



WRITTEN SCHEME OF INVESTIGATION FOR LAND OFF HIGH STREET, HIGH ROAD, JOHNSTOWN, WREXHAM

August 2021

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Cover imager: view of the western side of a former field barn from Ruabon Road

1.0 INTRODUCTION

Dr George Nash (GHN) was commissioned by Gower Homes Ltd. 8 Temple Row, Wrexham, LL13 8LY to produce a Written Scheme of Investigation (WSI) on a development that includes the demolition of existing buildings within a plot known as 'land off High Street, Johnstown, Wrexham, LL14 2BA'¹

This plot is located within the central part of Johnston (Rhosllannerchrugog) (NGR SJ 30100 45979), immediately east of Ruabon Road (High Street). The watching brief will focus on the groundworks phase (following the demolition of existing buildings that stand within the curtilage of the site).

The plot and the Ruabon Road mark the eastern section of Offa's Dyke.² A search of the various online heritage sources, there appears to be no Designated Heritage Assets within the vicinity of the site, although the building stock within the curtilage of the site is considered by the LPA as Non-designated Heritage Assets (such as the stone building).

This WSI has been prepared in order to assist Gower Homes Ltd. with the discharge of conditions imposed by Wrexham County Borough Council (Decision Sheet: Planning ref: P/2020/0844). In correspondence with Gower Homes Ltd. (dated 05/07/2021), Wrexham County Borough Council in Paragraph 5 states:

No part of the development / works shall commence until details of an on-site watching brief, prepared and to be carried out by a suitably qualified archaeologist, for the duration of the construction works has been submitted to and approved in writing by the Local Planning Authority. The archaeological watching brief must meet the standards laid down by the Chartered Institute for Archaeologists Standard and Guidance for archaeological watching briefs.



Figure 1. Location of the area of the Plot (marked in red)

¹ Formally known as 'Tan-y-clawdd'

² The former route of the dyke is not shown on the Archwilio website

2.0 LOCATION

The Plot of land for development is located north of Ruabon, within the modern settlement of Johnston (Rhosllannerchrugog), at NGR SJ 30100 45979. Based on historic mapping, the road network around the site has changed considerably, with the western boundary forming a much-denuded linear section of Offa's Dyke. Topographically, the site stands with a slight depression, at around 120m AOD. Surrounding the site is modern residential development, which forms part of one of the largest estates in Wales.

3.0 BRIEF CONTEXTUAL HISTORY

During the latter part of the 18th and early part of the 19th century, the area around Johnston and Rhosllannerchrugog was still largely agricultural in form, with farmsteads, workers' cottages dispersed across an enclosed landscape. The field system extending across much of this area of the former Flintshire was enclosed with rectilinear fields. Intermittently dispersed across this late post-medieval enclosed landscape were pockets of fields with irregular boundaries, which suggest an earlier form of enclosure.

During the latter part of the 19th century, the site formed part of a small farmstead, known as Tan-y-clawdd (Figure 2). This farmstead was accessed by a small lane to the north of the farm. To the west was the Ruabon Road (now known as High Street). Located on the 1879 map, standing west of the farmstead and forming the western kerb-line is the 'Remains of Offa's Dyke'. This linear earthwork, extending from Chepstow to the north of Wrexham for 132 km and probably dates to the late 8th century. The construction methods used for this massive earthwork project are largely generic throughout. The average width of the dyke and accompanying ditch is around 20m in width. Based on observations, little or no above-ground remains survive; however, traces of the earthwork may survive as subsurface remains.

