

Archaeological Watching Brief at Tewkesbury Nature Reserve Priors Park Tewkesbury Gloucestershire

Worcestershire Archaeology
for the Environment Agency

January 2019



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TEWKESBURY NATURE RESERVE PRIORS PARK TEWKESBURY GLOUCESTERSHIRE

Archaeological Watching Brief Report



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The Hive
Sawmill Walk
The Butts
Worcester
WR1 3PD

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SITE INFORMATION

Site name: Tewkesbury Nature Reserve
Site code: -
Local planning authority: Tewkesbury Borough Council
Planning reference: -
Central NGR: SO 89935 31856
Commissioning client: Environment Agency
Client project reference: -
WA project number: P5473
WA report number: 2630
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1	23/01/2019	Jamie Wilkins	Draft for comment	Tom Vaughan

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CONTENTS

SUMMARY	1
REPORT	2
1 INTRODUCTION	2
1.1 Background to the project	2
1.2 Site location, topography and geology.....	2
2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	2
2.1 Introduction	2
2.2 Prehistoric.....	2
2.3 Roman	3
2.4 Medieval	3
2.5 Archaeological works associated with the Nature Reserve	3
3 PROJECT AIMS	4
4 PROJECT METHODOLOGY	4
5 ARCHAEOLOGICAL RESULTS	5
5.1 Introduction	5
5.2 Phasing	5
5.2.1 Natural deposits	5
5.2.2 Phase 1: Medieval to post-medieval.....	5
5.2.3 Phase 2: Post-medieval	5
5.2.4 Phase 3: Modern.....	5
6 ARTEFACTUAL EVIDENCE, BY ROB HEDGE	5
6.1 Artefact methodology	5
6.1.1 Recovery policy.....	5
6.1.2 Method of analysis.....	6
6.2 Artefactual analysis	6
6.3 Recommendations	7
6.3.1 Further analysis and reporting	7
6.3.2 Discard and retention	7
7 ENVIRONMENTAL EVIDENCE	7
8 CONCLUSIONS	7
8.1 General	7
8.2 The axe-head and the Battle of Tewkesbury	7
8.2.1 Significance	8
8.2.2 Statement of confidence	8
9 PROJECT PERSONNEL	8
10 ACKNOWLEDGEMENTS	8
11 BIBLIOGRAPHY	9

FIGURES

PLATES

APPENDIX 1: SUMMARY OF PROJECT ARCHIVE

Archaeological Watching Brief at Tewkesbury Nature Reserve, Priors Park, Tewkesbury, Gloucestershire

By Jamie Wilkins

With contributions by Rob Hedge

Illustrations by Laura Templeton

Summary

An archaeological watching brief was undertaken by Worcestershire Archaeology (WA) in October 2018 at Tewkesbury Nature Reserve, Priors Park, Tewkesbury, Gloucestershire (NGR SO 89935 31856). The project was commissioned by the Environment Agency, on behalf of Tewkesbury Naturalists Club, in advance of groundworks associated with a new pond and reed-bed.

The archaeological advisor to the local planning authority considered that the development had the potential to impact upon possible heritage assets. Previous archaeological works within the nature reserve have identified evidence of prehistoric and Roman activity, as well as evidence of medieval agriculture.

The site is located within the floodplain of the River Swilgate, which lies c 50m to the west. The river also comprises the eastern-most boundary of the Registered Battlefield of Tewkesbury, a pitched battle fought in 1471 during the War of the Roses.

No significant archaeological features or deposits were identified within the groundworks monitored, although a residual sherd of Severn Valley Ware pottery reflects the background Roman activity recorded within the wider landscape, and may be associated with the settlement to the south-east

The character of the site is defined by a significant find comprising an iron axe-head, thought to be associated with the Battle of Tewkesbury. The axe-head has been identified as a 'type 4b' bearded axe common to the later medieval period. Primarily a utilitarian tool, the example recovered in this project show some evidence of expedient adaption, possibly for combat.

The location of the axe, within the south of the site and c 50m east of the Registered Battlefield, appears to correlate with the rout of the Lancastrian forces. The eastern flank of the Lancastrians was protected by the River Swilgate, and it is documented that much of the army fled the battlefield across the river.

If the axe-head is indeed an artefact directly associated with the Battle of Tewkesbury, then it represents an interesting find of local significance. It also appears to be a find of some rarity, and further highlights the archaeological potential of those areas immediately surrounding, but outside the boundaries of the Registered Battlefield.

Report

1 Introduction

1.1 Background to the project

An archaeological watching brief was undertaken by Worcestershire Archaeology (WA) in October 2018 at Tewkesbury Nature Reserve, Priors Park, Tewkesbury, Gloucestershire (NGR SO 89935 31856). The project was commissioned by the Environment Agency, on behalf of Tewkesbury Naturalists Club, in advance of groundworks associated with a new pond and reed-bed. The archaeological watching brief was undertaken on the recommendation of Charles Parry (Senior Archaeological Officer, Gloucestershire County Council), the archaeological advisor to Tewkesbury Borough Council, who considered that the development had the potential to impact upon possible heritage assets. Previous archaeological work within the nature reserve has identified evidence of prehistoric and Roman activity, as well as evidence of medieval agriculture.

