

# **Archaeological Services**

**An Archaeological Evaluation** 

at Highfields Farm,

Findern, South Derbyshire

NGR: SK 318 325

Tim Higgins and Matthew Beamish



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## An Archaeological Evaluation at Highfield Farm, Findern, South Derbyshire

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## **Tim Higgins and Matthew Beamish**

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# An Archaeological Evaluation at Highfields Farm, Findern, South Derbyshire NGR SK 318 325

#### Tim Higgins and Matthew Beamish

#### **Summary**

An archaeological evaluation was undertaken at Highfields Farm, Findern, South Derbyshire (SK 318 325) by ULAS in February 2014. The work was commissioned by Miller Homes and carried out in advance of the proposed construction of up to 1200 residential units, a new primary school, community facilities and local centre, associated infrastructure and landscaping including the provision for a new country park.

An earlier archaeological trench evaluation had indicated the presence of a rural Romano-British settlement surviving in the south-east of the development area (Hurford 2007). As a condition of planning permission, further trench evaluation was requested by the Derbyshire County Council, Development Control Officer, as advisor to the planning authority in order that the extent of this settlement be better defined so to enable specific mitigation within the development programme.

Trenches were also required in the south-west of the development area where fire-cracked stone and pottery had been recovered from the surface of the fields during a fieldwalking survey (Hurford 2006) to clarify the presence or absence of archaeological features in this area.

In total 19 trial trenches were excavated in the two areas. Archaeological features were identified in two probable areas in the south-east of the proposed area on south and east facing slopes above a small stream valley. As anticipated, occupation of Romano-British date was identified, although a separate phase of activity probably in the Iron Age was also found. Trenching in the south-west of the development area did not locate archaeological features.

The site archive will be held at Derby City Museum under the accession number DBYMU:2013-155.

#### 1. Introduction

In accordance with National Planning Policy Framework (NPPF) Section 12 Conserving and Enhancing the Historic Environment, this document presents the results of an archaeological evaluation by trial trenching at Highfields Farm, Findern, South Derbyshire (SK 318 325) (Figure 1). The proposed works will involve the construction of up to 1200 residential units, a new primary school, community facilities and local centre, associated infrastructure and landscaping including the provision for a new country park. Further conditional archaeological work was required at this site following outline permission for the development.

The evaluation addresses the requirements for archaeological investigation requested by the Development Control Archaeologist for South Derbyshire District Council in his capacity as archaeological advisor to South Derbyshire District Council and follows the approved

Design Specification for archaeological evaluation by trial trenching (14. Appendix 3: Specification).

An archaeological evaluation had previously been undertaken in May 2007 (Hurford 2007). A trench in the south-east of the development area (Figure 3, 'Previous survey') revealed evidence of a rural Romano-British settlement dating from the mid to late second and third centuries comprising gullies, a probable enclosure ditch and possible pit (Derbyshire HER MDR19924). Further evaluative trenching was requested by the Development Control Officer, in order that the extent of this settlement be better defined to enable a specific mitigation strategy within the development programme.

A fieldwalking survey undertaken in 2006 (Hurford 2006) identified sherds of Roman and medieval pottery, and some fire-cracked stone on the surface of the fields in the south-west of the development area (Derbyshire HER MDR19923). No trenches were excavated in this area in the 2007 evaluative phase, and the Development Control archaeologist required trench evaluation work to clarify the presence or absence of archaeological features in this area

#### 2. Geological and Topographical

The Ordnance Survey Geological Survey of Great Britain, Sheet 141 (Loughborough) indicates that the underlying geology is likely to consist of Middle Triassic Cotgrave Sandstone with Holocene Lacustrine deposits in the north-east of the site. The site lies at a height of c.53m O.D. The site consists of several, mostly rectangular fields, bounded by hedges and fences. The ground is mostly flat with a stream valley on the east side.

#### 3. Archaeological Background

A desk-based assessment has been prepared by ULAS (Hunt 2006) which provided tentative evidence for possible prehistoric and Roman activity along with evidence for medieval agriculture the form of ridge and furrow. The Roman road of Ryknield Street passes through the northern part of the site on a NE-SW alignment (Derbyshire HER MDR18929). This follows the line of Burton Road and Ryknield Road and originally connected Wall to Little Chester Fort, and then continues to Chesterfield.

Earthworks associated with the road are still visible in places and a section west of the former Crest Hotel is scheduled (Derbyshire MDR32050). Birmingham University Field Archaeology Unit excavations to the north of the development area show it on a slightly different alignment to that previously supposed, bringing it marginally closer to the proposed development site.

A fieldwalking survey (Hurford 2006) produced no strong concentrations of artefacts though it did provide some evidence of possible prehistoric and Roman activity along with medieval agricultural manuring (MDR19923). A geophysical survey (Heard 2007) combined a magnetic susceptibility scan of 43ha with a subsequent detailed magnetometry survey of seven areas totalling c.4.3ha. Six of the seven areas provided results dominated by past agricultural activity. However, in one of the areas (Area 1) possible evidence for buried archaeological features was identified. This included positive linear and isolated anomalies representing cut features across the centre, south and east of the area. These include one feature that could represent part of a rectangular enclosure and another with two parallel ditches running south-west to north-east.

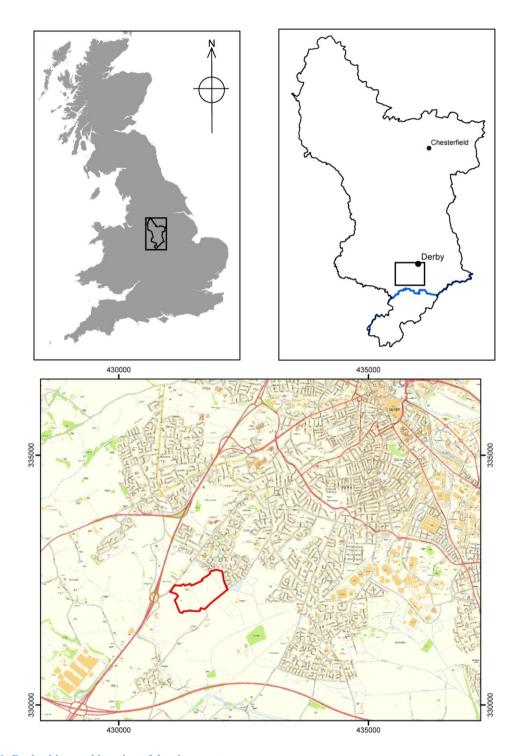


Figure 1: Derbyshire, and location of development area

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An archaeological evaluation was undertaken by ULAS in May 2007 (Hurford 2007). In total 10 trial trenches were excavated which revealed that the north-east of the site contained modern features, probably associated with a recently constructed housing estate located to the north and west. Probable medieval furrows were encountered throughout the southern half of the site. Trenching in the south-east of the site Area 2 trench 7 (Figure 3, 'Previous

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survey') not only revealed furrows but also evidence of a rural Romano-British settlement dating from the mid to late second and third centuries comprising numerous gullies, a probable enclosure ditch and possible pit (MDR19924).

#### 4. Aims and Objectives

The main aims of the evaluation were:

- To identify the presence/absence of any archaeological deposits. In particular these would target the anomalies highlighted by the geophysical survey.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed development
- To produce an archive and report of any results.

Within the stated project objectives, the principal aim of the evaluation was to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits within the southern area of the site in order to determine the potential impact upon them from the proposed development.

#### 5. Methodology

The written scheme specified a trenching programme centred on Trench 7 of the previous evaluation (Figure 3, 'Previous survey'), in which Romano-British occupation was recorded. A 2% sample of a notional circular area around this trench of 2.6ha, was to be achieved by excavating 9 trenches, 30m long and 2m wide (c. 528 sq. m). As the extent of the suspected Romano-British settlement may continue outside of the notional area, a further 5 trenches, also 30x2m, would be excavated, in locations to be agreed on site once the first trenches had been opened. If the extent of archaeological deposits remained unresolved, contingency funds would allow for the excavation of a further 6 trenches.

Six 30x2m trenches were to be opened in Area B is the south-west of the development area. The trenches would be aligned with the ridge and furrow and located along the ridges where the best archaeological preservation will be found. These trenches were designed to identify discrete features associated with the fire cracked stone and pottery identified during field-walking, and located to maximise archaeological visibility and avoid medieval furrows. These trenches would represent a 0.5% sample of a notional 3.25 ha area around the findspots.

Using a JCB mechanical excavator with a ditching bucket, topsoil and overlying layers were removed under full archaeological supervision until either the top of archaeology or natural undisturbed ground was reached, or to a maximum safe depth given the specific site conditions. Weather conditions were generally good during the evaluation and there was little interruption to work. However soils were saturated due to the extremely heavy rainfall of the winter of 2013/4 which made trenching in the south-west of the area, (Area B) and the east of Area A, difficult as soils were soft and waterlogged.

The bases of the trenches were cleaned in areas where potential archaeology was observed. Archaeological remains were recorded and sample excavation was undertaken in order to determine the character and date of any remains. Bulk soil samples were taken as appropriate in order to evaluate the environmental potential of the site. Archaeological contexts as a cut are indicated by square brackets e.g. [09], those that are fills are indicated by round brackets e.g. (07).

The trenches were located in relation to adjacent field boundaries using a Leica Total Station attached to a Psion Workabout controller. The data was processed using n4ce Software and the final plans completed with the aid of TurboCad v.19 design software and ArcGIS 10.1.

All the work followed the Institute for Archaeologists (IfA) Code of Conduct (2010) Standard and Guidance for Archaeological Field Evaluations (2008).

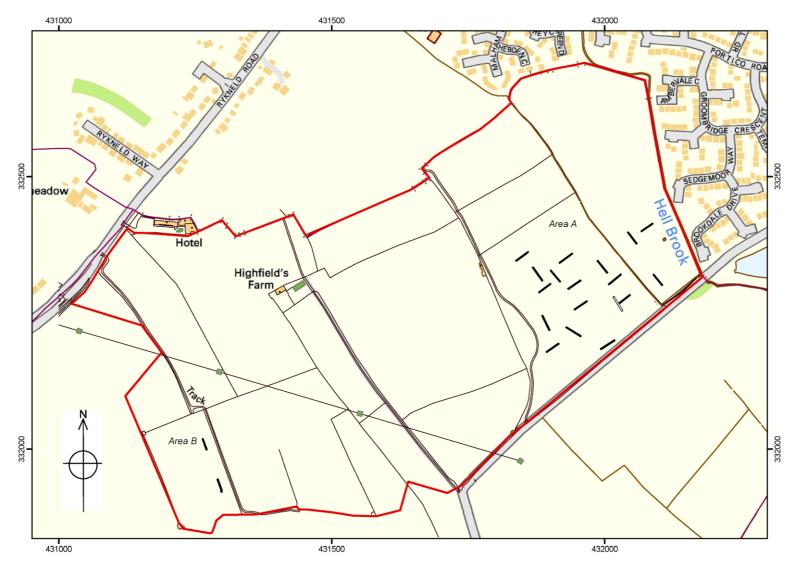


Figure 2: Location of Areas A and B, and excavated trenches.