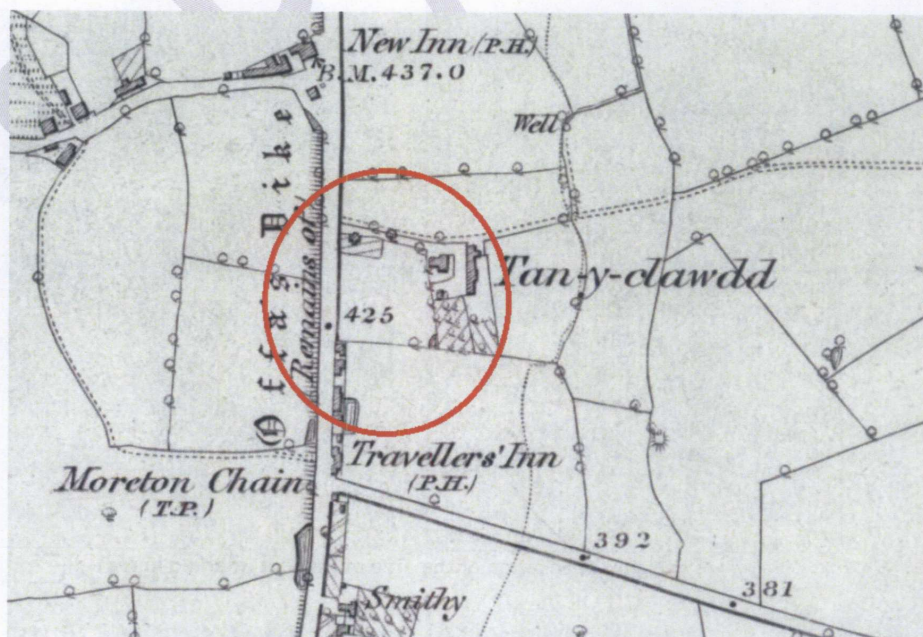


Figure 2. The Ordnance Survey six-inch map of 1879 (Denbighshire XXXV)

4.0 THE PROPOSED DEVELOPMENT

Gower Homes Ltd. wishes to develop the plot for residential use. Currently, the site is occupied by light industrial buildings and an historic field barn (Figure 3). Following the demolition of these buildings and site clearance, the Client will erect 10 residential units and associated landscaping and services (Figure 4). The process of transforming the current plot will include:

- Asbestos Removal and Demolition of the former Heaps Factory
- Removal of Substation (by Scot Power EN)
- Foul and Surface water drainage systems
- Form Entrance and adoptable road, including retaining walls and highways drainage.
- Build 10 new dwellings comprising of 4 semis and 6 detached, traditionally built houses.
- Mains services including water, electric, gas and telecom/data
- External works including hard and soft landscaping. Tarmac driveways.
- The surface water drainage now includes a landscaped dry basin with restricted outfall to provide flood control downstream. (SuDS scheme)
- Planting of trees, shrubs and turf to lawned areas.



Figure 3. Detail plan of the existing site (Plan supplied by Gower Homes Ltd.)

