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Royd Moor House Farm

L'Arche Developments (Yorkshire) Ltd

Structural Inspection Report

December 2022

P3858

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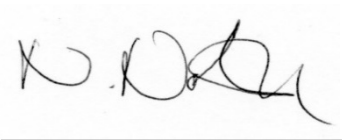
Revision History			
Initial Issue	15 December 2022		
Prepared By:		Checked:	
	Nick North Director		Graham Helme Director

Rev No	Date	Description	By	Checked
0	19.12.22	Initial Issue	NN	GH

Contents

1 PURPOSE OF THIS REPORT

It is proposed to convert existing agricultural buildings at Royd Moor House Farm to residential use under the permitted development rights of Class Q(a) of the Town and Country Planning (General Permitted Development) (England) Order 2015.

The purpose of this report is to comment on the suitability of the structure of the existing agricultural buildings 8, 14, 19 and 20 for conversion. The building are substantial single bay frames, and the proposals are only to convert these buildings. The discussion in this report only considers buildings 8, 14, 19 and 20 unless noted otherwise.

2 FINDINGS

An internal and external visual examination was made of the areas accessible from ground level on 24th November 2022. At the time of the inspection the weather overcast and foggy and there had been heavy showers immediately preceding the inspection. The buildings are shown on Acumen drawing 1000/(SK)02 which is enclosed in Appendix A and the elevation descriptions used in this report relate to the building orientation shown on the drawing.

2.1 Building Description

Building 8

The building is a duo pitched timber frame with two rows of internal timber props to the rafters, which has a precast concrete wall to three sides (**Error! Reference source not found.**). The building is open on the northern elevation.

Stability is provided by rigid steel strap connections to the rafters and columns which transmit wind loadings via the columns to the precast concrete walls which are built around the columns.

Above the concrete walls, the frame is clad with timber panels with the roof clad using corrugated sheets carried by timber purlins and sheeting rails (Photograph 2).

The floor is an unfinished concrete slab (Photograph 3) which has a slight fall.

The building is currently used as a barn and livestock shelter.

Building 14

The building is a comparatively modern steel single-bay portal frame which has 2.4m high, concrete blockwork walls to three sides and timber cladding to the remaining gable (Photograph 4).

Longitudinal stability is provided by rigid connections level which transmit wind loadings via steel eaves to the concrete blockwork walls which are built around the columns.

Above the blockwork walls and on the roof, the frame is clad with corrugated cement sheets carried by cold rolled purlins and sheeting rails (Photograph 5).

The floor is a good quality concrete slab.

To the west, the ground is lower than the floor slab with the blockwork wall acting as a retaining wall (Photograph 6).

The north bay of the building is currently used as a barn and store.

Building 19

The building is a duo pitched timber frame with three rows of internal timber props to the rafters (Photograph 7). The building is enclosed on all four sides.

Stability is provided by rigid steel strap connections to the rafters and columns which transmit wind loadings via the columns ground floor level.

The frame is clad with corrugated sheets with the roof clad using similar sheets carried by timber purlins and sheeting rails (Photograph 8).

The floor is an unfinished earth / rubble (Photograph 9).

The building is currently used as a barn and store.

Building 20

The building is a mono pitched timber frame with a single row of internal timber props to the rafters (Photograph 10). The building is enclosed on all three sides and open to eastern elevation.

Stability is provided by rigid steel strap connections to the rafters and columns which transmit wind loadings via the columns ground floor level.

The frame is clad with corrugated sheets with the roof clad using similar sheets carried by timber purlins and sheeting rails (Photograph 11).

The floor is an unfinished concrete slab which has a slight fall to the east

The building is currently used as a barn and store.

2.2 Building Condition

Building 8

The building is constructed from good quality aged timber. No significant signs decay or infestation were identified in the timber components.

The precast concrete walls, where open to inspection, were free from significant damage and degradation.

The floor slab, where open to inspection, was free from damage and degradation

There is no damp proof course present.

The roof and upper wall sheeting is in good condition with the exception of some local damage on the north and east elevations where there are missing sheets (Photograph 12).

Building 14

The building is constructed from good quality modern materials. There is light corrosion on the steel frame and no decay or infestation was identified in the timber components.

The blockwork walls were free from damage and degradation.

The floor slab was free from damage and degradation

There is no damp proof course present.

The roof and upper wall sheeting is generally in good condition with no obvious sign of significant damage and degradation noted.

Building 19

The building is constructed from good quality aged timber. Some of the internal columns showed signs of historical repair and signs decay or infestation were identified at the base of internal timber props.

There is no damp proof course present.

The roof and upper wall sheeting is in good condition with the exception of some small local penetrations to the eastern elevation (Photograph 12).

Building 20

The building is constructed from good quality aged timber. Some of the internal columns showed signs decay or infestation at the base of internal timber props.

