A further Archaeological Evaluation and Watching Brief at Newtown Linford Lane, Groby, Leicestershire

SK 524 075

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Martin Shore

For: George Wimpey East Midlands Ltd

Checked by Project Manager

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1 Summary

An archaeological evaluation was carried out between 10th and 16th October 2007 by University Of Leicester Archaeological Services (ULAS) at Newtown Linford Lane, Groby, Leicestershire (SK 524 075) on behalf of George Wimpey. The site is located within the medieval village core of Groby, adjacent to Groby Castle and the Old Hall. Following a previous evaluation in January 2007, two extra trial trenches were examined. One (trench 6) displayed a spread of building rubble but no structural features except stone land drains. The other (trench 7) had a large silt and clay filled cut, perhaps indicative of fish ponds or possibly an outer castle ditch. Pottery recovered suggested that this feature was being backfilled by the 12th or early/mid 13th century AD date. Subsequently, an archaeological watching brief was maintained between 30th October & 12 November 2007 on groundworks associated with the laying of a new sewer. This confirmed the presence of two walls, two ditches and improved understanding of the extents of the probable fishponds identified in the evaluation. Finds and records will be appended to the previous archive and deposited with Leicestershire Museums under accession number X.A22.2007

2 Introduction

2.1 The proposed development site is located on land at Newton Linford Lane, Groby, Leicestershire (SK5243 0757), and has recently been cleared of its remaining light industrial units (Fig. 1). It comprises an area of approximately 0.5 ha within which it is proposed to construct various residential dwellings, with associated car parking, access, services and landscaping. A desk-based assessment has been conducted for the site (Bocock 2006), this has highlighted that the site has a moderate potential for containing archaeological remains.

2.2 The site lies at approximately 88 m OD. The Ordnance Survey Geological survey of Great Britain, Sheet 155 indicates that the underlying geology is likely to comprise Mercia Mudstone and alluvium.

2.3 A desk-based assessment for the site (Bocock 2006) concluded that while no archaeological activity is recorded within the proposed development area and the land has been built on during the 20th century, there is potential for archaeological deposits to survive. Groby is referred to in the Domesday Book and means 'farmstead near a hollow or pit'. Later maps show the area as enclosed fields. The site was built on during the 20th century and there is between 0.2m - 0.5m of made ground on the site. Prehistoric features in the vicinity include cropmarks of possible Iron Age date, 900m to the west. Roman finds suggesting occupation are recorded 750m to the north-east and other Roman finds have come from nearby. The site is located within the

medieval village core of Groby and lies adjacent to the Scheduled Ancient Monument, Groby Castle and Old Hall (Fig.5). The former is a Norman motte and bailey with possible earlier origins. Other medieval and post-medieval archaeological sites and historic buildings are also found in the vicinity.

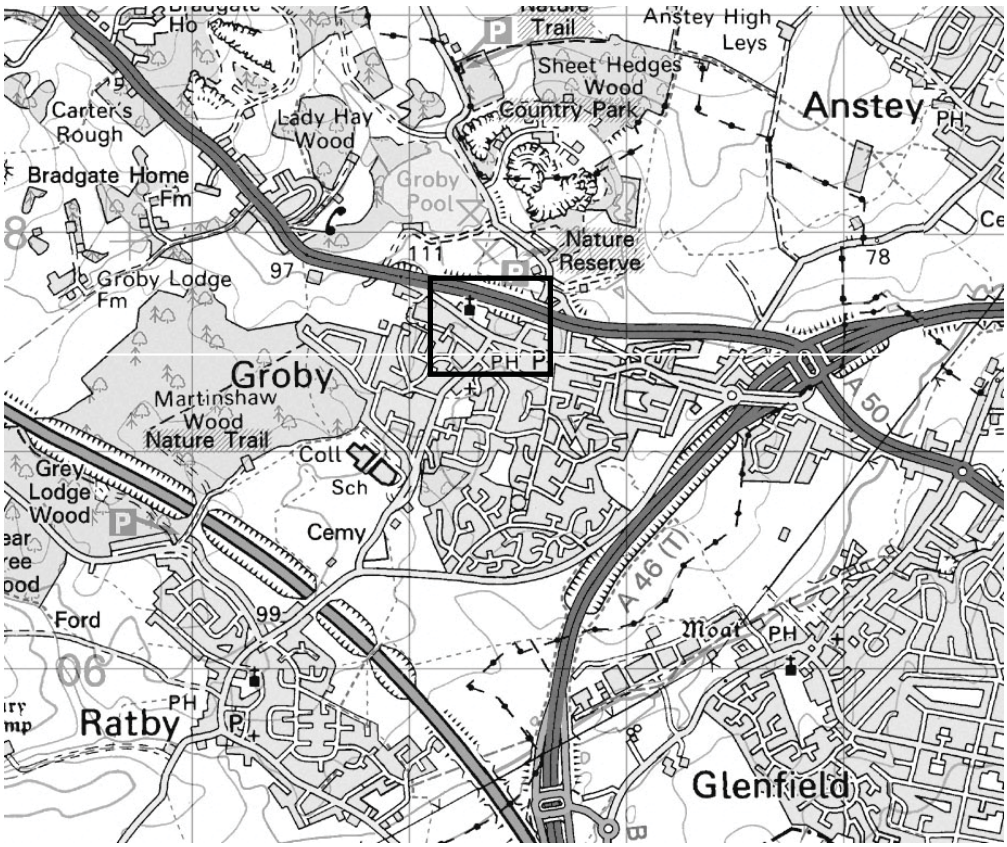

Figure 1 Site location

2.4 In view of the archaeological potential of the site, the Senior Planning Archaeologist, Leicestershire County Council requested intrusive evaluation of the site by trial trenching to provide an approximately 5% sample. The work was carried out under the supervision of Martin Shore of ULAS in January 2007, with the examination of five trenches located to provide an even sample of the site (Shore 2007). As some archaeological features were located, including medieval structural remains, part of the development was subsequently re-planned to avoid damaging them. In addition, there appeared to be one or more potentially large silty features of unknown profile, extent or alignment on the west side of the site. At the time, the presence of two industrial buildings precluded any further investigation of these features, so the Senior Planning Archaeologists requested additional trenches to be examined after demolition. Two trenches were investigated in October 2007 after the buildings had been removed under the supervision of Jon Coward of ULAS. Later, groundworks associated with the provision of a new sewer were subject to an

archaeological watching brief undertaken by Martin Shore in October and November 2007. The project was funded by George Wimpey East Midlands Ltd.

3 Aims and Objectives

3.1 The purpose of the original archaeological evaluation of January 2007 was to try and ascertain if any archaeological deposits were present and if so, to establish their nature, extent, date and significance in order that an informed decision could be taken by the planning authority on the impact of the development proposals. Recording of these archaeological deposits was to be carried out as appropriate, and an archive and report produced. This subsequent tranche of work was carried out with the aim of elucidating the nature of some features examined in the original evaluation. The work followed the Institute of Field Archaeologists (IFA) Code of Conduct and adhered to their *Standard and Guidance for Archaeological Field Evaluations* (1999).

3.2 An environmental assessment of the site carried out by RSK ENST (2006) identified several potential hazards, including unstable ground and groundwater. In order to mitigate these, no trench was to be excavated to below 1m, and the stability of the sides was to be kept under assessment during the course of the work.

3.3 The objective of the watching brief was to ensure that an adequate record could be made of any archaeological deposits affected by groundworks associated with the provision of a new sewer trench. The work followed the Institute of Field Archaeologists (IFA) Standard and Guidance for *Archaeological Watching Briefs*,

4 Evaluation results (trench nos. carried on from previous evaluation, Shore 2007)

4.1 *Trench 6*

Measuring 17m by 2.1m, trench 6 covered an area of 38.8 m^2, and was orientated south-west/north-east across the footprint of the southernmost demolished industrial unit (Figs 2 and 6). A thin skim of modern stone chippings and hardcore covered most of the trench area. Beneath this, to the south-west end of the trench, there was an expanse of disturbed demolition debris, consisting mainly of slate rubble and sandstone, with some brick fragments (Figs 3 and 4). To the centre and east end of the trench was a more homogeneous red-brown clay soil; this however was not undisturbed natural as was seen from the presence of occasional fragments of masonry, ceramic building material (CBM), and common charcoal flecks. This deposit had been cut into (or possibly not, see below) by three land drains aligned roughly north-west/south-east running across the trench. Two of these land drains were of an unusual construction not previously encountered by the author, consisting mostly of slate rubble and sandstone masonry within a clay matrix, together with some granite rubble and occasional CBM (Fig. 7). One large piece of what appeared to be Dane Hills sandstone (a Leicester building stone) indicate that at least some of this material may have been brought onto the site from elsewhere. There was no structure or bonding; these materials appeared to have been dumped randomly into position, and there were several outliers off-line from the main run. No cut was visible

in the baulk sections. Both of these drains had 'sink-holes' above them which consisted of a dump of modern small stone chippings which reached up to the surface, implying that they were visible during the construction of the overlying buildings and were utilised. Taking into account the fact that the surrounding clay soil was not undisturbed natural, even at 1 metre depth, there was no visible cut, and the construction appear to be haphazard, another possibility is that the whole area was built up artificially and the drains roughly created by earthmoving equipment in advance of the construction of the recently-demolished building. This may have been to counter groundwater problems, as the central and eastern parts of trench 6 flooded during machining as these drains were disturbed. Only the top of the (lower) third drain was visible, it was disturbed during the machining but appeared to have consisted of angled slate slabs set on end. The clay fill was in parts a slightly different colour to the surrounding clay deposits, this may have percolated into the drain throughout its use. Presumably slate slabs would have covered it originally. This feature may represent an earlier drainage attempt.

No pottery whatsoever was recovered from any of the machined deposits, spoil or baulk sections.

4.2 *Trench 7*

4.2.1 Trench 7 was 2.1m in width and originally machined to a length of 21m. It was orientated north-west/south-east across the footprint of a demolished industrial unit (Figs 2 and 8). A layer of modern stone chippings and make-up extended the length of the trench. At the north-west end, a dark sub-square feature was encountered; as the fill appeared very dark, and the appropriate level for machining had not had an opportunity to be established, the upper part (*c* 15-20 cm) of this feature was machined off; but when it persisted the machining was stopped and the trench base left high. On excavation this was revealed as a vertical-sided post hole, with a charcoally clayish fill (Fig. 8). Pieces of Swithland or Groby slate at the base had been wedged into the south-eastern side of the cut, and the feature appeared undercut at this side; it is suggested that the slate originally lay at the base of a post and was displaced on its removal (Fig. 9). No dating evidence for this feature was recovered.

