

CFA Archaeology Ltd

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Advice on Archaeology & Planning

Environmental Impact Assessment

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Finds / Environmental Analysis

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Site & Landscape Survey

Interpretation, Design & Display

**Pavillion Gardens
St John's Road
Buxton
Derbyshire**

**Written Scheme of Investigation for
an Archaeological Watching Brief**

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This document has been prepared in accordance with CFA Archaeology Ltd standard procedures.

**Pavillion Gardens
St John's Road
Buxton
Derbyshire**

**Written Scheme of Investigation for
an Archaeological Watching Brief**

1. Background

This Written Scheme of Investigation (WSI) has been produced by CFA Archaeology Ltd for Bench Architects to detail a programme of archaeological works to be undertaken. The site is situated at the Pavilion and its associated grounds off St. John's Roads, Buxton, Derbyshire. The site is centred at NGR SK 05521 73439 and is at a height of approximately 300m above the Ordnance Datum (AOD).

2. Development Background

The proposed development involves structural repairs, re-roofing works, remedial works, stabilisation, reordering and upgrades to make safe the Octagon and Octagon Reception, including; the complete replacement of the existing floors, the complete renewal of above and below ground drainage works and mechanical services. The proposed development may also require localised support to enable the works. Mitigation, therefore, will be required where ground work is taking place.

3. Archaeological Background

The proposed development area was the subject of a design, access and heritage statement (Bench Architects 2016) which confirmed that it lies within an archaeologically sensitive site. A prehistoric flint was found within the Pavilion Gardens (HER 2802) and it lies within 500m of Lismore Fields, which contains scheduled, nationally important evidence for Mesolithic and Neolithic activity (HER 2898 and 2899). This and the site's proximity to the River Wye, means that there is potential for prehistoric archaeological remains to be present on the site.

The proposed development area lies within 60m of Buxton's 'Area of Archaeological Interest', which corresponds to the extent of Roman activity in the town, including the purported Roman Baths. It is possible therefore that Roman remains may also be present.

Buxton is the home to the shrine of St Ann and its associated natural mineral springs. It was popular place of pilgrimage during the medieval period and the town was known for its picturesque setting; the Pavilion Gardens were developed in the 16th or 17th century in association with Buxton Hall.

Buxton Spa is within the purported Roman site, located over natural water sources and improved during the 18th century. This reinvigorated the town's popularity with visitors. To enhance their experiences improvements and planting continued at the Pavilion Gardens by the Dukes of Devonshire in the eighteenth and nineteenth centuries. In the 1830s, the sixth Duke of Devonshire commissioned Joseph Paxton (1803-65) to improve and embellish the area around the River Wye, and his work is recorded on the Map of Buxton Park, reproduced by Dr. William Robertson in 1854.

The Pavilion Gardens was given to the Buxton Improvements Company by the 7th Duke of Devonshire in the late 19th century. In the 1870s they commissioned Edward Milner (former apprentice of Paxton) to design the Pavilion building and improve the park. He incorporated Paxton's original designs into the improvements. The Octagon, made from pioneering iron-framed structures, forms the most complete building of the original, though the Pavilion was subject to enlargements, to accommodate the Concert Hall, Playhouse and Octagon Reception.

In the 20th century an Opera House was built where the original eastern pavilion used to stand,

a swimming pool was added but was damaged by fire and rebuilt in the late 20th century. The extensions and repair conceal a lot of Milner's original design.

4. Project Objectives

There is the potential for the disturbance of buried archaeological remains. The objective of the watching brief will be to:

- Determine the form and function of any archaeological features encountered;
- Determine the spatial arrangement of any archaeological features encountered;
- As far as practicable, recover dating evidence from the archaeological features;
- Establish the sequence of any archaeological remains present on the site;
- Consider any results in the context of relevant research agendas and in accordance with their significance;
- To inform ongoing mitigation strategies to ensure remains in close proximity to the development are preserved in situ, and;
- Produce a report detailing the results of the watching brief.

The research objectives are detailed in *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight, Vyner and Allen 2012).

5. Methods Statement

CFA Archaeology is a registered organisation with the Chartered Institute for Archaeologists. Work will be conducted with regard to the Institute's Standards documents (CIfA 2014a and 2014b), Historic England guidance documents (EH 2006a, 2006b, 2008, 2010, 2011 and 2012), and this WSI. Recording of all elements will be done following established CFA procedures.

Archaeological Monitoring: external areas

A suitably qualified and experienced archaeologist will continually monitor all groundworks associated with the development, including, but not exclusive to, all drainage and inspection chamber works.