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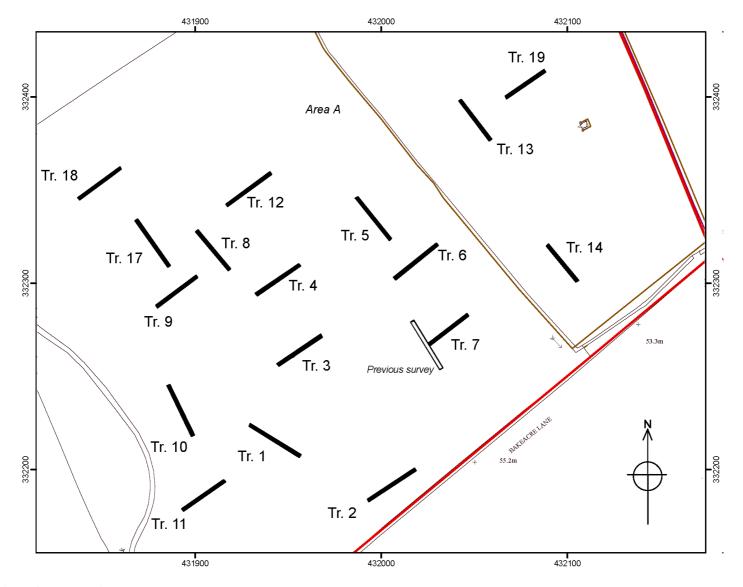


Figure 3: Location of trenches in Area A

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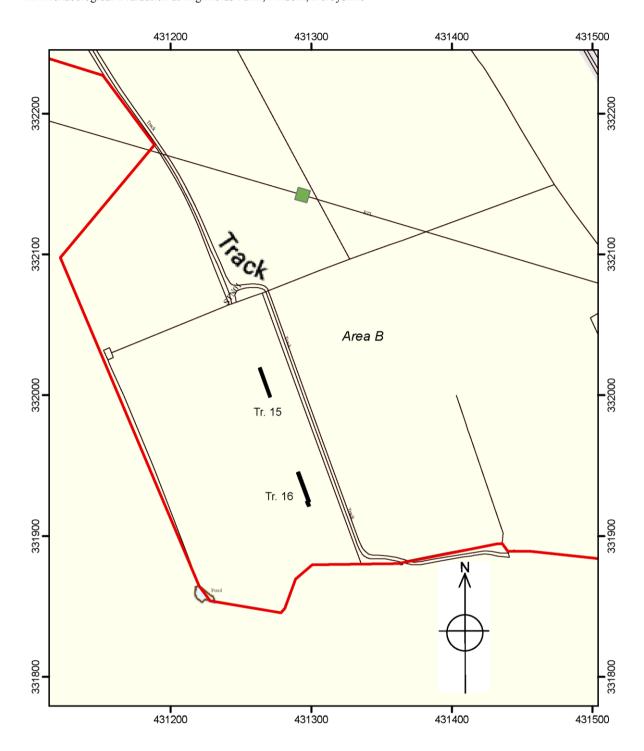


Figure 4: Location of trenches in Area B.

#### 6. Results

## Trench 01 (Area A)

Figure 3, Figure 5, Figure 9, Figure 27, .

Length: 30m

Width: 1.6m

Depth: 0.30 m (min) - 0.60 m (max)

Orientation: NW-SE

Trench 01 was positioned to investigate whether the Romano-British settlement spread westward with Area A. Between 0.20m and 0.30m of firm mid- yellowish-grey silty-clay topsoil was removed revealing a truncated layer of firm light yellowish-brown clay silt subsoil. Beneath it, at a depth of between 0.20m and 0.44m natural substratum consisting of light reddish brown clay with patches of green clay silt was observed.

Within the trench a single posthole feature [026] was found towards the southern end of the trench. The post hole [026] was half sectioned and consisted of large deep oval feature with steep sloping sides and a rounded base. The feature measured 0.45m in diameter and 0.48m deep and contained clean greenish grey clay that was clean (027).

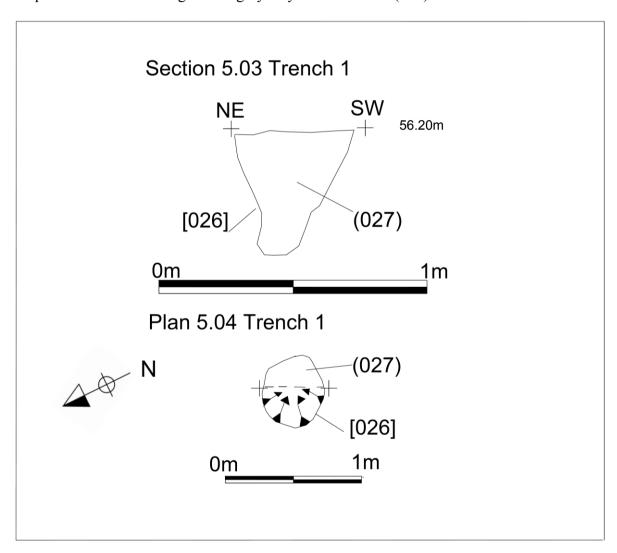


Figure 5: Section 5.03 and Plan 5.04, Trench 1.

#### Trench 02 (Area A)

Figure 3, Figure 6, Figure 7, Figure 8, Figure 9, Figure 27.

Length: 30m

Width: 1.6m

Depth: 0.30 m (min) - 0.50 m (max)

Orientation: NE-SW

Trench 02 was positioned to investigate the southern extent of the Romano-British settlement within Area A. Between 0.20m and 0.30m of firm mid-yellowish-grey silty-clay topsoil was removed revealing a layer of firm light yellowish-brown silty-clay subsoil. Beneath it, at a depth of between 0.20m and 0.44m was the natural substratum consisting of light reddish brown clay with patches of blue silt.

The large ditch cuts [001] and [003] feature was found running north to south across the western end of the trench and a section excavated across the feature revealed a ditch that had been re-cut. The primary cut located on the west side of the excavated section comprised a narrow 'U' shape cut with a gradual 45 degree sloping east side and much steeper 60 degree east side. Both sides break gradually into flat base and the cut measured 1.25m wide and 0.70m deep (Figure 6). The feature contained a single fill (002) and consisted of mid to dark orange grey silty-clay mixed with occasional charcoal flecks, and Romano-British Derbyshire ware jar form pottery sherds that date from the mid to late 2nd century (p37). The primary ditch [001] appears to have re-cut [003] locate on the east side of the section. The cut comprised broad 'U' shape cut with a gradual stepped 45 degree sloping west side and much steeper 60 degree east side. Both sides break gradually into flat base and the cut measured 2.11m wide and 0.61m deep. The feature contained a single fill (004) and consisted of light orange grey silty-clay mixed with occasional charcoal flecks, and Romano-British Derbyshire ware jar form pottery sherds that date from the mid to late 2nd century(p37).

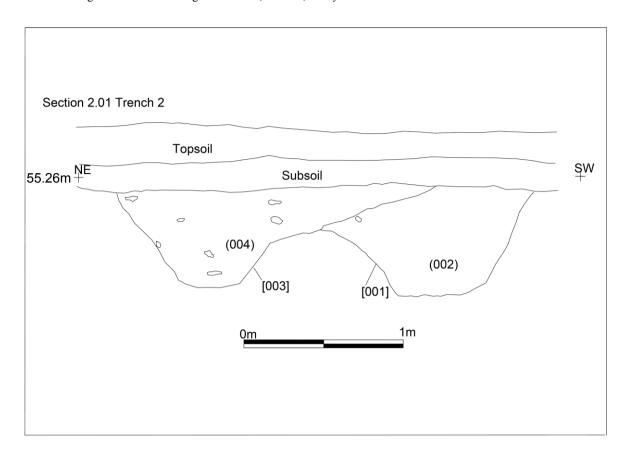


Figure 6: Section 2.01, Trench 2.

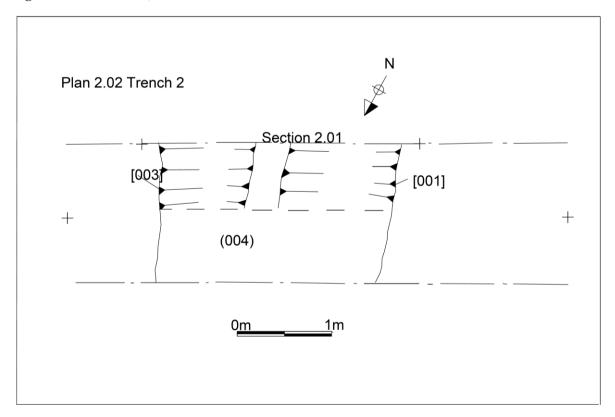


Figure 7: Plan 2.02, Trench 2.



Figure 8: Ditch [01] and [03], looking south-east, Trench 2.

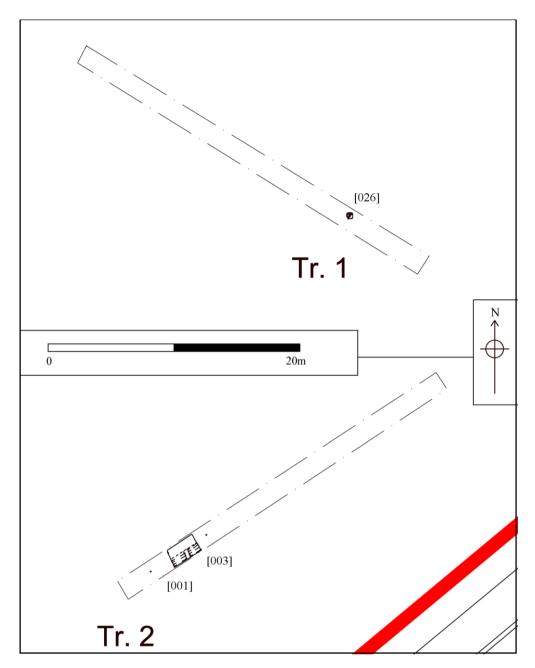


Figure 9: Results from Trenches 1 and 2

## Trench 03 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.30 m (min) - 0.60 m (max)

Orientation: NE-SW

Trench 03 was positioned to investigate the north-west corner of target Area A and the extent of the potential Romano-British settlement. Between 0.25m and 0.30m of firm mid yellowish grey silty-clay topsoil was removed revealing a layer of firm yellowish-brown clay-silt

subsoil. Beneath it, at a depth of between 0.20m and 0.44m, was the natural substratum consisting of red clay with patches of blue silt.

