



RIBBLE VALLEY
BOROUGH COUNCIL

28 SEP 2011

FOR THE
ATTENTION OF

For office use only

Application No. 020110790P

Date received

Fee paid £

Receipt No:

Council Offices, Church Walk, Clitheroe, Lancashire. BB7 2RA Tel: 01200 425111 www.ribblevalley.gov.uk

Application for Planning Permission.
Town and Country Planning Act 1990

Publication of applications on planning authority websites.

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website.
If you require any further clarification, please contact the Authority's planning department.

1. Applicant Name, Address and Contact Details

Title:	Mr	First name:	Steven	Surname:	Dobson		
Company name:							
Street address:	Hill House Farm				Country Code	National Number	Extension Number
	Sawley Rd				Telephone number:		
	Grindleton				Mobile number:		
Town/City:	Clitheroe				Fax number:		
County:	Lancs				Email address:		
Country:							
Postcode:	BB7 4QS						
Are you an agent acting on behalf of the applicant? ☒ Yes ☐ No							

2. Agent Name, Address and Contact Details

Title:	Mr	First Name:	John	Surname:	Welbank		
Company name:	Rural Futures (North West) Ltd						
Street address:	1 The Creamery Kenlis Rd Barnacre				Country Code	National Number	Extension Number
					Telephone number:	01995	600724
					Mobile number:		
Town/City:	Preston				Fax number:		
County:	Lancashire				Email address:		
Country:	United Kingdom						
Postcode:	PR3 1GD				johnw@ruralfutures.co.uk		

3. Description of the Proposal

Please describe the proposed development including any change of use:

The development involves the conversion of a redundant field barn into residential use.

Has the building, work or change of use already started? ☐ Yes ☒ No

4. Site Address Details

Full postal address of the site (including full postcode where available)

Description:

House:		Suffix:	
House name:	Jacksons Barn		
Street address:	Sawley Rd		
	Sawley		
Town/City:	Clitheroe		
County:	Lancs		
Postcode:	BB7 4RT		

Description of location or a grid reference
(must be completed if postcode is not known):

Easting:	377493
Northing:	446913

5. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?

☐ Yes ☒ No

6. Pedestrian and Vehicle Access, Roads and Rights of Way

Is a new or altered vehicle access proposed to or from the public highway?

☐ Yes ☒ No

Is a new or altered pedestrian access proposed to or from the public highway?

☐ Yes ☒ No

Are there any new public roads to be provided within the site?

☐ Yes ☒ No

Are there any new public rights of way to be provided within or adjacent to the site?

☐ Yes ☒ No

Do the proposals require any diversions/extinguishments and/or creation of rights of way?

☐ Yes ☒ No

7. Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste?

☒ Yes ☐ No

If Yes, please provide details:

RVBC residential waste bins located at road side

Have arrangements been made for the separate storage and collection of recyclable waste?

☒ Yes ☐ No

If Yes, please provide details:

RVBC household recycling bins

8. Authority Employee/Member

With respect to the Authority, I am:

- (a) a member of staff
- (b) an elected member
- (c) related to a member of staff
- (d) related to an elected member

Do any of these statements apply to you?

☐ Yes ☒ No

9. Materials

Please state what materials (including type, colour and name) are to be used externally (if applicable):

Walls - description:

Description of *existing* materials and finishes:

Random stone

Description of *proposed* materials and finishes:

Random stone matching existing for increased roof line

Roof - description:

Description of *existing* materials and finishes:

Slate

Description of *proposed* materials and finishes:

Retention of existing. Any replacements to match.

Windows - description:Description of *existing* materials and finishes:

Timber framed where they exist

Description of *proposed* materials and finishes:

Timber framed

Doors - description:Description of *existing* materials and finishes:

Stone surrounds and timber doors where they exist

Description of *proposed* materials and finishes:

Brick infill in some openings to be removed and replaced with timber framed doors or windows with random stone surrounds to match.

Boundary treatments - description:Description of *existing* materials and finishes:

Stock fencing

Description of *proposed* materials and finishes:

Stock fencing with native hedge species including blackthorn, quichthorn, holly and dog rose.

Vehicle access and hard standing - description:Description of *existing* materials and finishes:

Concrete yard

Description of *proposed* materials and finishes:

Retained concrete and permeable block paving.

Are you supplying additional information on submitted plan(s)/drawing(s)/design and access statement?

☒ Yes ☐ No

If Yes, please state references for the plan(s)/drawing(s)/design and access statement:

Design and Access Statement

Site Plan and elevation Drawings

10. Vehicle Parking

Please provide information on the existing and proposed number of on-site parking spaces:

Type of vehicle	Existing number of spaces	Total proposed (including spaces retained)	Difference in spaces
Cars	2	2	0
Light goods vehicles/public carrier vehicles	0	0	0
Motorcycles	0	0	0
Disability spaces	0	0	0
Cycle spaces	0	0	0
Other (e.g. Bus)	0	0	0
Short description of Other			

11. Foul Sewage

Please state how foul sewage is to be disposed of:

Mains sewer

☐

Package treatment plant

☒

Unknown

☐

Septic tank

☐

Cess pit

☐

Other

Are you proposing to connect to the existing drainage system?

☐ Yes ☒ No ☐ Unknown**12. Assessment of Flood Risk**

Is the site within an area at risk of flooding? (Refer to the Environment Agency's Flood Map showing flood zones 2 and 3 and consult Environment Agency standing advice and your local planning authority requirements for information as necessary.)

☒ Yes ☐ No

If Yes, you will need to submit an appropriate flood risk assessment to consider the risk to the proposed site.

Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?

☒ Yes ☐ No

Will the proposal increase the flood risk elsewhere?

☐ Yes ☒ No

How will surface water be disposed of?

☐ Sustainable drainage system☐ Main sewer☐ Pond/lake☐ Soakaway☒ Existing watercourse

13. Biodiversity and Geological Conservation

To assist in answering the following questions refer to the guidance notes for further information on when there is a reasonable likelihood that any important biodiversity or geological conservation features may be present or nearby and whether they are likely to be affected by your proposals.

Having referred to the guidance notes, is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site OR on land adjacent to or near the application site:

a) Protected and priority species

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

b) Designated sites, important habitats or other biodiversity features

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

c) Features of geological conservation importance

☐ Yes, on the development site ☐ Yes, on land adjacent to or near the proposed development ☒ No

14. Existing Use

Please describe the current use of the site:

Vacant

Is the site currently vacant? ☒ Yes ☐ No

If Yes, please describe the last use of the site:

Machinery storage

When did this use end (if known) (DD/MM/YYYY)?

01/01/2004

Does the proposal involve any of the following?

If yes, you will need to submit an appropriate contamination assessment with your application

Land which is known to be contaminated? ☐ Yes ☒ No

Land where contamination is suspected for all or part of the site? ☐ Yes ☒ No

A proposed use that would be particularly vulnerable to the presence of contamination? ☐ Yes ☒ No

15. Trees and Hedges

Are there trees or hedges on the proposed development site? ☐ Yes ☒ No

And/or: Are there trees or hedges on land adjacent to the proposed development site that could influence the development or might be important as part of the local landscape character?

☐ Yes ☒ No

If Yes to either or both of the above, you may need to provide a full Tree Survey at the discretion of your local planning authority. If a Tree Survey is required, this and the accompanying plan should be submitted alongside your application. Your local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to construction - Recommendations'.

16. Trade Effluent

Does the proposal involve the need to dispose of trade effluents or waste? ☐ Yes ☒ No

17. Residential Units

Does your proposal include the gain or loss of residential units? ☒ Yes ☐ No

Market Housing - Proposed

	Number of bedrooms				
	1	2	3	4+	Unknown
Houses			1		
Flats/Maisonettes					
Live-Work units					
Cluster flats					
Sheltered housing					
Bedsit/Studios					
Unknown					

Proposed Market Housing Total

1

Market Housing - Existing

	Number of bedrooms				
	1	2	3	4+	Unknown
Houses					
Flats/Maisonettes					
Live-Work units					
Cluster flats					
Sheltered housing					
Bedsit/Studios					
Unknown					

Existing Market Housing Total

0

Overall Residential Unit Totals

Total proposed residential units	1
Total existing residential units	0

Does your proposal involve the loss, gain or change of use of non-residential floorspace?

☐ Yes ☒ No**19. Employment**

If known, please complete the following information regarding employees:

	Full-time	Part-time	Equivalent number of full-time
Existing employees	0	0	0
Proposed employees	0	0	0

20. Hours of Opening

If known, please state the hours of opening for each non-residential use proposed:

Use	Monday to Friday		Saturday		Sunday and Bank Holidays		Not Known
	Start Time	End Time	Start Time	End Time	Start Time	End Time	

21. Site Area

What is the site area?

00.12

hectares

22. Industrial or Commercial Processes and Machinery

Please describe the activities and processes which would be carried out on the site and the end products including plant, ventilation or air conditioning. Please include the type of machinery which may be installed on site:

Residential use

Is the proposal for a waste management development?

☐ Yes ☒ No**23. Hazardous Substances**

Is any hazardous waste involved in the proposal?

☐ Yes ☒ No**24. Site Visit**

Can the site be seen from a public road, public footpath, bridleway or other public land?

☒ Yes ☐ No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact? (Please select only one)

☐ The agent ☒ The applicant ☐ Other person**25. Certificates (Certificate A)****Certificate of Ownership - Certificate A****Town and Country Planning (Development Management Procedure) (England) Order 2010 Certificate under Article 12**

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner (owner is a person with a freehold interest or leasehold interest with at least 7 years left to run) of any part of the land or building to which the application relates.

Title: Mr First name: Steven Surname: Dobson

Person role: Applicant

Declaration date: 20/09/2011

☒ Declaration made**25. Certificates (Agricultural Land Declaration)****Agricultural Land Declaration****Town and Country Planning (Development Management Procedure) (England) Order 2010 Certificate under Article 12**

Agricultural Land Declaration - You Must Complete Either A or B

(A) None of the land to which the application relates is, or is part of an agricultural holding.

(B) I have/The applicant has given the requisite notice to every person other than myself/the applicant who, on the day 21 days before the date of this application, was a tenant of an agricultural holding on all or part of the land to which this application relates, as listed below:

If any part of the land is an agricultural holding, of which the applicant is the sole tenant, the applicant should complete part (B) of the form by writing 'sole tenant - not applicable' in the first column of the table below

Title: Mr First Name: Steven Surname: Dobson

Person role: Applicant

Declaration date: 20/09/2011

☒ Declaration Made

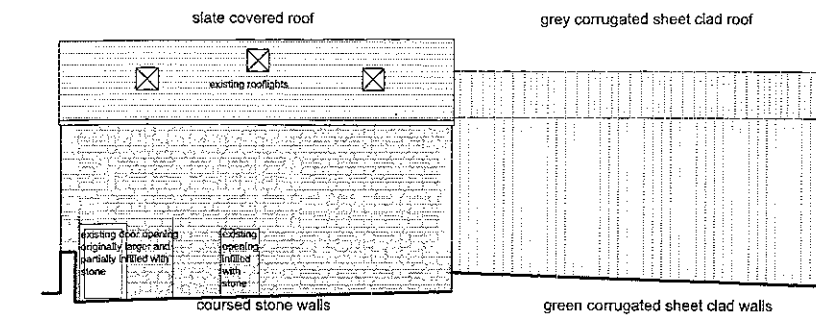
26. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information.

