



Castell Bach Engineering Ltd.

Whitehall Farm Barn

Structural Appraisal Report

279-RP-001

Revision 1 – 1st June 2026



REVISION TRACKING

Revision	Date	Revision Purpose	Description of Revision / Key Changes
0	4 th June 2026	Issued for Review	Issued for Client Comment
1	5 th June 2026	Issued for Information	Issued for use inclusive of Client comments.



Executive Summary

This report presents the findings of a structural appraisal of a stone barn at Whitehall Farm carried out by Castell Bach Engineering Ltd. on 4th June 2026.

The barn is in a generally very good structural condition. No obvious significant defects which could compromise structural integrity of the barn were encountered.

It should be noted by reader that whilst, this report presents observations noted on day of inspection there were no obvious signs of transient defects which may have been developing over time.

Foundations may require modifications to accommodate any extensive building modifications based on final design and foundation checks by others. However based on current understanding of proposed plans there would be little in way of modifications required to the building layout or foundations.

It is the considered opinion of Castell Bach Engineering Ltd, based on observations noted, that the building would be suitable for repurposing for use as a storage building, should further investigations and modifications to building structure be carried out. Modifications are not over and above what we would consider normal for buildings of the age and size encountered.



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1 Introduction

1.1 Project Background

Whitehall Farm Estates Ltd (The Client) propose to convert and adapt a stone outbuilding for use as a storage building.

Castell Bach Engineering Ltd. has been appointed by The Client to provide a structural appraisal report to support the formal process of change of use of building.

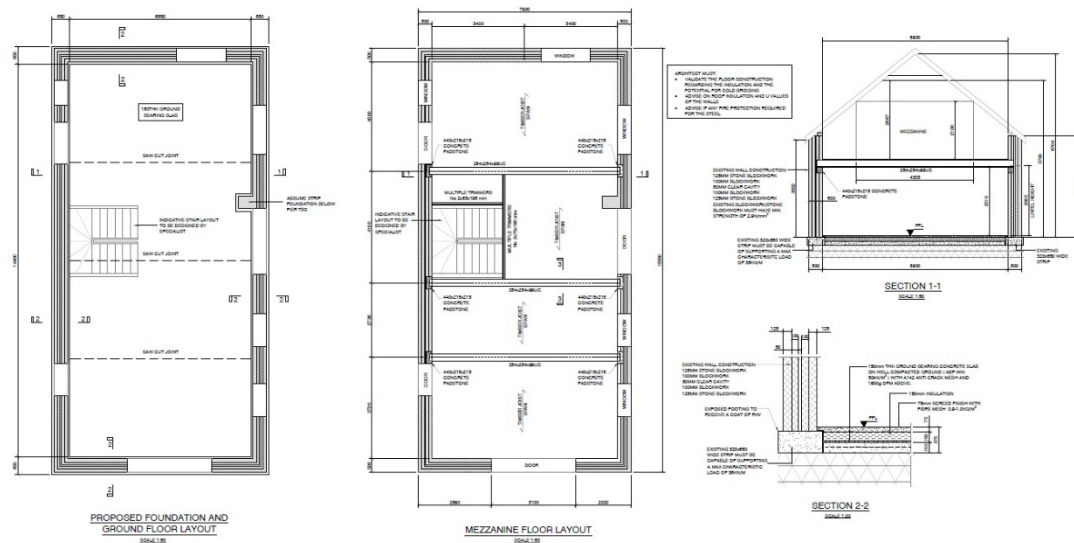


Figure 1.1 – Proposed Development (Source Client Drawing No. 04/01)

1.2 Method of Inspection

The structure was visually inspected both internally and externally. Only the main structure of the barn was inspected, the foundations and surrounding area do not form part of this scope. However, it is understood from the Client that the foundations have been investigated and shown to be in good condition by 3rd Party Engineers (Quad Consult).

A full structural survey has not been completed as part of these works, only visual checks identifying key issues possibly relating to integrity of the building have been highlighted and discussed in this report.

The survey was carried out by James Wilkie of Castell Bach Engineering Ltd. The survey was completed on 4th June 2026.

1.3 Weather

At the time of inspection, the weather was cloudy with sunny spells having just been hit with heavy rain showers prior to site visit.





1.4 Location

Whitehall Farm:
Caerleon,
Newport,
NP18 1LR.



Figure 1.3 – Location of Farm (www.openstreetmap.org).

Farm is accessed from a private track off Usk Road.