No brief was provided but this project conforms to the generality of briefs previously issued for this area. A WSI was prepared by Cotswold Archaeology (CA 2014) and approved by Gloucestershire County Council. The watching brief also conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for an archaeological watching brief* (CIfA 2014a).

1.2 Site location, topography and geology

The site is located approximately 1km south-east of the historic core of Tewkesbury, and 90m west of the A38 eastern relief road. The site comprises a field of open grassland, approximately 1.5ha, on the flood plain of the River Swilgate, which lies 50m to the west. The River Swilgate is a tributary of the River Avon and flows south around the town. The River Avon joins the River Severn at Tewkesbury and so the site sits within a wider landscape dominated by watercourses.

The site is bounded to the north and south by hedgerows, whilst the A38 makes up the eastern boundary. A temporary fence-line erected to partition the field comprises the western boundary. The field is generally flat, at c 12m Above Ordnance Datum (AOD), though within the wider landscape there is a gentle slope west towards the River Swilgate, at c 11m AOD. The site was formerly a pasture field, though in recent years it has been the focus of landscaping works associated with the formation of the nature reserve, of which this project is the latest phase. Previous groundworks have included the instalment of a reed-bed c 20m to the south.

The underlying geology comprises bedrock of Saltford Shale member, a mudstone formed in the Triassic and Jurassic periods. No superficial deposits are recorded to overlay the site itself, though this changes c 5m west towards the River Swilgate where superficial deposits comprising alluvial clays are recorded (BGS 2018).

2 Archaeological and historical background

2.1 Introduction

An archaeological desk-based assessment (DBA) of the site was undertaken by Cotswold Archaeology, on behalf of the Environment Agency (CA 2013). The study site for the DBA covered all phases of the nature reserve, comprising 20 parcels of land flanking a c 1.7km stretch of the River Swilgate. The summary of the findings, presented below, will focus on the areas directly associated with the study site of this particular phase.

2.2 Prehistoric

Excavations associated with the eastern relief road (A38) identified an early to middle Bronze Age settlement c 180m north-east of site. The site comprised a 'D' shaped enclosure and associated pit

groups. Further excavations, c 500m north-east, revealed a possible middle Bronze Age 'casting' or metal-working site, with finds including mould fragments consistent with those used for forging channel-bladed spearheads (Walker *et al* 2004).

Within the field itself, lithics dating to the Neolithic and Bronze Age, including a leaf-shaped arrowhead, were recovered c 60m south-east of the site (*ibid* 2004).

2.3 Roman

Two comprehensive Romano-British settlement sites have been identified within the vicinity of the site. The sites were also excavated in preparation for works associated for the eastern relief road. The closest settlement lies just 60m south-east of the site, and within the same field. This comprised a complex series of enclosures which appeared to span from the 1st to 4th centuries AD. Domestic features included roundhouses and pit clusters.

Approximately 180m north-east of site, an additional Romano-British settlement was excavated as part of the same works. The settlement comprised a 'D' shaped enclosure, a trackway, a roundhouse and pit clusters, occupied primarily in the 2nd century AD and abandoned in the early 3rd century AD.

2.4 Medieval

Medieval activity is largely confined to the west of the site, across the River Swilgate, and closer to the historic core of Tewkesbury. The site is considered to have been part of the agricultural hinterland surrounding the town at this period, as indicated by the presence of water meadow ditches identified east of the site, across the A38.

The site lies just outside the Registered site of the Battle of Tewkesbury (NHLE 1000039; HER 5529; English Heritage 1995), the eastern boundary of which comprises the River Swilgate. The battle took place on the 4 May 1471 and represented a significant victory for the Yorkist army over the Lancastrians in the War of the Roses, leading to 14 years of peace.

There is some uncertainty over the battlefield site itself, though the most likely area of the pitched battle is considered to be the Gastons and the fields immediately south and west of there (Plate 8). Archaeological evidence of the battle within the registered area is expected to comprise weaponry, ammunition, and personal effects, though these may also be present in surrounding fields as they would have been discarded during the rout.

There is also the potential for mass graves, dug in the aftermath of the battle, within both the registered and surrounding areas.

2.5 Archaeological works associated with the Nature Reserve

As outlined in Section 1 above, this project represents the latest of a series of works associated with the formation of a nature reserve along the River Swilgate. Earlier archaeological investigations associated with this project comprised test pitting, trial trenching and watching briefs (CA 2017).

