# Agents House, Brymbo Ironworks, Wrexham

## **Photographic Record**

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NGR: SJ 29476 53477 Planning #: N/A Project #: AD031 February 2017



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Prepared for: The Brymbo Heritage Group Brymbo Ironworks, Brymbo, Denbighshire Project No: N/A

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Fig. 3 - Ground and First Floor Plans.

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### Agents House, Brymbo Ironworks, Wrexham

Photographic Record

#### Summary

ArchaeoDomus Archaeological & Heritage Services was commissioned by the Brymbo Heritage Group to undertake a photographic record and a rapid assessment of the development of the Agents House at the former Brymbo Ironworks. The results of this work has been the production of a photographic record and interpreted ground and first floor plans.

This Photographic Record has been commissioned as part of a grant aid packet for the removal of the roof of the Agents House and the erection of a single pitch roof. This work it to ensure the stability and future use of the building as a part of the Brymbo Heritage Area and Museum in the years to come.

The Photographic Record, with analysis of the building, was undertaken on 9<sup>th</sup> and 27<sup>th</sup> February 2017. This comprised of a photographic record and visual assessment of the buildings form and development, with additional detail measured added to plans produced in 2013 by the RCAHM Wales.

The Agents House is a Grade II\* Listed Building and the most complete of all of John Wilkinson's structures to still survive at the Ironworks; the others being the retaining wall now housed within the 1920s Machine Shop, and elements of the Foundry and Charge Wall. From its initial construction the Agents House underwent rapid development, with the western extension and eastern Counting House being added within a matter of years of its construction, all of which being built between 1798 and 1809.



#### **PROJECT TEAM**

**Ross Cook** - an experienced buildings archaeologist and surveyor with a background in archaeology and buildings conservation. He has undertaken detailed survey works to a wide range of Scheduled Ancient Monument and Listed Buildings through Wales and England, which has included Neath Abbey, The Tower of London, Llansteffan Castle, Christ Church Oxford, Magdalen College Oxford, Tretower Castle, Cilgerran Castle, Newport Castle Pembrokeshire, Picton Castle, and Brymbo Ironworks. He previously worked for the Royal Commission on the Ancient and Historical Monuments of Wales as a Historic Buildings Investigator (Archaeology), where he recorded buildings and monuments, and provided advice on historic buildings at a national level. Currently he is involved with project work with Cadw, The Brymbo Heritage Group, and The Buildings of Medieval and Ottoman Palestine Research Project.

Ross also works as an Associate Dendrochronologist with the Oxford Dendrochronology Laboratory, through which he has undertaken work on sites such as Hampton Court Palace, Winchester Cathedral, Queens House Greenwich, The Tower of London, Christ Church Oxford, Magdalen College Oxford, Hay Castle, Tredegar House, and a large number of other smaller listed buildings and schedules sites throughout Wales and England.

ArchaeoDomus Archaeological & Heritage Services is the trading name of Ross Cook. An affiliate member of the CIfA, and adhere to the CIfA codes of conduct. I hold a valid CSCS card.

Cert. in Buildings Archaeology - University of Sussex, CCE. PGCert. Social Anthropology - University of Wales, Lampeter BA Join Honours Archaeology & Anthropology - University of Wales, Lampeter

#### ACKNOWLEDGEMENTS

With thanks to the Brymbo Heritage Group for enabling my continued involvement at Brymbo Ironworks and to Will Davies of Cadw, for support in facilitating this through a programme of grant aid funding. Particular thanks to Colin Davis and Gary Brown of the BHG, who have supported in every aspect of the survey and research to make it possible.



