



# Madeley Park Farm, Hollington ARCHAEOLOGICAL EVALUATION

PN 16-10



# Project No.16-10

# 08/2017 FINAL VERSION

# Madeley Park Farm,

Long Close, Hollington, Staffordshire, ST10 4HJ.

# ARCHAEOLOGICAL EVALUATION

# By William Mitchell Project Archaeologist

	Name	Position	
Edited by/	KSC	Project Manager	
Reviewed by:			
Approved by:	KSC	Project Manager	
Signature:			
	Signature:		
Version: v0a Version Date: 06.07.2017			

#### for

JMW Planning Ltd, 578 Kedleston Road, Derby, DE22 2NH

#### Contact: Kevin Colls

Archaeological Project Manager
Centre of Archaeology
School of Creative Arts and Engineering
Staffordshire University
L325 Flaxman Building
College Road

L325 Flaxman Building College Road, Stoke-on-Trent, ST4 2DE (+44) 01782 294037

Email: <u>Kevin.colls@staffs.ac.uk</u>
Web: <u>www.staffs.ac.uk/archaeology</u>



# Madeley Park Farm, Hollington

Archaeological Evaluation, 07/2017

#### **TABLE OF CONTENTS**

SUMM	ARY	1
1.	INTRODUCTION	2
2.	LOCATION AND GEOLOGY	2
3.	HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	3
4.	AIMS AND OBJECTIVES	4
5.	METHODOLOGY	5
6.	RESULTS	6
7.	ENVIRONMENTAL ANALYSIS by Julie-Anne Bouchard-Perron (Trent & peak Archaeology)	7
8.	DISCUSSION	9
9.	ACKNOWLEDGEMENTS	10
10	REFERENCES	10

# **List of Figures**

- Figure 1: Location Plan.
- Figure 2: The Proposed Drive Location Plan
- Figure 3: Trench Plan and South Facing Section.

# **List of Plates**

- Plate 1. Ordnance Survey Map 1991-92, showing known extent of Park Pale marked in red.
- Plate 2. Trench; facing north. Section through Park Pale.
- Plate 3. Trench; facing north. Section through Park Pale, with possible post hole [1012] marked in red.
- Plate 4. Trench; facing east. Looking towards Stramshall Lane.
- Plate 5. Detail of ditch [1002], with re-cut drainage ditch [1009], facing north.



Plate 6. Carex remains from sample 1003

Plate 7. Some of the megaspores observed in sample 1003

Plate 8. Bramble remains from sample 1003

# **List of Appendices**

Appendix 1: Written Scheme of Investigation. Centre of Archaeology, Staffordshire University.



# **Madeley Park Farm, Hollington**

Archaeological Evaluation, 07/2017

#### **SUMMARY**

The Centre of Archaeology was commissioned in June 2017 by JMW Planning Ltd on behalf of Mr and Mrs Bloor, to undertake an evaluation to the north-east of Madeley Park Farm, in advance of the construction of an access road (NGR SK 06819 38103). A single trench was located in order to transect a section of a medieval park pale, part of which sits alongside Stramshall Lane. The existing shallow ditch and wide raised bank was excavated for the purpose of investigating its construction technique. Natural geology was reached at the base of the trench and modern drainage ditches were identified along both sides of the park pale. The park pale was constructed of a series of redeposited clays, taken from a shallow ditch along its western (internal) side. Environmental evidence suggested that the modern re-cutting of the ditch had disturbed the deposits at this location. This meant that all the remains had a modern aspect. No datable artefacts were recovered from the stratified layers within the evaluation trench.



# Madeley Park Farm, Hollington

#### Archaeological Evaluation, 07/2017

#### 1. INTRODUCTION

- 1.1. The Centre of Archaeology was commissioned in June 2017 by JMW Planning Ltd on behalf of Mr and Mrs Bloor to undertake an evaluation on land to the north of Madeley Park Farm (NGR SK 06819 38103) in advance of the construction of an access road (hereinafter referred to as the site). The results of these site investigations form part of the planning documents prepared for the submission of the application to the local planning authority (East Staffordshire Borough Council, planning application reference number P/2016/00385). The application was for the proposed construction of a vehicular and pedestrian access road to the east of Madeley Park Farm .
- 1.2. The proposed development site was of known archaeological significance, therefore a programme of archaeological monitoring and recording was recommended by Debbie Taylor Landscape Archaeologist for Staffordshire County Council. The programme was monitored by Stephen Dean, Principal Archaeologist for Staffordshire County Council.
- 1.3. This report outlines the results of an evaluation undertaken on 26<sup>th</sup> June 2017, and has been prepared under the Standards and Guidance issued by the Chartered Institute for Archaeologists (CIfA 2014).
- 1.4. Prior to the archaeological investigations a Written Scheme of Investigation was completed by the Centre of Archaeology which was approved Staffordshire County Council (See Appendix 1), there has been no known previous historical or archaeological work undertaken in the area.
- 1.5. This document has been prepared in accordance with government advice contained with NPPF (National Planning Policy Framework; Department for Communities and Local Government 2012) and should be read in conjunction with this report.

# 2. LOCATION AND GEOLOGY

2.1. The site is located to the north of Madeley Park Farm on agricultural land west of Stramshall Lane (formerly Hollington Lane). Madeley Park Farm is south-east of Hollington, Staffordshire and is centred on NGR SK 06819 38103 (Figure 1).