Despite the archaeological potential, highlighted above, those investigations did not identify any significant archaeological deposits or features. Additionally, the metal detecting methodology (outlined in Section 4 below) did not recover any metal artefacts earlier than modern in date.

3 Project aims

The objectives of the archaeological works are:

- To monitor groundworks, and to identify, investigate and record all significant buried archaeological deposits revealed on the site during the course of the development groundworks;
- At the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the projects and the archaeological conclusions that can be drawn from the recorded data.

4 Project methodology

A Written Scheme of Investigation (WSI) was prepared by Cotswold Archaeology (CA 2014). Fieldwork was undertaken between 15 and 19 October 2018.

The archaeological watching brief comprised the monitoring of groundworks associated with the excavation of a new pond and reed-bed, as part of a wider programme of works attached to the expansion of Tewkesbury Nature Reserve.

The proposed pond and reed-bed covers approximately 0.2ha in area, excluding the five islets which represent ground to be left *in situ*. Deeper areas and channels of the pond were observed to the archaeological level, in this instance the top of the natural geology. The excavated areas are shown in Figure 2 and Plates 1-4.

Site groundworks were delayed by flooding in the east of the site, and consequently, during the delay, the Environment Agency requested the excavation of two trial trenches in the west of the site, which had remained dry. It was thought that the trenches would help to inform our understanding of the stratigraphy and potential for archaeological deposits. This would help to inform later decision making, and lessen any potential delays during the watching brief. The location of the trenches is shown in Figure 2.

As stipulated in the WSI, and due to the proximity to the Battle of Tewkesbury site, overburden comprising topsoil and subsoil deposits was scanned with a metal detector, set to all-metal mode. Any artefacts of archaeological importance were individually bagged and 3D located. Any modern or 'junk' finds from the same context were bagged together, and used to provide an indicator of the background noise associated with the specific deposits.

Deposits considered not to be significant were removed under constant archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated as appropriate to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and feature locations were surveyed using a differential GPS with an accuracy limit set at 0.04m.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural and artefactual evidence, allied to the information derived from other sources.

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited at Tewkesbury Museum.

5 Archaeological results

5.1 Introduction

No archaeological features were identified within the confines of the groundworks monitored. The trench locations, excavation areas and find-spots are shown in Figure 2 and Plates 1-4.

5.2 Phasing

5.2.1 Natural deposits

The natural substrate comprised a firm, silty clay between 0.35m-0.47m below ground surface. Some variation was observed in the colour, with a dark yellow hue predominant in the east, with an increase in blueish-orange mottling further west (Plates 1-4). It also contained frequent patches of limestone gravels with fossils.

No alluvial deposits were observed.

5.2.2 Phase 1: Medieval to post-medieval

A firm, mid brownish-yellow, silty clay deposit was observed to overlie the natural substrate. The deposit was observed across the entirety of the site and is interpreted as a subsoil layer. Artefacts recovered from the subsoil comprise two abraded pottery sherds, and more significantly, an iron axe-head (Plate 5).

The axe-head was identified in the south of the area (Fig 2) at 10.35m AOD, approximately 0.40m below ground surface. The artefact was located towards the base of the subsoil, and did not appear to have been disturbed by modern activity.

The subsoil was truncated by numerous land-drains dating to the post-medieval and modern periods.

5.2.3 Phase 2: Post-medieval

Numerous ceramic land-drains crossed the site, and reflect attempts to drain the site for agricultural purposes.

5.2.4 Phase 3: Modern

A friable, mid brownish-grey, clayey silt topsoil overlay the entirety of the site. The topsoil measured between 0.18m-0.24m in depth and contained an abundance of rooting and moderate sub-rounded pebbles. Metal detector survey across the deposit identified a variety of modern, ferrous artefacts. These comprised nails, fence staples and washers, and are considered to be insignificant. A small selection was retained and is shown in Plate 6.

Some land-drains of more modern origin were identified across the site. These were identifiable by the plastic piping used, and relate to more recent attempts to drain the site.

6 Artefactual evidence, by Rob Hedge

6.1 Artefact methodology

The finds work reported here conforms with the following guidance: for findwork by ClfA (2014b), for pottery analysis by PCRG/SGRP/MPRG (2016), for archive creation by AAF (2011), and for museum deposition by SMA (1993).

6.1.1 Recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012; appendix 2).

6.1.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A terminus post quem date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on a Microsoft Access database.

The pottery and ceramic building material was examined under x20 magnification and referenced as appropriate by fabric type and form according to the fabric reference series maintained by Worcestershire Archaeology (Hurst and Rees 1992 and www.worcestershireceramics.org).

6.2 Artefactual analysis

A small assemblage of artefacts was recovered from subsoil deposit (301) comprising:

- A small (5g), abraded sherd of Roman Severn Valley ware (fabric 12, mid-1st to 4th century AD);
- A small (6g), abraded sherd of North Devon gravel-tempered ware (fabric 75, late-16th to 18th century);
- Three corroded and undiagnostic fragments of iron nails (3g);
- An iron axe-head (small find 1; Plate 5).

