University of Salford MANCHESTER ARCHAEOLOGY

Salford Archaeology

Centre for Applied Archaeology

University of Salford

Blocks 3 & 4, Potato Wharf, Castlefield, Manchester

A Written Scheme of Investigation for an Archaeological Evaluation

Version: 1.0

Client: Lend Lease Residential (North West)

Project	Document Title	Document Type	Author	Date	Version
Blocks 3 & 4, Potato Wharf, Manchester	Blocks 3 & 4, Potato Wharf, Castlefield, Manchester: Archaeological Evaluation	WSI	Ian Miller (Assistant Director)	25/05/2016	1.0

University of Salford MANCHESTER
ARCHAEOLOGY

Site Location: Potato Wharf, Castlefield, Manchester

NGR: 382880 397600

Internal Ref:

Planning Ref: 109335/FO/2015/C1

Prepared for: Lend Lease Residential (North West)

Doc Title: Blocks 3 & 4, Potato Wharf, Castlefield, Manchester: A Written Scheme of Investigation for an Archaeological Evaluation

Doc Type: Written Scheme of Investigation

Version: Version 1.0

Author: Ian Miller BA Hons, FSA
Position: Assistant Director
Date: May 2016

Copyright: Copyright for this document remains with the Centre for Applied Archaeology, University of Salford.

Contact: Salford Archaeology, University of Salford, Peel Building, Salford, Greater Manchester, M5 4DW
Telephone: 0161 295 4467
Email: i.f.miller@salford.ac.uk

Disclaimer: This document has been prepared by Salford Archaeology (Centre for Applied Archaeology, University of Salford) for the titled project or named part thereof and should not be used or relied upon for any other project without an independent check being undertaken to assess its suitability and the prior written consent and authority obtained from Salford Archaeology. The University of Salford accepts no responsibility or liability for the consequences of this document being used for a purpose other than those for which it was commissioned. Other persons/parties using or relying on this document for other such purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify the University of Salford for all loss or damage resulting therefrom. The University of Salford accepts no liability or responsibility for this document to any other party/persons than by whom it was commissioned.

Project	Document Title	Document Type	Author	Date	Version
Blocks 3 & 4, Potato Wharf, Manchester	Blocks 3 & 4, Potato Wharf, Castlefield, Manchester: Archaeological Evaluation	WSI	Ian Miller (Assistant Director)	25/05/2016	1.0

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Lend Lease Residential (North West) has obtained planning consent (Ref: 109335/FO/2015/C1) for a residential development on Potato Wharf in the Castlefield area of Manchester city centre (centred on NGR 382880 397600). The site lies between Potato Wharf and the Bridgewater Canal and its associated canal basins, on the fringe of the area occupied previously by the Roman settlement of *Mamucium*.

1.1.2 The proposed development allows will necessitate considerable earth-moving works that have potential to impact on any below-ground remains of archaeological interest. In order to secure archaeological interest, Manchester City Council has attached a condition (Condition 8) to planning consent for the proposed development that reads:

'No development shall take place until the applicant or their agents or their successors in title has secured the implementation of a programme of archaeological works to be undertaken in accordance with a Written Scheme of Investigation (WSI), prepared by the appointed archaeological contractor. The WSI should be submitted to and approved in writing by the local planning authority. The development shall not be occupied until the site investigation has been completed in accordance with the approved WSI'.

Reason - To investigate the archaeological interest of the site and record and preserve any remains of archaeological interest, pursuant to saved policy DC20.1 of the Unitary Development Plan for the City of Manchester and guidance in the National Planning Policy Framework.

1.1.3 In order to fulfil the requirements of this condition, Lend Lease Residential (North West) has commissioned Salford Archaeology within the University of Salford to undertake a programme of archaeological investigation. This has been formulated to meet the requirements of the Greater Manchester Archaeology Advisory Service (GMAAS), which provides planning advice on archaeological issues to Manchester City Council, and in the first instance allows for a programme of evaluation trenching. Two trenches will be excavated across the proposed development site, targeted on the sites of an infilled canal basin and associated warehouses. In the event of significant archaeological remains being discovered during the evaluation trenching, further archaeological investigation is likely to be required. Any such additional works will be carried out in accordance with an Updated Written Scheme of Investigation, which will be formulated in consultation with GMAAS. In addition, GMAAS has recommended that an historic building investigation of a small warehouse that survives extant on the site is carried out in advance of demolition.

