THURVASTON HOUSE FARM, THURVASTON, DERBYSHIRE: AN ARCHAEOLOGICAL EVALUATION

On behalf of Mr and Mrs Hammersley

CS Archaeology
October 2011

On behalf of:	Mr and Mrs Hammersley Thurvaston House Farm Thurvaston Derbyshire DE6 5BL
National Grid Reference (NGR):	SK 24340 37989
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Frontispiece: view of the evaluation trench looking NW

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1. SUMMARY

1.1 Following the granting of Scheduled Monument Consent an archaeological evaluation was undertaken at Thurvaston House Farm, Thurvaston, Derbyshire. This work is required to inform a proposed planning application to develop the Proposed Development Area (PDA) as a new milking Parlour in response to new European legislation.

1.2 A single ditch was revealed which bisected the evaluation trench and was broadly aligned on a northwest to southeast access. Pottery from the ditch fills has been assessed and typically the date range lies between the 13th and 14th centuries.

2. INTRODUCTION

2.1 Thurvaston House Farm lies to the northeast end of Thurvaston village just south of Long Lane, a former Roman road between Derby and Rocester. Part of the farm including the area of the evaluation lies within a scheduled monument; Thurvaston's shrunken medieval village and moated site (Mon. No. 23299). The area of the evaluation is centred on National Grid Reference SK 24340 37989 (**Figures 1 & 2**).

2.2 This watching brief was undertaken on the 9th September 2011 in response to the granting of scheduled monument consent by English Heritage.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 The PDA lies within the medieval shrunken village of Thurvaston. Surviving earthworks from the village are still extant across Thurvaston House Farm, and consist of house platforms and hollow ways which lie within the scheduled monument area.

3.2 The tithe map of 1840 depicts the site as part of apportionment (plot) 79 called 'Middle Croft' which was described as an 'Old Turf Pasture' and consisted of an area of 1 acre, 25 perches. The field boundaries are depicted and show the site to be bisected by a boundary that abuts the 'L' shaped barn and cow-houses of Thurvaston House Farm.

3.3 In 1889 the field boundaries of the tithe map are depicted in the Ordnance Survey maps.

3.4 Prior to the 19th century Thurvaston was a much larger rural settlement consisting of a cluster of houses, gardens, yards, streets, paddocks, often with a green, manor house and church. Thurvaston declined in size as a result of declining economic viability or population fluctuations caused by widespread epidemics such as the Black Death.

3.5 Recent archaeological work in the area includes a watching brief carried out by CS Archaeology in 2009, which revealed a post medieval field boundary.

4. AIMS AND OBJECTIVES

4.1 The aim of the archaeological evaluation is to record and potentially sample part of the scheduled monument (the PDA) by the excavation of a single trench. The evaluation will gather sufficient information to establish the presence/absence, nature, date, quality of survival and importance of any archaeological remains. This will enable an assessment of the PDA's archaeological potential and significance.

4.2 The results of the archaeological recording will enable the impact of the proposals on the archaeological resource to be assessed, and thereby enable informed decisions to be taken regarding the impact to a scheduled monument, and the need for any design amendments and/or mitigation strategies for the management of the archaeological resource. These strategies might include physical *in situ* preservation of archaeological remains, part or full excavation and preservation 'by record'.

5. METHODOLOGY

5.1 This has been carried out in accordance with a written scheme of investigation issued by CS Archaeology (6/2011).

5.2 In addition to this specification all exposed surfaces and spoil were surveyed for metal and examined for pottery and worked stone.

5.3 The only archaeological feature encountered was linear feature [104] which was identified by the correlating distribution of fire-cracked stone. The linear feature was hand excavated in dry/hard soil conditions.

5.4 Plans and a representative section of the trenches were recorded (Figure 3). Written records of the contexts were made on *pro-forma* recording cards summarised in Appendix 2. A photographic record was made of all deposits in Black and White print using a 35mm single lens reflex camera. Colour digital images were taken in order to illustrate the report. All photographs have been included as part of the site archive (Appendix 2).

5.5 Datum levels were provided via spot heights from the OS digital site plans, and were transferred to the site by dumpy level.

5.6 Mr J Humble (English Heritage) and Mr S Baker (Derbyshire County Council) were kept fully informed of the progress of the works.

6. RESULTS

6.1 The evaluation trench was initially excavated by mechanical excavator using a toothless ditching bucket and was positioned south of the modern barn across the PDA (Plate 1, *1*).

6.2 Excavations started at the north end of the trench. This quickly revealed trench stratigraphy, which consisted of a mid brown clayey loam [100] generally 0.15m deep. The topsoil overlay a thin layer of leached silty clay [101].

6.3 The natural geology was then revealed just 0.2m below the surface. Following examination of the natural for features (Plate 2, *2*); a sondage was excavated down to a depth of 0.8m below the general ground surface (Plate 3, *8*). The sondage confirmed the depth of the natural clay [106], its deformation towards the north of the trench was probably caused by the construction of the adjacent modern agricultural building.

6.4 Removal of the overburden continued until the trench was fully excavated and cleaned (Plates 4, *5* & 5, *6*).

6.5 Examination of the up-cast/spoil heap during the excavation revealed 2 quernstone fragments (Small Find (SF) 1: **Figure 3**). Their approximate position correlated with what was later found to be a linear feature. The quernstone has been assessed by Dr J Cruse (Yorkshire Archaeological Society Quern Co-ordinator) who has confirmed the fragments are from a saddle quern. Unfortunately this type of artefact has a wide date range*, 'saddle querns are known from Early Neolithic right through into the Middle/ Late Iron Age introduction of the rotary quern, with a few saddle querns still continuing to be used for specific duties well into Roman times'* (pers. comm. Dr J Cruse).

6.6 Towards the southern end of the trench a linear band of lighter soils was highlighted since a number of heat affected rounded stones were observed and their distribution correlated with the fill of the linear feature [104]. This feature was cleaned and its edges defined and planned (**Figure 4**: Plate 6, *11*), showing a straight southern edge and a sinuous northern boundary, which continued into both baulks.

6.7 Hand excavation of the fill initially [102] revealed at least two fills; the slight characteristic ridge to the base of the cut [104] indicated that that the ditch had been re-cut [105] to the southwest edge (Plate 7, *13* & Plate 8, *14*). Both fills contained frequent heated affected stones, principally of quartzite, which were probably gathered from either the natural boulder clay [106] or washed out and collected from a stream channel. These stones were probably collected for their re-usability, probably for domestic cooking purposes. Both ditch fills [102 & 103] were relatively undisturbed and archaeologically sealed and diagnostic green glazed pottery was recovered from both contexts. The pottery was assessed and dated to the 13th/14th centuries (Appendix 3).

6.8 The southern end of the evaluation trench was also tested for stratigraphy. A dark linear stain into the eastern baulk was revealed, and was interpreted as the base of a furrow which was broadly on the same alignment as ditch [104].

6.9 Metal detecting was undertaken on all exposed foundation trench surfaces and resulting spoil. No significant artefacts were recovered from this survey.

7. CONCLUSIONS

7.1 The evaluation revealed evidence for a medieval ditch and residual traces of much earlier artefacts which probably accidentally incorporated into the re-filling of the ditch during the 14th century. Typically these assemblages date from later prehistoric – to Romano-British periods and represent settlement evidence probably in the form of cooking and processing grain.

7.2 The medieval ditch [104] is apparently on a different alignment to the post medieval field system (**Figure 5**) and may represent either a medieval field boundary or property boundary within the village.

7.3 The archaeological resource of the PDA has suffered widespread truncation due to ploughing probably during the later and post medieval periods. This factor has limited expected archaeological deposits associated with the medieval village. Anticipated features still within the PDA will be a continuation of the ditch [104] and other deep features such as potential pits.

7.4 The evaluation indicates that across the PDA the depth of stratigraphy is limited to deep features that cut through the original top and subsoil into the clay geology. Therefore the chances of finding medieval house platforms, road and pathways are very unlikely.

7.5 Other than 19th century and modern finds metal detecting across the site also failed to recover any significant artefacts.

8. MITIGATION

8.1 As the evaluation has shown archaeology across the PDA is limited. Therefore it is recommended that any future site reduction work must involve an archaeology watching brief, with the provision of recording further sections of the ditch [104] and any unknown archaeological features.