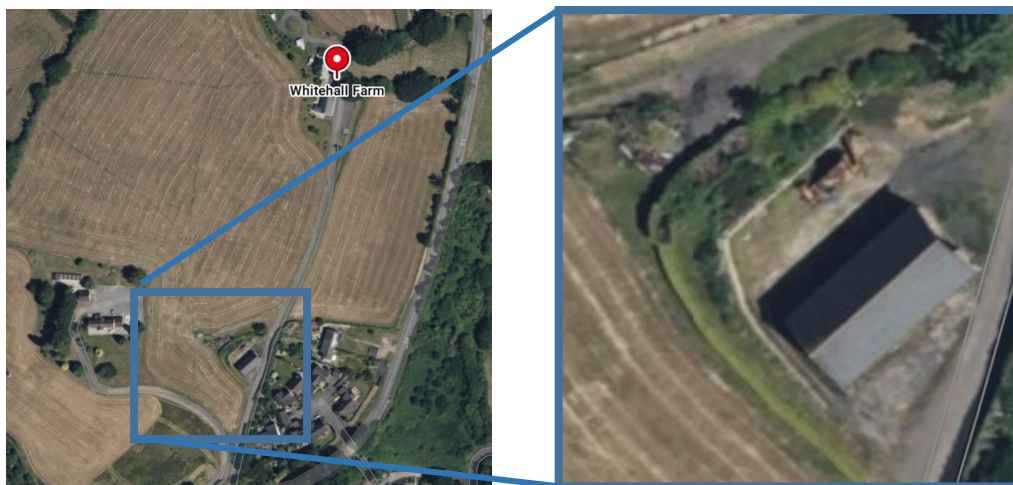


Figure 1.4 – Access to Farm (www.google.co.uk/maps).



2 Inspection of Structures

2.1 Method of Inspection

An inspection was carried out on the 4th June 2026 by James Wilkie of Castell Bach Engineering Ltd. Access was afforded to the property both inside and outside by the Client's representative (Joe McDonald).

Castell Bach Engineering Ltd. carried out the following inspection of the barn:

- i. Visual, non-intrusive inspection of stone/block barn walls.
- ii. Visual, non-intrusive inspection of roof.
- iii. Visual, non-intrusive inspection of flooring.

Non-intrusive inspection means that no floor coverings, equipment, wall coverings floorboards or panels were lifted or moved during the inspection.

Statements contained within this report, with respect to the structural integrity of the building, are based purely on a visual assessment at the time of inspection. Non-structural elements were not part of the scope to be inspected (e.g., windows, drainage, architectural finishes etc) however where observations have been recorded, they are also noted within this report.

2.2 Inspection Notes

The following sections provide a high-level narrative of the observations made during the visit. For itemised observations along with photographs please refer to Appendix A.



3 Description of Building

3.1 General

The barn on which the scope of work is based, is situated within a small holding site. The barn is adjacent to the private approach track/driveway which leads to the main farm building.

There is space for parking adjacent to the barn.

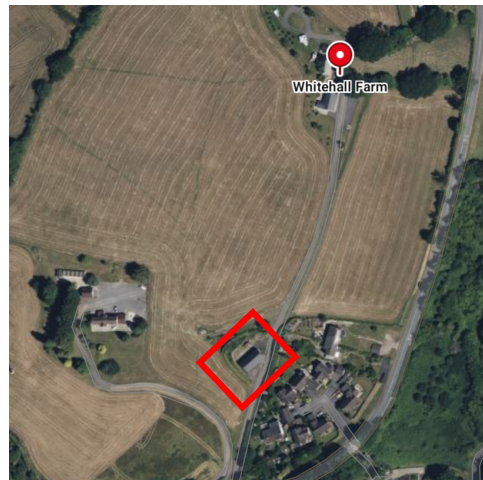


Figure 3.1 – Barn Location on Farm

The barn with a footprint of approximately 14.4m x 6.7m has a stone/block cavity wall construction. Roof is timber framed dual-pitched roof with a tiled covering. Internally the structure is open plan with a mezzanine floor providing first floor storage accessed by ladder.

Barn has four access points, two on the south eastern, one on north eastern gable end and one on the north western elevation. Only two of these access points have doors of temporary construction installed (north eastern and north western). The other access points are boarded up. Windows are boarded up with no glazing /frames installed.

The walls do not have any extensive render or covering on internal or external faces. All roof structure timbers are exposed internally, with no ceiling coverings.

Building is open plan, with no internal partitioning.



Figure 3.2 – North Eastern Elevation of Barn



Figure 3.3 – North Western Elevation of Barn



Figure 3.4 – South Western Elevation of Barn



Figure 3.5 – South Eastern Elevation of Barn



4 Observations

The following sections gives descriptions of the general defects viewed during the inspection. For a detailed breakdown of observations see Appendix A which contains itemised notes taken during the inspection, relevant observations are summarised here. Where probable causes of defects are discussed, these shall be taken as preliminary assumptions only, further investigations would be required to determine factual causes of any defects presented.