A single east west aligned furrow was present at the north east end of the trench.

#### Trench 04 (Area A)

Figure 3, Figure 10, Figure 11, Figure 12, Figure 13, Figure 14, Figure 15, Figure 16, Figure 25, Figure 27.

Length: 30m

Width: 1.6m

Depth: 0.15m (min) - 0.35m (max)

Orientation: NE-SW

Trench 04 was positioned to investigate the northern extent of a potential Romano-British settlement within Area. Between 0.15m and 0.35m of firm mid yellowish grey silty-clay topsoil was removed revealing was the natural substratum consisting of red clay with patches of blue silt.

At the centre of the trench a small shallow pit was observed running into the south baulk [012]. The excavated section revealed shallow very steep sloping sides gradually breaking into a flat base. The pit had a measured depth of 0.91m.

The feature contained a single fill (013) and consisted of light yellowish brown clay silt mixed with occasional small rounded pebble.

The pit was cut by ditch [007] running south to north and a section excavated across this feature revealed 'V' shaped gradual sloping sides and a narrow rounded base. The ditch measured approximately 1.60m wide and 0.58m deep. At the base the ditch contained primary fill (008) comprised light reddish brown clay mixed with occasional charcoal flecks, a fire cracked pebble, and contained pottery tentatively given an Iron Age date (p37). Overlying was a second fill (009) that comprised dark orange-brown clay mixed with occasional charcoal flecks and Iron Age pottery sherds (p37).

The ditch was cut by possible circular shallow pit or posthole [010]. A section excavated across it revealed shallow steep sloping sides that break gradually into wide flat base. The pit measured 0.88m wide and 0.17m deep and contained medium orange grey silty clay mixed with rare charcoal flecks. The surface of the post-hole was at

At the eastern end of the trench another ditch [020] was identified running north to south across the trench. Excavation revealed a 'U' shape feature that measured 1.65m wide and 0.60m deep. The section revealed a stepped gradual sloping east side and much steeper sloping west side. Both sides were observed to break gradually into a flat base. The fill (021), comprised a medium orange brown silty-clay with occasional charcoal flecks and fire cracked pebbles (p37).

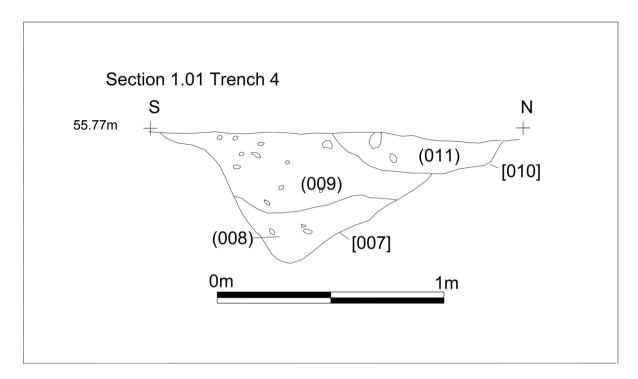


Figure 10: Section 1.01, Trench 4.

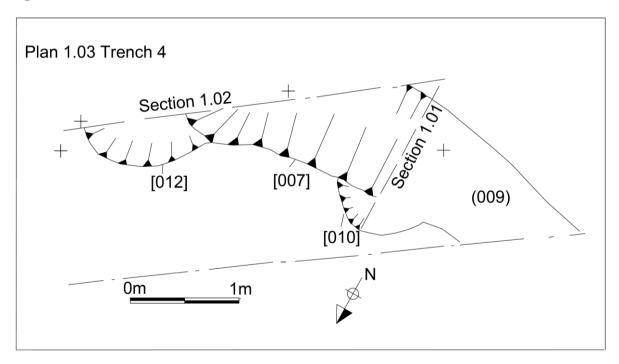


Figure 11: Plan 1.03, Trench 4.

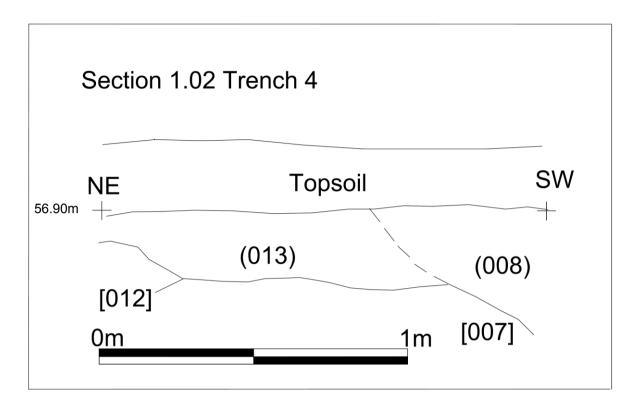


Figure 12: Section 1.02, Trench 4.



Figure 13: Ditch cut [007] and post-hole cut [010,] Trench 4

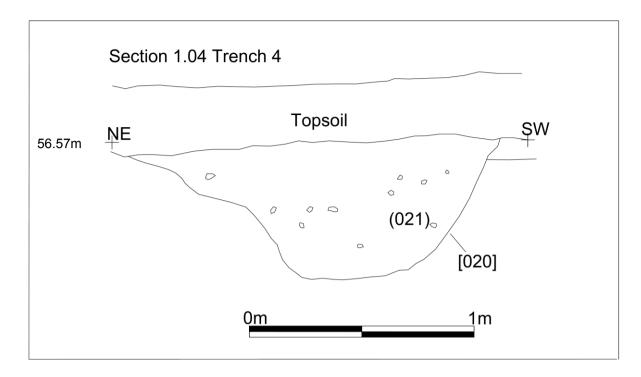


Figure 14: Section 1.04, Trench 4

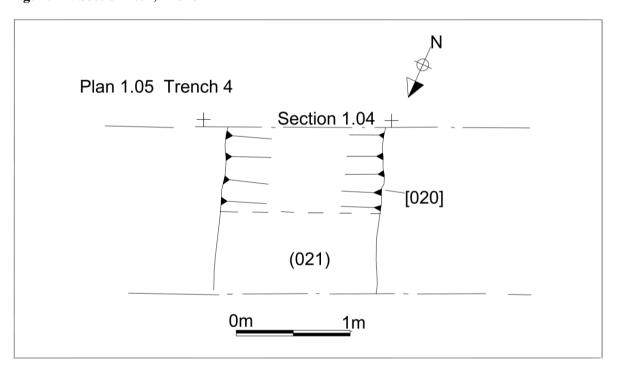


Figure 15: Plan 1.05, Trench 4



Figure 16: Ditch cut [020], Trench 4

## Trench 05 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.25 m (min) - 0.50 m (max)

Orientation: N-S

Trench 05 was positioned to investigate the north-east extent of potential Romano-British settlement. Between 0.24m and 0.30m of firm mid yellowish-grey silty-clay topsoil was removed revealing a layer of light yellowish-brown silty-clay subsoil. Beneath it, at a depth of between 0.25m and 0.45m was the natural substratum consisting of red clay.

Three east to west aligned furrows were present within the trench. No other archaeological features were observed within this trench

#### Trench 06 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.25 m (min) - 0.60 m (max)

Orientation: SW-NE

Trench 06 was positioned to investigate the eastern extent of potential Romano-British settlement. Between 0.20m and 0.30m of firm mid yellowish-grey silty-clay topsoil was removed revealing a truncated layer of light yellowish-brown silty-clay subsoil located at the eastern end of the trench. Beneath it, at a depth of between 0.25m and 0.58m was the natural substratum consisting of red clay.

No archaeological features were observed within this trench.

#### Trench 07 (Area A)

Figure 3, Figure 17, Figure 18, Figure 29, Figure 21, Figure 22, Figure 25, Figure 27.

Length: 30m

Width: 1.6m

Depth: 0.30 m (min) - 0.50 m (max)

Orientation: SW-NE

Trench 07 was positioned to the east of the previously excavated trench in which Romano-British settlement deposits had been identified. Between 0.22m and 0.35m of firm dark yellow grey silty-clay topsoil was removed revealing was the natural substratum consisting of red brown clay with patches of blue silt.

Towards the western of the trench a large ditch was observed running north-westward between trench baulks [005]. The excavated section revealed deep 'U' shape cut with very steep sloping sides that gradually break into a wide flat base. The ditch measured depth of 1.95m wide and 0.85m deep. The feature contained a single fill (006) and consisted of pale greyish brown sandy clay mixed with occasional charcoal flecks, fragments of animal bone (p40) and pottery sherds comprising Romano-British Derbyshire ware, oxidised sandy ware and fine grey ware that date from the mid to late 2nd century (p39). The west side of the ditch was partially truncated by modern land drain.

At the centre of the trench mall shallow gully was observed. The gully cut [018] comprised a narrow 0.30m wide linear and a section excavated across it revealed shallow gradual sloping sides that break gradually into rounded base. The gully measured 0.10m deep and contained pale pinkish-brown sandy clay fill (019) mixed with rare charcoal flecks.

At the eastern end of the trench part of a large pit [014] was observed running into the north baulk. Excavation revealed a deep cut feature but ground water issues prevented full excavation. The pit measured 1.50m wide and had an excavated minimum depth of 0.60m deep. The section revealed a gradual sloping side at the top breaking into much steeper sloping sides. The pit contained at least three fills. The first fill (017) found towards the base of the pit comprised dark grey silty clay mixed with occasional pebbles. This was sealed by a second fill (016) and measured 0.20m thick and consisted yellowish grey sandy clay mixed with occasional charcoal flecks. Overlying was a third fill (015) that comprised

pale grey and yellow sandy clay mixed with the occasional charcoal fleck. It also contained pottery sherds comprising Romano-British Derbyshire ware and oxidised sandy ware that date from the mid to late 2nd century (p37).

