

Report No. 12588.R01.PDeval
July 2005

ROMAN MIDDLEWICH LHI COMMUNITY DIG
PROJECT DESIGN FOR AN ARCHAEOLOGICAL EVALUATION

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1. INTRODUCTION

1.1 Project background and documentation

The present project is a development from the HLF-funded Roman Middlewich project 1998-2005 which has successfully raised the interests and knowledge of the local community to the rich archaeological legacy of Middlewich, particularly of the Roman period. An application was submitted in February, and approved in May, for a Local Heritage Initiative grant, the main aim of which was to provide an opportunity for members of the local community to become actively involved in archaeological investigation. The documentation that supported this application detailed five stages to the project and provided a project outline from which a series of more detailed project designs could be developed once funding had been secured and preliminary data was available. Each stage was to be informed by the previous stage and by consultation with project partners and other stakeholders.

The present Project Design is for the evaluation of the site, the preliminary part of which has been a magnetometer survey that, together with previous knowledge from John Bestwick's excavations in the 1960s-70s and the Sites and Monuments Record, provides essential baseline data to help in planning an appropriate strategy and methodology. The results from the evaluation in turn will inform the planning and Project Design for three sessions of two week area excavations. Volunteers from the local community will be given the opportunity to become involved in all aspects of the work over both the evaluation and excavation stages, and a series of lectures will be given as a further stage to prepare would-be volunteers with the general principles and practices of archaeological work. Project planning, liaison, consultation and logistical organization will constitute a preliminary stage, and the last stage will consist of post-excavation assessment and dissemination of information.

1.2 Site description

The site is at NGR SJ 705 665 and consists of a field under rough vegetation (recently cut down to permit access for the geophysical survey), which slopes south-westwards to the River Croco. It lies on a geological foundation of mudstone and river terrace deposits, with some alluvial overburden. A terrace is visible on the south-western edge, and access is provided on the north-western side via a small lane to a pumping station. The eastern perimeter lies along the backs of modern properties facing on to King Street, and archaeological evidence has demonstrated that the Roman settlement area covered this area south of the fort in Harbutts Field. The site itself is now known as Buckley's Field and extends to approximately 0.7ha in total area. It is virtually the only remaining undeveloped area of the Roman town and is therefore an ideal opportunity for a community dig and a site at which research questions can be posed without the attendant pressures of a housing development and planning process.

1.3 Archaeological background

Although the site lies within the general area of the Roman industrial settlement at Middlewich, little is known in detail of its archaeological potential. John Bestwick excavated a number of areas in Middlewich during the 1960s-70s, and his Site J was within Buckley's Field. Little is known of the results of this work beyond the fact that evidence for 2nd-3rd century iron-smithing was found and that an aisled post-built structure associated with 3rd – 4th century pottery was discovered. The area is presumed to be a backyard area behind King Street, a likely focus for industrial activity.

Around the edges of the site briquetage and lead salt pans gives evidence for (undated) salt-working, and a military diploma was found close to King Street, just to the north of the site. In this location a hoard of coins and evidence for buildings has also been recovered.

2. GENERAL RESEARCH QUESTIONS FOR THE PROJECT

2.1 Prehistoric origins: pre-Roman occupation/salt making, & native/Roman coexistence?

Target: drop-off to river, poss. round-houses; tight chronological/stratigraphic data; salt kilns
Technique: Resistivity survey and trenching/area excavation; artefact recovery in-situ VCP

2.2 Late Roman continuity (and sub-Roman): can we find any evidence? Problems with “litharge”

Target: upper layers of stratigraphy and artefact retrieval; 200-275AD, 275-350, 350-450 etc
Technique: metal-detecting, test-pits and sieving programme; can we devise a strategy for bringing out any “ghosts”? e.g. closely gridded phosphate sampling; poss. Christian symbols

2.3 Spatial organization of “back-plot” area

Target A: road to identify nature and date of construction(s), alignment, relate to King St
Technique: longitudinal and cross section of road to find buried artefacts for dating purposes excavate in two places at western and eastern ends; compare to other roads
Target B: ditched “property” boundaries, date and alignment; relate to road and other linears
Technique: Resistivity survey, excavation longitudinal and cross sections

2.4 Industrial v. domestic use of area

Target A: magnetometer anomalies to characterize metal working and salt-production
Technique: area excavation; appropriate sampling strategies for metal debris
Target B: building remains from Bestwick evidence and magnetometer survey
Technique: trenching/area excavation