- 2.2. The development site remains free from structures and is located within a former deer park, bounded by a park pale which has survived in varying degrees of preservation in the area surrounding Madeley Park Farm. The park pale, once defined by an unbroken bank, ditch and palisade fence or stone wall, was used to define the boundaries of a medieval deer park. The design of these park pales allowed deer to bound into the park but prevented them from leaping out again. This former deer park was once almost certainly associated with the local lord of the manor or alternatively the 12<sup>th</sup> century Croxden Abbey which is located just over 1km to the north.
- 2.3. The underlying bedrock consists of red and white sandstone of the mercia mudstone group known locally as 'Hollington Stone'. The superficial deposits consist of glaciofluvial deposits of sand and gravel.
- 2.4. The present character of the site is pastured land, Stramshall Lane is located immediately to the east of the site. The site is currently surrounded by arable and pasture fields on all sides. The location of the proposed access road will transect a section of a medieval park pale which sits alongside Stramshall Lane (see Plate 1 and Figure 2).
- 2.5. Evidence of the park pale survives within the area of the proposed access road. It is represented by a shallow ditch and wide raised bank orientated north to south, which follows the line of the Stramshall Lane. The bank is topped by a modern timber and wire fence and there is a modern shallower ditch and bank on the eastern side along the roadside.

# 3. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.1. The extent of survival of below ground remains of Madeley Park Farm and the surrounding area in general is unknown, with no recorded archaeological work in the main settlement or adjacent areas.
- 3.2. Within the local area there are several features of archaeological interest. Located immediately north of Stramshall Lane is Hollington Road, the former Roman Road which led from the fort and settlement at Rocester to the camp at Chesterton near Newcastle-under-Lyme.
- 3.3. A medieval park pale which once enclosed Madeley deer park survives as an upstanding earthwork (around 11m wide) for approximately 200m adjacent to Stramshall Lane). Further sections of the park pale which enclosed Madeley deer park survive as earthworks elsewhere in the landscape around Madeley Park Farm (and other farms including Little Park Farm, Hollywood Farm, and



Littlewood Farm) (Figure 1). In Medieval and Early Modern England, the park pale was the boundary to a deer park and was often formed of a ditch and bank. It was usual to have a ditch dug along the inside of the bank which was topped by a timber 'park pale'. This arrangement helped to contain the deer within the confines of the park. In some cases the timber park pale was replaced by a stone or brick wall.

- 3.4. Several examples of medieval ridge and furrows, evidence of medieval and later ploughing, exist to the east and north of the site between Hollingdon and Croxden. Ridge and furrow field systems derive from medieval arable cultivation. This practice persisted right up until the end of the nineteenth century in some areas of the country, but are most frequently associated with medieval farming practices.
- 3.5. Approximately 1km to the north of site are the remains of the 12<sup>th</sup> century Croxden Abbey. A community of Cistercian monks were granted land at Croxden in 1176 by important local nobleman Bertram de Verdun, Lord of Alton, construction on the monastic site began in 1179. During the 13<sup>th</sup> century the abbey flourished and it may have supported as many as 70 monks. The community suffered from various economic and environmental pressures in the 14<sup>th</sup> century before gradually being suppressed in 1538 by Henry VIII. The abbey and its lands later became part of a farm (http://www.english-heritage.org.uk/visit/places/croxden-abbey/history/ accessed 06.07.2017)

#### 4. AIMS AND OBJECTIVES

- 4.1. The principal aim of the evaluation was to determine the character, state of preservation and the potential significance of any buried remains.
- 4.2. More specific aims were to:
- Confirm the existence of the medieval park pale which once formed the boundary of Madeley deer park.
- Interpret the landscape, architectural and archaeological evidence of the park pale to determine its construction technique and date.



#### 5. METHODOLOGY

- 5.1. The proposed vehicular and pedestrian access road covers approximately 0.1185 hectares. One trench was excavated across the site totalling 24m² (the excavated trench dimensions were approximately 12m x 2m) which provided a 2% sample of the total area (Figure 2).
- 5.2. One trench was positioned to straddle the route of the bank and ditch thought to form the park pale. This location was chosen for the purpose of obtaining a clear cross-section through it to interpret its construction technique and obtain a clearly defined section. The width of the proposed road prohibited the excavation of any more trenches due to lack of space. This approach was developed following consultation with the Staffordshire County Council Historic Environment Team. The trial-trench was surveyed in using a hand held GPS and was located on the Ordnance Survey National Grid.
- 5.3. All topsoil and modern overburden was removed using a JCB type mechanical excavator with a 1.2m wide toothless ditching bucket, under direct archaeological supervision, down to the top of the uppermost archaeological horizon or the subsoil. Subsequent cleaning, excavation and investigation was undertaken stratigraphically and by hand. The bank was carefully machined under archaeological supervision down to the formation level for the vehicular and pedestrian access.
- 5.4. All stratigraphic sequences were recorded, even where no archaeology was present. Sections were drawn of all significant vertical stratigraphy at a scale of 1:20. A comprehensive written record was maintained using a continuous numbered context system on pro-forma cards. Written records and scale plans were supplemented by photographs using high resolution digital photography.
- 5.5. Buried soils and sediment sequences were inspected and recorded on site where appropriate. Examination of soil sediments conformed to guidelines set out in *Geoarchaeology: using earth sciences to understand the archaeological record* (Historic England 2015). One deposit was sampled for retrieval, for the assessment of the preservation conditions and potential for analysis of biological remains. The environmental sampling policy followed the guidelines contained in the Centre of Archaeology Fieldwork Manual and *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2002).
- 5.6. The full site archive has been prepared according to guidelines set down in Appendix 3 of the Management of Research Projects in the Historic Environment (Historic England, 2015), the Guidelines for the Preparation of Excavation Archives for Long-term Storage (UKIC, 1990), the



Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2001) and the Standards in the Museum Care of Archaeological collections (Museum and Art Galleries Commission, 1992). The paper archive will be deposited with the Potteries Museum and Art Gallery, Stoke-on-Trent. A copy of the report will also be submitted to OASIS (Online Access to the Index of archaeological investigations).

#### 6. RESULTS

#### 6.1. Introduction

The following section is arranged stratigraphically and both feature (cut) and context numbers are highlighted in bold. A representative trench section and plan is illustrated (see Plates 2, 3 & 4 and Figure 3). Ground level was approximately 135.3m AOD. All ground level data was measured against this known height. Natural ground was reached at various locations across the trench. The depth of the trench was however, determined by the formation level of the proposed access road. No artefacts were identified in in any of the buried layers, suggesting that the site has remained an open agricultural field free from development, throughout its history.