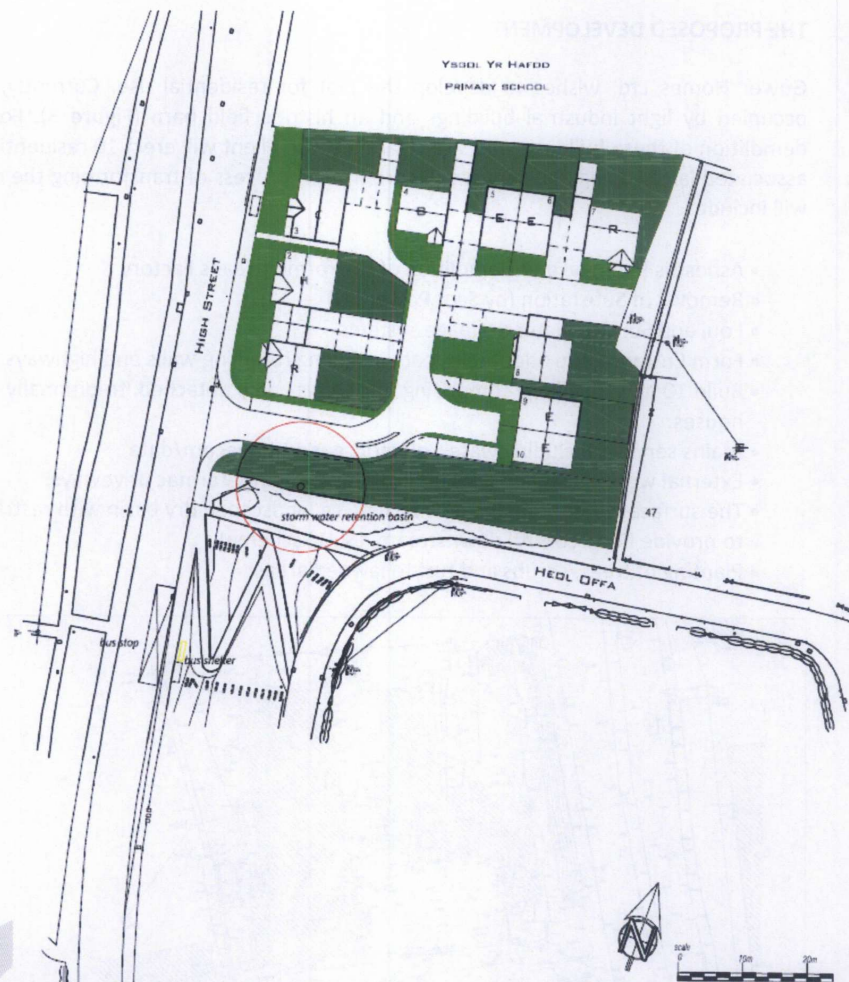


Figure 4. The proposed development of the site (Plan supplied by Gower Homes Ltd.)

4.1 Assessment of Archaeological Potential

Potential significant archaeological remains may be uncovered during the proposed trenching regime, in the form of the eastern section of an ancient linear earthwork (Offa's Dyke). That notwithstanding it should be noted that substantial disturbance may have occurred over the relatively recent past. It is therefore unlikely that little or no archaeological remains will have survived following this disturbance.

5.0 PREVIOUS ARCHAEOLOGICAL WORK

As far as the author of this document is aware, there has been no archaeological activity in or near the site. A search of the *Archwilio* database reveals only four archaeological sites within the locality. Interestingly, there is no reference made to the north-south line of Offa's Dyke, which forms part of the western boundary of the site.

6.0 AIMS AND OBJECTIVES

The aims of the Watching Brief are:

- To assess the archaeological resource proportionately, and to understand the nature, character and preservation of any archaeological remains present within the proposed development area. The watching brief and subsequent report/publication should lead to an understanding of the potential archaeological significance of the site and result in the deposition of a suitable archaeological archive.
- Where applicable, the watching brief will also determine the relationship of any above-ground structures to potential surviving archaeological deposits below ground. Where such a relationship is demonstrable, the watching brief will encompass the character, condition, significance and quality of the above-ground remains on the same basis as those below;
- The watching brief will seek to clarify the nature and extent of existing disturbance and intrusion (such as the footings and subbase of the current building stock etc.) and assess the degree of archaeological survival of buried deposits and surviving structures of archaeological significance.
- Dependent on the level of physical remains uncovered, the watching brief will aim to answer the following research questions, derived partially from research priorities.
- To gain knowledge on the site and the surrounding landscape; in particular, the survival of archaeological remains that may be associated with Offa's Dyke.
- To provide an opportunity for the archaeologist to signal to all involved parties, before the destruction of the material in question, that potential archaeological finds have been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.
- To assist Gower Homes Ltd. with the discharge of conditions imposed by Wrexham County Borough Council (through the LPA).

6.1 Timetable for archaeological work

It is desirable that the watching brief be implemented sometime between August and September 2021 (dependent on the building contractors' availability).

