

Heather Hills, Birchall Lane, Leek, Staffordshire

Written Scheme of Investigation for Archaeological Works

2017



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Prepared on behalf of: Smart P.D. & S. Ltd

Date of compilation: May 2017

Planning reference: SMD/2017/0147

Local Authority: Staffordshire Moorlands District Council

Site central NGR: SJ 98889 54758

1 INTRODUCTION

1.1 Project Background

1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) for Smart P.D. & S. Ltd. It details a scheme of works for an archaeological watching brief at Heather Hills, Birchall Lane, Leek, Staffordshire. The proposed development comprises the construction of a single dwelling and associated works.

1.1.2 A planning application has been submitted to Staffordshire Moorlands District Council for a new dwelling on land at Heather Hill, Birchall Lane, Leek (planning application no. SMD/2017/0147). The application is currently pending determination. Should planning permission be granted the development may be subject to an archaeological condition for an archaeological scheme of monitoring and recording as follows.

1.1.3 This WSI confirms the nature of the archaeological works to be undertaken by ARS Ltd at Heather Hill, Birchall Lane, Leek, comprising an watching brief during ground works for the site redevelopment in accordance with guidance from Stephen Dean, the Staffordshire County Council Principal Archaeologist (see section 2.2.3 below).

1.1.4 The aim of the programme of works is, in line with the National Planning Policy Framework (NPPF) paragraph 141 (DCLG 2012), to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportionate to their importance, and to make this evidence (and any archived generated) publically accessible.

1.2 Site Description and Location

1.2.1 The proposed development area (hereafter 'PDA') comprises a roughly triangular-shaped site within the grounds of Heather Hills. It is bounded to the south by Birchall Lane and to the north-west and north-east by private residential dwellings (the one to the north-east being Heather Hills). The site is centred at NGR SJ 98889 54758 (Figure 1). The PDA lies on land sloping very gently to the south towards a tributary which drains in a westerly direction towards the River Churnet.

1.3 Geology

1.3.1 The underlying solid geology of the PDA consists of Chester Pebble Beds Formation – sandstone, pebbly (gravelly) formed in the Triassic Period, with no overlying superficial deposits (BGS 2017).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.2.1 The site of Heather Hills lies on the northern boundary of a former loose courtyard farmstead known as Big Birchall farm which is recorded on the 1st Edition Ordnance Survey mapping of the area (c.1880). Yates records a property in the general area on an earlier map of the area (1775) although it cannot be definitively identified as Big Birchall farm. The Staffordshire Historic Environment Record (HER)



records that, during land at Birchall had been granted to the Cistercian Abbey at Dieulecres Abbey within a few years of its foundation and that, by 1246 they had established a grange there (described as Birchall Grange in 1345). Following the Dissolution, the grange was included in a grant of the abbey's property to Sir Ralph Bagnall in 1552. The grange was subsequently conveyed to the Egerton family (1563-1623) and then to the Jolliffe family (1623-1766); in 1765 it was known as Great Birchall farm. In 1841 the farm, with two others, was sold to John Davenport of Westwood Hall. The farmhouse at Big Birchall was still standing in 1928, but was later demolished. Therefore, there does remain the potential for a range of archaeological evidence to be impacted during groundworks associated with the proposed scheme.

2.2.2 Taking into consideration the location and scale of the proposed scheme and the demonstrable archaeological potential from the area, the Staffordshire County Council Principal Archaeologist has advised that an archaeological watching brief be maintain on all groundwork aspects of the proposed scheme.

3 AIMS AND OBJECTIVES

3.1 Regional Research Aims and Objectives

3.1.1 Research topics identified in *The Archaeology of the West Midlands: A Framework for Research* (Watt (ed.) 2011) considered to be the most relevant to the project include *the monastic church in town and country*, in particular understanding the wider landscape setting – tenurial, economic, environmental – of monastic houses: “an important preliminary in this context is to ensure that all grange sites have, at the very least, been located, mapped and recorded” (Hunt 2011, 201).