# 6.2. Trench 1 (Plates 2-5, Figure 3) (10m x 2m)

Trench 1 was excavated to a depth of around 0.40m below ground level. Natural ground (**1001**) was exposed at this level (134.9m AOD). This layer was composed of orangey-red, weathered clay. There were bands of yellowish-orange sandy clay within this layer and it contained occasional, small (50mm-100mm) rounded pebbles. The park pale ditch and bank was excavated from this natural geological material.

The park pale ditch (1002) was present on the western side of the bank. It was a gradual sloping cut which appeared to taper to a flat base. It was approximately 1.7m in width and 0.7m-0.8m in depth. The clay removed from this ditch had been used to construct the bank on the eastern side (1004) which rose to a height of 136.2m AOD. It had a gradual slope on its eastern side and a more steeply sloping edge on its western side. The was made up of two discrete types of clay. One section of clay which was orangey-yellow and less compacted was mounded on the eastern side of the bank and perhaps represented the primary core of material (1007). This deposit of clay may have originated from a lower geological layer. Overlying this was an orangey-red redeposited clay (1006). This was compacted and contained very occasional small rounded pebbles. On the top of the bank there was a thin (80mm) layer of compacted rounded pebbles (1005). This was thicker towards the base of



the bank representing slumping of this material. A small area of disturbance on the top of the bank down to a depth of approximately 0.4m may have represented a filled in post hole of one of the many now removed posts for the palisade fence along the top of the pale (1012). It was filled with the same clay deposit as (1006), although this showed evidence of disturbance. The material which made up the fill of the ditch was a mid-orangey brown friable silty clay (1003), the base of which showed an increased frequency of small rounded pebbles. The fill of the ditch most likely occurred through gradual silting and slumping of material from the bank.

The ditch had been re-cut at some point probably in the 19<sup>th</sup> century for the purpose of laying a linear ceramic field drain. This field drain (**1011**) had been placed in a 0.7m deep steep linear trench (**1009**) in the original park pale ditch. The recut ditch had been filled with light greyish-brown silty clay (**1010**), which was a mixture of silted material and redeposited clay.

On the eastern side of the bank there was a further ditch and bank. These were contemporary with the road (Stramshall Lane), which is present on the six inch Ordnance Survey map of 1886 and was surveyed in 1880/81. Material from the continued re-cutting and cleaning of this ditch had been redeposited against the eastern side of the bank (1008). This material was dark brownish black loose clayey-silt similar to the topsoil.

All of these layers and deposits were sealed by a 0.1m-0.15m mid-dark brown, clayey-silt topsoil (1000). This topsoil tapered off on the eastern side of the bank, beneath the field boundary hedge.

# 7. ENVIRONMENTAL ANALYSIS BY Julie-Anne Bouchard-Perron, PhD (Trent & peak Archaeology)

- 7.1 Introduction. The site of Madeley Park Farm is located about a mile to the southeast of present-day Hollington in Staffordshire. In 2017, an archaeological evaluation took place on site in order to identify and document elements of cultural value in the area. This intervention notably focused on a medieval deer park pale associated to a ditch stretching across 200m. To assess the potential of the park boundary for environmental analysis a soil sample was collected in a stratigraphically sealed deposit associated to the natural and gradual fill of the ditch (1003). The current report provides an overview of the sample content and discusses the overall significance after detailing the methodology used to reach these results.
- 7.2 **Methodology.** During the evaluation a 9L soil sample of 9,4 kg was collected in context 1003. The sample was wet sieved before being processed using a modified Ankara flotation machine at the Peak and Trent Archaeology facilities. In this process, a 250µm mesh was used to retain the heavy



residue. Likewise, the smallest sieve used to collect the light fraction had a 250µm aperture. After flotation, both the heavy residue and the light fraction were left to dry at room temperature. Once dry, the heavy residue was screened by the naked eye to isolate any organic remains present, while the light fraction was sorted using a stereomicroscope at 4x to 40x magnification. In this process, plant remains were fully quantified while the quantity of other organic remains was assessed using the following scale of abundance:

Abundance scale					
Symbol	Relative quantity	Term used			
х	up to 10 items	Rare			
xx	10-50 items	Occasional			
xxx	50-100 items	Frequent			
xxxx	100-250 items	Abundant			
AB	more than 250 items	Very abundant			

**7.3 Results.** Roundish pebbles constituted about 99% of the sample heavy residue after flotation. The heavy residue also yielded some rare pieces of charcoal which were small and in a poor state of preservation. Worn off charcoal fragments were equally rare in the sample's light fraction which also comprised scarce insect remains. Most of the light fraction was composed of roots and megaspores. Very abundant, the latter are produced by gymnosperms, ferns and mosses, and difficult to identify to the genus or the family level. It is also hard to determine whether they are old or recent. As such, they are of limited interpretative value.

An extremely low density of plant macro-remains was recorded in the light fraction of the sample (1,2 seed/litre). None of the 11 remains observed was carbonised and they were all in a perfect state with the exception of one unidentified seed which was fragmented. Six other remains belonged to sedges (*Carex* sp.) and four were associated to bramble (*Rubus* sp.). Plants of these genus are very common in the United Kingdom and are encountered in a wide range of habitats (Stace 2010:241-252, 951-973). It is noticeable that like all the other organic components of the light fraction, the macro-botanical remains observed were smaller than 2,3 mm (See plates 6-8).

7.4 Discussion and Recommendations. With the exception of charcoal, all organic remains had a modern aspect: to have been preserved in such a state waterlogged conditions must have prevailed in the deposit. Yet, contrary to what has been observed in the sample from 1003, waterlogged deposits tend to yield very high densities and diversity of organic remains, including seeds, insects, ostracods, daphnia, flies and mites (Gallagher 2014:24). In the absence of such evidence, it seems



likely that the remains observed are recent. It is possible that their small size contributed to their movement across the deposits by percolation for example.