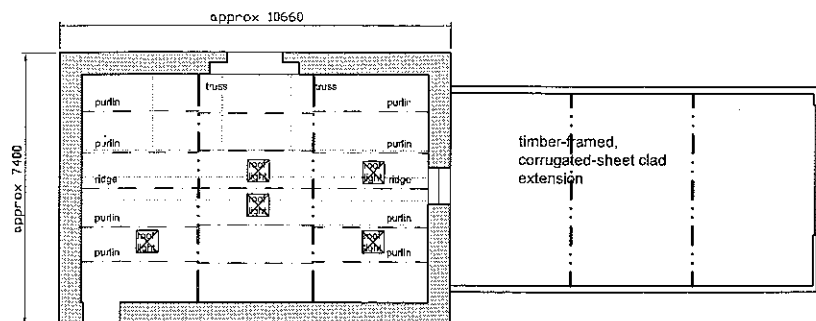


Date

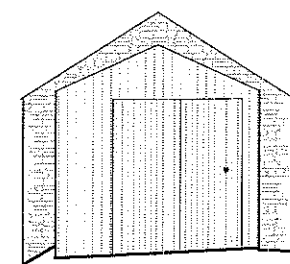
20/09/2011



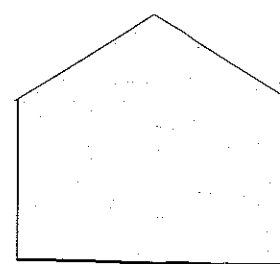
SOUTH ELEVATION



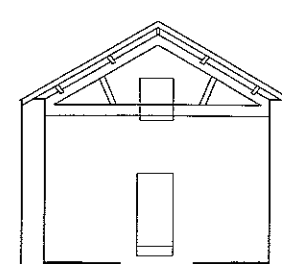
PLAN



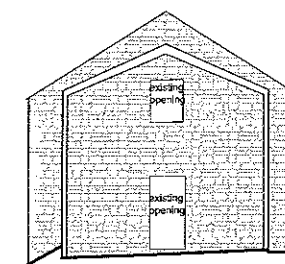
EAST ELEVATION



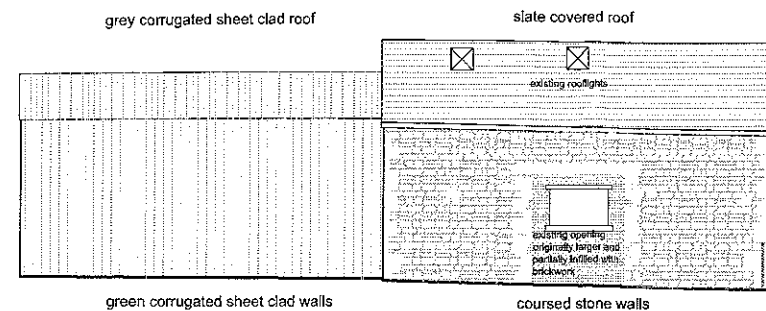
WEST ELEVATION



TYPICAL SECTION

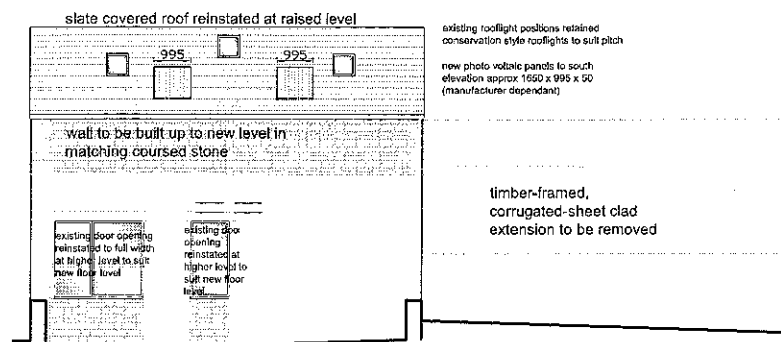


EAST ELEVATION

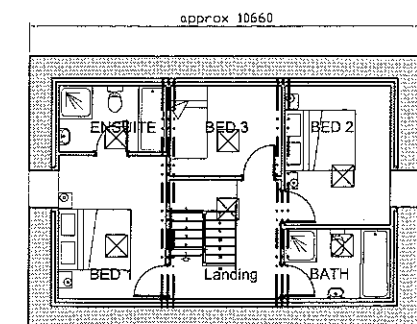


NORTH ELEVATION

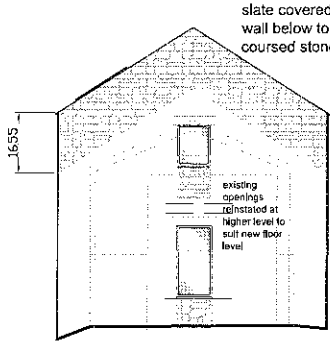
EXISTING PLANS AND ELEVATIONS



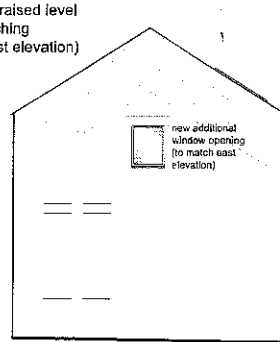
SOUTH ELEVATION



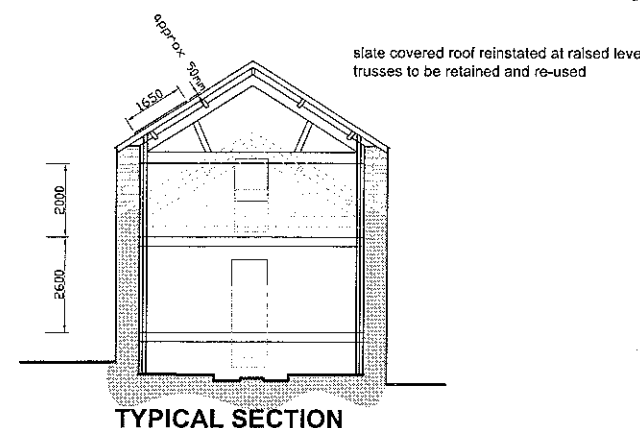
FIRST FLOOR PLAN



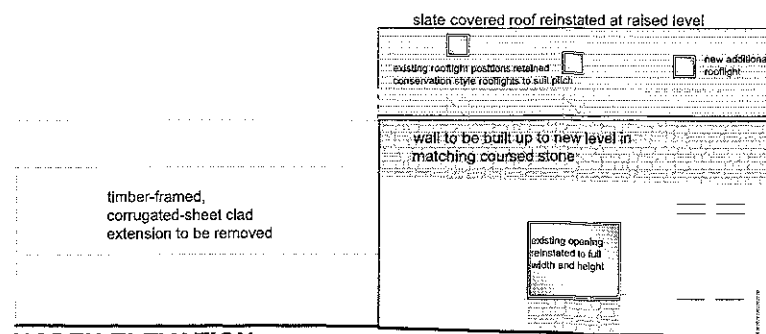
EAST ELEVATION



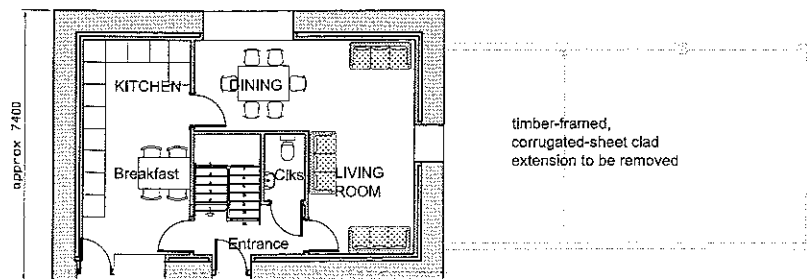
WEST ELEVATION



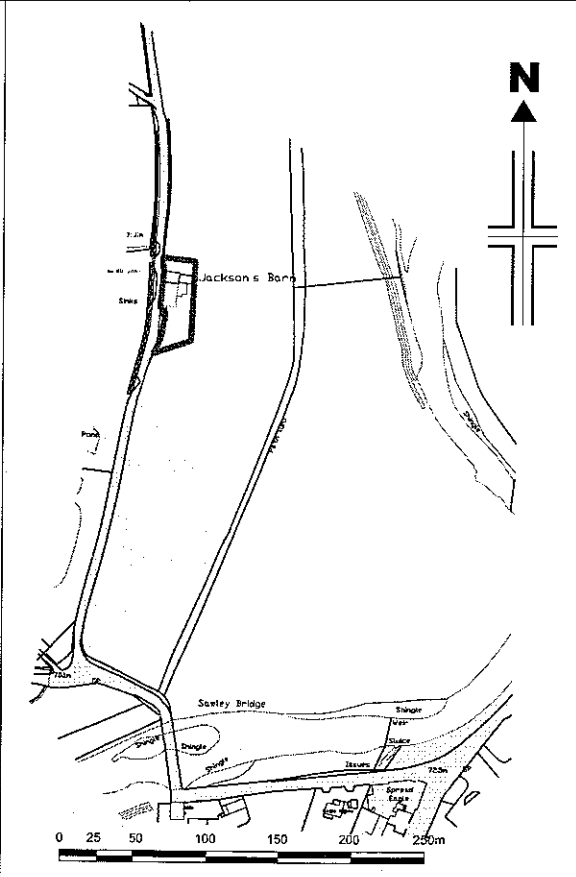
TYPICAL SECTION



NORTH ELEVATION



GROUND FLOOR PLAN



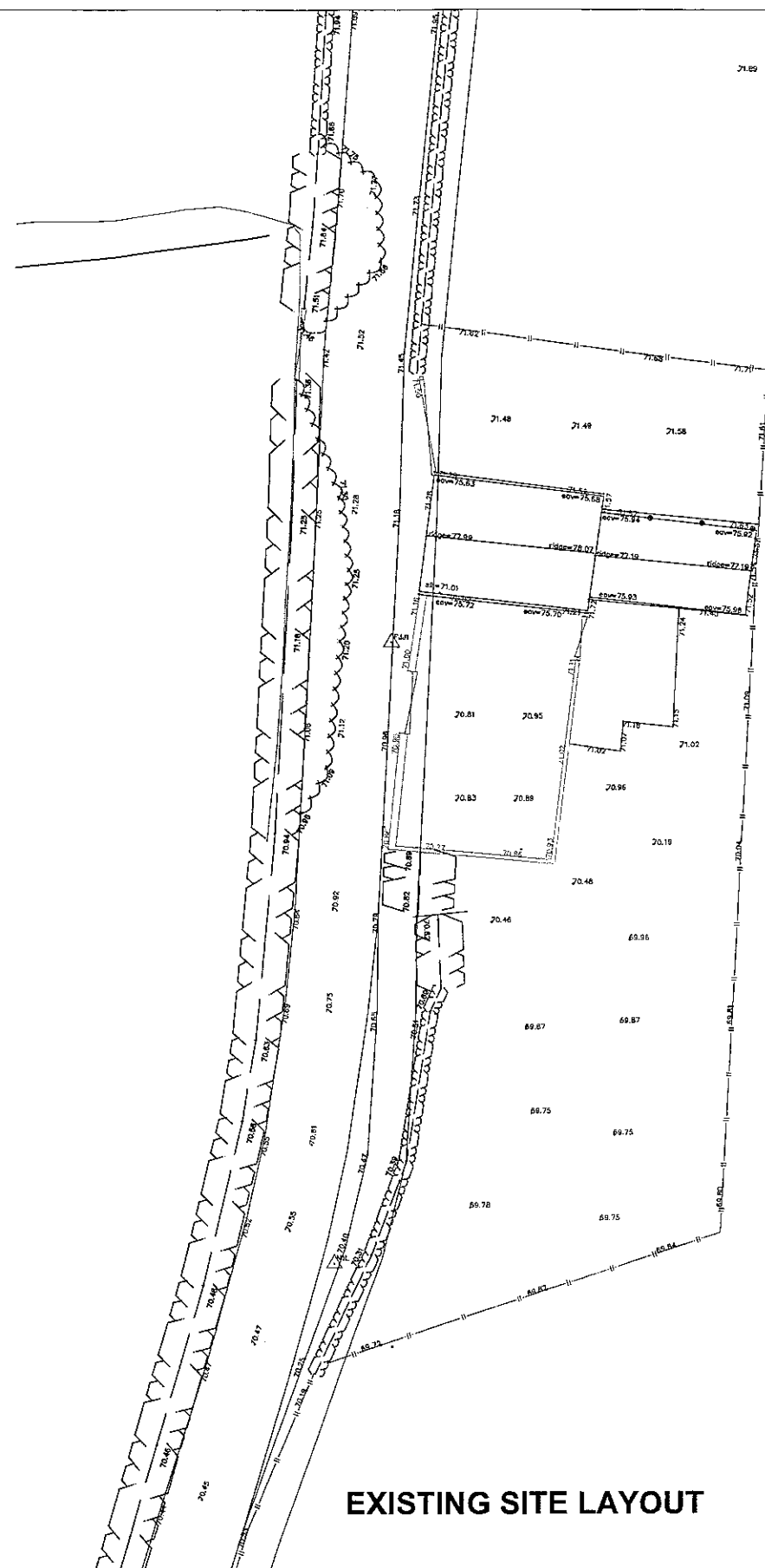
SITE LOCATION PLAN
scale 1:2500

PROPOSED PLANS AND ELEVATIONS

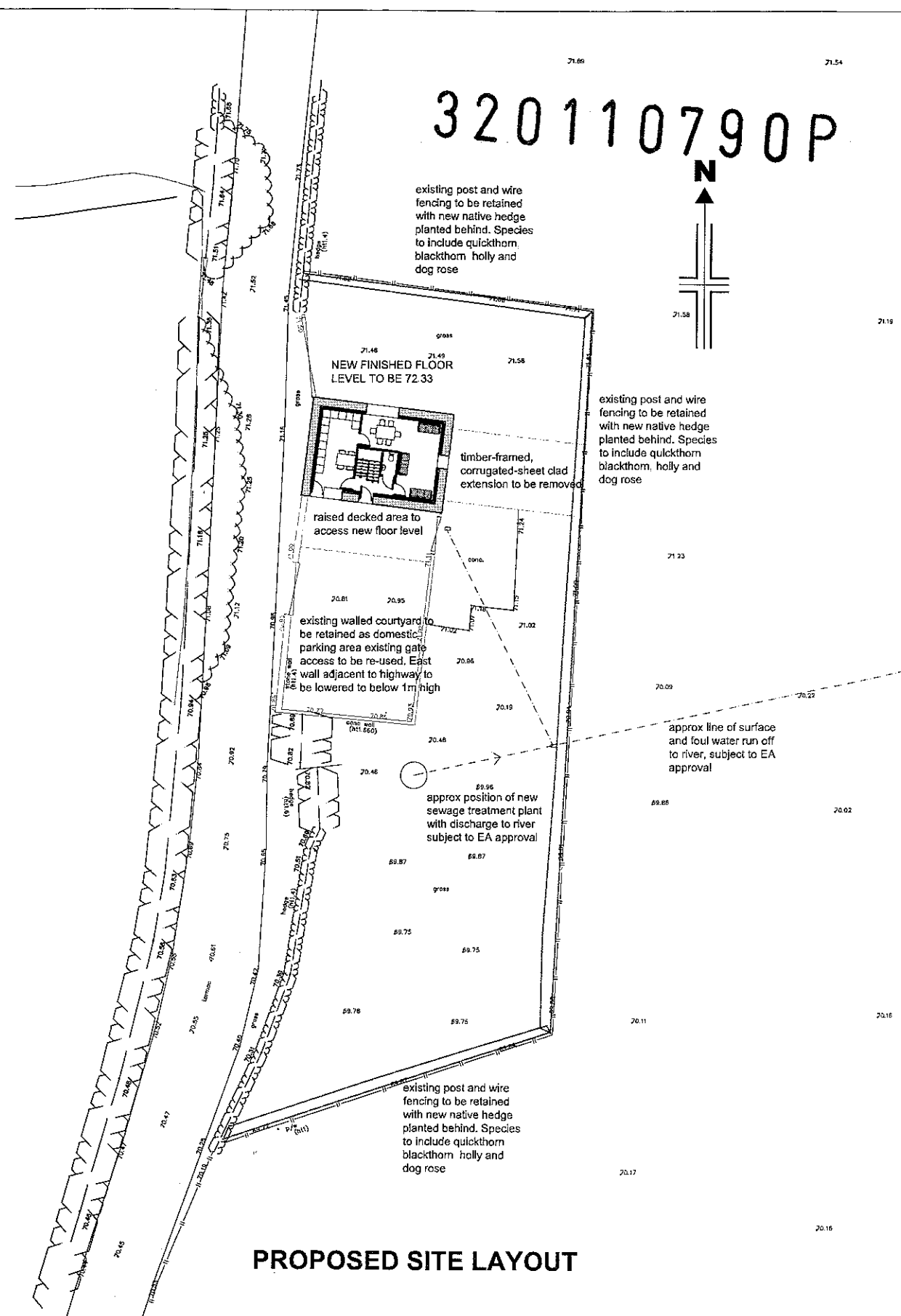
Mr. S. Dobson		
Conversion to Dwelling Jackson's Barn Sawley Plans and Elevations Existing and Proposed		Scale 1:100
Drawn DME	Checked	Approved
Drwg No. D1491/PL01		Date Sept 2011
Rev. b		

PSA Design
The Old Bank House
6 Berry Lane, Loughridge
Preston, PR5 3JA
Tel. 01772 786066
Fax. 01772 786265

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EXISTING SITE LAYOUT



PROPOSED SITE LAYOUT

320110790P

HERITAGE STATEMENT

CONVERSION OF A REDUNDANT AGRICULTURAL BARN FOR
RESIDENTIAL PURPOSES

Applicant

Mr S Dobson
Hill House Rd.
Sawley Rd
Grindleton
Clitheroe
BB7 4QS

Site

Jacksons Barn
Bolton By Bowland Rd.
Sawley
Clitheroe
BB7 4RT

1.0 Planning Policy Context

- 1.1 Planning Policy Statement 5 (PPS5) Planning for the Historic Environment sets out the Government's policies on the conservation of the historic environment along with the accompanying Historic Environment Planning Practice Guide.
- 1.2 Those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are called heritage assets. PPS5 asserts that planning has a central role to play in conserving our heritage assets and utilising the historic environment in creating sustainable places. Paragraph HE6.1 confirms that the Local Planning Authority should require an applicant to provide a description of the significance of the heritage assets affected and the contribution of their setting to that significance. The level of details should be proportionate to the importance of the heritage asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset.
- 1.3 Policy HE7 of PPS7 sets out a number of general policy principles guiding the determination of applications for consent relating to all heritage assets. Policy HE7.2 suggests, in considering the impact of a proposal on any on any heritage asset, local planning authorities should take into account the particular nature of the significance of the heritage asset and the value that it holds for this and future generations. Policy HE7.5 suggests that Local Planning Authorities should take into account the desirability of the new development making a positive contribution to the character and local distinctiveness of the historic asset.

2.0 Significance of the Heritage Asset.

