APPENDIX A

STRUCTURAL SURVEY

prepared by

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REPORT ON THE CONDITION OF STRUCTURE OF

BRON PARC
LLANFWROG
RUTHIN
DENBIGHSHIRE

FOR

MR AND MRS O JONES
GELLI LAS
BONTUCHEL
RUTHIN
DENBIGHSHIRE
LL15 2BP

GMW247/GPH/OCT 2016

1.0 BRIEF

1.1 This report was commissioned by Mr and Mrs Jones, via their appointed architect, to assist with a Planning Application for a replacement dwelling on the site of Bron Parc, Llanfwrog, Ruthin, Denbighshire.

1.2 The brief for this report was to carry out a visual examination of the existing buildings, the house - in particular - and also the barns, in order to assess the form and condition of the structure and the fabric and to advice our opinion on their suitability for continued usage.

1.3 This report is for the use of Mr and Mrs Jones and their advisors in this matter. It can be released to those parties with a direct interest in the vetting of the current planning application, but shall not be released to any other party, for any other use, without the express permission of Mr and Mrs Jones and Hughes Consulting. No other party may rely on this report.

2.0 SURVEY

2.1 General

A survey of the building was made on 26th October 2016. The survey comprised a visual examination, without removing any finishes nor excavating any trial holes for examination of foundations or bearing strata, i.e. no attempt was made to uncover any otherwise hidden or buried elements. It is however, judged that sufficient information has been gathered for us to report usefully. Record photographs of condition have been taken.

2.2 The proposal is for a replacement building on the site which will, we understand, utilise sustainable building materials and energy resources whilst incorporating finishes which are in keeping with the tradition and vernacular styling of the locality.

3.0 LAYOUT

The existing farmhouse building is a two storey house, L shaped on plan. The slope of the site, from front to rear and form right to left - facing the front of the house - has been utilised to form a partial basement at the rear right hand corner.

The farmhouse sits at the entrance to the farmyard, enclosed by various outbuildings adjoining and across the m from the house.

The layout and form of the existing buildings is shown by the Architectural drawings provided. The site is sloping, from front to rear and from right to left facing the front of the farmhouse.

4.0 HISTORY

The details of the building history are not known to us. The age of the building is estimated to be around 125 - 150 years. Clearly the agricultural outbuildngs have not been used for many years and have fallen into serious disrepair.

5.0 CONSTRUCTION

The form of construction is entirely traditional. The house roof is double pitched and covered with slates over timber framing of rafters and purlins, supported by load-bearing masonry walls – being solid brickwork with a render application to the external

elevations. The sloping site has been utilised to from a partial basement under the rear right hand corner section of the house. The upper floor is formed by boarded timber joists as is the ground floor partially, above the basement. The front section has solid ground bearing floor construction, topped by tiles.
The outbuildngs are mainly match the house construction, being a mix of two and single storey with dilapidated largely open steel frame and sheet cladding buildings on the edge of the farmyard.

6.0 OBSERVATIONS ON CONDITION

The principal observations on condition, are as follows;-

6.1 The building is affected by differential foundation movement over a wide area at the front and right hand side, with moderate to severe cracking in the loadbearing walls of those sections of the building. The front wall of the house is also bulging outwards severely.

6.2 There is widespread serious damp ingress and mould staining on walls. The damp penetration is by rising damp and penetrating driven rain through walls and also the roof in places.

6.3 There is widespread weather staining of render and paint finish. Render has failed in several areas under heavy weathering.

6.4 The damp problems are exacerbated by the windows being single glazed. The timber frames are badly affected by rot.

6.5 The cellar is badly dilapidated and damp.

6.6 We have not inspected the roof space. However, we understand That there is no felt. Flashings are clearly inadequate. Ceiling plaster finishes are cracked in places.

6.7 The ground floor appears to be affected by damp penetration in places.

6.8 Drainage provisions seem to be inadequate and do not comply with current standards.

7.0 DISCUSSION

There are very serious doubts concerning the suitability of the existing being retained on a number of counts;-

The building is affected by widespread foundation movement.

The walls and floors do not have adequate resistance to damp penetration and the provisions for ventilation are seriously inadequate. Consequentially the walls are very damp and dilapidation of finishes is clearly evident.

The wall external faces are badly weathered.

The roof timbers are not protected by felt, as we understand it, nor insulated. The slates would need to be taken off and then re-laid in order to allow upgrading to comply with current standards.

Therefore there would be a need for extensive works to restore the integrity of the roof, walls, floors and finishes to acceptable, habitable standards and also to ensure adequate structural function.

In order to incorporate sustainable energy sources, which we understand are intended, then the ground floors will need to be broken out and reconstructed anyway, apart from the need for widespread repair due to damp ingress.

There would need to be extensive works to upgrade the construction to meet current standards of Part L of the Building Regulations.

8.0 CONCLUSION

From the foregoing we consider that it is clearly apparent that in order to provide an adequately constructed building, adopting sustainable construction materials, energy sources and complying with current standards of insulation and energy use, a replacement of the building along the lines proposed will be the optimum course of action to be followed.

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