The absence of preserved organic remains in the sample from 1003 does not necessarily mean that poor preservation conditions prevail everywhere along the ditch especially as it stretched over 200m. If the ditch was to be fully excavated, it is recommended that 10l samples are collected every 20 to 50 meters, especially if change in depth and soil texture are observed.

# 7.5 Bibliography.

Gallagher, Daphne, 2014. Formation Processes of the Macrobotanical Record, in: Marston, John, d'Alpoim Guedes, Jade, Warinner, Christina (Eds.), *Method and Theory in Paleoethnobotany*, University Press of Colorado, Boulder, pp. 19-34.

Stace, Clive, 2010. New Flora of the British Isles. Cambridge University Press, Cambridge.

#### 8. DISCUSSION

The remaining archaeological and historical evidence suggests that the surviving landscape feature 8.1 is a medieval park pale. Despite the lack of datable evidence, the location on the landscape, historic/ background information and form of the feature as confirmed in the archaeological evidence, all suggest that this bank and ditch is likely to be the extant remnants of the medieval Madeley Deer Park Pale. The purpose of the trench was to to transect a section of the medieval park pale, part of which sits alongside Stranshall Lane. The surviving shallow ditch and wide raised bank was excavated for the purpose of investigating its construction technique, and to identify dating evidence. The park pale was constructed of a series of redeposited clays, which had been taken from a shallow ditch along its western (internal) side. There was possible evidence of a posthole from the top of the bank, this may represent park of a now removed palisade fence. Natural geology was reached at the base of the trench and modern drainage ditches were identified along both sides of the park pale. Survival of the park pale was good and there were clearly defined stratified deposits. Environmental evidence suggested that the modern re-cutting of the ditch had disturbed the deposits at this location. This meant that all the remains had a modern aspect. No datable artefacts were recovered from the stratified layers within the evaluation trench.



#### 9. ACKNOWLEDGEMENTS

9.1. The project was commissioned by JMW Planning Ltd on behalf of Mr and Mrs Bloor. Thanks go to Debbie Taylor, Landscape Archaeologist and Stephen Dean Principal Archaeologist who monitored the project on behalf of Staffordshire County Council. Work on site was undertaken by William Mitchell. William Mitchell produced the written report, which was edited by Kevin Colls, who also managed the project for the Centre of Archaeology.

#### 10. REFERENCES

Brown, D. 2007. *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation*. Archaeological Archives Forum and Institute for Field Archaeologists.

CIfA, Dec 2014, Standard and guidance for archaeological advice by historic environment services.

CIfA, Dec 2014, Standard and guidance for the creation, completion transfer and deposition of archaeological archives.

CIfA, Dec 2014, Standard and guidance for archaeological investigation.

CIfA, Dec 2014, Standard and guidance for archaeological field evaluation.

CIfA, Dec 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials.

CIfA, Dec 2014, Standard and guidance Appendices.

Department for Communities and Local Government 2012 National Planning Policy Framework, Section 12; Conserving and Enhancing the Historic Environment. London.

English Heritage, 2008, Management of Research Projects in the Historic Environment. PPN 3: Archaeological Excavation.

Historic England, April 2015, Management of Research Projects in the Historic Environment. The MoRPHE Project Manager's Guide

Institute for Archaeologists revised 2013 Standard and guidance for archaeological desk-based assessment; Standard and guidance for archaeological field evaluation; Standard and guidance for an archaeological watching brief; Standard and guidance for archaeological excavation; Standard and guidance for the collection, documentation, conservation and research of archaeological materials.

Museums and Galleries Commission. 1992 *Standards in the museum care of archaeological collections.* London: Museums and Galleries Commission

Standing Conference of Archaeological Unit Managers (SCAUM), 2007 revised 2012 *Health & Safety in Field Archaeology Manual.* 

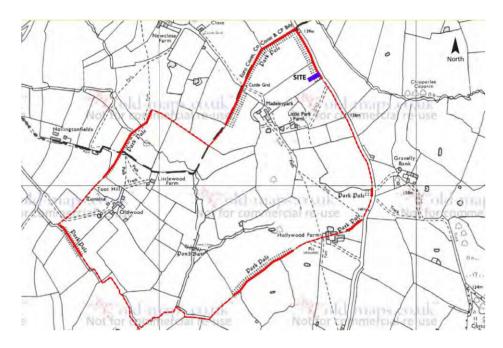


Walker, K. 1990 *Guidelines for the preparation of excavation archives for long-term storage,* Archaeology Section of the United Kingdom Institute for Conservation.

Watkinson, D. and Neal, V. 1998 *First Aid for Finds* (3<sup>rd</sup> edition), RESCUE and the Archaeology Section of the United Kingdom Institute for Conservation.

11

# **PLATES AND FIGURES**



**Plate 1.** Ordnance Survey Map 1991-92, showing known (red line) and possible (dashed red line) extent of Park Pale (Reproduced from old-maps.co.uk).



**Plate 2.** Trench; facing north. Section through Park Pale.





Plate 3. Trench; facing north. Section through Park Pale, with possible post hole [1012] marked in red.



**Plate 4.** Trench; facing east. Looking towards Stramshall Lane.





Plate 5. Detail of ditch [1002], with re-cut drainage ditch [1009], facing north.