3.1.2 This research topic has assisted in informing the aims and objectives for the watching brief outlined in section 3.2 below. It should be noted that other research objectives may come to the fore should any archaeological features from other periods be identified as a result of the mitigation works outlined below.

3.2 Principal Aims and Objectives

3.2.1 The aims of the programme of work are to gather sufficient evidence to establish, supplement, improve and make available information about any archaeological remains existing within the area of investigation, and to provide an appropriate post-excavation assessment, analysis, reporting, archiving and dissemination.

3.2.2 The objectives are as follows.

- To produce a photographic, drawn and descriptive record of any surviving below-ground archaeological remains.
- To produce dating and phasing for archaeological deposits recorded on the site.
- To establish the character and delimit the extent of archaeological deposits in order to define functional areas on the site, e.g. industrial and domestic.



- To produce information on the economy and local environment.

4 FIELDWORK METHODOLOGY

4.1 General Statement of Practice

4.1.1 All staff employed on the project will be suitably qualified for their respective project roles and have substantial experience of archaeological excavation and recording.

4.1.2 All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification.

4.1.3 All ground works covered under this specification will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket working in plan.

4.1.4 ARS Ltd will ensure that plant or machinery will not be operated in the immediate vicinity of any archaeological remains until they have been recorded.

4.1.5 Contractors and plant operators will be notified that any observations of archaeological remains must be reported immediately to the archaeologist on site.

4.1.6 Regular contact will be ensured between ARS Ltd and the site project manager to ensure that ARS Ltd is kept up to date with site works and given the change to respond appropriately and in line with the Staffordshire County Council Principal Archaeologist's requirements.

4.1.7 All site operations will be carried out in a safe manner in accordance with ARS Ltd's health and safety policy. A risk assessment will be prepared before commencement on site.

4.2 Watching Brief

4.2.1 All elements of the archaeological watching brief will be carried out in accordance with ClfA's *Code of Conduct* (2014a) and *Standards and Guidance for Archaeological Watching Briefs* (2014c).

4.2.2 On completion of the strip, map and record exercise the watching brief will be carried out during any other associated groundworks, such as service runs, and will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket.

4.2.3 All excavated spoil will be scanned visually to recover small finds. Finds so recovered will be recorded with their location of origin ascribed. Finds will be retained and recorded.

4.2.4 Where archaeological features and/or deposits are identified during the watching brief, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed.



4.2.5 If significant archaeological features are identified during these works, the Staffordshire County Council Principal Archaeologist will be notified and a decision made as how to proceed.

4.3 Sampling, Faunal Remains and Treasure

4.3.1 This section outlines sampling methodologies to be utilised in all excavation types.

4.3.2 For sealed and stratigraphically secure deposits that have the potential to provide environmental evidence relating to diet and economy, dating evidence or land use regime, a minimum of 40 litres of sample will be taken, or 100% of the sample if smaller. This material will be floated and passed through graduated sieves, the smallest being a 500µ mesh.

4.3.3 In the case of waterlogged or anaerobic deposits, a minimum sample size of 20 litres will be taken,

4.3.4 Should a sequence of superimposed deposits of note be present column sampling may be considered.

4.3.5 In all instances, sampling strategies will be in accordance with guidelines issued by Historic England's *Environmental Archaeology: A Guide to the Theory and Practice Methods, from sampling and recovery to post-excavation* (Campbell *et al.* 2011) and will be targeted in order to explore the levels and types of preservation present.

4.3.6 Should other types of environmental deposits be encountered, appropriate specialist advice will be sought and appropriate sampling strategy devised. Samples will be assessed by a suitable specialist with provision for further analysis as required. Advice from the Historic England Scientific Advisor will be taken as appropriate.

4.3.7 Any human remains will initially be left *in-situ* and, if deemed necessary, removal will be undertaken following once a Coroners licence has been obtained in accordance with the relevant Ministry of Justice regulations and in discussion with the Staffordshire County Council Principal Archaeologist.

