



HEREFORDSHIRE ARCHAEOLOGY

**Explosive Times: A Community Archaeology
Project at the Glyn Neath gunpowder Works,
Pontneddfechan, South Wales.
SAM-BR230**

Written Scheme of Investigation

4th July 2018

Prepared by: T. Hoverd,
Archaeological Projects Manager,
Herefordshire Archaeology.
Herefordshire Council

For: Ruth Coulthard
Brecon Beacons National Park Authority
Cambrian Way,
Brecon,
Powys
LD3 7HP

1: Introduction

This Written Scheme of Investigation has been produced in response to a successful tender for “Explosive Times Community Archaeology Project” developed by Ruth Coulthard, Brecon Beacons National Park Authority.

The Community Project will form part of a suite of works associated with the conservation, repair, research and interpretation of the Glyn Neath gunpowder Works, Pontneddfechan, a Heritage Lottery funded project within the Brecon Beacons National Park.

This document sets out a proposed methodology for implementing and delivering a community archaeology project

2. Aims and Objectives

The principal aim of the community archaeology project is to create a range of skill building opportunities for staff, volunteers, the local communities and others involved in the project. This will be done by involving as many participants as is possible, introducing them to the concept and methodologies of practical archaeology, providing appropriate training in order to achieve the best outcomes possible from the project.

The project will comprise 6 days of fieldwork (excavation and recording), to include a day of finds processing and documentation. It is understood that this will be followed by a further 5 days of fieldwork later in the year.

Herefordshire Archaeology will liaise closely with the National Park Authority’s Heritage Officer (Archaeology) and an independent project Archaeologist.

It is understood that recruitment for those taking part will be led by volunteer development officer at the Authority in conjunction with the contractor.

This project will also link with the historical research group programme which will bring together interested members of the local community to research the unanswered questions about the site and present the findings on a public platform. Herefordshire Archaeology will liaise with this group in order to understand the projected outcomes for this group and opportunities for joint working and avoid duplication of effort.

3. Policy and guidance

The works will be undertaken regarding relevant legislation, National Planning Policy, and Guidance, and Regional and Local Planning Policy relating to Cultural Heritage.

Legislation:

Ancient Monuments (Class Consents) Order 1994 (SI 1994 No 1381) statute protects scheduled Monuments and Listed Buildings.

Legislation regarding Scheduled Monuments is contained within The Ancient Monuments and Archaeological Areas Act 1979. Under this legislation, it is an offence to carry out any works resulting in the demolition or destruction of or any damage to a scheduled monument without prior written consent.

Monuments included in the schedule have statutory protection. This work is undertaken by Welsh Government Historic Environment Service (Cadw), which is an Executive Agency within the Assembly.

The site lies within the Brecon Beacons National Park, The purpose of the Brecon Beacons National Park is to conserve and enhance the natural beauty, wildlife and cultural heritage of this special landscape, and promote opportunities for the understanding and enjoyment of its special qualities by the public.

The Brecon Beacons National Park Authority is a signatory to the 'Joint Statement on the Historic Environment Action Plan', which aims defines common principles for the sustainable management of the historic environment across all UK National Parks, and ensure that sustainable management of the historic environment is fully integrated into all aspects of the management of National Park landscapes.

4. Site location, Description, Setting

The remains of the Glyn-Neath Gunpowder Works are located to the north east of the village of Glyn Neath. The site is positioned within the deep wooded valley of the river Mellte. A series of isolated stone and brick built structures stretch along the bank of the river for approximately 2 kilometres.

5. Geology

The geology of the valley in which the site is located is a mixture of bedrocks comprising of South Wales Lower Coal Measures, Bishopston Mudstone, and Twrch Sandstone Formations.

The Lower Coal Measures and Bishopston Mudstone are sedimentary bedrock formed approximately 312 to 313 million years ago, in the Carboniferous Period, indicating a local environment previously dominated by swamps, estuaries, and delta. These rocks were formed in marginal coastal plains with lakes and swamps periodically inundated by the sea; or estuaries and deltas, and shallow seas.

Twrch Sandstone formation is a sandstone and conglomerate, interbedded sedimentary bedrock also formed approximately 313 to 326 million years ago, in the Carboniferous Period, suggestive of a local environment previously dominated by rivers depositing mainly sand and gravel detrital material in channels to form river terrace deposits, with fine silt and clay from overbank floods forming floodplain alluvium.

