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BUILDING SURVEY REPORT

ON

BARN - WILLOWBROOK, DANWORTH LANE, HURSTPIERPOINT, HASSOCKS BN6 9LW

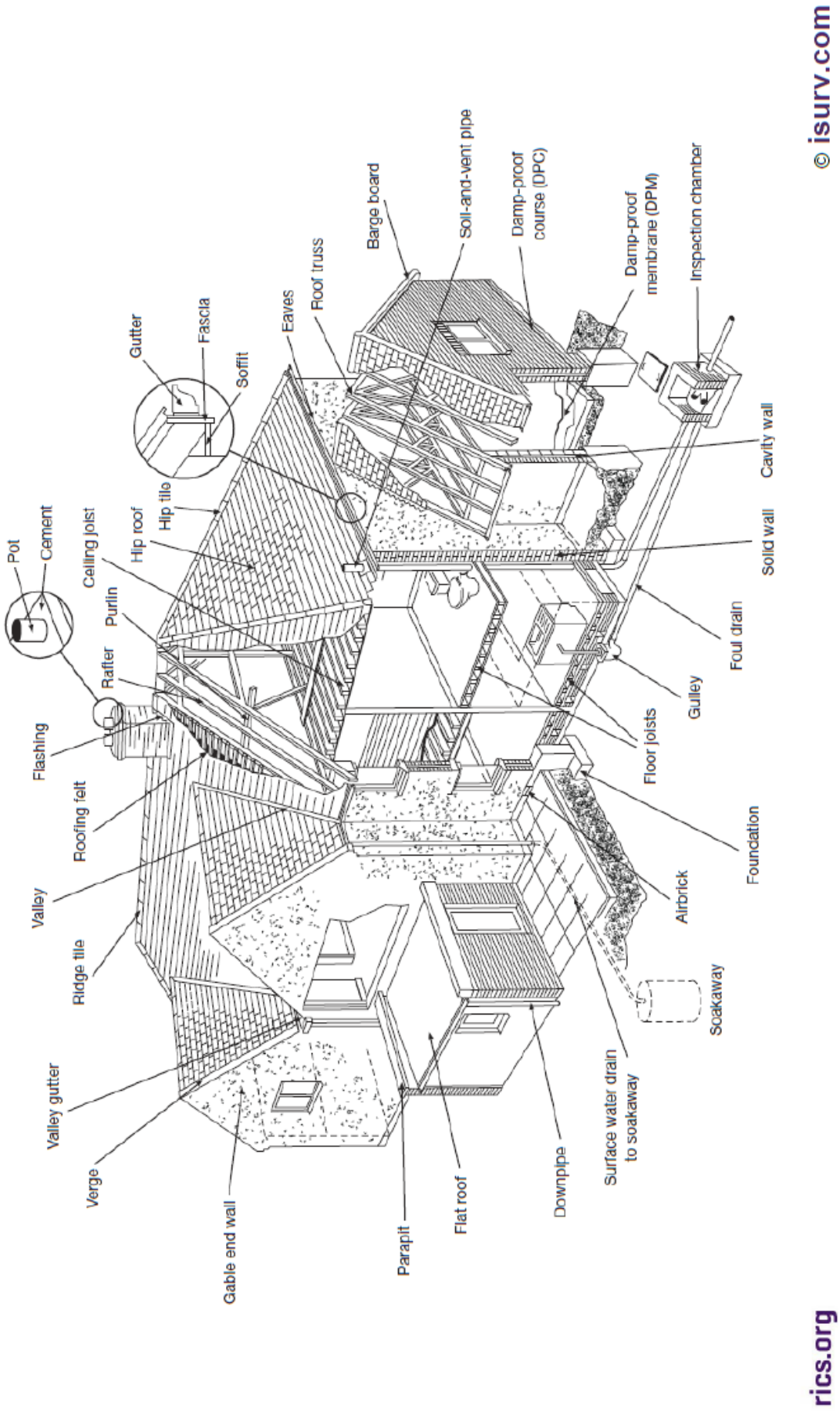
FOR

MR J AND MRS S OCKENDEN

DATE OF INSPECTION: 4 APRIL 2023

Contents

GENERIC DIAGRAM ILLUSTRATING COMMON BUILDING TERMS



1 CLIENTS' INSTRUCTIONS

Further to our confirmation of instructions letter and accompanying terms of engagement dated 23 March 2023, I am pleased to confirm that a full and detailed building survey of Barn - Willowbrook, Danworth Lane, Hurstpierpoint, Hassocks BN6 9LW was successfully completed on 4 April 2023 in connection with your planning application to convert the barn into habitable accommodation.