The axe-head is an interesting and unusual find. It was found at the base of the subsoil, with no evidence for disturbance or modern activity. There is extensive surface corrosion, but the head is almost complete; the only visible damage is a broken tip. The tip was not present within the deposit, so it seems likely that the axe was damaged prior to deposition. There was no sign of a handle, nor any woody impressions in the corrosion products, but soil conditions were not especially conducive to the preservation of organic remains; therefore any wood originally associated with it would not be expected to survive.

The axe measures approximately 200mm in width, 145mm in height (max), and is 30mm thick at the butt. The blade is asymmetrical, and broadly conforms to Ward-Perkins' 'Type 4b', within a group commonly known as 'bearded' axes. These forms seem to first appear in Viking contexts, but become common again in the later medieval period (Ward-Perkins 1954, 61). Bearded axes are generally hafted with the steeper, drooping curve on the lower side, curving down towards the user. Curiously, there is evidence to suggest that this axe was mounted upside-down: the axe-eye on the side of the drooping beard is plugged with at least three iron nails, which extend through the eye towards what would usually be the upper side. Iron nails are not a reliable method for fixing axe-heads: their presence, combined with the unusual upside-down position, suggests that it may have been expediently adapted for a different purpose, perhaps to give it a longer reach.

Radiographic imaging of the axe shows that it was fashioned from a single piece of iron, with the eye driven through the butt end (Plate 7). It also revealed that a hardened strip (maybe steel) had been added during manufacture, so that it could be more easily sharpened to a fine edge (Pieta Greaves, pers comm). A maker's mark on the axe-blade — in the form of a triangular arrangement of three stamped circles — was observable on the radiograph. All these features indicate a good-quality tool.

Bearded axes are a utilitarian, civilian type, widely-used throughout the later medieval period. However, this did not preclude their use in a wide variety of other contexts, including battle. The presence of a large tool in a subsoil deposit with no associated settlement activity is unusual. A chance loss is unlikely, and even though the tip is broken, high-quality iron would ordinarily be repaired or recycled, rather than discarded in an open field. Although other hypotheses cannot be discounted, the most plausible scenario for the axe's deposition is that it was associated with the Battle of Tewkesbury. A wide range of axes were used in later medieval warfare, and the weaponry of the Wars of the Roses included adapted civilian tools used by local levies.

The location of the find supports this hypothesis. Although found just to the east of the battlefield, it is documented that many of the Lancastrian forces fleeing the battle attempted to cross the River Swilgate, discarding equipment and weaponry as they were pursued by the Yorkist troops (Plate 8).

6.3 Recommendations

6.3.1 Further analysis and reporting

The following recommendations are made with regard to further work on the artefacts considered as part of this report.

- Further enquiries regarding the axe-head may reveal more information on its dating and function.

6.3.2 Discard and retention

The axe-head is an interesting find, and the potential link to the Battle of Tewkesbury affords it local significance. It should be retained, and offered to Tewkesbury Museum. The remainder of the assemblage is not considered worthy of retention.

7 Environmental evidence

Environmental sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event no deposits were identified which were considered to be suitable for environmental analysis.

8 Conclusions

8.1 General

Despite the archaeological potential of the site, no significant archaeological features or deposits were identified during the confines of the project. Groundworks in a portion of the east of the site were not observed, however, the surrounding observed areas did not indicate the presence of any surviving archaeology.

The lack of archaeological features is somewhat surprising given the location of a known Romano-British enclosed settlement c 60m to the south-east. It is however consistent with earlier archaeological works conducted in association with the development of the nature reserve, which also failed to identify any significant archaeological features (CA 2017). The site is located within the floodplain of the River Swilgate, and so this may provide some explanation for the lack of archaeology.

The residual sherd of Severn Valley Ware pottery recovered in this project reflects the background Roman activity recorded within the wider landscape, and may be associated with the settlement to the south-east.

No alluvial deposits were recorded on the site which is consistent with earlier archaeological works (see Test Pit 10, CA 2017) and also the British Geological Survey which identifies alluvial deposits further west of the site towards the River Swilgate.

8.2 The axe-head and the Battle of Tewkesbury

The site is characterised not by the presence of archaeological features, but rather by an interesting find comprising an iron axe-head (Plate 5). The axe-head was located in the south of the site (Fig 2) within the subsoil, approximately 50m east of the Registered Battlefield.

The position of the axe-head within the subsoil is curious. Located towards the base and with no evidence of a cut feature or modern disturbance, the axe-head may have been buried via early agricultural use of the land. Furthermore, despite the lack of alluvial deposits, the site is located within the wider flood plain of the River Swilgate, and may have been subjected to periodic inundation and the associated deposition of silt.