- 2.1 Farmsteads and their buildings must be understood in terms of the function or functions they were intended to house. Their scale and form are directly related the historic land use of the area, which is also reflected in the wider landscape. Buildings may in addition need to be understood as reflections of a particular vernacular building tradition or as expressions of a wider architectural or landscape design embracing a whole farmstead or estate.

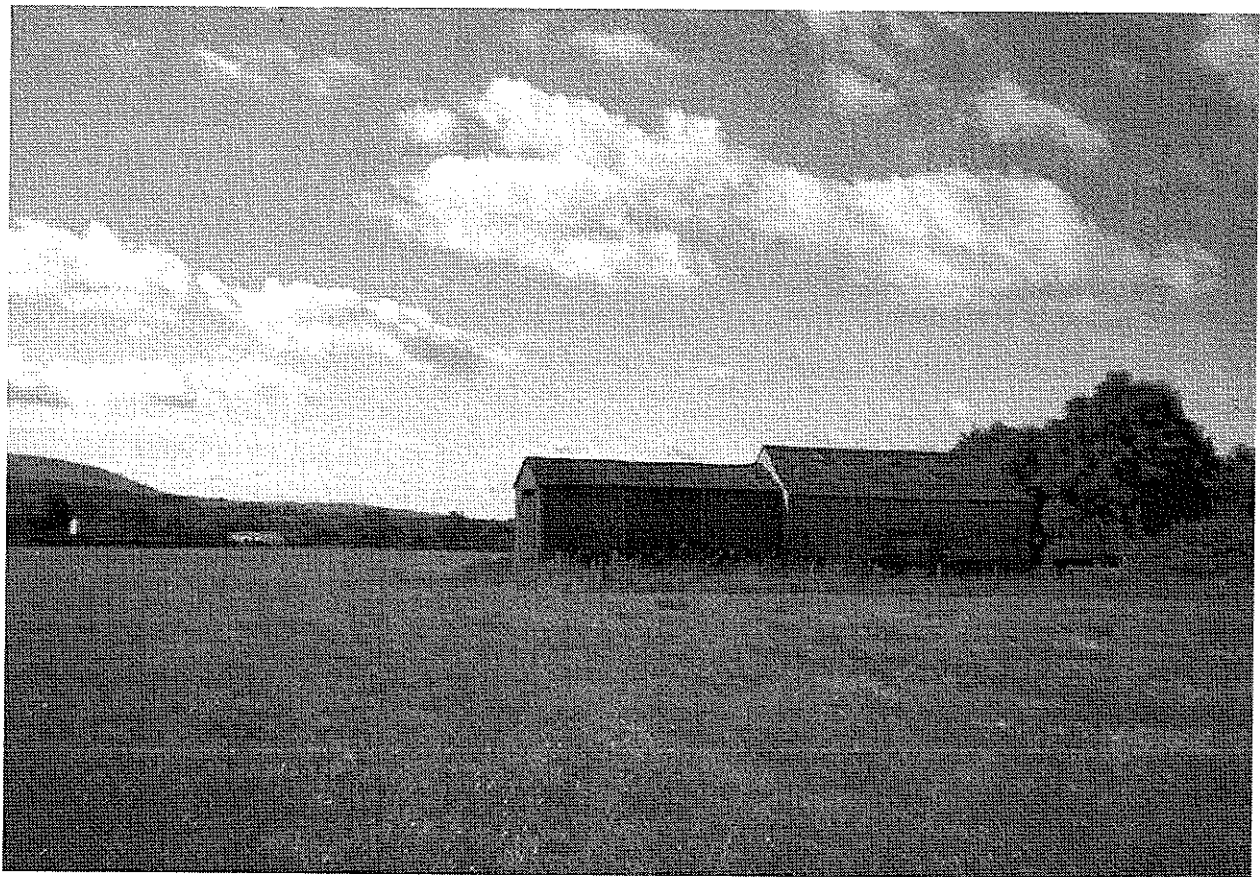
3.0 National Framework Farmstead Type

- 3.1 The scale and form of farmstead types are subject to much variation and are closely related to farm size and status, terrain and land use. Paragraph 5.11 Historic Farmsteads, Preliminary Character Statement: North West Region provides the historic background to the development of such steadings. The **linear layout** are now most strongly associated with the hill farms of northern England (North East, North West and Yorkshire and Humber). The major reason for the persistence of the layout in northern England was that it was suited to smaller farms (of 50 acres or less) needing fewer buildings – other than the storage of subsistence levels of corn for the household and livestock, and the housing of some milk cattle, poultry and pigs. It was also a layout ideally suited to building along the contours of a hillside and so this farmstead plan remained in use in upland areas of England.

4.0 Assessment of the Heritage Asset

4.1 The application site is located in open countryside in a rural location adjacent to Sawley Rd

The development site comprises a single auxiliary agricultural barn located alongside the flood plain. The original stone barn forming part of the agricultural holding was added to in the late nineteen sixties through the addition of a tin sheeted extension. During the same period it would appear that a number of the original features such as the main barn door were been bricked in. Externally the midden area is constructed of concrete block suggesting this to be a later addition.



4.2 As part of the assessment Lancashire County Council were consulted. Within the Historic Environmental Records there was no additional information available however the county was able to confirm the original building was present on the 1860 Ordinance Survey map. The barn remained in its present form on the 1955 OS edition. The new extension appeared on the 1974 revision. From local research we understand the tin sheeted addition was constructed in the late nineteen sixties.

- 4.3 On the Ordinance Survey map the barn is referred to as Cow Hill Laithe. The name locally is actually Jackson's Barn. It is understood that the barn was owned by Fattorina's, a wealthy jeweler from Leeds who owned the Dockber Estate. It is called Jackson's barn as it was owned by a Mr Jackson before the Fattorina family bought the surrounding land.

5.0 Historic Use

- 5.1 The land around the barn is permanent pasture and meadow supporting cattle and sheep.

During the winter months cattle would be housed and prior to the development of large cubicle buildings animals were tied by the neck in shippens. Hay was conserved and stored in barns and fed to the cattle during the winter period. Until the late 1950's most hay was conserved as loose hay and was cut during the winter with a hay knife. The development of the mechanical baler replaced this practice. This change meant that buildings of the size of Jackson's barn became redundant for most agricultural purposes other than storage.