9. REFERENCES

8.1 Bibliography

CS Archaeology, 2009, *An Archaeological Watching Brief: Thurvaston House Farm, Thurvaston, Derbyshire*, unpublished client report No. 38

8.2 Cartographic References

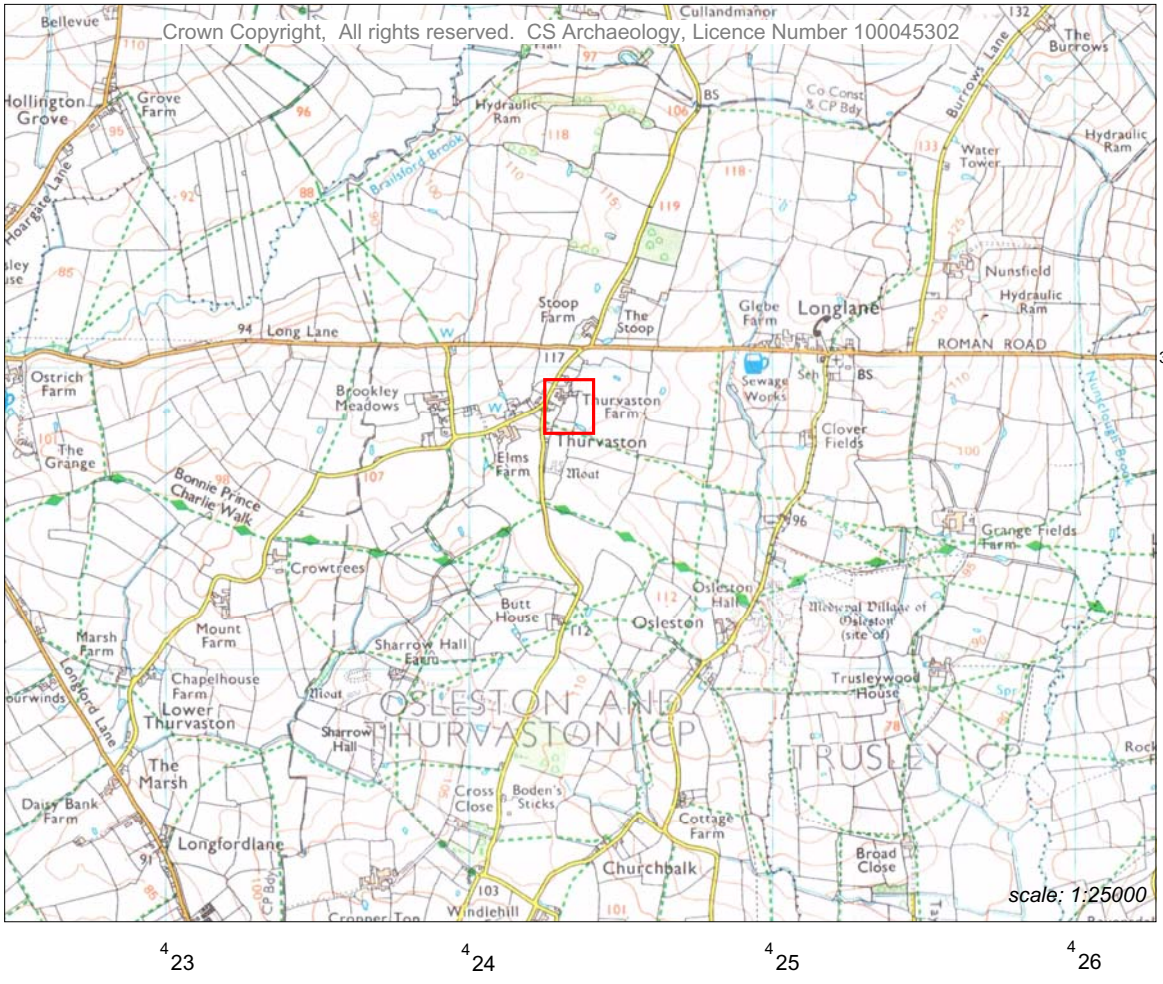
1889 6 inch Ordnance Survey map 2nd Edition (http://www.old-maps.co.uk)

1840 Transcription and apportionments of the Thurvaston Tithe Map (http://freepages.genealogy.rootsweb.ancestry.com/~laetoli/thurvastontithemap.jpg)

10. ACKNOWLEGEMENTS

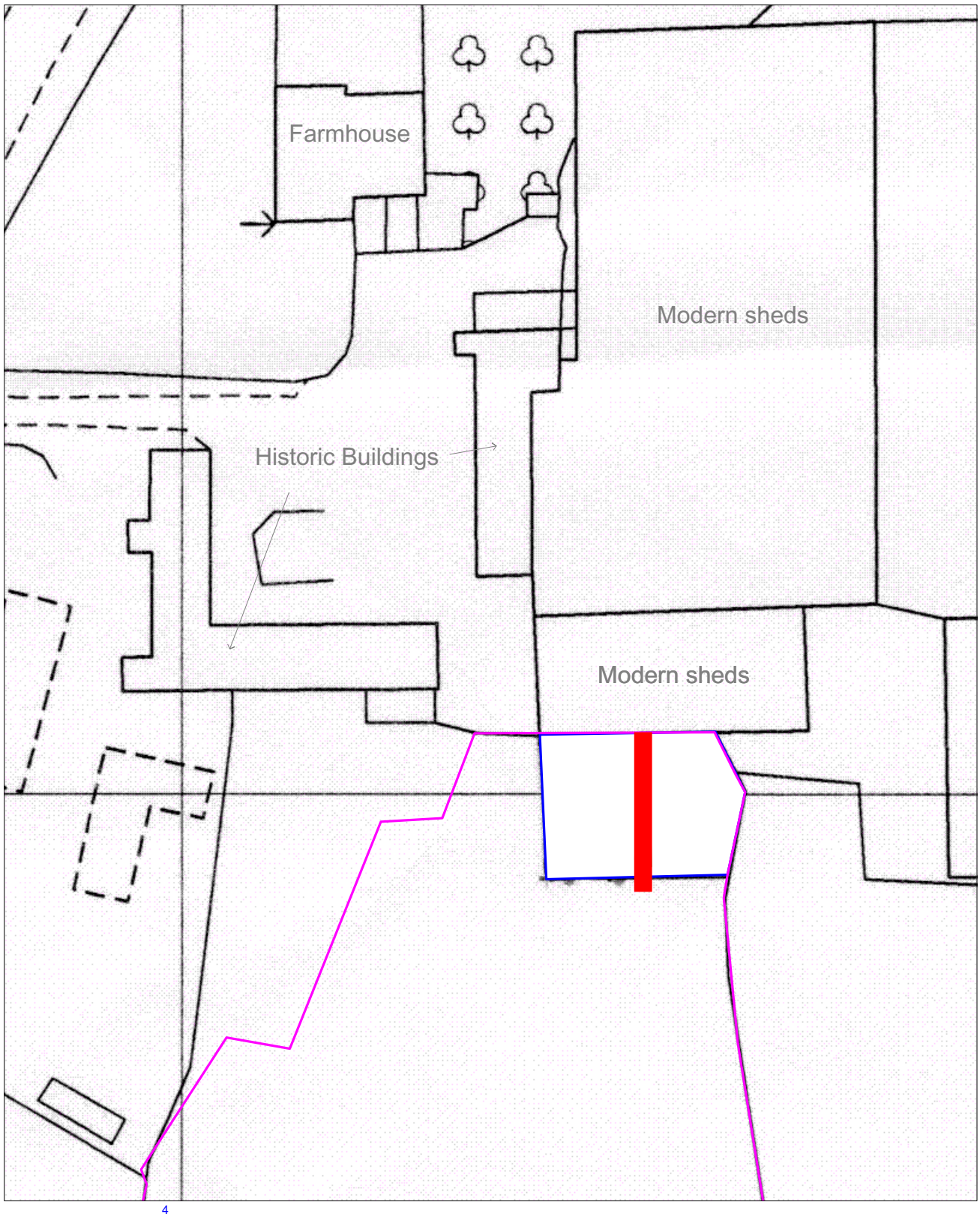
Thank you to Mr and Mrs Hammersley for commissioning this report and to Mr J Humble (English Heritage) for permitting the excavation to be undertaken within a scheduled monument.

FIGURES



for inset see Figure 2

Thurvaston House Farm: An Archaeological Evaluation	Figure 1: Site Map	CS Archaeology October 2011



key

evaluation trench (14 x 1.5m)

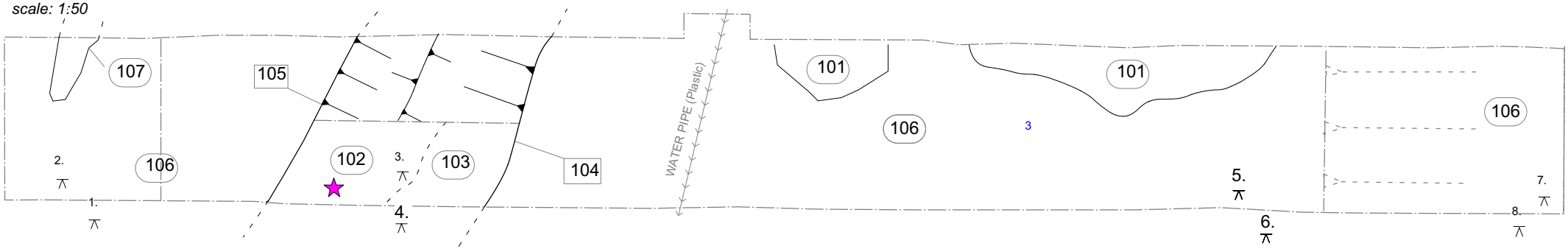
Proposed Development Area (PDA)