The floor slab, where open to inspection, was free from damage and degradation

There is no damp proof course present.

The roof and upper wall sheeting is in good condition with the exception of some small local penetrations to the roof (Photograph 12).

3 CONCLUSIONS

We understand that it is proposed to convert the buildings 8, 14, 19 and 20 to dwellings utilising the existing envelope. With the exception of the damage noted previously, which should be repaired as part of normal ongoing maintenance, the existing building envelopes appear to be free from defects and we are of the opinion that the structures are capable of conversion.

Paragraph Q1(i) (i) (aa) of the Town and Country Planning (General Permitted Development) (England) Order 2015 permits '*the installation or replacement of windows, doors, roofs or exterior walls,…*' and paragraph Q1 (i) (ii) '*partial demolition to the extent reasonably necessary to carry out building operations allowed by paragraph Q.1(i)(i)*'.

We therefore consider the proposed works constitute permitted development for the following reasons:

1. New openings can be formed in the existing masonry walls by the addition of lintels over the openings. The existing cement sheeting can be trimmed and framed out locally to create new openings.
2. Any additional liner walls to provide adequate insulation to comply with the Building Regulations are permitted development.
3. Infilling of the open elevations can be done by using a proprietary cladding system in which lateral stability is gained between the existing floor slab and the additional return liner walls within the permitted development.

No damp proofing could be seen and so any works should incorporate an appropriate damp proof membrane

4 GENERAL REMARKS

This report has been commissioned by L'Arche Developments (Yorkshire) Ltd to give a structural engineer's opinion on the suitability of converting the existing barn for residential use. It should not therefore be considered a full structural survey of the property. The conclusions presented herein are based on the inspection on 24th November 2022 and no liability can be accepted for the condition of parts of the structure that were not inspected or for deterioration after the survey.

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APPENDIX A

Acumen drawing 1000/(SK)02

Only figured dimensions should be used.

Scaled dimensions should be checked with the Architect.
This drawing together with the design, is the property and copyright of the Architect and must not be reproduced without written permission

Volume & Usage Schedule

Mass No.	Volume	Use	Conversion Suitability
1	1399.61 m³	COMMERCIAL	MOST
2	1354.36 m³	EQUESTRIAN	N/A
3	631.48 m³	AGRICULTURAL	NO
4	397.96 m³	AGRICULTURAL	MOST
5	87.51 m³	STORAGE	MOST
6	194.95 m³	STORAGE	MOST
7	148.08 m³	AGRICULTURAL	NO
8	2076.36 m³	AGRICULTURAL	POSSIBLY
9	61.56 m³	EQUESTRIAN	N/A
10	124.20 m³	EQUESTRIAN	N/A
11	174.25 m³	EQUESTRIAN	N/A
12	718.52 m³	EQUESTRIAN	N/A
13	1283.69 m³	EQUESTRIAN	N/A
14	1013.51 m³	AGRICULTURAL	POSSIBLY
15	113.23 m³	AGRICULTURAL	NO
16	195.39 m³	LEISURE	N/A
17	291.01 m³	LEISURE	N/A
18	127.48 m³	LEISURE	N/A
19	421.30 m³	AGRICULTURAL	NO
20	755.95 m³	AGRICULTURAL	NO
21	314.61 m³	AGRICULTURAL	NO
22	78.24 m³	AGRICULTURAL	NO
23	23.43 m³	AGRICULTURAL	NO
24	9.43 m³	AGRICULTURAL	NO
25	100.74 m³	AGRICULTURAL	NO

TOTAL APROX. VOLUME: 12132.14 m³

EQUESTRIAN
AGRICULTURAL
LEISURE
STORAGE
COMMERCIAL
RESIDENTIAL

CALCULATED FROM GOOGLE EARTH. SUBJECT TO ACCURATE REMEASURE

A	ADDED USAGE & SUITABILITY	HB	JC	JUL 22

DO NOT SCALE OFF THIS DRAWING

ACUMEN
Designers & Architects
acumenarchitects.co.uk 01484 546 000
Headrow House, Old Leeds Road, Huddersfield, Huddersfield HD1 1SG