#### 1 INTRODUCTION

#### 1.1 General

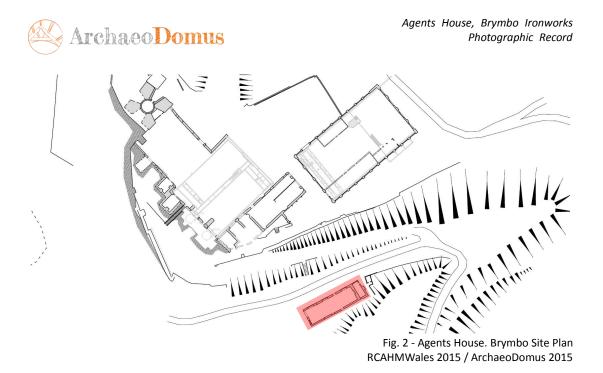
- 1.1.1 This document provides a register for a photographic survey of the Agents House at Brymbo Ironworks by Ross Cook of ArchaeoDomus Archaeological & Heritage Services. The record was undertaken on 9<sup>th</sup> and 27<sup>th</sup> February 2017 to provide a lasting record of the building prior to alteration.
- 1.1.2 This document also provides a methodology for the photographic and measured survey. An interpretation has been included for the benefit of understanding the building.
- 1.1.3 The photographic record runs parallel to an ongoing programme of measured survey and investigation for the Brymbo Heritage Group by ArchaeoDomus.
- 1.1.4 This programme of recording work was instigated by the Royal Commission on the Ancient and Historical Monuments of Wales in March 2013.
- 1.1.5 This record has been commissioned by the Brymbo Heritage Group as part of a successful Grant Aid application made to Cadw to remove the roof from the Agents House and provide it with a temporary single pitch roof.

#### 1.2 Location

1.2.1 The Agents House sits at *c*. 215m above sea level and forms part of the Brymbo Ironworks, which sits on top of a large hill, known as Brymbo Mountain, on the eastern edge of the Ruabon Moors. The site nestles just blow a natural ridge, now supported by the Charge Wall, being semi-enclosed with banks to three sides. To the north-west runs Blast Road, with the immediate land to the south and east being reclaimed from land formally occupied by steelwork buildings, which has seen a long term redevelopment turn the site over to residential use.



Fig. 1 - Location of Site. Ordnance Survey 1:15,000 to 1:30,000 VectorMap District. Contains Ordnance Survey data © Crown copyright and database right 2017



#### 2 OBJECTIVES

- 2.1 The objectives of this work was :-
  - Produce a photographic record of the Agents House prior to the removal of the roof.
  - Annotate the photographs to provide further detail on the buildings phasing and construction.
  - To add further detail to an existing plan produced by the RCAHMW in 2013.

#### 3 METHODOLOGY

#### 3.1 General

3.1.1 ArchaeoDomus follows the Chartered Institute for Archaeologists' Code of Conduct, Standards and Guidelines.

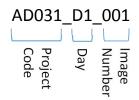
#### 3.2 Survey Methods

- 3.2.1 The survey was undertaken using traditional survey techniques to add further detail to the building in plan form only.
- 3.2.2 Drawings have been produced using CAD and exported to PDF with a print scale of 1:100 at A3. Kubit PhoToPlan was used to rectify elevation drawings were possible.
- 3.2.3 Further survey plans of the Ironworks site are available from the Royal Commission on the Ancient and Historical Monuments of Wales.



#### 3.3 Photography

- 3.3.1 The photographic survey was undertaken using a Canon 500D digital SLR camera with a Canon EFS 18-55mm lens and EFS 10-22mm wide angle lens, mounted on a tripod, where possible.
- 3.3.2 All photography has been captured in colour using natural light only, where possible.
- 3.3.3 Stitched photographic panoramas of the North, South and West elevations to create a high resolution record (Fig. 4) have been produced using Microsoft Image Composite Editor. It was not possible to utilise this technique for the East elevation.
- 3.3.4 Further photographic archives of the site can be accessed from the Royal Commission on the Ancient and Historical Monuments of Wales.
- 3.3.5 The archive numbers attributed to the photographs have been given the references as follows:



#### 4 DATING AND ANALYSIS

#### 4.1 Introduction

- 4.1.2 The Agents House is a Grade II\* late 18<sup>th</sup>/early 19<sup>th</sup> century six bay, two-storey house with dressed sandstone walls with corbelled eave and plain string course, and a hipped slate roof. It is the best surviving of all Wilkinson's early development of the Ironworks.
- 4.1.3 **Externally (Photos 001-041)** the building retains much of its original features, however it is notable that all chimneys have been removed, apart from that to the lower extension to the east end. The windows have all been removed and altered during one of its later uses, with casement fixed light windows now in situ. Both rear doorways appear to be inserted.
- 4.1.4 **Internally (Photos 042-079)** the former first floor has both collapsed and been partially removed to make use of the building as storage. Little survives of its early use, apart from a ground and first floor fireplace to the east end, all others having been removed when the building was turned over for industrial use; scaring to the internal lateral walls shows where the former gable was removed. A small amount of early lathe and plaster survives to Bay I. A blocked doorway once allowed access between the Counting House and Bay I. Truss 1 and Truss 5 (T1 & T5 on Fig. 3) are the only two original trusses to survive, which are king post in form, with the addition of straight struts. The principle rafters carry a single purlin, which in turn, along with a ridge board, support the common rafters. The cast iron range, although probably not original, remains in situ and blocked up with brick. The scar of a former entrance passage can be seen to either side of the door, however, much of the original internal arrangement can no longer be seen due to the effects of later use.



#### 4.2 Development

- 4.2.1 A estate map produced for John Wilkinson in 1798 shows a building occupying the same location as the Agents House today. However, at this time is it labelled '*Three Cottages*', thus giving us a *terminus post quem* for possible construction. The Agents House first appears on a site plan in 1809 called '*PLAN of the Workings in the MAIN COAL at BRYMBO Colliery*', though it is not certain that the building is that currently standing, a later plan by the same name, produced in 1812 replicated this. In 1812 an associated document called '*A LONGITUDINAL SECTION of the STRATA at BRYMBO COLLIERY*' is also produced and shows the Agents House in elevation as it stands today. Therefore we can surmise that, since both plans are the same, that the Agents House and its subsequent extensions were built in a short period of time between 1798 and 1809.
- 4.2.2 By the 1873 Ordnance Survey 25 Inch Map, it is clear that the building had undergone a number of minor changes to become a store house, with water tanks to service the railway built alongside. It is probable that the Agents House is became a railway building at the same time as, or shortly after, the on-site railway was laid in the 1840s. The resurveyed map of 1899 shows that the Agents House had become connected in some way with the mineral railway, with additional extensions of the west elevation. This may the when the large door in the west elevation was created, though it is quite probable that this was still a later change. The 25 Inch Map of 1963 shows the building standing as seen today.
- 4.2.3 Initially it was thought possible that the Agents House may have been a re-fronting of these earlier cottages, but with with full access during this recent work, there has been no evidence seen for this.

#### 5 CONCLUSIONS

- 5.1 The Agents House is a was built in two discernible phases within very short succession between the years of 1798 and 1809.
- 5.2 The first phase is a complete construction phase and not a re-fronting and alteration of the earlier cottages shown on the site.
- 5.3 Whilst not a re-fronting, it is likely that the Agents House reused stone from the former cottages.
- 5.4 It's a fine and high status building within the Ironworks, with unusually large windows for the time period and overall size of property. This allowing for light and overseeing view of the Ironworks.
- 5.5 The Agents House is the most complete building from the Wilkinson period Ironworks, surviving over 200 years of alterations, whilst maintaining its original façade.