The axe-head has been discussed in some detail in Section 6 above, and though other possibilities cannot be conclusively excluded, it appears to be an artefact associated with the Battle of Tewkesbury in 1471. The evidence for this is substantial, and is largely focussed on the typology and location of the artefact. There is also some evidence to suggest that what is generally a utilitarian tool had been adapted, possibly for combat. The tool was of good quality, as highlighted by the maker's stamp and hardened cutting edge visible on the radiograph image (Plate 7).

It is conjectured that the axe was lost during the rout of the Lancastrian forces and this would appear to be the most plausible scenario for the deposition of the axe. Personal effects, armour and weaponry, were often discarded during these moments, so as to provide a greater chance of escape. It is documented that the left flank of the Lancastrian army was protected by the River Swilgate to the east, which would have become a hindrance during the rout (Plate 8). It is plausible that the axe was lost as individuals fled for safety across the river.

8.2.1 Significance

If the axe-head is indeed directly associated with the Battle of Tewkesbury, then it represents an interesting find of local significance. It also appears to be a find of some rarity.

Artefacts associated with battlefields typically comprise projectiles such as arrowheads, musket balls and artillery round-shot, which are fired from range and are not easily recoverable post-battle (Foard and Morris 2012). Indeed, other finds thought to be associated with the battle comprise arrowheads recovered during excavations at the site of Holme Castle, Tewkesbury (Starley and Cubitt 2006; Foard and Morris 2012). Hand-held weaponry, such as axes, were valuable items and would generally have been recovered in the immediate aftermath of the battle.

The find highlights the battle-specific archaeological potential for those areas, outside the registered boundary, but immediately surrounding the battlefield. Typically battlefields cannot be investigated using standard archaeological practices (Sutherland and Holst 2005; Pollard 2009), and so the continued use of metal detector survey within these areas has the potential to further our understanding of these events.

8.2.2 Statement of confidence

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were generally suitable in all of the areas observed to identify the presence or absence of archaeological features. Unfortunately, groundworks within an area in the east of the site were not observed, following miscommunication. The surrounding areas, however, provided no indication that any archaeological features had been present.

9 Project personnel

The fieldwork was led by Jamie Wilkins and Richard Bradley.

The project was managed by Tom Vaughan. The report was produced and collated by Jamie Wilkins. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text. Pieta Greaves (Drakon Heritage) undertook the radiography of the axe-head.

10 Acknowledgements

Worcestershire Archaeology would like to thank the following: Cathy Beeching (Fisheries, Biodiversity and Geomorphology, Environment Agency), Pieta Greaves (Drakon Heritage), Les Buchanan, Larry Blacker and Peter Bates (Tewkesbury Naturalists Club), Andy Noble (Asset Manager, Tewkesbury Borough Council), and Charles Parry (Senior Archaeological Officer, Gloucestershire County Council).