4.1 Externally

The stone/masonry built barn appears to be in generally very good condition. Walls, gable ends, and entirety of wall height along long edge of building appear to match the make up as defined in Client provided drawings, with a stone/block cavity make up (see figure 4.1 below).

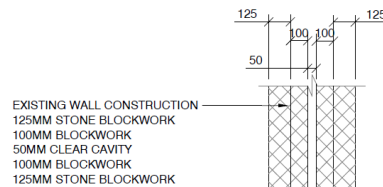


Figure 4.1 – Existing Wall (extract from Client Provided Drawing)

Gable walls at first floor level have timber cladding affixed to the external face of stone faced walls.

Externally the ground is generally adjacent to the barn with internal top of floor being slightly above external ground levels.

There are no signs of movement/cracking in the walls, with all pointing to stone face being in very good condition. Walls are true and plumb with no signs of roof spread or differential settlement.

4.2 Internally

The internals of barn are split into two levels. Ground floor is open plan. The mezzanine floor comprises of interlocking tongue and groove flooring sat over timber joists/steel beam supporting structure.

Internally the ground floor has compacted earth flooring. There is a mezzanine floor accessed by temporary ladder. Lower and upper floors are open plan. There were no obvious defects in the ground or mezzanine flooring, and it appears to be in a good solid construction.

Thickness and exact construction makeup of external walls were not possible to confirm during inspection. However, there was no evidence to challenge the make up as shown in Figure 4.1.

Lintels over doors and windows were mostly either steel (Catnic) or timber. There was a masonry arch over the northern access point. All lintels and the archway were in good condition.



All visible structures are in good condition. No visible cracking or movement.

4.3 Roof

Overall, the barn roof is in very good condition. Roof is timber framed, duo pitched with slate tiling.

Externally there are no signs of ridge deflection issues, timbers are in good condition internally. Facias to east and west are missing, and exposed timbers are showing signs of deterioration.

Internally the A-Frame construction is in good condition with all principal timbers and connections showing no signs of defects / movement.

4.4 Guttering and drainage

Roof has black PVC guttering installed along both long edges of roof, with 2 down pipes on eastern side of building. There are no signs of issues with guttering. Down pipes discharge at surface with no obvious signs of drainage connection points.

There are no foul or surface water drainage connections servicing the barn.



5 Limitations of Inspection

This report has been prepared solely for the benefit of the named Client. No liability is accepted should this report be given to any third party. We have not undertaken any formal enquiries to Statutory Authorities, or investigations made to verify information as to the tenure and existence of rights or easements.

Only minor revealment work was undertaken during the inspection, no comment has been given on areas that were covered, concealed or not otherwise readily visible. There is a risk that additional defects and consequent repair costs will be discovered at a later date.

The inspection was to comment on the structural condition of the property only. Minor observations may have been recorded on services based on condition as found, no comment has been made on functionality of services.

Accordingly, consideration should be given to natural deterioration due to the elements and usage. The report has been prepared having due regard to the age and type of the building. This report reflects the condition of the various parts of the property at the time of our inspection. It is possible that defects could arise between the date of the survey and the date upon which any proposed development commences. It must be accepted that this report can only comment on what is visible and reasonably accessible at the time of inspection.

For the purposes of this report, only significant defects, and deficiencies readily apparent from a visual inspection/minor revealment have been reported. We have not exposed the foundations of the property. Without exposing all the foundations to the property, Client must accept the risk of unseen defects. However, unless noted within this report, we have not noted any above ground defects, which relate to defective foundations or signs of defective foundations. We have not carried out any geological survey or site investigation and cannot confirm the nature or characteristics of the soil with regard to fill or possible contamination.

Any beams, lintels or other supporting components which were not exposed may have concealed defects. Therefore, the risk of defects being present within areas which could not be inspected should be accepted by The Client should they wish to proceed without further investigation.

It is important that the report should be considered in its entirety before proceeding. If there are any points in the report which require clarification or on which you require further advice, please do not hesitate to contact Castell Bach Engineering Ltd.

Whilst there were no obvious signs of materials containing asbestos being present in and around the barn. The exact nature of any materials can only be determined by laboratory tests. Client has a duty to manage any asbestos which may be present in accordance with the Control of Asbestos Regulations 2012.



6 Summary of Findings

The barn is in generally very good structural condition. It should be noted, that whilst this report presents observations noted on the day of inspection, by nature of this approach, the reader will be presented with mostly defects for discussion. However, as a general narrative to the observations, Castell Bach Engineering Ltd, wish to point out that most of the observations are minor in nature and are not unusual for buildings of their age, construction, and use.

Barn is showing no signs of major defects.

Foundation could not be inspected at time of the appraisal. It is understood from Client that the foundations have been checked by the Quad Consult who prepared the drawings. Quad Consult also sized and detailed the steels used in the mezzanine flooring.