4.2.2 The trench was then stepped down to the full 1 metre depth immediately past the feature (Figs 3 and 4). One edge of a large grey silty clay feature [32] was encountered approximately half way along the trench (Figs 10-12). This was assumed to be a continuation of the feature seen in trench 2 to the north. In an effort to establish depth and profile, this was machined through until the full 1 metre depth allowed for by the risk assessment had been reached. This feature carried on along the entire length of the trench, abruptly finishing at the south-east end of the trench with a curious vertical junction to a dark reddish-brown clay soil. Examination of this dark clay soil revealed that this was not likely to be undisturbed natural: some sandstone fragments and common charcoal flecks pointed to redeposition. No sign of a base was evident by this depth, although there appeared to be a possible differentiation in fill as the north-west side of the feature appeared lighter, more silty and with more pebbles than at the centre and south-east end. Two small hand-dug sondages into the fill showed that although the fill at the north-west end was shallow

and pebbly, a more clayish, greyer fill [34] existed further to the SE which was not bottomed. Sherds of Potters Marston ware recovered from this second fill [34] showed it to have been deposited some time around the 12th to mid 13th century.

4.2.3 No other features were noted in the trench with the interesting exceptions of a layer of pebbles/small cobbles noticeable in the lower baulk section immediately to the north-west of the feature cut, and an *in situ* horseshoe ceramic land-drain sitting high up in the baulk on the junction of a stony clayish soil and more homogeneous reddish clay layer. As these drains were always dug in well under any cultivation layers so as to avoid plough damage, this drain probably gives an indication that a considerable amount of original land surface has been truncated off this part of the site. The abrupt drop of *c* 2m between the land surface to the west and east of the nearby property boundary also supports this hypothesis.

4.2.4 After a visit from the archaeological adviser to the Planning Authority, it was decided that, if possible, the full extent and profile of the large silty clay feature be defined by means of a slit trench within the base of the trench as excavated. Although the risk assessment noted potentially unstable ground and the risk of flooding, the baulk sections of the trench appeared stable and no flooding was occurring, even though the base of the trench was below that of the flooded trench ten metres to the south. A mini excavator was used to excavate a 0.80m wide slit trench through the silty feature (Fig. 13). This succeeded in establishing the depth of the feature, revealed several fills, but unfortunately did not establish its full extent: the vertical junction with the dark reddish brown clay soil at the south-east end was shown to be misleading, in that it represented a large dump of redeposited material with a circular ceramic land drain in its base. This had cut the feature fill, which continued to the south-east. Although the author would normally consider circular ceramic land drains to be unlikely to date later than the early 20th century, the vertical cut and large volume of redeposited soil point to the use of mechanical excavators, indicating a later date. The remainder of the feature fill was chased for another 1.5m before the main north-south sewer running across the site was encountered, ending further machining. The very base of the feature started flooding after machining. In all, the total depth of the feature was *c* 2m from present ground surface.

4.2.5 The lowest fill of the feature was a largely sterile grey to beige-coloured clay or sandy clay, which appeared to have little organic matter. However, above this was a more organic sandy clay fill [33] which contained common charcoal, and bone fragments, which appear to have been waterlogged for some time after deposition, although the deposit was not waterlogged at the time of excavation. This fill was sampled, and a single sherd of pottery (SF50) was recovered, of a similar date range to the Potters Marston in the context above. Due to concerns about stability the baulk section of the slit trench was planned from above using an EDM rather than by hand.