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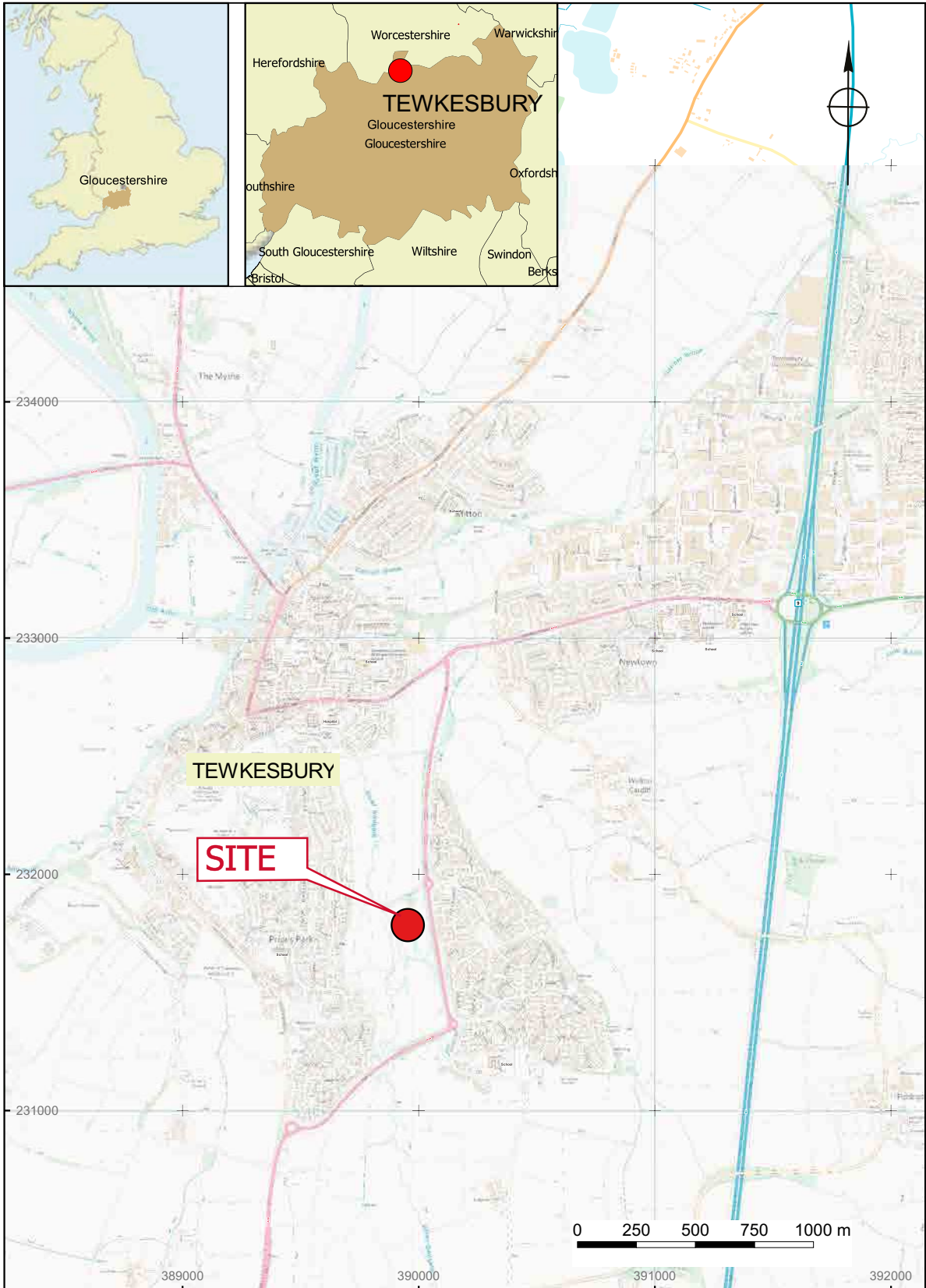
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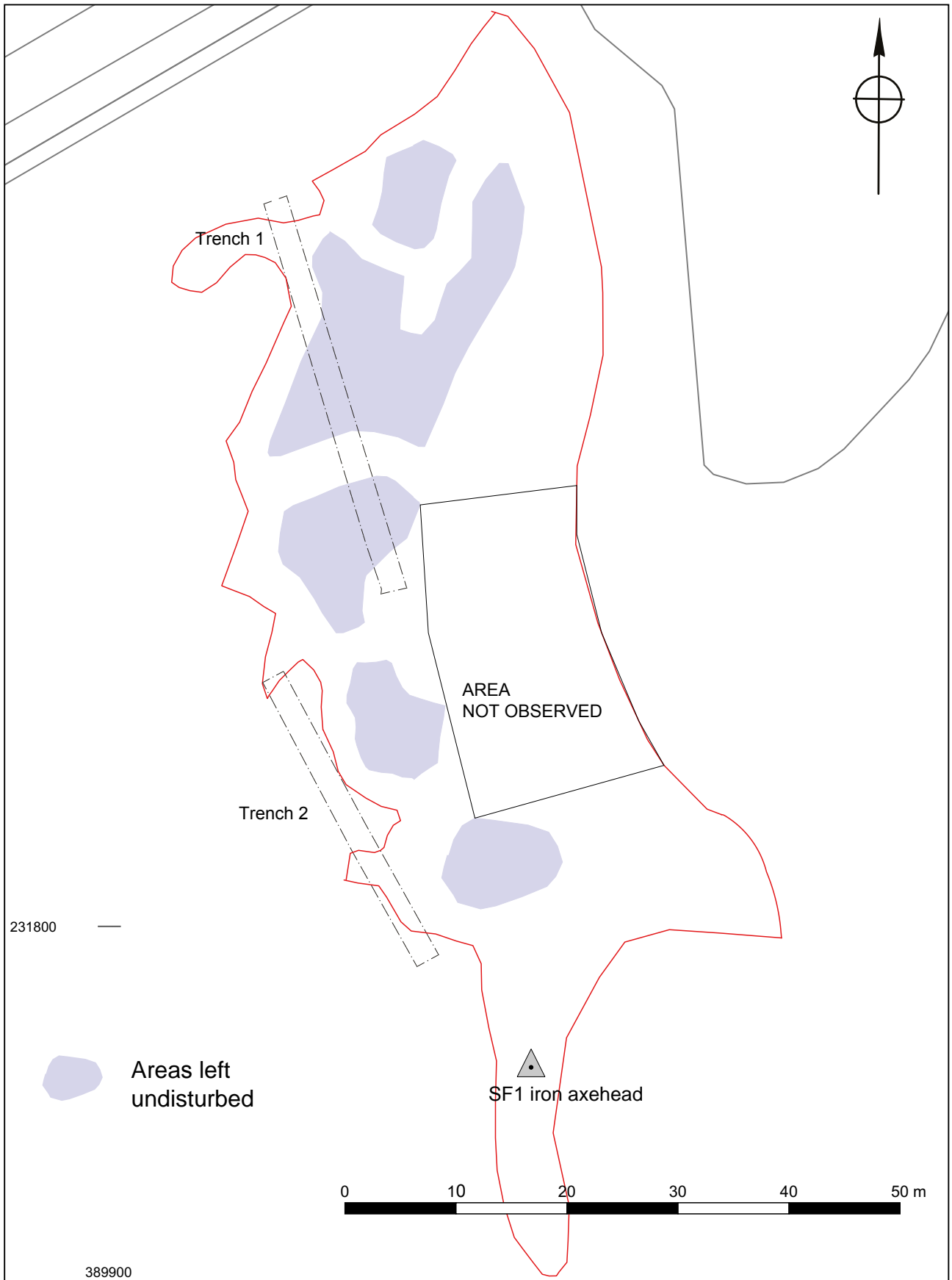
Figures