2 METHOD AND EXTENT OF SURVEY - LIMITATIONS

We refer in the first instance to standard limitations in our terms of engagement. The property was visually inspected externally from the front, sides and rear from ground level where possible.

There is no formal fixed drainage to inspect.

Please note that no specific asbestos survey has been undertaken to identify the presence and extent of any concealed asbestos containing material (ACM).

Internally the barn was inspected as much as possible bearing in mind its current use. No dampness readings were taken as this was not deemed necessary considering the construction and current use.

The property is currently being used as storage for straw. The straw significantly limited the internal inspection capable.

The weather was dry and sunny.

Directions are given as if looking towards the barn from the front, being the elevation with the double doors giving internal access.

3 DESCRIPTION OF PROPERTY

The barn is a small purpose built structure used as straw storage for the adjacent stables. The age of the original construction is unknown and seemingly impossible to determine without specific knowledge.

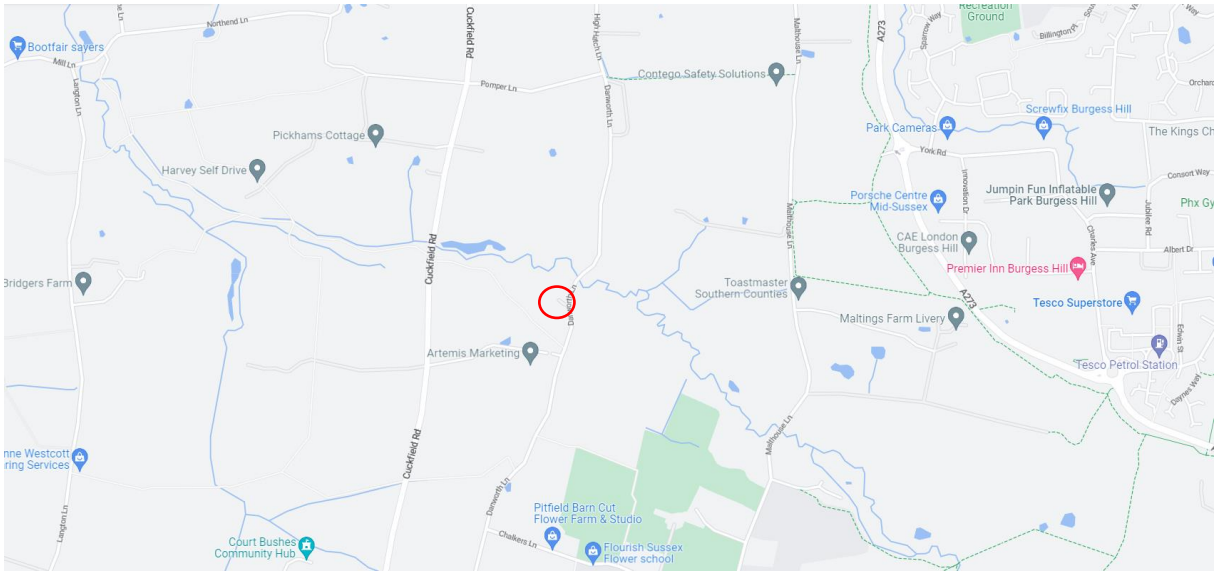
The barn is of a timber structure with a modern timber truss roof over.

There is no internal fit out.

Mains electricity appears to be connected but there are no other fixed services to the barn itself.

The front elevation of the barn faces approximately south.

