

**An Archaeological Watching Brief
During groundworks at
Meadow Lane, Shirebrook,
Derbyshire
(SK 5153 6660)**

Leon Hunt

for

Taylor Woodrow Developments Ltd

Checked by Project Manager

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An Archaeological Watching Brief During Groundworks at Meadow Lane, Shirebrook, Derbyshire (SK 5153 6660)

Leon Hunt

Summary

An archaeological watching brief was undertaken by ULAS during groundworks at Meadow Lane, Shirebrook, Derbyshire (SK 5153 6660). The area had been previously evaluated archaeologically by trial trenching and undated ditches and other features were recorded. Nearby excavations had yielded features dated to the Bronze Age. Topsoil stripping and the excavation of foundation trenches were observed during the watching brief but no archaeological features or finds associated with archaeological features were discovered. The archive for this work will be deposited with Derby Museums and Art Gallery with accession number DBYMU 2006-433.

Introduction

An archaeological watching brief was undertaken by University of Leicester Archaeological Services (ULAS) for Taylor Woodrow Developments Ltd at Meadow Lane, south of Shirebrook, Derbyshire (NGR SK 5153 6660). This work was carried out during groundworks for foundation trenches for a new dwelling. The new dwelling is part of a larger development, which will eventually cover an area of 1.5ha.

This watching brief addresses the requirements for archaeological investigation from Derbyshire County Council as archaeological advisors to the Bolsover District Council planning authority following Planning Policy Guideline 16 (PPG16, Archaeology & Planning, paragraph 30), outlined in the '*Brief for a Programme of Archaeological Field Investigation*' (hereinafter 'The Brief') dated 12/01/07 (Appendix 1).

Planning permission has been granted for residential development. Condition 7 of the consent granted for application number 06/00225/REMMAJ requires that:

'No development shall take place, until a written programme of investigative archaeological work has been submitted to and approved in writing by the Local Planning Authority and until the agreed scheme has been implemented'

A Written Scheme of Investigation for archaeological excavation and watching brief on the area has been drawn up by ULAS as *A Design Specification for Archaeological Excavation and Watching Brief* (Appendix 2) and was prepared by ULAS in advance of the supervised archaeological work being undertaken.

Aims and Methods

The purpose of the watching brief was to ascertain whether archaeological deposits were present. If so, the character, extent and date range of any deposits identified would be established, in order to assess their significance. Recording of these deposits would be carried out as appropriate, and an archive and this report produced. The work followed the Institute of Field Archaeologists (IFA) *Standard and Guidance for*

Archaeological Watching Briefs, and adhered to the University's Health and Safety policy.

The watching brief covered the examination of soil stripping and foundation trenches associated with Plot 39 of Phase 1 of the South Shirebrook Regeneration Area.

The site was visited by an archaeologist on 21st and 22nd March 2007 and soil stripping and the excavation of foundation trenches were observed.