#### PHOTOGRAPHIC REGISTER

Number	Description	Wide Angle	Colour - B/W	Flash
AD031_D1_001	External; 3/4 view of north elevation	No	Colour	No
	(principle elevation) and west elevation.			
AD031_D1_002	External; 3/4 view of north elevation	No	Colour	No
	(principle elevation) and east elevation.			
AD031_D1_003	External; View of west elevation.	No	Colour	No
AD031_D1_004	External; 3/4 view of west elevation and south elevation.	No	Colour	No
AD031_D1_005	External; View of rear elevation showing	No	Colour	No
	vertical joint between Phase I and Phase II.			
AD031_D1_006	External; Detail of south elevation eave string course.	No	Colour	No
AD031_D1_007	External; Detail of south elevation eave string course.	No	Colour	No
AD031_D1_008	External; Detail of south elevation eave string course.	No	Colour	No
AD031_D1_009	External; Detail of south elevation eave string course.	No	Colour	No
AD031_D1_010	External; Detail of south elevation eave string course.	No	Colour	No
AD031_D1_011	External; Detail of south elevation eave string course.	No	Colour	No
AD031 D1 012	External; View along south elevation.	No	Colour	No
AD031_D1_013	External; North elevation window detail.	No	Colour	No
AD031_D1_014	External; North elevation, Phase II ground and first floor windows.	No	Colour	No
AD031_D1_015	External; North elevation, Phase I first and ground floor windows (west end).	No	Colour	No
AD031_D1_016	North elevation, Phase I doorway.	No	Colour	No
 AD031_D1_017	North elevation, Phase I first and ground floor windows (east end).	No	Colour	No
AD031 D1 018	External; North elevation, doorway detail.	No	Colour	No
AD031_D1_019	External; North elevation, window lintel detail.	No	Colour	No
AD031_D1_020	External; South elevation, Phase II first floor window detail, west end.	No	Colour	No
AD031_D1_021	External; South elevation, rafter socket remains to Phase I walling.	No	Colour	No
AD031_D1_022	External; South elevation, former doorway detail, west end.	No	Colour	No
AD031_D1_023	External; South elevation, view of east end, showing window and doorway locations.	No	Colour	No
AD031_D1_024	External; South elevation, showing window to rear of Counting House.	No	Colour	No



AD031_D1_025	External; South elevation, showing window, rafter sockets and Phase I / II joint.	Yes	Colour	No
AD031 D1 026	External; South elevation, general view.	Yes	Colour	No
 AD031_D1_027	External; South elevation, blocked doorway detail.	Yes	Colour	No
AD031_D1_028	External; South elevation, blocked window to Counting House.	Yes	Colour	No
AD031_D1_029	Internal view of Counting House.	Yes	Colour	No
AD031_D1_030	Internal view of Counting House.	Yes	Colour	No
AD031_D1_031	Internal view of Counting House, showing roof structure.	Yes	Colour	No
AD031_D1_032	External; View of east elevation.	Yes	Colour	No
AD031_D1_033	External; View of north elevation.	Yes	Colour	No
AD031_D1_034	External; View of north elevation.	Yes	Colour	No
AD031_D1_035	External; External; Detail of iron work to side of doorway.	No	Colour	No
AD031_D1_036	External; Remains of ironwork lead fixed into stonework.	No	Colour	No
AD031_D1_037	External; Detail of doorway lintel.	No	Colour	No
AD031_D1_038	External; Remains of ironwork lead fixed into stonework.	No	Colour	No
AD031_D1_039	External; Detail of iron gutter bracket.	No	Colour	No
AD031_D1_040	External; Detail of iron work for electric connection.	No	Colour	No
AD031_D2_041	External; Detail of rear first floor window to Phase II.	No	Colour	No
AD031_D2_042	Internal; Viewed towards east.	No	Colour	No
AD031 D2 043	Internal; Truss 1	No	Colour	No
AD031 D2 044	Internal; View towards east.	No	Colour	No
AD031 D2 045	Internal; Truss 5.	No	Colour	No
AD031_D2_046	Internal; View towards west.	No	Colour	No
 AD031_D2_047	Internal; First floor chimney breast, and lath and plaster ceiling, east end.	No	Colour	No
AD031 D2 048	Internal; Fireplace, east end.	No	Colour	No
AD031 D2 049	Internal; Detail of fireplace mantelpiece.	No	Colour	No
AD031 D2 050	Internal; Truss 2.	No	Colour	No
AD031 D2 051	Internal; Fireplace, east end.	No	Colour	No
AD031 D2 052	Internal; Blocked door to Counting House.	No	Colour	No
AD031 D2 053	Internal; Detail of lathe and plaster.	No	Colour	No
AD031 D2 054	Internal; Ground floor window, east end.	No	Colour	No
AD031_D2_055	Internal; First floor window, east end.	No	Colour	No
AD031_D2_056	Internal; Partial collapse of stone wall	No	Colour	No
	between ground and first floor windows, east end.			
AD031_D2_057	Internal; Doorway, north elevation.	No	Colour	No
AD031_D2_058	Internal; Doorway, south elevation.	No	Colour	No
 AD031_D2_059	Internal; Doorway, showing blocking, south elevation.	No	Colour	No
AD031_D2_060	Internal; First floor wall above doorway, showing rebuilding in brick, north elevation.	No	Colour	No



