

**NORTH AUQUHARNEY
HATTON
ABERDEENSHIRE**



Standing Building Survey

Carried out 7th October 2016

by

Murray Archaeological Services Ltd



Report No: MAS 2016-30

by

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- Standing Building Survey -

1. Background
 - 1.1 As a result of an enquiry by Mr and Mrs Ytre-Eide, the owners of North Auquharney, Hatton, Aberdeenshire, it was decided by the Archaeology Service, Aberdeenshire Council, that an unusual small building on the property merited a standing building survey to record it.
 - 1.2 A Level 1 Standing Building Survey has been undertaken which includes measured plans and elevations, a written account of the building's plan, form, function, age and development sequence in addition to a photographic survey of the interior and exterior of the building.
 - 1.3 Murray Archaeological Services Ltd was commissioned to undertake the work by the Archaeology Service, Aberdeenshire Council. The site element of the survey was completed on the 7th October 2016.
2. Desk-top survey
 - 2.1 A search was carried out in the Sites and Monuments Record, Archaeology Service, Aberdeenshire Council and in the National Monuments Records of Scotland at the Historic Environment Scotland (HES) through Canmore and Pastmap.
 - 2.2 The 1st and 2nd edition Ordnance Survey maps were consulted.
 - 2.3 The plans and elevations were drawn by MAS Ltd.

3. The Site

3.1 The building is part of the policies of Auquharney House (c. 1840) and lies directly S of the S wall of the former walled garden.

Auquharney is W of Hatton, lying on a private road, N of the road which runs through Hatton, between the A90 and the A952.

Parish: Cruden NGR NK 0243 3795

GPS in front of building: 402432, 837955

Related sites:

Auquharney House NRHE No: NK03NW23

Aberdeenshire SMR: NK03NW0023

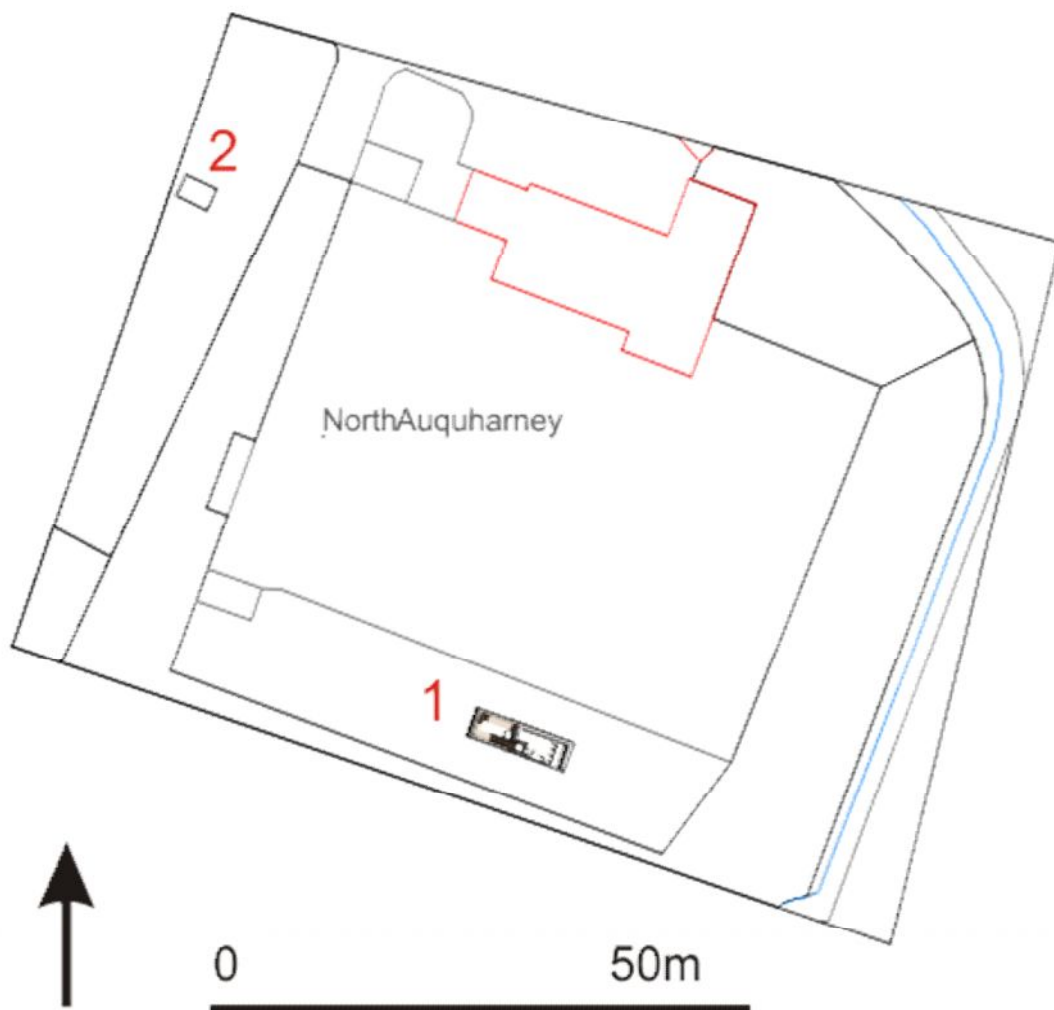
Listed building 3072

North Auquharney Keeper's cottage

Aberdeenshire SMR: NK03NW0094



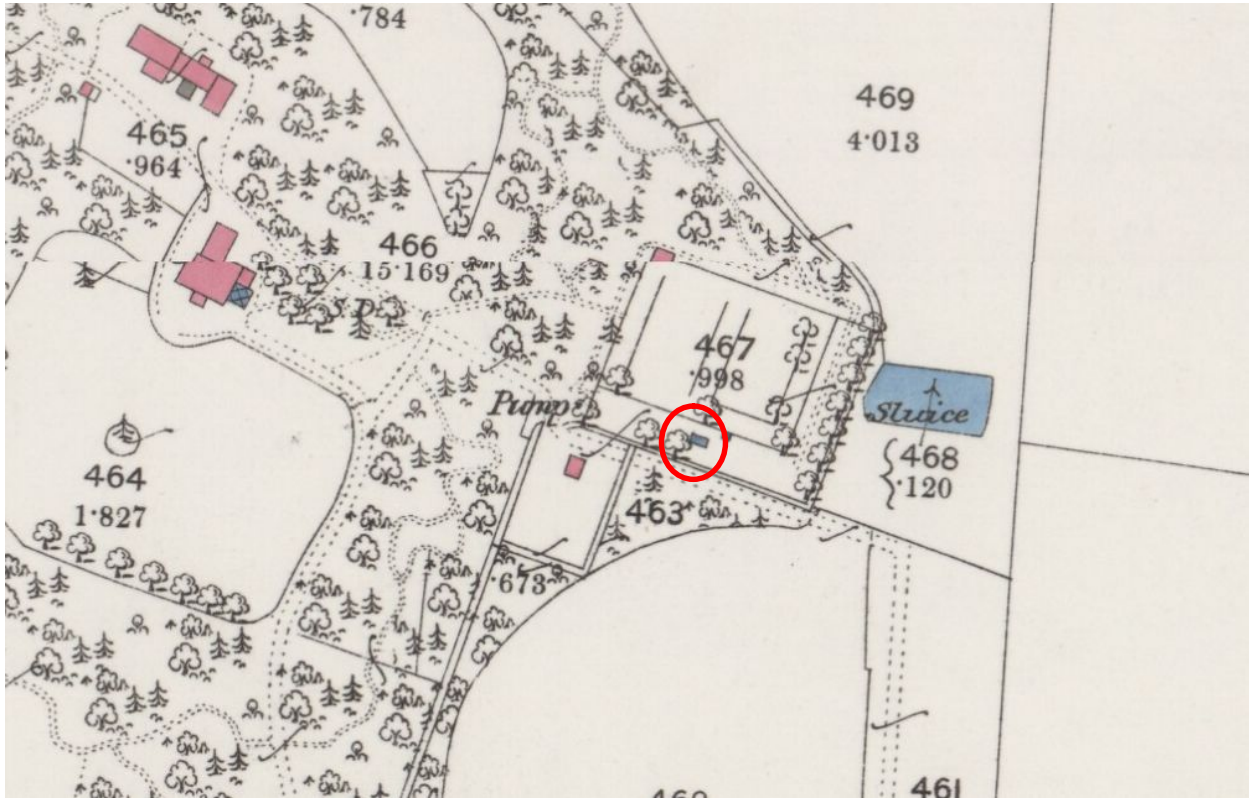
Illus 1 Building 1 from SE. Garden wall visible behind to RHS