1.1.4 This Written Scheme of Investigation (WSI) for an appropriate programme of archaeological evaluation has been prepared by Ian Miller, Assistant Director of Salford Archaeology at the Centre for Applied Archaeology (CfAA) on behalf of Lend Lease Residential (North West). The document has been prepared in consultation with the Greater Manchester Archaeological Advisory Service (GMAAS) in their capacity as archaeological advisors to Manchester City Council. GMAAS has agreed in principle to be kept informed by the Senior Archaeologist of the ongoing works during the programme and upon any changes to the design. Any change to the proposed WSI will be agreed between the Client, GMAAS and Salford Archaeology.

1.2 PURPOSE OF THE DOCUMENT

1.1.1 An Archaeological Written Scheme of Investigation (WSI) is a comprehensive document detailing the requirements and methodological approaches of a programme of archaeological works. It is defined by Historic England as:

"Where development will lead to the loss of a material part of the significance of a heritage asset, policy HE12.3 [of PPS5, now paragraph 141 of the NPPF] requires local planning authorities to ensure that developers take advantage of the opportunity to advance our understanding of the past before the asset or the relevant part is irretrievably lost. As this is the only opportunity to do this it is important that:

1: Any investigation, including recording and sampling, is carried out to professional standards and to an appropriate level of detail proportionate to the assets likely significance, by an organisation or individual with appropriate expertise;

2. The resultant records, artefacts and samples are analysed and where necessary conserved;

3: The understanding gained is made publically available;

4: An archive is created, and deposited for future research.

The steps to be taken by the developer to achieve these aims can be controlled through a Written Scheme of Investigation (WSI), usually drafted by the applicant. The local planning authority can advise as to what the scheme should cover. Conditions can then be applied to the consent to secure the implementation of the Written Scheme of Investigation.

1.1.2 Should significant archaeological remains be identified during the archaeological evaluation, GMAAS may recommend further detailed works or open area excavations. Any additional change to this WSI would be discussed and agreed between all parties (Salford Archaeology, the client and GMAAS) at the earliest possible opportunity.

1.1.3 The nominated individual representing GMAAS for the duration of the project is: Norman Redhead, Heritage Management Director. email contact: N.Redhead@salford.ac.uk

2. AIMS AND OBJECTIVES

2.1 ACADEMIC AIMS

2.1.1 The principal aim of the project is to ensure that any remains of archaeological interest that are to be exposed, damaged or removed during the course of the development are recorded to an appropriate standard.

2.2 OBJECTIVES

2.2.1 The objectives of the project may be summarised as follows:

- to record, as far as is reasonably possible, the location, extent, condition, significance and quality of any surviving archaeological remains observed;
- to record a sufficient sample of the features to adequately characterise the nature of the surviving archaeology and date significant features;
- to determine the presence, character, and extent of buried remains pertaining to Manchester's Roman settlement;
- to determine the presence, character, and extent of buried remains pertaining to the medieval and post-medieval development of Manchester;
- to determine the presence, character, and extent of the infilled canal basin for the Bridgewater Canal;
- to determine the presence, character, and extent of buried remains pertaining to the former warehouses associated with the Bridgewater Canal;
- to provide sufficient information to enable an informed decision to be made about the need for any additional archaeological mitigation;
- to provide a photographic record of the two-storey building commensurate with an Historic England Level I standard of historic building investigation, which will provide a lasting record of the structure in its present condition;
- to make available the results of the work.

2.2.3 In order to address the aims and objective outlined above, it is proposed that two trial trenches are excavated across the proposed development area.

3. METHOD STATEMENT

3.1 THE PROPOSED ARCHAEOLOGICAL EVALUATION PROGRAMME

3.1.1 ***Trenching Rationale:*** it is proposed that two evaluation trenches, each measuring 40m long, across the proposed development site (Fig 1). The trenches are targeted on the infilled canal basin and the footprint of the former warehouses on each side. The trenches will be intended to establish the presence or absence of buried remains of archaeological interest identified in the desk-based assessment:

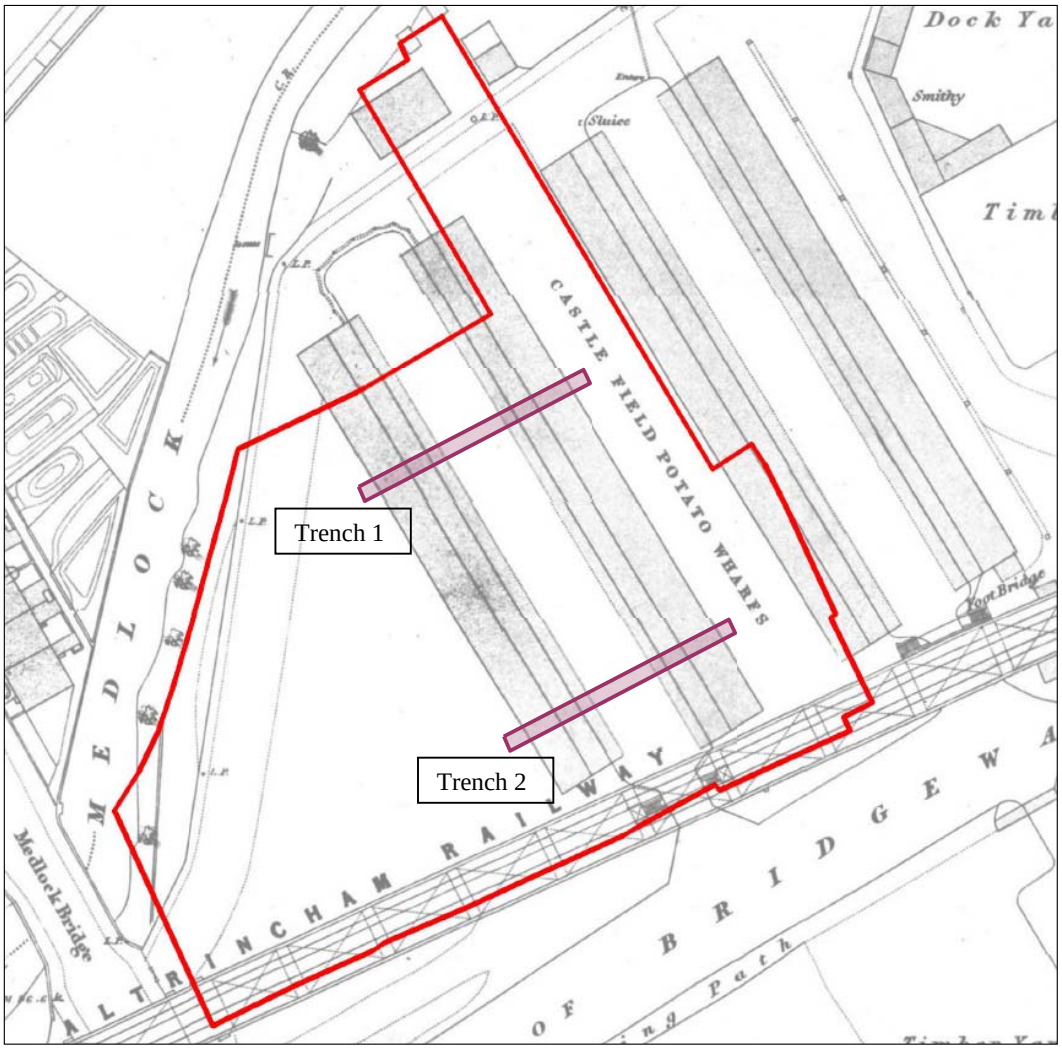


Figure 1: Proposed trench locations superimposed on the OS map of 1851

Project	Document Title	Document Type	Author	Date	Version
Blocks 3 & 4, Potato Wharf, Manchester	Blocks 3 & 4, Potato Wharf, Castlefield, Manchester: Archaeological Evaluation	WSI	Ian Miller (Assistant Director)	25/05/2016	1.0

3.1.2 ***General Methodology:*** all archaeological excavation shall be conducted following the CIfA Standards and Guidance for archaeological field evaluation (Published October 1994, Revised September 2001 and October 2008). Excavation of the modern ground surface will be undertaken by a machine of appropriate power using a toothed bucket and, where necessary, a breaker. The uppermost levels of overburden/demolition material will then be removed using the same machine, but fitted with a toothless ditching bucket, to the top of the first significant archaeological level. The work will be supervised closely by a suitably experienced archaeologist.