AD031_D2_061	Internal; Blocking of ground floor window, west end of Phase I.	No	Colour	No
AD031_D2_062	Internal; Blocking of doorway in brick, south elevation.	No	Colour	No
AD031_D2_063	Internal; First floor window, west end Phase I.		Colour	No
AD031_D2_064	Internal; Ground floor window, Phase II extension.	No	Colour	No
AD031_D2_065	Internal; First floor window, Phase II extension.		Colour	No
AD031_D2_066	Internal; Later timber store room, west end.	No	Colour	No
AD031_D2_067	Internal; Blocked doorway to west elevation, unseen externally.	No	Colour	Yes
AD031_D2_068	Internal; Blocked window to west elevation, unseen externally.	No	Colour	No
AD031_D2_069	Internal; Doorway to west elevation.	No	Colour	No
AD031_D2_070	Internal; View towards west.	No	Colour	No
AD031_D2_071	Internal; Detail of pecked stone work in rebuilt west elevation.	No	Colour	No
AD031_D2_072	Internal; General view towards east.	Yes	Colour	No
AD031_D2_073	Internal; General view towards east, showing fireplace arrangement.	Yes	Colour	No
AD031_D2_074	Internal; View of doorway, north elevation.	Yes	Colour	No
AD031_D2_075	Internal; General view towards west.	Yes	Colour	No
AD031_D2_076	Internal; General view towards north.	Yes	Colour	No
AD031_D2_077	Internal; View showing scare from removal of former gable wall, south.	Yes	Colour	No
AD031_D2_078	Internal; View showing scare from removal of former gable wall, north.	Yes	Colour	No
AD031_D2_079	Internal; Later store room.	Yes	Colour	Yes
AD031_D2_080	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_081	External; Detail of eave string course, west elevation.	No	Colour	No
AD031_D2_082	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_083	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_084	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_085	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_086	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_087	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_088	External; Detail of eave string course, north elevation.	No	Colour	No
AD031_D2_089	External; Detail of eave string course, north elevation.	No	Colour	No



External; Detail of eave string course, north	No	Colour	No
<b>.</b>	No	Colour	No
elevation.			
External; Detail of eave string course, east	No	Colour	No
elevation.			
External; Detail of eave string course, east	No	Colour	No
elevation.			
External; Detail of eave string course, east	No	Colour	No
elevation.			
External: Detail of eave string course, south	No	Colour	No
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#### **APPENDIX 1 - Plans**