Illus 2 Detail of OS map. Ordnance Survey © Crown copyright (2015) All rights reserved. Licence number (100049810). Building (1) has been superimposed as the OS only shows the footprint of E half of structure.

4 Documentary evidence

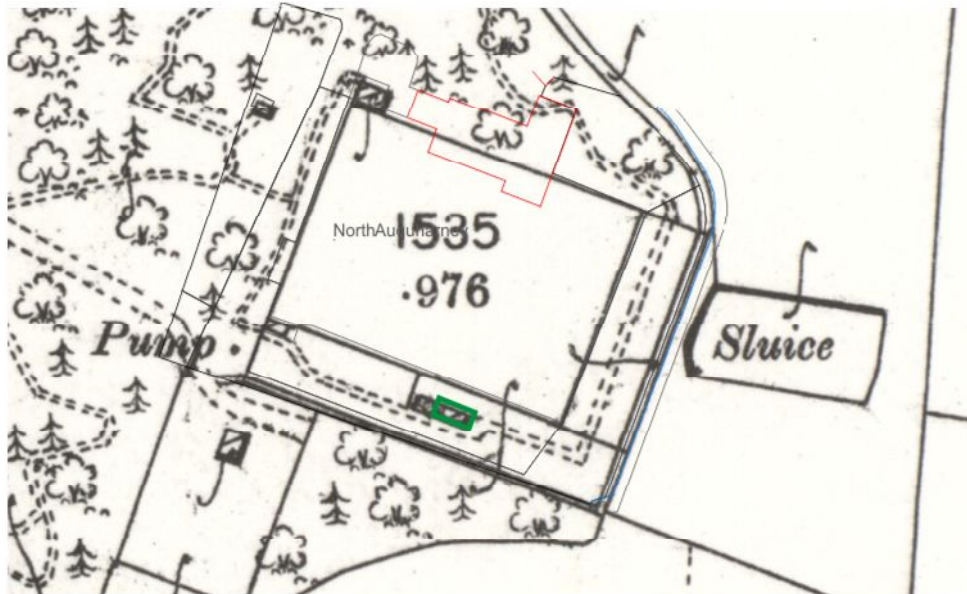
4.1 The 1st edition 25"/mile Ordnance Survey of 1870 (Aberdeen Sheet XXXI.10 of 1870 (published 1872) shows the W (lower) part of the present structure but not the full-height building on the E. The lower part is shown as glass (blue) so was probably already some form of cold frame or hot bed.



Illus 3 Detail of the 1st edition Ordnance Survey 25" map, Aberdeen Sheet XXXI.10 of 1870 (published 1872) www.nls.ac.uk



Illus 4 Detail of the 1st edition Ordnance Survey 25" map, Aberdeen Sheet XXXI.10 of 1870 (published 1872) www.nls.ac.uk with overlay of modern map which shows only the E full-height structure.



Illus 5 Detail of the 2nd edition 25th/mile Ordnance Survey of 1899 (published 1900. Aberdeenshire Sheet 065.04) www.nls.ac.uk. Overlay (green) shows the E full-height structure.

4.2 By the 2nd edition 25th/mile Ordnance Survey of 1899 (published 1901.

Aberdeenshire Sheet 031.10) both parts of the structure are shown, so either the E building with the heating system was added between 1870 and 1899 or it was made more elaborate, with the addition of shelter for the stoking pit.

5 Methodology

5.1 The ground plans and elevations (illus 6, 8)) have been annotated to show details which may help in understanding the development and history of the building.

