

## **Proposed conversion of barns to two dwellings at Winston Court, Llanvetherine**

### **Structural survey**

#### **Instructions**

Heron Associates have been commissioned to prepare design schemes and make applications for Planning Permission and Listed Building Consent for the conversion of a range of barns at Winston Court into two dwellings.

A structural report is required to appraise the condition of the barns and assess their suitability for conversion. The report is to identify any necessary major repair works.

There will be separate Planning and Listed Building Applications for The Threshing Barn/Cart Shed/Fowl House and for the Cider House/Cowhouse. This Structural Report applies to both.

#### **Description**

The Farm Range which is the subject of these applications and comprising *Fowl House, Cartshed, Barn, Cowhouse and Cider House at Winston Court* (CADW ID 24194) is Grade II Listed as a good linear farm range, and for important group value with farmhouse and stable at Winston Court.

#### **Survey**

Refer also to Heron Associates drawing 3728-12 Structural Survey Annotations.

In general the walls of the main body of the range are in good structural condition with just minor cracking and some previous poor patching and infilling.

The exception to this is the Fowl House on the eastern end of the range. This has sagging arches to both windows and the door as well as disrupted quoins at both corners. In addition the roof structure cuts across the gable end window of the Cart Shed and sags due to lack of fixity to the wall across the opening.

Regarding the other roof structures these are all in good condition but comprise slender timber members. These will need to be strengthened in order to support the additional weight of insulation, ceilings etc.

The roofs need reslating, using existing slates if they are in good condition and supplementing as necessary. The original slates should be used on the north face of the Threshing Barn and Cart Shed and on the Fowl House if there are sufficient as these are the most visible elevations. It should be noted that there are undulations in the roof line. It is important that these are retained in the re-roofing and not flattened out.

Guttering is provided to the roof on the yard side but not to those facing the field. Downpipes are either missing or damaged leading to some localised damp patches on walls and floors.

There are intermediate floor structures in the cart shed, cow barn and cider house but none of these are serviceable and all of them will need repairs to structure and the replacement of floorboards.

The remains of animal pens abut the south wall of the Cider House. It is understood that these will be retained as landscaping features and as such do not come under the scope of this survey. The south wall of the Cider House requires some rebuilding and the animal pen walls will have to be reduced in height to allow this.

The attached Radon Gas report shows that there is no anticipated risk for this property and as such this raises no problems in recommending breathable construction for the conversion.

### **Conclusions**

Apart from the items mentioned above the structural condition of the range is good and suitable for the proposed conversion.

### **Recommendations**

See the attached drawing 3728-12 onto which the proposed repairs have been annotated.

The repairs include some small areas of rebuild or repointing to the external stonework, rebuilding of brickwork to the Fowl House, stitching some minor cracks and replacing some timber lintels.

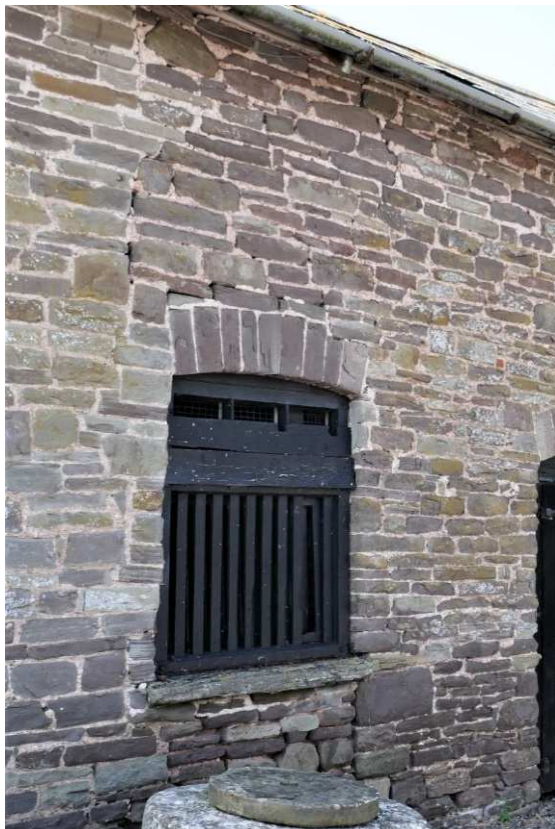
Provision of rainwater gutters and downpipes will be required all around along with a scheme of land drainage to the perimeter of the building.

It is understood that it is proposed to finish the external walls with a bagged lime surface as part of the conversion. This will protect the eroded stonework and repair recommendations are made on the basis of this finish being used.

**Richard Heron** C.Eng., M.I.Struct.E.



1. The doorway and quoins of the Fowl House require rebuilding



2. The north side of the Cider House requires repointing



3. The south side of the Cider House requires rebuilding of the outer skin of stonework



4. The internal cracking in the Threshing Barn



5. The same crack on the Cowhouse side



6. Defective timberwork in the Cowhouse



7. The beam across the cart shed with nailed on bearers for the floor joists on each side. Note the steel packer.



8. The Fowl House roof crossing the hayloft window



9. The undersized rafters and trusses in the Threshing Barn



10. There are similar sized rafters in the Cart Shed



11. The flagstone central cartway in the Threshing Barn



12. The patched structural timbers in the Cart Shed





13. The beams and floor joists in the Cowhouse



14. Damp affecting floorboards and joists in the Cow house



15. The floor joists and beams in the Cider House

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Address searched: Winston Court, Llanvetherine, Abergavenny, NP7 8RG

Date of report: 10 December 2022

## **Guidance for existing properties**

### **Is this property in a radon Affected Area? - No**

A radon Affected Area is defined as where the radon level in at least one property in every hundred is estimated to exceed the Action Level.