4 LOCATION



The property is located in a rural location with the subject barn itself forming part of a larger parcel of land currently used as various small fields for the owner's horses. The property is accessed from a quiet rural lane.

The property is located within Flood Zone 1 which is an area of land unlikely to flood and there is a very low risk from surface water flooding.

5 EXECUTIVE SUMMARY AND RECOMMENDATIONS

Whilst the 'traffic light' condition rating system used in RICS Homebuyers Surveys is a convenient way of showing the seriousness of defects that are found during the inspection of a property Graves Jenkins believes there are shortcomings and so have adopted a similar system based upon that used in BS7913:2013 – "Guide to the conservation of historic buildings", Annex B. Whilst this document was written with historic buildings in mind the methodology of prioritising works or attending to other urgent issues such as health and safety concerns is applicable to buildings of all types and ages. Accordingly, the four urgency or priority categories included are as follows:

1 ***Immediate*: Work that should commence without delay for health and safety reasons, or to prevent imminent damage or to mitigate rapid deterioration. This can include recommendations for immediate further investigation.**

2 ***Urgent*: Work that should be carried out within weeks or early months, so as to mitigate further deterioration and increased cost.**

3 ***Necessary*: Work that should be carried out in the short to medium term (up to 5 years), so as to prevent unnecessary deterioration. Most general repair work falls into this category.**

4 ***Desirable*: This is work not strictly necessary or considered precautionary, but might improve functionality, performance or aesthetic qualities.**

For ease of reference, principal items requiring attention or further investigation are detailed below.

EXTERNALLY

5.1. 1 The roof covering has failed in places and requires removal and replacement.

5.2. 1 Isolated areas of the plywood roof deck require replacement where they have been exposed to rain for a long period of time. Most notable would be the front left hand corner. When undertaking the reroofing you may find other isolated areas of plywood that need to be replaced.

5.3. 2 There is no gutter to the rear roof slope and I recommend that a gutter is installed.

5.4. 3 Generally the main structural timber posts are in a reasonable condition, although there is surface rot in places in particular at low level. It would be a benefit to improve the detail where the posts bear into the ground but otherwise there is little repair work required to the main structural posts.

5.5. 1 The lower parts of many of the vertical timber studs forming the supporting structure for the wall cladding have rotted away. I recommend that new sections of pre-treated timber studs are installed where required.

5.6. 2 There is evidence of wood boring insect attack to the majority of the timber studs and I recommend that all timbers are treated against woodworm, etc.

5.7. 1 The horizontal timber frame above the front doors bows significantly and appears to be undersized. I recommend that this is reinforced.

5.8. 2 The windows where present show signs of rot and damage in places and would benefit from repairs.

5.9. 1 The wall plate at the top of the left hand side elevation is not adequately fixed into the timber studwork. I recommend that this is repaired as necessary.

5.10. 1 The right hand side post/door frame to the front elevation is significantly rotten at the base and this now is supported in the air rather than bearing into the ground. This requires replacement or new timbers to be scarf jointed in.

5.11. 2 The timber weatherboard cladding in places is damaged and rotten due to age. This is most notable to the front elevation. Elements will need to be carefully removed and replaced or repaired.

Generally the barn is in a serviceable condition and is currently working well in its intended use as a straw storage area. Generally it is in a reasonable structural condition but would benefit from some repairs and maintenance due to lack of sufficient maintenance over the recent preceding years. Once these repairs have been carried out the structure will be in a good condition and should last many years.

6 HAZARDS, HAZARDOUS MATERIALS AND HEALTH AND SAFETY CONSIDERATIONS

No suspect asbestos containing materials were identified to the structure during the inspection.

No specific hazards, hazardous materials or significant health and safety considerations were identified.

7 ENERGY EFFICIENCY

There is no EPC for the property as it does not currently require one. At present it would seem to be impossible to provide an EPC in its current condition, construction and use.

Of course to convert into habitable use insulation to current standards will need to be installed to the floor, walls and roof.