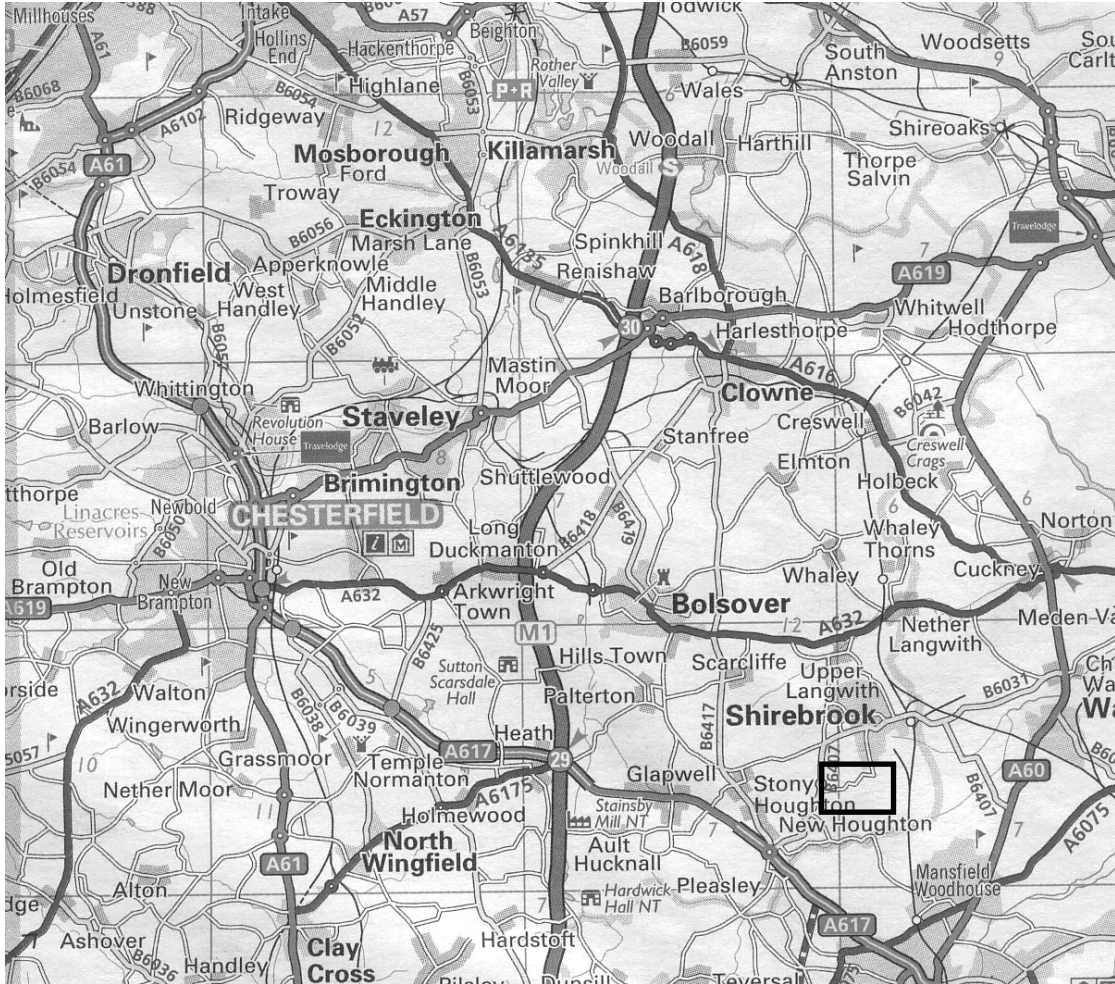


Figure 1: Site Location. Scale 1: 250, 000

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Site Location and Geology

Shirebrook lies in Derbyshire, close to the border with Nottinghamshire. It lies 6 km north of Mansfield and 12km south east of Chesterfield (Figure 1).

The site is located on the South Shirebrook Regeneration Area on land that currently consists of pasture and lies on the northern side of Meadow Lane, close to the roundabout at the junction with Common Lane (B6407) (Figure 2). It covers an area of 1.5ha.

Plot 39 lies in the south eastern corner of the site.

The Ordnance Survey Geological Survey of Great Britain Sheet 170 indicates that the underlying geology is likely to consist of clays. The site lies at a height of *c.* 78m OD.

Archaeological and Historical background

The site has been the subject of an archaeological desk-based assessment (John Samuels Archaeological Consultants 1999) and geophysical survey (GSB Propection 2000), which identified a series of anomalies that suggested buried ditch features. Later evaluation work (Birmingham Archaeology 2002) established the presence of truncated ditch and other features cutting into the subsoil. Unfortunately no archaeological finds were found to date these features.

This work was undertaken in connection with phase 1 of the regeneration scheme for the former Shirebrook Colliery and South Shirebrook regeneration scheme.

Previous archaeological work carried out to the north of the site had identified prehistoric enclosure ditches of a similar form, which could be dated to the Bronze Age (2350-1000 B.C).

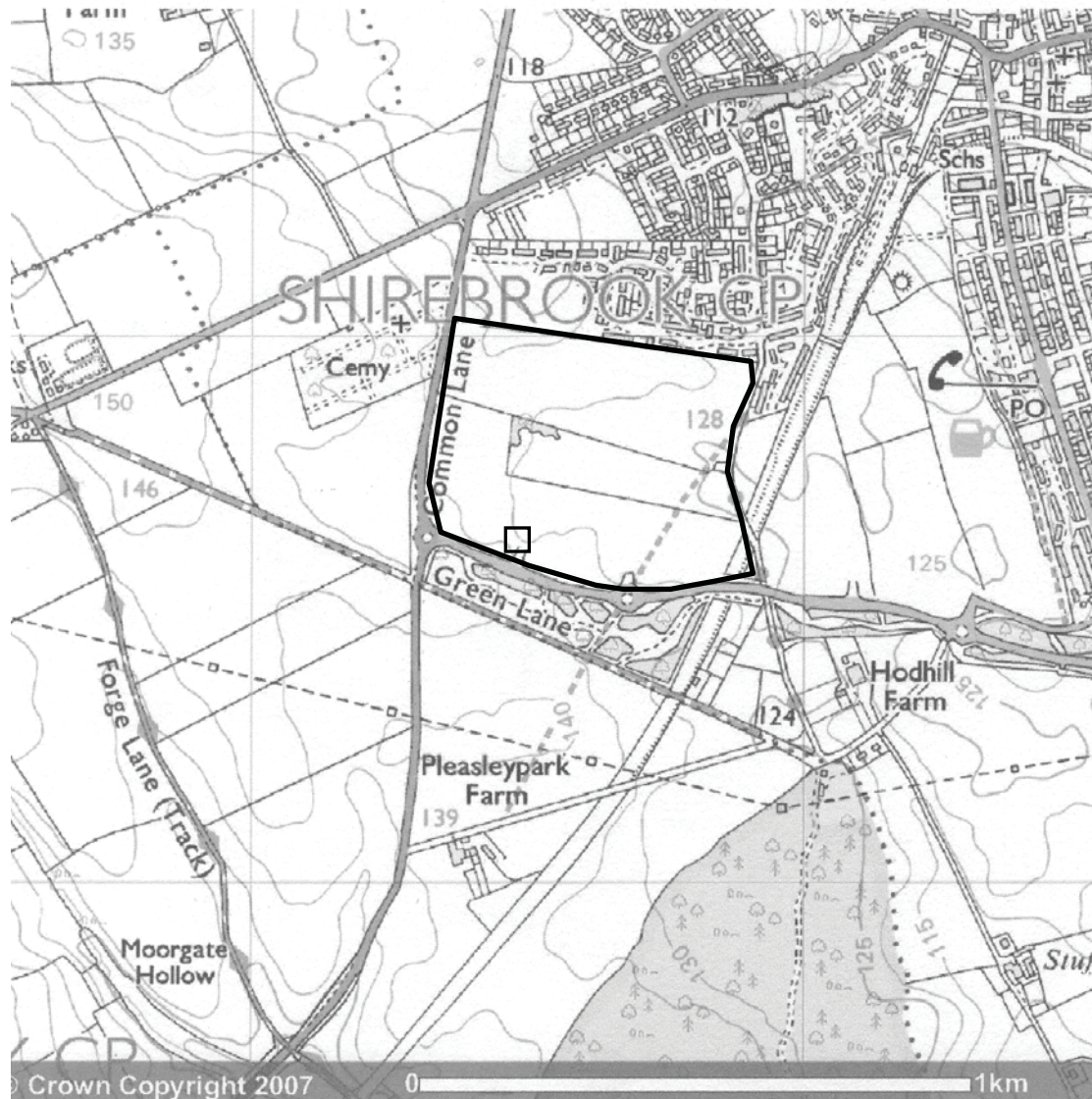


Figure 2: Plan of Phase 1 of the South Shirebrook Regeneration Area, with position of Plot 39 highlighted

Results

The site was visited on 21st March 2007 and the stripping of some of the topsoil with a JCB was observed. A further visit on 22nd March saw the foundation trenches excavated and the spoil heaps were periodically checked for finds.

