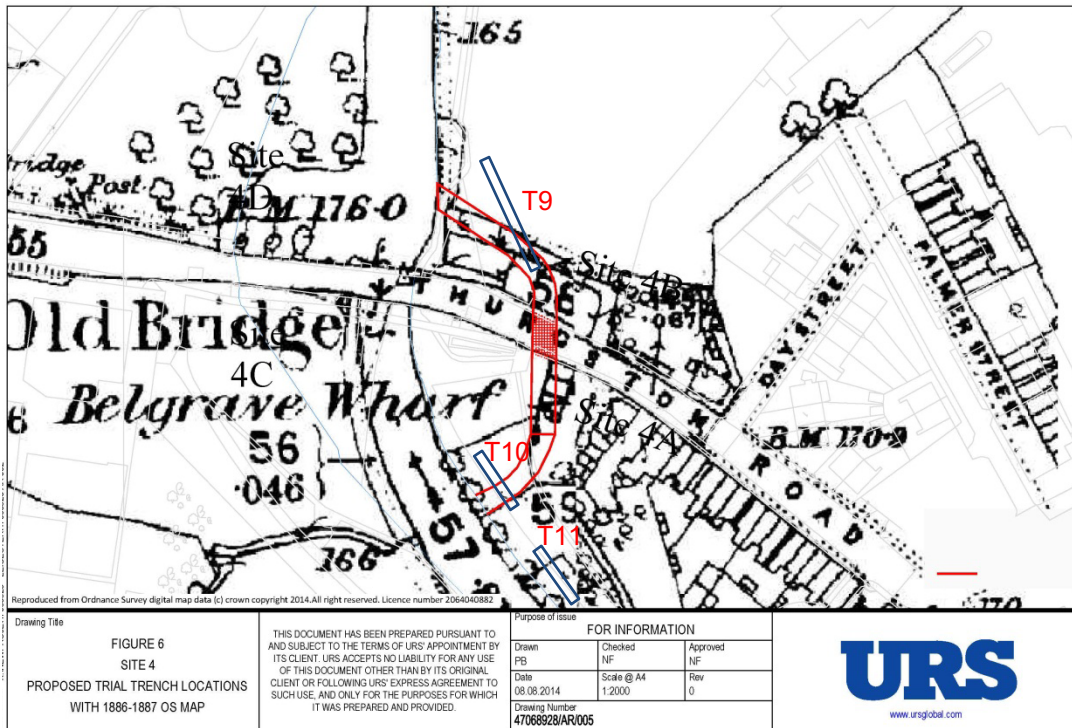


Figure 6: Site 4 trench locations



Figure 12: Trench 9: general view north-east (2m scale)



Figure 13: Trench 11; stratigraphic sequence viewed north-east (2m scale)

Site 5: Beaumanor Open Space/Abbey Meadows

Finally, two 30m by 1.80 trenches (12 & 13) were opened west of the river at Beaumanor Open Space. Both revealed a 0.10-0.15m thick dark greyish-brown clay silt top soil overlying

a 0.15-0.35m accumulation of greyish-brown silty clay subsoil onto clean pale brown natural clay; no alluvial material was present.