Plate 6. Carex remains from sample 1003





Plate 7. Some of the megaspores observed in sample 1003



Plate 8. Bramble remains from sample 1003









Figure 1 - Location plan (reproduced from Google open sources)

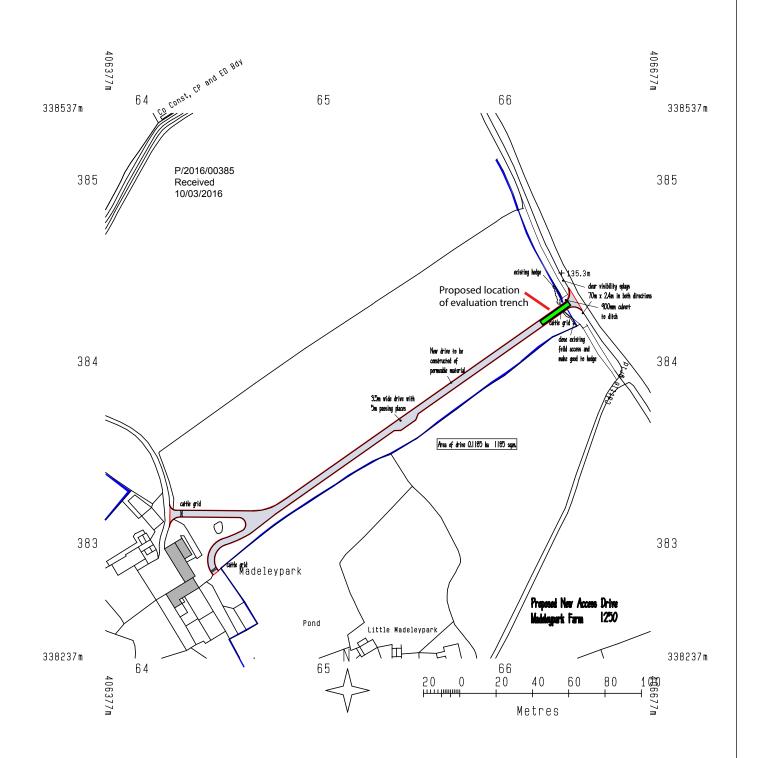




Figure 2 - Proposed location of Evaluation trench

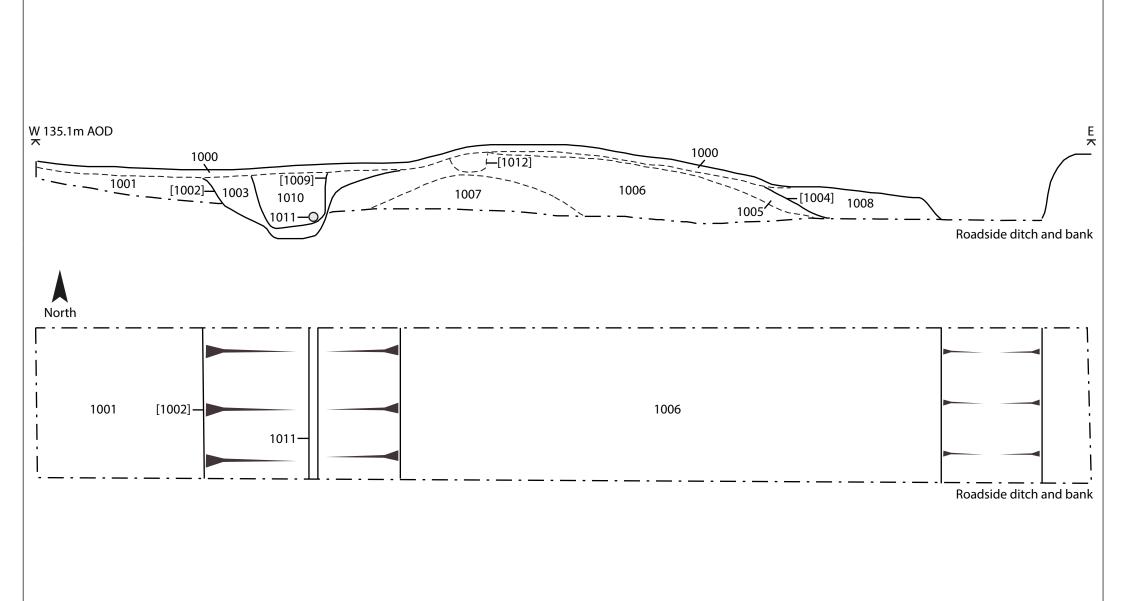




Figure 3- South Facing Trench Section and Trench Plan

2m



12 APPENDICIES

Appendix 1: Written Scheme of Investigation.



REPORT VERSION: REVISION A- OCTOBER 2016.

Madeley Park Farm, Long Close, Hollington, Staffordshire, ST10 4HJ

**East Staffordshire Borough Council** 

Written Scheme of Investigation for JMW Planning Ltd, 578 Kedleston Road, Derby, DE22 2NH

Planning application no: (P/2016/00385)

NGR: SK 06819 38103

**Archaeological Contractor: Centre of Archaeology** 

#### 1 INTRODUCTION

- 1.1 This document describes the programme of work required to undertake an archaeological investigation at the above site. It forms the written scheme of investigation for the work, which is a requirement of East Staffordshire Borough Council (18<sup>th</sup> May 2016). Any variation in the scope of work would be agreed with Debbie Taylor, Landscape Archaeologist for Staffordshire County Council before implementation.
- 1.2 A planning application (Planning application reference no. P/2016/00385) has been submitted to East Staffordshire Borough Council for the proposed construction of a vehicular and pedestrian access road at Madeley Park Farm, Long Close Hollington. As the proposed development site is of possible archaeological significance an archaeological evaluation was recommended by the Debbie Taylor, Landscape Archaeologist for Staffordshire County Council. This is in accordance with government advice contained with NPPF (National Planning Policy Framework; Department for Communities and Local Government 2012).

#### 2 SITE DESCRIPTION AND LOCATION

- 2.1 The site is located at Madeley Park Farm, south-east of Hollington, Staffordshire and is centred on NGR SK 06819 38103 (Figure 1).
- 2.2 The underlying bedrock consists of red and white sandstone of the mercia mudstone group known locally as 'Hollington Stone'. The superficial deposits consist of glaciofluvial deposits of sand and gravel.
- 2.3 The present character of the site is pastured land, Stramshall Lane is located immediately to the north of the site. The site is currently surrounded by arable and pasture fields on all sides. The location of the proposed access road will transect a section of a medieval park pale which sits alongside Stramshall Lane (see below).
- 2.4 Evidence of the park pale survives within the area of the proposed access road. It is represented by a shallow bank and wide raised ditch, which follows the line of the Stramshall road. The bank is topped by a modern timber and wire fence.