3.1.3 Machine excavation will then be used to define carefully the extent of any surviving foundations, floors, and other remains. Thereafter, structural remains will be rapidly cleaned manually to define their extent, nature, form and, where possible, date. Hand excavation will be undertaken by trained professional archaeologists, and shall occur only if it is deemed safe to do so by the Senior Archaeologist. If the excavation of individual trenches is to proceed below a depth of 1.2m, then the trench will be widened sufficiently to allow the sides to be stepped in.

3.1.4 All recording of below ground archaeological works will be produced in line with the Chartered Institute for Archaeologists*: Standard and guidance for Archaeological Excavation*, Published September 1995, revised October 2008. All information identified in the course of the site works will be recorded stratigraphically, utilising *pro-forma* context sheets, and will be accompanied with sufficient pictorial record (plans, sections and digital photographs) to identify and illustrate individual features.

3.1.5 ***Context Recording:*** all contexts will be recorded using *pro-forma* sheets, and details will be incorporated into a Harris matrix. All written recording of survey data, contexts, photographs, artefacts and ecofacts will be cross-referenced from record sheets using sequential numbering.

3.1.6 ***Photography:*** a full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the strip and record excavation will be generated. Photography will be undertaken using high-resolution digital cameras. All frames will include a visible, graduated metric scale. Photographs records will be maintained on special photographic *pro-forma* sheets.

3.1.7 ***Planning:*** the precise location of all archaeological structures encountered will be surveyed by EDM tacheometry using a total station linked to a pen computer data logger. This process will generate scaled plans within AutoCAD, which will then be subject to manual survey enhancement. The drawings will be generated at an accuracy appropriate for 1:20. Sections will be manually drafted as appropriate at a scale of 1:10. All information will be tied in to Ordnance Datum.

3.1.8 ***Human remains:*** human remains are not expected to be present, but if they are found they will, if possible, be left *in situ* covered and protected. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and curator will be informed immediately. Where a licence is issued, all human skeletal remains must be properly removed in accordance with the terms of that licence.

3.1.9 ***Finds policy:*** finds recovery and sampling programmes will be in accordance with best practice (following current Chartered Institute for Archaeologists' guidelines) and subject to expert advice in order to minimise deterioration. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). Samples will also be collected for technological, pedological and chronological analysis as appropriate.

3.1.10 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996.

3.2 THE HISTORIC BUILDING INVESTIGATION

3.2.1 ***Trenching Rationale:*** it is proposed that the two-storey building in the north-eastern part of the study area is subject to an historic building investigation commensurate with an Historic England Level I-type survey. The survey will be conducted following the CIfA Standards and guidance for archaeological building surveys (published October 1994, revised September 2001 and October 2008).

3.2.2 A comprehensive photographic archive for all of the buildings (pending the availability of safe access to the interiors) will be produced utilising a high-resolution digital camera. All frames, excluding general contextual views, will incorporate a graduated metric scale. A plan showing the view point directions will be produced, together with a full photographic index. The archive will comprise the following:

- the external appearance and setting of the buildings, including a mixture of general shots and detailed views taken from perpendicular and oblique angles;
- general shots of the surrounding landscape;
- the general appearance of principal rooms and circulation areas;
- any external or internal detail, structural or architectural, which is relevant to the design, development and use of the buildings, and which does not show adequately on general photographs;
- any internal detailed views of features of especial architectural interest, fixtures and fittings, or fabric detail relevant to phasing the buildings.

3.3 HEALTH AND SAFETY

3.3.1 Full regard will be given to all constraints during the course of the project. The University of Salford provides a Health and Safety Statement for all projects and maintains a Safety Policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers.

- The Health and Safety at Work Act (1974);
- Management of Health and Safety at Work Regulations (1999);
- Manual Handling Operations Regulations 1992 (as amended in 2002);
- The Construction (Design and Management) Regulations (2007);
- The Control of Asbestos Regulations (2006);
- The Workplace (Health, Safety and Welfare) Regulations (1992);
- Construction (Health, Safety and Welfare) Regulations (1996);
- The Health and Safety (Miscellaneous Amendments) Regulations (2002);
- The Work at Height Regulations (2005);
- The Control of Substances Hazardous to Health Regulations (2002);
- The Health and Safety (First-Aid) Regulations (1981);
- The Regulatory Reform (Fire Safety) Order (2005);
- The Provision and Use of Work Equipment Regulations (1998);
- Lifting Operations and Lifting Equipment Regulations (1998).

