

TPWW/01



HIGHWAY ALTERATIONS ASSOCIATED WITH TECHNOLOGY PARK, WORCESTER

ARCHAEOLOGICAL WATCHING BRIEF

commissioned by Alun Griffiths Contracting
on behalf of Worcestershire County Council

WSM 67001

February 2016

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project info

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ARCHAEOLOGY**
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PROJECT SUMMARY

Headland Archaeology undertook a Watching Brief off Pershore Lane, south of Tibberton, Worcestershire between June and October 2015, during works associated with the widening of the road and installation of a new roundabout. Previous works in the vicinity of the site had identified the course of a palaeochannel and possible associated timber trackway. Whilst evidence of the palaeochannel was identified during the course of the watching brief, running across the northern part of the site, no further archaeological remains were revealed.

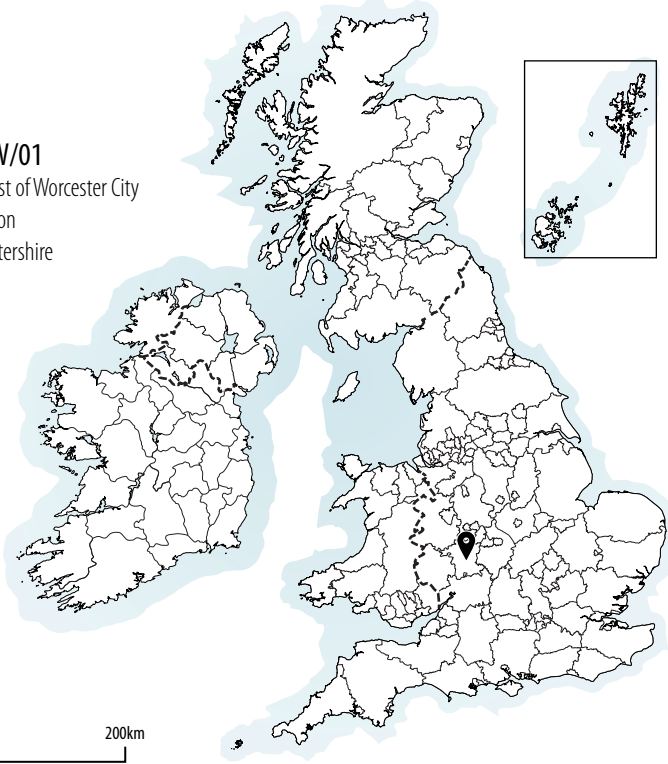
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TPWW/01
land east of Worcester City
Tibberton
Worcestershire



0 200km



- KEY
- area of high potential
 - all other areas
 - suggested course of palaeochannel

0 500m
scale 1:10,000 @ A4



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ILLUS 1 Site location

HIGHWAY ALTERATIONS ASSOCIATED WITH TECHNOLOGY PARK, WORCESTER

ARCHAEOLOGICAL WATCHING BRIEF

1 INTRODUCTION

Headland Archaeology was commissioned by Worcestershire County Council to undertake an archaeological watching brief off Pershore Road, Tibberton, Worcestershire (hereafter referred to as the site). The works included the mechanical removal of overburden and cut and fill operations in advance of road widening and the installation of a new roundabout; prior to the development of the land as a new technology and business park.

The site was located to the east of the city of Worcester at the intersection of Pershore Lane and the B4636 (NGR 389630, 256047). The proposed works comprise the widening of the existing carriageway around the Plough Lane roundabout, and the creation of a new roundabout adjacent to the existing carriageway.

The site comprised two fields with a former hedge line forming the site boundary and boundary between them.

The underlying geology is predominantly Sidmouth Mudstone Formation, with superficial alluvium deposits located to the west of the site. (British Geological Survey 2014)

The watching-brief was undertaken in accordance with a Written Scheme of Investigation (WSI) agreed with the archaeological advisors to the planning authority (Craddock-Bennett 2015).

The initial scope of works identified in the WSI encompassed the stripping of topsoil for the road widening and new roundabout installation off Pershore Road over a two week period. During the course of the works the need was identified to undertake further archaeological monitoring for the levelling of the site and the excavation of drainage channels/pools. Due to the change in the scope of works, a meeting between the archaeological advisor, Headland Archaeology and the client was held and the works continued under a revised WSI.