The foundation trenches were 0.67m wide and *c.* 0.8m deep, except where the bay windows of the house were to be constructed, where the trenches were 1.25m wide. The turf was stripped to reveal soft mid-brown silty clay topsoil, which lay at a fairly uniform depth of 0.3m. Underlying the topsoil was reddish brown silty clay subsoil that varied in thickness between 0.25-0.4m throughout the trenches. Underlying this was a yellowish red heavily weathered sandstone substratum, which also varied considerably in depth from 0.2-0.4m and was very crumbly and degraded in places, although it was fairly hard at the base of the trenches at 0.8m. In places the sandstone was very high in the sequence, whereas in other areas the subsoil had filled fissures in the sandstone to some depth.

No archaeological features were observed during the watching brief and no finds were discovered. The soils were almost barren of any artefacts at all and only two pieces of modern pottery were discovered in the topsoil.

Conclusion

Although the site had strong potential to contain archaeological features none were discovered during the watching brief. The results from the evaluations carried out by Birmingham Archaeology would suggest that archaeological remains are more likely to exist in the area to the north of the area covered by this watching brief. Further archaeological work in this area may be more fruitful.

Acknowledgements

ULAS would like to thank Steve Bull and Gabriel Dunn of Taylor Woodrow, and T. Balfe Construction Ltd for their help and co-operation during this watching brief. Leon Hunt carried out the watching brief; Patrick Clay was the project manager.

Archive

The archive for this watching brief will be deposited with Derby Museum and Art Gallery with accession number DBYMU 2006-433 and consists of:

- 1 Copy of this report
- 2 Watching brief recording sheets
- 1 CD of Digital Photographs
- 1 Contact Sheet of Digital Photographs
- 1 Contact Sheet of B&W photographs
- 1 Set B&W Negatives

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23/03/07



Plate 1: Work in Progress. Looking north west



Plate 2: Area stripped prior to marking out, looking north west



Plate 3: South facing section, south east corner, looking north



Plate 4: Southern trench, south facing section, looking north west



Plate 5: Close to completion, looking north east



Plate 6: Mid section of house, west facing, looking east

APPENDIX 1:

Brief for a Programme of Archaeological Field Investigation

Site Name: South Shirebrook Regeneration Area

NGR: SK 5153 6660

Applicant: Taylor Woodrow Developments Ltd

Planning application(s): 06/00225/REMMAJ

District Planning Officer: Steve Phillipson – Bolsover District Council

Brief issued by: A. M. Myers – Development Control Archaeologist

Brief issued to: Patrick Clay - ULAS

Date: 12th January 2007

1.0 Introduction

1.1 Outline planning consent has been obtained by the East Midlands Development Agency for large scale regeneration development on land to the south of Shirebrook. Taylor Woodrow Developments Ltd., has submitted a number of reserved matters applications for development, including 06/00225/REMMAJ covering the main distributor road and structural landscaping. The initial phase of development will include part of the distributor road system and residential blocks H1-H3 and M1-M4 (fig.1: phase 1 development). Application 06/00238/REMMAJ covers housing in blocks H1-H3, while 06/00597/REMMAJ covers blocks M1-M4.

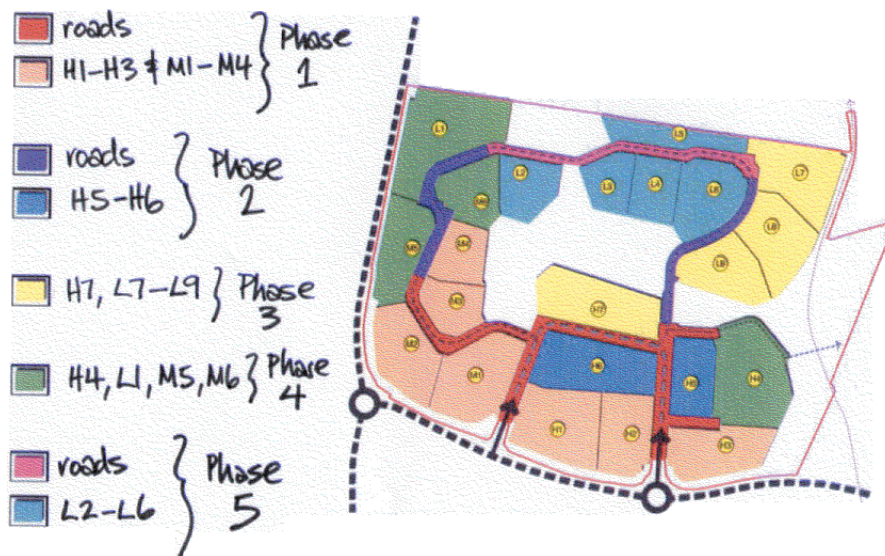


Fig. 1: Masterplan for the development

1.2 Condition 7 of the consent granted for application 06/00225/REMMAJ requires

“No development shall take place, until a written programme of investigative archaeological work has been submitted to and approved in writing by the Local Planning Authority and until the agreed scheme has been implemented.”