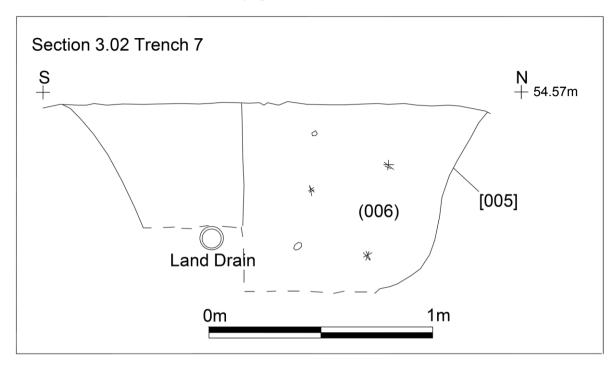


Figure 17: Section 3.02, Trench 7

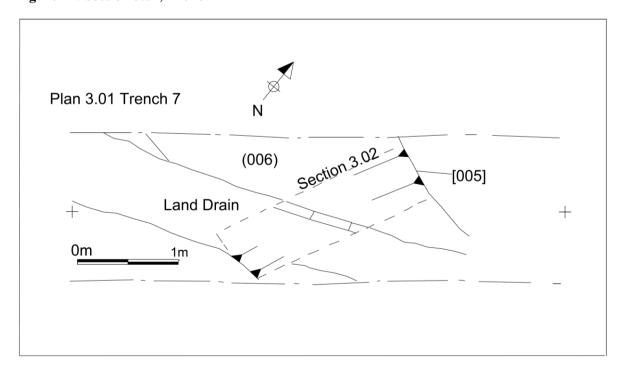


Figure 18: Plan 3.01, Trench 7



Figure 19: Ditch [005] looking north-east, Trench 7.

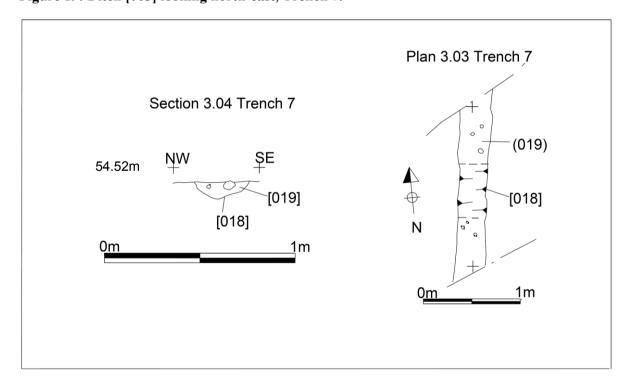


Figure 20: Section 3.04, Trench 7.

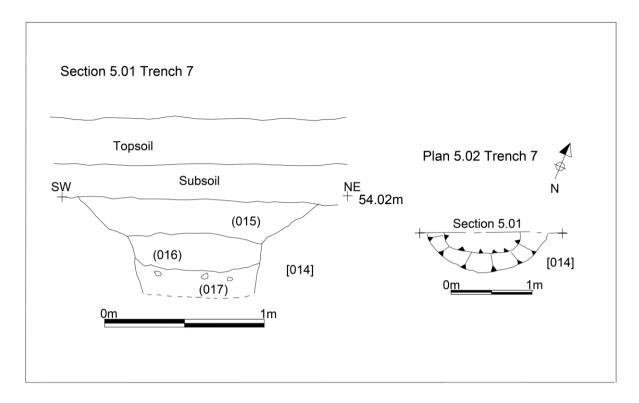


Figure 21: Section 5.01 and Plan 5.02, Trench 7



Figure 22: Pit cut [014], Trench 7

#### Trench 08 (Area A)

Figure 3: Location of trenches in Area A. Figure 24, Figure 25, Figure 27.

Length: 30m

Width: 1.6m

Depth: 0.25m (min) - 0.36m (max)

Orientation: SE-NW

Trench 08 was an additional trench positioned to investigate the possible northern extent of the Romano-British settlement within Area A. Between 0.20m and 0.26m of firm dark yellowish grey silty-clay topsoil was removed revealing a layer of light yellowish-brown clay silt subsoil. Beneath it, at a depth of between 0.25m and 0.30m was the natural substratum consisting of red clay.

At the southern end of the trench a small shallow pit was observed running into the east baulk [024]. The excavated section revealed a shallow sub-circular cut with very steep sloping sides that gradually break into a flat base. The pit had a measured depth of 0.25m and a width 0.25m. The feature contained a single fill (025) and consisted of light reddish-brown clay silt mixed with occasional small rounded pebble and charcoal flecks.

Towards the centre of the trench a ditch cut [020] was observed running east to west. A section excavated across this feature revealed 'U' shaped cut with gradual sloping sides and a wide rounded base. The ditch measured approximately 1.65m wide and 0.60m deep. The ditch contained a single fill (021) comprised medium orange-brown silty clay mixed with occasional charcoal flecks and pebbles.

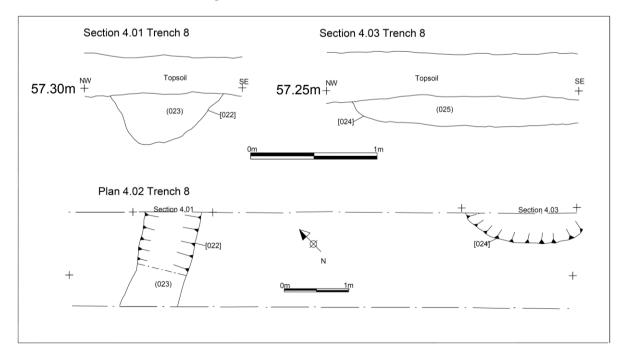


Figure 23: Sections 4.01 and 4.03 Plan 4.02, Trench 8



Figure 24: Ditch cut [022], Trench 8

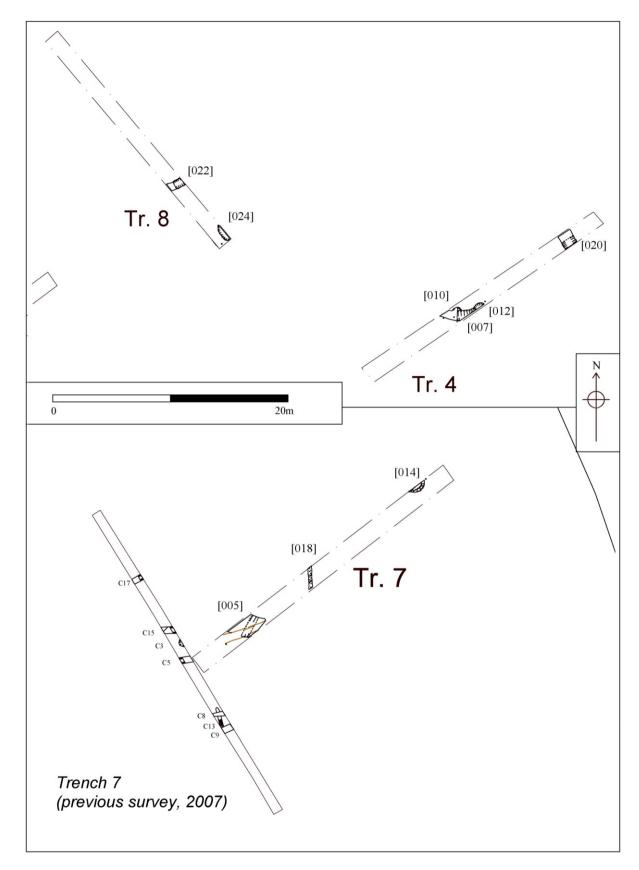


Figure 25: Results from trenches 4, 7 and 8.

#### Trench 09 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.28m (min) - 0.47m (max)

Orientation: SW-NE

Trench 09 was an additional trench that was positioned to investigate the possible western extent of the archaeological deposits. Between 0.20m and 0.30m of firm mid yellow grey silty-clay topsoil was removed revealing a layer of firm light yellow brown silty-clay subsoil. Beneath it, at a depth of between 0.28m and 0.38m was the natural substratum consisting of red clay.

Part of a single east-west aligned furrow present at the western end of the trench.

#### Trench 10 (Area A)

Figure 3

Length: 15m

Width: 1.6m

Depth: 0.30m (min) - 50m (max)

Orientation: NW-SE

Trench 10 was a second additional trench that was positioned to investigate the western extent of archaeological deposits remains in Area A. Between 0.20m and 0.30m of firm mid yellow grey silty-clay topsoil was removed revealing a truncated layer of firm light yellow brown silty-clay subsoil. Beneath it, at a depth of between 0.20m and 0.37m was the natural substratum consisting of red clay.

No archaeological features were found in this trench apart from two east-west aligned. furrows were.

#### Trench 11 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.35m (min) - 0.40m (max)

Orientation: NE-SW

Trench 11 was the third additional trench that was positioned to investigate the south-western extent of archaeological deposits remains within Area A. Between 0.25m and 0.30m of firm mid yellow grey silty-clay topsoil was removed revealing a truncated layer of firm

light yellow brown silty-clay subsoil. Beneath it, at a depth of between 0.25m and 0.40m was the natural substratum consisting of red clay mixed with light blue patches.

No archaeological features were found in this trench apart from a single east-west aligned furrow located south west corner.

#### Trench 12 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.25m (min) - 0.40m (max)

Orientation: NE-SW

Trench 12 was a fourth additional trench that was positioned to investigate the northern extent of archaeological deposits within Area A. Between 0.25m and 0.30m of firm mid yellow grey silty-clay topsoil was removed revealing a truncated layer of firm light yellow brown silty-clay subsoil. Beneath it, at a depth of between 0.25m and 0.30m was the natural substratum consisting of red clay mixed with light blue patches.

No archaeological features were found in this trench apart from a single east-west aligned furrow located south west corner.

#### Trench 13 (Area A)

Figure 3

Length: 30m

Width: 1.6m

Depth: 0.30 m (min) - 0.40 m (max)

Orientation: NW-SE

Trench 13 was positioned to investigate the eastern extent of the Romano-British settlement. Between 0.20m and 0.30m of firm dark yellowish-grey silty-clay topsoil was removed revealing light orange grey silty-clay was alluvial deposit.

No archaeological features were observed within this trench.

## Trench 14 (Area A)

Figure 3

Length: 28m

Width: 1.6m

Depth: 0.40 m (min) - 0.75 m (max)

Orientation: NW-SE

Trench 14 was positioned to investigate the eastern extent of the Romano-British settlement.

Between 0.20m and 0.30m of firm dark yellowish grey silty-clay topsoil was removed revealing a layer of light brown silty-clay alluvial deposit. Beneath it, at a depth of between 0.58m and 0.60m was the natural substratum consisting of light yellowish-brown silty clay.