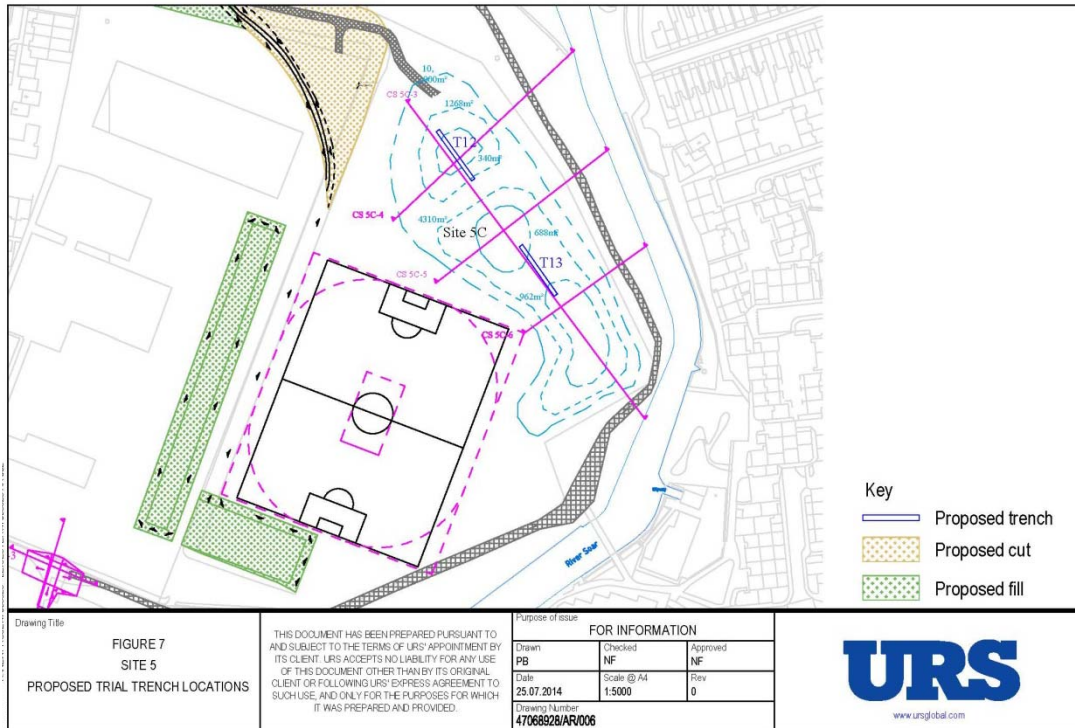


Figure 14: Site 5: trench locations



Figure 15: Trench 12, general view north-east (2m scale)

TRENCH	SITE	ORIENTATION	LENGTH & WIDTH (metres)	DESCRIPTION	DEPTH (MIN-MAX metres)
1	1	NW-SE	27 x 1.80	Topsoil 0.20-0.30m, subsoil 0.70-0.90m. No alluvium present. No archaeological finds or features.	1.0-1.15
2	1	NE-SW	30 x 1.80	Topsoil 0.15-0.20m, subsoil 0.07-0.15m. No alluvium present. No archaeological finds or features.	0.27-0.30
3	1	NW-SE	30 x 1.80	Topsoil 0.20m, made ground 0.80-1.0m. No alluvium present. No archaeological finds or features.	1.0-1.60
4	2	NNW-SSE	30 x 1.80	Topsoil 0.20-0.50m, subsoil 0.40-0.60m, alluvium 0.50m-1.10m. No archaeological finds or features.	1.20-2.30
5	2	NEE-SWW	30 x 1.80	Topsoil 0.20-0.30m, made ground 0.80-1.65m, alluvium 0.30-0.35m. No archaeological finds or deposits.	1.10-1.90
6	3	E-W	30 x 1.80	Topsoil 0.20-0.40m, subsoil 0.40-0.90m, alluvium 0.85-1.15m. No archaeological finds or deposits.	0.90-2.20
7	3	NW-SE	30 x 1.80	Topsoil 0.30m, subsoil 0.50-0.80m. No alluvium present. No archaeological finds or deposits.	0.70-2.70
8	3	NNW-SSE	30 x 1.80	Topsoil 0.20-0.30m, alluvium 0.30-1.80m. No archaeological finds or deposits.	2.10-2.10
9	4	N-S	30 x 1.80	Made ground 0.20-0.30m, alluvium 0.70-0.95m. No archaeological finds or deposits.	1.25-1.60
10	4	NNE-SSW	5 x 1.80	Rubble 0.30m, subsoil 1.70m. No archaeological finds or deposits.	2.0-2.80
11	4	NW-SE	5 x 1.80	Topsoil 0.20m, made ground 2.70m. No archaeological finds or deposits.	1.0-2.90
12	5	NW-SE	30 x 1.80	Topsoil 0.20m subsoil 0.15-0.25m. No archaeological finds or	0.25-0.50

				deposits.	
13	5	N-S	30 x 1.80	Topsoil 0.10-0.15m, subsoil 0.25-0.30m. No archaeological finds or deposits.	0.35-0.40

Figure 16: Trench table

Conclusions

The archaeological evaluation undertaken by ULAS at a series of sites (1-5) along the River Soar produced neither artefactual nor structural archaeological evidence, reflecting the findings of the watching brief undertaken on the same sites earlier in 2014 (Browning 2014). Whilst alluvial material was identified at a number of sites (namely, 2, 3 and 4), some of which contained visible organic material, the presence of ceramic building material and other debris established these deposits as being modern in origin. The evaluation did, however, serve to provide further data regarding depths of riverine alluvial deposits along the course of the River Soar.