8 EXTERNAL EXAMINATION

8.1 ROOF STRUCTURE AND COVERINGS

The roof is of a modern shallow pitched timber truss construction with the trusses bearing onto the timber wall plates. There is a plywood structural deck with a reinforced bitumen membrane covering.

The roof structure is generally lightweight and so only requires minimal trusses.

The felt covering has failed and in places from the inside daylight can be seen through the joints of the plywood. There is water damage to some of the plywood, most notably to the front left corner. The majority of the plywood, however, appears to be in a good condition and can be reused.

Whilst there is evidence of some mould growth on the underside of the plywood this is of no concern due to the property currently being well ventilated due to its current intended use.

The trusses appear to be in a good condition and no defects were noted and on the whole the roof structure is in a good condition.

I recommend that the existing covering is removed. Patch repairs should then be carried out to the plywood, removing rotten and damaged parts. New sections of external grade plywood should be installed where required before a suitable new weatherproof covering is installed.

8.2 RAINWATER GOODS

At the front there is a black PVCu half round gutter which discharges via round downpipes either onto the ground or into a water butt. There was no stop end to the left hand side but otherwise the gutters were in a good condition. I recommend that a stop end is installed. There is no gutter to the rear and it would be a benefit to have a gutter installed and ideally rainwater would be directed away from the building to improve the ongoing condition of the structure.

Defective rainwater goods are a frequent source of damp penetration, which in turn can lead to timber defects developing. Regular inspection and adequate maintenance, including clearing out light debris, are therefore essential.

8.3 STRUCTURE AND MAIN WALLS

Reference to the Geological Survey Map of Great Britain and the Cranfield University Soilscapes interactive Map indicates that the subsoils in this area are thought to be of a silty, sandy clay in nature with impeded drainage.

Silty, sandy clays are good founding mediums for structures and typically offer little shrinkage potential which reduces the risk of subsidence. Nonetheless it is still beneficial to limit the growth of large, highly water dependant trees close to structures and ensure that drains are leak free.

The structure is primarily formed of ten structural reclaimed telephone poles. These appear to bear directly into the soil but this could not be confirmed. Between these ten posts there is a timber studwork frame which rests on the ground. This serves as an infill between the structural poststo support the external cladding which encloses the interior. Atop of the walls there is a timber wall plate to take the load of the roof structure down to the ground via the structural posts and this also offers support for the cladding frame.

It is unlikely that there is any form of foundation to any part of the barn but this could not be confirmed and further investigations would need to be carried out around the structural posts to confirm.

Where visible, most notably to the front right hand corner post, there is significant surface rot to the telephone poles where these bear into the ground, however, the underlying heartwood appears to be in a good and structurally sound condition and there does not appear to be any need to carry out significant repairs to the structural timber posts to ensure its ongoing condition.

The surfaces of the posts/poles are affected by weathering and there are large 'shakes'/cracks due to the standard drying out of timber but there is no need to carry out repairs to these but you may wish to have these filled with a suitable material to stop the penetration of rainwater. Generally these ten structural posts appear to be in a good structural condition.

The timber studwork supporting the timber cladding varies in its condition. Most notable would be to the bases where numerous timber studs were found to be significantly rotten and in places entirely eaten away and are now supported in mid-air by other parts of the structure. It is unclear what these studs are supported onto but there is evidence in one location of a timber ground plate but the majority of the junction with the ground is concealed. These rotten posts/studs will require replacement or parts to be cut out and new timbers scarf jointed in.

However, the majority of the studwork forming the wall cladding structure is in a reasonable condition and structurally sound with parts above the immediate ground generally free from rot and significant damage. No obvious need for repair was seen to the majority of this supporting studwork, however, almost all parts are affected by wood boring insects but none was noted to such an extent that timbers require replacement. I recommend that all of the timbers are treated against woodworm.

To the left hand side elevation at high level the timber wall plate is not fixed into the studwork as it appears to have moved. As such there is insufficient restraint to this part of the structure. Repairs should be carried out to reconnect the wall plate to the studwork.

The vertical post to the right hand side of the front door frame is entirely rotten at the base and requires replacement.

The horizontal section of supporting frame above the front doors significantly bows and appears to be undersized. This part should be reinforced.