No archaeological features were observed within this trench.

#### Trench 15 (Area B)

Figure 4

Length: 21m

Width: 1.6m

Depth: 0.40 m (min) - 0.50 m (max)

Orientation: NW-SE.

Trench 15 was positioned to investigate identify potential discrete features associated with the fire cracked stone identified during field-walking within Area B. Between 0.30m and 0.35m of firm dark greyish-brown silty-clay topsoil was removed revealing the natural substratum consisting of red sandy clay.

No archaeological features were observed within this trench.

#### Trench 16 (Area B)

Figure 4

Length: 26m

Width: 1.6m

Depth: 0.40 m (min) - 0.55 m (max)

Orientation: N-S

This second trench was positioned to investigate identify potential discrete features associated with the fire cracked stone and pottery identified during field-walking within Area B. Between 0.30m and 0.40m of firm dark greyish-brown silty-clay topsoil was removed revealing the natural substratum consisting of red sandy clay.

As the trench was opened, a single north to south orientated furrow was observed which had also been cut by a land drain. The position of trench was immediately moved to the east to avoid the furrow and continued to be excavated. No other archaeological features were observed within this re-positioned trench.

#### Trench 17 (Area A)

Figure 3

Length: 30m

Width: 1.6m

An Archaeological Evaluation at Highfields Farm, Findern, Derbyshire

Depth: 0.30 m (min) - 0.40 m (max)

Orientation: NW-SE

Trench 17 was positioned to investigate the north western extent of the Romano-British settlement. Between 0.25m and 0.40m of firm dark yellowish-grey silty-clay topsoil was removed revealing a truncated layer of light yellowish-brown silty-clay subsoil. Beneath it, at a depth of between 0.27m and 0.40m was the natural substratum consisting of red brown clay.

A single east to west aligned furrow was present within at the northern end of the trench.

#### Trench 18 (Area A)

Figure 3

Length: 27m

Width: 1.6m

Depth: 0.32 m (min) - 0.40 m (max)

Orientation: NE-SW

Trench 18 was positioned to investigate the northern extent of the Romano-British settlement. Between 0.25m and 0.30m of firm dark yellowish-grey silty-clay topsoil was removed revealing a truncated layer of light yellowish-brown silty-clay subsoil. Beneath it, at a depth of between 0.26m and 0.33m was the natural substratum consisting of red brown clay.

A single east to west aligned furrow was present within at the eastern end of the trench.

#### Trench 19 (Area A)

Figure 3, Figure 26.

Length: 25m

Width: 1.6m

Depth: 1.20 m (min) - 1.60 m (max)

Orientation: NW-SE

Trench 19 was positioned to investigate the eastern extent of alluvial silty clay found in trenches 13 and 14. Between 0.20m and 0.25m of firm dark greenish-grey silty-clay topsoil was removed revealing a layer of light yellowish-brown silty-clay alluvial deposit. Beneath it, at a depth of between 1.20m and 1.60m was the natural substratum consisting of grey blue clay mixed with light yellowish brown clay and gravels.

No archaeological features were present within the trench.



Figure 26: Alluvial deposit, Trench 19.

#### 7. Discussion

#### Area A

In total 17 trenches were excavated within Area A, which were placed to help find the extent of a Romano-British settlement identified during the first evaluation (Hurford 2007, MDR19924). A better defined area of settlement would enable specific mitigation within the development programme.

Five out of the 17 evaluation trenches (trenches 1, 2, 4, 7 and 8) contained archaeological evidence suggesting that areas of activity may be confined to the central and northern parts of Area A. The evidence recorded suggests two potential settlement phases within this area. The first phase is probably Iron Age in date and consists of settlement activity in the form of pits and ditches. This group appears toward the north-west corner of Area A (*Figure 27*).

Three relatively large ditches were found within the trenches [007] (Trench 4), [020] (Trench 4) and [022] (Trench 8). The ditches may relate to some form of boundary activity, possibly forming an animal enclosure or a settlement area. A projected layout of part of a possible rectangular enclosure is suggested (Figure 27). A scatter of pits [010] (Trench 4), [012] and [024] (Trench 8) were located on the inside of this possibly enclosed area. Some pottery sherds and fire-cracked pebbles (p37) were found associated within their fills. The bulk of the pottery was tentatively given an Iron Age date (p. 37) and the finds are indicative of domestic occupation nearby.

The second group of features confirmed the Romano-British settlement in Area A centred on the original evaluation trench (Hurford 2007). The original trench contained gullies, a probable enclosure ditch and possible pit dating from the mid to late second and third centuries.

During this current evaluation phase two further relatively large ditches were found within the trenches [001], [003] (Trench 2) and [005] (Trench 7). These ditches together with a third found in the previous evaluation may relate to some form of boundary activity, possibly forming an animal enclosure or a settlement area. The ditches may form a possible rectangular enclosure system (see Figure 27 for a suggested layout). A light scatter of features including a pit [014] (Trench 7), gully [018] (Trench 7) and post-hole [026] (Trench 1) were located around these potential enclosures ditches. Some pottery sherds (p.37) and animal bone (p.40) were found associated within their fills. A stratified assemblage of 18 sherds of Roman period pottery was retrieved from four contexts. The bulk of the ceramic material was *Derbyshire ware* dating to the later 2nd or 3rd century (p.39). The remainder of the material comprises locally made grey ware and oxidised wares and a sherd from a shell-tempered ware jar, probably coming from Lincolnshire. The pottery and animal bone suggests perhaps domestic occupation nearby.

The eastern half of target Area A is located on a natural incline down towards the south-east and the Hell brook. Three trenches (trenches 13, 14 and 19) located within this area contained no archaeological features apart from modern field drains found in Trench 19. All trenches contained fine grained alluvial deposits overlying a gravelly clay natural substrate. The depth of the alluvial deposit increased from a depth of 0.30 in Trench 14 that was located towards the top of the slope to 1.20m deep in Trench 19 located towards the base of the slope and closest to the Hell brook.

These alluvial deposits were comparable with those found during archaeological work in the nearby Willington Quarry excavations, Derbyshire (Beamish 2009), 6 kilometres to the south-west. The quarry was located on low lying ground close to the Egginton Brook near to its confluence with the River Trent. A scientific dating programme indicated that the alluvial sediments were being deposited between the fourth and second millennia BC.

#### Area B

In Area B a fieldwalking survey undertaken in 2006 (Hurford 2006) identified Romano-British and medieval pottery, and fire-cracked stone on the surface of the fields in the southwest of the development area (MDR19923). Two trenches were excavated in this area during this evaluative phase, but both trenches proved to be negative.

# **Archaeological context**

The features recorded at Highfields Farm probably stem from low status agricultural settlements or farmsteads. As the spread of occupation within the development area would not seem to extend over a large area, it is likely that the settlements were occupied by extended family groups.

The Derbyshire Historic Environment records available through the Heritage Gateway have been searched in order to place the recorded information from the site in context. Within a 2 km radius of the centre of the site, Iron Age period records include a possible Pit Alignment at Pastures Hill, Littleover some 2 km to the north (MDR32406) forming part of Scheduled Monument 102321 (Section of Ryknield Street Roman road and remains of Bronze Age cemetery). The Pit Alignment which formed part of an Iron Age boundary system produced Late Iron Age pottery from primary layers. Two other Pit Alignments have also been interpreted from cropmark photos at Buckford Lane, Findern (MDR19903). A greater distance from the site, a small quantity of Iron Age pottery came from excavations at Strutt Parks Fort, Derby (MDR18940).

Within a 2 km radius of the centre of the development, Romano-British material is limited to several areas where the Roman road (Ryknield St) is known to survive (MDRs 32050, 19908 and possibly 32055), the pottery that has come from the previous work on the Highfields Farm site and a loosely located Derbyshire ware Bell-mouthed jar said to have been found by workmen in Littleover Road (MDR32426).

Iron Age and Romano-British settlements are not as well represented in the archaeological record in South Derbyshire as they are in topographically similar parts of neighbouring Leicestershire and Nottinghamshire, and this imbalance in distribution has been noted (Barrett 2000, Myers 2000). Excavated Trent valley sites at Willington (MDR27928, MDR27908, Wheeler 1979), Swarkestone (MDR27031, Knight and Morris 1997) and Shardlow and Great Wilne (MDR25217, Knight and Malone 1997), and further cropmark sites indicative of Iron Age and Romano-British occupation in Twyford and Stenson (MDR27403), Barrow-on –Trent (MDR16709 & MDR16720) all demonstrate that parts of the area were occupied in these periods. As has been the case for other regions much of the absence of evidence away from the valley floors and lower terraces may well be due to invisibility of the archaeological record rather than a largely unoccupied landscape. A similar area of previously unidentified Romano-British settlement was revealed during recent evaluative work at Chellaston some 6 km to the south-east (Harvey 2012). However, the lack of higher status Romano-British settlements/Villa sites in this part of the East Midlands

cannot be as easily explained as such sites can be recognised more easily from surface survey and stray finds.

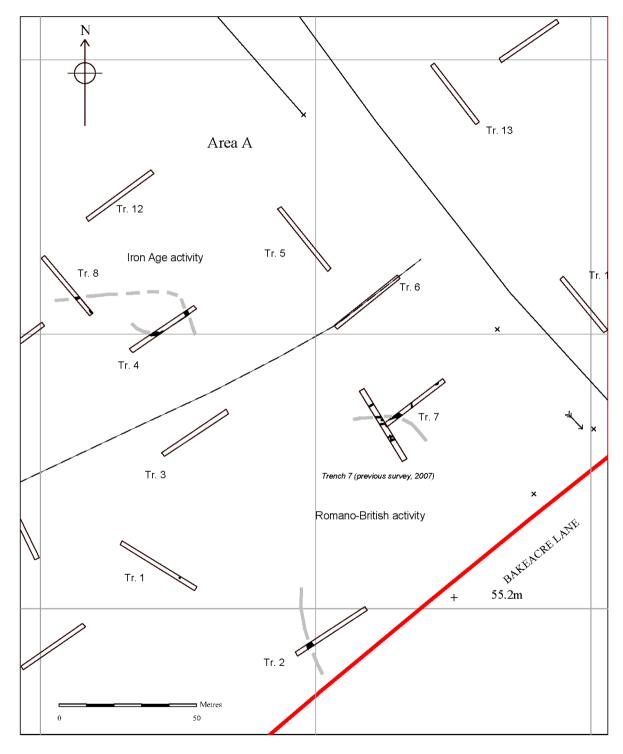


Figure 27: Location of trenches containing archaeological deposits with possible interpretation in grey.