2.5 Civil v. military status (poss. change-over Flavio-Trajanic military to Hadrianic civil)

Target: artefact retrieval; spatial organization and Roman surveying
Technique: area excavation, metal-detecting, alignment & interval plotting; coins & imports

2.6 Palaeoenvironmental studies

Target: general environmental background; site-specific and feature-specific activities
Technique: soil sampling, flotation and sieving of buried soil beneath road, ditch & pit fills

2.7 Location of Bestwick excavation and how this can add to our knowledge of previous results

Target: magnetometer anomalies and area of weak positive signal in centre of field
Technique: trenching and area excavation

2.8 Geophysical effectiveness and soil chemistry

Target: survey Buckley’s Field in general, then some more detailed survey work on key areas
Technique: compare results from different techniques, take soil samples (for soil chemistry), test against excavated results in due course

2.9 Salt & Saxons: why did post-Roman salt-making & Newton occur on west side of Croco?

What detailed evidence can we find for the function of briquetage and lead pans.
Target: upper layers of in-filled features for Saxo-Norman palaeoenvironmental data; artefacts
Technique: soil sampling; in situ recovery of salt-making artefacts and hearths

3. EVALUATION STRATEGY AND METHODOLOGY

3.1 Staged approach

A staged approach to the evaluation will be conducted using several techniques and methodologies. Each technique will help to inform subsequent stages and will in turn be subject to an assessment of its efficacy in the light of complementary evaluation. The approximate position of Bestwick's site J will form one area to be targeted as mapped on to the SMR, and other aspects of the known archaeological record from this source will help to influence the strategy to be adopted. Topographic features and general information on the depth and make-up of the field will also be aspects which will require targeted evaluation to clarify their nature and character.

3.2 Geophysical survey

Discussion during the first week of June with Stratascan determined a strategy to cover 0.7ha. This would first involve a rapid scan of the field using magnetometer and review of results. This was undertaken on 23rd June and the interpretation provided some ferrous anomalies in the centre of the field, in the general location assumed to be that of Bestwick's Site J, a northwest-southeast running large linear feature in the north-eastern part of the field, and a series of positive and negative anomalies of possible structural origin running at roughly right-angles to the main linear. Much of the field, however, was unresponsive due to magnetic debris associated with modern disturbance. As a consequence a second phase of geophysical prospecting will be undertaken, using resistivity in the 0.5ha ultimately available for examination by the magnetometer. This second phase will include a survey of 0.25ha at 1.0m intervals, and then more detailed survey at 0.5m intervals of specific features and areas to compare the results with the standard, and with magnetometer. Some of the area that was unresponsive to the magnetometer will be surveyed by resistivity to check on sub-surface visibility in this area. The resistivity survey is more likely to detect building remains, but the magnetometer has been useful in confirming the probable presence of iron-working.

3.3 Trial trenching and test-pitting

Eleven trenches will be located over key features and areas identified from the magnetometer survey (Fig. 1). Some of these will be linear and some will be 5 x 5m test-pits, the latter primarily located over the ferrous anomaly signals. The overburden will be removed by mechanical excavator under the supervision of an archaeologist, after which archaeologically sensitive deposits will be cleaned and investigated by hand. Hand-excavation and sieving will also be conducted through deposits that appear to be the product of leaching, and therefore might retain some archaeological interest although much of the stratigraphic integrity may have been lost.

Trenches 1 and 10 will be c.10m long and 1.6m wide and will aim to bisect the major linear anomaly at the eastern end of the site, and along the verge of the access lane where remains of a possible road may be showing in the up cast from fence-posts and the general rise and fall of the land. This alignment is in broad agreement with King Street or the earlier road to the fort and is therefore worthy of clarification, and could prove to be a highly visible feature which would act as a good guide for volunteers and visitors to first start adjusting to the appearance of archaeological deposits. Trench 8 will also intersect with this major linear, but at a critical point where a minor linear anomaly emanates from it.

Trenches 2, 3, 6 and 9 will be 10m and 5m long trenches located to investigate a series of minor positive and negative linear anomalies in the western and central part of the field.

Trenches 4 and 5 will be 5 x 5m test-pits located over the ferrous anomalies in the centre of the field. Trench 7 will be a 10m long linear located over an area of faint positive magnetic response which may have an archaeological origin, or could possibly reflect disturbance from Bestwick's original excavation.