### **The estimated probability of the property being above the Action Level for radon is: 0-1%**

The probability result is only valid for properties above ground. All basement and cellar areas are considered to be at additional risk from high radon levels.

The result may not be valid for buildings larger than 25 metres.

If this site is for redevelopment, you should undertake a GeoReport provided by the British Geological Survey.

This report informs you of the estimated probability that this particular property is above the Action Level for radon. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

Radon Affected Areas are designated by the UK Health Security Agency. UKHSA advises that radon gas should be measured in all properties within Radon Affected Areas.

If you are buying a currently occupied property in a Radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the Radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and the results of re-testing confirmed the effectiveness of the measures.

Further information is available from UKHSA or <https://www.ukradon.org>

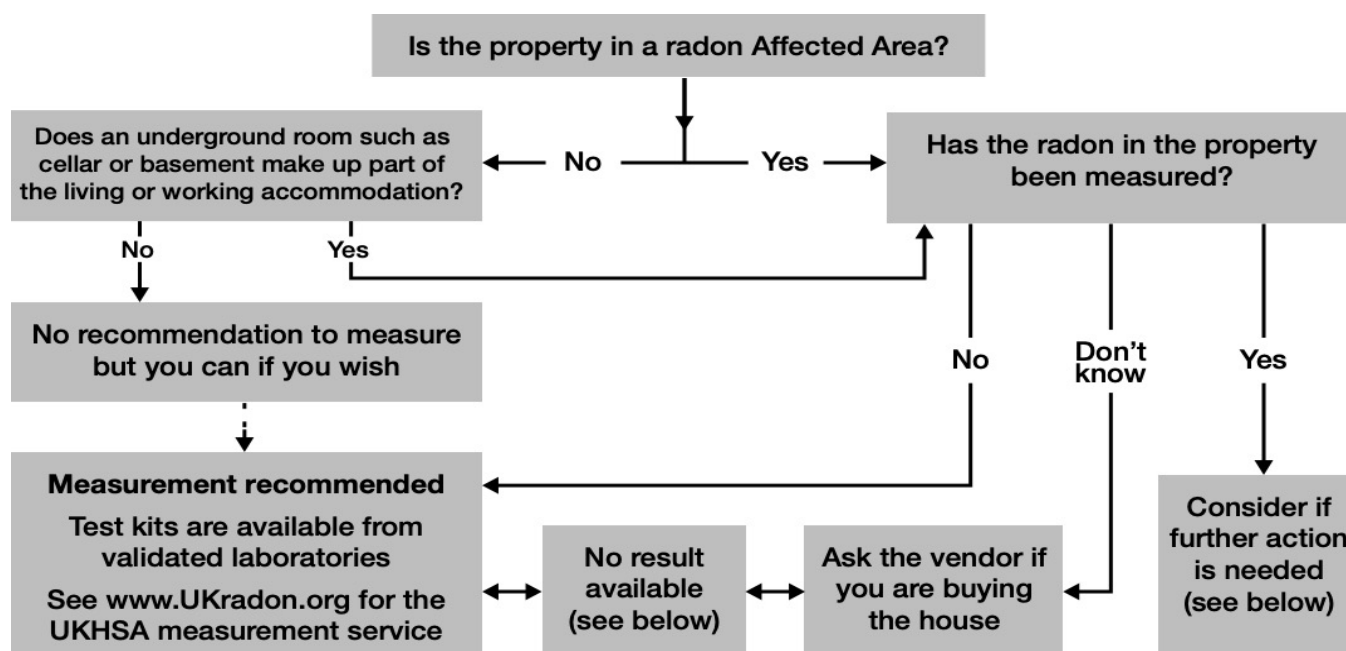
## **Guidance for new buildings and extensions to existing properties**

### **What is the requirement under Building Regulations for radon protection in new buildings and extensions at the property location? - None**

If you are buying a new property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

See the Radon and Building Regulations for more details.

## UKHSA guidance for occupiers and prospective purchases



**Existing radon test results:** There is no public record of individual radon measurements. Results of previous tests can only be obtained from the seller. Radon levels can be significantly affected by changes to the building or its use, particularly by alterations to the heating and ventilation which can also be affected by changes in occupier. If in doubt, test again for reassurance.

**Radon Bond:** This is simply a retained fund, the terms of which are negotiated between the purchaser and the vendor. It allows the conveyance of the property to proceed without undue delay. The purchaser is protected against the possible cost of radon reduction work and the seller does not lose sale proceeds if the result is low. Make sure the agreement allows enough time to complete the test, get the result and arrange the work if needed.

**High Results:** Exposure to high levels of radon increases the risk of developing lung cancer. If a test in a home gives a result at or above the Action Level of 200 Becquerels per cubic metre of air (Bq/m<sup>3</sup>), formal advice will be given to lower the level. Radon reduction will also be recommended if the occupants include smokers or ex-smokers when the radon level is at or above the Target Level of 100 Bq/m<sup>3</sup>; these groups have a higher risk. Information on health risks and radon reduction work is available from UKHSA. Guidance about radon reduction work is also available from some Local Authorities, the Building Research Establishment and specialist contractors.

UKHSA designated radon website: <https://www.ukradon.org>

Building Research Establishment: <http://www.bre.co.uk/page.jsp?id=3137>