Plate 1 - Park pale at north-eastern end of field. Represented by a ditch and bank.

#### 3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 The extent of survival of below ground remains within the site boundary in general is unknown. There has been no recorded archaeological work undertaken at the site or in the adjacent properties.
- 3.2 Within the local area there are several features of archaeological interest. A medieval park pale which once enclosed Madeley deer park survives as an upstanding earthwork (around 11m wide) for approximately 200m adjacent to Stramshall Lane). Further sections of the park pale which enclosed Madeley deer park survive as earthworks elsewhere in the landscape around Madeley Park Farm (and other farms including Little Park Farm, Hollywood Farm, and Littlewood Farm). In Medieval and Early Modern England, a park pale was used to mark the ditch and bank that formed the boundary of deer parks. It was usual to have a ditch dug along the inside of the bank which was topped by a timber 'park pale'. This arrangement helped to contain the deer within the confines of the park. In some cases the timber park pale was replaced by a stone or brick wall.
- 3.3 Several examples of medieval ridge and furrows, evidence of medieval and later ploughing, exist to the east and north of the site between Hollingdon and Croxden. Ridge and furrow field systems derive from medieval arable cultivation. This practice persisted right up until the end of the nineteenth century in some areas of the country, but is most frequently associated with medieval farming practices.

#### 4 AIMS AND OBJECTIVES

- 4.1 The principal aim of the evaluation is to determine the character, extent, date, state of preservation and the potential significance of any buried remains.
- 4.2 More specific aims are to:
  - Confirm the existence of the medieval park pale which once formed the boundary of Madeley deer park
  - Interpret the landscape, architectural and archaeological evidence of the park pale to determine its construction technique and date.

#### 5 METHODOLOGY

- 5.1 The proposed vehicular and pedestrian access road covers approximately 0.1185 hectares. A total of one trench will be excavated across the site totalling 24m² (one trench at 2m x 12m) approximately which provides a 2% sample of the total area (Figure 2).
- 5.2 The trench will be located across the location assumed to be the bank and ditch of the park pale. This is for the purposes of obtaining a clear cross-section through it to interpret its construction technique. One trench across the bank and ditch will provide clarity and the best chance of obtaining a clearly defined section. The width of the proposed road prohibits the excavation of any more trenches due to lack of space. The trial-trench will be surveyed-in using an EDM total station or other appropriate survey instruments and located on the Ordnance Survey National Grid.
- 5.3 All topsoil and modern overburden will be removed using a JCB type mechanical excavator with a toothless ditching bucket, under direct archaeological supervision, down to the top of the uppermost archaeological horizon. Following this the area will be cleaned, recorded and investigated. After this process has been completed, the bank will be carefully machined under archaeological supervision down to the buried topsoil horizon. If features are identified buried by the later bank, these will be investigated and recorded by hand before the ground is mechanically stripped down to the formation level for the vehicular and pedestrian access.
- 5.4 If further archaeological features and deposits are encountered a representative sample of these will be manually sample excavated. This is done to sufficiently define their character and to obtain suitable dating evidence using the following strategy;
- 50% of pits under 1.5m or postholes
- 25% of pits over 1.5m including a complete section
- 20% sample of linear/ curvi-linear features under 5m in length
- 10% sample of linear/ curvi-linear features over 5m in length
- 5.5 Archaeological deposits will not be completely excavated unless it was deemed unavoidable. The depth of archaeological deposits across the site will be assessed, although the full length of every trench will not be necessarily excavated down to natural.

- All stratigraphic sequences will be recorded, even where no archaeology is present. Features will be planned at a scale of 1:20 or 1:50, and sections drawn of all cut features and significant vertical stratigraphy at a scale of 1:10. A comprehensive written record will be maintained using a continuous numbered context system on *pro-forma* cards. Written records and scale plans will be supplemented by photographs using black and white monochrome, colour slide and digital photography. All photography will include a scale and north arrow.
- 5.7 Buried soils and sediment sequences will be inspected and recorded on site where appropriate. Examination of soil sediments conformed to guidelines set out in *Geoarchaeology: using earth sciences to understand the archaeological record* (Historic England 2015).
- 5.8 Deposits will be sampled for retrieval, for the assessment of the preservation conditions and potential for analysis of biological remains. The environmental sampling policy will follow the guidelines contained in the Centre of Archaeology Fieldwork Manual and *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2002). Sampling strategies for wooden structures will conform to guidelines set out in *Waterlogged wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.* (Brunning 1996).
- 5.9 Where suitable deposits existed they will be sampled for dendrochronological dating evidence in line with *Dendrochonology: guidelines on producing and interpreting dendrochronological data* (English Heritage 2004a).
- 5.10 Where there was evidence for industrial activity, samples will be **taken** to identify macroscopic technological residues in accordance with *Archaeometallurgy* (Historic England 2015) and *Science for Historic Industries* (English Heritage 2006).
- 5.11 Recovered finds will be cleaned, marked and remedial conservation work undertaken as necessary. Treatment of all finds conforms to guidance contained within the Centre of Archaeology Fieldwork Manual and *First Aid for Finds* (Watkinson and Neal 1998).
- 5.12 While buried human remains are not anticipated on this site, should they be encountered work will halt and the area of the discovery will be cordoned off. The coroner and SCC Principal Archaeologist will be consulted and the opportunity for a site meeting explored. Where the archaeological recording and excavation of human remains is warranted, a licence will first be obtained from the Ministry of Justice. Any such remains will be treated with due respect and will be removed from site for appropriate assessment in accordance with relevant standards and guidance.
- 5.13 Were there to be any discovery of artefacts regarded as treasure, any such discovery will halt works, the area will be cordoned off and the Coroner, Staffordshire Portable Antiquities scheme Finds Liaison Officer and the SCC Principal Archaeologist will be consulted and a site meeting arranged at the earliest opportunity. Where such finds are of sufficient significance, a separate WSI will be prepared by the appointed archaeological organisation to cater for the excavation, recording and careful lifting of appropriate evidence forms.
- 5.14 Any human remains encountered will be initially left in situ and covered. In the event that human remains need to be removed this will be carried out under the terms of a Ministry of Justice Licence and adhering to relevant environmental health regulations. All finds which may constitute 'treasure' under the Treasure Act, 1997 will be removed to a safe place and reported to the local Coroner. If removal is not possible on the same working day as discovery, appropriate security arrangements will be provided to keep the finds safe from theft.