5.2 The areas recorded were photographed. The full set of photographs will be supplied for the archive and annotated plans in the present report (illus 17, 18) indicate the position of each.

6 The Building

Building 1

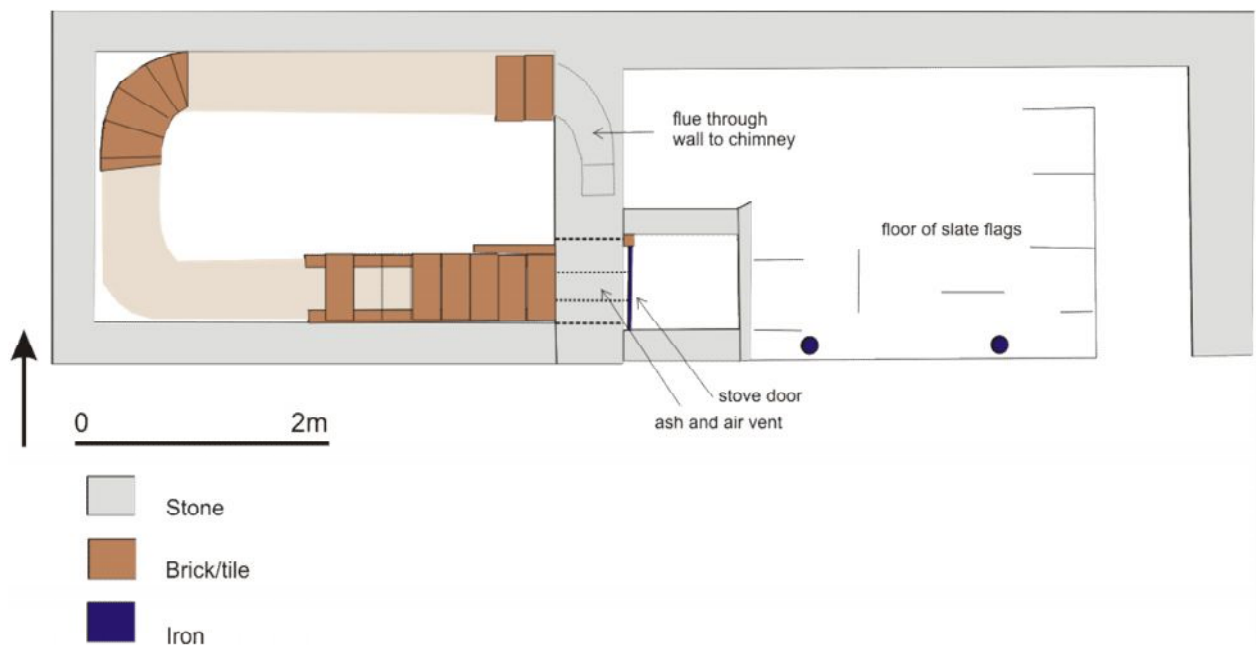
The building which is freestanding some 3.5m S of the outside of the S wall of the walled garden, has external dimension of 9.5 x 2.73m. It faces S and is formed of two parts, a low W cold frame/hot bed and a full-height E part.

The E part of the building, which is 4.5m x 2.27m internally, has stone walls c470mm thick on the E, N and W sides and is open to the S. In general the stonework is of moderate quality with many small rubble stones; however the lower part of the E gable has good flat-faced stone work and there are dressed ashlar blocks used as rybats at all the corners.

The roof is missing but had been pitched, with the front (S) side supported on two cast iron pillars; these are hollow and appear to be re-used down pipes or similar.

The floor had been partially exposed and is of large slate slabs.