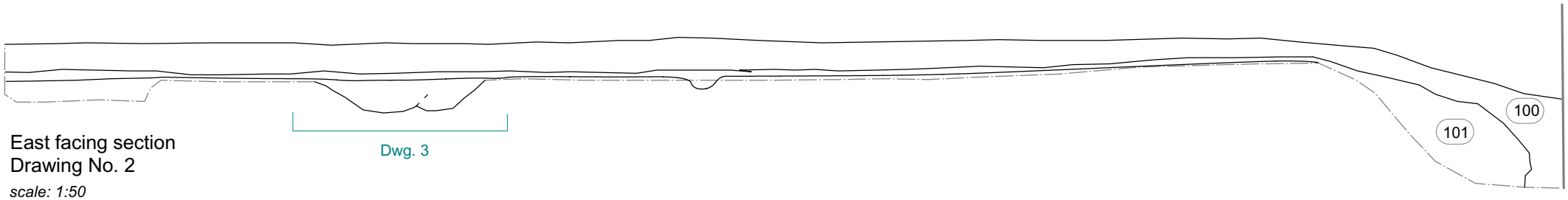
Scheduled Monument Boundary

scale: 1:500

Thurvaston House Farm: An Archaeological Evaluation	Figure 2: The PDA with the Evaluation Trench	CS Archaeology October 2011

Trench Plan
Drawing No. 1
scale: 1:50





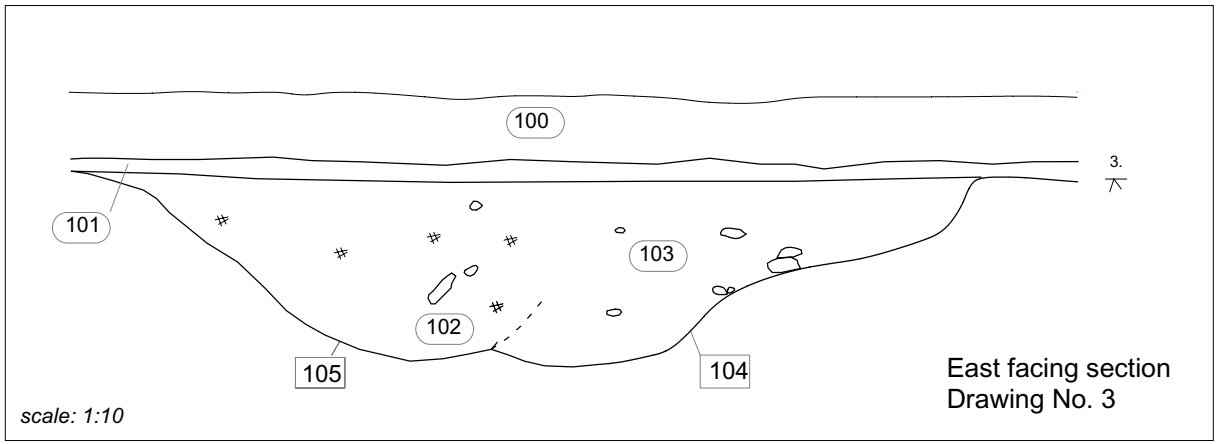
East facing section
Drawing No. 2
scale: 1:50

levels AOD (metres)

1. 116.93
2. 116.57
3. 116.63
4. 116.96
5. 116.85
6. 117.72
7. 115.71
8. 116.51

key

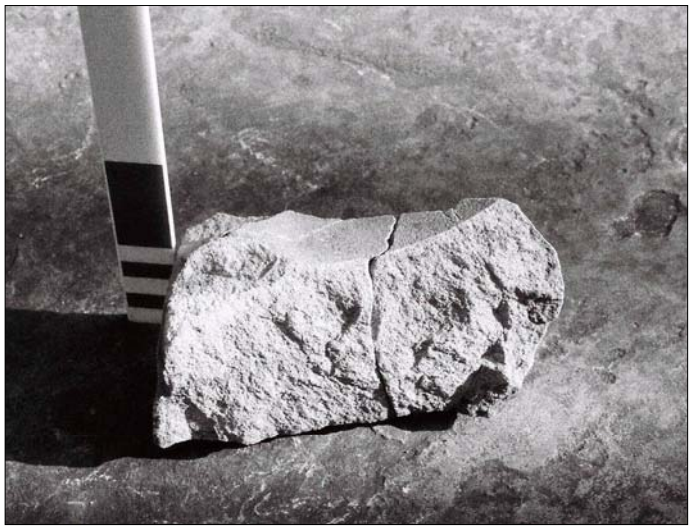
- charcoal inclusions
- limit of excavation
- modern water pipe
- context boundary
- position of SF1 within [101]



scale: 1:10

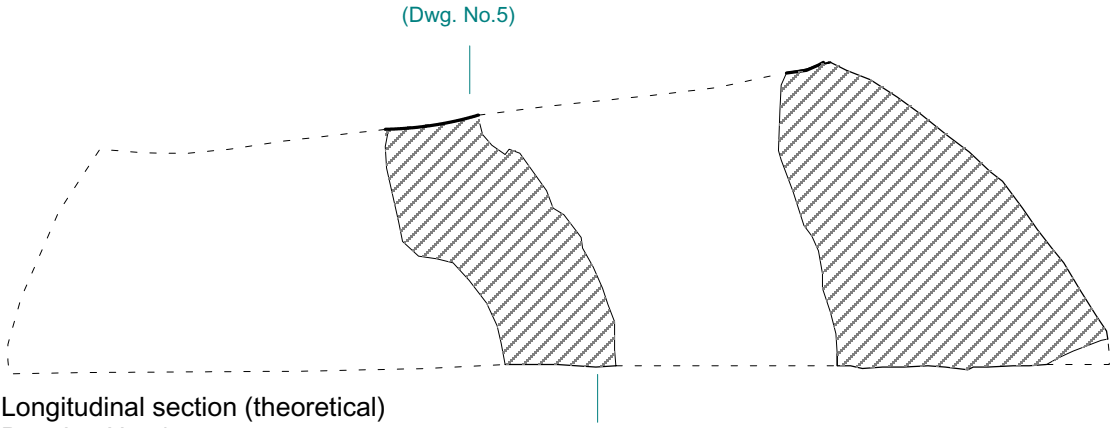
East facing section
Drawing No. 3

Thurvaston House Farm: An Archaeological Evaluation	Figure 3: Trench Plan and Sections	CS Archaeology October 2011