#### 8. Conclusion

The archaeological evaluation has revealed areas of fairly well preserved archaeological remains in the south-east of the development area at Highfields Farm, South Derbyshire.

The archaeological deposits comprised a number of gullies, pits and wide boundary ditches which were likely to be settlement enclosure ditches. The pottery evidence suggests activity during both Iron Age period, and the mid to late second and third centuries AD of the Romano-British period. The dominance of local coarse wares, a scarcity of regional imports and the absence of fine wares and continental imports suggests occupation within a rural farmstead type site.

The archaeological remains on the site if fully investigated could help provide answers to some key questions regarding the Iron Age and Romano-British Rural settlement in South Derbyshire. Further investigation of both the Iron Age and Romano-British with this area activity would give valuable information concerning the date, nature and development of these settlements and may reveal associated structural activity.

#### 9. Archive and Publication

The site archive will be held by ULAS under the accession number **DBYMU 2014-155** prior to deposition with Derby City Museums.

The content of the paper archive consists of:

1 Unbound A4 copy of this report

19 A4 Trench recording sheets

1 A4 Context summary sheet

27 A5 Context Sheets

2 A4 Photo record sheet

1 A4 Drawing Record

1 A4 Sample Index

5 A3 Plan and section drawing sheets

Black and white contact print -- Black and white picture negatives

A4 Colour digital contact print 1 CD of 95 digital photos

A record of the project will be submitted to the Oasis project under the code universil-177213. Oasis is an online index to grey literature reports.

A summary of the work will be submitted for publication in the *Derbyshire Archaeological Journal* in due course.

## 10. Acknowledgements

The fieldwork was carried out by the author, assisted by Jamie Patrick. Mathew Beamish managed the project. The pottery and miscellaneous finds were identified by Nick Cooper,

and Jennifer Browning identified the animal bone. We would like to thank Helen Dawkins and Matthew Bartram of Miller Homes who commissioned the work, and Steve Baker, Development Control Archaeologist for Derby and Derbyshire, for his help with the project.

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## 12. Appendix 1: The Pottery and Miscellaneous Finds

Nicholas J. Cooper

# **Prehistoric Pottery**

An assemblage of 20 sherds (156g) was recovered from (008) and (009) within Trench 4 (p14). The pottery has been analysed by form and fabric using the Leicestershire County Museums prehistoric pottery fabric series (Marsden 2011, 62, Table 1), with reference to the Prehistoric Ceramic Research Group's Guidelines (PCRG 1997), and quantified by sherd count and weight.

**Table 1: Quantified record of Prehistoric Pottery** 

Prehistoric Pottery from Highlands Farm, Findern, Derby, DBYMU-2013-155							
Context	Trench	Fabric	Form	Sherds	Weight (g)	TPQ	Comments
8		Q1 +	misc.	4	50	?Iron Age	upright rim joins 9
8		R1	misc.	2	10	?Iron Age	Heavily abraded
9		Q1 + iron	misc.	14	96	?Iron Age	joins 8
Total				20	156		

Most of the sherds derive from one handmade vessel with a girth of 160mm, joining sherds of which were found in both contexts. A small single plain upright flat rim (90mm diameter) in the same fabric probably comes from a separate vessel. The fabric is tempered with abundant rounded quartz sand up to 1mm (Fabric Q1) but also contains frequent pellets of ferruginous mudstone which of up to 3mm, which have sometimes been leached out of the weathered surfaces. The fabric is also atypically hard and the fact that a fragment of fire-cracked pebble also came from (8), may indicate that the pottery has been accidentally burnt, though no vitrification is apparent. The material can be tentatively given an Iron Age date on the basis of the rim form, but there is no scoring apparent on the weathered external surface (Elsdon 1992).

The two remaining sherds from (8) are also difficult to date closely, but by inference from the associated material and by comparison with Iron Age pottery from nearby Willington, Derbyshire for example (Elsdon 1979, 170, fig.68) it is most likely they are also of that date. The use of angular granitic and crushed quartz pebble inclusions is common to all locally-made pottery from the Neolithic to the Iron Age, so without a diagnostic form or decoration it is difficult to be certain.

# **Roman Pottery**

A stratified assemblage of 18 sherds of Roman period pottery weighing 201g was retrieved from four contexts. The sherds are in variable condition with high levels of abrasion and a low average sherd weight (5g). The material was classified using the Derby Fabric Series (Leary 2001), a summary of which is given below in Table 2. The material was quantified by sherd count and weight and the full quantified record is shown below (Table 3).

Table 2: Summary of Derby fabric series (Leary 2001: 96-101).

Fabric Code:	Fabric Type:
BB1	Black Burnished ware
BSA3	Black sandy wares
CTA1	Oxidised shelly ware
DBY	Derbyshire ware
GRA	Fine grey ware

Fabric Code:	Fabric Type:
GRB1	Grey wares
МН	Mancetter-Hartshill Mortaria
OAB1	Oxidised sandy wares
OAC1	"Pre-Derbyshire" ware

**Table 3: Quantified Record of Roman Pottery** 

Romano-	Romano-British Pottery from Highlands Farm, Findern, Derby, DBYMU-2013-155							
Context	Trench	Fabric	Form	Sherds	Weight (g)	TPQ	Comments	
2	2	DBY	Jar	3	10	mid/late2ndC+		
4		DBY	jar	3	65	mid/late2ndC+	joining base sherds	
4		GRB1	misc.	1	2	2nd +	abraded	
4		CTA1	jar	1	5	L1st+	abraded	
6	7	DBY	jar	5	82	mid/late2ndC+		

6	7	GRB1	dish	1	20	2nd +	abraded
6	7	OAB1	misc.	1	5	2nd +	
15	7	DBY	jar	2	10	mid/late2ndC+	
15	7	OAB1	misc.	1	2	2nd +	abraded
Total				18	201		

As would be expected at a rural Derbyshire site dating to the later 2nd or 3rd century, the distinctive Derbyshire ware jar form (DBY) made at the Hazelwood-Holbrook kilns makes up the bulk of the assemblage and this was also true of the previous assemblage from this site where it made up 75% of the group (Johnson report on 2007-122). The remainder of the material comprises locally made grey (GRB1) and oxidised wares (OAB1) including a plain rimmed dish, probably made at Little Chester and Derby Racecourse (Brassington 1971, 1980; Sparey-Green 2002: 152-154) and a sherd from a shell-tempered ware jar (CTA1), probably coming from Lincolnshire.

# Fire-cracked cobbles, fired clay and coal

Three fire-cracked pebbles, with reddened surfaces, perhaps used as pot boilers, were recovered from (21) in Trench 4 with another from (8), associated with the Prehistoric pot.

A single small fragment (30g) of burnt daub with part of a wattle impression came from (21) associated with the fire-cracked cobbles, with another small fragment (1g) from (4) associated with Roman pottery.

A tiny fragment of coal (2g) came from (6).

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# 13. Appendix 2: Animal Bones

### Jennifer Browning

Animal bones were only recovered from context (006) in Trench 7 (p19). These comprised seven fragments, which appear to belong to a single fragmented cervical vertebra belonging to a cattle-size mammal. Surface condition was considered fair, permitting examination for butchery marks and other modifications. Some root etching and surface abrasion were observed. While preservation indicates that it is possible for animal bones to survive at the site, recovery of a much larger sample would be needed to provide useful information on the exploitation of animal resources.

## 14. Appendix 3: Environmental Remains

No contexts excavated on site appeared suitable for environmental processing as deposits with any visible charred remains were either secondary or tertiary in nature (and contained sparsely dispersed material of unknown provenance) and primary deposits in features all appeared sterile and very unlikely to contain environmental remains. In consultation with ULAS' Environmental Officer, no samples have been processed for environmental remains. The nature of the soils on the site and the clay substrate will probably have preserved charred remains within negative features and in the event of further work on this site a full sampling strategy would be likely to yield information.

## 14. Appendix 3: Specification

#### UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

## Written scheme of investigation for archaeological work

Job title: Highfields Farm, Findern, South Derbyshire

NGR: SK 318 325

#### Miller Homes

#### **Derbyshire County Council:**

(Planning Application SDDC 9/2006/0775, APP/F1040/A/06/2028732, 9/2011/0640)

### 1 Introduction

### 1.1 Definition and scope of the specification

This document is a Written Scheme of Investigation for a phase of archaeological evaluative work and as appropriate recording at the above site, in accordance with National Planning Policy Framework (NPPF) Section 12 Conserving and Enhancing the Historic Environment. This work is required by the planning authority in accordance with the conditions issued as part of the planning consent. The fieldwork specified below is intended 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 may be assessed by the Planning Authority and further mitigation measures, if necessary, be put in place.

- 1.2 The definition of an archaeological evaluation, taken from the Institute for Archaeologists Standards and Guidance: Institute for Archaeologists Standards and Guidance: for Archaeological Field Evaluation (2010) is a limited programme of non-intrusive and/ or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate. The definition of an Archaeological excavation taken from the Institute for Archaeologists Standards and Guidance: for archaeological excavations (2008) is controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design.
- 1.3 In particular this WSI will address the potential for the survival, and attempt to define further the character and extent of Romano-British remains which have previously been identified in the south-west of the development area (Hurford 2007) (Figs. 1-2).

### 2. Background

#### **Context of the Project**

- 1.1 This document sets out a Written Scheme of Investigation (WSI) to record potential archaeological deposits at Highfields Farm, Findern, Derby (Grid. Ref. SK 318 325; figs.1 and 2) in advance of a proposed housing development. An Archaeological desk-based assessment (Hunt 2006), geophysical survey (Heard 2007), fieldwalking survey (Hurford 2006) and initial trial trench evaluation (Hurford 2007) have been completed.
- 1.2 The proposed development area is located in the parish of Findern (Grid. Ref. SK 318 325; figs.2 and 3). The proposed works involve the construction of up to 1200 residential units, a new primary school,

community facilities and local centre, associated infrastructure and landscaping including provision for a new country park. The development area covers an area of c. 51 ha currently used as agricultural land.