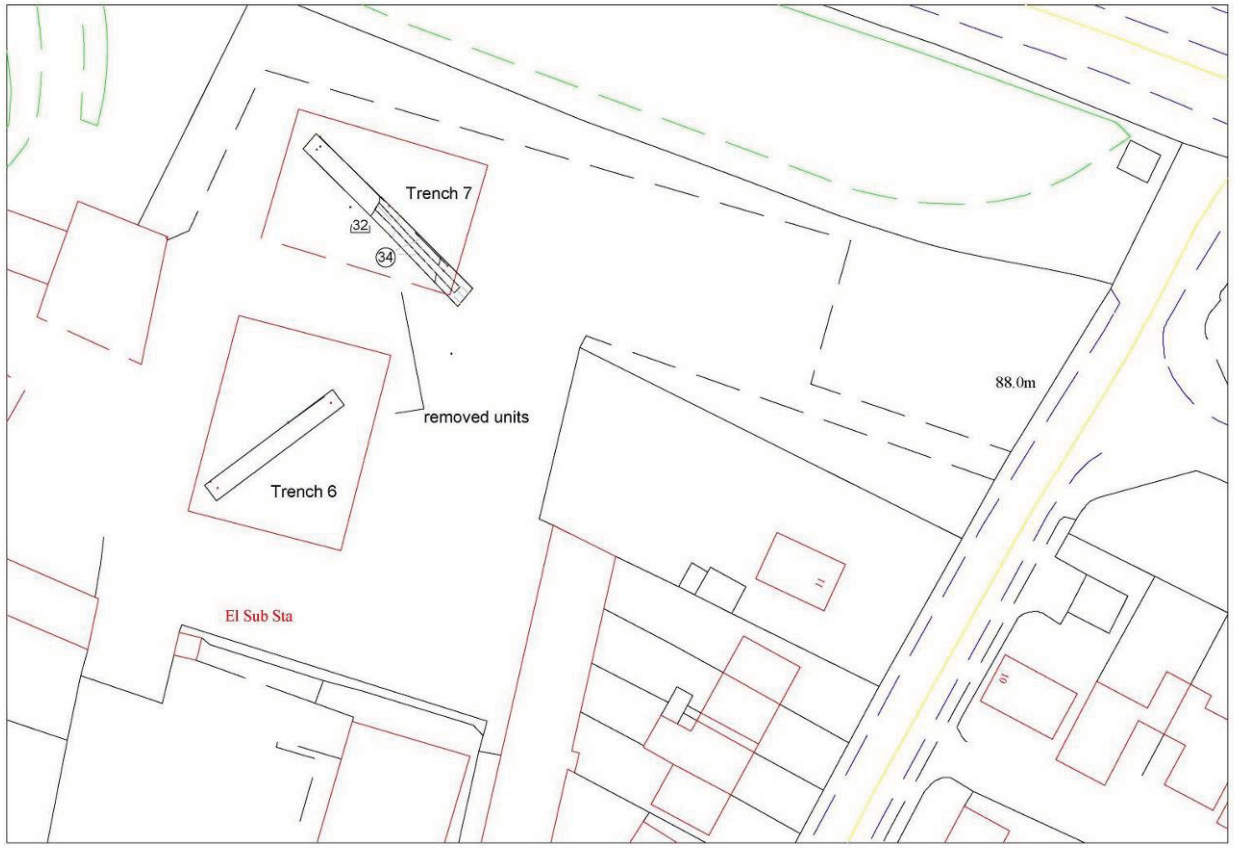

Figure 2 Trench location plan

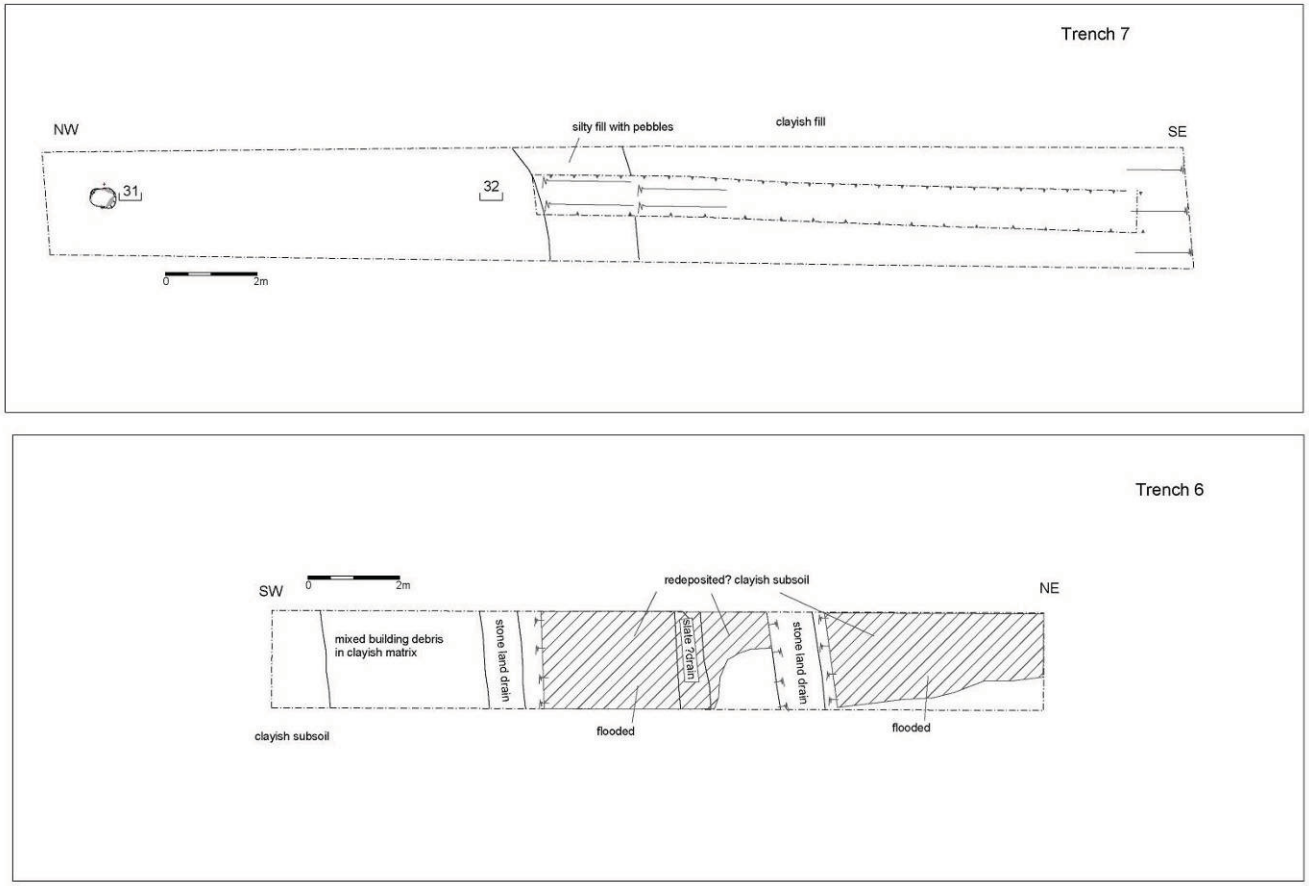

Figure 3 Trench plans

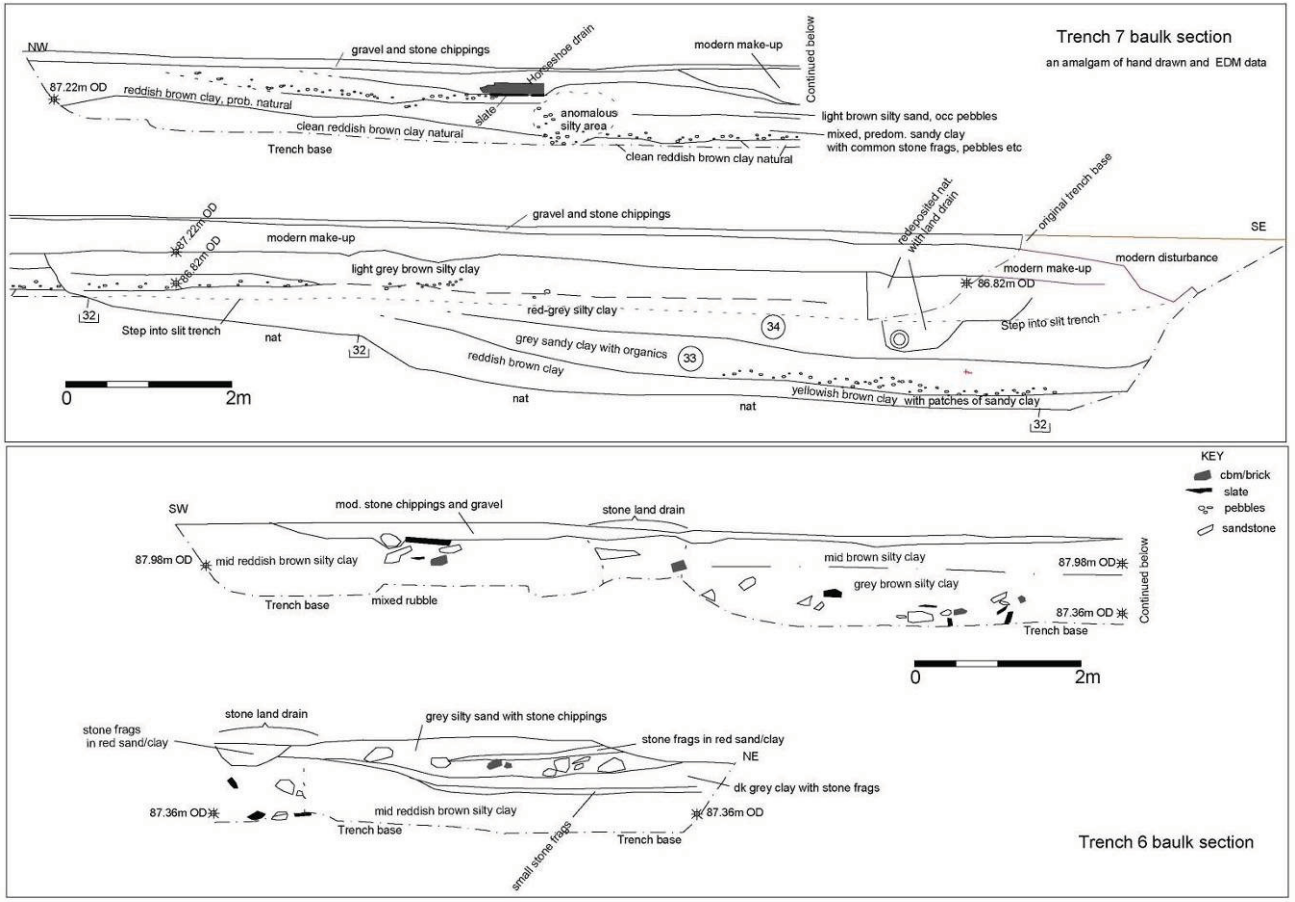

Figure 4 Trench 6 and 7 sections

Figure 5 Evaluation: overview of the site, looking W towards Old Hall

Figure 6 Evaluation: Trench 6, looking SW

Figure 7 Evaluation: Trench 6 stone filled drain, looking SE

Figure 8 Evaluation: Trench 7, looking SE. Half sectioned post hole in foreground.

Figure 9 Evaluation: Trench 7, excavated post hole showing slate to base, looking NE

Figure 10 Evaluation: Trench 7 NW edge of silty feature and small sondage, looking N

Figure 11 Evaluation: Trench 7, SE edge of silty feature, showing apparent vertical junction. Looking N

Figure 12 Evaluation: Trench 7, layer of pebbles etc NW of feature cut. Looking NE

Figure 13 Trench 7, Evaluation: extent of re-machined feature. Looking W

5 Watching Brief

5.1 The main impact on the site from the development proposals was the re-routing of the main sewer, located at the western area of the development (Figs 14 and 18). This had a length of nearly 100m, a width of 1.00m, and a depth of 2-2.50m. Also seven holes for manholes were excavated, each measuring 2.50m x 2.50m square. Due to the depth of these ground works, for safety reasons it was not possible to gain access to the excavations, except on rare occasions.

5.2 The trench was started at the far northern area of the site, close to evaluation trenches 2A & 2B and trenches 5 & 7, and confirmed the presence of **Fish pond 1** seen in M6, section 1 (Fig. 15). This feature had a dark grey silty fill, and was seen at a depth of 1.80m below present ground level, and was below an orange/red make up layer. The full extent and depth of this feature was unknown.

5.3 Further south-west of the trench, in between manholes M4 & M5, two linear ditches were located at a depth of 0.90m below present ground level, both of these features appeared to run east-west towards the motte and bailey feature to the west. **Ditch 1** was 3.00m wide, and approximately 3.00m in depth and had a dark grey silty fill, **Ditch 2** was 5.00m north of Ditch 1 and was 1.00m wide with a depth of approximately 0.70m, again with a dark grey silty fill. Both ditches were seen to be cutting the natural Mercia Mudstone. Further S/W from Ditch 1, towards manhole M4 the natural mudstone was seen at a depth of 0.60m.

5.4 At 4.50m south of M4, at the western area of the trench, **Wall 1** was located at a depth of 0.20m and cut a red brown clay make up layer. It had a width of 1.10m and ran east-west across the trench, then turning to the north at the western face of the trench. The wall appeared to have collapsed in places, as seen in section 2 (Figs 15 and 16), and was constructed of granite with a red clay bonding, and had a depth of 0.60m. Further south at manhole M3, **Wall 2** was seen in the western section of the manhole running north-east – south-west at a depth of 0.40m from present ground level and cutting silts of fish pond 2, this was 0.80m wide and 0.40m in depth, and was constructed of granite with a mortar bonding (Fig. 17).

5.5 At the south-western area of the site, **Fish pond 2** was located with similar fills to Fish pond 1; this was seen at a depth of 0.50m below present ground level and had a depth of at least 1.50m. This feature was originally located in evaluation trench 3; again the extent of the feature is unknown.

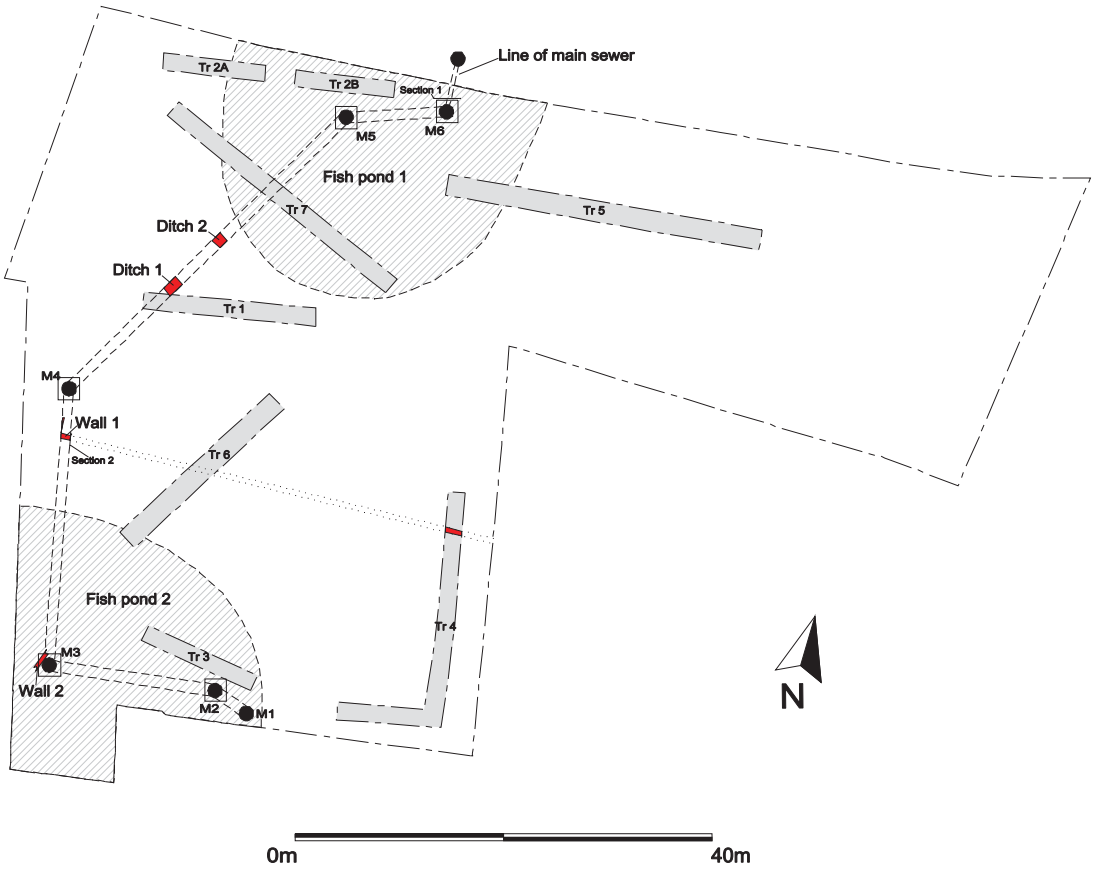

Figure 14 Watching brief: Plan showing the route of the sewer trench, with the location of the walls, ditches, and probable areas of the fish ponds.