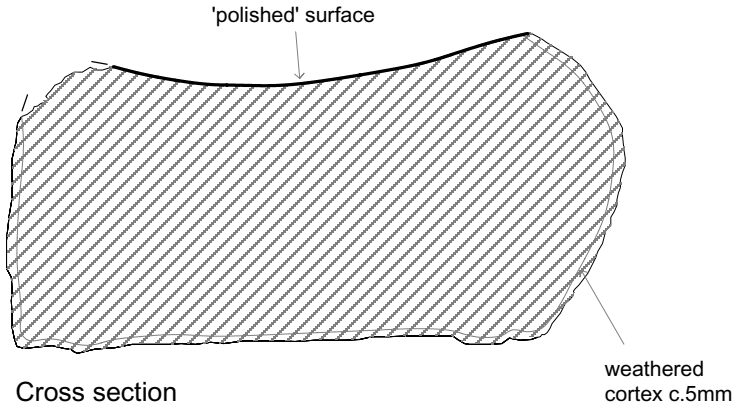
0.2m scale

0.2m scale



Longitudinal section (theoretical)
Drawing No. 4

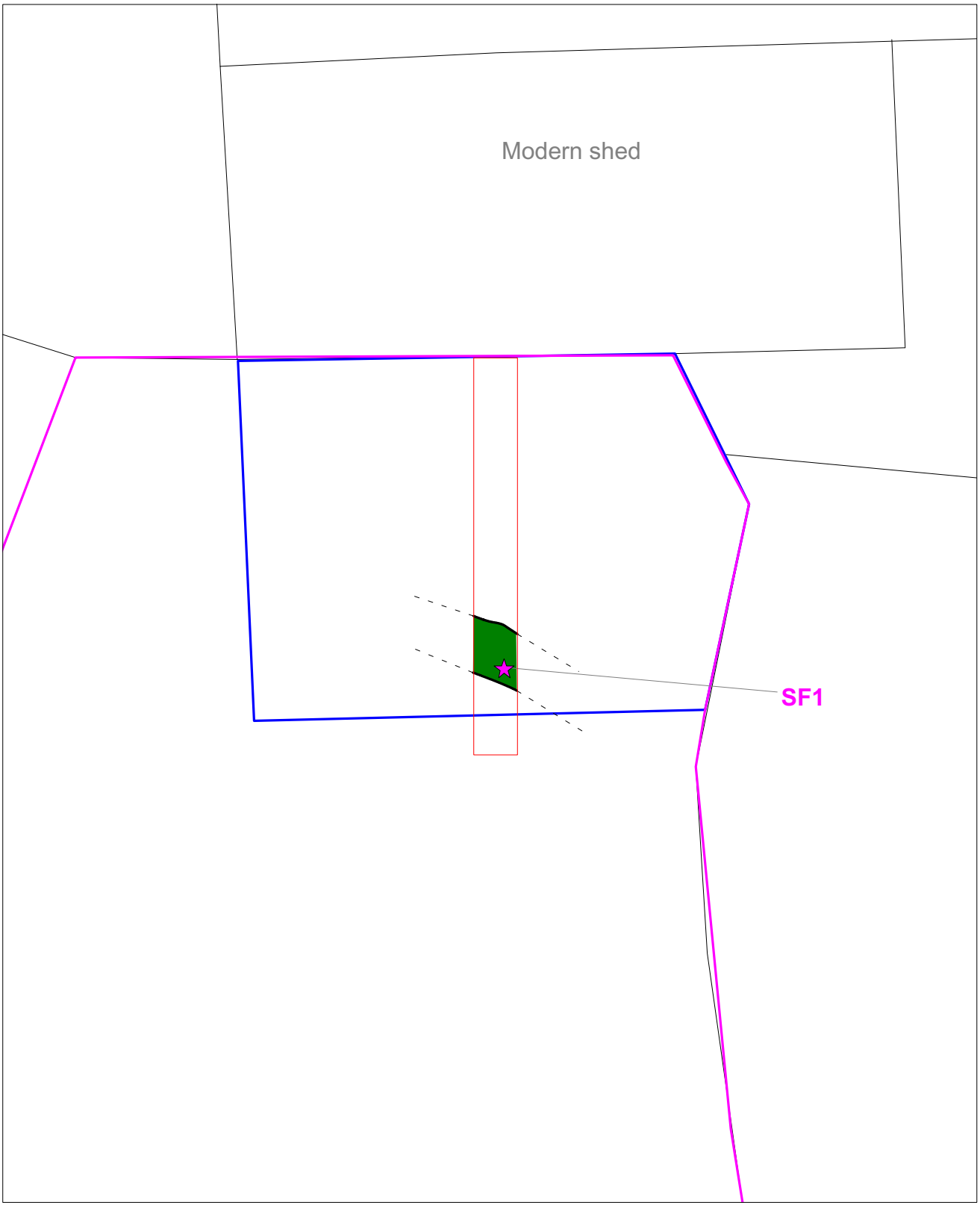
scale: 1:2



Cross section
Drawing No. 5

scale: 1:2

Thurvaston House Farm: An Archaeological Evaluation	Figure 4: The Quernstone (SF1)	CS Archaeology October 2011



key

- scheduled monument boundary
- evaluation trench (14 x 1.5m)
- proposed development area (PDA)
- medieval ditch [104] centred on SK 24341 37894

scale: 1:200

Thurvaston House Farm: An Archaeological Evaluation	Figure 5: Location Plan of Ditch [104]	CS Archaeology October 2011

APPENDICES

Appendix 1: The WSI

A WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION AT THURVASTON HOUSE FARM, DERBYSHIRE

CS Archaeology

June 2011

0 SUMMARY

0.1 This Written Scheme of investigation outlines CS Archaeology's approach to the archaeological evaluation of piece of land adjacent to an existing agricultural building. The site of the proposed building lies within the scheduled monument area of Thurvaston's shrunken medieval village and moated site.

0.2 Because the Proposed Development Area (PDA) lies within a scheduled monument, an area of national importance this pre-planning evaluation is designed to ascertain the nature, extent and condition of the PDA's archaeological resource. The in situ preservation of the archaeology will be the preferred mitigation approach.

1 INTRODUCTION

1.1 Details

1.1.1 *Site Name:* Land south of Thurvaston House Farm

1.1.2 *Location:* Thurvaston, Derbyshire

1.1.3 Status: Scheduled Monument (No. 23299)

1.1.4 NGR SK 24340 37898 (centre)

1.1.5 Area c. 0.021 hectares

1.1.6 Thurvaston House Farm lies to the northeast end of Thurvaston village just south of Long Lane a former Roman road between Derby and Rocester. Part of the farm including the area of the evaluation lies at the northern end of the scheduled monument of Thurvaston's shrunken medieval village and moated site (**Figure 1**).

1.1.7 The archaeological evaluation will record all archaeological deposits down to either the natural substrate. The archaeological record will establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the site outlined in **Figure 2**, and if suitable, samples will be collected for palaeoenvironmental/artefact/building material research.

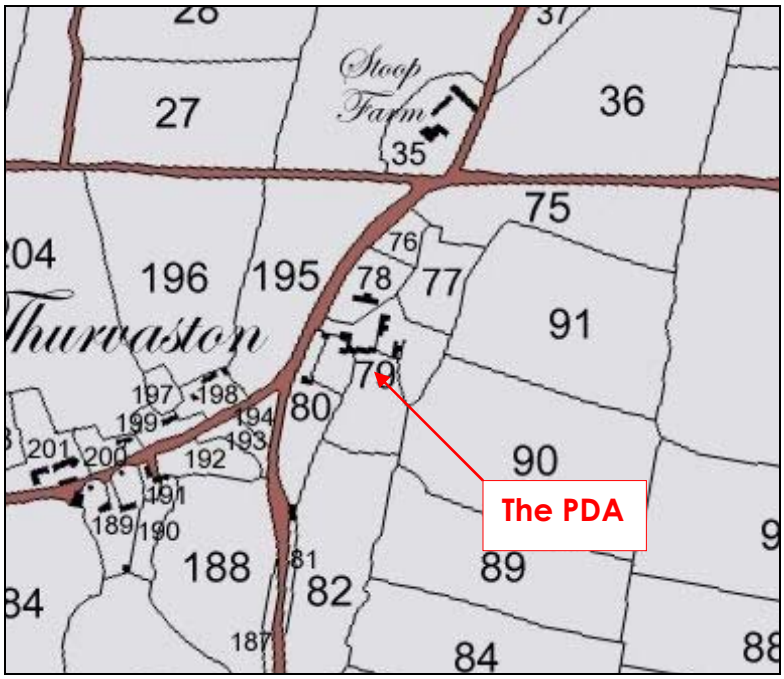
1.2 Planning Background

1.2.1 This proposed archaeological work is to inform the decision making process in together with and in advance of applications for Scheduled Monument Consent (SMC).

1.2.2 The feasibility of using existing buildings as an alternative to encroaching upon designated scheduled monument land, has been investigated. The result of this investigation has found that for the current and future viability of the farm it is uneconomic to do so, and an extension of the present building to the south is the preferred option.

1.3 Archaeological Background

1.3.1 The site lies within the medieval shrunken village of Thurvaston. Surviving earthworks from the village are still extant across Thurvaston House Farm, and consist of house platforms and hollow ways which lie within the scheduled monument area.



Extract from the Thurvaston Tithe Map of 1840

3.1.2 The tithe map of 1840 depicts the site as part of apportionment (plot) 79 called 'Middle Croft' which was described as an 'Old Turf Pasture' and consisted of an area of 1 acre, 25 perches. The field boundaries are depicted and shows the site to be bisected by boundary that abuts the 'L' shaped barn and cow-houses of Thurvaston House Farm.

3.1.3 In 1889 the field boundaries are still depicted on the Ordnance Survey map.

3.1.4 Prior to the 19th century Thurvaston was a much larger rural settlement consisting of a cluster of houses, gardens, yards, streets, paddocks, often with a green, manor house and church. Thurvaston declined in size as a result of declining economic viability or population fluctuations caused by widespread epidemics such as the Black Death.

3.1.5 The PDA was afforded statutory protection in 1994 and it considers that there it is probable that the medieval village extended north from the moated site, and can be evidenced by building platforms. It has not been confirmed but these building platforms may have extended into the area now occupied by Thurvaston House Farm (English Heritage 1994).

2 OBJECTIVES

2.1 The aim of the archaeological evaluation is to record and potentially sample part of the scheduled monument (the PDA) by the excavation of a single trench. The evaluation will gather sufficient information to establish the presence/absence, nature, date, quality of survival and importance of any archaeological remains. This will enable an assessment of the PDAs archaeological potential and significance.

2.2 The results of the archaeological recording will enable the impact of the proposals on the archaeological resource to be assessed, and thereby enable informed decisions to be taken regarding the impact to a scheduled monument, and the need for any design amendments and/or mitigation strategies for the management of the archaeological resource. These strategies might include physical *in situ* preservation of archaeological remains, part or full excavation and preservation 'by record'.

3 METHODOLOGY

3.1 Evaluation

3.1.1 An evaluation will consist of a single evaluation trench running centrally positioned on a north-south alignment across the PDA. The proposed extension measures approximately 210m², and lies on the south of the existing agricultural building (**Figures 1 and 2**).

3.1.2 Trench 1 (**Figure 2**) will measure 14 x 1.5m. The aim of this trench is to determine the extent, nature and quality of survival of deposits which are likely to be affected by the proposed extension. It will also gauge the extent of possible disturbance, to the archaeology, caused during construction of the existing agricultural building. A contingency will be made for the possibility that the trench may need to be extended in order to clarify findings within the area affected by the proposed extension.

3.1.3 The excavation will initially be undertaken with a machine to clear the upper surface/overburden. This will be carried extremely judiciously and under constant archaeological supervision by a mechanical excavator, using a toothless ditching bucket. Once a section has proved to contain no archaeological features the excavator will continue down in a methodological manner. Each section/spit will be cleaned and recorded by hand if necessary. Any archaeological features will be half sectioned and hand excavated.

3.1.4 There will be a 20% excavation contingency, (a 4-5m trench) if it is felt that further archaeological clarification be required and will be agreed in advance with English Heritage.