(British Geological Survey website, Accessed 31-04 2017; (<http://www.bgs.ac.uk>).

6. Historical and archaeological background

The foundation and function of the Gunpowder works are well documented a summary of the history is illustrated below:

Industrial activities in the region started with a 21-year lease of an area of land from the Marquess of Bute by the Quaker entrepreneur William Weston Young, for the sinking of silica mines around Craig-y-Dinas from 1822 onwards. The silica was extracted for the manufacture of firebricks at the Dinas Firebrick Co. in Pont Walby. In 1843, Young's lease ran out and the then Riddles, Young & Co. firebrick manufacturers moved to a new premise on The Green, Neath.

In 1857, the Vale of Neath Powder Company built a "gunpowder manufactory", having obtained "a licence to erect their mills over a space of two miles including the Upper and Lower Cilliepste Falls". The site on the River Mellte was chosen because of its remoteness and because of the availability of both water power and of timber to produce charcoal, one of the ingredients of gunpowder.

An inclined tramway was built from a siding on the Vale of Neath Railway near Pen-cae-drain. This was used to bring in sulphur and saltpetre, the other ingredients. A horse-drawn tramway linked the various buildings on the site. In 1862, Curtis & Harvey took over the site They later merged with Nobel's Explosives Co and finally became incorporated into Imperial Chemical Industries Ltd in 1926. The works were

closed in 1939, after the Home Office took black powder off the 'permitted list of explosives', the works closed down. They were deliberately set fire to and many of the buildings were demolished for safety reasons.

The National Park Authority now administers the site.

A number of archaeological and architectural surveys of the site have been undertaken to date in support of the project. These include:

Hammond, 2016. Industrial Heritage Review of Glyn Neath Gunpowder Works Pontneddfechan.

Hammond, 2016. Gazetteer of Glyn Neath Gunpowder Works Pontneddfechan.

Clwyd-Powys Archaeological Trust 2015. Glyn Neath Gunpowder Works: Cultural Heritage Impact Assessment.

Alistair Coey Architects, 2016. Glyn Neath Gunpowder Works: Conservation Plan for the Brecon Beacons National Park authority.

Alistair Coey Architects, 2016. Glyn Neath Gunpowder Works: Management and Maintenance Plan.

Alistair Coey Architects. 2016 Glyn Neath Gunpowder Works: Condition Report.

Dyfed Archaeological Trust, 2016. Explosive times, the old gunpowder works community archaeology project: Community Consultation.

Herefordshire Archaeology, 2017. Programme of Archaeological Observation and Recording at the Old Gunpowder Works, Glyn Neath, Pontneddfechan, South Wales. Herefordshire Archaeology Report No. 369.

7. Methodology

It is proposed that two trenches are excavated over a period of 5 days. In addition to this an area within the Scheduled area which has been identified as being damaged by footfall will be archaeologically cleaned and recorded prior to discussions regarding its conservation taking place. Site work will take place between 30th July to 3rd August, with a post excavation and results day on Saturday 4th August. It is presumed that staff and volunteers will be able to use the washing and toilet facilities that are currently on site and at the village hall.

All works will be undertaken in accordance with relevant SMC consent / Class Consent.

Trench 1 will be located over the Cake Press House (Hammond 203 / Nobel 30, NGR 291682 208273) This will comprise a 1m wide trench between 4 and 6m in length being excavated across the longitudinal axis of the building to the top of significant archaeology in order to locate and define wall lines and therefore enhance the plan of the structure(s). Prior to excavation works beginning any tall vegetation will be removed from the trench area (see below). If necessary two 0.5m square test pits will be excavated on the same line of the trench in order to locate the gable walls of the building. A profile across the structure will be produced as will a plan.

It is understood that this structure represents the remains of a press house or cake press house which had been damaged by an explosion prior to 1927 and which may have been replaced by a building immediately to its north after this event. (Hammond 2016).

Designation status: Within BBNP but not SAM

Trench 2 will be located across the leat between the boiler house (Hammond 502.2 / Nobel 44) and a Magazine / Pellet House, (Hammond / Nobel 47 & 48), at the base of the slope from the chimney NGR 292065 208610. This trench will be 1.5 m wide and up to 6m in length and will provide a section across the leat and include the investigation of an iron object protruding from the eastern bank of the lead which is thought to be the remains of a foot bridge.