All mechanical excavation will be undertaken by a machine fitted with a toothless ditching bucket. If, during the course of the groundworks, any features of potential archaeological interest are located, excavations will be temporarily ceased and the archaeologist will be allowed sufficient time excavate and record the remains. Any encountered remains will be excavated and recorded to an appropriate level in accordance with nationally recognised industry standards and guidance (CIfA 2014a).

Archaeological recording will be undertaken by means of standard recording sheets, drawings and photographs. Site plans will be located on development plans supplied by the client. Archaeological sections and plans will be drawn at an appropriate scale.

Photographs will include an appropriate scale and where necessary a north arrow. All photographs will be recorded on a photographic register detailing subject, location and direction of shot. A high specification digital SLR will be used for all record photographs..

Archaeological Monitoring: internal areas

A suitably qualified and experienced archaeologist will intermittently monitor all groundworks associated with the development as and when required. These works include but are not exclusive to, all drainage works, floor consolidation and groundworks pertaining to localised supports. The archaeological monitoring of the internal areas will be subject to same procedures as the external areas, mentioned above.

6. Site Sampling

Excavation of the archaeological remains encountered on site will be subject to the following strategy:

- All partial or whole archaeological deposits and features encountered within the extents of the groundworks will be fully excavated;
- Any structural remains such as post-holes and stake-holes, assuming they are fully exposed, will be 50% sampled in the first instance, recorded and then fully sampled;
- Walls and/or wall footings will be fully cleaned, photographed and then drawn in elevation;
- If the masonry has to be removed a section will be deconstructed noting bonding material and construction techniques. The foundation cut will then be excavated and recorded in section;
- Particular care will be taken to secure dateable material from any identified structural features;
- The extent of the excavations and all encountered remains will be located and planned using an industry standard Trimble GPS system;
- In the highly unlikely event that human remains are encountered they will be left in situ and the relevant authorities will be notified immediately. If removal is necessary this will comply with the relevant Government licence, regulations and guidance.

7. Environmental Sampling and Scientific Dating

Should deposits suitable for environmental sampling be encountered they will be sampled in accordance with current Historic England Guidelines (2011), advice from CFA's environmental specialist and Historic England's Regional Scientific Advisor will be sought as necessary.

8. Finds and Conservation

All finds (artefacts and ecofacts) recovered during excavation will be collected and processed, unless variations in this principle are agreed with the Local Authority. Finds will be appropriately packaged and stored under optimum conditions (Watkinson and Neal 1998) and in accordance with Historic England Guidelines. 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-rayed before assessment.

9. Analysis and reporting

The report detailing post-excavation assessment, specialist assessment and analysis will be completed within an agreed timescale and a digital copy of the report will be supplied in PDF format. A hard copy of the report can be supplied to the client upon request; the Derbyshire HER will receive a hard copy and a digital copy.

The report will include:

- A non-technical summary of the results of the work, introduction and aims and objectives.
- An introduction which will include:
 - The site code/project number;
 - Planning reference number;
 - Dates when the fieldwork took place and;
 - OS Grid reference.
- An account of the methods and results of the archaeological monitoring, describing both structural data and associated finds and/or environmental data recovered;
- Interpretation, including phasing of the site sequence and spot-dating of ceramics. (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 groundwork excavations and indicating the location of archaeological features;
- A statement of the significance of archaeological remains and their potential to contribute to the understanding of the periods they relate to and relevant research agendas;
- A specialist assessment of the artefacts recovered with a view to their potential for further study. Allowance will be made for preliminary conservation and stabilisation of all objects and an assessment of long-term conservation and storage needs;
- Assessment of artefacts will include inspection of all iron objects, a selection of non-ferrous artefacts (including coins), and a sample of any industrial debris relating to metallurgy. An assessment 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;
- 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, will be completed. The preservation state, density and significance of material retrieved will be assessed, following industry standards (EH, 2011a). Unprocessed sub-samples must be stored in conditions specified by the appropriate specialists;
- Assessments for any technological residues will be undertaken;
- An assessment of the archaeological significance of the deposits identified, in relation to other sites in the region;
- A conclusion with recommendations for further post-excavation work in the form of an updated WSI design including a timetable and details of proposed wider publication, if required;
- Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive;
- Appendices figures and plates, as appropriate, including a copy of the Written Scheme of Investigation;
- References and bibliography of all sources used.

Upon completion of the work, CFA Archaeology will make their work accessible to the wider research community by submitting digital data and copies of reports online to OASIS (<http://ads.ahds.ac.uk/project/oasis>).

All finds, if appropriate, will be retained, washed and where appropriate, marked with the site code and context number in accordance to accepted professional standards (CIfA 2014b).