1.3 This brief provides the basis upon which an archaeological contractor may prepare a written scheme (programme) of investigation (WSI) for an archaeological investigation of the

phase 1 development area only. The WSI should be submitted in advance for the written approval of Bolsover District Council.

2.0 Previous Fieldwork/ Recording

2.1 The application area has previously been the subject of an archaeological desk-based assessment (John Samuels Archaeological Consultants 1999), geophysical survey (GSB Prospection 2000) and archaeological evaluation (Birmingham Archaeology 2002). All of this work has been undertaken in connection with phase 1 of the regeneration scheme for the former Shirebrook Colliery and South Shirebrook regeneration scheme.

2.2 The geophysical survey identified a series of anomalies indicative of potential buried ditch features. The evaluation trenching (fig. 2) established the presence of heavily truncated ditch and other features cutting into the sub-soil. None of the features identified during the evaluation produced evidence that could be used to date them. Previous archaeological excavations just to the north, adjacent to Stinting Lane, have identified prehistoric enclosure ditches that date to the Bronze Age (2350 – 1000 BC). The ditches were similar in their size, plan, and degree of truncation to those encountered during the phase 1 evaluation. It does seem likely that at least some of the evaluation features will be of a similar age.

2.3 Throughout this area the top of the sub-soil is quite shallow to the surface and the identified features were heavily truncated. There can be little doubt that the proposed development would destroy any buried archaeological features within the area.

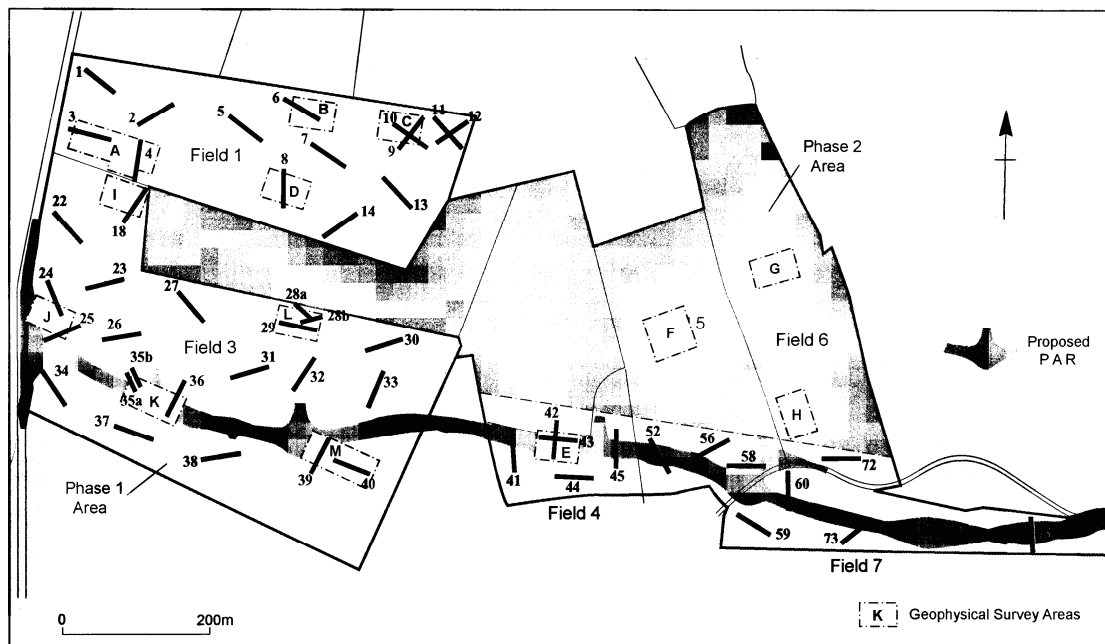


Fig 2: Plan of the evaluation trenching

2.4 The evaluation report offered specific recommendations for further work, including:

- i) watching brief during the clearance of overburden in advance of the perimeter access road construction
- ii) removal of overburden by tracked excavator working under archaeological control, selective hand cleaning of subsoil surface and planning of features present, and programme of sampling the features by hand excavation – to target areas surrounding evaluation trenches 1-4, 22, 24, 26-7 and 31.

2.6 Of the evaluation trenches specified in 2.4ii trenches 1-4 fall to the north and outside of the development blocks being considered here. Trench 22 would appear to be largely outside. However, the south-eastern end of the trench falls either inside or at least very close to the current development

clocks. As features were identified at this end of the trench this is held as relevant for the present work. Trenches 24, 26-27 and 31 all fell within the current development clocks.

2.7 The perimeter access road has already been constructed.

3.0 The Programme of Fieldwork

3.1 The development proposals include the construction of access roads and residential blocks. The residential blocks are to be built around a series of courts. The DCA does not know at this stage if the development will require a systematic strip of topsoil across most of the site. It is assumed that soils will be stripped from the residential blocks and the lines of the access roads.

3.2 Using the evaluation results regarding the position of identified features, under constant and close archaeological supervision, topsoil will be carefully stripped from block areas surrounding the evaluation trenches as per 2.6..

3.3 The sizes of the blocks to be stripped may vary, but should be sufficiently large to demonstrate that the spread, extent and character of features has been convincingly defined. The WSI should propose a minimum total area of "strip, map and record" and a contingency for additional areas.

3.4 The evaluation trenches were 50m x 2m. The positions and extent of the relevant evaluation trenches should be re-established on the ground

3.5 Stripping of topsoil should be done in spits using a back-actor mechanical excavator and a toothless bucket. Spit surfaces should be regularly and carefully cleaned and examined by the archaeologist. Care should be taken to monitor for the possible identification of artefacts in the topsoil or on exposed spit surfaces. In any given part of the site mechanical stripping will cease once undisturbed natural or archaeological features/ layers are identified. All such exposed areas will be cleaned and excavated thereafter by hand.