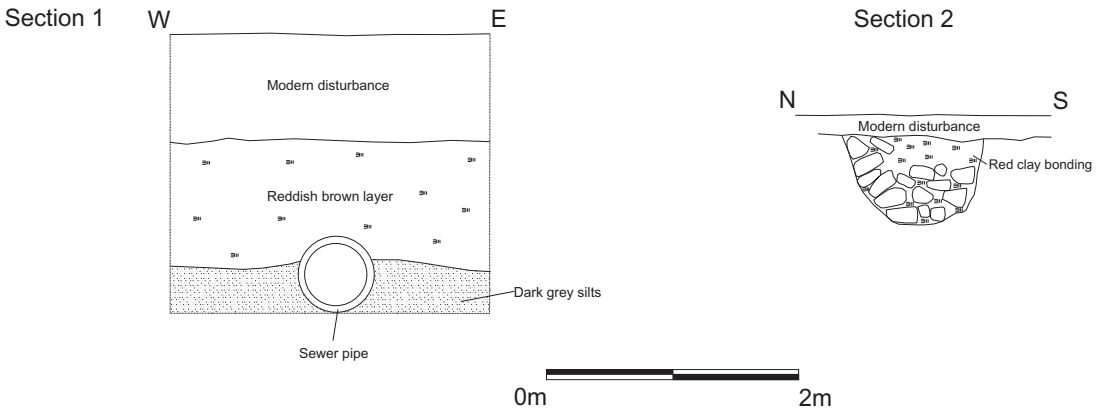

Figure 15 Watching brief: Sections 1 & 2

Figure 16 Watching brief: Section 2 showing wall 1

Figure 17 Watching brief: Showing wall 2 above pond silts

Figure 18 Watching Brief: View looking S/W from manhole 5

6 Discussion

6.1 The evaluation showed no evidence for significant structural remains at 1m depth in the area of trench 6. It established the depth of the large cut feature in Trench 7, but not its full extent. Considering that the deposits encountered were considered to be a continuation of those encountered in the original evaluation trenches 1, 2a and 2b, and perhaps trench 3, the additional evaluation did not succeed in elucidating the overall shape in plan. This may be for several reasons, the simplest being that they are indeed all separate, unconnected features. However, trench 7 has demonstrated that the feature is large and deep, and would have involved considerable earthmoving effort to construct, the inference being that it is likely to extend considerably beyond its proven boundaries in trench 7. Complicating the whole interpretation of the feature(s) is the evidence for large-scale topographic alteration of the land surface over the years: different systems of land drains appearing at different levels, and large volumes of redeposited natural being encountered, perhaps compounded by in recent time by earthmoving associated with the construction of the by-pass embankment adjacent. The circular land-drain may even have been removed and relaid at a new level during that work as re-instatement. Taking into account probable truncation in the post medieval period, the feature could have been originally substantially deeper.

6.2 Notwithstanding this uncertainty, the profile of the feature does not lend itself to a defensive interpretation, and it is noticeable that whatever the lie of the land over,

the base of the feature is reasonably level. Thus the interpretation as a potential fishpond complex, (albeit rather large) seems more plausible than a bailey ditch, especially since the conventionally accepted position of the bailey is further north on cartographic evidence. Sediments from the feature were sampled with a view to recovering waterlogged plant macrofossils which might provide environmental indicators of the function of the feature. The results of this analysis concluded that the deposit sampled was unlikely to have been permanently waterlogged. Seeds were found including nettles, hemlock and henbane indicating rough vegetation of nutrient-rich ground (such as would be found near a midden) and animal waste. Evidence for damp ground vegetation with very few waterside plants; wayside plants and nearby hedgerow or scrub vegetation was also indicated. The environmental report concludes that the layer is likely to represent abandonment and silting of a pond or ditch, although there was little evidence to suggest the original function of the feature. The lack of water plants or fish remains could be the result of cleaning out a fish pond, but could also be explained by preservation bias or because the feature had a different function altogether.

6.3 The watching brief on the sewer line confirmed the presence of the probable fishponds, but failed to provide any firm dating evidence for them. Also located were two east-west linear ditches which also lacked any dating evidence – containing only animal bone fragments in the fills – but were presumed to be of the medieval period. They may have may have been boundary ditches, but it was unclear if the ditches were associated with the motte and bailey castle to the west. Two walls were also encountered. Wall 1 may have been part of a medieval boundary wall extending east, and lining up with a similar wall seen in evaluation trench 4, but this is purely speculative. Wall 2 could have been part of a dwelling or smaller structure but not enough was seen to be sure of this, although it appeared to be of a later date than wall 1, probably post medieval in date.

7 Bibliography

Bocock, S., 2006 — *An Archaeological Desk-based Assessment for a Proposed Development at Newtown Linford Lane, Groby, Leicestershire (SK 524 075) ULAS Report 2006-143*

Brief — *Brief For Further Archaeological Evaluation Of Land To The North Of 11 Newtown Linford Lane, Groby, Leicestershire* issued by Historic and Natural Environment Team, Environment and Heritage Services, Leicestershire County Council

Shore, M 2007 — *An archaeological evaluation by trial trenching for a proposed development at Newtown Linford Lane, Groby, Leicestershire (SK 524 075) ULAS Report 2007-023*

Design Specification for Additional Archaeological Evaluation by Trial Trenching *Proposed Residential development at Newtown Linford Lane,Groby, Leicestershire* NGR*: SK 5253 0757*

8 Archive

The archive will be deposited with Leicestershire Historic and Natural Environment team with accession number XA22. 2007 and consist of the following:

27 context recording sheets.
8 permatrace plans & sections.
79 digital photographs.
8 trench recording sheets.
3 risk assessment sheets.
1 CD of all CAD drawings, reports & digital photographs.
4 sherds of medieval pottery
1 environmental sample residue

9 Acknowledgements

ULAS would like to thank George Wimpey East Midlands Ltd for their help and co-operation. The project was managed by Richard Buckley.

APPENDIX 1: The medieval pottery from an evaluation at Groby, Leicestershire.

D. Sawday

The pottery, five sherds, weighing 56 grams, was examined under a binocular microscope and catalogued with reference to the ULAS fabric series (Davies and Sawday 1999). A date from the 12th or early to mid 13th century is suggested for this small group of material.

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Connor, A., and Buckley, R.. *Roman and Medieval Occupation in Causeway Lane, Leicester*, Leicester Archaeology Mon. **5.**

Davies, S., and Sawday, D., 1999. 'The Post Roman Pottery and Tile' *in* A. Connor and R. Buckley, 1999, 165-213.

Site/Parish: Groby, Leics. Accession No/ Doc Ref: XA22 2007.groby2.doc Material: pottery Site Type: village core, near motte.	Submitter: J. Coward Identifier: D. Sawday Date of Id: 19.10.07 Method of Recovery: evaluation Job No.

Context	Fabric/ware	Nos.	Grams	Comments
33 - SF <50>	SP3 – Splashed ware 3	1	36	Olive green glaze ext, thick walled sherd.
34	PM – Potters Marston	4	20	Body sherds, evidence of sooting and some abrasion.

APPENDIX 2 Environmental samples from Groby, Leicestershire (xA22.2007).

Angela Monckton (15th Jan. 2008, amended 23.1.08)

Introduction

The site at Groby was investigated by Jon Coward of ULAS in 2007 and it was decided that a large flat bottomed feature, a ditch or fishpond should be investigated for the preservation of waterlogged organic remains which may help with interpretation of the function of the feature. Waterlogged remains can provide evidence of the past environment of sites so samples were taken to establish the potential for the recovery of evidence from organic remains and were processed for waterlogged plant macrofossils (seeds, leaves and stems) to indicate the potential to recover other remains.

Ponds and ditches have the potential to preserve organic remains if permanently waterlogged sediment survives which may preserve pollen, plant and insect remains. Pollen can provide evidence about the regional and surrounding vegetation, as well as the vegetation on the site. Plant macrofossils are likely to represent the vegetation on the site and so can show the water conditions by the type of water plants present, as well as the other nearby vegetation. Evidence of plants from nearby gardens may be found which may be of interest in the study of the site. Insect remains have good potential to show the local land use from, for example, the presence of insects which may indicate pasture or woodland; they also have the potential to reveal the water conditions from water beetles and caddisflies which may be characteristic of still or flowing water. Molluscs are also good environmental indicators as well as providing evidence of water conditions, particularly relevant to the study of fishponds. These remains, if preserved, can also show differences from streams or ditches. The samples were examined for the presence of any fish remains of bones or scales which may be identified to show the fish species provided from the ponds. However, it is known that fishponds were cleaned out on a regular basis in the past and the sediments may date from much later times than the main use of the pond.

Methods

After the survey of the earthworks and recording the depths of the deposits by the excavation team, samples judged to have some potential to contain organic remains were taken for assessment and possible analysis of plant macrofossils. Samples from context (33) were from a layer containing medieval pottery and were examined in detail.

Samples of 6 litres of sediment were processed by washing into a 0.3mm mesh sieve and the organic fraction (flot) was examined with a x10-30 stereo microscope for plant and other remains. The plant remains were identified by comparison with modern reference material and listed below. Plant names follow Stace (1991). The residues of the samples were sorted for all finds and the fine fraction (below 4mm) was scanned for the presence of fish remains which are usually very small and are only found by sieving.

Results

The sample consisted of medium brown sandy clay so was unlikely to have been permanently waterlogged because anaerobic deposits are dark grey to black in colour. However, the deposit did contain organic material consisting of woody twig and stem fragments and seeds were quite numerous. The remains appeared to be the more robust seeds and stems so possibly more delicate material had not survived. The seeds were sorted from the organic fraction and were identified and recorded (table 1):

The residues over 4mm contained a few large animal bones: a cattle femur (distal shaft fragment), and a sheep/goat tibia (probably goat) identified by Jennifer Browning at ULAS. A few fragments of wood were also found in a fraction consisting largely of gravel and pebbles. The residue below 4mm consisted of grit and sand with a few charcoal fragments and a broken charred grain of free-threshing wheat and a few uncharred seed fragments. No fish remains were found by scanning with a stereo microscope at x10 magnification.

In the organic fraction the most numerous seeds were of plants which grow on nutrient rich disturbed ground such as near pits and middens. Of these nettles were most abundant, with henbane and hemlock which are both poisonous plants and henbane is rare today but has been found in medieval samples from Leicester (Monckton 1999). Elder also grows in these conditions. Damp ground plants were well represented by sedges, buttercups and thistles, disturbed ground plants and garden-type weeds included goosefoots, persicaria and docks. Some plants of grassy vegetation and way-sides included stitchworts, self-heal and pimpernel. There were a few seeds of waterside plants including rushes, club-rush and celery-leaved buttercup but no truly aquatic plants. The plants found indicate a wet area surrounded by rough vegetation. A few of the seeds were speckled with a blue deposit characteristic of sewage or animal slurry, there is little to suggest human sewage except a few bramble pips which are probably from the surrounding scrub or hedgerows. This deposit may contain animal run-off or dumped farmyard waste. Some charcoal and a couple of charred weed seeds suggest some waste was included with the mainly wild vegetation. This layer may therefore represent abandonment of the fishpond and silting or dumping of this material.

Discussion

The most numerous seeds were more robust seeds with very few seeds of waterside plants considering that the samples were from features which would have held water. This suggests that preservation was poor and the deposits may not have been permanently waterlogged. There is however a range of remains to show the rough vegetation of the area as described above. Fishponds were usually maintained and cleared of sediment so may not preserve evidence of their use. The deposit was thought to have poor potential for evidence from pollen because it did not appear to be anaerobic and possibly only preserved the more robust remains.