This is the Upper leat described by Hammond and is present on the 1877 Ordnance Survey Map and provided water to two turbines and a small water wheel. (Hammond 2016)

Designation status: Within BBNP and SAM

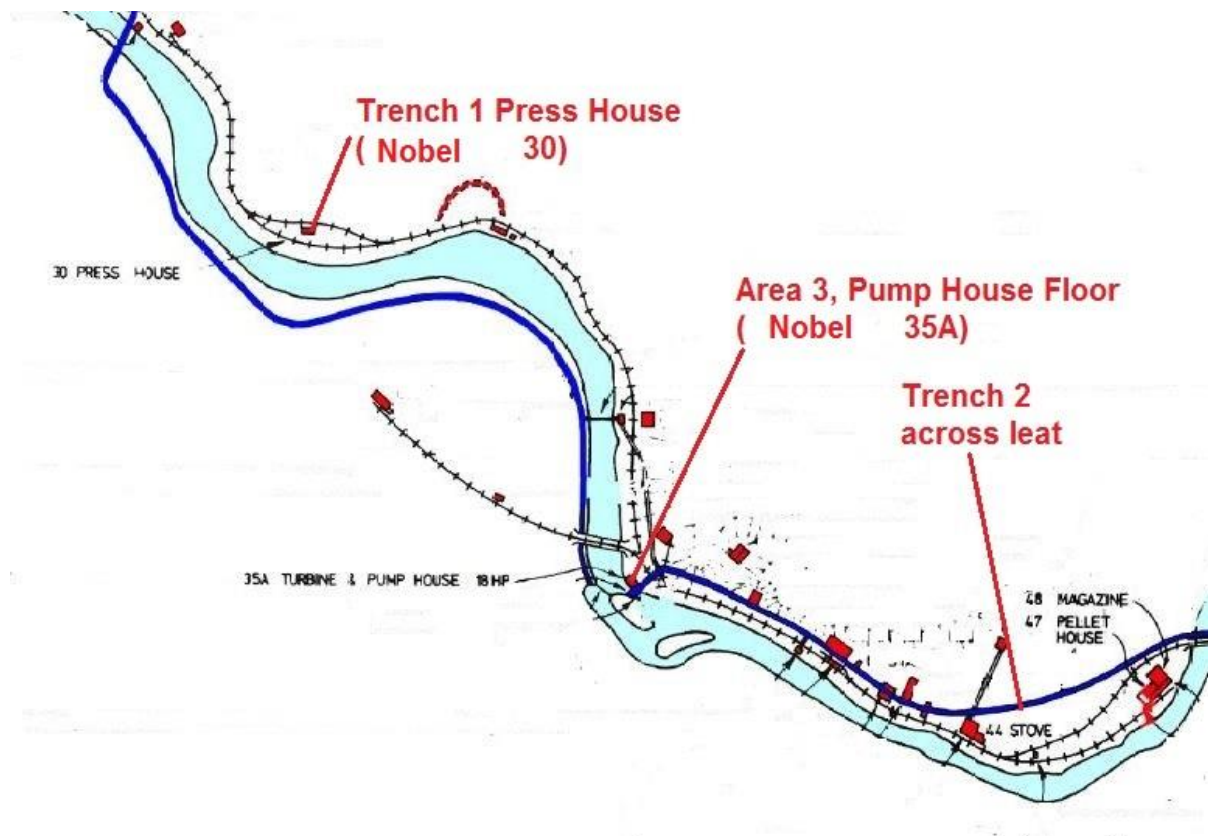
Spoil from the two trenches will be banded as close to the trenches as is practical and safe. A metre minimum will be left between the trench edge and the spoil tip.

The third area of investigation will comprise a section of the Pump House floor (Hammond 208.1 / Nobel 35A, NGR 291925 208402). This is being affected by erosion (human footfall) and some of the material which comprise the floor and wall lines is being displaced. The accessible areas of the floor will be cleaned by light trowelling and brushing in order to define edges and reveal machinery bases drain lines, doorways, construction breaks etc. The cleaned area will then be recorded both photographically and by Total Station survey instrument.