In accordance with the revised WSI, additional monitoring was undertaken in areas north of the new roundabout, identified as the most archaeologically sensitive area in relation to the palaeochannel.

1.1 ARCHAEOLOGICAL BACKGROUND

In 2010 an archaeological field evaluation (Keith-Lucas 2010) was undertaken over the majority of the wider development site.

The evaluation identified the course of a palaeochannel, which flowed to the north-west of the current area of investigation and potentially continued along the north-western boundary of the site. A complex sequence of organic and alluvial deposits was identified within the former channel. The evaluation found evidence for worked timbers of Middle Iron Age date forming possible structures, including what was interpreted as a possible timber trackway, at least 150m long. Limited evidence of activity spanning from the Prehistoric and Roman periods, through to medieval and Post-Medieval activity was also identified across the surrounding area.

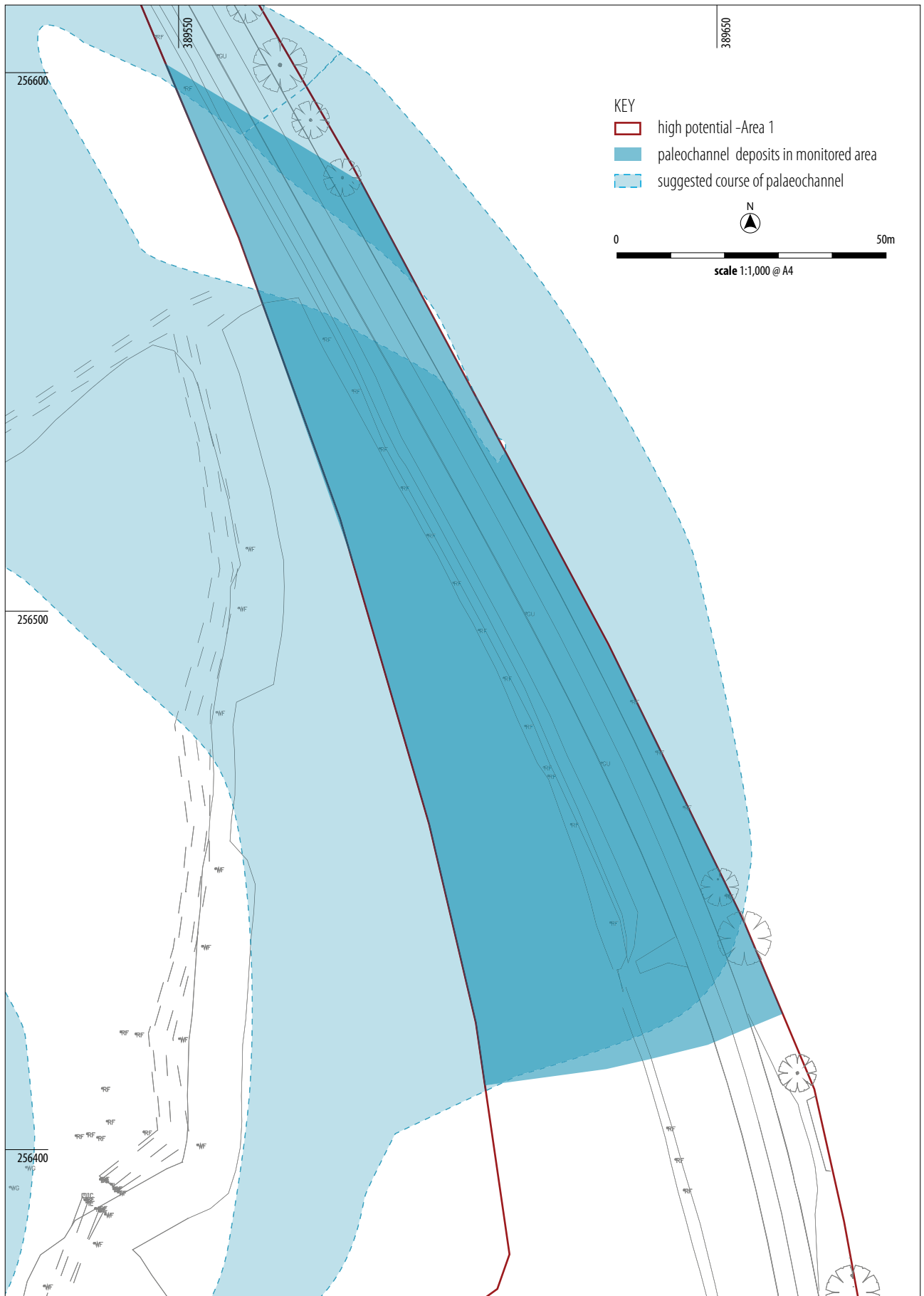
A further evaluation (Craddock-Bennett & Blackburn 2014) identified a single undated archaeological feature, but did not encounter the palaeochannel or any other archaeological features or deposits.