Sediments have been studied from Groby Pool by pollen analysis (David and Roberts 1990), and land use over the last 200 years reconstructed in the context of the documentary records from the Domesday Survey onwards. Groby was recorded as being well wooded in 1086 compared with the rest of the county. Around 3% of the

land area of the county was woodland in 1086, which is about the same amount as in 1895, while nationally woodland reduced on average from 15% to 5% of the land area (Rackham 1976, 1990). It was concluded that although there was little change in the overall amount of woodland at the county scale since 1086 there were local variations within this, and the composition has changed from mixed oak woodland to largely conifer woods by 1990. As well as changes in woodland management from 'coppice with standards' of medieval times, arable agriculture in the medieval open fields changed with the Enclosures to more small fields used as pasture, although at Groby some arable agriculture was carried out in the area. Well preserved medieval sediments would enable the study of the details of these changes but unfortunately this deposit is not suitable for such detailed study.

Unfortunately fish remains were not found in the samples examined but they are not often found in such features because the fish would be removed for consumption. At Owston Abbey in Leicestershire remains (scales or pharyngeal teeth) of rudd, bream, chub, roach, pike and perch were found in samples from a layer possibly of 16th century date when the ponds were abandoned there. These were all from small fish, perhaps left behind when larger fish were removed (Hayne, Shackley and Wainwright 1988). Similar species may have been kept here. It may be possible to investigate the fish species available if any rubbish pits or cesspits are found nearby in the future which may contain waste from fish consumption such as that found in cesspits from Leicester (Nicholson 1999). If such features are found in the area sampling is recommended to compare with the town.

Conclusions

Sediments from one of the possible fishponds was examined for the presence of waterlogged preservation of plant macrofossils. Seeds were found including nettles, hemlock and henbane indicating rough vegetation of nutrient rich ground such as would be found near a midden and animal waste was suggested. The area also included damp ground vegetation with very few waterside plants; wayside plants and a nearby hedgerow or scrub vegetation was indicated. The layer is likely to represent abandonment and silting of the pond or ditch and there was little to suggest the original function of the feature. No water plants or fish remains were found, perhaps because the pond had been cleaned out or because of poor preservation. The deposit was not anaerobic and therefore not very well preserved so did not have good potential for further analysis.

Acknowledgements

I am grateful to Jon Coward for taking the samples and to Anita Radini for processing the samples. This work was carried out at University of Leicester Archaeological Services, University Road, Leicester LEI 7RH.

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Table 1: Plant macrofossils from Groby (xA22.2007)

Sample	**2.2**	**2.1**	**Residue**	
Context	**33**	**33**	**33**	
WATERSIDE				
Juncus spp.	2	-	-	Rushes
Ranunculus sceleratus L.	1	-	-	Celery-leaved buttercup
Schoenoplectus sp.	2	-	-	Club-rush
Carex sp.	31	++	-	Sedges
TREES and SHRUBS				
Rubus fruiticosus agg.	3	+	-	Bramble
Corylus avellana L.	-	+	-	Hazel
Crataegus/Prunus thorn	-	+	-	Hawthorn/ Blackthorn
Sambucus nigra L.	9	+	-	Elder
Twig fragments	+		+	Twigs
OTHER PLANTS				
Ranunculus acris/repens/bulbosus	7	+	-	Buttercup
Ranunculus arvensis L.	1	-	-	Corn Buttercup
Ranunculus sp.	2	-	-	Buttercups
Urtica dioica L.	203	++	-	Nettle
Lamium sp.	2	-	-	Dead-nettles
Prunella vulgaris L.	1	-	-	Self-heal
Chenopodium album L.	2	+	-	Fat-hen
Chenopodium sp.	2	+	-	Goosefoot
Cerastium/Stellaria	3	-	-	Stitchworts

Polygonum sp.	1	-	-	Knotweed
Persicaria sp.	2	+	-	Persicaria
Rumex sp. charred	1	-	-	Docks
Trifolium type	-	+	-	Clover type
Potentilla sp.	2	+	-	Cinque-foil
Anagallis sp.	2	-	-	Pimpernel
Aethusa cynapium L.	-	+	-	Fool's parsley
Conium maculatum L.	7	++	-	Hemlock
Hyoscyamus niger L.	21	+	-	Henbane
Senecio sp	2	+	-	Sow-thistle
Cirsium sp.	1	+	-	Thistles
Poaceae		+	-	Grass
Indet. Seeds	7	+	-	Seeds
Fish remains	None	None	None	
Snails	None	None	None	
Sample size (litres)	6 litres	6 litres	-	

Key: Counts are numbers of seeds, + = present; ++ = abundant

APPENDIX 3 Specification for further evaluation

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Design Specification for Additional Archaeological Evaluation by Trial Trenching

Proposed Residential development at Newtown Linford Lane,

Groby, Leicestershire

NGR*: SK 5253 0757*

Client: *George Wimpey East Midlands*

Planning Authority: *Leicestershire County Council*

1 Introduction

1.1 ***Definition and scope of the specification***

This document is a design specification for a second phase of intrusive archaeological field evaluation (AFE) at the above site, in accordance with DOE Planning Policy Guidance note 16 (PPG16, Archaeology and Planning, para.30). The fieldwork specified below is intended to supplement the results of the first phase of evaluation (Shore 2007) by providing additional information on the character and extent of buried archaeological remains in areas previously inaccessible for investigation.

1.2 The definition of archaeological field evaluation, taken from the Institute of Field Archaeologists Standards and Guidance: for Archaeological Field Evaluation (IFA S&G: AFE) 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.

1.3 The document provides details of the work proposed by ULAS on behalf of the client, and should be submitted to the Archaeological Advisor to the Planning Authority for approval before archaeological investigation by ULAS is implemented. The document provides details of the work proposed by ULAS on behalf of the client for:

- Additional archaeological evaluation by intrusive trial trenching.

2. Background

2.1 ***Context of the Project***

2.1.1 The proposed development site is located on land at Newton Linford Lane, Groby, Leicestershire (SK5243 0757, Figs 1 & 2), and is currently occupied by light industrial units (about to be demolished) and concrete/gravel hardstanding. An electricity substation lies in the south-west corner of the site. It comprises an area of approximately 0.5 ha within which it is proposed to construct various residential dwellings, with associated car parking, access, services and landscaping. A desk-based assessment has been conducted for the site (Bocock 2006), this has highlighted that the site has a moderate potential for containing archaeological remains.

2.1.2 The senior planning archaeologist at Leicestershire County Council initially requested an archaeological evaluation of 5% of the site by trial trenching to confirm the nature, extent, date and significance of any archaeological deposits that may be present. University of Leicester Archaeological Services (ULAS), undertook this work (see below).

2.1.3 A second phase of trial trenching after demolition of agricultural buildings on the site was subsequently requested by the senior planning archaeologist in order to clarify the nature of archaeological features in this area. The requirements were expressed in the *Brief For Further Archaeological Evaluation Of Land To The North Of 11 Newtown Linford Lane, Groby, Leicestershire* issued by Historic and Natural Environment Team, Environment and Heritage Services, Leicestershire County Council (Hereinafter 'The Brief'). This requires the investigation of a further 60 sq. m of trench (supplemented by environmental sampling) in order to further elucidate the form, extent, significance (especially in terms of environmental potential) and character of deposits encountered during the initial evaluation (contexts/features 1, 2, 5, 6, 7).

2.2 ***Geological and Topographical Background***

2.2.1 The site lies at approximately 88 m OD. The Ordnance Survey Geological survey of Great Britain, Sheet 155 indicates that the underlying geology is likely to comprise Mercia Mudstone and alluvium.

2.3 ***Archaeological and Historical Background***

2.3.1 A desk-based assessment has been conducted for the site (Bocock 2006). This concluded that while no archaeological activity is recorded within the proposed development area and the land has been built on during the 20th century, there is a potential for archaeological deposits to survive.

2.3.2 Groby is referred to in the Domesday Book and means 'farmstead near a hollow or pit'. Later maps show the area as enclosed fields. The site was built on during the 20th century and there is between 0.2m - 0.5m of made ground on the site.

2.3.3 Prehistoric features in the vicinity include cropmarks of possible Iron Age date, 900m to the west (MLE2768). Roman finds suggesting occupation are recorded 750m to the north-east (MLE2770), and other Roman finds have come from nearby.

2.3.4 The site is located within the medieval village core of Groby and lies adjacent to the Scheduled Ancient Monument, Groby Castle and Old Hall (SAM 17066, MLE2758). This is a Norman motte and bailey with possible earlier origins. Other medieval and post-medieval archaeological sites and historic buildings are also found in the vicinity.

2.3.5 An archaeological evaluation was carried out between 16th and 22nd January 2007 by ULAS and comprised the investigation of five trial trenches, of which four (trenches 1, 2a, 2b and 3) had very silty fills, perhaps indicative of fish ponds or possibly an outer castle ditch. The presence of agricultural buildings in this area meant that these features could not be evaluated sufficiently to determine their nature or date. Another trench (4) contained a spread of building rubble with the remains of granite wall foundations which probably relate to a substantial structure of medieval date, based on the presence of a sherd of Stamford ware pottery and a fragment of ridge tile. Two fragments of Roman roofing tile from this trench also indicate activity of this period in the vicinity.

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3. Archaeological Objectives

3.1 The main objectives of the evaluation will be:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent, date range and environmental potential for any archaeological deposits to be affected by the proposals.
- To sample excavate and record any archaeological deposits to be affected by the ground works.
- To produce an archive and report of any results.

3.2 Within the stated project objectives, the principal aim of the evaluation is to establish the nature, extent and significance of archaeological deposits on the site in order to determine the potential impact upon them from proposed development. The archaeological evaluation, once the above information has been gathered, will serve to determine a decision being made on planning permission regarding archaeological issues. Potentially further stages of archaeological investigation will be required as a condition of planning permission.

4. Methodology

4.1 *General Methodology and Standards*

4.1.1 All work will follow the Institute of Field Archaeologists (IFA) Code of Conduct and adhere to their *Standard and Guidance for Archaeological Field Evaluation* (1999).

4.1.2 Staffing, recording systems, health and safety provisions and insurance details are included below.

4.1.3 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.

4.2 *Trial Trenching Methodology*

4.2.1 Two trenches, each 20m by 1.5m (total of 60 sq. m), will be excavated across the footprints of the former agricultural buildings. The proposed trench location plan is included below (Fig. 3).

4.2.2 The present ground surfaces and underlying modern overburden (approximately 02 - 0.5m of made ground is expected), over the area of the trench, will be removed in level spits, under continuous archaeological supervision. The work will use a mechanical excavator using a toothless ditching bucket and will continue down to the uppermost archaeological deposits or undisturbed natural (whichever is encountered first), to a maximum depth of 1m (See Section 11). The trenches will be backfilled and levelled at the end of the evaluation, but surfaces will not be reinstated.

4.2.3 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. All plans will be tied into the Ordnance Survey National Grid. Relative spot heights will be taken as appropriate.

4.2.4 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.

4.2.5 Trench locations will be recorded using an electronic distance measurer. These will then be tied in to the Ordnance Survey National Grid.

4.2.6 Any human remains will initially be left *in situ* and will only be removed if necessary for their protection, under a Home Office Licence and in compliance with relevant environmental health regulations.