5.15 The full site archive will include all artefactual remains recovered from the site. The site archive will be prepared according to guidelines set down in Appendix 3 of the Management of Archaeology Projects (Historic England 2015), the Guidelines for the Preparation of Excavation Archives for Long-term Storage (UKIC, 1990) and Standards in the Museum Care of Archaeological collections (Museum and Art Galleries Commission, 1992). The paper archive will be deposited with the appropriate repository subject to permission from the landowner.

#### 6 STAFFING

- 6.1 The project will be managed and directed for the Centre of Archaeology by Kevin Colls MIFA and supervised in the field by a suitably qualified and experienced archaeological supervisor (details to be notified, prior to the commencement of the fieldwork).
- 6.2 Specialist staff will be, where appropriate:

Prehistoric pottery	David Mullins	Freelance Specialist
Prehistoric flint	Barry Bishop	Freelance Specialist
Roman pottery	Jane Evans	Freelance pottery specialist
Roman pottery	Jane Timby	Freelance pottery specialist
Samian pottery	Felicity Wild	Freelance pottery specialist
Saxon, medieval and post- medieval pottery	Stephanie Rátkai	Finds Researcher, University of Birmingham
Medieval and post-medieval pottery	Chris Cumberpatch	Freelance
Post-medieval pottery and glass	Leigh Dodd	Freelance
Ceramic building material (CBM)	Phil Mills	Leicester University
Vessel glass	Cecily Cropper	Freelance specialist
Clay tobacco pipe	Dr David Higgins	Freelance Specialist
Coins, brooches	Dr Roger White	University of Birmingham
Iron, leather	Quita Mould	Freelance finds specialist
General finds	Jon Goodwin	Finds specialist, Senior Planning Officer
Animal bone	Matilda Holmes	Freelance archaeozoologist
Human bone	Dr Caroline Sturdy Colls	Staffordshire University
Archaeo-geomorphology	Dr Andrew Howard	Freelance specialist
Palynology	MOLA	Museum of London Archaeology
Archaeobotany	MOLA	Museum of London Archaeology

Entymology	Dr David Smith	University of Birmingham
	Dr Emma Tetlow	University of Edinburgh
Charcoal and wood	Rowena Gale	Freelance Specialist
Dendrochronology	Dr Robert Howard	Nottingham Tree Ring Dating Laboratory
Archaeometallurgy	Anthony Swiss	Freelance specialist
	Rod MacKenzie	Freelance specialist
	Jane Cowgill	Freelance specialist
Glass residues	Dr David Dungworthy	English Heritage

#### 7 REPORT

- 7.1 A report will be produced for the evaluation. On completion of the fieldwork post-excavation work for each phase, including finds processing/ conservation, analysis and primary research, will be undertaken. A site archive will be compiled and an illustrated report will be prepared. This would conform to the relevant CIfA standards and guidance (CIfA revised 2014).
- 7.2 This report would be in the format required by the *Management of Archaeological Projects 2* (Historic England 2105) and *Management of Research Projects in the Historic Environment* (English Heritage 2006, 2008) guidelines as appropriate, to include:
  - 1) Summary
  - 2) Description of the archaeological background
  - 3) Method
  - 4) A narrative description of the results and discussion of the evidence, set in their local, regional and national research context, supported by appropriate plans, sections and photographs
  - 5) Summary of the finds and environmental evidence
  - 6) Specialist assessments of the finds and environmental evidence
  - 7) Impact assessment and recommended mitigation strategy.
- 7.3 The written report will be made publicly accessible, as part of the Staffordshire Sites and Monuments Record within six months of completion. Two copies of the report will be lodged with the County Archaeologist, Staffordshire County Council. A digital copy on CD-ROM will be provided. A summary report may be submitted for inclusion in a local archaeological journal or similar. If the results are considered of regional or national importance it may be appropriate to publish the report in a regional or national archaeological journal or other suitable publication outlet including digital online reports.
- 7.4 On completion of the report the appropriate OASIS (Online Access to the Index of archaeological investigations) form will be completed and the report will be submitted to OASIS.

#### 8 ARCHIVING

- 8.1 The full site archive will include all artefactual and/or ecofactual remains recovered from the site. Staffordshire County Council Historic Environment Record will be furnished with a hard and digital copy of the final report for inclusion in the HER. The site archive (paper records, digital records and finds) will be deposited with the accepting museum, in this case the Potteries Museum in Stoke on Trent subject to permission from the landowner.
- 8.2 Preparation and deposition of the site archive, from both evaluation and excavation will be undertaken with reference to the Staffordshire and Stoke-on-Trent Archive Service guidelines and to Guidelines for the Preparation of Excavation Archives for Long-Term Storage (Walker 1990) and Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (Brown 2007).

#### 9 TIMETABLE

9.1 A timetable has not been agreed at present.

#### 10 PROFESSIONAL STANDARDS

10.1 All project staff will adhere to the Code of Conduct of the Chartered Institute for Archaeologists. The project will follow the requirements set down in the *Standard and Guidance for Archaeological Field Evaluation/ Excavation* (CIFA revised 2014).