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Location of the site

Figure 1



Trench locations and pond outline

Figure 2

Plates



Plate 1: The site strip underway; view south; 2x 1m scales



Plate 2: Stripping the site; view north-east; 2x 1m scales



Plate 3. The channels around the islets stripped down to the natural geology; view north-east; 2x 1m scales



Plate 4. The channels around the islets stripped to natural geology; view north-east; 2x 1m scales



Plate 5. Iron axe-head (SF1) at the base of the subsoil; 0.20m scale



Plate 6. Examples of ferrous 'modern junk' recovered during metal detector survey of the topsoil; artefacts include nails and fence staples which were not retained; 8cm scale

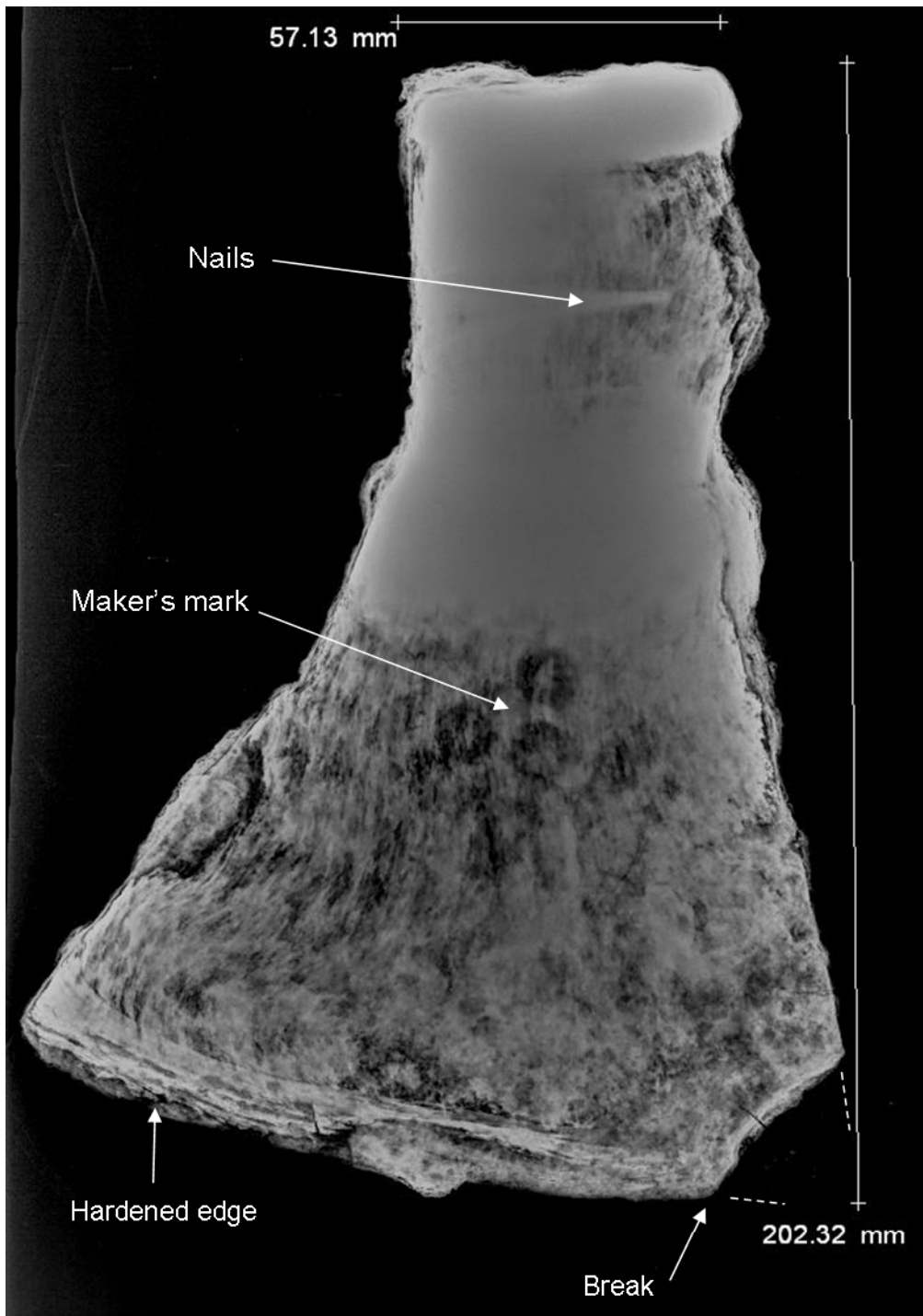