4.3 *Recording Systems*

4.3.1 The ULAS recording manual will be used as a guide for all recording.

4.3.2 Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto pro-forma recording sheets.

4.3.3 A site location plan based on the current Ordnance Survey 1:1250 map (reproduced with the permission of the Controller of HMSO) will be prepared. This will be supplemented by a trench plan at appropriate scale, which will show the location of the areas investigated in relationship to the investigation area and OS grid.

4.3.4 A record of the full extent in plan of all archaeological deposits encountered will be made. Sections including the half-sections of individual layers of features will be drawn as necessary. The relative height of all principal strata and features will be recorded. The stratigraphy of all trenches shall be recorded even where no archaeological features are identified.

4.3.5 A photographic record of the investigations will be prepared illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.

4.3.6 This record will be compiled and checked during the course of the excavations.

5. Finds & samples

5.1 The IFA Guidelines for Finds Work will be adhered to.

5.2 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 LCC for storage in perpetuity.

5.3 An Accession number will be obtained from the Assistant Keeper of Archaeological Archives at Leicestershire County Council that will be used to identify all records and finds from the site, prior to the commencement of any on-site works.

5.4 During the fieldwork, different sampling strategies may be employed according to the perceived importance of the strata under investigation. Close attention will always be given to sampling for date, structure and environment. As part of this phase, environmental sampling will be undertaken as appropriate in order to assess the environmental potential of the deep ditch or pond-like features under investigation Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated and datable. Consultation with the specialist will be undertaken.

5.5 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 City Archaeologist. The IFA Guidelines for Finds Work will be adhered to.

5.6 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. Report and Archive

6.1 The full report in A4 format will usually follow within eight weeks of the completion of the fieldwork and copies will be dispatched to the Senior Planning Archaeologist/SMR to be distributed amongst relevant sections of Leicestershire County Council as necessary.

6.2 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.

- Summary.
- The location and size of the archive.
- 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).

6.3 A full copy of the archive as defined in *The Guidelines For The Preparation Of Excavation Archives For Long-Term Storage* (UKIC 1990), and *Standards In The Museum: Care Of Archaeological Collections* (MGC 1992) and *Guidelines for the Preparation of Site Archives and Assessments for all Finds* (other than fired clay objects) (Roman Finds Group and Finds Research Group AD 700-1700 1993) will usually be presented to within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken.

7 Publication and Dissemination of Results

7.1 A summary of the work will be submitted to the local archaeological journal, the Transactions of the Leicestershire Archaeological and Historical Society. A larger report will be submitted for inclusion if the results of the evaluation warrant it.

7.2 University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS form at http://ads.ac.uk/project/oasis will be completed detailing the results of the project. ULAS will contact Leicestershire County Council's SMR prior to completion of the form. Once a report has become a public document following its incorporation into Leicestershire SMR it may be placed on the web-site. The Developer should agree to this procedure in writing as part of the process of submitting the report to Leicestershire SMR.

8. Acknowledgement and Publicity

8.1 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.

8.2 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.

9. Copyright

9.1 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.

10. Timetable

10.1 The archaeological evaluation is scheduled to start week commencing 1 October 2007 and will last approximately 1 week.

10.2 The on-site director/supervisor will carry out the post-excavation work, with time allocated within the costing of the project for analysis of any artefacts found on the site by the relevant in-house specialists at ULAS.

10.3 An interim report on the results of the evaluation can be prepared, if required, after the completion of the fieldwork.

11. Health and Safety

11.1 ULAS is covered by and adheres to the University of Leicester Archaeological Services Health and Safety Policy and Health and Safety manual with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is attached as Appendix 1. The relevant Health and Safety Executive guidelines will be adhered to as appropriate. The HSE has determined that archaeological investigations are exempt from CDM regulations.

11.2 An intrusive environmental site assessment was undertaken by RSK ENST (2006), to assess possible contamination of the site. This identified a number of potential hazards requiring remedial action including:

- The suspected presence of asbestos cement roofing sheets and downpipes.
- Possible small amounts of hazardous ground gases including methane, carbon dioxide and oxygen.
- Soft and possibly unstable ground with groundwater being encountered at around 1.5m.

The report recommended that no excavations exceed 1m without support or gas monitoring. For further health and safety issues see Appendix 1.

11.3 All of these hazards will be identified on the risk assessment form, which will be updated as necessary during the site works.

11.4 Information on the known location of any other services or other constraints will need to be supplied by the Client, prior to the commencement of works on the site.

12 Insurance

12.1 All employees, consultants and volunteers are covered by the University of Leicester public liability insurance, £20m cover with St. Paul Travellers (policy no. UCPOP3651237). Professional indemnity insurance is with Lloyds Underwriters 50% and Brit Insurance 50%, £10m cover (policy no. PUNIO3605). Employer's Liability Insurance is with St. Paul Travellers, cover £10m (policy no. UCPOP3651237).

13. Monitoring arrangements

13.1 Unlimited access to monitor the project will be available to both the Client and his representatives and Senior Planning Archaeologist subject to the health and safety requirements of the site. Notice will be given to the Leicestershire Senior Planning Archaeologist before the commencement of the archaeological evaluation in order that monitoring arrangements can be made.

13.2 All monitoring shall be carried out in accordance with the IFA *Standard and Guidance for Archaeological Field Evaluations.*

13.3 Internal monitoring will be carried out by the ULAS project manager.

14. Contingencies and unforeseen circumstances

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

15. Bibliography

Bocock, S., 2006	An archaeological desk-based assessment for a proposed development at Newtown Linford Lane, Groby, Leicestershire (SK 524 075)
Brief	*Brief For Further Archaeological Evaluation Of Land To The North Of 11 Newtown Linford Lane, Groby, Leicestershire* issued by Historic and Natural Environment Team, Environment and Heritage Services, Leicestershire County Council
MAP 2	The management of archaeological projects 2nd edition English Heritage 1991
MGC 1992	Standards in the Museum Care of Archaeological Collections 1992 (Museums and Galleries Commission)
RFG/FRG 1993	Guidelines for the preparation of site archives (Roman Finds Group and Finds Research Group AD 700-1700 1993)
RSK ENSR, 2006	Site Investigation Newtown Linford Lane, Groby, Leicestershire.
Shore, M 2007	*An archaeological evaluation by trial trenching for a proposed development at Newtown Linford Lane, Groby, Leicestershire (SK 524 075)* ULAS Report 2007-023
SMA 1993	Selection, retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland 1993 (Society of Museum Archaeologists)

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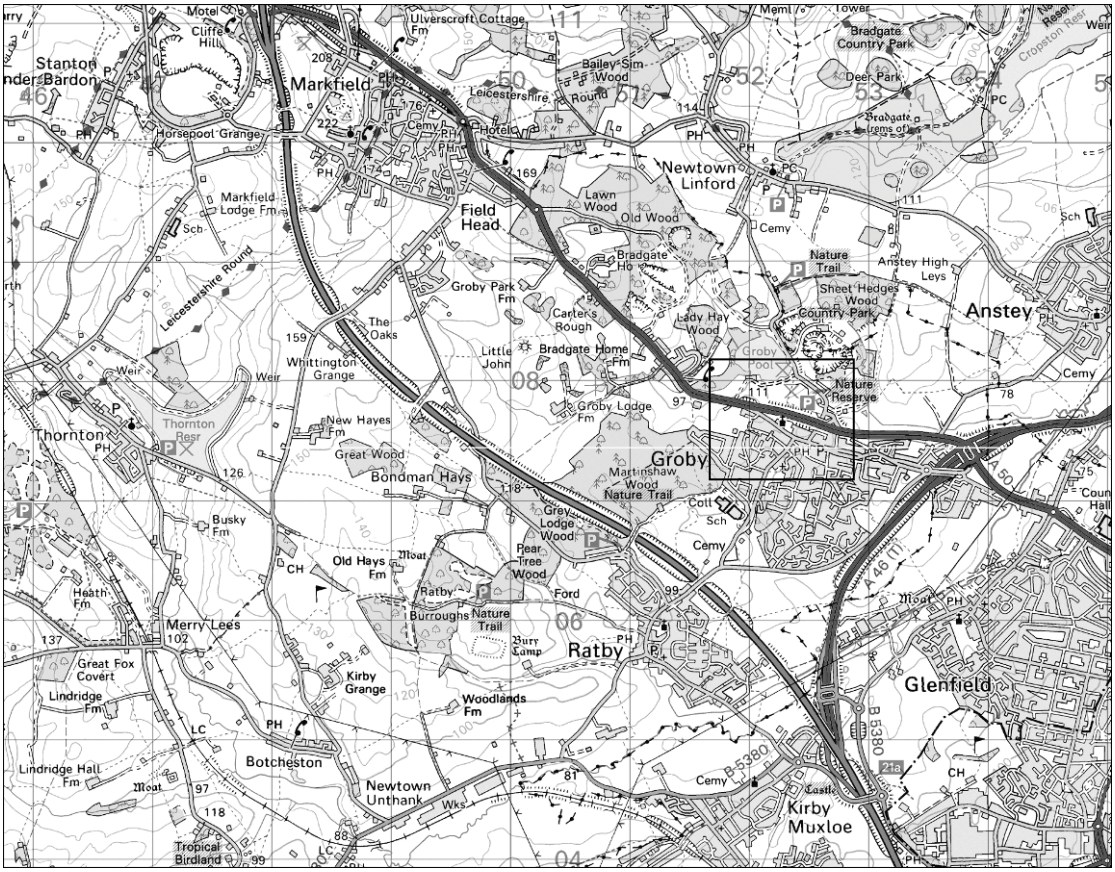

Fig. 1. Site location Scale 1:50000

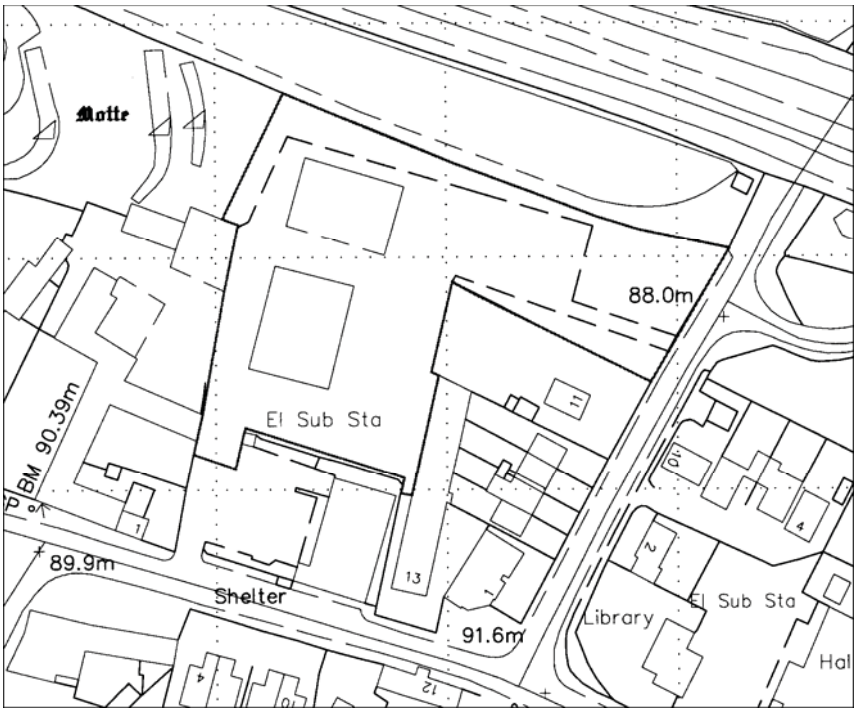

Fig. 2. Location of proposed development area, supplied by developer. (NTS)

Fig 3. Proposed additional trench locations in red.