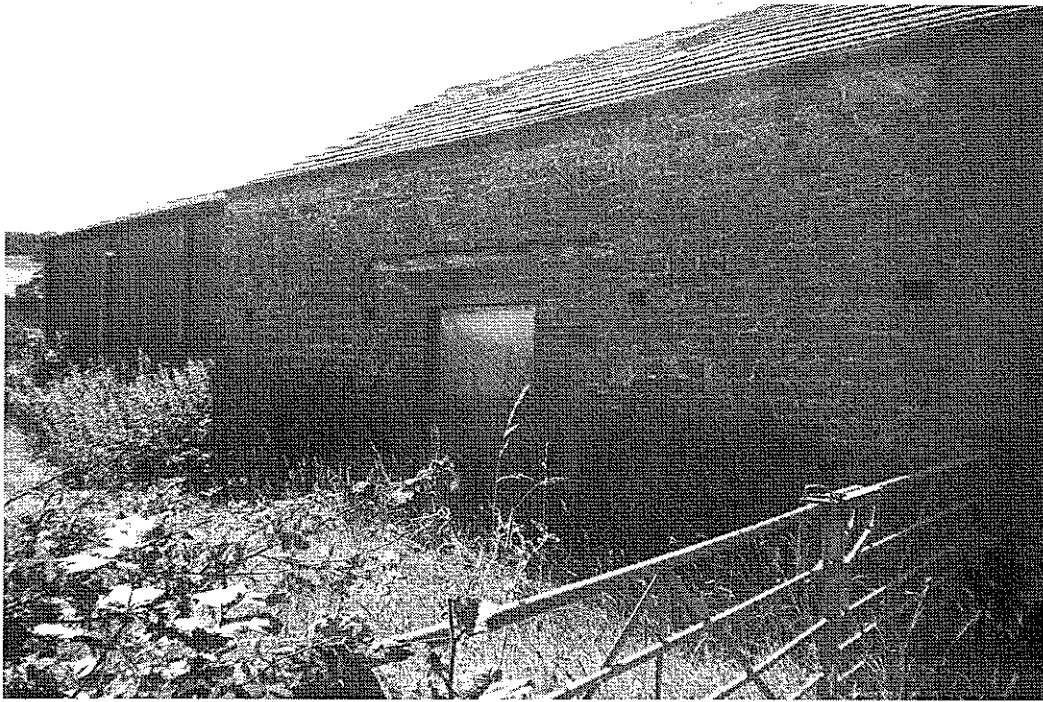
6.0 Present Use

- 6.1 The barn has not been used for agriculture purposes since the 1980's. The most recent use was for machinery storage associated with one of the local steam rallies. As the building is isolated and easily accessible the barn was being regularly broken into so this limited use stopped. Since then the building has been left empty.

7.0 Condition & Interesting Features

- 7.1 A structural survey provides detailed information regarding the condition of the barn and concludes that the building is capable of conversion. The barn has a number of distinctive features including the remains of a dressed stone entrance and ventilation apertures. The remaining stones in the main doorway suggest the entrance to be rectangular rather than the more common arched entrance. The main doorway is supported by a large timber lintel that is still present. This suggests that the building is not that old. Other similar buildings in the area are dated at between 1800 – 1840. It is understood that the brick infill of the doorway was undertaken at the same time as the tin sheeted extension.

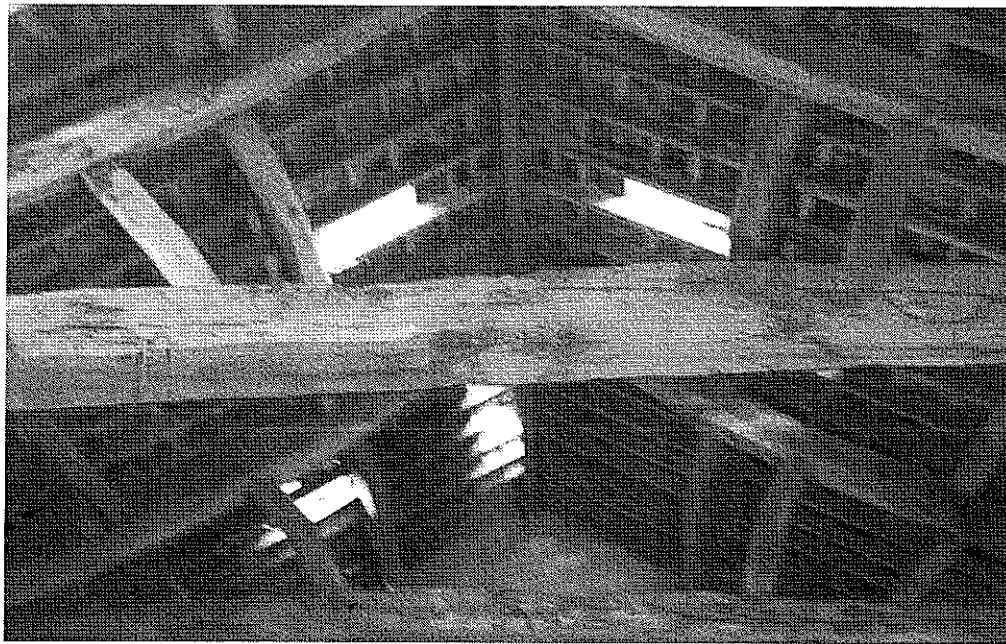
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- 7.2 There is evidence that some alterations have been made to the building. Two openings on the southern elevation have been blocked at some time in the past. There was clearly a second small door to the right of the existing. The large stone lintel above the existing door suggests that there may have been a larger opening here at some point. This would seem likely as this would provide access to the midden area beyond.



- 2087-1050
- 7.3 The main roof structure remains untouched and appears to be original. This includes the roof lights, which again suggests that the building is probably early 1800's.



8.0 Proposed alterations.

- 8.1 The proposed development will convert the building to a new sustainable residential use and preserve the most important features of the structure. There have clearly been a number of changes to openings and principle walls over the years. The roof structure both internally and externally has remained untouched.

- 8.2 Due to the flood risk associated with the sight the ground floor will require raising. To accommodate the proposed use the roof height will also need raising. It is however proposed that the existing timber structure be raised rather than replaced. This will preserve the most important feature of the building.

9.0 Design

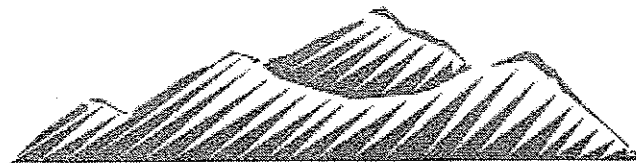
- 9.1 The Conversion of Traditional Farm Buildings: A guide to good practice (English Heritage) sets out the general principles and design issues relating to the adaptation of traditional farm buildings. General principles include understanding the character, significance and context of the heritage asset, understanding it's construction and respecting the architectural and historic interest of the building in its setting. Minimising loss of historic fabric and achieving high standards of design.
- 9.2 Retaining features that provide evidence of the former use and contribute to the significance of the heritage asset is critical to a successful conversion.

10.0 Impact on the Heritage Asset

- 10.1 From the assessment provided it is clear that the building is not of a great age and probably dates from around the early 1800's. Since then a number of the original features have been altered including the main entrances. The only original, main feature seems to be the roof structure. Overall the building has more landscape significance than heritage value.
- 10.2 That said it is considered that there will be little loss of features and minimal changes to the character of the building by the proposed conversion. The design has taken care to respect the principle features including the original roof structure. Original and existing openings will be reinstated and the unsightly bricked areas removed.
- 10.2 The main external change will be the removal of the unsightly tin sheeted extension. This will open up the main stone structure to views from across the flood plain.
- 10.4 It is considered that the conversion of the building will have no negative impacts on the heritage asset or the surrounding area. The building will be utilized for a long term, sustainable purpose which will retain and maintain the heritage asset into the future.

John Metcalfe 2011

Stone Lea
Sedgwick
Kendal
Cumbria
LA8 0JP



envirotech

Tel: 015395 61894
Mobile: 07812 081320
Email: info@envtech.co.uk
Web: www.envtech.co.uk

320110790P

BAT & BARN OWL SURVEY

Jackson's Barn, Sawley

BY

Jack Sykes BSc (Hons) AIEEM

On the Instructions of

Steven Dobson

BAT/11/1086

BAT & BARN OWL SURVEY

Instructions

Investigate for the presence or absence of bat species and Barn Owls as part of a planning application for the conversion of a barn and demolition of an existing sheet metal extension at Jackson's Barn, Sawley.

Professional responsibility

This report has been commissioned and the actions of the surveyor have been made in accordance with the Code of Professional Conduct for the Institute of Ecology and Environmental Management. (www.ieem.org.uk) and the Royal Institution of Chartered Surveyors (www.rics.org.uk)

Accuracy of report

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, bats and Barn Owls are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and or in their interaction with bat species and or Barn Owls. If bats or barn owls are found during a work programme and continuing the work programme could result in their disturbance, injury or death either directly or indirectly an offence may be committed.

Bats and Barn Owls may only be disturbed, injured or killed under license. This report does not convey the authority to undertake work which may disturb, injure or kill bats of any species or barn owls.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

This report has been printed on recycled paper as part of our commitment to achieving both the ISO 9001 Quality Assurance and ISO 14001 Environmental Assurance standards. Envirotech has been awarded the gold standard by the Cumbria Business Environmental Network for its Environmental management systems.

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1. Introduction

1.1 Site Description

The site lies 400m North of Sawley village and 2.5km South of Bolton-by-Bowland. The site is on the Eastern side of a country lane and 150m West of the River Ribble. The surveyed building is made from natural stone under an unlined Yorkshire slate roof. The site is surrounded by pasture fields and hedgerows with an area of mature trees to the West.

1.2 Proposed Works

An application is to be submitted for the conversion of a barn to form a residential property and the demolition of the existing sheet metal extension structure. Full details can be found in the plans accompanying this report for the planning application.

1.3 Aims of Study

To ensure that the proposed development does not affect any bat species which is listed under the Conservation (Natural Habitats, &c) Regulations 1994 which implements the EC Directive 92/43/EEC in the United Kingdom the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000.

The survey will:-

- ⇒ Identify the past and/or current use of the site by bat species
- ⇒ Assess the likely impact of the proposed development on these species
- ⇒ Provide a basis upon which to propose mitigation (if required) for bat species affected by the development

To ensure the proposed development does not affect Barn Owls as it is an offence under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) to

- ⇒ Kill or injure a Barn Owl
- ⇒ Damaging or destroy the active nest site with eggs or young or before eggs are laid
- ⇒ Disturbing the dependent young of a Barn Owl
- ⇒ Intentionally or recklessly disturb any Barn Owl whilst building a nest or is in, on or near an active nest site.

2 Methodology

The methods used comply with those described in BCT (2007). This is a progressive assessment starting with a broad habitat assessment then increasingly more thorough survey methods, until a level is reached at which additional survey effort is unlikely to provide additional useful information about the site.

2.1 Desk Study

- ⇒ Likely bat roosting and feeding sites adjacent to the site were identified from aerial photography at 1:5000 scale. This allows us to determine likely commuting routes into and off the site.

- ⇒ A records search was undertaken of the Envirotech and NBN dataset. The purpose of a records search is to establish the species of bat found in the local area and any past history of bats at the site.

2.2 Field Survey

2.2.1 Methodology

- ⇒ Field assessment of adjacent bat feeding and roosting sites made following a review of aerial photography. This allows us to cross check our interpretation of aerial photography with actual habitat on the ground.
- ⇒ Inspection of the walls and eaves using a torch, binoculars and ladders to locate potential bat roosts
- ⇒ Inspection of all gaps and crevices in the roof and walls potentially suitable for use by bats with an endoscope and inspection mirrors.
- ⇒ Inspection of the roof using a torch and binoculars to locate potential bat roosts
- ⇒ Search of walls, sills, doors for the presence of bat droppings deposited as bats fly inside the building or as they exit and enter their roosts to forage.
- ⇒ Search for detritus associated with bat feeding perches and roosts:- These roosts are usually associated with Brown Long-eared (*Plecotus auritus*) bats in roof voids and under eaves.
- ⇒ A search of the site was made for indications of nesting barn owls such as nesting materials or accumulations of droppings. The surveyor was observant for birds displaying territorial behaviour, carrying prey items or calling.
- ⇒ Dusk emergence survey carried out on 2nd September 2011. Bat commuting routes and activity in and around the building were observed and noted.
 - Passive pre-emergence scan of buildings made with Bat Box Duet, heterodyne and frequency division detector set at 17 KHz below potential roost sites. This would detect pre-emergence social chatter from bats.
 - Active scan with Bat Box III, heterodyne detector set at 40KHz made post emergence. The surveyor then moves around the site adjusting the frequency of the detector in response to bat sightings.

2.2.2 Timing

Date of Visit	Site/ Local area Inspection	Emergence survey
2 nd Sept 2011	19:05 - 19:55	19:55 - 21:15

2.2.3 Weather conditions

The following reflects conditions at the site during the emergence survey; site conditions can have a large impact upon the results of any survey. Conditions for a bat survey at the time of year were regarded as excellent.