Archive and Publications

The site archive, consisting of paper and photographic records, will be deposited with Leicester City Museums Service under Accession Reference Number A29.2014.

The archive consists of:

- 13 trench recording sheets
- Photographic record index
- 30 digital photographs
- A risk assessment form

Publication

A version of the excavation summary (see above) will appear in due course in the *Transactions of the Leicestershire and Rutland Archaeological and Historical Society*.

Acknowledgements

Luis Huscroft and Roger Kipling of ULAS undertook the archaeological evaluation on behalf of URS. The project was managed by Richard Buckley.

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Oasis Information

Project Name	Leicester City Riverside Flood Relief Management Scheme
Project Type	Archaeological evaluation
Project Manager	Richard Buckley
Project Supervisor	Roger Kipling
Previous/Future work	Flood alleviation
Current Land Use	Recreational
Development Type	Flood alleviation
Reason for Investigation	NPPF
Position in the Planning Process	Post-determination
Site Co ordinates	NGR SK 5970 0796 (NE) to SK 5906 0678 (SW)
Start/end dates of field work	November 2014
Archive Recipient	Leicester City Museums Service A29.2014
Study Area	

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APPENDIX Borehole at Site 1A (Leicester Cooperative Society Sports Ground, Birstall Road)

James Rackham

As part of a programme of archaeological evaluation in advance of work on the Leicester Flood Relief Scheme a borehole was requested by the Environment Agency at the southern end of the Leicester Cooperative Society Sports Fields on Birstall Road, between the end of the playing fields and the River Soar. This area is destined for a pond (Fig. 1) and evaluation of the fluvial sediments was requested by the EA prior to any excavation. The Environmental Archaeology Consultancy was commissioned by the University of Leicester Archaeology Service to undertake the coring.

The proposed pond has an 860m² footprint and the borehole was located near the centre. A single borehole is rarely an adequate investigation of river floodplains where former river channels are sought to recover the palaeoenvironmental evidence that is contained in their organic sediments. To increase the investigative potential of the evaluation two further boreholes were sunk, one sited 8m closer to the river channel and the other 8m in the opposite direction (Fig. 1). The location of the central borehole from which a core was subsequently recovered was SK 59698 08052 with an altitude of approximately 50m OD.

Methodology

Three locations were selected for exploratory coring using a hand operated gouge auger of 25mm diameter with the centre core being the location requested for coring. The cores were logged in the field (Appendix 1) using standard sediment descriptions, and the depths recorded of all boundaries recognised and a section constructed (Fig. 2). No good palaeoenvironmental sediments were recorded during the hand augering so a single core was taken from the original proposed location (BH1). The borehole was undertaken using a small caterpillar tracked Dando Terrier rig with a steel sampling tube with a clear plastic insert for the recovery of the core. The hand augering had established that the superficial deposits overlying the sands and gravels were approximately 2m deep so a three metre core was recovered at BH1 (Fig. 1).

Three 1m cores were recovered, with varying degrees of compression of the sediments recovered in the cores. The cores were subsequently split open, cleaned, photographed and then described (Fig. 3).

Results

The three hand auger holes showed that there was little variation across the 16m investigated, with just a slight fall in the upper surface of the underlying gravels as the boreholes approached the modern river channel. None of the hand auger holes recorded an organic sediment filled palaeochannel, but all suggested alluvial overbank flood sediments.

On the basis of these results a core was taken from the original proposed borehole site to a total depth of 3m. The three 1m cores are illustrated in Fig. 3. The basal 0.6m of the borehole is a coarse sandy gravel of glacial origin. This is overlain by a soft alluvial clay with traces of surviving organic roots, and iron mottling indicating a fluctuating water table. These deposits are unoxidised. Similar alluvial clays above show similar mottling and a degree of oxidation, with browner more oxidised alluvial clays above. These clays are covered by dark grey silty clay loams, with occasional pebbles, and clay lenses. A slightly thicker clay lens at 38-40cm depth represents a flood event. The upper humic silty clay loam is the modern vegetated soil that originated as flood silts.