3.6 All identified potential features/ layers will be investigated and recorded at an appropriate scale by measured drawing and photography. The sampling of features should be undertaken to satisfy the need, as relevant, to determine their nature, profile, date and function.

3.7 A contingency and method statement should be specifically included in the WSI to allow for a subsequent watching brief during construction work.

3.8 Using the results of the evaluation and the 'strip, map and record' fieldwork the desirability or otherwise for a watching brief to be maintained on the access road and/ or residential block construction work should be considered.

3.9 All archaeological fieldwork, recording of archaeological features and deposits and post-excavation analysis should be carried out to acceptable archaeological standards. The contractor will be expected to abide by the Code of Practice of the Institute of Field Archaeologists, and to follow the guidance provided in "Archaeological Science at PPG16 Interventions" (English Heritage 2003).

4.0 Finds & Palaeoenvironmental Samples

4.1 Artefact collection policy should be concerned with the provision of adequate samples for meeting the objectives of the work.

4.2 Discarded artefactual materials should be described and quantified through assignment to broad categories in the field.

4.3 Retained artefacts should be cleaned, marked, catalogued and packed in materials, as appropriate, for long term storage (see 9.2 below).

4.4 Analysis of finds or palaeoenvironmental samples will be undertaken, as necessary, by suitably qualified specialists.

4.5 Retained palaeoenvironmental samples should be suitably marked and stored as appropriate and in accordance with current accepted standards.

4.6 Buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist.

4.7 In the event of human remains being encountered site works in the vicinity of the remains will cease and the Coroner's Office notified. Such remains will remain *in situ* until authorised to continue by the Coroner. Lifting of *in situ* skeletal remains will only be done following site inspection by a suitably qualified specialist.

4.8 The contact details for the Coroner are;

Mr T. Kelly,
69 Saltergate,
Chesterfield,
Derbyshire,
S40 1JS

Tel: 01246 222332

4.9 The cataloguing and analysis of all human remains will be undertaken, as necessary, by a suitably qualified osteoarchaeologist.

5.0 Monitoring

5.1 During the course of the fieldwork it is anticipated the Development Control Archaeologist will undertake monitoring visits.

5.2 The Development Control Archaeologist should be given at least 2 weeks prior notice of the commencement of fieldwork.

5.3 Should significant archaeological deposits be encountered the contractor should immediately contact the Development Control Archaeologist and arrange a convenient date and time for a site visit.

5.4 Contact details for the Development Control Archaeologist are;

Andrew Myers BA (Hons) MSc PhD MIFA,
Development Control Archaeologist,
Conservation and Design Group,
Derbyshire County Council,
Environmental Services Department,
Shand House,
Dale Road South,
Matlock,
Derbyshire,
DE4 3RY.

Tel: 01629 580000 (3358)

DDI: 01629 585146

Fax: 01629 585507 / 585146
Mob: 07881 850742

5.5 The WSI should include the name and mobile telephone number(s) for the relevant project officer and site supervisor who will be on-site during the evaluation..

6.0 Health and Safety

6.1 Whilst on site all archaeologists will operate with due regard to health and safety regulations.

7.0 Output

7.1 The preparation of the report should follow the guidelines published by the Institute of Field Archaeology.

7.2 Bound copies of the evaluation report should be provided for all of the interested parties including the Development Control Archaeologist and the Sites and Monuments Record, and for inclusion with the archive to be deposited with the appropriate museum (see below).

7.3 A digital copy of the report including illustrations and photographs (PDF Format) should be submitted to the Sites and Monuments Record.

7.4 The report should include as a minimum:

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Method
- An objective discussion of the results*
- Conclusion, including a confidence statement
- Formal assessment of importance
- Supporting illustrations and plans at appropriate scales
- Supporting data – tabulated or in appendices
- Supporting illustrations, photographs
- Index to archive and details of archive location
- References
- A copy of this brief

7.5* The results may need to be assessed and discussed with reference to the evidence from other relevant sites or excavations from the immediate area.

7.6 A short summary report (see notes attached) should be supplied as hard copy and a PDF to the Development Control Archaeologist along with the evaluation report. The appointed archaeological contractor should also provide the Development Control Archaeologist with a written statement on how the project is to be published. Where no further publication is envisaged then the short report will be published in an annual round-up on Developer Funded Archaeology in Derbyshire Archaeological Journal.

7.7 At the start of fieldwork (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form must be completed for submission to the SMR. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

8.0 Arrangements for the Project Archive

8.1 Arrangements should be made from the outset of the project for the archive, consisting of artefacts, record sheets, original drawings, drawn plans, photographs, notes, copies of (as appropriate) the evaluation fieldwork report(s) along with an index to the archive to be deposited in an appropriate museum. Your contact will be;

Gillian Woolrich
Sheffield City Museum and Art Gallery
Weston Park
Sheffield
S10 2TP

Tel: 0114 2782600

9.2 The archive should be transferred in accordance with the procedures set-out in "Procedures for the Transfer of Archaeological Archives" (2003) (a copy is available upon request from either the Museum or the Development Control Archaeologist).

Notes for contributors to the *Derbyshire Archaeological Journal* of interim and short reports on developer funded archaeology:

The aim is to publish annual compilations of short reports on developer funded archaeology in the county on a regular basis in the *Derbyshire Archaeological Journal*, in order to better inform the public of the results of the work being undertaken.