3.1.5 A sufficient sample of any archaeological features and deposits revealed will be excavated in an archaeologically controlled and stratigraphic manner, in order to fulfil the aims of the evaluation (see section 2 above). The site monitors will be consulted on the treatment of significant features that may merit full preservation *in situ*. The complete excavation of features is not regarded as necessary; a sufficient sample will be investigated to understand the full stratigraphic sequence in each trench, down to naturally occurring deposits. The sampling policy is as follows:

a) A 100% sample will be taken of all stake-holes.
b) A 50% sample will be taken of all post-holes, and of pits with a diameter of up to 1.5m.
c) A minimum 25% sample will be taken of pits with a diameter of over 1.5m; but this will include a complete section across the pit to recover its full profile.
d) A minimum 20% sample will be taken of all linear features, up to 5m in length; for features greater than this, a 10% sample would suffice.

3.1.6 In certain cases, the use of mechanical excavation equipment may be appropriate (e.g. for removing deep intrusions such as modern brick and concrete floors or footings), or for putting sections through major features after partial excavation (e.g. ditches), or through deposits to check that they are of natural origin.

3.1.7 A full written, drawn and photographic record will be made of **all material** revealed during the course of the trial excavation. All archaeological features and

deposits, and all sections, will be drawn and fully recorded for archival purposes. Plans will be completed at a scale of 1:50 or 1:20 (as appropriate), whilst section drawings will be at a scale of 1:10. A minimum 35mm format for photography is required (in monochrome and colour).

3.1.8 Where industrial activity is detected, material will be retained from each spatially and chronologically distinct deposit to ensure that any chronological or spatial changes in the use of the site can be investigated. A specialist will be consulted to advise on the specifics, but a rapid visual examination will be sufficient to determine how many types of material are present in a particular deposit (black slag, green slag, magnetic lumps, etc, for example), and specimens of each will be retained. The amount retained will be sufficient for any analysis required and will include examples that show distinctive features, such as details and marks, dimensions, fabrics and forms. Frequently the most informative examples show how different categories of waste were associated in the process (a ceramic fragment with adhering black and green slag, for example). It is not generally necessary to retain all the industrial residues from a deposit, and specialist advice will be sought. Where doubt exists, and only small quantities are present, all the material will be kept; where large quantities are present (more than one tonne), a proportion will be kept and the amount discarded recorded. Refer to section 3.7 of the 'Science for Historic Industries' (English Heritage, 2006) guidelines.

3.1.9 Where industrial activity is detected, samples will be collected (in conjunction with hand-retrieved material, see 3.1.7 above). Separate samples (0.2 litres in volume) will be collected for micro-slags (hammer-scale and spherical droplets). When working areas are identified multiple samples will be taken at regular 0.2-0.5m intervals (e.g. a grid pattern to look at spatial distributions). Refer to page 6 of the 'Metallurgy' (English Heritage, 2001) guidelines.

3.1.10 Deposits will be sampled for retrieval and assessment of the preservation conditions and potential for analysis of all biological remains. A strategy for the recovery and sampling of environmental remains from the site will be agreed with an environmental consultancy, in advance of the project (Appendix 1). The sampling strategy will include a reasoned justification for selection of deposits for sampling, and has been developed in collaboration with a recognised bio-archaeologist. This WSI and sampling strategy has been submitted to English Heritage Regional Science Advisor, Dr Jim Williams at the Northampton Office (email: jim.williams@english-heritage.org.uk), prior to commencement of site works. Opportunity will be afforded for an environmental specialist to visit the site during the evaluation and to discuss the strategy. In keeping with the EH guidelines, all securely stratified deposits considered suitable for environmental analysis (i.e. those not consisting of building debris, rubble mortar etc.) will be sampled (50-60 litres in volume, where deposits allow) in order that their potential can be fully assessed, and a suitable sampling strategy can be formulated in case of further mitigation. Refer to the '*Environmental Archaeology*' (English Heritage, 2002) guidelines.

3.1.11 Other samples will be taken, as appropriate, in consultation with specialists and the English Heritage Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies.

3.1.12 Lifting of human skeletal remains will be kept to the minimum which is compatible with an adequate evaluation. At sites known in advance to be cemeteries, provision will be made for site-inspection by a recognised specialist. Excavators will be aware of, and comply with, provisions of Section 25 of the Burial Act of 1857, and pay due attention to requirements of Health and Safety.

3.1.13 A finds recovery and conservation strategy will be discussed with the County Archaeologist and the recipient museum in advance of the project commencing, and a policy for finds recording will be agreed and submitted to the County Archaeologist, before commencement of site works (see *Selection, Retention and Dispersal of Archaeological Collections, Guidelines for use in England, Northern Ireland, Scotland and Wales*: Society of Museum Archaeologists 1993). Any recording, marking and storage materials will be of archive quality, and recording systems will be compatible with the recipient museum (see 9 below). Copies of all recording forms and manuals will be submitted to the County Archaeologist, prior to the commencement of site works, if these have not been supplied previously. Allowance will be made for preliminary conservation and stabilisation of all objects and an assessment of long-term conservation and storage needs. Contractors will make an allowance for a minimum of four boxes in calculating estimates for museum's storage grant.

3.1.14 All finds (artefacts and ecofacts) visible during excavation will be collected, processed and assessed (by a suitably qualified and experienced specialist), unless variations in this principle are agreed with English Heritage and the South Yorkshire Archaeology Service. Finds will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication *First Aid for Finds*. In accordance with the procedures outlined in MAP2, all iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy will be X-radiographed before assessment. On large post-medieval or other metalworking sites, or sites yielding structural metalwork, there may be a need to vary this strategy, and the need and use of X-radiography will be established by the specialist in conjunction with the project monitors.

3.1.15 The following categories of artefacts may be predicted: pottery, ferrous and non-ferrous metalwork, glass, ceramic building materials, worked bone, flint and/or worked stone.

3.1.16 Metalworking finds and metalworking residues will normally be washed, but some materials, however, are delicate and may be damaged; any cleaning procedures will be agreed with the metalworking specialist and / or conservator. Materials that will not be washed (except by, or under the supervision of, the metalworking specialist include crucibles, moulds, hearth and furnace linings. Refer to page 6 of the 'Metallurgy' (English Heritage, 2001) guidelines.

3.1.17 CS Archaeology has direct experience of carrying out work in south Yorkshire and has used specialist subcontractors such as Dr Chris Cumberpatch (Sheffield) and Dr J Wheeler (Aberford, W Yorks) to clarify and augment the archaeological interpretation and archive. CS Archaeology will also ensure that local museum's are visited to update artefact recognition particularly from the medieval and post-medieval periods within the region. CS Archaeology will ensure that the pottery report, if require, will use the fabric classifications which have been published in the reports for other recently published medieval and post-medieval sites from the county, for the

sake of consistency: access to the fabric series will be freely granted to pottery researchers.

3.1.18 This WSI will be agreed with the regional Inspector of Ancient Monuments and the County Archaeologist at the outset of the project.

3.1.19 CS Archaeology will make provision for the use of shoring, pumps, or artificial lighting. Such strategies will also allow for sampling for radiocarbon, archaeomagnetic and/or dendrochronological determinations, as appropriate: where *in situ* timbers are found to survive in good condition, samples will be taken for dendrochronological assay.

3.1.20 Should CS Archaeology or the client wish to vary the survey strategy, if, for example, a part or the whole of the site is not amenable to evaluation as outlined above, or trench positions conflict with development proposals; or an alternative evaluation technique may be more appropriate or likely to produce more informative results, a proposal for amended/additional work will be drafted by CS Archaeology, and discussed urgently with the English Heritage Regional Inspector of Ancient Monuments and the County Archaeologist.

4 REPORT PREPARATION, CONTENTS AND DISTRIBUTION

4.1 Upon completion of the evaluation, the artefacts, soil samples and stratigraphic information shall be assessed as to their potential and significance for further analysis.

4.2 A report will be prepared which will provide the results of the fieldwork and assessment and will place the results in a contextual and historical framework. The project report will be produced in accordance with English Heritage guidelines as outlined in MoRPHE (2006), and IFA guidance for evaluations (2008). It will synthesise all elements of the evaluation work.

The report will include the following:

a) A non-technical summary of the results of the work, introduction and aims and objectives.

b) An introduction which will include

- the site code/project number;
- planning reference number;
- dates when the fieldwork took place;
- grid reference;
- author of report and report date.

c) An account of the methods employed during the project, and any constraints.

d) An account of the results of the fieldwork, describing both structural data and associated finds and/or environmental data recovered, and with a quantification of artefacts, ecofacts, contexts and other primary records and registers.

e) Interpretation, including phasing of the site sequence and spot dating of artefactual and environmental material recovered (including type series & fabric codes for local pottery groups, as appropriate). Descriptive material will be clearly separated from interpretative statements. This shall be supported by the use of **photographs and drawings**, to include an overall plan of the site accurately identifying the location of trenches, related to fixed points shown on current OS data, geo-referenced to National Grid; individual trench plans as excavated indicating the location of archaeological features with at least one section detailing the stratigraphic sequence of deposits within each trench; illustration of significant archaeological features with appropriately scaled plans and sections, with heights relative to Ordnance Datum.