The Worcestershire Historic Environment Record records the presence of a ring ditch (WSM04209) identified from aerial photographs to the west of the proposed development site.

2 OBJECTIVES

In general, the purpose of the watching brief was to establish the location, extent, nature and date of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development.

The archaeological potential of this area had already been established through previous works. The specific purpose of this watching brief was to determine, as far as reasonably possible, whether the palaeochannel extends into the evaluation area and to define its extent in plan form.



ILLUS 2 Area 1; palaeochannel extents identified during monitoring



ILLUS 3 Exposing paleochannel deposits in Area 1 **ILLUS 4** Southern edge of palaeochannel deposits exposed in Area 1 **ILLUS 5** Soil strip in Area 2

Other objectives of the programme of archaeological work were as follows:

- To directly monitor all work comprising the stripping of topsoil, the excavation of drainage and levelling of land thereby fulfilling the archaeological condition to the satisfaction of the planning authority;
- To excavate and record any archaeological remains that would be disturbed by the development; and
- To produce a 'grey literature' site report for the planning authority of the results of the work as appropriate.

The local and regional research contexts are provided by The Archaeology of the West Midlands: A Framework for Research. Any evidence retrieved during the works has been analysed in light of the objectives contained in these frameworks.

The results of the watching brief will be used to inform a strategy for further archaeological mitigation.

The project was undertaken in line with the Standards and Guidelines for Archaeological Projects in Worcestershire, issued by Worcestershire Historic Environment and Archaeology Service.

The resulting archive will be organised and deposited in Worcestershire Museum to facilitate access for future research and interpretation for public benefit.

3 METHOD

The archaeological potential of the site was zoned based on the results of previous archaeological work.

The level of archaeological monitoring required was determined as follows:

- Areas of High Potential – Constant monitoring
- All other areas – Intermittent monitoring (as appropriate)

The monitored works comprised:

- Topsoil strip adjacent to Plough Lane roundabout.
- Road widening and creation of new main access roundabout to north of Plough Lane roundabout.
- Cut and fill activity across the site.
- Excavation of drainage trenches/pools.

Excavation works were undertaken by a mechanical excavator equipped with a flat-bladed bucket. The main contractor mechanically excavated deposits as necessary for the improvement works which were monitored by an archaeologist. In most cases the archaeologist entered and record interventions once the topsoil & subsoil layer had been removed to expose the undisturbed geological horizon.

Where significant archaeological deposits were encountered, hand excavation, by a suitably qualified archaeologist, was then undertaken. Sufficient time was allowed prior to continuing excavation works for the archaeologist to make adequate records.

Due to Health and Safety considerations, Headland Archaeology (UK) Ltd staff did not enter unsupported excavations which were considered to be unsafe. All recording was undertaken on pre-printed pro-forma record cards. Monochrome film photographs were taken with a graduated metric scale clearly visible, supplemented by digital photography.

All recording followed Worcestershire and ClfA Standards and Guidance (ClfA 2014) for conducting archaeological excavations along with the Headland manual.

4 RESULTS

4.1 AREAS OF HIGH POTENTIAL; AREA 1

The areas of high potential were described as those incorporating the new access roundabout and the carriageway widening works to its north.

All new groundworks in this area were subject to constant monitoring by an appropriately qualified archaeologist, due to the possible presence of the previously identified palaeochannel and the associated anthropogenic, prehistoric activity.

Adjacent to the site of the proposed roundabout, the natural ground surface was encountered at a depth of between 0.45 and 0.80m below the existing ground surface. It comprised dark brownish red, compact, degraded mudstones with grey and red mottling (104/109). The natural was sealed by a mixed, pale reddish-brown silty clay (106) above which, the subsoil, topsoil and other modern overburden (101–105) were deposited.