4.3.8 Finds of 'treasure' will be reported to the Coroner in accordance with the Treasure Act (DCMS 2008). The Portable Antiquities Liaison officer will also be notified.

HM Coroner
Ian Stewart Smith
Coroners Chambers
547 Hartshill Road
Stoke-on-Trent
Staffordshire
ST4 6HF
Tel: 01782 234783

Finds Liaison Officer
Teresa Gilmore
Birmingham Museum and Art Gallery
Chamberlain Square
Birmingham
West Midlands
B3 3DH
Tel: 01213 488225
e-mail: Teresa.Gilmore@birminghammuseums.org.uk



The Staffordshire County Council Principal Archaeologist will also be notified and, if necessary, a site meeting arranged to determine if further investigation in the vicinity of the find spot is required.

4.4 Recording

4.4.1 Site recording will follow standard conventions outlined in the *Site Recording Manual* of Museum of London Archaeology Services (MoLAS) (2002).

4.4.2 The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded using a single context planning system in accordance with the ARS Ltd field recording manual.

4.4.3 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate measured scale plans and section/elevations will be drawn where required at the appropriate scale and in accordance with best practice. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.

4.4.4 A plan of the excavated areas will be maintained, features notes and section lines recorded. All drawings will be carried out at an appropriate scale and all contexts will be recorded using a single context recording system.

4.4.5 Sample representative levels will be taken to record the maximum depth of excavation and/or natural should no archaeological features be uncovered.

4.4.6 The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

4.4.7 All heights above sea level will be recorded for all deposits and features in metres above Ordnance Datum (aOD).

4.4.8 A full photographic record will be compiled using a digital camera, a Fuji XP90 with a 16.4 MP resolution, and a register of all photographs will be kept. The photographic record will encompass all encountered archaeological entities. In addition, key relationships between entities, where these help demonstrate sequence or form, will also be photographed. A clearly visible, graduated metric scale will be included in all record shots. A supplementary record of working images will be taken to demonstrate how the site was investigated and what the prevailing conditions were like during excavation.

4.4.9 A stratigraphic matrix will be compiled for all trenches where superimposed archaeological deposits, features or structures are encountered.

5 FINDS PROCESSING AND STORAGE

5.1 All finds processing, conservation work and storage of finds will be carried out in accordance with the ClfA (2014d) *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* and the UKIC (1990) *Guidelines for the Preparation of Archives for Long-Term Storage*.



5.2 Artefact collection and discard policies will be appropriate for the defined purpose.

5.3 Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.

5.4 All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper).

5.5 Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated.

5.6 During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.

5.7 The deposition and disposal of artefacts will be agreed with the legal owner and The Potteries Museum & Art Gallery prior to the work taking place. All finds except treasure trove are the property of the landowner.

5.8 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of The Potteries Museum & Art Gallery.

6 TIMETABLE AND STAFFING

6.1 The outline timetable for the works is as follows. This will be updated by email as the project progresses.

Proposed Commencement Date	Task
June 2017	Archaeological fieldwork
July 2017	Archaeological report and archive

6.2 The Project Manager for the archaeological works will be Reuben Thorpe MCIfA, Projects Manager at ARS Ltd. The Fieldwork Project Officer will be Ben Dyson ACIfA or Callum Alsop ACIfA, Projects Officers at ARS Ltd or Tristan Wilson, Assistant Projects Officer at ARS Ltd.