f) A specialist assessment of the artefacts recovered with a view to their potential for further study. Allowance will be made for preliminary conservation and stabilization of all objects and an assessment of long-term conservation and storage needs. Assessment of artefacts will normally include inspection of X-radiographs of all iron objects, a selection of non-ferrous artefacts (including coins), and a sample of any industrial debris relating to metallurgy. However, on large post-medieval or other metalworking sites, or sites yielding structural metalwork this may not always be appropriate, and the need and use of X-radiography will be established by the specialist. . A rapid scan of all excavated material will be undertaken by conservators and finds researchers in collaboration. Material considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration will be given to possible investigative procedures (e.g. glass composition studies, residues in or on pottery, and mineral-preserved organic material). Once assessed, all material will be packed and stored in optimum conditions, as described in *First Aid for Finds*. Waterlogged organic materials will be dealt with, following the English Heritage documents, *Guidelines for the care of waterlogged*

archaeological leather, and *Guidelines on the recording, sampling, conservation and curation of waterlogged wood*.

g) A specialist assessment of environmental samples taken, with a view to their potential for subsequent study. Processing of all samples collected for biological assessment, (or sub-samples of them, in the case of heavy clay for instance) will be completed. Bulk and site-riddled samples from dry deposits will have been processed during the excavation, where possible. The preservation state, density and significance of material retrieved will be assessed, following methods presented in *Environmental Archaeology: a Guide to the theory and practice of methods from sampling and recovery to post-excavation*. Unprocessed sub-samples will be stored in conditions specified by the appropriate specialists. Assessments for any technological residues will be undertaken. Samples for dating will be submitted to laboratories promptly, so as to ensure that results are available to aid development of specifications for subsequent mitigation strategies.

h) The results from investigations in Archaeological Sciences **will** be included in the Site Archive and presented in the report. The report will include sufficient detail to permit assessment of potential for analysis. If pertinent it will include tabulation of data in relation to site phasing and contexts, and will include non-technical summaries. The objective presentation of data will be clearly separated from interpretation. Recommendations for further investigations (both on samples already collected, and at future excavations) will be clearly separated from the results and interpretation, and will be incorporated into the Specifications/Project Design for any future intervention or mitigation strategy.

i) An assessment of the archaeological significance of the deposits identified, in relation to other sites in the region.

j) A conclusion with recommendations for further post-excavation work, if required.

k) Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive.

l) Appendices and figures, as appropriate, including a copy of this Written Scheme of Investigation.

m) References and bibliography of all sources used.

4.3 Copies of the report will be submitted to Mr and Mrs Hammersley, Mr J Humble (English Heritage) and Mr S Baker (Derbyshire County Council), within an agreed timetable and subject to any contractual requirements on confidentiality. The usual period for a written, illustrated report is within 3 months (or longer period by mutual agreement) following completion of fieldwork.

4.4 A brief, interim report will be prepared during or shortly after the completion of fieldwork, to assist in making decisions on development proposals.

4.5 As well as a printed copy of the report, an electronic copy of the report will also be supplied in PDF and word formats to Mr S Baker and Mr J Humble. This will allow a text summary to be incorporated by the Historic Environment Record (HER) into any review or synthetic documents.

4.6 An on-line OASIS form will also be completed at http://ads.ahds.ac.uk/project/oasis/, for inclusion in the ADS database.

5 COPYRIGHT, CONFIDENTIALITY AND PUBLICITY

5.1 Unless the individual/organisation commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic records and reports rests with CS Archaeology. Agreements on copyright will be agreed with the commissioning body at the outset of the project.

5.2 The circumstances under which the report or records can be used by other parties will be identified at the commencement of the project, as will the proposals for distribution of the report (see 4 above). All archaeologists undertaking work will respect the commissioning body's requirements over confidentiality, but the archaeologist will endeavour to emphasise their professional obligation to make the results of archaeological work available to the wider archaeological community within a reasonable time.

5.3 The archaeologist undertaking the evaluation has a duty of confidence to the client commissioning the work. All aspects of publicity will be agreed at the outset of the project between the commissioning body and the archaeological organisation or individual undertaking the project.

6 ARCHIVE PREPARATION & DEPOSITION

6.1 The requirements for archive preparation and deposition will be addressed and undertaken in a manner agreed with the recipient museum. The recipient museum **will** be contacted at an early stage, before submission of the project design and before commencement of fieldwork.

6.2 A site archive will be prepared in accordance with English Heritage MoRPHE guidelines (English Heritage 2006). See also *Towards an Accessible Archaeological Archive, the Transfer of Archaeological Archives to Museums: Guidelines for use in England, Northern Ireland, Scotland and Wales* Society of Museum Archaeologists 1995.

6.3 The site archive, including finds and environmental material, subject to the permission of the relevant landowners, will be labelled, conserved and stored according to the United Kingdom Institute for Conservation (UKIC)'s *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (Walker 1990) and the Museums and Galleries Commission's *Standards in the Museum Care of Archaeological Collections*, 1992.

6.4 Arrangements will be made as soon as Scheduled Monument Consent has been granted for the full and final archive to be deposited in Derby Museum and Art Gallery in accordance with their deposition and archiving standards. If, after the evaluation, no further archaeological work is initiated, the archive will be deposited. An agreed allowance will be made for a contribution to the recipient museum towards the curation and storage of material.

6.5 If further archaeological evaluation be initiated and additional archaeological work undertaken, the evaluation archive will be prepared accordingly for incorporation into the final archive.

6.6 Archive deposition will be arranged in consultation with the Derby City Museum and the EH/DCC, and will take account of the museum's requirements and the relevant guidelines (see above) relating to the preparation and transfer of archives. The timetable for deposition shall be agreed on completion of the site archive and narrative.

7 POST EXCAVATION ANALYSIS, PUBLICATION & DISSEMINATION

7.1 The information contained within the assessment report will enable decisions to be taken regarding the future treatment of the archaeology of the site and any material recovered during the recording brief.

7.2 If further archaeological investigations take place, any further analyses (as recommended by the specialists, and following agreement with the curator) will be incorporated into the post-excavation stage of the archaeological programme.

7.3 If further site works do not take place, it will be appreciated that assessment may produce results of sufficient significance to merit publication in their own right, and allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.

7.4 Should further archaeological excavation be undertaken, a synopsis of the results of the assessment will be prepared for publication with the final results of any further fieldwork.

8 MONITORING, HEALTH AND SAFETY, STAFFING & INSURANCE

8.1 The archaeological work will be monitored under the auspices of the EH/DCC.

8.2 During the course of the fieldwork the Development Control Archaeologist may undertake monitoring visits. Two week's prior notice of the commencement of fieldwork should therefore be given, including the name and contact number of the archaeologist on site.

8.3 Should significant archaeological deposits be encountered the archaeological contractor will contact English Heritage (Mr J Humble) and/or Derbyshire's Development Control Archaeologist (Mr S Baker) and arrange a convenient date and time for a site visit.

8.4 All CSCS staff and subcontracting archaeologists are CSCS accredited, details available on request.

8.5 CS Archaeology will ensure that arrangements are made for monitoring visits and meetings before, during and after the archaeological site work, as appropriate.

8.6 CS Archaeology will report any significant or unexpected discoveries immediately to the project monitors and the client/agent.

8.7 Health and safety will take priority over archaeological matters. All archaeologists undertaking fieldwork will comply with all Health and Safety Legislation; this includes the preparation of a Risk Assessment.

8.8 Necessary precautions will be taken over underground services and overhead lines.

8.9 CS Archaeology will ensure that they, or any proposed sub-contractors, are appropriately qualified to undertake such projects.

8.10 CS Archaeology has ensured that they are adequately insured, to cover all eventualities, including risks to third parties.

9. BIBLIOGRAPHY

English Heritage. 2001. *Archaeometalurgy.*

English Heritage. 2002. *Environmental Archaeology: a Guide to the theory and practice of methods from sampling and recovery to post-excavation*.

English Heritage 1994. Monument descriptions (magic.gov website).

English Heritage. 2006. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.*

English Heritage. 2006. *Science for Historic Industries: Guidelines for the Investigation of 17th to 19th century Industries*.

English Heritage. 2007. *Understanding the Archaeology of Landscape – a guide to good recording practice.*

English Heritage. 2008. *Geophysical Survey in Archaeological Evaluation.*

English Heritage. 2008. *Investigative Conservation.*

English Heritage. 2008. *Guidelines for the curation of waterlogged macroscopic plant and invertebrate remains.* ICOSSE. 2005. *Sheffield Manor Lodge: Conservation Management Plan Vol. 2, Archaeological Desk Study*. Unpublished ICOSSE report.

Institute for Archaeologists. 1993. Technical paper No.13 by McKinley, J. I., and C. Roberts. *Excavation and post-excavation treatment of cremated and inhumed human remains*. Institute for Archaeologists. 2007. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation,* by D.H. Brown.

