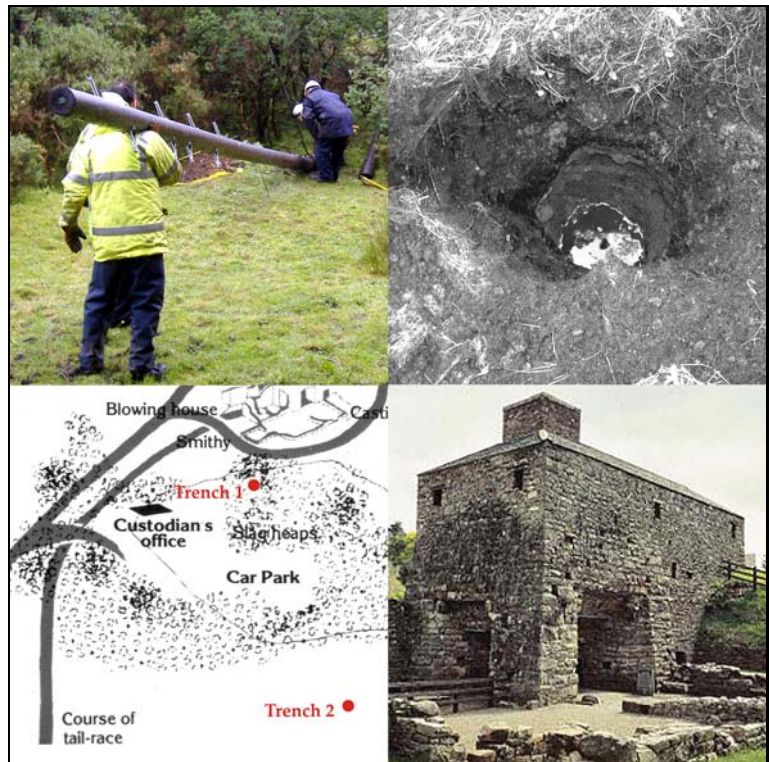


Historic Scotland
Properties in Care
Minor Archaeological Works 2008

Bonawe Iron Furnace: Archaeological monitoring of minor excavations, June 2008

HS PIC Index number: 90037
Project code: HSCO-90037-2008-01



22 September 2008
Kirkdale Archaeology

<u>Site</u>	Bonawe Iron Furnace
<u>N.G.R</u>	NN 0090 3191 / NN 0093 3190
<u>Project Description</u>	Archaeological monitoring of minor excavations
<u>Project code</u>	HSCO-90037-2008-01

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SUMMARY

A watching brief was maintained during the excavation of two small holes just northwest of Bonawe Iron Furnace, amongst the slag heaps. These holes were for the insertion of telegraph poles. The excavations re-used existing holes and slightly enlarged them. Stone seen in one hole may have been demolition debris or structural remains, while the other hole was dug through a layer of slag to natural subsoil.

1.0 INTRODUCTION

Kirkdale Archaeology was asked to undertake a watching brief near Bonawe Iron Furnace during the excavation of two small holes by British Telecom operatives to insert telegraph poles. This involved the excavation and slight enlargement of existing holes on land just NW of the furnace building.

Trench 1 was located in woodland to the W of the car park and Trench 2 to the S of the custodian's office and the car park.

The ironworks were established in 1752-3 and the extensive remains are very well preserved. The principle reasons for locating the iron works here may have been the nearby abundant woodland, from which charcoal could be produced for the furnace, and the accessibility to Loch Etive for the transport of materials, while the River Awe was a ready source of motive power.

The work was undertaken on 25 June 2008.

2.0 EXCAVATION ACCOUNT

2.1 Trench 1 (GPS location NGR NN 00897 31909 +/- 7.50 m)

This area was on a mound of made up ground and the current excavation seems to have been a little larger than the original one affording a look at this made up ground.

The hole was roughly circular and measured 600 mm in diameter at the upper 400 mm, narrowing to 300 mm in the remaining depth of the excavation.