6.2 Objectives

The specific objectives of this programme of work will include:

- Making a photographic and textual record of the trenching programme;
- If encountered, the careful excavation of archaeological features, deposits and structures that may be revealed during the trenching regime that, in particular, relate to potential remains of Offa's Dyke;
- To produce a report containing the information gathered during fieldwork;
- Submitting an ordered archive to a suitable local/regional repository; and
- The physical archive will be submitted to a local museum (dependent upon consent from the landowner) for the transfer of ownership of the finds archive and the policy of selection for retention of finds (or to discard those finds considered inappropriate for retention); and the provision for long-term storage.

7.0 METHODOLOGY

7.1 Professional Standards

Dr George Nash is a full member of the Chartered Institute for Archaeologists (CIfA). The work undertaken will be to the highest professional standards. This document has been prepared with reference to the Chartered Institute for Archaeologist's *Standard and Guidance for Watching Briefs* 2014 (Updated October 2020).

7.2 Methods (fieldwork)

- Dr Nash will be informed in advance of the commencement of site works. Dr Nash will then inform the archaeological monitoring authority - CPAT of a date of commencement.
- Dr Nash will confirm to CPAT arrangements concerning access to the site.
- CPAT will be informed should any significant archaeological remains are exposed.
- The recording will be undertaken by a qualified and competent field archaeologist who will conform to the CIfA's *Standards and Guidance Procedures for Watching Briefs* (2014 [Updated October 2020]).
- It is more than likely that the groundworks will reveal little in the way of significant archaeological remains due to the historic and recent development of the site. The majority of the footing and trenching will occur within already disturbed land and mirror the current footprint of the footings of buildings that stand within the curtilage of the site (**Figure 3**).

- In the unlikely event of human remains being encountered, the Client and monitoring authority will be informed immediately, and site work will be halted. Specialist advice will be provided where necessary. human bone assemblages will be treated at all times in accordance with the following guidelines:
 - ClfA Technical Paper No. 13 (McKinley & Roberts 1993).
 - ClfA Technical Paper No. 7 (Brickley & McKinley 2004).
 - EH Centre for Archaeology Guidelines relating to human bones from archaeological sites (2002). Superseded by *The Role of the Human Osteologist in an Archaeological Fieldwork Projects* (Historic England 2018).
 - Historic England 2018 *The Role of the Human Osteologist in an Archaeological Fieldwork Project*
<https://historicengland.org.uk/images-books/publications/role-of-human-osteologist-in-archaeological-fieldwork-project/>
 - Ministry of Justice document Burial Law and Policy in the 21st century: The way forward (2007).
- Dr Nash will abide by the requirements of Section 25 of the Burial Act 1857 and thus any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought.
- Where possible, all human remains are to be preserved in situ, covered and protected and will only be removed in the event of exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act, with adequate security provided in such cases.
- The field record will comprise annotated [foundation] trench locations over existing architect plans. A photographic record will be maintained comprising high-resolution digital images with a supporting index, archived in accordance with ClfA guidelines for long-term storage of digital media.³ Textual records will consist of recording sheets and annotations to plans and sections.
- All sub-surface excavations will be accurately located and tied into existing Ordnance Survey data.
- The photographic record will comprise high-resolution digital images with a supporting index in accordance with ClfA guidelines.
- If required, a drawn record will comprise plans of the site at a suitable scale, typically 1:20 for features and sections at scale 1:10. This task will be dependent on the dimensions of the trenching.
- If required, artefacts/ecofacts will be collected and recorded stratigraphically. All artefacts/ecofacts will be labelled, packed and stored in an appropriate repository to ensure that no deterioration occurs. All artefact/ecofact processing/storage will be carried out following UKIC (United Kingdom Institute for Conservation) guidelines and will accord with relevant Institute of Field Archaeologists Guidelines on Finds Work.