Institute for Archaeologists. 2008. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.*

Institute for Archaeologists. 2008. *Standard and Guidance for Archaeological Field Evaluation*

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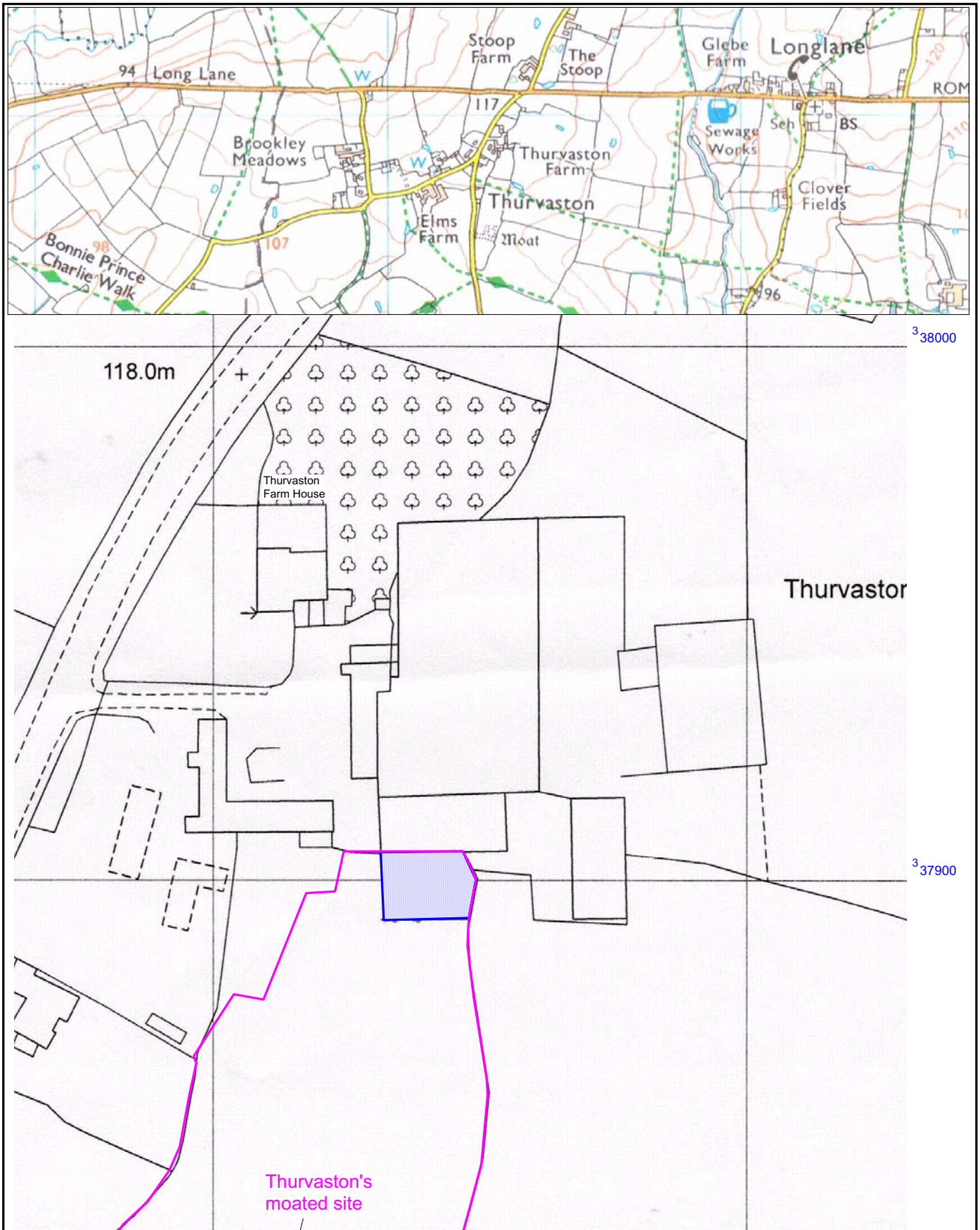
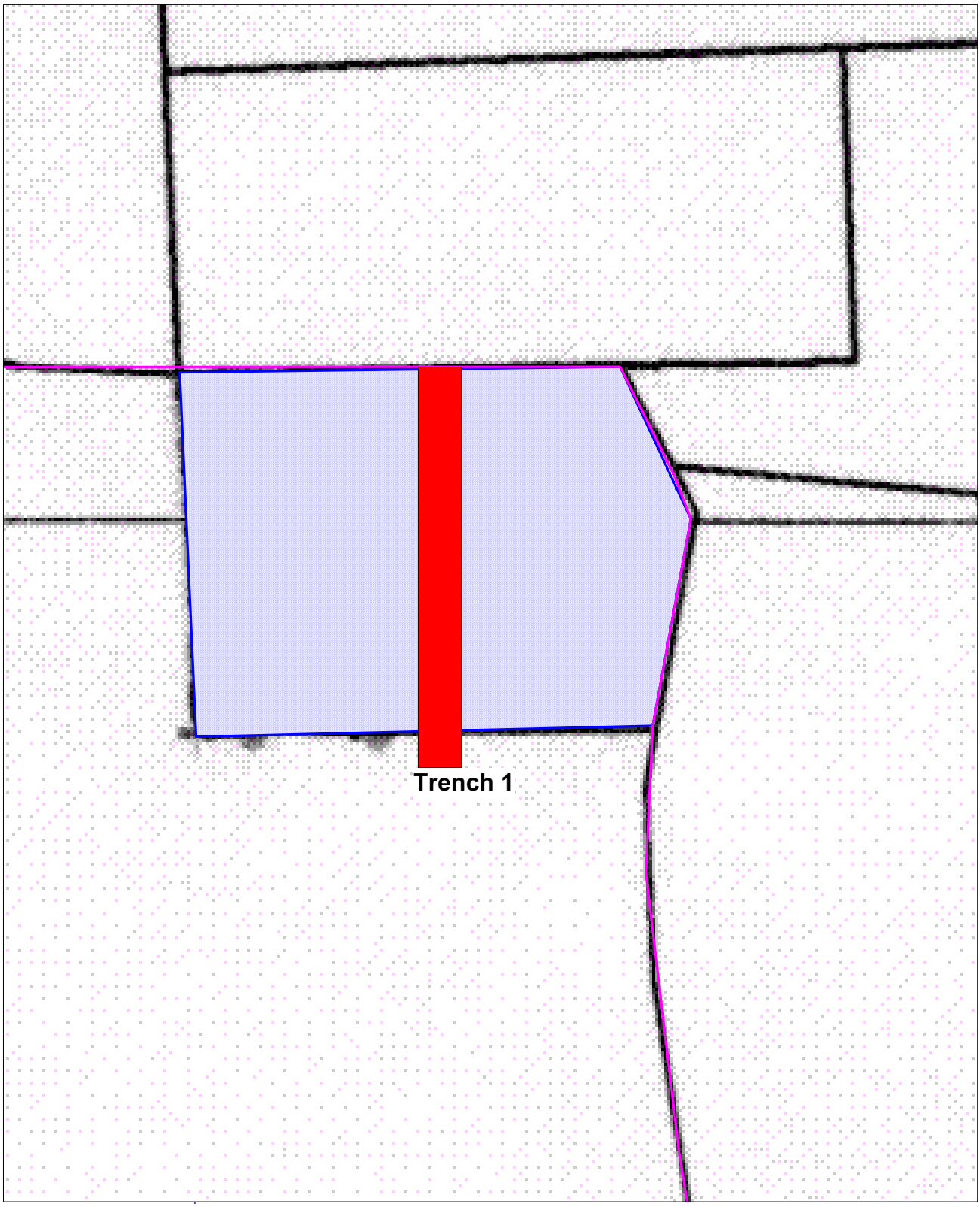
FIGURES



Thurvaston House Farm: An Archaeological Evaluation	Figure 1: Site Map	CS Archaeology June 2011



key

proposed evaluation trench (14 x 1.5m)

proposed agricultural building

Scheduled Monument Boundary

scale: 1:200

Thurvaston House Farm: An Archaeological Evaluation	Figure 2: Trench Location Plan	CS Archaeology June 2011

Appendix 1

SAMPLING STRATEGY
FOR AN ARCHAEOLOGICAL EVALUATION AT:
THURVASTON HOUSE FARM

CS ARCHAEOLOGY
June 2011

1. EVALUATION

1.1 For palaeoenvironmental research different sampling strategies will be employed according to established research targets and the perceived importance of the strata under investigation. CS Archaeology conventionally recovers three main categories of sample;

i) Standard Bulk Samples; a representative 40-60 litre sample from every excavated soil context on site, in accordance with English Heritage Guidelines (2002). This sample is used, through floatation sieving, to recover a sub-sample of charred macroplant material, faunal remains and artefacts;

ii) Purposive or Special Samples; a sample from a sediment which is determined, in field, to either have the potential for dating (wood charcoal for radiocarbon dating or in situ hearths for magnetic susceptibility dating) or for the recovery of enhanced palaeo-environmental information (waterlogged sediments, peat columns, etc).

1.2 Samples will be taken for scientific dating, principally radiocarbon (C14) and archaeomagnetic dating, where dating of artefacts is insecure and where dating is a significant issue for the development of subsequent mitigation strategies.

1.3 Environmental samples will be collected from primary and secondary contexts, where applicable, from a range of representative features, including pit and ditch fills, postholes, floor deposits, ring gullies and other negative features. Positive features should also be sampled. Sampling will also be considered for those features where dating by other methods (e.g. pottery and artefacts) in uncertain. Animal bones will be hand collected, and from bulk samples collected from contexts containing a high density of bones.

1.4 Standard Bulk Samples of 50-60 litres or more will be recovered from every archaeologically significant soil context as part of a comprehensive environmental sampling strategy.

1.5 Within each significant archaeological horizon a minimum number of features required to meet the aims of the project will be hand excavated. Pits and postholes normally will be sampled by half-sectioning although some features may require complete excavation. Linear features will be sectioned as appropriate. No deposits will be entirely removed unless this is unavoidable. As the objective is to define remains it will not necessarily be the intention to fully excavated all trenches to natural stratigraphy. However, the full depth of archaeological deposits across the entire site will be assessed. Even in the case where no remains have been located the stratigraphy of all evaluation trenches will be recorded.