Fig. 1. Plan of the site at Birstall Road Sports Ground with location of recovered core, and auger holes.

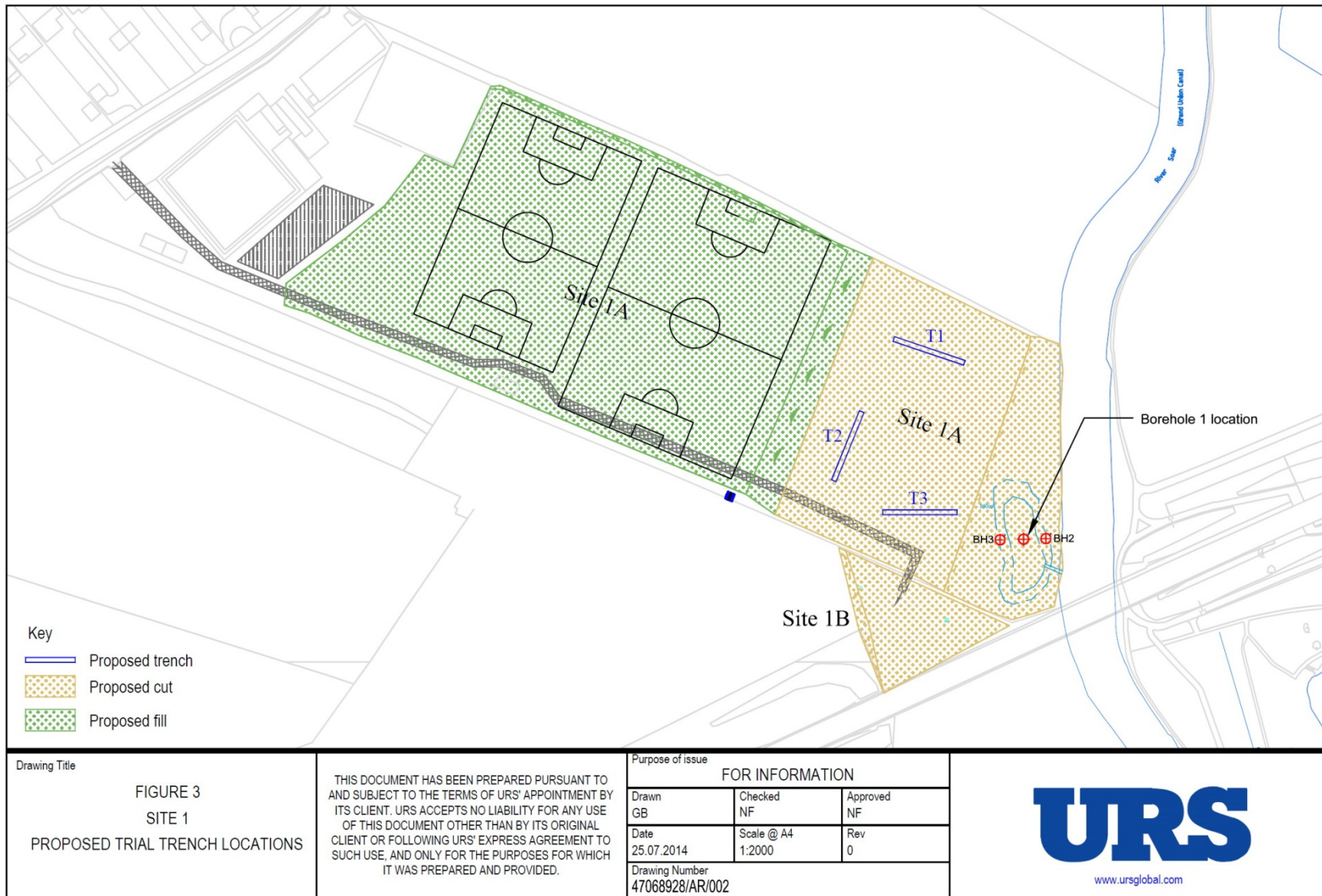


Fig. 2. Reconstructed section based on the gouge auger cores.