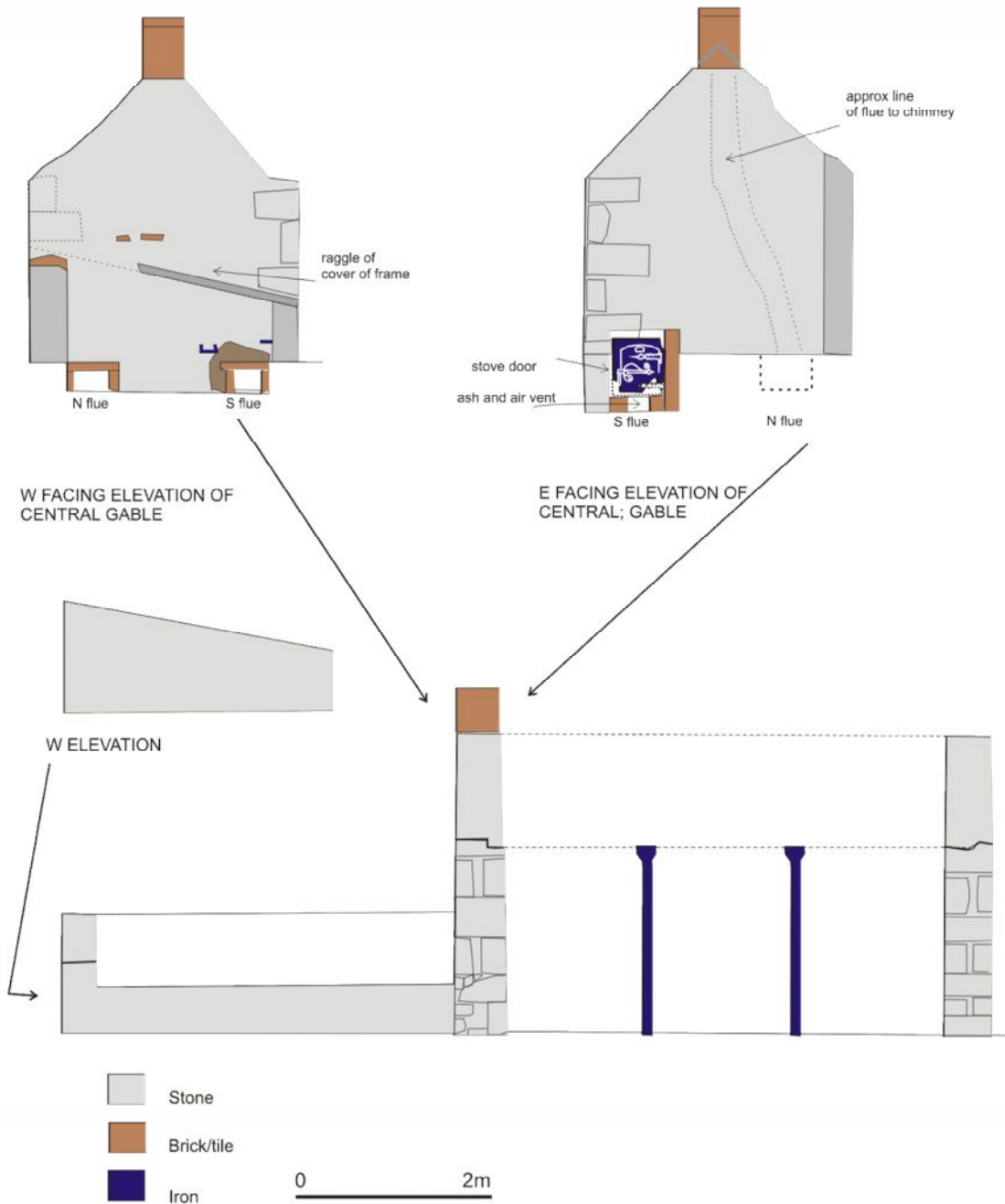
There is a brick chimney at the centre of the W gable.



Illus 6 Plan of the structure



Illus 7 E end of building from S. Garden wall behind



Illus 8 Elevations of the structure

There is a stone-lined stoking pit 740 x 970mm and 580mm deep, in the SW corner. This gave access to a hearth with a cast-iron fire door. There are the remains of an iron grate at the base of the fire box. The firebox is c.600mm wide and 650mm long and runs through the thickness of the base of the wall. Below the fire door and the grate, there is an open brick-lined air vent, with a metal hook at one side which had presumably held a flap for adjusting the draft to the fire.

The heat from the fire would have run through the flue below the floor of the frame/ hot bed at the W end of the building, and out through the flue in the gable to the chimney.