3.3.2 Salford Archaeology undertakes to safeguard, so far as is reasonably practicable, the health, safety and welfare of its staff and of others who may be affected by our work. This applies in particular to providing and maintaining suitable premises, and providing all reasonable safeguards and precautions against accidents. The University of Salford will also take all reasonable steps to ensure the health and safety of all persons not in their employment, such as volunteers, students, visitors, and members of the public (this includes trespassers).

3.3.3 ***Contamination:*** the presence of any contaminated material on the site is currently uncertain, although the potential for chemical residues deriving from the site's former use as a hat manufactory and rubber works cannot be discounted. In the event of encountered any contaminated material, excavation will cease immediately, the Client will be informed, and the trench backfilled.

3.3.4 ***Insurance:*** the University of Salford has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

3.4 POST-EXCAVATION AND REPORT PRODUCTION

3.4.1 ***Report:*** a report will be produced within four working weeks of the completion of the fieldwork, and will include:

- a summary statement of the findings;
- the background to the archaeological investigation, including location details;
- an outline of the methodology of the survey;
- results obtained from historical research;
- a description of the site's setting, including topography and geology;
- an account of the documented historical background to the site;
- a summary, assessment, and interpretation of the results of the archaeological investigation;
- an assessment of any finds and samples recovered from the investigated area;
- a description of the significance of the site in its local and regional context;
- recommendations for any further archaeological investigation that is considered merited to mitigate the impact of the development works;
- a catalogue of archive items, including a list of photographs, and details of the final deposition of the project archive.

3.4.2 ***Archive:*** the results of the archaeological investigation will form the basis of a full archive to professional standards, in accordance with current Historic England guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*), the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990), and current CIfA standards and guidance for the creation, compilation, transportation and deposition of archaeological archive (published October 2009). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the CIfA in that organisation's code of conduct. As part of the archiving process, the on-line OASIS (On-line Access to Index of Archaeological Investigations) form will be completed.

3.4.3 The initial result of the fieldwork stage will be the site archive, which will be prepared in accordance with the '*Management of Archaeological Projects*' (English Heritage 1991). The site archive will be so organised as to be compatible with the other archaeological archives produced in the Greater Manchester area. All drawn records to be transferred to and stored in digital format, in systems which are easily accessible.

3.4.4 The integrity of the site archive will be maintained upon completion of the archaeological works with the aim of the archive ultimately being deposited to the Local Authority Museum (subject to their approval).

3.4.5 The minimum acceptable standard for the site archive is defined in the '*Management of Archaeological Projects 5.4*' and '*Appendix 3*' as well as '*The Management of Research Projects in the Historic Environment*' (MoRPHE; English Heritage 2006).

3.4.6 The archaeological archive will consist of the following:

- The project specification or research design;
- The schedule of works or similar documents;
- All original written records created throughout the course of the project;
- All original drawings, whether created during fieldwork, in analysis or for publication;
- Indexes to the drawings;
- Indexes to the photographic archive;
- All born digital material;
- Digital material created from written, drawn or photographed original records;
- Documentation accompanying the digital archive, either in digital or written form;
- All finds and other archaeological materials selected for retention, and associated documentation;
- All scientific samples suitable for curation, and associated documentation;
- All original x-radiographs;
- All specialist reports;
- The final project report;
- Other work published during the life of the project;
- An index to the archive;
- A list of contents of the archive.

3.4.7 The Centre for Applied Archaeology will retain digital copies of the archive.

3.5 OTHER MATTERS

3.5.1 ***Project Monitoring:*** the aims of monitoring are to ensure that the archaeological works are undertaken within the limits set by the Written Scheme of Investigation, and to the satisfaction of the curatorial archaeologist at the Greater Manchester Archaeological Advisory Service (GMAAS).

3.5.2 The curatorial archaeologist will be given at least five days' notice of when work is due to commence, and will be free to visit the site by prior arrangement with the project director. It is anticipated that there will be at least one formal monitoring meeting during the course of the evaluation, which should also be attended by the Client or his representative.

3.5.3 ***Contingencies:*** if there are more complex or generally deeper deposits than can be anticipated from the evidence available, there may need to be a corresponding increase in costs, which will be subject to agreement with the Client and the archaeological curator. These contingency costs are in accordance with the Chartered Institute for Archaeologists' guidance.

3.5.4 ***Working Hours:*** normal working hours are between 8.00 am and 4.00 pm, Monday to Friday, though adjustments to hours may be made to maximise daylight working time in winter and to meet travel requirements. It is not normal practice for the University of Salford staff to be asked to work weekends or bank holidays, and should the Client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.