APPENDIX 1: Draft Project Health and Safety Policy Statement:

Proposed Residential development at Newtown Linford Road, Groby, Leicestershire

NGR*: SK 5253 0757*

Client: *George Wimpey East Midlands*

Planning Authority: *Leicestershire County Council*

A risks assessment will be completed by site personnel and will be updated and amended by on-site staff during the course of the evaluation.

1. Nature of the work

1.1 The work will involve trial trenching during daylight hours to reveal underlying archaeological deposits. The work will involve excavation using machine (JCB or equivalent with toothless ditching bucket), of trial trenches under the control and supervision of archaeologists.

2 Risks Assessment

2.1 ***Trial Trenching***

The work will involve machine excavation by mechanical excavator during daylight hours to reveal underlying archaeological deposits. Due to the possible presence of hazardous ground gases and soft unstable ground, no trench will exceed 1m in depth as recommended by the site contamination investigation (RSK ENSR 2006). An assessment of the stability of the sides will be carried out by a competent person prior to staff access. All open trenches will be checked for stability every day and staff will remain alert to any indications of gases (e.g. smell).

A 'No Smoking' rule will be applied to the excavation areas.

Spoil will be stockpiled no less than 1.5 m from the edge of the excavation with the edges kept clean.

One end of each trench will be modified to provide access. Entry into the base of the trench is to be by this access only.

Remaining works will involve the examination of the exposed surface with hand tools (shovels, trowels etc) and excavation of archaeological features. Loose spoil heaps will not be walked on.

Protective footwear will be worn at all times. Hard hats will be worn when working in deeper sections or with plant. A first aid kit and mobile phone is to be kept on site at all times in case of an emergency.

2.2 ***Working with plant***.

Each trench will be excavated by machine under the supervision of an experienced archaeologist. A responsible person will be nominated as banksman. They will direct the machine using a series of pre-arranged hand signals. No one else is to approach the machine working area until the banksman has been made aware of their presence.

During bucket changes site staff will stand well clear of the machine until the bucket/breaker has been correctly fitted and crowned.

During machining all personnel are to wear a safety helmet, steel toe-capped boots and a high visibility jacket / vest. Ear defenders / plugs and safety glasses will also be made available to all staff on site. Ear protection will be worn whilst the breaker/excavator is in use.

2.3 ***Working in vicinity of services***

There is a known electricity sub-station adjacent to the site. No work will be carried out until a services plan has been seen and the location of known services are clearly identified and marked. Trenches may be moved to avoid services.

If services or wells are encountered, machining will be halted until their extent has been established by hand excavation, or areas where it is safe to machine have been established.

2.4 ***Working within areas prone to waterlogging***.

In the event of waterlogging preventing work continuing, an assessment will be made by the site supervisor to determine if it is possible to excavate a sump, suitably fenced and clearly marked to enable the water to drain away from the trenches. Protective clothing will be worn at all times and precautions taken to prevent contact with stagnant water which may carry Vialls disease or similar.

2.5 ***Asbestos***

The possible presence of asbestos has been identified on site. All site staff will be made aware of this and will avoid any contact during work on site.

2.6 ***Working with chemicals.***

If chemicals are used to conserve or help lift archaeological material these will only be used by qualified personnel with protective clothing (i.e. a trained conservator) and will be removed from site immediately after use.

2.7 ***Other risks***

If there is any suspicion of unforeseen hazards being encountered e.g. chemical contaminants, unexploded bombs, hazardous gases, work will cease immediately. The client and relevant public authorities will be informed immediately.

APPENDIX 4: Specification for watching brief

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Design Specification for Archaeological Watching Brief

Proposed Residential development at Newtown Linford Lane,

Groby, Leicestershire

NGR*: SK 5253 0757*

Client: *George Wimpey East Midlands*

Planning Authority: *Leicestershire County Council*

1 Definition and scope of the specification

1.1 In accordance with Planning Policy Guidelines 16 (PPG16, Archaeology and planning), para.30, this specification provides a written scheme of investigation (WSI) for archaeological attendance during any ground works on the above site which may disturb areas of archaeological potential in connection with a planning application for the construction of residential dwellings.

It addresses the requirements from Leicestershire County Council as archaeological advisors to Hinckley and Bosworth Borough Council and forms part of a scheme of work to fulfil one of the planning condition placed upon the development.

1.2 All archaeological work will adhere to the Institute of Field Archaeologist's (IFA) *Code of Conduct* and *Standard and Guidance for Archaeological Watching Briefs* and the *Guidelines for Archaeological Work in Leicestershire and Rutland* (LMARS).

2 Background

2.1 Context of the project

2.1.1 The proposed development site is located on land at Newton Linford Lane, Groby, Leicestershire (SK5243 0757, Figs 1 & 2), and was occupied by light industrial units and concrete/gravel hardstanding. It comprises an area of approximately 0.5 ha within which it is proposed to construct various residential dwellings, with associated car parking, access, services and landscaping. A desk-based assessment (Bocock 2006) indicated that the site has a moderate potential for containing archaeological remains.

2.1.2 The senior planning archaeologist at Leicestershire County Council initially requested an archaeological evaluation of 5% of the site by trial trenching to confirm the nature, extent, date and significance of any archaeological deposits that may be present. University of Leicester Archaeological Services (ULAS), undertook this work (see below).

2.1.3 A second phase of trial trenching after demolition of agricultural buildings was subsequently undertaken in order to clarify the nature of archaeological features in previously-inaccessible areas. The requirements were expressed in the *Brief For Further Archaeological Evaluation Of Land To The North Of 11 Newtown Linford Lane, Groby, Leicestershire* issued by Historic and Natural Environment Team, Environment and Heritage Services, Leicestershire County Council. This required the investigation of a further 60 sq. m of trench (supplemented by environmental sampling) in order to further elucidate the form, extent, significance (especially in terms of environmental potential) and character of deposits encountered during the initial evaluation (contexts/features 1, 2, 5, 6, 7).

2.2 *Requirements for mitigation strategy*

2.2.1 In the light of the results of the initial evaluation phase, the development proposals were modified in order to ensure significant structural remains could be preserved in situ. Elsewhere on the site, a large sub surface feature – either a pond or ditch – would be affected by pile foundations and drainage trenches, to be covered by an archaeological watching brief during construction – the subject of this specification.

2.2.2 The archaeological watching brief is to involve attendance for inspection and recording during ground disturbance to identify any deposits of archaeological importance.

2.2 Archaeological background

2.2.1 A desk-based assessment (Bocock 2006) concluded that while no archaeological activity is recorded within the proposed development area and the land has been built on during the 20th century, there is a potential for archaeological deposits to survive.

2.2.2 Groby is referred to in the Domesday Book and means 'farmstead near a hollow or pit'. Later maps show the area as enclosed fields. The site was built on during the 20th century and there is between 0.2m - 0.5m of made ground on the site.

2.2.3 Prehistoric features in the vicinity include cropmarks of possible Iron Age date, 900m to the west (MLE2768). Roman finds suggesting occupation are recorded 750m to the north-east (MLE2770), and other Roman finds have come from nearby.

2.2.4 The site is located within the medieval village core of Groby and lies adjacent to the Scheduled Ancient Monument, Groby Castle and Old Hall (SAM 17066, MLE2758). This is a Norman motte and bailey with possible earlier origins. Other medieval and post-medieval archaeological sites and historic buildings are also found in the vicinity.

2.2.5 An archaeological evaluation was carried out between 16th and 22nd January 2007 by ULAS and comprised the investigation of five trial trenches, of which four (trenches 1, 2a, 2b and 3) had very silty fills, perhaps indicative of fish ponds or possibly an outer castle ditch. The presence of agricultural buildings in this area meant that these features could not be evaluated sufficiently to determine their nature or date. Another trench (4) contained a spread of building rubble with the remains of granite wall foundations which probably relate to a substantial structure of medieval date, based on the presence of a sherd of Stamford ware pottery and a fragment of ridge tile. Two fragments of Roman roofing tile from this trench also indicate activity of this period in the vicinity.

2.2.6 In October 2007, two extra trial trenches were examined. One (trench 6) displayed a spread of building rubble but no structural features except stone land drains. The other (trench 7) had a large silt and clay filled cut, perhaps indicative of fish ponds or possibly an outer castle ditch. Pottery recovered suggested that this feature was being backfilled by the 12th or early/mid 13th century AD date.

3 Aims

3.1 Through archaeological supervision of existing overburden stripping and groundworks by the client's contractors:

1. To identify the presence/absence of any archaeological deposits.
2. To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
3. To record any archaeological deposits to be affected by the ground works.
4. To produce an archive and report of any results.

4 Methods

4.1 The project will involve the supervision of overburden, service trenches and other groundworks by an experienced professional archaeologist during the works specified above. During these ground works, if any archaeological deposits are seen to be present, the archaeologist will record areas of archaeological interest.

4.2 The archaeologist will co-operate at all times with the contractors on site to ensure the minimum interruption to the work.

4.3 Any archaeological deposits located will be hand cleaned and planned as appropriate. Samples of any archaeological deposits located will be hand excavated. Measured drawings of all archaeological features will be prepared at a scale of 1:20 and tied into an overall site plan of 1:100. All plans will be tied into the National Grid using an Electronic Distance Measurer (EDM) where appropriate.

4.4 Archaeological deposits will be excavated and recorded as appropriate to establishing the stratigraphic and chronological sequence of deposits, 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.

4.5 All excavated sections will be recorded and drawn at 1:10 or 1:20 scale, levelled and tied into the Ordnance Survey datum. Spot heights will be taken as appropriate.

4.5 Any human remains encountered will be initially left *in situ* and only be removed under a Home Office Licence and in compliance with relevant environmental health regulations. The developer, Leicestershire County Council, Heritage Services and the coroner will be informed immediately on their discovery.

4.6 Internal monitoring procedures will be undertaken including visits to the site from the project manager. These will ensure that professional standards are being maintained. Provision will be made for monitoring visits with representatives of the owners, Leicestershire County Council and Hinckley and Bosworth Borough Council.