Illus 9 E side of W gable showing stoking pit



Illus 10 Detail of stoking pit

The door of the fire box has a makers plate which reads

‘-Y HER MAJESTY’S ROYAL
..HE ECONOMICAL COOKING ... (?APPARATUS
GODDARD NOTTINGHAM’.

Henry Goddard was a stove grate manufacturer listed in Nottingham from 1848. In 1851 he won a prize medal at the Crystal Palace Exhibition for a Patent Economical Cooking Apparatus. The firm continued as Goddard of Nottingham until 1874 when it became Goddard and Massey (Grace’s Guide).

The stove door therefore probably dates from between 1851 and 1874, although there is a possibility it had been re-used from a kitchen range.



Illus 11 Maker’s name on door

The W part of the building is 3.35m x 2.15m internally, with low stone walls, angled from N to S with 600mm high at the front and 1.10m at the back. The cover was likely to have been of glass (shown blue on 1870 OS map) but nothing of the framework survives. Internally it was partially filled with soft loam which had been partially dug away by the owners to expose a flue cut into the floor level. In the course of the recording MAS Ltd exposed the flue at the NW and NE corners.

It was defined by a single thickness of bricks on either side (except where it comes through the wall at the SE corner where the bricks were doubled). It was covered by large, lipped ceramic lids, c 500mm long set across the flue. The flue ran from the fire box at the SE corner, around the perimeter of the frame, and opened out into a chimney flue from the NE corner up to the central chimney in the gable.

Width of flue to outside of bricks: 440mm. Internal width: 280mm. Height from central ground level to top of lids: 270mm.



Illus 12 Building from W



Illus 13 Building from W showing S end of flue



Illus 14 Flue from above

Building 2

A small stone-built toilet in the woods to the W of the walled garden was also photographed. It is not shown on the 1870 Ordnance Survey map, but is shown on the 1899 map. It would appear to have been built between 1870 and 1899 and was presumably for the use of the gardeners, keeper etc.



Illus 15 Building 2



Illus 16 Detail of dry toilet

7 Discussion

The W part of Building 1 seems to have existed by 1870 (and presumably not earlier than c 1840, when Auquharney House was built by the Yeats family) as a horticultural frame, shown as glass on the 1870 map. There is no indication of it having been externally heated at this stage. However it is very possible that it was a hot bed using rotting horse manure to create heat through the soil.

Between 1870 and 1899 the E part of the structure was built. It appears to have been a shelter for a solid fuel heating system and possibly a fuel store. The difference in the stonework on the W side of the W gable above and below the line of the cover of the frame/hot bed and the clumsy brick blocking above where the flue comes through the wall from the fire box, both indicate that the flue heating system was secondary and added when the E part of the building was built between 1870 and 1899. Manure may still have been used to give additional heat.

This fairly elaborate heating system would indicate that at this period the frame was used as a hot bed for starting plants or for the cultivation of tender plants.

In construction it is very similar to late 18th and 19th-century pinerys and the present owners had wondered if it had been used for pineapple cultivation. We are grateful to Robert Grant, former Head of Gardens & Designed Landscapes for the National Trust for Scotland for confirming that this is a possibility, although he is only aware one similar structure at Megginch Castle, Errol, Perthshire, where there was no tradition of pineapple growing.

Loudon (1824, I, 547-549, 557-593) describes various pinerys and the cultivation of the pineapples; he notes that there are 3 stages, the crowns or suckers, succession plants and the fruiting plants- the whole process to fruiting taking between 18 months and 3 years (Loudon, 1824, 558). Each of these stages would normally take place in a separate pit, and Loudon (1824, 547) writes that three pits with a combined length of 100 feet would provide pineapple for 'a large family'. Large scale pinerys of this sort appear to have been planned for both Blairs Castle (Plan of pinery 1807: Canmore Cat: PTD127/129P) and Kinfauns Castle (Plan of pinery. No date. Canmore Cat: PTD64/53 and 64/54).