Plate 7. Radiograph of iron axe-head (SF1); note the stamped maker's mark and strip of iron or steel forged onto the blade (Drakon Heritage)

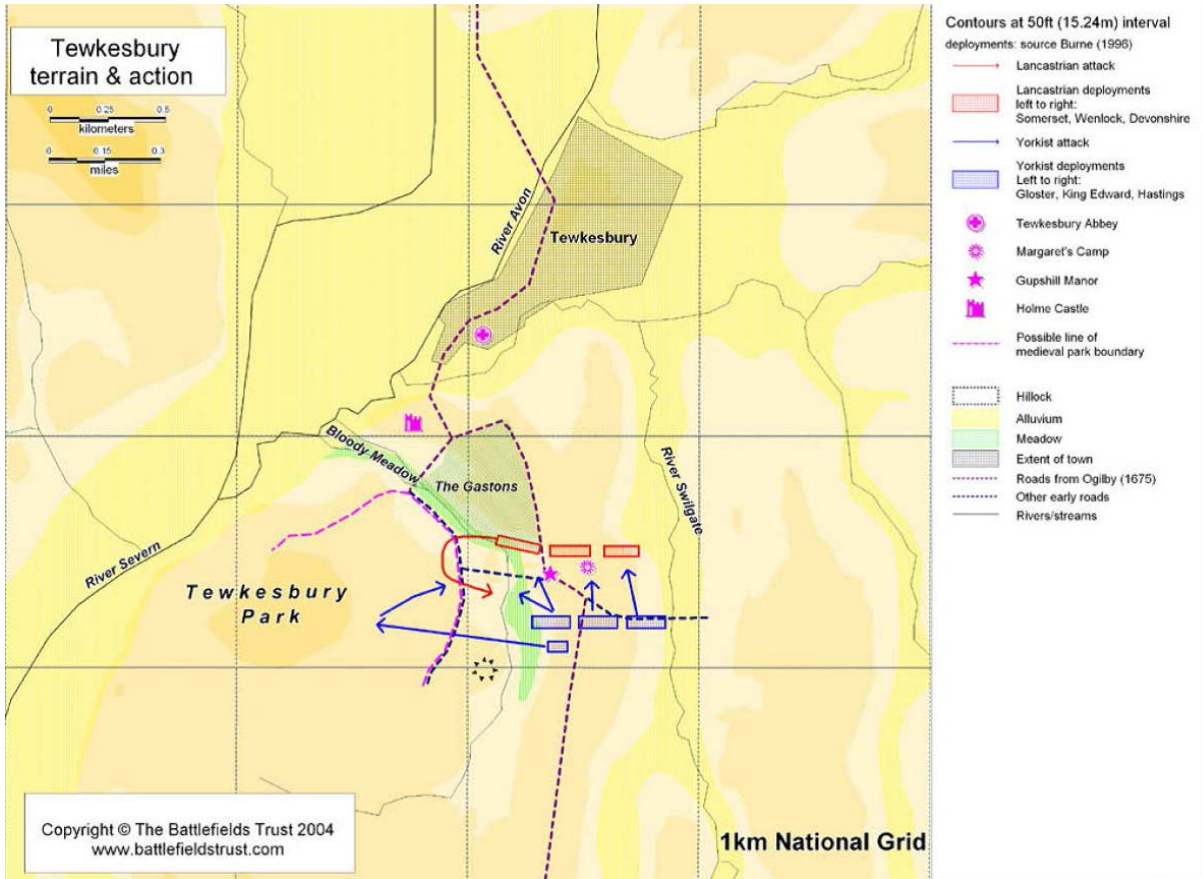


Plate 8. The Battle of Tewkesbury terrain and action map produced by The Battlefields Trust. The map identifies the Lancastrian forces (red), Yorkist forces (blue), and the River Swilgate to their east. Available from: <http://www.battlefieldstrust.com/resource-centre/warsoftheroses/battleview.asp?BattleFieldId=45>

Appendix 1: Summary of project archive (P5473)

TYPE	DETAILS*
Artefacts and Environmental	Metal
Paper	Context sheet, Diary (Field progress form), Report
Digital	Database, GIS, Images raster/digital photography, Survey, Text

*OASIS terminology