6.3 Specialist analyses will be carried out by appropriately qualified specialists as detailed subject to availability.

- Flint and prehistoric pottery: Dr Robin Holgate MCIfA
- Romano-British pottery: Ruth Leary or Ian Rowlandson



- | | |
|---|---|
| • Romano-British small finds: | Lindsay Allason-Jones MCIfA |
| • Samian Ware: | Dr Gwladys Monteil |
| • Medieval and post-medieval pottery: | Dr Chris Cumberpatch or
Dr Robin Holgate MCIfA |
| • Medieval and post-medieval glass, metalwork and clay pipes: | Mike Wood MCIfA |
| • Plant macrofossils, charcoals and pollen: | Luke Parker |
| • Human and animal bone: | Milena Grzybowska |
| • Radiocarbon dating: | Prof Gordon Cook (SUERC) |
| • Finds conservation: | Vicky Garlick (Durham University) |

7 REPORT

7.1 A report on the results obtained will be produced by ARS Ltd and submitted to the Staffordshire County Council Principal Archaeologist or personnel nominated by her within 8 weeks of the completion of the watching brief. The report will follow the guidance laid out in the relevant ClfA standards and will include the following as a minimum.

- Non-technical executive summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections
- An objective summary statement of results
- Conclusions
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the WSI and OASIS form.



7.2 One bound copy of the final report with a digital copy of the report in PDF/A format on disc will be deposited with the Staffordshire Historic Environment Record (HER). A copy of the report will be uploaded as part of the OASIS record for online access via the Archaeological Data Service.

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

8 ARCHIVE DEPOSITION

8.1 Should the project produce archaeologically significant finds, then the Staffordshire County Council Principal Archaeologist and The Potteries Museum & Art Gallery Curator will be notified at the earliest opportunity, and an accession number will be produced for the site.

8.2 A project archive will be prepared for deposition by ARS Ltd with the Potteries Museum & Art Gallery. The archive will comprise of the primary record and synthetic works arising from the project, including documents, plans, sections, photographs, and electronic data and an accompanying metadata statement. The digital archive will be prepared in line with current best practice outlined in *Archaeology Data Service/Digital Antiquity Guides to Good Practice* (ADS/Digital Antiquity 2011).

8.3 The archive will be deposited in line with *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (Brown 2007), ClfA's (2014e) *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*, and Society of Museum Archaeologists (1993) *Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland*. In addition, The Potteries Museum & Art Gallery *Guidelines for the Preparation and Preservation of Archaeological Archives* (2015) will be adhered to. The archive will be deposited within two months of the completion of the report.

8.4 The Staffordshire County Council Principal Archaeologist and Museum Curator will be notified at the earliest opportunity should the site produce archaeologically significant, unusual, or unexpected finds.

8.5 The Staffordshire County Council Principal Archaeologist and Museum Curator will be notified in writing on completion of the fieldwork with projected dates for the completion of the report and deposition of the archive. The date for deposition of the archive will be confirmed in the report and the SCC Principal Archaeologist informed in writing on final deposition of the archive.

8.6 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive.



8.7 A full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be deposited with the archive as digital images on a CD ROM.

9 MONITORING ARRANGEMENTS

9.1 At least one week prior notice of the commencement of each phase of groundworks to be given to the Staffordshire County Council Principal Archaeologist:

Stephen Dean
Staffordshire County Council Principal Archaeologist
Design Hub
No.1 Staffordshire Place
Stafford
ST16 2DH
Tel: 01785 277290

9.2 ARS Ltd will liaise with the Staffordshire County Council Principal Archaeologist at regular intervals throughout the course of the work.

9.3 The client will afford reasonable access to the Staffordshire County Council Principal Archaeologist, or his representative, for the purposes of monitoring the archaeological mitigation.

10 GENERAL ITEMS

10.1 Health and Safety

10.1.1 All work will be carried out in accordance with The Health and Safety at Work Act 1974. Specific health and safety policies exist for all our workplaces and all staff employed will be made aware of the policy and any relevant issues. The particular risks involved with this project will be assessed, recorded and relevant mitigation measures put in place as part of a full risk assessment, which will be compiled in advance of fieldwork and will be read and signed by all on-site operatives. ARS Ltd retains Peninsula as its expert health and safety consultants.

10.2 Insurance Cover

10.2.1 ARS Ltd has full insurance cover for employee liability public liability, professional indemnity and all-risks cover.

10.3 Community Engagement and Outreach

10.3.1 Any opportunities for engaging the local community in any archaeological findings should be sought, for example a guided site tour and/or dissemination of information via ARS Ltd's website and local media.