Birstall Road Cooperative Sports Ground

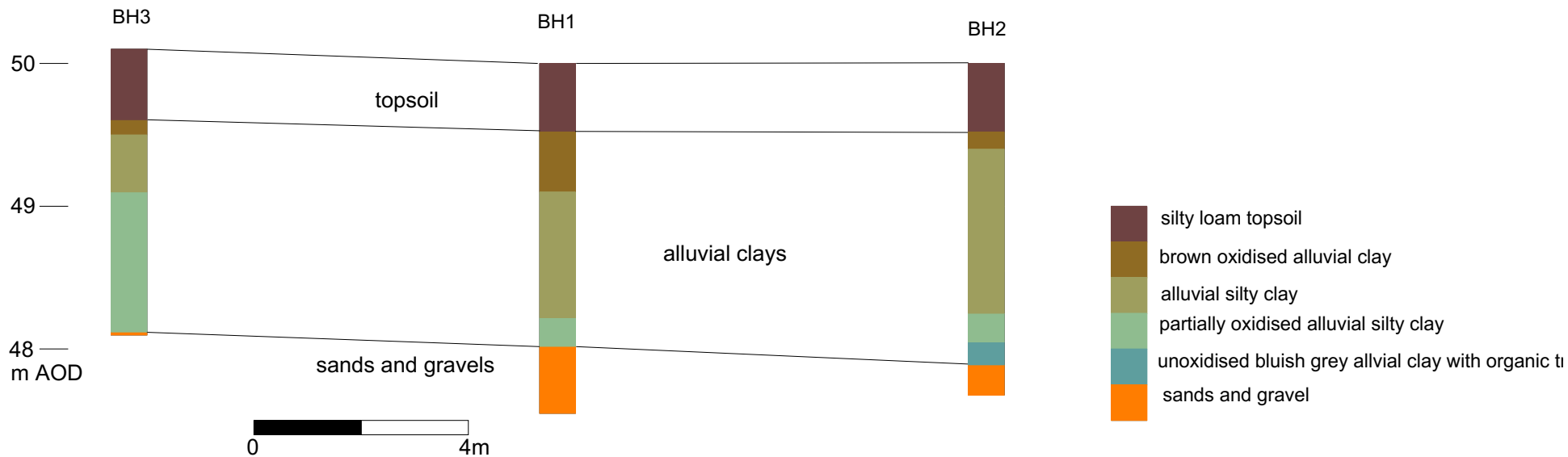
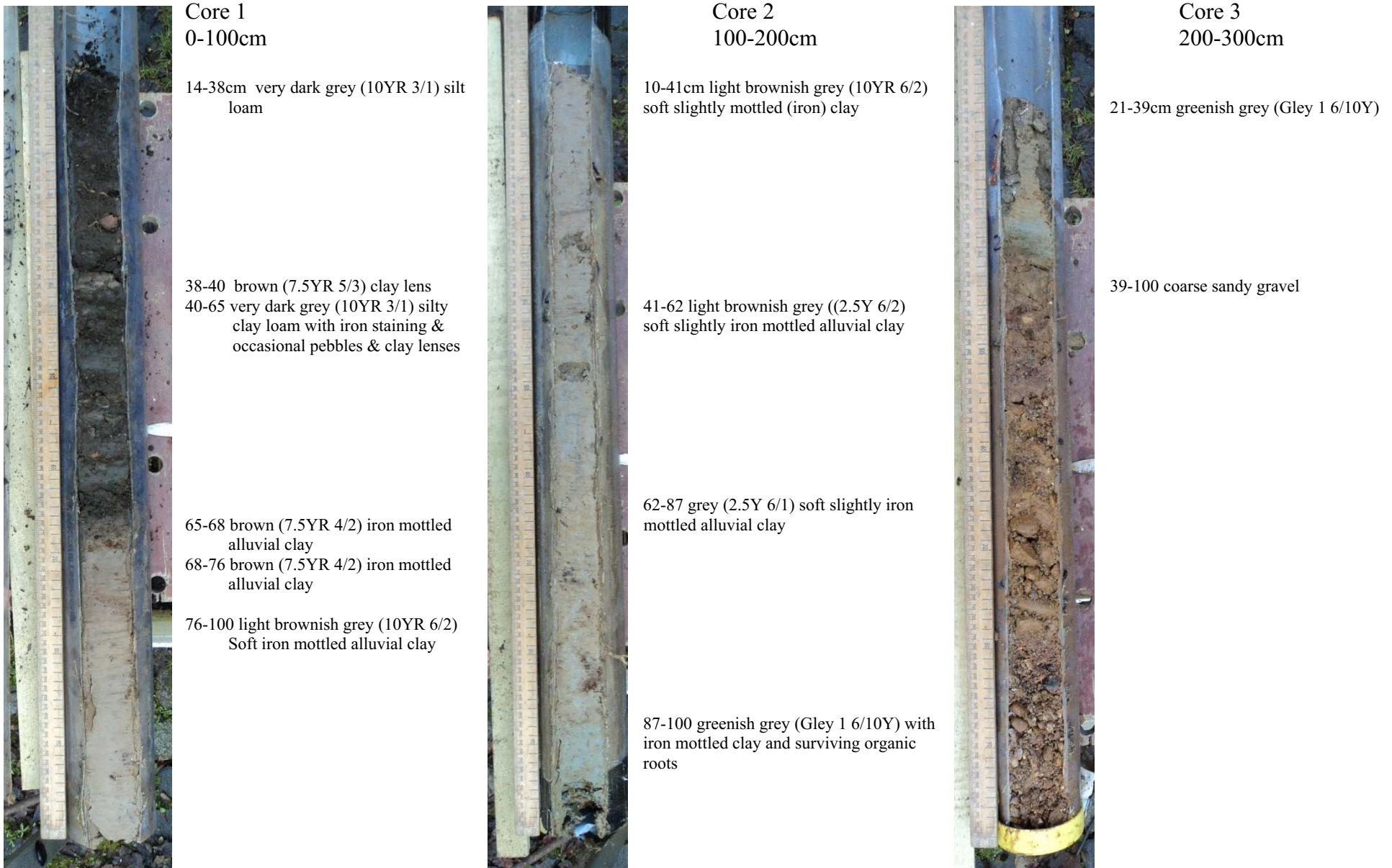