Client: KINGMAN HOMES

Project: ROYD MOOR RD

Project No	Drawing No	Rev
1000	(SK)02	A

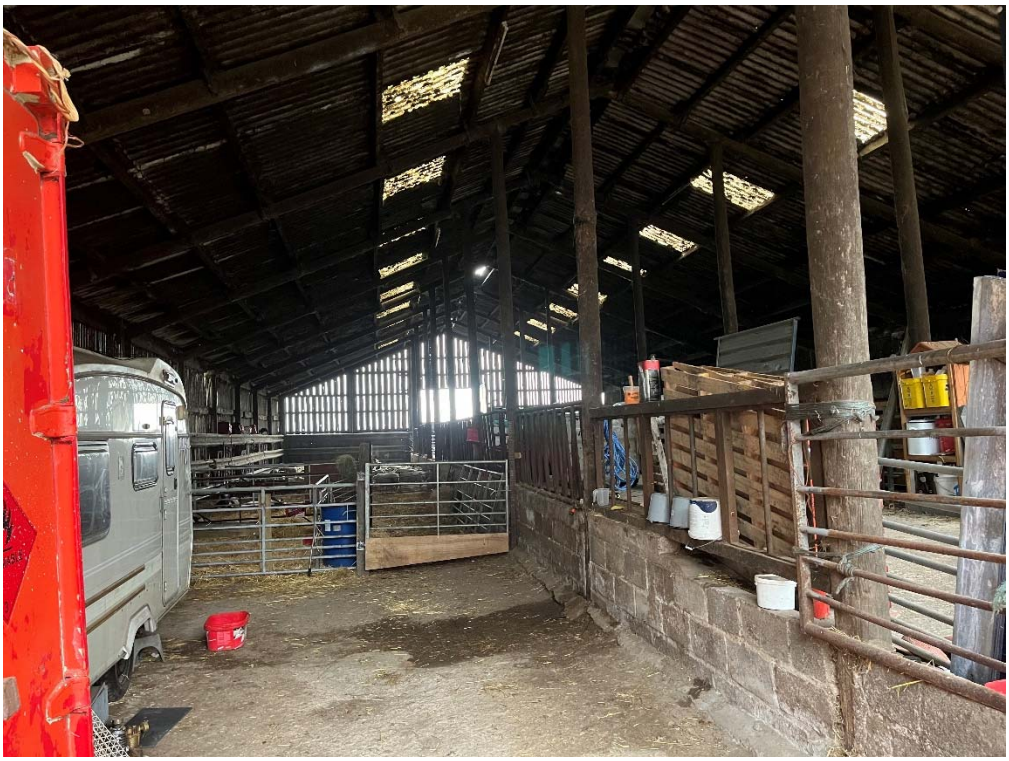
Description: SITE PLAN & USAGE

Scale	Date Drawn	Drawn By	Authorised By
1 : 500 @ A2	JUL 22	HB	JC

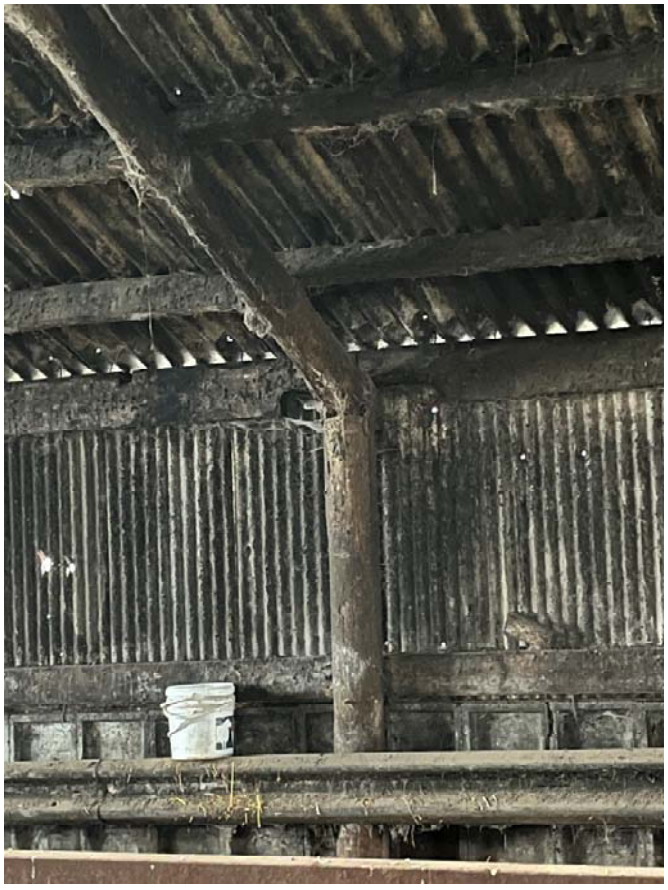
Purpose of Issue
Planning ○ Building Regs ○ Tender ○ Construction ○ Comment ● Info ○