4.7 In the event of significant archaeological remains being located during the watching brief there may be the need for contingency time and finance to be provided to ensure adequate recording is undertaken. On the discovery of potentially significant remains the archaeologist will inform the developer, the Planning Archaeologist at Leicestershire County Council and the planning authority. If the archaeological remains are identified to be of significance additional contingent archaeological works will be required.

5 Recording Systems

5.1 Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets.

5.2 A site location plan based on the current Ordnance Survey 1:1250 map, (reproduced with the permission of the Controller of HMSO) will be prepared. This will be supplemented by a plan at 1:200 (or 1:100), which will show the location of the areas investigated.

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.

5.4 An adequate photographic record of the investigations will be prepared. This will include black and white prints and colour transparencies illustrating in both detail and general context the principal features and finds discovered. 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 watching brief.

5.6 All site records and finds will be kept securely.

6 Report and Archive

6.1 An accession number will be drawn before the commencement of groundworks. A report on the watching brief will be provided following the groundworks. Following the fieldwork the work will be entered on to the OASIS project database.

6.2 Copies will be provided for the client, Sites and Monuments Record and planning Authority. 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.

6.3 A full copy of the archive as defined in the 'Guidelines for the preparation of excavation archives for long-term storage' (UKIC 1990), and Standards in the Museum care of archaeological collections (MGC 1992) and 'Guidelines for the preparation of site archives and assessments for all finds (other than fired clay objects) (Roman Finds Group and Finds Research Group AD 700-1700 1993) will be presented to Leicestershire County Council, Heritage Services normally within six months of the completion of analysis. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken.

7 Publication

7.1 A summary report will be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork. A full report will be submitted if the results are of significance.

8 Timetable and Staffing

8.1 The watching brief is scheduled to commence at the inception of the contractors groundworks on 30 October 2007. An experienced archaeologist will be present during this work. It is proposed to watch all works, as specified above, with appropriately timed visits during the work in consultation with the contractors.

9 Health and Safety

9.1 ULAS is covered by and adheres to the University of Leicester Statement of Safety Policy and uses the ULAS Health and Safety Manual (2001) 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.

10 Insurance

10.1 All ULAS work is covered by the University of Leicester's Public Liability and Professional Indemnity Insurance. The Public Liability Insurance is with Gerling Insurance Services Policy No. 62/99094/D, Risk Reference LT 35101 while the Professional Indemnity Insurance is with Sun Alliance Insurance Policy No. 03A/5A 001 05978, Risk Reference LT 27229.

11. Bibliography

MAP 2, *The management of archaeological projects* 2nd edition English Heritage 1991

MGC 1992, *Standards in the Museum Care of Archaeological Collections* (Museums and Galleries Commission)

RFG/FRG 1993, *Guidelines for the preparation of site archives* (Roman Finds Group and Finds Research Group AD 700-1700)

SMA 1993, *Selection, retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland* (Society of Museum Archaeologists)

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29.10.2007

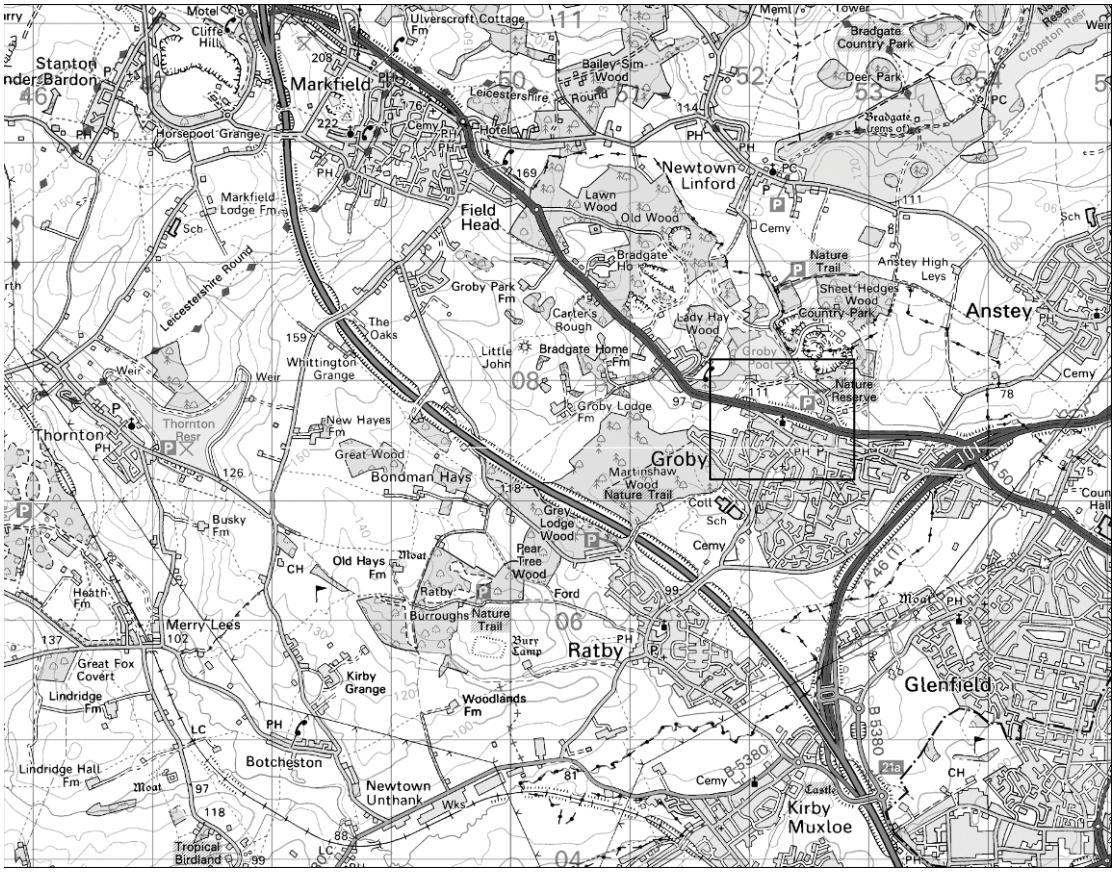

Fig. 1. Site location Scale 1:50000

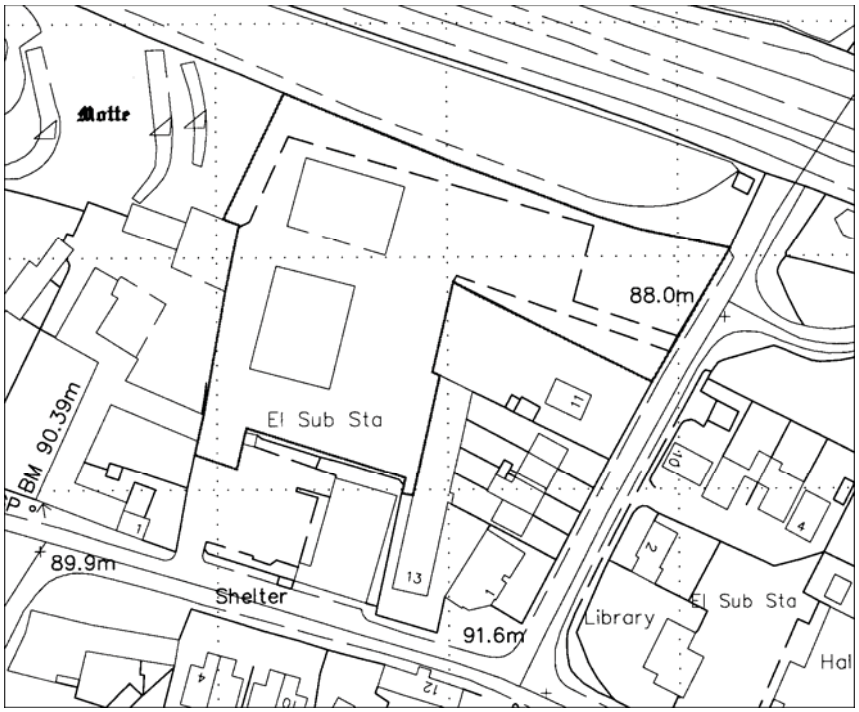

Fig. 2. Location of proposed development area, supplied by developer.
(NTS)

Appendix

Draft Project Health and Safety Policy Statement

Proposed Residential development at Newtown Linford Lane,

Groby, Leicestershire

NGR*: SK 5253 0757*

Client: *George Wimpey East Midlands*

Planning Authority: Leicestershire County Counci

1 Nature of the work

1.1 This statement is for an archaeological watching brief.

1.2 The work will involve observation of groundworks during daylight hours and recording of any underlying archaeological deposits revealed. Overall depth is likely to be *c.* 0.2-0.5m. This will involve the examination of the exposed surface with hand tools (shovels, trowels etc) and excavation of archaeological features. All work will adhere to the University of Leicester Health and Safety Policy and follow the guidance in the ULAS Health and Safety Manual (2001) together with the following relevant Health and Safety guidelines.

1.3 HSE Construction Information Sheet CS8 Safety in excavations.
HSE Industry Advisory leaflet IND (G)143 (L): Getting to grips with manual handling.
HSE Industry Advisory leaflet IND (G)145 (L): Watch Your back.
CIRIA R97 Trenching practice.
CIRIA TN95 Proprietary Trench Support Systems.
HSE Guidance Note HS(G) 47 Avoiding danger to underground services. HSE Guidance Note GS7 Accidents to children on construction sites

1.4 The Health and Safety policy on site will be reassessed during the evaluation .

1.5 All work will adhere to the contractors' health and safety policy.

2 Risks Assessment

2.1 Working within a building site

Precautions. No work will be undertaken beneath section faces. Loose spoil heaps will not be walked on. Protective footwear will be worn at all times. Hard hats will be worn at all times. A member of staff qualified in First Aid will be present at all times. First aid kit, vehicle and mobile phone to be kept on site in case of emergency.

2.2 Working with plant.

Precautions. Hard hats, protective footwear and hazard jackets will be worn at all times. No examination of the area of stripping will take place until machines have vacated area. Observation of machines will be maintained during hand excavation. Liaison will be maintained with the contractors to ensure programme of machine movement is understood.

2.3 Working within areas prone to waterlogging.

Protective clothing will be worn at all times and precautions taken to prevent contact with stagnant water which may carry Vialls disease or similar.

2.4 Working with chemicals.

If chemicals are used to conserve or help lift archaeological material these will only be used by qualified personnel with protective clothing (i.e a trained conservator) and will be removed from site immediately after use.

2.5 Other risks

Precautions. If there is any suspicion of unforeseen hazards being encountered e.g chemical contaminants, unexploded bombs, hazardous gases work will cease immediately. The client and relevant public authorities will be informed immediately.

2.9 No other constraints are recognised over the nature of the soil, water, type of excavation, proximity of structures, sources of vibration and contamination.

Richard Buckley
29.10.2007