Trench 11 will be a c.20m x 1.6m trench located to investigate the terracing on the southwestern edge of the site towards the area of 19th century discoveries in the adjoining property.

3.4 Artefact recovery and Metal-detecting

Sampling of the homogenous sub-soil to maximise recovery of artefacts will be undertaken as part of the evaluation, with hand-excavation and sieving employed as appropriate. The test-pits will be subjected to particular scrutiny in this manner. Metal-detecting will be routinely conducted over the spoil from the trenches and from the exposed trench surfaces. The locations of artefacts retrieved during this exercise will be recorded accurately so that their spatial and vertical locations can be plotted. Metal objects will be retrieved immediately and not left out on site over night.

3.5 Excavation and recording

Sample excavation will be employed throughout this exercise. There will be no attempt to completely excavate all features or deposits as the main objective is to inform the planning stage for the location of excavation areas. Depth, nature and extent of soil make-up and any coherent stratigraphy will be recorded, as will archaeological features and other remains. The dating and relationships of these will be investigated.

In general the following will be adopted:

- 3.5.1 The recording system to be used is based on that developed by English Heritage, Central Archaeology Service.
- 3.5.2 The photographic record will comprise 35mm format colour-slides and prints and monochrome prints with a supporting index.
- 3.5.3 The basic drawn record will comprise plans and sections at scales of 1:20 and 1:10 respectively. A profile of the deposits in each trench would be recorded, even where no archaeology is present. The plans and sections will be input to AutoCAD drawing software. This will allow the collation of composite structure-plans and phase-plans where appropriate

3.6 Palaeoenvironmental sampling

It is not proposed to undertake any detailed palaeoenvironmental sampling until a strategy has been agreed with English Heritage's Regional Science Advisor who will be visiting on 20th July.

4. RESOURCES

The team will consist of Laurence Hayes directing the site, with Tim Malim managing and overseeing the work. Archaeological assistance will be provided by a professional archaeologist and a student assistant. Three – four volunteers will be learning on the evaluation under the guidance of the Gifford archaeologists. It is anticipated that the duration of this work will take approximately one week. During this period it is planned that a number of visits will occur, which may lengthen the operation.

5. REPORT

5.1 Evaluation results

The results from the evaluation will be utilised in consultation and liaison as part of the excavation planning stage. The results will be brought together within a document detailing in brief outline of the nature and character of the deposits, supported by a rapid assessment of artefactual evidence and locational information provided by plans and sections.

In general the following practice will be adopted as part of rapid assessment:

- 5.1.1 Immediately upon completion of the site-work an assessment of the site-archive will be undertaken to include all written, drawn and photographic records, artefacts and ecofacts/samples. This assessment will make reference to any results of the previous archaeological evaluations and investigations undertaken in the area.
- 5.1.2 Artefacts will be assessed for their potential to provide dating, social, economic, and technological information. Special or unusual features will be highlighted and reference made to other material recovered from the immediate environs of the evaluation site.
- 5.1.3 The suitability of ecofactual material and samples recovered during the excavation for palaeoenvironmental analysis will be assessed by a suitably qualified specialist.
- 5.1.4 A site-narrative giving an account of the stratigraphic and structural history of the site will be prepared.

5.2 Archive

The archiving of the evaluation will be included within the general archiving of the excavation.

6. HEALTH AND SAFETY

- 6.1 Gifford and Partners operate in accordance with the health and safety procedures as set out in:
 - The *Health and Safety Work Act* (1974) and related legislation.
 - The Standing Conference of Archaeology Unit Managers *Health and Safety Manual* (2002).
 - The Council for British Archaeology Handbook no. 6, *Safety in Archaeological Fieldwork* (1989).
 - The Gifford *Health and Safety Handbook*. In accordance with the CDM Regulations Gifford would prepare a Risk Assessment in relation to the archaeological works prior to the commencement of the evaluation.

- 6.2 Gifford will require from the Client any information regarding hazardous contaminants present in the surface materials and sub-surface strata at the site. Appropriate measures will then be taken by Gifford to ensure the health and safety of its staff who may come into contact with such contaminants. Measures may include on-site adaptation of the agreed Project Design.
- 6.3 All necessary protective clothing and equipment would be used. The archaeologists on site would wear hard hats as required. Ear defenders and eye goggles would be used as required when machinery is in operation.
- 6.4 A First-Aid kit and Accident Book would be kept on site at all times, with the Gifford Health and Safety file.



Figure 1 Magnetometer interpretation with evaluation trench locations overlaid