³. https://www.archaeologists.net/sites/default/files/downloads/selection-toolkit/SelectionToolkit_Full.pdf

- In terms of a research agenda, any recognised or significant archaeological deposits recovered from the site could add significant knowledge concerning the history of the site and the surrounding area.
- Potential archaeological remains/stratigraphy from these contexts, in particular, those that are identified within the lower stratigraphy of the site could assist in understanding the formation and development of:
 - The deposition in and around Offa's Dyke;
 - Any Early Medieval archaeological activity that stands to the east of the Dyke and is within the site boundary;
 - Late Post-Medieval and recent activity that dates from AD 1800.

Environmental sampling and strategy will be undertaken (if and where necessary). All environmental sampling will be carried out with reference to *Environmental Archaeology and Archaeological Evaluations – Recommendations regarding the environmental archaeology component of archaeological evaluations in England. Association for Environmental Archaeology working paper No. 2, (1995)* and *Historic England's Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition) (August 2011). In this case, archaeological features and deposits will be assessed for environmental during the watching brief, with specialist advice being sought in the event of special circumstances or in the case of exceptional environmental potential.

Features likely to produce information on Offa's Dyke may include the subsurface remains of a linear ditch that ran parallel with the earthwork. In addition, there may potential survival of the earthwork as well (see **Table 1**).

Features of interest for information on the environment or processes of deposition may include soils and archaeological deposits associated with potential subsurface remains of Offa's Dyke. As a result of the possible survival, bulk samples of 40 litres may be taken from deposits identified as having environmental potential. Where the volume of material is lower than 40 litres, 100% of each feature will be sampled. Large visible items such as animal and human bone will be collected by hand and will be subject to sampling and flotation of stratified and datable material in order to recover environmental data.

If required, metallurgical residues recovered from the identified stratigraphy will be examined by Dr Tim Young (Geoarch), while stone or flint artefacts will be analysed by Dr Nash. Lipid analysis from pottery residues will be undertaken by Dr Julie Dunne at Bristol University (Department of Chemistry).

An archaeological science contingency fund totalling 15% of the overall project budget, or a minimum equivalent of the cost of one radiocarbon date, will be reserved for archaeological science (if needed).

Table 1: Excavation Strategy for Individual Features

Feature Type	Excavation Method (minimum sample sizes required. Percentages are by volume of exposed feature)
Pits and postholes	50% of each intrusive feature
Linear features (building footings)	25% of the exposed area, plus all terminals and

	intersections
Structural features	50% of exposed features
surviving structural elements	expose, clean and preserve for excavation in more appropriate circumstances

Under the Treasure Act 1996 four categories of an object are now classed as treasure:

- Any object other than a coin that is at least 10% silver or gold by weight and more than 300 years old.
- Any coins that are at least 10% silver or gold by weight and come from a single find provided the find contains at least two coins with a gold or silver content of at least 10%. The coins must be at least 300 years old at the time of discovery. Where finds consist of coins that are less than 10% gold or silver by weight, there must be at least 10 coins in the find and they must be at least 300 years old at the time of discovery for the find to be considered treasure.
- Any object, of whatever, composition, that is found in the same place as, or that had previously been together with, another object that is treasure; and
- Any object that would previously have been treasure trove but does not fall within the specific categories given above. The Act also introduces a Code of Practice for the voluntary recording of archaeological finds (DNH, 1996).

Any objects recovered that are deemed to qualify as treasure will be notified to the local coroner within fourteen days of discovery, in accordance with *The Treasure Act 1996 Code of Practice (Revised)*.

7.2.1 Methods (Site Investigation Report)

After completion of the fieldwork, a formal report will be prepared. The watching brief report will contain the following elements:

- Summary in Welsh and English
- A table of contents;
- An introduction with acknowledgments, including a list of all those involved in the project and the location and description of the observed trenching;
- A statement of the project aims;
- An account of the project methodology undertaken, with an assessment of the same;
- A summary of the archaeological/historical background of the area, indicating past and present land use, accompanied by relevant maps;
- A description of the archaeological works and standing structure recording;

- Digital colour images of work in progress and significant features;
- Architect Plans and section drawings at appropriate scales;
- Other maps, plans, drawings and photographs as appropriate;
- An interpretation of the results;
- A bibliography of sources consulted and a supplementary bibliography of any sources identified, but not available for consultation; and
- An index to the project archive and a statement of its location/proposed repository.