10. Archiving

The requirements for conservation and storage will be agreed with the relevant museum prior to the start of work. Appropriate conservation of finds will be conducted before disposal. The archive will include all finds and paper records from the evaluation as well as the excavation and will be ordered, indexed and conform to the requirements of the depositing museum and to all relevant professional guidance (CIfA 2014b and ADS 2011). Appropriate forms for prior notification of the project and for transfer of title will be procured from the relevant museum.

11. Publishing

Should significant remains be encountered then a publication report will be submitted to an appropriate journal.

12. Monitoring

Monitoring of the project will be carried out by the Derby and Derbyshire Control Archaeologist of the Economy, Transport and Environment Department of Derbyshire County Council.

13. Project Personnel

Martin Lightfoot (BA MA MifA) is Head of Commercial Operations (England) for CFA. Martin has project managed numerous archaeological projects of all periods throughout the country including those undertaken for large infrastructure projects. Martin will exercise overall management of the project.

The **Site Archaeologist** for CFA will be selected from CFA's pool of staff, all of whom have appropriate experience. If appointed, CVs for the appropriate staff can be forwarded prior to the start of the project.

Shelley Werner (BSc MPhil PhD) is CFA's Graphics Manager, responsible for the organisation and management of all GIS, CAD and Illustrative material. She is an experienced illustrator with specialist knowledge in GIS consultancy and standing building survey and has worked on a variety of projects in Scotland and England.

Post-excavation will be managed by CFA's post-excavation manager **Melanie Johnson**; CV's for CFA's 'in house' specialists or external consultants can be supplied on request.

14. List of Specialists

Neolithic or Bronze Age pottery	Terry Manby
Roman and Pre-Roman Iron Age pottery	Christopher Cumberpatch BA PhD
Post-Roman pottery	Christopher Cumberpatch BA PhD
Flint	Martin Lightfoot BA MA MCIfA (CFA Archaeology)
Roman Glass, Iron and Copper Alloy objects	Hilary Cool
Conservation Laboratory	Ian Panter (York Archaeological Trust)
Dendrochronology	Ian Tyers
Palaeoenvironmental Scientist	Mike Cressey HND BA MSc PhD MifA (CFA Archaeology)
Archaeobotany	Mhairi Hastie BSc MSc AIfA (CFA Archaeology)
Archaeozoology	Jennifer Thoms MA PhD FSA Scot
Soil Micromorphology	Clare Ellis BA PhD MifA
Mollusca and fish remains	Ruby Ceron-Carrasco MA PhD
Medieval and post-medieval pottery	Christopher Cumberpatch BA PhD
Palynology	Robert McCulloch BA PhD (University of Stirling)
Ceramic Building Material	John Tibbles BA AIFA

The above list is not exhaustive, should unusual or locally specific archaeological materials be discovered; appropriate specialists will be sort on the advice of the Historic England's Science Advisor for Yorkshire. CV's and examples of work for all specialists may be supplied on request.

15. Health and Safety

All CFA staff have been inducted into CFA's Health and Safety Policy, which can be supplied on request. All site staff have current relevant CSCS cards (archaeological technician). A risk assessment will be undertaken prior to the start of works.

16. References

- ADS, 2011, *Guides to Good Practice*, Archaeology Data Service / Digital Antiquity
- Bench Architects, 2016, *Octagon Pavilion Gardens; design, access and heritage statement – Octagon beam repairs, Pavilion Gardens, Buxton, Derbyshire, SK17 6BE*, Bench Architects
- CIfA, 2014a, *Standard and Guidance for Archaeological Excavation*, Chartered Institute for Archaeologists
- CIfA, 2014b, *Standard and Guidance for the collection, documentation, conservation and research of archaeological material*, Chartered Institute for Archaeologists
- EH, 2006a, *The Management of Research Projects in the Historic Environment*, (MoRPHE), Project Managers' Guide, English Heritage
- EH, 2006b, *Understanding Buildings: A guide to historic building recording*, English Heritage
- EH, 2007, *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record*, English Heritage
- EH, 2008, *Investigative Conservation*, English Heritage
- EH, 2010, *Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood*, English Heritage (3rd edition)
- EH, 2011a, *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation*, English Heritage (Second Edition)
- EH, 2011b, *Environmental Archaeology; A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*, English Heritage, (2nd edition)
- EH, 2012, *Waterlogged Organic Artefacts. Guidance on their Recovery, Analysis and Conservation*, English Heritage
- Knight D., Vyner B., and Allen, C., 2012, *East Midlands Heritage: An updated Research Agenda and strategy for the historic environment of the east midlands* East Midlands Heritage
- NPPF, 2012, *National Planning Policy Framework*, Department for Communities and Local Government, March 2012
- Watkinson D. and Neal V., 1998 (eds), *First Aid for Finds*