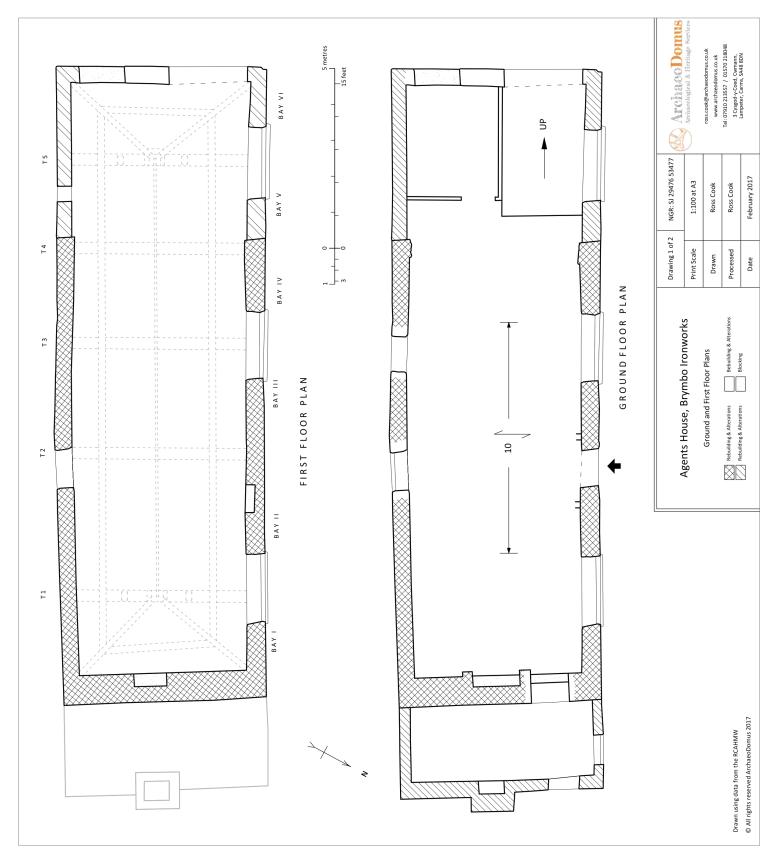


Fig. 3 - Ground and First Floor Plans.





Fig. 4 - Photo Elevation Plans.



#### **APPENDIX 2 - Listed Building Description**

Building Description	Former Agent's House at site of Brymbo Ironworks	Cadw ID	1731
Grade	II*	Locality	Brymbo Steelworks
Date Listed	25 <sup>th</sup> October 1991	County	Wrexham
NGR	SJ 294 534	Postcode	N/A

Listing Text:

#### History

Brymbo Ironworks was established by John Wilkinson between 1795 and 1798. This domestic building was shown on the plans and sections of the works made after Wilkinson's death in 1808. It has remained unchanged in appearance since 1812, but for the loss of an extension at the W. Sale particulars in 1829 identify two houses for agents. The larger (now demolished) had gardens and two counting houses. The surviving building was probably the 'Substantial and convenient DWELLING HOUSE, and a Counting House attached, suitable for an Agent'. By the 1870's the building had become a store house with a water tank built alongside it for the use of the railway.

#### Exterior

A two-storey house, one room deep with three bays to the N-facing facade. Dressed sandstone with plain stone lintels and plain matching eaves cornice and string course. Hipped slate roof. Large casement windows with clear prospect northwards to the main ironworks site. Lean-to on E end exists as shown in 1812, in the form of a separate room with fireplace and brick chimney and a small window: this may have been the counting house. Extensions at the W end have been demolished and the wall patched where it appears to have opened directly into the adjacent structure. Large double doors have been inserted facing W. The main block has been lengthened by the addition of a third bay to match the existing two, as shown by a straight-joint in the front facade (the lengthening is already shown on the 1812 section).

#### Interior

Now entirely open at ground and first floor levels with the first floor removed at the western end. Large stone fireplace at E end.

#### **Reason For Listing**

The only building which can be proved to be original to John Wilkinson's establishment of the Brymbo Ironworks; a rare survivor of an agent's house at an eighteenth century ironworks in a relatively unaltered state. It is listed for this historical and architectural importance, and for its group value with the ironworks site.