- Average wind speed at head height during survey period: 0 mph
- Maximum wind speed at head height during survey period: 2 mph
- Temperature at head height start of survey: 16 Degrees Centigrade at 19:55
- The evening was dry with 80% cloud cover after a very warm day.

2.2.4 Personnel

The survey was carried out by

Mr Jack Sykes BSc (Hons), AIEEM
Natural England Bat License- All species, All counties

Mr Tom Sykes
Field Assistant

3 Results

3.1 Desk Study

Bats

There are records of four species of bat on the datasets within 2km.

Having visited the area we are of the opinion that the records on the Envirotech dataset are likely to be slightly under representative of the species of bats in the local area.

From the pre-existing records, a review of aerial photography, a field assessment of the area adjacent to the site and the experience of the surveyor, bat species which may occur adjacent to the site are:-

- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Whiskered (*Myotis mystacinus*)
- Brandt's (*Myotis brandtii*)
- Noctule (*Nyctalus noctula*)
- Daubenton's (*Myotis daubentonii*)

This assessment has been made on the following basis:

Landscapes can be divided into four categories for use by bats; open, closed, edge and water. Each type of landscape category is suitable for use by a different combination of

bat species. We would classify the landscape immediately adjacent to the site as "edge", within 1km of the site the landscape could be described as "water" "open" and "edge".

The trees to the West of the site were judged to be the primary commuting routes for bats next to the site. This was judged to be a **moderate quality** foraging area for bats.

The River Ribble which runs 150m to the East of the site could be favourable for bats which feed in "water" landscapes such as Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Daubenton's (*Myotis daubentonii*). Soprano Pipistrelle (*Pipistrellus pygmaeus*) are not always confined to landscapes including water bodies, although they have a strong preference for them.

Both Natterer's (*Myotis nattereri*) and Brown Long-eared (*Plecotus auritus*) bats prefer to roost or fly inside enclosed spaces before emerging. There were no enclosed roof voids at the site and we judge they would be unlikely to utilise the adjacent environs as they are insufficiently "closed" for these species.

Noctule (*Nyctalus noctula*) are rarely found roosting in buildings but have been known to do so. These species of bat disperse widely from their roosts, which tend to be in trees, to feed. We would judge it unlikely they would roost in buildings such as those surveyed but are likely to be found in the wider area.

Whiskered (*Myotis mystacinus*), Brandt's (*Myotis brandtii*) and Common Pipistrelle (*Pipistrellus pipistrellus*) are likely to make use of the surrounding pasture fields and hedgerows in the local area to forage.

Barn Owls

There are no records of Barn owls within 1km of the site on the dataset. The habitat around the site appears to be reasonably favourable for hunting Barn owls.

3.2 Field Survey

3.2.1 Habitat Description

The site lies 400m North of Sawley village and 2.5km South of Bolton-by-Bowland. The site is on the Eastern side of a country lane and 150m West of the River Ribble.

The surveyed building is made from natural stone under an unlined Yorkshire slate roof. The site is surrounded by pasture fields and hedgerows with an area of mature trees to the West.

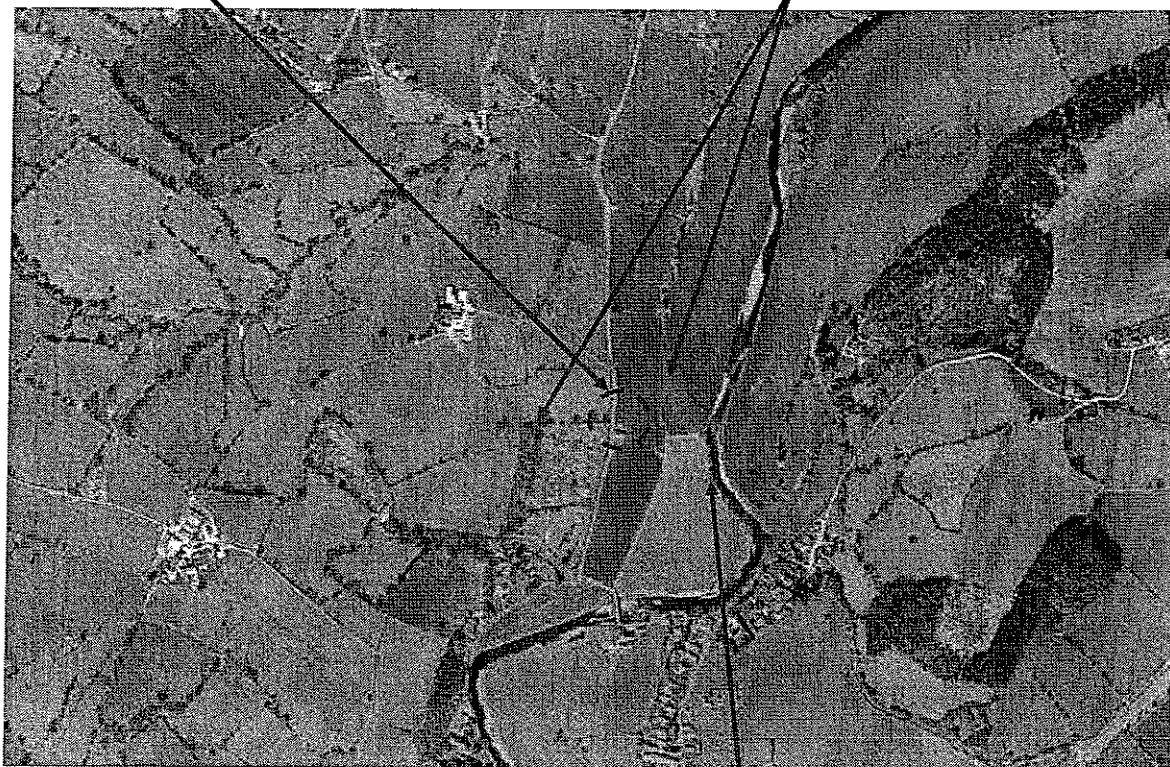
It is judged that bats are likely to commute into and out of the site using the mature trees to the West of the site which are judged to be of **moderate quality**. The pasture fields in the local area may support foraging bats but they are not structurally diverse and are considered to offer only marginal foraging potential.

An annotated satellite image of the surrounding habitat is shown overleaf.

Satellite Image of surrounding area

The site lies in a remote rural area

The site is surrounded by pasture fields and hedgerows



River Ribble to the East

Surveyed building



3.2.2 Bat Roost Survey

Barn

The exterior walls of the building were inspected for gaps, cracks, areas of rotten wood and or signs of bats such as grease marks, bat droppings and feeding detritus. Where appropriate ladders, binoculars and an endoscope were used to inspect areas above head height.

The barn is of natural stone construction and is reasonably well pointed. There is a large structural crack on the South West corner of the building and a number of wall crevices between the stones on the North, East and South elevations which would all be suitable for crevice dwelling bats. These were all inspected with a hand torch, endoscope and ladders. Some of the crevices were too deep and complex to fully inspect even with an endoscope but of the areas that were inspected, no bats or past evidence could be found in or around the holes (e.g. droppings, urine staining, grease marks etc). The Western elevation is fully rendered and offers no roosting potential in the walls.

The eaves of the barn were found to be well sealed with only a couple of wall top access points on the North and South elevations. These were found to be empty with no signs of previous use.

The roof of the barn is made from Yorkshire slate slabs and is unlined. There are a number of missing and slipped slates which bats could gain access under. These gaps were easily inspected from the ground with a pair of close focus binoculars and a 1,000,000 candle power torch but found to be empty. As there is no roof lining, these slate gaps would be draughty and not offer stable roosting conditions for bats.

The one window in the barn was surrounded by red bricks and offered no roosting crevices around the frame.

Internally the barn was found to be very light from missing roof slates, five roof light glass panels, open doorways and the glass window. The wall tops were found to be too exposed for bats to safely roost here and the gable walls were fully sealed at the tops except for one slight gap behind a wooden beam. The full extent of this gap could be seen and was found to be empty. The internal walls have been fully rendered and painted. They offer no roosting crevices anywhere for bats. The roof timber beams offered no joints which were sufficiently deep to allow bats to roost in.

No droppings, urine staining, grease marks, scratch marks or prey items could be found on any of the surfaces inside the barn.

The sheet metal extension on the East elevation of the building was inspected internally and externally. The panels are poorly joined and overlapped leaving the internal space light and draughty. The timber structure is in good condition with no joints and there are no enclosed voids or rooms to offer safe roosting spaces for bats. This structure is judged to offer no roosting potential for bats.

No evidence of bats using the surveyed building or extension could be found throughout the entire inspection.

Emergence Survey

Having undertaken a thorough inspection of the building as well as the surrounding habitat, we judged that an emergence survey would be beneficial to confirm that bats do not utilise the building for roosting.

The surveyors were positioned in a location that covered all potential roosting elevations of the building.

The emergence survey commenced at 19.55 (5 mins before sunset).

At 20.10 the first Soprano Pipistrelle was recorded foraging to the North West of the site around the trees across the road.

Another bat joined this one to forage in the same area at 20.14.

Bat foraging activity continued in this area for the duration of the emergence survey.

At 20.31 and 20.45 Soprano Pipistrelles were detected commuting past the site from the South to the East.

The emergence survey terminated at 21.15.

Checks were made at the end of the survey to look for internal light sensing activity in the barn and extension however no bats were present.

During the survey no bats were seen to emerge from the roof structure or walls of the surveyed building.



3.2.3 Barn Owls

There was no "white wash", owl pellets, feathers or down anywhere on the site. It is judged that barn owls have not used this site in the past.

4 Assessment

4.1 Constraints

Not all external wall crevices could be viewed to their full extent due to the depth and complexity of the holes.

Full co-operation was received from the property owners.

4.2 Interpretation

4.2.1 Presence/ absence

No evidence of bats was found at the time of the survey.

We consider that the building is unlikely to be used by bats for roosting and show no past or present evidence.

There is no evidence that Barn owls have nested and/or roosted anywhere on the site.

4.2.2 Population size class assessment

From a review of adjacent habitat the maximum number of bats that are likely to use the area around the site is of the magnitude 10-100 (Medium).

Barn Owls are considered to be absent.

4.2.3 Site status assessment

Whilst the site itself is unlikely to be used as a roost by bats, there is likely to be use of the adjacent landscape. Bats are likely to rely on a number of roost sites in other buildings and trees in the local area. It is therefore likely that the surveyed building has a low significance for bats.

We are of the opinion that the site is not used by Barn Owls.

4.3 Potential Impacts

4.3.1 Bat Roosts

4.3.1.1 Pre and mid-activity impacts

A worst case scenario will be considered in addressing potential impacts at the site without mitigation.

No signs of past maternity or gathering roosts were found at the site during the survey. The potential for a maternity or gathering roost in the building is judged to be low. Evidence of past use of the site by large numbers of bats such as would occur in a maternity or gathering roost, such as staining on the roof or walls, was absent. We judge there is no risk to a maternity colony or gathering roost at this site from the proposed work.

We judge there is a low risk of disturbing bats in or loss of transitional, bachelor or non breeding female roost sites. A number of external wall crevices were found in the barn which are of suitable size and depth for bats.

In our experience lek sites are commonly found in proximity to the main feeding and commuting routes. The primarily commuting and feeding area at the site was judged to be the mature trees to the West, these were judged to be of moderate quality. There were no potential lek sites identified in the building close enough to these commuting routes which could be used by male bats for leks. It is therefore unlikely that there will be a risk to disturbing bats in lek sites by the proposed work.

There are no areas of rotten wood in the building which offer crevices which could be suitable for hibernating *Pipistrelle* Sp. bats. There are no areas of the building which are sufficiently damp and cool which would be ideal for hibernating *Myotis* Sp. bats. There is very little evidence and limited potential for hibernation at the site; it is therefore unlikely there will be loss of hibernation sites.

There is unlikely to be any loss of a swarming site. Swarming sites are generally found at or near hibernation sites. We judge that the site is unlikely to be used by *Myotis* Sp. bats and Brown Long-eared (*Plecotus auritus*) which have been known to swarm as there are no hibernation sites for these species in the building.

There is little potential for hibernation at the site.

4.3.1.2 Long term impacts

There are likely to be no negative long term impacts on bats. Development of the site is unlikely to affect commuting routes or feeding areas in the long term.