1.3 The desk-based assessment provided tentative evidence for possible prehistoric and Roman activity along with evidence for medieval agriculture the form of ridge and furrow. The Roman road of Ryknield Street passes through the northern part of the site on a NE-SW alignment (SMR 18929-MNR4600). This follows the line of Burton Road and Ryknield Road and originally connected Wall to Little Chester Fort. After this, it continues to Chesterfield

Earthworks associated with the road are still visible in places and a section west of the former Crest Hotel is scheduled (SMR32050). The Birmingham University Field Archaeology Unit excavations to the north of the development area show it on a slightly different alignment to that previously supposed, bringing it marginally closer to the proposed development site. The fieldwalking survey (Hurford 2006) produced no strong concentrations of artefacts though it did provide some evidence of possible prehistoric and Roman activity along with medieval agricultural manuring. The geophysical survey (Heard 2007) combined a magnetic susceptibility scan of 43ha with a subsequent detailed magnetometry survey of seven areas totalling c.4.3ha. Six of the seven areas provided results dominated by past agricultural activity. However, in one of the areas (Area 1) possible evidence for buried archaeological features was identified. This included positive linear and isolated anomalies representing cut features across the centre, south and east of the area. These include one feature that could represent part of a rectangular enclosure and another with two parallel ditches running south-west to north-east.

Evaluative trenching in May 2007 identified the remains of a settlement, probably a farmstead of 2<sup>nd</sup> to 3<sup>rd</sup> Century AD date, located in the south-east of the development area. Further trenching work has been requested by the Development Control Officer, in order that the extent of this settlement is better defined so to enable specific mitigation within the development programme.

The fieldwalking programme identified fire cracked stone on the surface of fields in the south-west of the development area. No trenches were excavated in this area in the 2007 evaluative phase, and the Development Control archaeologist requires some further work to clarify the presence of absence of archaeological features in this area.

## 2. Geology and topography

2.1 The Ordnance Survey Geological Survey of Great Britain, Sheet 141 (Loughborough) indicates that the underlying geology is likely to consist of Middle Triassic Cotgrave Sandstone with Holocene Lacustrine deposits in the north-east of the site. The site lies at a height of c.53m O.D. The site consists of several, mostly rectangular fields, bounded by hedges and fences. The ground is mostly flat.

# 3. Archaeological Aims and Objectives

3.1 Two areas are considered (Figure 2 and Figure 3).

Area A (26427 sq. m) in the south-east of the development area is circular, of some 100m radius and centred on Trench 7 of the previous evaluation, in which Romano-British occupation was recorded. A 2% trenching programme of this area represents 528 sq. m which will be achieved by excavating 9 trenches, 30m long and 2m wide. The trenches are oriented along the long axis of the medieval field systems in the two fields covered, and will be cut along the top of the ridges where the best archaeological survival will be found, while some trenches will cut perpendicular to these trenches to identify ditches running on different alignments. As the extent of the Romano-British settlement may continue outside of the delineated area, a further 5 trenches, also 30x2m, will be excavated, in locations to be agreed on site once the first trenches have been opened. If the extent of archaeological deposits remains unresolved, contingency funds will allow for the excavation of a further 6 trenches.

Area B is in the south-west of the development area. 6 30x2m trenches will be opened, aligned with the ridge and furrow and located along the ridges where the best archaeological preservation will be found. These trenches are designed to identify discrete features associated with the fire cracked stone identified during field-walking, and located to maximise archaeological visibility and avoid medieval furrows. These trenches will represent a 0.5% sample of a notional 3.25 ha area around the findspots.

- 3.2 The main objectives of the exploratory works and any subsequent recording will be:
  - To identify the presence/absence of any archaeological deposits.
  - To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works and record these to an appropriate level.
  - To produce an archive and report of any results.

### 4. Methodology

## General Methodology and Standards

- 4.1 All work will follow the Institute for Archaeologists (IfA) *Code of Conduct* (2011) and adhere to their *Standard and Guidance for Archaeological Field Evaluation* (2008).
- 4.2 Staffing, recording systems, health and safety provisions and insurance details are included below.
- 4.3 Internal monitoring procedures will be undertaken including visits to the site by the project manager. These will ensure that project targets are met and professional standards are maintained. Provision will be made for external monitoring meetings with the Planning Authority and the Client, if required.
- 4.4 Unlimited access to monitor the project will be available to the Client and his representatives, the planning authority, the Development Control Archaeologist (Environmental Services), Derbyshire County Council subject to the health and safety requirements of the site. At least one week's notice will be given prior to commencement of the recording work in order that monitoring arrangements can be made. All monitoring shall be carried out in accordance with the IfA Standard and Guidance for Archaeological Field Evaluation (2008).

#### **Trial Trenching Methodology**

- 4.5 Prior to any machining of trial trenches general photographs of the site areas will be taken.
- 4.6 Constraints exist in both areas Water supply and foul water in Area A, and underground Electrical and telecommunications cables in Area B (Figure 4, Figure 5, Figure 6, Figure 7, and Figure 8). Services will be identified and located on the ground using surface indicators (e.g. man-hole covers, housings) and by a Cable Avoidance Tool. Trenches will be placed at least 15m from any identified service unless a separate SSOW is approved.
- 4.6 Area A: It is proposed to excavate 9 trial trenches (each approximately 30 x 2m long) to cover 2% sample of the proposed area. The provisional trench plan attached (Fig. 2) shows the proposed location of the trenches the size and position indicated on the plan may vary due to site constraints or the presence of archaeological deposits. Five further trenches will be opened to define the extent of the occupation area. Should archaeological deposits continue to be present in trenches on the periphery of the Area, a further 6 trenches will be excavated to define the extent of any site identified.
- Area B: An area of It is proposed to excavate 6 trial trenches (each approximately 30 x 2m long) to cover approximately 0.5% sample of the proposed area. The provisional trench plan attached (Fig. 2) shows the proposed location of the trenches the size and position indicated on the plan may vary due to site constraints or the presence of archaeological deposits.
- 4.7 Topsoil and overburden will be removed carefully in level spits, under continuous archaeological supervision using a mechanical excavator using a toothless bucket. Trenches will be excavated down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first. All excavation by machine and hand will be undertaken with a view to avoid damage to archaeological deposits or features which appear worthy of preservation in situ or more detailed investigation than for the purposes of evaluation. Where structures, features or finds appear to merit preservation in situ, they will be adequately protected from deterioration
- 4.8 Trenches will be examined by hand cleaning and any archaeological deposits located will be planned at an appropriate scale. Archaeological deposits will be sample-excavated by hand as appropriate to establish

the stratigraphic and chronological sequence, recognising and excavating structural evidence and recovering economic, artefactual and environmental evidence. Particular attention will be paid to the potential for buried palaeosols and waterlogged deposits in consultation with ULAS's environmental officer.

- 4.9 Measured drawings of all archaeological features will be prepared at a scale of 1:20 and tied into an overall site plan. All plans will be tied into the Ordnance Survey National Grid. Relative spot heights will be taken as appropriate.
- 4.10 Sections of any excavated archaeological features will be drawn at an appropriate scale. At least one longitudinal face of each trench will be recorded. All sections will be levelled and tied to the Ordnance Survey Datum, or a permanent fixed benchmark.
- 4.11 Trench locations will be accurately surveyed and tied in to the Ordnance Survey National Grid.
- 4.12 Any human remains encountered will initially be left in situ and will only be removed if necessary for their protection, under Ministry of Justice guidelines and in compliance with relevant environmental health regulations.
- 4.13 Where necessary, trenches will be extended to expose the extent of discrete features partly exposed within a trench.
- 4.13 In the event that unforeseen archaeological discoveries are made during the project, or some further trenching is required by the DCA to better define the form and extent of archaeological deposits exposed, a contingency may be required to enable the excavation of further trenches. The contingency will only be initiated after consultation with the Client and the DCA and Planning Authority. Following assessment of the archaeological remains by the DCA/Planning Archaeologist, ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.
- 4.14 The trenches will be backfilled and levelled at the end of the evaluation.

### 5 Recording Systems

- 5.1 Any archaeological deposits encountered will be recorded and excavated using standard procedures as outlined in the ULAS recording manual. Sufficient of any archaeological features or deposits will be hand excavated in order to provide the information required. Any buried palaeosols located will be hand excavated and the spoil sieved for smaller lithic fragments using a 0.5mm grid.
- 5.2 Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. All finds will be 3D recorded.
- 5.3 A record of the full extent in plan of all archaeological deposits encountered will be made on drawing film, related to the OS grid and at a scale of 1:10 or 1:20. Elevations and sections of individual layers of features should be drawn where possible. The OD height of all principal strata and features will be calculated and indicated on the appropriate plans.
- An adequate photographic record of the investigations will be prepared illustrating in both detail and general context the principal features and finds discovered. Photo media used will include 35mm black and white film, and Digital format. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.
- 5.5 This record will be compiled and fully checked during the course of the project.

### 6. Finds

- 6.1 The IfA *Guidelines for Finds Work* will be adhered to.
- 6.2 If archaeological material is recorded, a Site code/Accession number will be obtained from Derby City Museums that will be used to identify all records and finds from the site.
- 6.3 All antiquities, valuables, objects or remains of archaeological interest, other than articles declared by Coroner's Inquest to be subject to the Treasure Act, discovered in or under the Site during the carrying out of

the project by ULAS or during works carried out on the Site by the Client shall be deemed to be the property of ULAS provided that ULAS after due examination of the said Archaeological Discoveries shall transfer ownership of all Archaeological Discoveries unconditionally to the appropriate authority for storage in perpetuity.

- 6.4 All identified finds and artefacts are to be retained, although certain classes of building material will, in some circumstances, be discarded after recording with the approval of the Planning Archaeologist.
- All finds and samples will be treated in a proper manner. Where appropriate they will be cleaned, marked and receive remedial conservation in accordance with recognised best practice. This will include the site code number, finds number and context number. Bulk finds will be bagged in clear self-sealing plastic bags, again marked with site code, finds and context.
- 6.6 Finds which may constitute 'treasure' under the Treasure Act, 1996 must be removed to a safe place and reported to the local Coroner. Where removal cannot take place on the same working day as discovery, suitable security will be taken to protect the finds from theft.