Fig. 3. Photographs of cores 1, 2 and 3 from BH1.



This sequence represents the build up of alluvial clays and silty clays over the floodplain of the river. The earliest sediments may represent early postglacial sedimentation within the braided channels of the glacial river, but the later clays reflect overbank flooding and sediment build-up across the floodplain. The sequence shows no traces of the organic rich silts that would be expected if a postglacial palaeochannel crossed the site.

Although the lower unoxidised alluvial clays will almost certainly contain pollen in countable numbers the deposits contain no organics that can be confidently used to date the sediments and without good dating the results of any analysis cannot be usefully applied.

On this basis no further work can be recommended on the core samples recovered, and it is unlikely that the excavation of the pond will disturb sediments where further study would be recommended. Nevertheless it would be appropriate to maintain a watching brief during the excavations in case a palaeochannel crosses the pond area to the north or south of the investigated line.

Acknowledgements

The hand coring was undertaken by the author with the assistance of Site Investigation Services, Willoughton, Gainsborough, who undertook the mechanical coring of Borehole 1. The cores were split, cleaned and photographed by Trude Maynard of the EAC, and described and logged by the author. The base plan for Fig. 1 was supplied by the University of Leicester Archaeology Service.

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Appendix

Gouge auger logs

Borehole 1 centre borehole

0-48cm	very dark greyish brown (10YR 3/2) silty loam
48-90	brown (7.5YR 4/3) silty clay alluvium
90-178	grey and pale brown (10YR 6/3) soft alluvial silty clay
178-198	greenish grey (Gley 1 5/10GY) unoxidised silty clay
198-245	sand and gravel

Borehole 2 8m east of BH1

0-48cm	very dark greyish brown (10YR 3/2) silty loam
48-60	brown (7.5YR 5/4) silty clay
60-100	light brown (7.5YR 6/3) alluvial clay
100-145	light olive grey (5Y 6/2) soft clay
145-175	light olive grey (5Y 6/2) soft clay with manganese granules
175-195	greenish grey (Gley 1 5/10Y) soft iron mottled unoxidised clay
195-211	bluish grey (Gley 2 5/5B) soft clay with rare organics
211-232	sandy gravels

Borehole 3 8m west of BH1

0-50	very dark greyish brown (10YR 3/2) silty loam
50-60	brown (7.5YR 5/4) silty clay alluvium
60-100	light brown (7.5YR 6/3) alluvial clay
100-175	greenish grey (Gley 1 5/5GY) soft clay
175-198	greenish grey (Gley 1 5/5GY) soft clay
198-200	gravel

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