1.6 Any excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation in situ.

REFERENCES

Bayley J, Dungworth D 2001 and Paynter S	Archaeometalurgy, Centre for Archaeology Guidelines, English Heritage
English Heritage 1991	Management of Archaeological Projects (MAP2)
English Heritage 2002	Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation [2002/01]
IfA 2001	Standard and Guidance for Archaeological Field Evaluations
Watkinson and D & Neal V. 1998	*First Aid for Finds* (3rd edition), Rescue/UKIC Archaeology Section of the United Kingdom Institute for Conservation.

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APPENDIX 2: **Context Register**

Context No.	Description
100	*Deposit:* clayey loam, containing 19th/20th century transfer decorated pottery and associated iron, finds not retained. Lies above [101]
101	*Deposit:* Light grey (very dry) silty clay with frequent charcoal and 3% rounded gravel (up to 0.004m diam.) and heat affected stone (up to 0.25m diam.). Lies below [100] and above [106, 102 & 103]
102	*Deposit:* light brown silty clay with frequent charcoal. 4% rounded and angular stone of which 50% are heat affected stone (1.2kg combined weight with [103]) *Artefacts:* medieval pottery, heat affected stone and charcoal
103	*Deposit:* light brown silty clay4% rounded and angular stone of which 50% are heat affected stone (1.2kg combined weight with [102]) *Artefacts:* medieval pottery, heat affected stone and charcoal
104	*Cut:* sinuous in plan along the NE edge. Concave sides and a rounded base. Overlies [106], underlies [105] & [102]. *Interpretation:* re-cut of ditch [104]
105	*Cut:* straight in plan along the SW edge. Concave sides and a rounded base. Overlies [106] & [104] & [103]. *Interpretation:* re-cut of ditch [104]
106	Reddish brown clay representing the site's natural drift geology – glacial boulder clay.
107	*Deposit:* brown silty clay with charcoal *Interpretation:* plough furrow

NB The archive is to be offered for deposition with Derby City Museum and Art Gallery

Photographic Register 1: black and white print (Ilford Delta 400 Professional)

Film/frame No.	Position No.	Description	From
1/36	1	Pre-excavation view of the evaluation area	SSW
1/35	2	View of the northern end of the trench pre- to excavation of sondage	S
1/34	3	Working view of the machine and evaluation trench	SW
1/33	4	Working view of evaluation trench	SW
1/32	5	Post-excavation view of the trench	S
1/31	6	Oblique, Post-excavation view of the east facing section	SE
1/30	7	Post-excavation view of the trench	N
1/29	8	Post-excavation view of the east facing section of the northern sondage	E
1/28	9	Post-excavation view of the northern end of the evaluation trench	S
1/27	10	Oblique, post-excavation view of the northern end of the evaluation trench	SE
1/26	11	View of the linear feature [104]	E
1/25 & 24	12	View of the linear feature [104]	S
1/23 & 22	13	Post-excavation view of ditch [104] and it's east facing section	E

Film/frame No.	Position No.	Description	From
1/21	14	Post-excavation view of ditch [104] and it's east facing section	S
1/20 & 19	15	View of the saddle quern (SF1)	-
1/18 & 17	16	View of the saddle quern (SF1)	-
1/17	17	Cross sectional view of the saddle quern (SF1)	-

Photographic Register 2: digital images @12 Mega-pixels

Position No.	Description	From
1	Pre-excavation view of the evaluation area	SSW
2	View of the northern end of the trench pre- to excavation of sondage	S
3	Working view of the machine and evaluation trench	SW
4	Working view of evaluation trench	SW
5	Post-excavation view of the trench	S
6	Oblique, Post-excavation view of the east facing section	SE
15	View of the saddle quern (SF1)	-
16	View of the saddle quern (SF1)	-
17	Cross sectional view of the saddle quern (SF1)	-
18	Record view of the artefacts from context [102]	-
19	Record view of the artefacts from context [103]	-
20	Record view of the fire-cracked stone from context [102]	-

Drawing Register

No.	Dwg.	Trench	Description
1	Plan 1	1	The evaluation trench with sondage either end @ scale 1:50
2	Section 1	2	East facing section of evaluation trench @ 1:50
3	Section 2	2	East facing section of ditch [104] @ 1:10

Small Find Register

No.	NGR	Context	Description
1	SK 424340 37894	unstratified	Three fragments of a saddle quern

APPENDIX 3

C.G. Cumberpatch BA PhD
Freelance Archaeologist

Introduction

The pottery assemblage from the archaeological evaluation at Thurvaston House Farm, Thurvaston was examined by the author on 19th September 2011. It consisted of twelve sherds of pottery weighing forty-one grams and represented a maximum of twelve vessels. The data are summarised in Table 1.

The pottery

The pottery assemblage was of medieval date and consisted of a range of types known and documented in the archaeological literature together with wares of unknown type but medieval date. The rather poor state of our understanding of the medieval pottery industry of Derbyshire has been summarised and discussed elsewhere (Cumberpatch 2004a) and there has been little advance since that publication. Significant assemblages from Nottingham, Derby and Chesterfield remain unpublished and as a result the traditional role of pottery as a means of calibrating stratigraphic assemblages and providing spot dates for archaeological features, structures and contexts remains surprisingly underdeveloped particularly in comparison with neighbouring areas of Yorkshire, Leicestershire and Lincolnshire. As a result of this, while a range of local and regional wares have been defined and characterised (Cumberpatch 2002-3, 2004a, 2004b) the date ranges of the associated contexts remains obscure, as reflected in the questionable nature of the date ranges proposed in Table 1.

Wares of known origin were limited to the sherds of Burley Hill type from context 103 although the commonest type in the assemblage as a whole, Derbyshire Coarse White Sandy ware (DCWSw) is also known from another site in Thurvaston (Beswick 1999; see Cumberpatch 2004a for a discussion of the type and its affinities) and may be of local origin. The remaining sherds consisted of Reduced Sandy ware, an unidentified type of unknown origin and a sherd of Shell Tempered ware. The latter was probably a regional import from Lincolnshire or the eastern part of Nottinghamshire. Such sherds are common throughout eastern and north-eastern England.

Conclusion

Although small in size the pottery assemblage from Thurvaston House Farm is of interest in view of its general similarity with that from Hemp Croft, Thurvaston and the fact that it would appear to represent undisturbed contexts of medieval date. All such small rural pottery assemblages (a feature of the archaeology of Derbyshire) would benefit immensely from the publication of urban assemblages which might provide a better chronological framework than the sparse structure which exists at present. As it stands, it indicates medieval activity on the site although the nature of this cannot be inferred from the information available.

Bibliography

Beswick, P. 1999 *Medieval pottery* In: K. Challis *Excavation of a medieval structure at Hemp Croft, Thurvaston, Derbyshire* **Derbyshire Archaeological Journal** 119:220-259.

Cumberpatch, C.G. 2002 - 2003 *Medieval pottery from manufacturing sites at King Street, Duffield and Burley Hill Duffield, Derbyshire: a summary report* **Medieval Ceramics** 26/7; 85-100.

Cumberpatch, C.G. 2004a *Medieval pottery production in Derbyshire: a review* **Derbyshire Archaeological Journal** 124;86 – 112.

Cumberpatch, C.G. 2004b **South Yorkshire and north Derbyshire medieval ceramics reference collection** http://ads.ahds.ac.uk/catalogue/specColl/ceramics_eh_2003/

Table 1

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
102	Derbyshire Coarse White Sandy ware	1	2	1	BS	Hollow ware	U/Dec	?C12th – C14th	Small sherd w/ abraded ext surface
102	Reduced Sandy ware	1	1	1	BS	Hollow ware	U/Dec	Medieval	Hard reduced grey fabric w/ abundant quartz sand
102	Reduced Sandy ware	1	5	1	BS	Hollow ware	Possible splashed glaze ext	MC11th – EC13th	Abundant fine sub-angular quartz & rock frags
103	Burley Hill 001	1	5	1	BS	Hollow ware	Green glaze ext	C13th - C14th	See Cumberpatch 2002-3
103	Burley Hill type ware	2	2	2	BS	Hollow ware	U/Dec	C13th – C14th	
103	Derbyshire Coarse White Sandy ware	1	10	1	Hammerhead rim	Jar	U/Dec	?C12th – C14th	See Cumberpatch 2004a, b, Beswick 1999
103	Derbyshire Coarse White Sandy ware	2	4	2	BS	Hollow ware	Pale green glaze ext	?C12th – C14th	Abundant fine quartz & white non-crystalline grit
103	Derbyshire Coarse White Sandy ware	1	4	1	BS	Hollow ware	U/Dec	?C12th – C14th	Abundant fine quartz & white non-crystalline grit
103	Reduced Sandy ware	1	5	1	BS	Hollow ware	U/Dec	?C12th – C14th	Dark grey core, dull buff int & ext; ?reduced DCWSw
103	Shell Tempered ware	1	3	1	BS	Hollow ware	U/Dec	Medieval	Vesicular sherd, all shell dissolved
	Total	**12**	**41**	**12**					