It is understood that this represents a single storey and single bay stone building in which an 18hp pump and turbine was housed sometime after 1877 but prior to 1903. (Hammond 2016)

It is currently understood that this area is to be covered in order to afford some protection as part of the conservation works however the details for this have not been discussed in detail with the author at this time.

Designation status: Within BBNP and SAM



Trench location plan

All trenches will be excavated by hand and backfilled by hand and where possible / practicable vegetation replaced.

All trenches will be surveyed in and located using a Total Station survey instrument.

Tools to be used during the project will include 4 inch pointing trowels, spades, shovels, mattocks and brushes. Buckets and wheel barrows will be used to remove spoil and to backfill. Any vegetation clearance required prior to the works will either be undertaken by BBNP Conservation Volunteers or by staff of Herefordshire Archaeology, using bill hook, slashers or machete type tools

The post excavation day (Saturday 4th August) will be held in the village hall and will include the washing and / or cleaning of finds recovered, the cataloguing of finds, survey drawings, context sheets and photographs and an initial summary of results from the project.

It is intended to run a “booking system” for volunteers in order to make it as easy as possible for as many as is practicable to be involved. Volunteers will be able to book in for either a 3 hour morning session or a 3 hour afternoon session or both each day. We have used this system in the past and have found that many volunteers find it difficult to commit to multiple whole days but find it much easier to commit to multiple part days.

Two members of staff (Simon Mayes and David (Dai) Williams), will be committed to running the project for the full six days

Upon arrival volunteers will be inducted in order to comply with Health & Safety legislation. Volunteers will be trained in the use of hand tools, the collection and basic recording of finds and the concept of excavation and recording by context.

As part of the finds processing day, volunteers will be trained in the cleaning, recording and basic conservation of archaeological finds.

All recording will follow standard archaeological guidelines as set out by the Chartered Institute for Archaeologists (CIfA). These will include:

- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives
- Standard and guidance for an archaeological excavation
- Standard and guidance for the collection, documentation, conservation and research of archaeological material. (for further description of these please see Appendix 1).

All recording will be undertaken on pro forma record cards that conform to accepted archaeological norms. Photographs of archaeological features, deposits and general area will be taken using 16mp digital camera.

Registers will kept for photographs, context sheets plans and section drawings.

8. Reporting, Publication and Archiving

Photographs and a statement or “Blog” will be sent to the BBNPA comms team: communications@beacons-npa.gov.uk for public dissemination at the end of each working day.

The final report will include the historical background to the sits, the development of the community project, a description of the results and conclusions together with all relevant catalogues, archive descriptions and illustrative material.

The final report will be produced within four weeks of the end of the project and will be made available digitally and by hard copy (if required) to CADW, RCAHMW, the CPAT Historic Environment Record and the Breacon Beacons National Park Authority. If suitable, the report or sections of it, will be re-drafted as an article to be published within an appropriate journal (eg. Archaeology in Wales, Brycheiniog)

Archiving arrangements and publication will be according to Chartered Institute for Archaeologists (CIfA), Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives, RCAHMW Guidelines for Digital Archaeological Archives and will be available through the Archaeological Data Service (ADS).

Should any finds be encountered during these works, these will be offered to Brecknockshire Museum after liaison with all interested parties.

9. Staff to be allocated to the project

Tim Hoverd (ACIfA) is the Archaeological Projects Manager for Herefordshire Archaeology, Herefordshire Council's archaeology service. He has been running community projects since 2005 and is currently directing the Longtown Castles Project (HLF funded) and the Bartonsham, Row Ditch Project (HLF funded). He regularly works with volunteers and co-directs the University of Manchester training excavations at Dorstone Hill, Herefordshire.

David Williams (MCIfA) has undertaken a large number of community projects, including projects for the National Trust, Woodland Trust and the mental health charity, Mind. He has worked extensively for over 30 years on industrial sites in Wales and the West Midlands.

Simon Mayes (ACIfA) specialises in the production of surveyed site drawings using electronic survey instruments and CAD software to produce publication standard plans, sections and elevations of sites and buildings. He is also a very experienced excavator and building recorder.

It is anticipated that Simon and David will be responsible for the day to day running of the project, the induction and training of volunteers and the excavation and recording of trenches. Tim will manage the project but will also be available to support Simon and David if needed on site.

Herefordshire Archaeology is the Archaeological Service for Herefordshire Council and it therefore covered by Herefordshire Council's liability insurance.