APPENDIX B

Photographs



Photograph 1 Building 8 Internal View



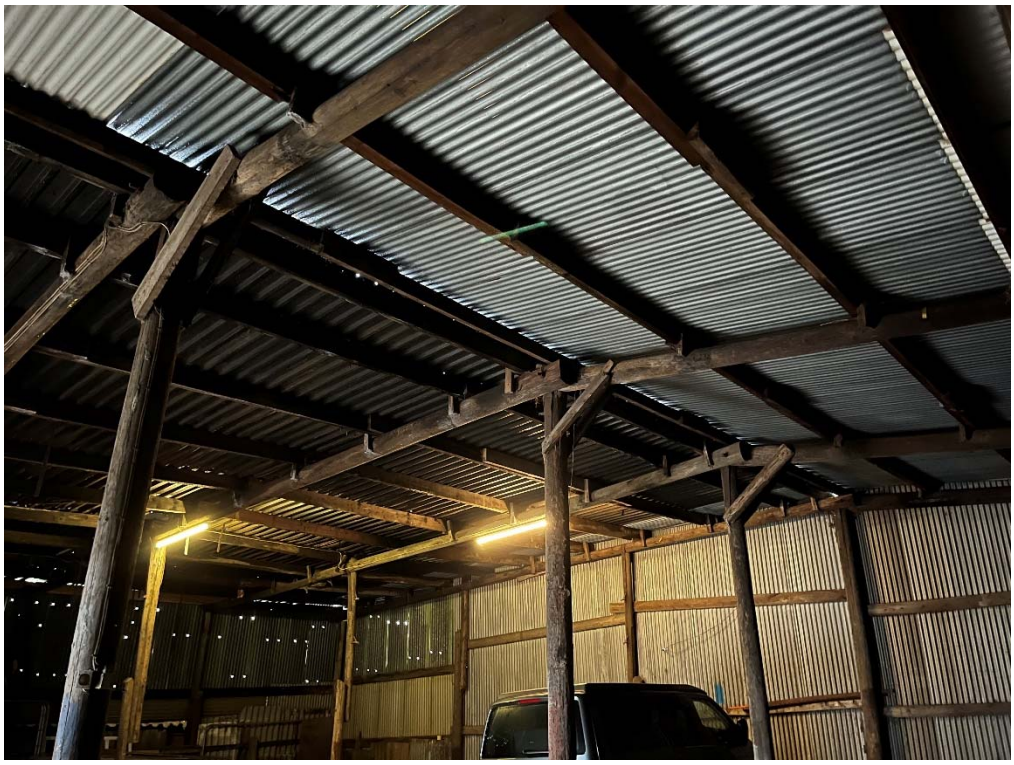
Photograph 2 Building 8 Typical Cladding

Photograph 3 Building 8 Slab

Photograph 4 Building 14 Internal View

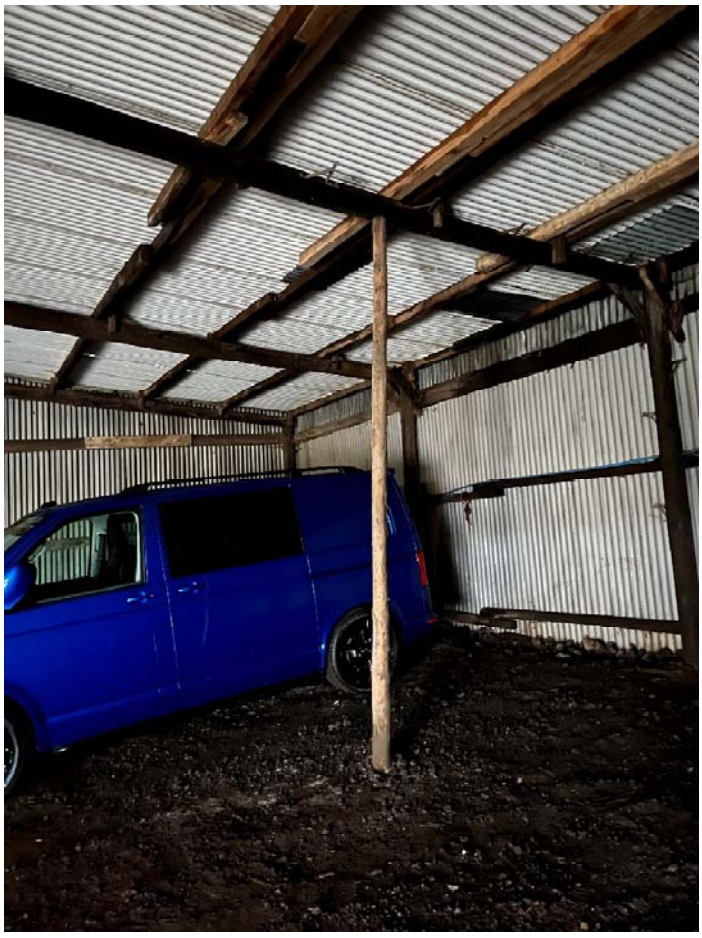
Photograph 5 Building 14 Typical Cladding

Photograph 6 Building 14 Western Elevation Retaining Wall



Photograph 7 Building 19 Internal View

Photograph 8 Building 19 Typical Cladding



Photograph 9 Building 19 Internal Floor

Photograph 10 Building 20 Front Elevation

Photograph 11 Building 20 Internal Cladding