Abercrombie (1789) describes very similar vinerys and heated flue pits in use for pineapple cultivation but also notes that already, by the late 18th century, nurseries were supplying fruiting plants for the public to grow on (Abercrombie, 1789, 66). An advertisement in the *Caledonian Mercury* dated Saturday August 9th 1783 notes,

' Pine-apple plants to be sold at Livingstone House, County of Linlithgow, a quantity of pine-apple plants which will fruit next season' (British Newspaper archive)- this suggests that on occasion larger private gardens might also sell off partially raised plants. It would be possible therefore that at Auquharney, pineapple plants within a year of fruiting were grown on. It is however slightly unusual that such a specialist production should take place in a garden where there was relatively little evidence of large scale greenhouse cultivation.

However, it is important to note that both Loudon (1824) and Abercrombie (1798) refer to the cultivation of many other plants such as melons, kidney beans, asparagus and early strawberries in similar structures.

Whatever the explanation it is an unusual survival.

8 References

Abercrombie, J 1789 The Hot House Gardener on the general culture of the pine-apple and methods of forcing early grapes, peaches, nectarines.. London. Accessed <http://books.google.co.uk>

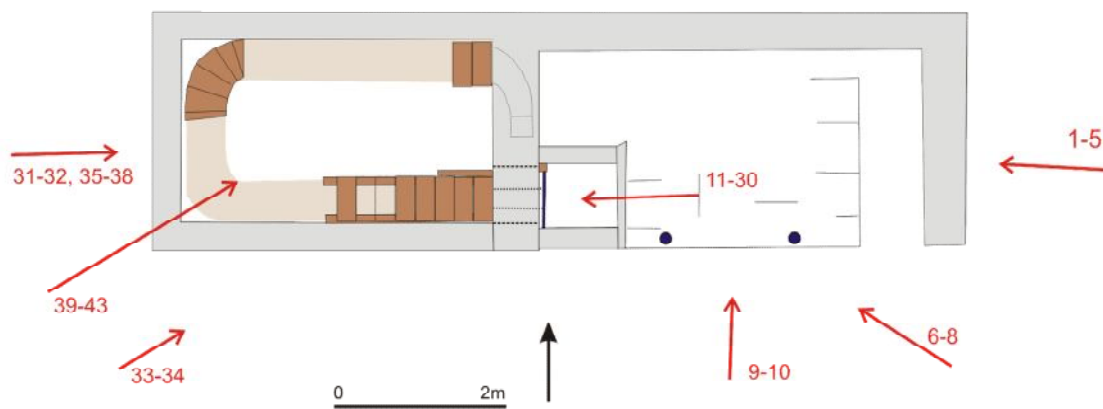
British Newspaper archive. <https://www.britishnewspaperarchive.co.uk>

Grace's Guide. British Industrial History <http://www.gracesguide.co.uk> Accessed 10/10/2016.

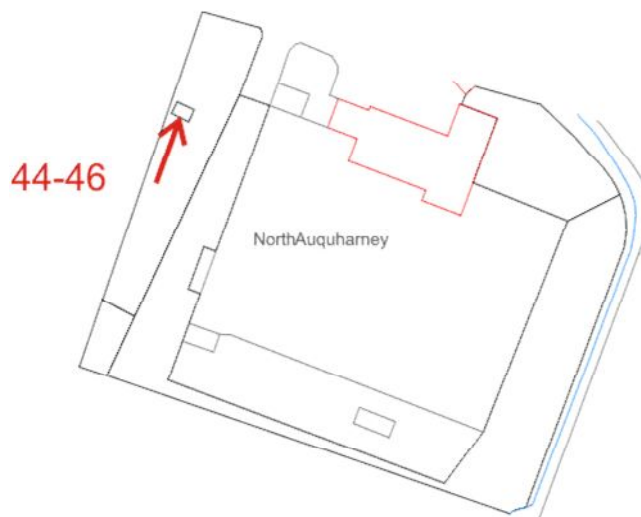
Loudon, J C 1824 An encyclopedia of Gardening. London. Accessed <http://books.google.co.uk>

8 Archive

A full set of photographs with the photo location plans (illus 18-19) will be supplied to the Aberdeenshire SMR in Aberdeen and to the NMRS.



Illus 17 Location of photographs Building 1



Illus 18 Location of photographs Building 2