The upper 80 mm comprised dark brown clayey topsoil, 101.

Immediately below **101** there was a depth of 500 mm of loose grey silt with abundant (70%- 80%) lumps of glassy slag, **102**.

102 sealed **103**, a 100 mm thick deposit of dark brown peaty clay.

Below **103** the trench was filled with orange brown sand and gravel.

2.2 Trench 2 (GPS location NGR NN 00942 31898 +/- 13.00 m)

This trench was located in a fairly heavily wooded area immediately outside the boundary fence; it measured 350 mm square and 1.40 m in depth. This re-excavated the 1970s BT hole fairly precisely and although the current pole is buried deeper the hole excavated for it was shallower than the original one.

The upper 60 mm comprised mid brown sandy silt, **101**. The remainder of the trench was filled with mid brown sandy silt and angular stone fragments, **102**.

In the edges of the trench there were large rectangular pieces of sandstone, **103**, many of which were sitting fairly flat.

3.0 INTERPRETATION AND OBSERVATIONS

3.1 Trench 1

3.1.1 Phase 1

104 is undisturbed subsoil.

3.1.2 Phase 2

It is thought that **103** is buried topsoil and shows the ground level in this area at the time of the construction of the iron works, and it would have remained until the deposition of phase 3. This deposit seems to be waterlogged quite often and this area would have been boggy woodland.

3.1.3 Phase 3

102 is largely waste from the furnace, this was mainly green vitreous pieces of slag with occasional fragments of scrap pig iron. Charcoal was seen within some of the slag lumps. It is not possible to say when this was deposited here but it raised the immediate area by *c* 500 mm. **102** had been partially re-deposited in the 1970s

excavation of the pole but looked to be *in situ* at the trench edges.

3.1.4 *Phase 4*

The current topsoil, 101.

3.3 Trench 2

3.3.1 *Phase 2*

It is difficult to interpret the stones glimpsed in the trench edge, 103, although they do appear to be structural. This could be a wall that has been cut through or demolition debris deposited in this area. As this trench is fairly close to the car park it would seem likely that material would be deposited here when it was constructed. On the other hand the topography does not show obvious signs of this area being raised at that time. It has been tentatively placed in this phase as there seems to have been little activity in this area since the demise of the furnace in 1876.

3.3.2 *Phase 4*

As at trench 1 the upper deposit is gradually being added to with rotted vegetation.

A1.0 APPENDIX 1: LIST OF CONTEXTS

Trench 1	
101	Dark brown clayey topsoil.
102	Loose grey silt with abundant lumps of glassy slag.
103	Dark brown peaty clay.
104	Orange brown sand and gravel.