5. Work Timetable

5.1 A one-week period should be allowed to excavate, record and backfill the trenches targeted for excavation. In the event of significant archaeological remains being discovered during the initial evaluation trenching, a programme of further investigation may be anticipated.

5.2 The historic building investigation will be completed within a single day on site.

5.3 A report will be submitted within four weeks of the completion of the fieldwork.

6. Staffing Proposals

6.1 The project will be under the overall charge of **Ian Miller BA FSA** (Assistant Director, Salford Archaeology) to whom all correspondence should be addressed. Ian has over 20 years' experience of commercial archaeology, and has a particular interest in the archaeology of the Industrial Period, and particular that of Greater Manchester and Lancashire. He managed the excavation of the Water Street Dye Works in Manchester, and was responsible for managing the archaeological elements of the Murrays' Mills Major Repairs Project in Manchester, which culminated in the production of an academic monograph of the steam-powered mills in the Ancoats area of Manchester. He has also managed many other evaluations and excavations of former industrial sites in Manchester.

6.2 His role will be to ensure that the Written Scheme of Investigation is implemented within the framework of the Project Objectives. He will be responsible for all aspects of staff and resource logistics, ensuring the smooth running of the project programme. He will liaise with the Client and GMAAS with regard to progress, and will maintain relationships with other contractors.

6.3 The fieldwork is likely to be undertaken by **Graham Mottershead BA** (Project Officer, Salford Archaeology). Graham is a highly experienced field archaeologist, with over 20 years continuous experience of field archaeology. It is not possible to provide details of specific technicians that will be involved with the fieldwork at this stage, but all shall be suitably qualified archaeologists with proven relevant experience. It is anticipated that up to two technicians will be required for the initial stage of the fieldwork.

University of Salford MANCHESTER
ARCHAEOLOGY

Contact Details

Business Address

Salford Archaeology
Centre for Applied Archaeology
University of Salford
Peel Building
Salford
M5 4NW

Nominated Contact Details

Ian Miller BA (Hons), FSA
Assistant Director

Telephone: 0161 295 4467
Email: i.f.miller@salford.ac.uk

Project	Document Title	Document Type	Author	Date	Version
Blocks 3 & 4, Potato Wharf, Manchester	Blocks 3 & 4, Potato Wharf, Castlefield, Manchester: Archaeological Evaluation	WSI	Ian Miller (Assistant Director)	25/05/2016	1.0

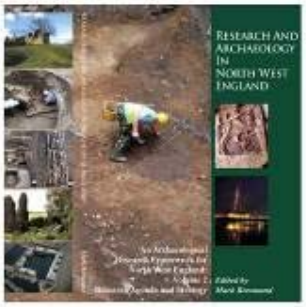
University of Salford MANCHESTER

University of Salford MANCHESTER

The Centre for Applied Archaeology

REGISTERED ORGANISATION IfA

CONSULTANCY



DESK BASED ASSESMENTS



WATCHING BRIEF & EVALUATION



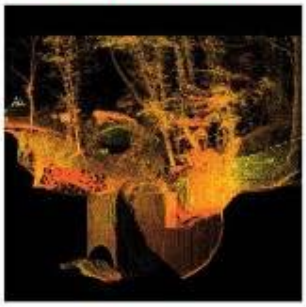
EXCAVATION



BUILDING SURVEY



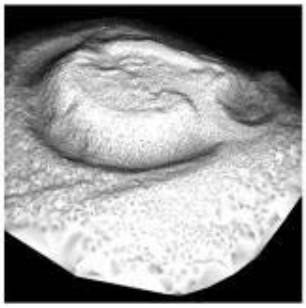
3D LASER SCANNING



COMMUNITY INVOLVEMENT



LANDSCAPE SURVEYS



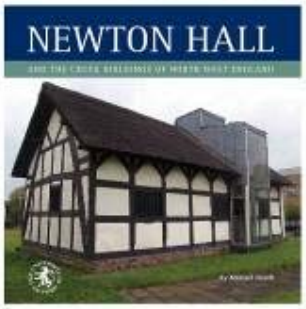
GEOPHYSICAL SURVEYS



WORKSHOPS & VOCATIONAL TRAINING



RESEARCH PUBLICATIONS



SEMINARS, DAYSCHOOLS CPD EVENTS