It is envisaged that the reports will take one of two forms;

- 1 Interim reports – short interim descriptions of an excavation or survey that will eventually be subjected to fuller publication.
- 2 Definitive reports – summaries of archaeological work which will not be pursued further. Note that even if the results were negative, if valid questions were posed then a brief explanation will be worthwhile.

MODEL – see attached pages from ‘Some Fieldwork in Derbyshire by the Trent & Peak Archaeological Unit in 1998-9’ edited by Graeme Guilbert and Daryl Garton, *DAJ* vol. 121 (2001): 223-5. Number 18 is an example of an Interim report and numbers 19 to 20 are examples of definitive reports.

DETAILED NOTES

Set individual reports out in alphabetical order of site names.

NGR should follow site name, followed by names of those responsible for the report and/ or fieldwork.

Give due acknowledgement to sponsors of project within text.

Definitive reports should include whereabouts of the related written, drawn and photographic archive, as well as any artefacts.

Illustrations – include line drawings and/or photographs if appropriate.

References – include where appropriate at the end of each report.

FUNDING

The Derbyshire Archaeological Society will require an offer of grant-aid towards the printing costs of short reports submitted in order to guarantee publication. Costs will be determined from the printer’s estimate. A contribution towards these costs of around 60% will be sought from the relevant contracting archaeological organisation. For further information contact Pauline Beswick (Hon. Editor), 4 Chapel Row, Froggatt, Calver, Hope Valley, S32 3ZA or tel. 01433 631256.

DEADLINE

Reports received by the end of July will be considered for inclusion in *DAJ* in the year following. If too late they will be saved for consideration for the succeeding year.

Reports to be submitted in hard copy and on disc to:

Andy Myers at Environmental Services Department, Derbyshire County Council, Shand House, Dale Road South, Matlock, Derbyshire DE4 3RY.

APPENDIX 2:

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Design Specification for archaeological excavation and watching brief

Job title: South Shirebrook Regeneration Area, Derbyshire

NGR: SK 5153 6660

Client: Taylor Woodrow Developments Ltd

Planning Authority: Bolsover District Council

Planning application Nos. 06/00225/REMMAJ

1. Definition and scope of the specification

1.1 This specification forms a Written Scheme of Investigation (WSI) for archaeological excavation and watching brief on land south of Shirebrook, Derbyshire (SK 5153 6660; fig.1)..

1.2 It addresses the requirements for archaeological investigation from Derbyshire County Council as archaeological advisor to the planning authority following Planning Policy Guideline 16 (PPG16, Archaeology and Planning para.30) outlined in their 'brief' of 12.01.2007).

1.3 All archaeological work will adhere to the Institute of Field Archaeologist's (IFA) *Code of Conduct and Standard and Guidance for Archaeological Excavations and Archaeological watching briefs*.

2. Background

2. Background

2.1 Context of the Project

2.1.1 The proposed development site is located on land south of Shirebrook (SK 5153 6660; fig.1). It consists of an area of c.1.5 ha.

2.1.2 Planning permission has been granted for residential development. Condition 7 of the consent granted for application 06/00225/REMMAJ requires that:

“No development shall take place, until a written programme of investigative archaeological work has been submitted to and approved in writing by the Local Planning Authority and until the agreed scheme has been implemented.”

2.1.3 Derbyshire County Council, Development Control Archaeologist as archaeological advisor to the planning authority details the level of archaeological work required ('Brief' of 12.01.2007).

2.2 Geological and Topographical Background

2.2.1 The Ordnance Survey Geological Survey of Great Britain Sheet 170 indicates that the underlying geology is likely to consist of clays. The site lies at a height of c.78 m O.D.

2.3 Archaeological and Historical Background

2.1 The application area has previously been the subject of an archaeological desk-based assessment (John Samuels Archaeological Consultants 1999), geophysical survey (GSB Prospection 2000) and archaeological evaluation (Birmingham Archaeology 2002). All of this work has been undertaken in connection with phase 1 of the regeneration scheme for the former Shirebrook Colliery and South Shirebrook regeneration scheme.

2.2 The geophysical survey identified a series of anomalies indicative of potential buried ditch features. The evaluation trenching (fig. 1) established the presence of heavily truncated ditch and other features cutting into the sub-soil. None of the features identified during the evaluation produced evidence that could be used to date them. Previous archaeological excavations just to the north, adjacent to Stinting Lane, have identified prehistoric enclosure ditches that date to the Bronze Age (2350 – 1000 BC). The ditches were similar in their size, plan, and degree of truncation to those encountered during the phase 1 evaluation. It does seem likely that at least some of the evaluation features will be of a similar age.

3. Aims and Objectives

3.1 Although as yet undated the archaeological deposits appear to be of prehistoric date. They may have the potential to address the following research aims:

3.1.1 *The transition to farming during the Neolithic - Bronze Age*

Settlement evidence during the Neolithic- Bronze Age is very rare nationally. The site may have the potential to analyse the environment and economy of such settlements and assess the role of agriculture in the 3rd and early 2nd millennium BC (Clay 2006).

3.1.2 *Iron Age settlement in the East Midlands (Willis 2006)*

The site may have the potential to provide important comparative information in relation to trading patterns, contact, land use and economy during this period and compliment the work at similar sites.

3.2 The objective of the archaeological work is to ascertain whether any significant archaeological remains are present and characterise their nature within the area to be developed. Specifically the excavation will aim to identify any evidence for prehistoric activity, identify whether it was occupation or agricultural, establish a chronology and identify how this activity might fit into a wider pattern of prehistoric activity in mid Derbyshire.

4 General Methodology

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

4.2 Staffing, recording systems, Health and Safety provisions and insurance details are provided.

4.3 Internal monitoring procedures will be undertaken including visits to the sites from the project manager. These will ensure that project targets are being met and professional standards are being maintained. Provision will be made for external monitoring meetings with representatives of the clients and Derbyshire County Council. The strategy will be reviewed in the light of the quality of the archaeological resource as revealed at different stages of the fieldwork.