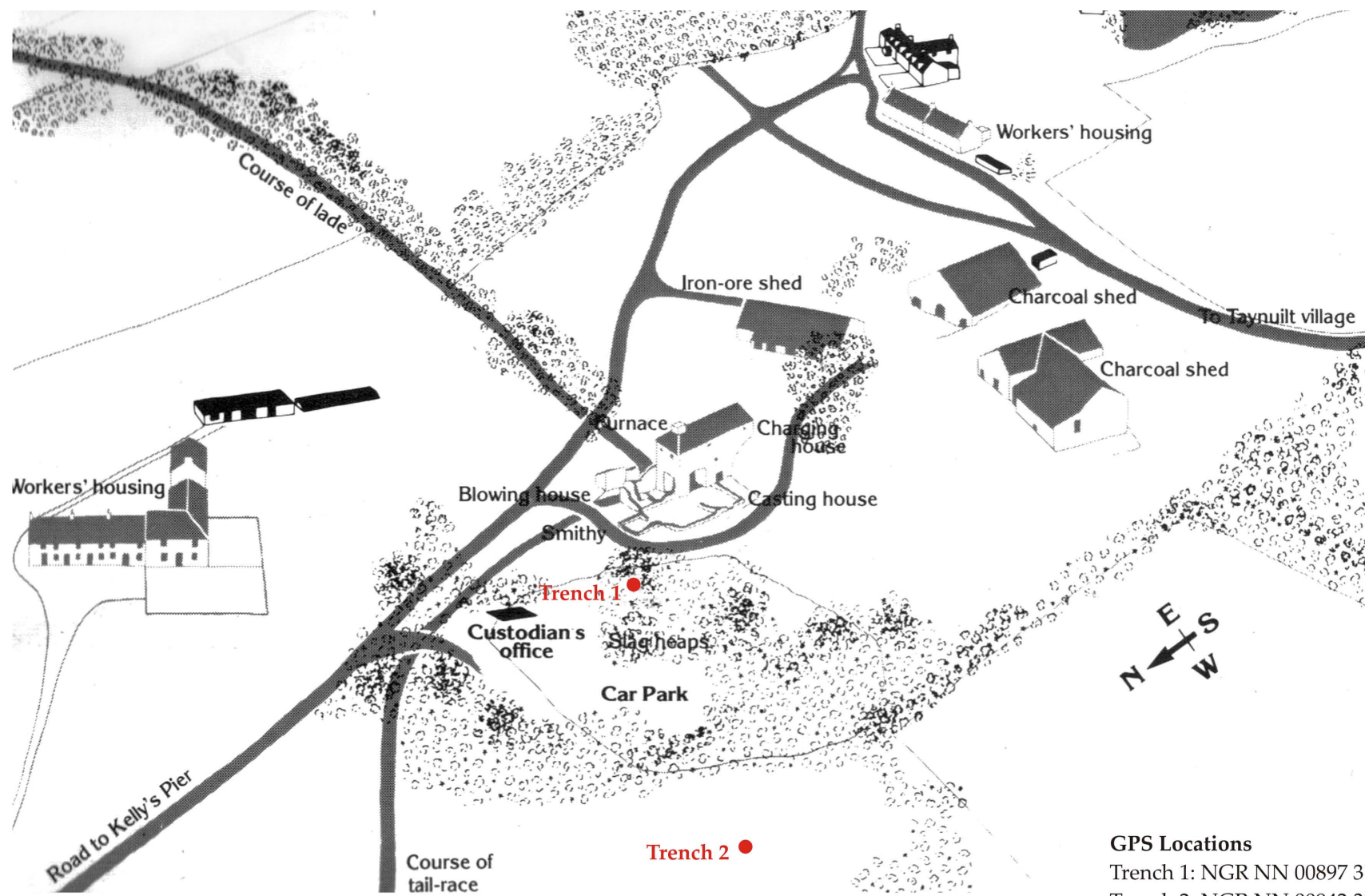
Trench 2	
201	Mid brown sandy silt.
202	Mid brown sandy silt and angular stone fragments
203	Large rectangular pieces of sandstone.

A2.0 APPENDIX 2: LIST OF DRAWINGS

No	Type	Description	Scale	Date
1	Plan	Annotated location drawing	NTS	25/6/08

A3.0 APPENDIX 3: LIST OF PHOTOGRAPHS

#	Description	From	Date
1	Trench 1 post excavation.	N	25/6/08
2	Location of trench 1.	E	25/6/08
3	More general, location of trench 1.	E	25/6/08
4	New pole for trench 1.	E	25/6/08
5	Lifting the pole.	E	25/6/08
6	Pole in situ.	E	25/6/08
7	Post excavation of trench 2.	NW	25/6/08
8	Stones 203 in the trench edge.	W	25/6/08
9	Stones 203 in the trench edge.	N	25/6/08
10	Location of trench 2.	W	25/6/08



GPS Locations
 Trench 1: NGR NN 00897 31909 +/- 7.50 m
 Trench 2: NGR NN 00942 31898 +/- 13.00 m

Fig. 1: Approximate location of Trenches 1& 2 (not to scale)