In general, it is the considered opinion of Castell Bach Engineering Ltd. that Whitehall Farm Barn would be suitable for change of use, should appropriate standard engineering works be conducted to ensure long term structural integrity of the building.

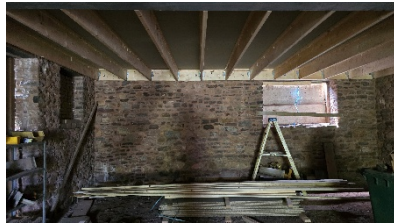


Appendix A – Barn Site Notes and Photos 4th June 2026



REF	LOCATION	OBSERVATION	PHOTOGRAPH
1	EXTERNAL - FOOTINGS	TOP OF FOOTINGS EXPOSED. VISIBLE CONCRETE. ALIGNS WITH CLIENT PROVIDED DRAWINGS. NO SIGNIFICANT DEFECTS SEEN	
2	EXTERNAL - GUTTERING	IN GOOD CONDITION, 2 NO. DOWN PIPES NORTH AND SOUTH WALL. NO OBVIOUS CONNECTION POINT FOR DISCHARGE	
3	EXTERNAL - DRAINS	NO VISIBLE DRAINAGE SYSTEMS (FOUL OR SURFACE WATER).	
4	EXTERNAL - WALLS	ALL PLUMB AND TRUE. POINTING IN GOOD CONDITION. NO VISIBLE CRACKING OR MOVEMENT. STONE WORK IN GOOD CONDITION. EXTERNAL TIMBER CLADDING TO TOP OF GABLE END WALLS IN GOOD CONDITION	



REF	LOCATION	OBSERVATION	PHOTOGRAPH
5	EXTERNAL ROOF	ROOF TILES / RIDGE IN GOOD CONDITION. NO SIGNS OF SPREAD OR MOVEMENT. TILES IN GOOD CONDITION, SLIGHT MOSS BUILD UP. TIMBER SOFFIT OVERHANGS AND TIMBER FASCIAS IN GOOD CONDITION.	
6	INTERNAL GROUND FLOOR – FLOORING	COMPACTED EARTH SURFACE. NO OBVIOUS HARD ENGINEERING FLOORING. LEVEL AND NO SIGNIFICANT RUTTING.	 
7	INTERNAL GROUND FLOOR – WALLS	WALLS IN GOOD CONDITION. INTERNAL FACE OF SOUTHERN WALL COMPRISES MOSTLY OF CONCRETE BLOCKS. POINTING AND WALLS IN GOOD CONDITION. NO OBVIOUS SIGNS OF MOVEMENT / CRACKING.	 



REF	LOCATION	OBSERVATION	PHOTOGRAPH
8	INTERNAL GROUND FLOOR – MEZANNINE FLOOR UNDERSIDE	NO CEILINGS. NO OBVIOUS SERVICES. TIMBER JOISTS AND WALL PLATES ALONG WITH INTERCONNECTED STEELS VISIBLE. NO OBVIOUS FLEXURE, CRACKING, TORSION IN ANY OF THE MEZANNINE FLOORING STRUCTURE.	 
9	INTERNAL GROUND FLOOR – WINDOW OPENINGS	NO GLAZING PRESENT. ALL WINDOW OPENINGS OPEN, WITH BOARDED COVERINGS. LINTELS SIT OVER OPENINGS. APPEAR TO BE 2NO CATNIC OR SIMILAR STEELS WITH CONCRETE LINTEL INFILLS.	
10	INTERNAL GROUND FLOOR – DOORS	DOOR OPENINGS HAVE NO PERMANENT DOORS OR IRONMONGERY. DOOR TO NORTH AND GABLE END DOOR TO EAST ARE OPENABLE. DOOR TO EAST IN GABLE IS FULL HEIGHT OPENING. TIMBER LINTELS SIT OVER OPENING.	 



REF	LOCATION	OBSERVATION	PHOTOGRAPH
11	INTERNAL MEZANNINE LEVEL - ACCESS	ACCESSED BY LADDER, NO PERMANENT MEANS OF ACCESS.	
12	INTERNAL MEZANNINE LEVEL – WALLS	NO INTERNAL WALLS AS SUCH. SOME STUD FRAMING, BUT LEFT OPEN. GOOD CONDITION. POINTING AND CONDITION OF INTERNAL FACE OF EXTERNAL WALLS IN GOOD CONDITION.	
13	INTERNAL MEZANNINE LEVEL – FLOORING	TOUNGE AND GROOVE PANEL FLOORING. ALL ALIGNED, NOT WARPING/WATER DAMAGE.	
14	INTERNAL ROOF	ROOF STRUCTURE VISIBLE INTERNALLY. NO INSULATION, BOARDING. A FRAME TIMBER ROOF FRAMING, WITH FELT IN GOOD CONDITION.	