4 Methodology

4.1 The scheme for archaeological work involves open area excavation in areas where archaeological deposits were located during evaluation. A watching brief has been requested for the remainder of the development. All work will follow the Institute of Field Archaeologists (IFA) *Code of Conduct* and adhere to their *Standard and Guidance for Archaeological Excavations*.

4.2 Staffing, Health and Safety provisions and insurance details are provided.

4.3 Internal monitoring procedures will be undertaken including visits to the sites from the project manager. These will ensure that project targets are being met and professional standards are being maintained. Provision will be made for external monitoring meetings with representatives of the client and Derbyshire County Council, as appropriate.

4.4 *Open area excavation (strip, map and record)*

4.4.1 The proposed areas for open area excavation are detailed in the brief (2.4). These are to target areas surrounding evaluation trenches 1-4, 22, 24, 26-7 and 31as shown in Fig 1. These may be modified in the light of the results.

4.4.2 The topsoil will be removed in spits by machine with toothless ditching bucket (or similar) under supervision, until archaeological deposits or undisturbed substrata are encountered. The topsoil will be kept separate from the subsoil.

4.4.3 The archaeological deposits will be hand-cleaned by trowel or draw hoe. The cleaned surface will be scanned by metal detector.

4.4.4 The archaeological features exposed by the machine stripping will be planned and sample excavated to provide an adequate sample to address the research aims (3.1).

4.4.5 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 a Total Station Electronic Distance Measurer (EDM).

4.4.6 The location of the excavation will be surveyed using a Total Station Electronic Distance Measurer (EDM) linked to a hand held computer.

4.4.7 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. 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.

4.4.8 Any human remains encountered will be initially left in situ and only removed under a Home Office Licence and in compliance with relevant environmental health regulations. Any material recovered which would be regarded as treasure following the Treasure Act 1996 will be reported to the coroner .

4.5 *Watching brief*

4.5.1 The extent of the watching brief will depend on the results of the excavation (Brief 3.8). This will involve the observation of overburden removal 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.

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

4.5.3 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.

4.5.4 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.

4.5.5 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.

4.5.5 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, Derbyshire County Council and the coroner will be informed immediately on their discovery.

4.5.6 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 developers and Derbyshire County Council.

4.5.7 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 Development Control Archaeologist at Derbyshire 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. If the complexity of the archaeology warrants it these will be computerised using the ULAS Access system.

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 trench plan at 1:200 (or 1:100), which will show the location of the areas investigated in relationship to the investigation area and OS grid.

5.3 Some record of the full extent in plan of all archaeological deposits encountered will be made on drawing film, related to the OS grid and be at a scale of 1:10 or 1:20. Sections including the half-sections of individual layers of features will be drawn as appropriate. The O.D 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 excavations.

6 Environmental Sampling

6.1 In order to contribute towards fulfilling the aims and objectives, outlined above (3.1-3) the routine sampling of excavated sites is required. Not all sites will produce samples suitable for analysis and interpretation but unless sampling is carried out and remains recorded there will be no basis for comparison of sites and for regional studies. Deposits to be sampled should be datable, have the potential to contain remains and represent the periods covered by the site. Hence the following deposits should be sampled:

6.1.1 Datable deposits containing pottery or any evidence of charcoal.

6.1.2 Features representing different periods and areas of the site.

6.2 Sample size will be a minimum of 20 litres although if charred plant remains appear to be at a very low concentration 40 litre samples should be considered. Small concentrations of remains will also be taken as samples if found.

6.3 The priority for sampling will be the corn drier which will have bulk samples taken on excavation. Other priorities for sampling will be pits, features associated with houses and deposits containing other materials such as pottery, bone and charcoal.

6.4 Should deposits containing abundant bone be found large samples of around 100 litres or a known fraction of the deposit will be taken for the constant recovery of smaller bones.

6.5 Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit. Samples of charcoal will be submitted for identification to establish the types of wood exploited.

6.6 Any waterlogged deposits will be sampled for pollen, plant macrofossils and insects in consultation with the specialists who will carry out the analysis.

6.7 If other remains such as molluscs are found samples will be taken and assessed by a specialist.

6.8 Sampling for examination of sediments will be considered if appropriate and a specialist consulted if necessary.

6.9 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.

6.10 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.

6.11 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 Finds and Samples

7.1 The IFA *Guidelines for Finds Work* will be adhered to.

7.2 All items of archaeological significance from the excavation will be examined and recorded to form part of the site archive to be eventually deposited with a registered museum. All identified finds and artefacts are to be retained, although certain classes of building material may, in some circumstances, be discarded after recording.

7.3 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 numbers and boxed by material in standard storage boxes (340mm x 270mm x 195mm). All metal objects will be x-rayed and then selected for conservation. All materials will be fully labelled, catalogued and stored in appropriate containers.

7.4 Advice on conservation will be provided by the accredited conservator at University of Leicester School of Archaeology and Ancient History. All remedial on-site conservation will follow UKIC guidelines.

8 Assessment

8.1 Following English Heritage guidelines (*The management of archaeological projects* 2nd edn 1991 hereinafter MAP 2) on completion of the fieldwork the archive will be updated and an assessment report prepared. This will indicate what further analysis, is required. The assessment report will include:

8.2 Interim Report

8.2.1 This will include the aims and methods used, the nature, location, extent, date, significance and quality of data recovered with appropriate illustrative material. It will include an assessment of the effectiveness of the methodologies employed.