As the strip progressed northward, the natural deposit (109) became a more comprehensive, compact mudstone (108) as it sloped downward to the north; to be overlain by pale grey silty clay deposits (107), measuring up to 0.80m in depth. This was, again, sealed by (106) which also became deeper (up to 0.50m deep) toward the northern end of the stripped area. These deposits were only encountered where cut and fill operations were carried out.

The edge of the clay deposits (107), encountered adjacent to the northern side of the proposed roundabout were observed to be roughly coincident with the presumed extent of the palaeochannel.

No features or deposits of an archaeological nature, or sediments containing organic materials, were observed during the course of the watching brief.

4.2 ALL OTHER AREAS; AREAS 2 AND 3

The remainder of the areas were subject to intermittent monitoring visits throughout the course of the groundworks. Across the remaining areas

affected by the works, the natural horizon (203/303) was encountered at depths varying from between 0.45m and 0.60m from the top of the modern surface deposits. The subsoil which overlay it represented the continuation of layer (103), a 0.15m deep layer of mid orange-brown silty clay immediately below the topsoil. Modern disturbance was observed throughout the areas which bounded the extant carriageway, associated with the construction of the road, the removal of a former hedge boundary and modern drainage interventions.

No features or deposits of an archaeological nature were identified during the course of these groundworks.

5 DISCUSSION

Deposits associated with the palaeochannel were positively identified within the area to the north of the site. A distinct edge to these deposits was also revealed within the stripped area. The clays themselves suggest a low energy depositional regime toward the edge of the flood plain of the former palaeochannel. No preserved organic or anthropogenic material was recovered from the areas associated with the channel, however, only a very small portion of its edge (which would presumably be the focus of archaeological activity) was revealed during the works. Indeed, the focus of activity seen in the earlier scheme of work (Keith-Lucas 2010) appeared to be located around the western bank of the channel. The upper, superficial horizons encountered across the site were all significantly disturbed by activity associated with the construction of the extant carriage way and associated services and boundaries.

6 CONCLUSION

The watching brief was able to confirm the presence of the palaeochannel deposits as suggested by previous programmes of work within the vicinity (Keith-Lucas 2010). Only a small proportion of the edge of the channel was revealed and no archaeological features or deposits were identified. However, the position of the channel edge at this location can now be refined and incorporated into the mapping of the localised historic landscape.

No further features or deposits of archaeological significance were identified during the course of the works.

7 BIBLIOGRAPHY

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8 APPENDICES

APPENDIX 1 CONTEXT REGISTER

Area 1

Context	Description	D of deposit (mBGL)
101	TOPSOIL: dark brown, firm silty clay with pebbles and modern detritus.	0.00–0.25
102	Mid brownish grey deposit of silty clay, firm. Contains rooting and other modern disturbance, deepens slightly to NW – possible alluvium/change in subsoil.	0.20–0.45
103	SUBSOIL: mid orange brown silty clay with moderate small stones.	0.20–0.45
104/ 108/ 109/ 411/ 413	NATURAL: varied from between dark brownish red, compact degraded mudstones with grey and red mottling to lighter, more gravelly clays to the south, more solid mudstones to the north.	0.60–0.80 +
105	Made ground and modern disturbance.	0.20 +
106	Pale reddish brown stiff silty clay – probable alluvium filling upper part of palaeochannel.	0.45–0.90
107	Pale mid-grey silt clay, lower infill of palaeochannel (possibly unoxidised (106)).	0.50–1.10

Summary:

Constant monitor area to the north of the proposed roundabout – cut and fill operations.
Palaeochannel edge observed adjacent to north side of proposed roundabout.

Area 2 and 3

Context	Description	D of deposit (mBGL)
201	TOPSOIL: dark brown, firm silty clay with pebbles and modern detritus.	0.00–0.40
202	SUBSOIL: mid orange brown silty clay with moderate small stones.	0.40–0.60
203	NATURAL: dark brownish red, compact degraded mudstones with grey and red mottling to lighter, more gravelly clays to the south.	0.60 +
204/304	Made ground and modern disturbance.	0.20 +

Summary

Intermittent monitor area to the south of the proposed roundabout. Shallower topsoil (0–0.25m) and subsoil (0.25–0.45m) at northern end of strip (Area 2) deepening to south (Area 3). Modern disturbance throughout, associated with construction of extant carriageway.



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