It is the opinion of the surveyor that the loss or creation of any other occasional roosts for crevice dwelling bats will not have a significant long term impact on the local population of the species.

4.3.1.3 Post activity interference impacts

It is our opinion that there will be no significant post activity impacts which may affect bat species.

4.3.1.4 Other impacts

It is our opinion that there will be no significant other negative impacts relating to the proposed work which may affect bat species.

4.3.2 Bat Foraging and Commuting Habitat

There is unlikely to be a disruption to any commuting routes at the site however we judge that any external light sources placed on the barn along the Western elevation may reduce the foraging potential for bats found in the local area.

There is a low potential for use of the site by Barn Owls.

4.4 Legislation and Policy Guidance

4.4.1 Legislative context - Bats

All bat species are protected under Section 39 of the 1994 Conservation (Natural Habitats, &c.) Regulations the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act.

Annex IV of the *Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (EC Habitats Directive) lists animal and plant species of Community interest in need of strict protection; this includes all bat species.

In the UK, the EC Habitats Directive has been transposed into national laws by means of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). These are commonly and collectively known as the 'Habitats Regulations' and they give bats, their breeding sites and resting places a high level of strict protection.

In summary, it is a criminal offence to:

- ⇒ capture or kill a bat;
- ⇒ disturb a bat whilst in a place of shelter or rest; or
- ⇒ damage or destroy a bat's breeding site or resting place.

The breeding sites and resting places of bats are usually known as 'roosts' and resting places also include, for example, feeding perches where a bat consumes its prey. Bat roosts are protected even when bats are not present.

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

It is essential that all contractors are instructed to work with particular care in order to avoid disturbing or harming bats. All those working at the site must be aware of the procedures to be followed if bats are found during works. Project Managers must commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

Natural England advises that, if possible, any works at bat roosts should be undertaken so as not to affect the bats and/or their roosts.

With careful working, it is judged that no significant disturbance to bats will occur at the site and no offence will be committed.

4.4.2 Legislative context - Barn Owls

It is an offence under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) to

- ⇒ Kill or injure a Barn Owl
- ⇒ Damaging or destroy the active nest site with eggs or young or before eggs are laid

- ⇒ Disturbing the dependent young of a Barn Owl
- ⇒ Intentionally or recklessly disturb any Barn Owl whilst building a nest or is in, on or near an active nest site.

It is judged that so long as work on the building takes place when Barn Owls are not nesting, then no offence will be committed.

If Barn Owls start to nest on site, work must be deferred until the young are fledged.

5 Recommendations and Mitigation

5.1 Further Survey

We consider that the risk to bats in the building will remain low and no additional survey work is required.

5.2 Mitigation Measures

5.2.1 Mitigation for Roost Sites

Natural England requires that mitigation addresses the impacts picked up by the site assessment, as follows:-

- Quantitative characteristics: There should be no net loss of roost sites, and in fact where significant impacts are predicted there will be an expectation that compensation will provide an enhanced resource compared with that to be lost. The reasoning behind this concept is that the acceptability of newly created roosts by bats is not predictable
- Qualitative characteristics: the plans should aim to replace like with like. As an extreme example, it would be unacceptable to replace maternity roosts with hibernation sites.
- Functional characteristics: compensation should aim to ensure that the affected bat population can function as before. This may require attention to the environment around the roost.

Natural England also recommends that precautions are taken to avoid the deliberate killing or injury of bats during development work at the site.

The site survey found no evidence of use of the building by roosting bats.

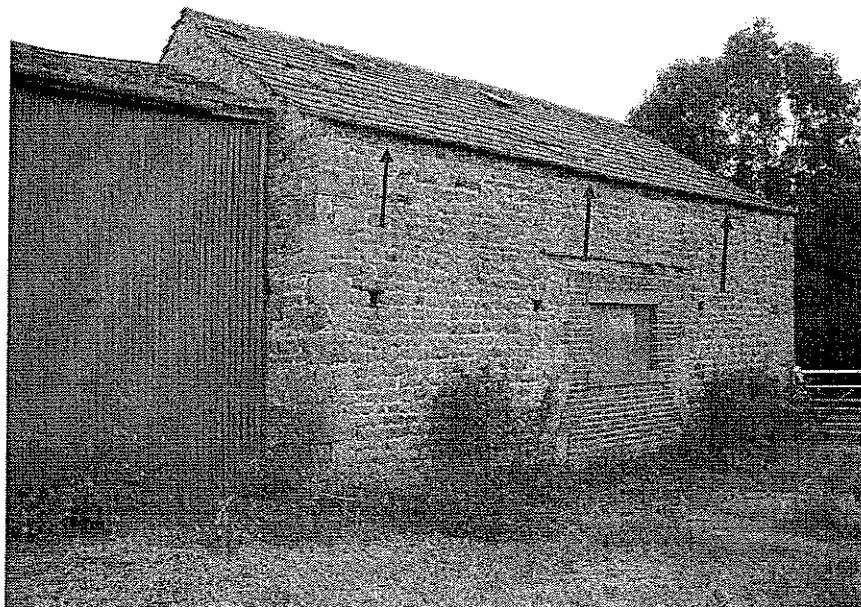
As a precautionary approach the following guidelines will be adhered to.

1. All contractors on the site will be made aware of the possible presence of bats prior to the commencement of work.
2. Contractors will be provided with the contact details of an appropriately qualified individual who can provide advice in relation to bats at any time during work. In the event that bats are found during work, unless the action has already been cleared by a suitably qualified individual, **all work will cease** and an appropriately qualified individual will be contacted for further advice.

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3. Contractors will be observant during any demolition work for bats which may use the building if new areas of the roof are exposed and left open over night. Bats are opportunistic and may make use of gaps opened up during work overnight.
4. If it is necessary to remove a bat to avoid it being harmed, gloves should be worn. It should be carefully caught in a cardboard box and kept in the dark in a quiet place until it can be released at dusk near to where it was found, or moved to an undisturbed part of the building, with outside access, and placed in a location safe from predators.
5. **If bats or bat roosts are found during work, all work should cease** as per point 2. The site will need to be re-assessed in regard to its use by bats. A Natural England license may be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration, destruction or obstruction of roost site.
6. No pointing of any wall crevices shall be undertaken to which the full extent of the crevice cannot be seen. This minimises the risk of entombing bats in the pointing between the stonework.
7. A total of six wall cavity roosting points will be created or maintained on the North and South elevations (three on each elevation) at a height of just under the eaves. These access points will maintain the current roosting potential of the building for crevice dwelling bats found locally. These roosting crevices will offer warmer roosting conditions in what will become a heated building, giving a net improvement on the current conditions of the cold walls. (See Appendix 3 - Bat roost plans)

These roosting points should be located in positions similar to those indicated below.



Following English Nature (Natural England) guidance Mitchell-Jones (2004), if these guidelines are followed we would consider that on balance, a disturbance to bat species which could be contrary to the 1994 Habitat Regulations and Wildlife and Countryside Act 1981 (as amended) is unlikely. **If bats are found prior to or during work a license application may be required.**

8. If Barn Owls are seen nesting at the site, all work should cease. The site will need to be re-assessed in regard to its use by Barn Owls. **A Natural England license may be required if continuing work is, on balance, likely to result in the disturbance of nesting Barn Owls or their killing or injury.**

5.2.2 Mitigation for Foraging and Commuting Habitat

9. No external lighting will be placed on the Western elevation of the barn.

5.3 Requirement for Habitats Regulations (EPS) Licence

At this stage, we judge that a Natural England license will not be required to cover work on the building. The loss of potential roost sites will be avoided and no significant disturbance to bats will occur, so long as the recommendations at paragraphs 5.1 and 5.2 of this report are followed.

If bats are disturbed or bats are found as a result of work, **all work must cease** as per point 5 above and the site will need to be re-assessed by a suitably qualified person with regard to its use by bats. **A Natural England license may be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration, destruction or obstruction of a roost site.**

6 Summary

An application is to be submitted for the conversion of a barn to form a residential property and the demolition of the existing sheet metal extension structure.

A bat and Barn owl survey was requested following guidance under Regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 1994, the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and Planning Policy Statement 9 (PPS9) Biodiversity and Geological Conservation.

The survey was undertaken by a licensed surveyor and experienced field assistant following a methodology which would be likely to identify past or current use of the site by bat species and/or Barn owls.

The site survey found no past or present evidence of bats roosting or Barn Owls nesting in the building.

It is judged that the work can take place without affecting bats or Barn owls, **so long as the recommendations in paragraphs 5.1 and 5.2 of this report are followed.**

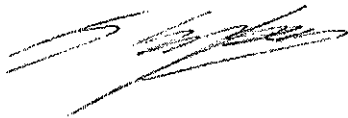
On the basis of survey information, specialist knowledge of bat species and the mitigation

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that has been proposed, it is considered that on balance the proposed activity is reasonably unlikely to result in an offence under regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 1994. We do not consider there to be a need for a Natural England licence at this time.

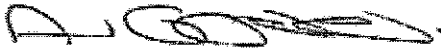
I certify that this report reflects my objective opinion of the facts found in relation to the instruction received and information available based upon the methodology, assumptions and constraints detailed within this report.

Report compiled by



Jack Sykes BSc (Hons) AIEEM
Surveyor
Saturday 3rd September 2011

Signed



Andrew Gardner BSc (Hons), MSc, MIEEM, MRICS, CEnv, Dip NDEA
Director
Saturday 3rd September 2011

7 References

Information from the following sources has been used in preparing the survey report.

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Appendix 1 Previous Survey Information

No previous survey information is known to exist.