8.3 Factual Data

8.3.1. The quantity of material and data including provenance, provisional dating, evidence for contamination and residuality and means of data collection used.

8.3.2. The range and variety of material including any possible biases resulting from collection or sampling methods.

8.3.3. An assessment of the condition of the material including preservation bias and potential for long term storage.

8.3.4. The existence of primary sources or relevant data which may enhance the study of site data.

8.4 Site Assessment

8.4.1 On completion of the fieldwork the site archive will be prepared to ensure accessibility and an interim report prepared. All records will be updated during the assessment stage and all plans sections and photographs indexed.

8.4.2 On completion of the archive an assessment report of the site's potential for further analysis will be prepared incorporating the information from the finds and environmental assessments. Contact will be maintained between the specialists during the assessment stage.

8.5 Finds Assessment

8.5.1 Any pottery recovered will be sorted by form, fabric and decoration following ULAS type series. Sequences will be established where possible in conjunction with the site information. Spot dating will be provided if diagnostic elements are present.

8.5.2 Finds assessment reports will be prepared for each category of find encountered. Consultants will be contacted where necessary.

8.5.3 An assessment of the conservation requirements for material recovered will be undertaken in consultation with the Conservator at the University of Leicester School of Archaeology and Ancient History.

8.6 Environmental Assessment

8.6.1 Sieving and sorting of the coarse residues of sediment will be completed and recorded immediately following the fieldwork phase. The fine residues (0.5-4mm) will be prioritised for sorting and the flots packed and labelled. Any additional samples will have been recorded and stored.

8.6.2 During the assessment phase the following work will be carried out:

- i) The prioritised fine residues (0.5-4mm) will be sorted.
- ii) The flots will be scanned and prioritised. selected flots will have plant remains identified to assess the range, quantity, preservation and potential of the remains. Flots with potential for further analysis will be selected for sorting during the analysis stage.
- iii) Any additional environmental materials will be assessed and considered for analysis.
- iv) Samples of charcoal and cereal grains will be selected for possible C14 dating if from appropriate deposits.
- v) Any additional samples will be assessed for further sieving.
- vi) Sediment samples will be selected for phosphate analysis, magnetic susceptibility or sediment analysis as appropriate to assist with the interpretation of the site.

8.7 Potential

8.7.1 The data and material will be critically examined in the light of their potential to answer the research aims resulting from the fieldwork including local, regional and national priorities.

8.7.2 In addition each material category report will summarise any site specific questions posed in the project design which

8.7.3 The data and material will be critically examined in the light of their potential to answer the research aims resulting from the fieldwork including local, regional and national priorities.

8.8 Potential

8.8.1 The data and material will be critically examined in the light of their potential to answer the research aims and objectives resulting from the fieldwork including local, regional and national priorities.

8.8.2 The quality of the surviving archaeology within the site will be assessed against the English Heritage monuments protection programme (MPP) and criteria for scheduling ancient monuments.

9. Report and Archive

9.1. A report on the fieldwork will be provided following analysis of the records and materials.

9.2. 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.

9.3 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) (RFG/FRG 1993) will be presented to an appropriate registered museum within six months of the completion of analysis. This archive will include all written, disk-based, drawn and photographic records relating directly to the investigations undertaken.

9.4 On the completion of fieldwork the originating organisation should complete the on-line OASIS form at <http://ads.ahds.ac.uk/project/oasis> on completion of the fieldwork.

10 Timetable and staffing

10.1. The excavation will commence with controlled topsoil removal down to the top of the archaeological deposits and can start during March 2007. The watching brief will commence at the start of the contractors groundworks

11. Health and Safety

11.1 ULAS is covered by and adheres to the University of Leicester Statement of Safety Policy and uses the ULAS Health and Safety Manual (2005) with appropriate risks assessments for all archaeological work. The relevant Health and Safety Executive guidelines will be adhered to as appropriate.

12. Insurance

12.1 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.

13. Bibliography

Clay, P., 2006 The Neolithic and early-middle Bronze Age in N. Cooper *The Archaeology of the East Midlands. A resource assessment and research agenda* University of Leicester: Leicester Monograph 13, 69-88.

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)

Willis, S., 2006 'The Late Bronze Age and Iron Age' in N. Cooper *The Archaeology of the East Midlands. A resource assessment and research agenda* University of Leicester: Leicester Monograph 13, 89-136

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05.03.2007

Draft Project Health and Safety Policy Statement

Job title: South Shirebrook Regeneration Area, Derbyshire

NGR: SK 5153 6660

Client: Taylor Woodrow Developments Ltd

Planning Authority: Bolsover District Council

Planning application Nos. 06/00225/REMAJ

1. Nature of the work

1.1 This statement is for archaeological excavation. It will be revised following the commencement of operations when the extent of risks can be assessed in full.

1.2 The work will involve overburden stripping by hymax 360 or similar during daylight hours and recording of any underlying archaeological deposits revealed. Overall depth is likely to be c. 1.0 – 1.2m. Following stripping the exposed deposits will be examined with hand tools (shovels, trowels etc) and archaeological features will be excavated. All work will adhere to the University of Leicester Health and Safety Policy and follow the guidance in the ULAS Health and safety and the Standing Committee of Archaeological Unit Managers manuals, together with the following relevant Health and Safety guidelines, including the following.

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

1.3 The Health and Safety policy on site will be reassessed during the evaluation. All work will adhere to the company's health and safety policy.

2 Risks Assessment

2.1 Working within an excavation.

Precautions. No work will be undertaken beneath section faces deeper than 1.2m. Loose spoil heaps will not be walked on. Protective footwear 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.

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 Weils 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.

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

05.03.2007



Fig 1 Proposed location of the open areas in relation to the trial trenches