# 11 HEALTH AND SAFETY

- 11.1 A detailed risk assessment (and method statement when appropriate) will be prepared prior to the commencement of fieldwork.
- All current health and safety legislation, regulations and guidance will be complied with. The excavation will conform to the *Workplace (Health, Safety and Welfare) Regulations 1992, Management of Health and Safety at Work Regulations 1999,* and *Construction (Design and Management) Regulations 2007* and any other health and safety legislation where appropriate. Work will be carried out in accordance with guidelines laid out in the *Staffordshire University health and Safety Manual* and *Health & Safety in Field Archaeology Manual* (SCAUM 2007).

#### 12 REFERENCES

Brown, D. 2007. *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation.* Archaeological Archives Forum and Institute for Field Archaeologists.

Brunning, R. 1996 Waterlogged wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood. English Heritage: London.

CIfA, Dec 2014, Standard and guidance for archaeological advice by historic environment services.

CIfA, Dec 2014, Standard and guidance for the creation, completion transfer and deposition of archaeological archives

CIfA, Dec 2014, Standard and guidance for the archaeological investigation and recording of standing buildings or structures

CIfA, Dec 2014, Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment

CIfA, Dec 2014, Standard and guidance for historic environment desk-based assessment

CIfA, Dec 2014, Standard and guidance for archaeological investigation

CIfA, Dec 2014, Standard and guidance for archaeological field evaluation

CIfA, Dec 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials

CIfA, Dec 2014, Standard and guidance for forensic archaeologists

CIfA, Dec 2014, Standard and guidance for archaeological geophysical survey

CIfA, Dec 2014, Standard and guidance for stewardship for the historic environment

CIfA, Dec 2014, Standard and guidance for an archaeological watching brief

ClfA, Dec 2014, Standard and guidance Appendices

Council for the Care of Churches 1999 Appendix 3. Draft guidelines for the treatment of human remains and Appendix 4. The Vermilion Accord, in *Church archaeology: its care and management. A report to the council from the Archaeology Working Group.* CCC: London. Department for Communities and Local Government 2012 National Planning Policy Framework, Section 12; Conserving and Enhancing the Historic Environment. London

English Heritage, 2011, 3D Laser Scanning for Heritage (second edition). Advice and guidance to users on laser scanning in archaeology and architecture

English Heritage, 2014, Animal Bones and Archaeology. Guidance for Best Practice

English Heritage, 2014, Animal Bones and Archaeology. Guidance for Best Practice. Supplement 1: Key reference resources

English Heritage, 2006, Archaeomagnetic Dating. Guidelines on producing and interpreting archaeomagnetic dates

English Heritage, 2008, Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains

English Heritage, June 2004, Dendrochronology. Guidelines on producing and interpreting dendrochronological dates

English Heritage, 2011, Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)

English Heritage, 2008, Geophysical Survey in Archaeological Field Evaluation

English Heritage, 2011, Archaeological Evidence for Glassworking. Guidelines for Best Practice

English Heritage, 2004, Human Bones from Archaeological Sites. Guidance for producing assessment documents and analytical reports

English Heritage and Church of England, 2005, Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England

English Heritage, 2008, Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use

English Heritage, 2010, The Light Fantastic. Using airborne lidar in archaeological survey

English Heritage, 2008, Luminescence Dating. Guidelines on using luminescence dating in archaeology

English Heritage, 2009, Measured and Drawn. Techniques and Practice for the metric survey of historic buildings (Second Edition)

English Heritage, 2006, Management of Research Projects in the Historic Environment. MoRPHE Project Planning Note 2. Developing Controlled Vocabularies.

English Heritage, 2008, Management of Research Projects in the Historic Environment. PPN 3: Archaeological Excavation

English Heritage, 2008, Management of Research Projects in the Historic Environment. PPN 4: Complex Architectural Survey

English Heritage, 2013, Management of Research Projects in the Historic Environment. PPN 6: Writing standards and guidance

English Heritage, 2012, Management of Research Projects in the Historic Environment. PPN 7: Interpretation and mapping from aerial photographs and other aerial remote sensed data

English Heritage, 2006, Science for Historic Industries. Guidance for the investigation of 17<sup>th</sup>- to 19<sup>th</sup>-century industries

English Heritage, 2007, Understanding the Archaeology of Landscapes. A guide to good recording practice

English Heritage, 2006, Understanding Historic Buildings. A guide to good recording practice

English Heritage, 2012, Waterlogged Organic Artefacts. Guidelines on their recovery, Analysis and Conservation

English Heritage, 2010, Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood.

English Heritage, 2006, Guidelines on the X-radiography of archaeological metalwork

Historic England-Oct 2015, Archaeological and Historic Pottery Production Sites. Guidelines for Best Practice

Historic England, Apr 2015, Archaeometallurgy, Guidelines for Best Practice

Historic England, December 2015, Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record

Historic England, April 2015, Management of Research Projects in the Historic Environment. The MoRPHE Project Manager's Guide

Historic England, 2016, Traversing the Past. The Total Station Theodolite in Archaeological Landscape Survey

Institute for Archaeologists revised 2013 Standard and guidance for archaeological desk-based assessment; Standard and guidance for archaeological field evaluation; Standard and guidance for an archaeological watching brief; Standard and guidance for archaeological excavation; Standard and guidance for the collection, documentation, conservation and research of archaeological materials.

McKinley, J. and Roberts, C. 1993 *Excavation and post-excavation treatment of cremated and inhumed human remains*. IFA Technical Paper **13**, Institute of Field Archaeologists.

Museums and Galleries Commission. 1992 *Standards in the museum care of archaeological collections.* London: Museums and Galleries Commission

Standing Conference of Archaeological Unit Managers (SCAUM), 2007 revised 2012 *Health & Safety in Field Archaeology Manual.* 

Walker, K. 1990 *Guidelines for the preparation of excavation archives for long-term storage*, Archaeology Section of the United Kingdom Institute for Conservation.

Watkinson, D. and Neal, V. 1998 *First Aid for Finds* (3<sup>rd</sup> edition), RESCUE and the Archaeology Section of the United Kingdom Institute for Conservation.