Appendix 2 Photographs



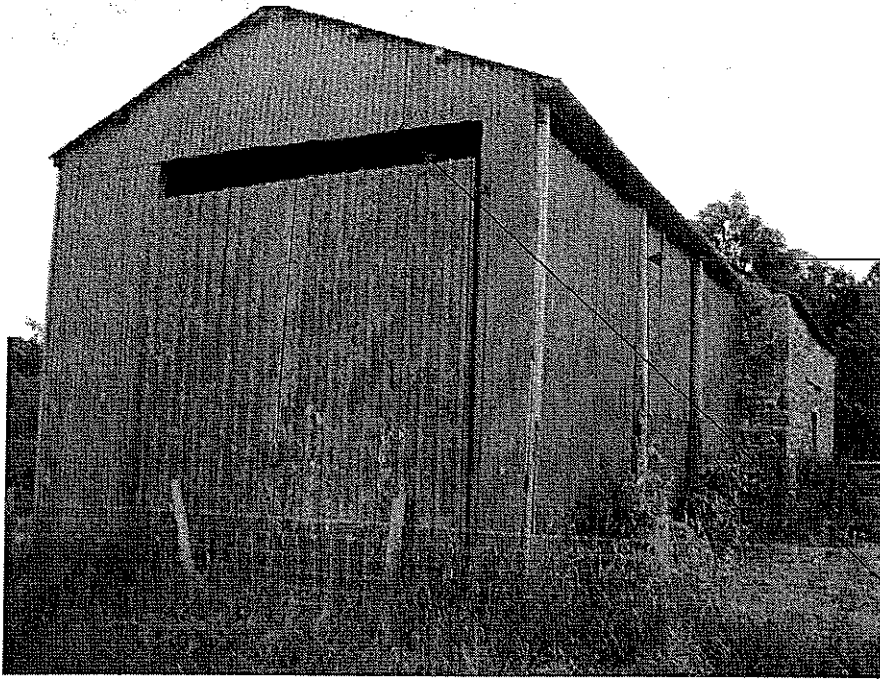
Western elevation
fully rendered

Barn external - Northern and Western elevations



A number of crevices
in the external
elevations

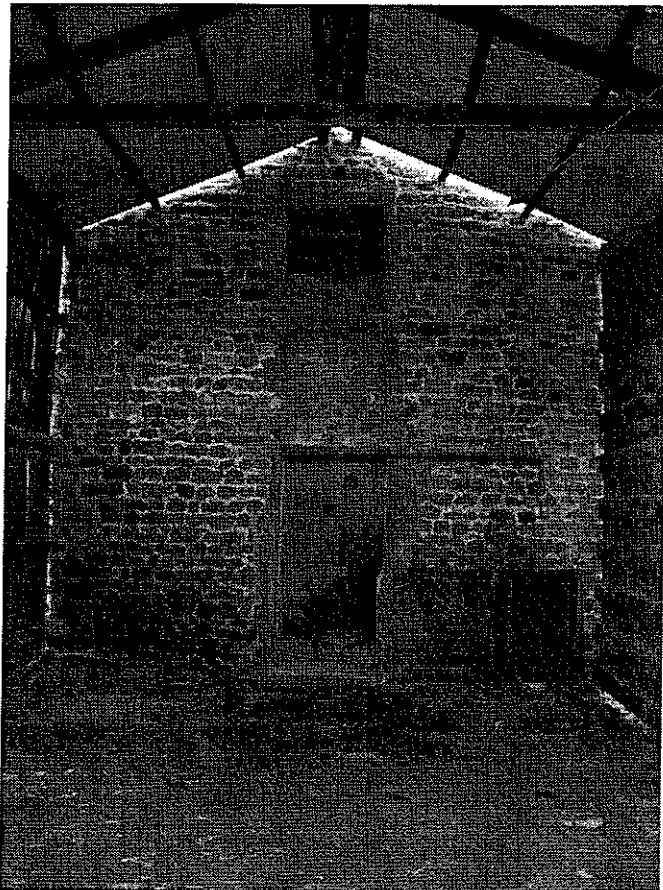
Barn external - Northern elevation



No roosting potential
between the panels

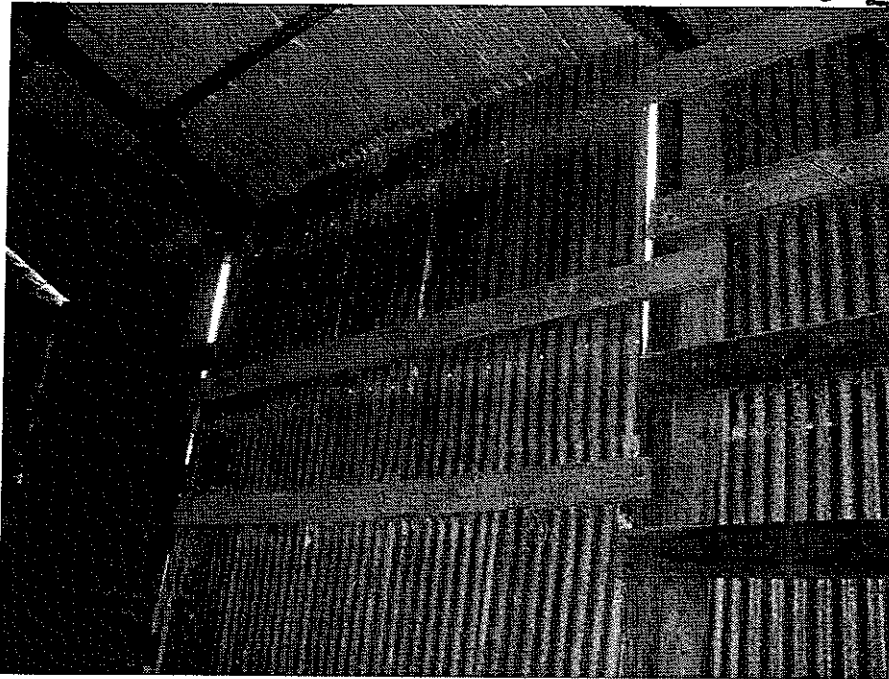
The poor fitting leaves
the internal space light
and draughty

Extension external - Eastern elevation



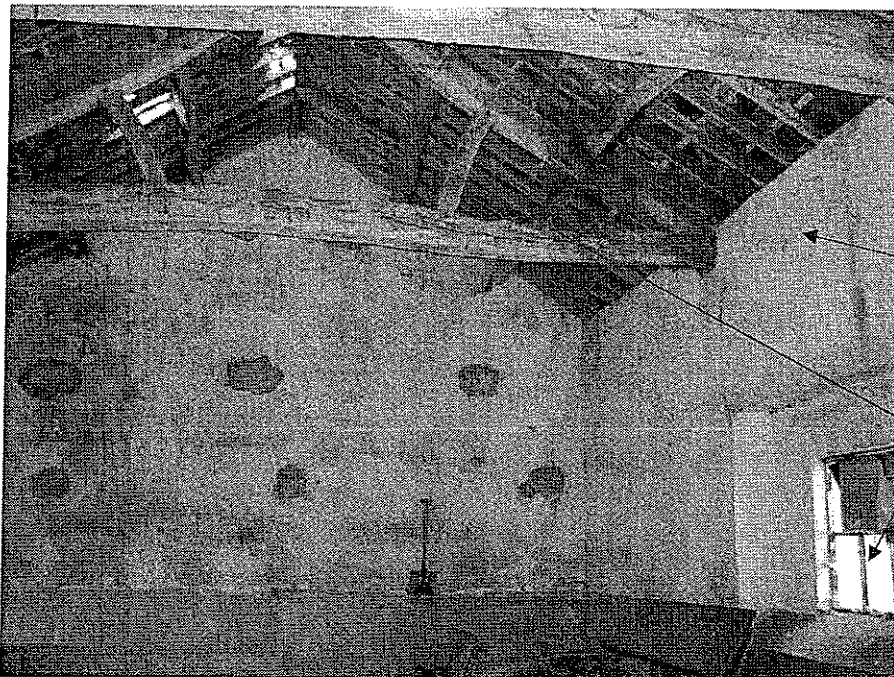
Extension internal showing the barn's Eastern elevation

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Timber structure well
jointed offering no
roosting potential for
bats

Extension internal - Wall panels



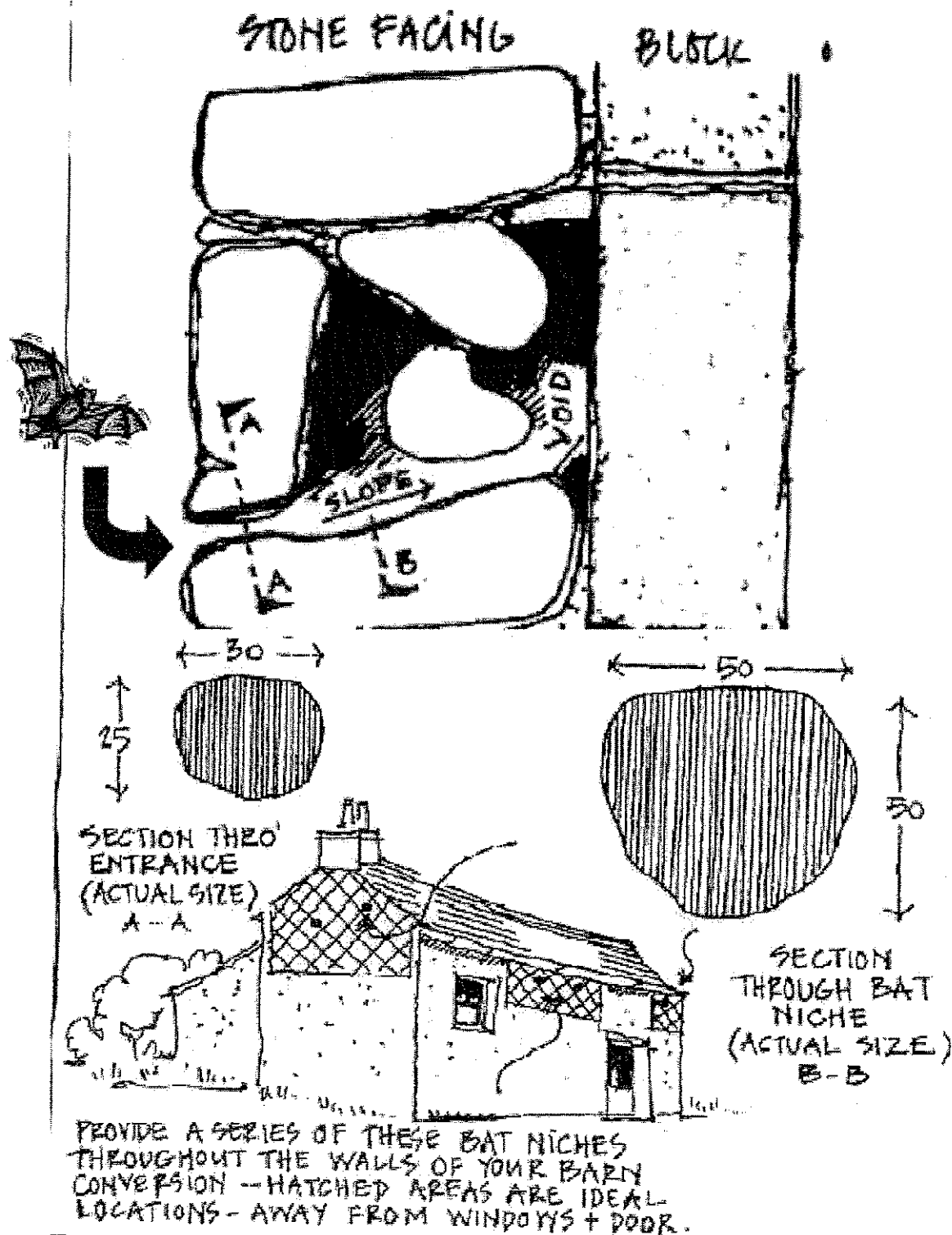
Walls fully rendered and
sealed

Internal space very light

Barn internal

Appendix 3 Bat Roost plans

Detail 5A: Stone faced cavity wall bat roost



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Design & Access/Planning Statement

**PROPOSED CONVERSION OF A REDUNDANT FIELD BARN INTO
A SINGLE RESIDENTIAL DWELLING.**

Applicant
Mr S Dobson
Hill House Rd.
Sawley Rd
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BB7 4QS

Site
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Bolton By Bowland Rd
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This statement has been structured with reference to CABE best practice guidance;
Design & Access Statements – how to write read and use them. CABE 2006. The

document also includes an assessment of the development proposal in relation to national, regional and local planning policies.

1.0 Background

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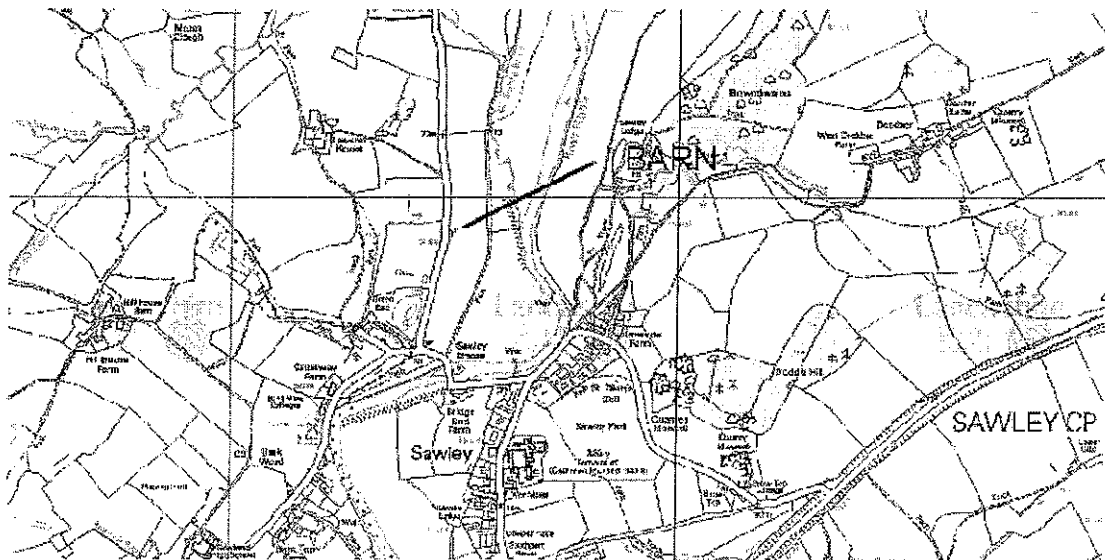
5.0 Planning Context

- Planning History
- Planning Policy Framework
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Plans & Drawings

- 1.1 Rural Futures have been commissioned by Mr Steven Dobson to submit a planning application for the conversion of a redundant agricultural barn to a single residential dwelling. This statement should be read in conjunction with the attached planning application forms and accompanying survey reports.
- 1.2 Jacksons Barn is located within an area of Open Countryside, fronting directly onto Sawley Rd, 0.5Km north of Sawley village. The barn has not been used for agricultural purposes for over ten years. The total site area extends to 0.12ha.