Digital **draft** copies in PDF format will be submitted to CPAT for comments, prior to final submission.

7.2.2 Methods (Archive)

As appropriate, Dr Nash will submit a draft report to the Client and archaeological monitoring authority for comments, before final submission. Due to the recent historic use of the site, it is not expected that any significant archaeological deposits, features, structures, or artifacts will be encountered during this programme of work. Documentary sources have revealed the trajectory of a north-south section of Offa's Dyke. Traces of this 8th century earthwork probably survive in various places along the western side of High Street (Ruabon Riad). It is not clear if the eastern section of the earthwork extends into the western part of the site

The archive will be deposited within three months of the completion of the site work.

The final report will be submitted in a PDF format. The project will rely upon guidance set within ClfA and Historic England's *Toolkit for Selecting Archaeological Archives* (March 2019).

The archive will be prepared according to procedures for the transfer of archaeological archives in Wales. Temporary storage pending deposition will be with the archaeological contractor for a period of up to three months after which responsibility for its maintenance will cease.

Details of the project will be uploaded onto OASIS digital report archive following the completion of the project.

7.2.3 Methods (Copyright)

Dr Nash will initially retain the copyright of any commissioned reports, tender documents, or other project documents, under the Copyright, Designs and Patents Act of 1988 with all rights reserved; the contractor will provide an exclusive licence to the Client for the use of such documents by the Client in all matters directly relating to the project as described in this Project Design. The Client will have the discretion to distribute this report to the respective Local Authority and Regional repositories.

7.2.4 Methods (Health and Safety)

Dr Nash will operate in accordance with the health and safety procedures as set out in:

- The Health and Safety Work Act (1974) and related legislation.
- CDM regulations 2007 (CDM is not required for archaeological works but we will follow the general principles).
- Manual of Health and Safety for Archaeological Fieldwork Federation of Archaeological Managers and Employers 2010.
- The Council for British Archaeology Handbook No. 6, Safety in Archaeological Fieldwork (1989).

Gower Homes' building contractor will provide Dr Nash with a *Schedule of Works* that identifies any potential hazards that may be present and a timescale. Before any fieldwork, a health and safety risk assessment will be produced.

All necessary protective clothing and equipment will be used. The archaeologist on-site will wear a hard hat, gloves (especially if handling human remains), reflective jackets and protective footwear (as a minimum) and will fully comply with the latest Covid-19 guidelines.

A First-Aid kit and Accident Book will be kept on-site at all times.

7.2.5 Methods (Project Monitoring)

Dr George Nash understands that the project will be monitored by the Clwyd-Powys Archaeological Trust.

8.0 RESOURCES AND ORGANISATION

This section outlines key staff and aspects of the organisation of the fieldwork.

8.1 Staff and Roles

8.1.1 Site Staff:

The archaeological watching brief will be undertaken by Dr George Nash, who is a full member of the Chartered Institute for Archaeologists.

8.2 Timing

It is estimated that the initial groundworks will take up to five to ten days to complete. This will be the expected duration of the archaeological watching brief. However, if significant and extensive remains are exposed, the works are likely to require additional time to adequately record any additional deposits, features and/or structures.

8.3 Insurance

The activities of the archaeological contractor on site are covered by public liability insurance. Details can be provided if necessary.

9.0 CLOSURE

This document has been prepared by Dr George Nash (MCIfA) with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by

agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report will be of use of the Client – Gower Homes Ltd. and their agents, following the final submission of the report. The author of this report disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

DRAFT