## 7. Environmental Sampling

- 7.1. If features are appropriate for environmental sampling a strategy and methodology will be developed on site following advice from ULAS's Environmental Specialist and the Derbyshire County Council Development Control Archaeologist. Preparation, taking, processing and assessment of environmental samples will be in accordance with current best practice. The sampling strategy is likely to include the following:
  - A range of features to represent all feature types, areas and phases will be selected on a judgmental basis. The criteria for selection will be that deposits are datable, well sealed and with little intrusive or residual material.
  - Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit.
  - Spot samples will be taken where concentrations of environmental remains are located.
  - Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated.
- 7.2 All collected samples will be labelled with context and sequential sample numbers.
- 7.3 Appropriate contexts (i.e. datable) will be bulk sampled (50 litres or the whole context depending on size) for the recovery of carbonised plant remains and insects.
- 7.4 Recovery of small animal bones, bird bone and large molluscs will normally be achieved through processing other bulk samples or 50 litre samples may be taken specifically to sample particularly rich deposits.
- 7.5 Wet sieving with flotation will be carried out using a York Archaeological Trust sieving tank with a 0.5mm mesh and a 0.3mm flotation sieve. The small size mesh will be used initially as flotation of plant remains may be incomplete and some may remain in the residue. The residue > 0.5mm from the tank will be separated into coarse fractions of over 4mm and fine fractions of > 0.5-4mm. The coarse fractions will be sorted for finds. The fine fractions and flots will be evaluated and prioritised; only those with remains apparent will be sorted. The prioritised flots will not be sorted until the analysis stage when phasing information is available. Flots will be scanned and plant remains from selected contexts will be identified and further sampling, sieving and sorting targeted towards higher potential deposits.
- 7.6 Where evidence of industrial processes are present (e.g. indicated by the presence of slag or hearth bases), samples will be taken for the analysis of industrial residues (e.g. hammer scale).

### 7 Report and Archive

- 7.1 A draft version of the report will normally be presented within four weeks of completion of site works. The full report in pdf/A-1a and A4 format will usually follow within eight weeks. Copies will be provided for the client and the Local Planning Authority and deposited with the Historic Environment Record.
- 7.2 The report will include consideration of:

- The aims and methods adopted in the course of the evaluation.
- The nature, location and extent of any structural, artefactual and environmental material uncovered.
- The anticipated degree of survival of archaeological deposits.
- The anticipated archaeological impact of the current proposals.
- Appropriate illustrative material including maps, plans, sections, drawings and photographs.
- Specialist assessments of relevant classes of material and a consideration of the evidence within its local, regional, national context with clear recommendations for retention/discard with relation to the regional research agenda.
- The location and size of the archive and proposal of deposition receiving body and date if appropriate
- A quantitative and qualitative assessment of the potential of the archive for further analysis leading to full publication, following guidelines laid down in *Management of Archaeological Projects* (English Heritage).
- 7.3 If the assessment of the potential of the archive leads to recommendations from the Derbyshire County Council Development Control Archaeologist for further analysis leading to full publication the following procedures will be followed. 1) the material is retained pending further fieldwork on the site and further analyses will be combined with later phases for analysis, or 2) if no further fieldwork is to be undertaken further analyses are undertaken, as a self-contained project, and reported in the final report.
- 7.3 A full copy of the archive as defined in the IfA Standard and Guidance for archaeological archives (Brown 2008) will normally be presented to Derby City Museums and Art Gallery within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken. If the evaluative trenches are all negative, deposition of an archive will not be required. The Archive preparation and deposition to be in line with *Procedures for the transfer of archaeological archives* (Museums in Derbyshire 2003). Prior notification has been sent to Derby Museum (see p33). An accession number will be issued if required. Written confirmation of completion of fieldwork will be sent to Derby Museum and the Derbyshire County Council Development Control Archaeologist. Written confirmation of the final deposition of archive will be sent to the Derbyshire County Council Development Control Archaeologist.
- 7.5 The copyright of all original finished documents shall remain vested in ULAS and ULAS will be entitled as of right to publish any material in any form produced as a result of its investigations.

#### 8 Publication and Dissemination of Results

- 8.1 A summary report will be submitted to *Derbyshire Archaeological Journal* following completion of the fieldwork. A full report will be submitted to a national or period journal if the results are of significance.
- 8.2 University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS form at http://www.oasis.ac.uk will be completed detailing the results of the project. ULAS will contact the HER prior to completion of the form. Once a report has become a public document following its incorporation into the HER it may be placed on the web-site.

## 9 Acknowledgement and Publicity

- 9.1 ULAS shall acknowledge the contribution of the Client in any displays, broadcasts or publications relating to the site or in which the report may be included.
- 9.2 ULAS and the Client shall each ensure that a senior employee shall be responsible for dealing with any enquiries received from press, television and any other broadcasting media and members of the public. All enquiries made to ULAS shall be directed to the Client for comment.

### 10 Copyright

10.1 The copyright of all original finished documents shall remain vested in ULAS and ULAS will be entitled as of right to publish any material in any form produced as a result of its investigations.

### 11 Monitoring arrangements

- 11.1 Unlimited access to monitor the project will be available to both the Client and his representatives and the Derbyshire County Council Development Control Archaeologist (DCCDCA) subject to the health and safety requirements of the site. The DCCDCA will require to view trenches prior to backfilling.
- 11.2 All monitoring shall be carried out in accordance with the IfA Standard and Guidance for Archaeological Field Evaluations (2008)
- 11.3 Internal monitoring will be carried out by the ULAS project manager.

## 12 Timetable and Staffing

12.1 A start date for the exploratory works is to be arranged. The Palaeolithic/Mesolithic consultant will be Lynden Cooper.

## 13 Health and Safety

13.1 ULAS is covered by and adheres to the University of Leicester Statement of Safety Policy and uses the ULAS Health and Safety Manual (revised 2010) with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is in the Appendix. The relevant Health and Safety Executive guidelines will be adhered to as appropriate.

#### 14. Insurance

14.1 All ULAS work is covered by the University of Leicester's Public Liability and Professional Indemnity Insurance. The Public Liability Insurance is with St Pauls Travellers Policy No. UCPOP3651237 while the Professional Indemnity Insurance is with Lloyds Underwriters (50%) and Brit Insurances (50%) Policy No. FUNK3605.

## 15. Contingencies and unforeseen circumstances

15.1 In the event that unforeseen archaeological discoveries are made during the project, ULAS shall inform the site agent/project manager, Client and the Planning Archaeologist and Planning Authority and prepare a short written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by the Planning Archaeologist, ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.

### 16. Bibliography

Brown, D., 2008 Standard and guidance for the preparation of Archaeological Archives (Institute for Archaeologists).

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Hunt, L. 2006. An Archaeological Desk-based assessment for land at Highfield Farm, Findern, South Derbyshire ULAS Report 2006-041

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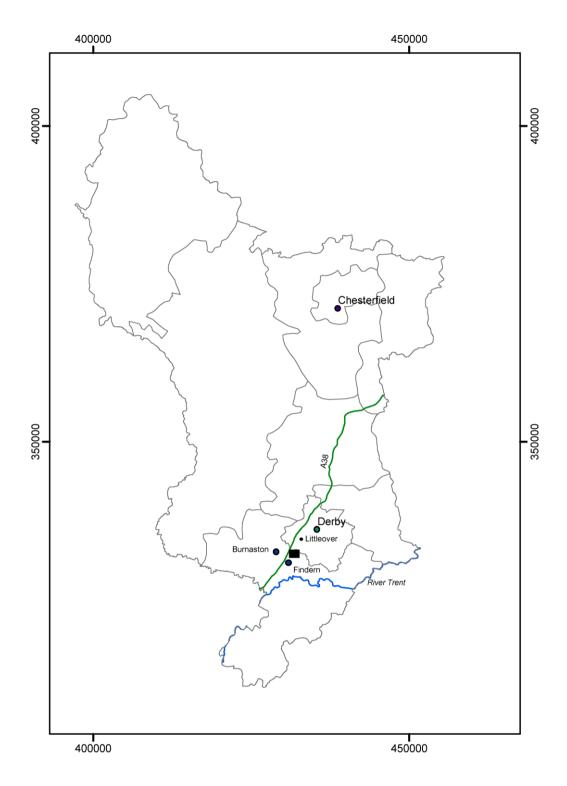


Figure 1: Location of application area

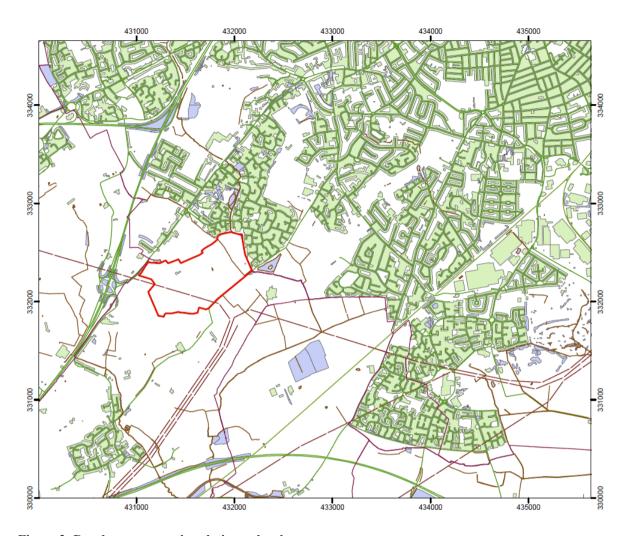


Figure 2: Development area in relation to local area

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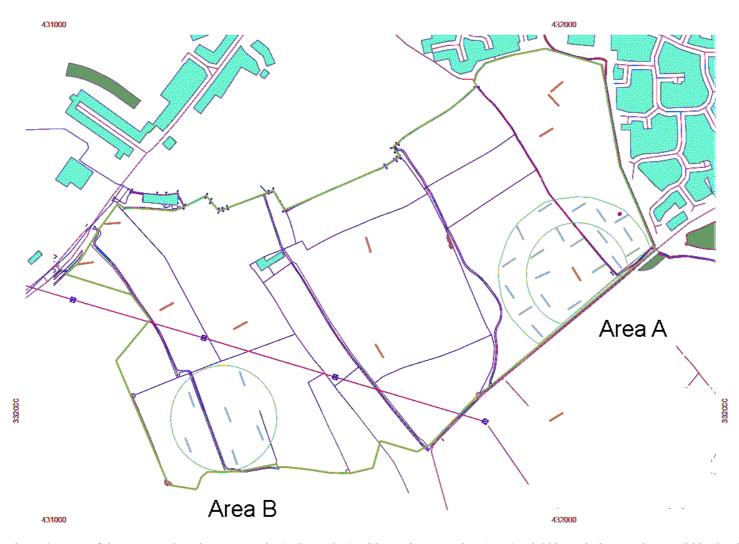


Figure 3: Area of the suggested exploratory works (red trenches) with previous trenches (cyan). Field boundaries are shown within the development area. Services cross both Areas A and B – do not locate trenches using this plan. *Contains Ordnance Survey data* © *Crown copyright and database right 2014* 

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