8.4 WINDOWS, EXTERNAL JOINERY AND METALWORK

The property includes three timber framed windows with frosted plastic glazing. The windows are rotten and damaged variously and the plastic is damaged to most parts. I recommend that the plastic is replaced with new to match the existing and minor repairs are required variously to the frames.

The barn includes three doors, however, the two at the rear have both been boarded over. At the front there is a set of double doors but the right hand leaf could not be opened due to the significant rot and damage to the right hand side supporting post/frame.

The exterior of the barn is clad in timber weatherboard which has been painted historically. Numerous parts of the cladding are damaged from rot, wood boring insect attack and have dropped due to rot and woodworm around the fixings or on the studwork. This is most notable to the front/south elevation due to the prevailing weather whereas, for example, the north and the west elevations (rear and left hand side) are in a better condition. Elements of the timber cladding will need to be replaced but a significant amount is capable of reuse.

There are no soffits or fascias with open eaves giving good ventilation to the barn.

8.5 FOUL DRAINAGE INSTALLATION

There is currently no formal foul drainage installation at the property.

8.6 EXTERNAL MATTERS GENERALLY

The barn is situated on a field area as part of a larger plot of land with various fences for the owner's horses and stables towards the front. At the driveway entrance there is a brick hardstanding and other areas are of old gravel and stones embedded into the dirt.

The grounds and boundaries were not inspected as part of this survey.

9 INTERNAL EXAMINATION

9.1 INTERIOR

The interior was inspected but due to its current use the majority of the findings are discussed elsewhere in the report such as under Main Structure.

The floor could not be inspected due to the large amount of straw and hay. It is assumed that there is bare earth and dirt.

There are no internal fixtures or fittings.

9.2 SERVICES AND SPECIALIST INSTALLATIONS

Note: ***Only visual inspections have been made of the services. An assessment of the suitability, method of installation, condition, efficiency and capacity of any central heating system, boiler or other equipment can only be made by specialist testing.***

The safety, standard of workmanship and state of repair of the gas and electrical installations can only be verified by testing and more detailed inspection by specialist contractors.

ELECTRICAL

The barn includes power which appears to arrive via an armoured cable from the stable area via poles. To the rear there appears to be some form of fuse board but this could not be inspected. Internally there is a single fluorescent light tube fitting and two sockets.

Regular inspection and testing of electrical installations is important to protect your home and ensure the safety of the occupants. Guidance published by the Institution of Engineering and Technology (IET) recommends that inspections and testing are undertaken by an NICEIC or ECA approved contractor at least every 10 years for owner occupied dwellings, at least every 5 years for rented dwellings and on any change of occupancy or ownership. An Electrical Installation certificate completed by a Part P competent electrician should identify all electrical works undertaken after 1 January 2005.

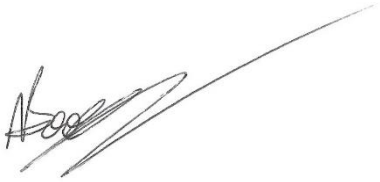
I recommend that an NICEIC or ECA registered contractor is employed to carry out an Electrical Installation Condition Report which will include any recommendations for upgrading. No certificate or report was in evidence at the time of my survey to confirm the date of the last inspection.

PLUMBING – COLD WATER

There is no mains water supply to the barn.

10 EXCLUSIONS

This Report is prepared for the sole and confidential use of the named clients and confers no benefit or liability on any third party without the author's consent in writing. The Report is prepared to the best of my ability in respect of all items uncovered or inspected and no liability is admitted for any item not uncovered or that would not be uncovered in such a survey without an adverse symptom being apparent. We are unable to confirm or rule out the presence of any hidden asbestos that is contained within the fabric of the building or concealed by surface coverings, fixtures, furnishings or stored items. No asbestos survey has been carried out by this practice. Although the service installations were inspected superficially, no warranty is given or implied that the installations comply in all respects with current Building Regulations, British Standards, Codes of Practice or manufacturer's directions which could only be confirmed by specialist examination.



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