10.4 Changes to the Written Scheme of Investigation

10.4.1 Changes to the approved methodology or programme of works will only be made with prior written approval of the Staffordshire County Council Principal Archaeologist.



10.5 Publication

10.5.1 If significant archaeological remains are recorded, ARS Ltd will submit a short summary report for inclusion in the next edition of the Journal of West Midlands Archaeology within 6 months of the completion of the fieldwork. Additional popular articles will also be produced for local and/or national magazines as appropriate. The final form of the publication is to be agreed with the planning archaeologist and the client dependent on the results of the fieldwork.

10.6 Publicity and Copyright

10.6.1 Any publicity will be handled by the client. ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

11 REFERENCES

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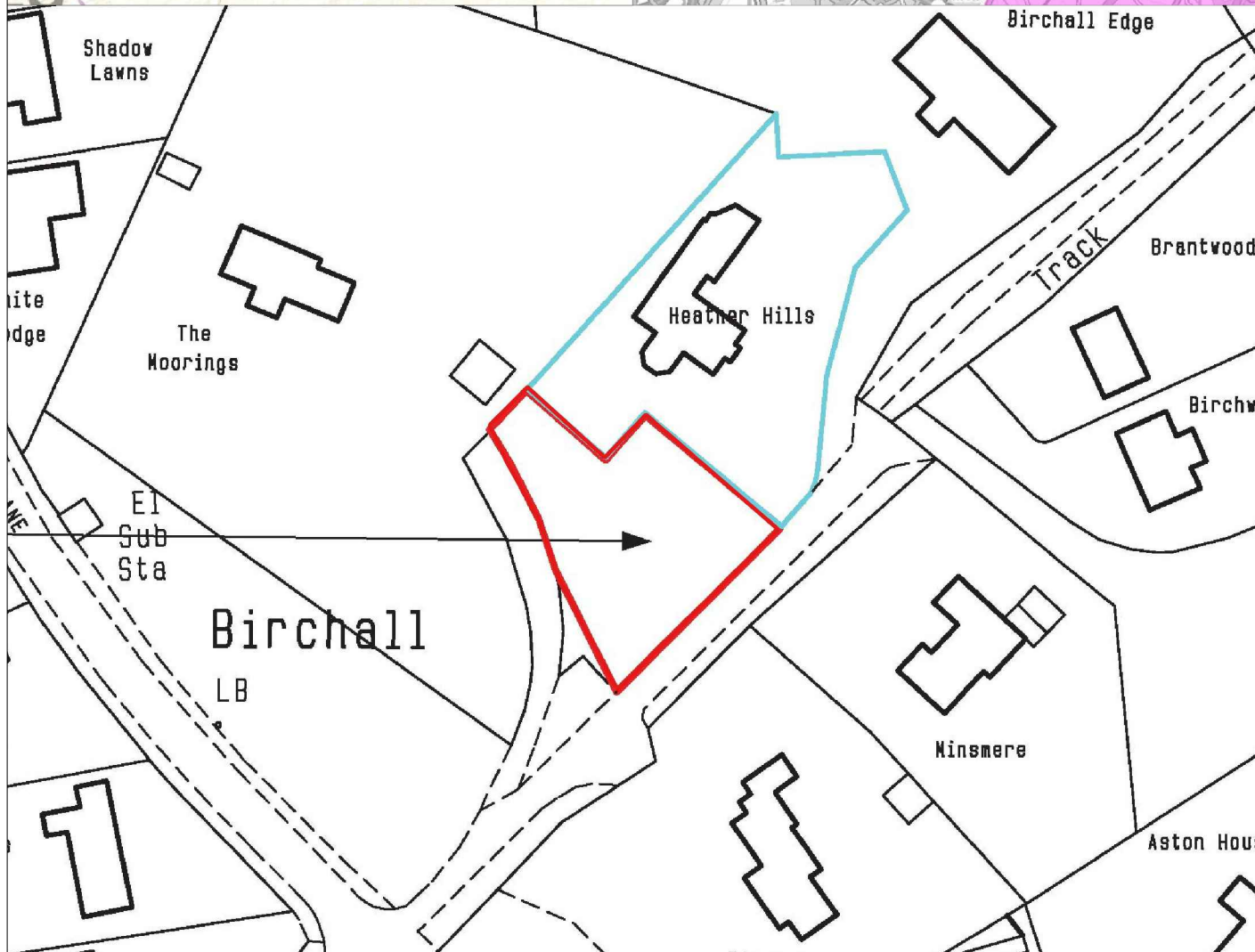
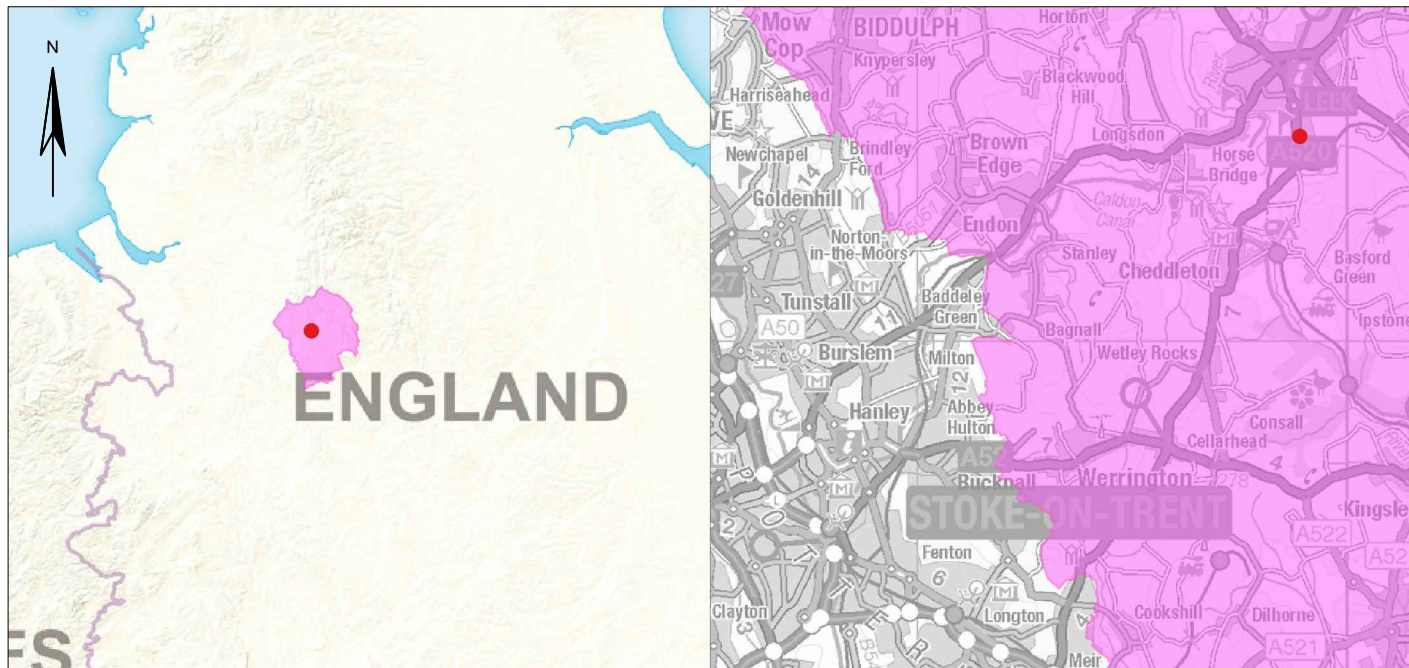
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FIGURE





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Site Code: Heather Hills, Birchall, Leek
Date: May 2017
Drawn: RD
Scale: As shown

Figure 1
Site Location

Key: ● Site location
 Proposed Development Area

Staffordshire Moorlands DC

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