- 1.3 The barn itself is constructed of stone with a steel framed extension to the east side. The site area includes two yard areas either side of the building. The area to the south is concreted with internal concrete block retaining walls.
- 1.4 The barn will be converted into a single residential dwelling comprising of ground floor living and kitchen areas with three bedrooms on the first floor. Externally an existing car parking area allows for two cars to be parked and turned within the site. The residential curtilage will include the enclosed area to the south which will provide a small garden area. The site is not connected to the mains sewer so this area will also accommodate the onsite waste treatment plant (details in Annex 1).

SECTION 2 CONTEXT OF SITE

Assessment

- 2.1** Jackson Barn lies in open countryside, approximately 500 metres north of Sawley village. The property benefits from direct access onto Sawley Road. There are no direct neighbours and there is parking space adjacent to the property.
- 2.2** Jackson Barn is a redundant agricultural building. The main building is constructed of stone with corrugated sheet clad building extending to the East. It is understood that it has not been used as a farm building for over ten years.
- 2.3** The site lies within the Forest Of Bowland AONB. It also lies within Flood Zone 2 of the Ribble Valley Flood plain.

Involvement

- 2.4** No contact has been made with the Local Planning Authority in respect of pre-application advice.
- 2.5** A structural survey has been carried out to assess the condition of the building and its suitability for conversion. A bat and barn owl survey has also been undertaken. As the building lies within Flood Zone 2 a full Flood Risk Assessment has also been undertaken (See enclosed surveys)

Evaluation

- 2.6** The two principle conflicts within the proposal are based around the landscape impact of the development and the mitigation of flood risk. In addition the site must comply with a number of policy considerations associated with structural integrity of the existing building and the wider impact of the development on biodiversity. Finally the design will aim to reduce the CO₂ footprint of the development without conflicting with the vernacular qualities of the existing structure.
- 2.7** A structural survey has been undertaken by PSA Design to assess the condition of the building. Although some minor remedial works are required, the building is a stable structure and capable of refurbishment.
- 2.8** The bat and barn owl survey shows that there is no evidence of bats or owls present in the building.
- 2.9** The FRA provides mitigation measures associated with flood risk. The main issue is a requirement to raise the ground floor level above 72.33 AOD (See accompanying FRA) To raise the ground floor to this level and retain the existing traditional timber beams the overall roof height needs to increase by 1.65m.

Design

- 2.10** The principle design issues are based around compliance with local planning policy in terms of reuse of buildings of landscape value, especially those with in the AONB. In this case the second design consideration is associated with the flood risk present at the site and how this can be mitigated.
- 2.11** Prior to detailed design these two issues need to be resolved so that the final layout has minimum landscape impact, mitigates any flood risk yet still created an attractive development capable of accommodating modern domestic requirements.
- 2.12** One final design consideration was associated with the reduction in CO2 emissions from the site. Again these requirements lead to a potential conflict with the landscape and vernacular heritage considerations. Based on the available technology options it was decided that photo voltaic provided the most appropriate solution. These are to be located on the southern roof elevation. The decision was based on the following alternative options:
- wind was ruled out due to the visual impact of wind turbines combined with the local wind strength .
 - Biomass heating was not appropriate due to the scale of the development making biomass costly to install. An external hopper would also have been required which would need the construction of a new structure out with the barn
 - The applicant felt that electricity was of more importance than heat so solar was ruled out as a result.

SECTION 3 DESIGN PRINCIPLES & CONCEPTS**Use**

- 3.1** The conversion will create a high quality residential unit located within close proximity of Sawley village.
- 3.2** The new dwelling will have three bedrooms located on the first floor with living areas on the ground floor. The site provides adequate parking provision for two cars through an existing opening onto to Sawley Rd. The site is already fenced off from the surrounding land.

Amount

- 3.3** The existing total ground floor area of the building is 128m². The proposed development will reduce the overall footprint of the building to 76m² through the removal of the unsightly corrugated tin sheet building to the East. The concrete yard area directly to the south of the barn extends to 160m². This area will be retained for parking and a raised deck area which will provide access to the building. The remaining site will consist of garden areas to the north and south.

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- 3.4 Internally the building will consist of a living and kitchen area on the ground floor and three bedrooms on the first floor.

Layout

- 3.5 The layout of the building is restricted to the original stone footprint. Parking areas are restricted to the existing areas of hard surface. No new structures are proposed as this would compromise the openness of the site in terms of its landscape impact within the AONB. The existing stone structure is also located the furthest distance from the potential flood risk.

- 3.6 Existing openings have been retained where ever possible. Existing openings exist within the eastern, southern and northern elevations. The barn also has five existing roof lights. Only one new opening is required in the western elevation overlooking the road and one additional roof light will be incorporated into the northern elevation.

Scale

- 3.7 The proposal footprint represents a reduced scale of development within the existing curtilage and site boundary. With the removal of the tin corrugated barn the site will reduce the developed footprint by some 20%.
The one increase in scale will be associated with roof height. In order to raise the ground floor level above that associated with the sites risk of flooding the roof height has to be raised. The detailed drawing shows the change in roof height level. The increase will be 1.65m in total. This height will raise the ground floor level and provide sufficient headroom for the re use of the existing main timber roof structure. Within the design criteria the aim is to re use all the existing internal and external features of the building.

Landscaping

- 3.8 Landscaping will be restricted to a new hedge around the perimeter of the entire site. The hedge species will include quick thorn, blackthorn, holly and dog rose. The existing stone walls facing onto the road will be retained as will the existing concrete block wall within the yard area to the south of the barn.

Appearance

- 3.9 Overall the site's visual appearance will improve as the unsightly corrugated tin sheet building will be removed leaving just the traditional stone building behind. This will provide a landscape improvement within the AONB. The raised wall heights will utilise local stone that matches the existing building. The existing slate roof and internal timber roof structure will be retained and raised to the new roof height.
- 3.10 All windows and doors will be in timber and will utilise both existing and previous openings. The large barn door opening on the northern elevation will be retained. The design will maintain the vernacular style of the local area and is sympathetic to the existing structure.

- 3.11 The five existing and one new roof lights will be conservation roof lights that lie flush to the slates.
- 3.12 As part of the design criteria two small photo voltaic panels will be located on the southern aspect of the development. This will reduce the CO₂ emissions of the site by approximately 15% without compromising the existing structure or its surroundings.
- 3.13 The foul water will be treated through a Matrix package treatment plant. Full details are provided in Annex 1. Treated water and surface water will be discharged through the existing culvert located at the south end of the site. The route of discharge is highlighted on the inset location plan and Proposed Site Layout.
- 3.14 The openness of the countryside and character of the area will not be compromised. There will be a potential improvement in the appearance of the site as a result of the removal of the corrugated tin sheet building. Although the roof height will be raised to meet the flood mitigation requirements all the existing main walls will be retained and any new stone will match the existing structure.

SECTION 4 ACCESS

An Accessible Environment

- 4.1 The proposed development maintains an accessible environment.
- 4.2 There is adequate parking for 2 vehicles as well as enough existing hard standing to allow vehicles to turn within the site.

Vehicular and Transport Links

- 4.3 The property provides excellent access to the highway network. The site is accessed directly off Sawley Rd with good sight lines in both directions. The barn is less than 200m from Sawley village and only 1 km from the A59.

Access and Movement Patterns

- 4.5 Based on normal residential use of a three bed house it is anticipated that daily vehicle movements are unlikely to exceed four car movements per day.

Emergency Services Access

- 4.6 Access for emergency services is good and will not be affected by the development.

Commitment to Design & Access Process

- 4.7 The Design and Access Statement will be seen as a working document and will be maintained through the planning and development stages.

SECTION 5 PLANNING POLICY CONTEXT

Planning History

- 5.1 As far as we are aware there is no planning history associated with this building.

Planning Policy Framework

- 5.2 Relevant planning policy and guidance in the determination of this application can be identified as being contained within Planning Policy Guidance Notes & Statements (PPGs & PPS's), Government circulars and the Ribble Valley Local Plan.

Planning Policy Statement 3 (PPS3) - Housing

- 5.3 PPS 3 state that where there is less than 5 years supply of deliverable sites Council's should consider favourably planning applications for housing having regard for PPS 3 paragraph 69.

"In general, in deciding planning applications, Local Planning Authorities should have regard to:

- *Achieving high quality housing*
- *Ensuring developments achieve a good mix of housing reflecting the accommodation requirements of specific groups, in particular, families and older people.*
- *The suitability of a site for housing, including its environmental sustainability*
- *Using land effectively and efficiently*
- *Ensuring proposed development is in line with planning for housing objectives, reflecting the need and demand for housing in, and the spatial vision for, the area and does not undermine wider policy objectives eg housing market renewal issues"*

RVBC does not presently have a five year housing land supply and the approval of this application will assist it in making progress towards achieving this requirement.

Planning Policy Statement 7 (PPS7)

- 5.4 The guidance relevant to the application and contained within PPS7 is highlighted below.

Objectives:

The Government's objectives for rural areas that are relevant to this Planning Policy Statement (PPS) are:

Key Principles:

1. Sustainable development is the core principle underpinning land use planning. The following key principles should be applied in combination with all the policies set out in this PPS:

(i) Decisions on development proposals should be based on sustainable development principles, ensuring an integrated approach to the consideration of:

- social inclusion, recognising the needs of everyone;*
- effective protection and enhancement of the environment;*
- prudent use of natural resources; and*

(v) Priority should be given to the re-use of previously-developed 'brownfield' sites in preference to the development of greenfield sites, except in cases where there are no brownfield sites available, or these brownfield sites perform so poorly in terms of sustainability considerations (for example, in their remoteness from settlements and services) in comparison with greenfield sites.

(vi) All development in rural areas should be well designed and inclusive, in keeping and scale with its location, and sensitive to the character of the countryside and local distinctiveness.

The development is associated with the reuse of a redundant traditional building that is an important feature within the landscape. The design of the dwelling utilises the existing features of the barn and will be undertaken using traditional materials. It will also remove the unsightly corrugated extension. The development will include a micro renewable power system that will ensure the 'prudent use of natural resources'.

Planning Policy Statement 25 (PPS25) – Development and Flood Risk

5.5 "Key Planning Objectives

The aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk.

Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall."

A full Flood Risk Analysis accompanies the application along with mitigation measures

5.7 General policies.

Policy G1– *“All development proposals will be expected to provide a high standard of building design and landscape quality. Development which does so will be permitted, unless it adversely affects the amenities of the surrounding area.*

In determining planning applications the following criteria will be applied:

(a) Development should be sympathetic to existing and proposed land uses in terms of its size, intensity and nature.

The development will reduce the overall footprint of the existing structure through the removal of the unsightly tin sheeted building. It will utilise the existing traditional features of the stone barn and minimise the number of new openings. Residential curtilage has been kept to an absolute minimum and will be screened through the creation of hedge planting around the perimeter of the site.

As a result the proposed structure will retain the vernacular characteristics of the existing structure. The removal of the unsightly corrugated structure will provide an improvement to the sites landscape impact.

(b) The likely scale and type of traffic generation will be assessed in relationship to the highway infrastructure and the proposed and existing public transport network. This will include safety, operational efficiency, amenity and environmental considerations

There will be no significant increase in traffic generated from the new use. The site is only 200m from Sawley village from where access can be gained to the local bus network.

(c) Developments should make adequate arrangements for car parking (see Policy T7).

Two parking spaces will be provided which will be sufficient for the proposed residential use.

(d) A safe access should be provided which is suitable to accommodate the scale and type of traffic likely to be generated.

Access on and offsite will allow for a vehicle to pull off the carriageway before entering the parking area. Site lines in both directions meet highways standards. Within the site there will be sufficient space to turn a vehicle.

(e) The density, layout and relationship between buildings is of major importance. Particular emphasis will be placed on visual appearance and the relationship to surroundings as well as the effects of development on existing amenities.

The overall intensity of development will reduce as a result of the demolition of the unsightly tin sheeted building. The visual appearance of the site will be retained through the use of existing openings and traditional

materials. There are no immediate neighbours so there will be no impact on local amenity.

(f) Developments should provide adequate arrangements for servicing and public utilities

The site benefits from close proximity to mains power and water. Foul waste will be dealt with through a package treatment plant located within the boundary of the site (see Proposed Site Layout). Full details are included in Annex 1. All surface and treated waste water will link to the existing culvert that runs through the site and feeds into the Ribble.

(g) Developments should provide adequate day lighting and privacy

The design provides adequate natural light to enter the building without having a detrimental effect on the traditional appearance of the barn. There are no immediate neighbours so there will be no impact of privacy of surrounding properties.

(h) Materials used should be sympathetic to the character of the area

The design will retain the stone finish of the existing building. s previously highlighted the roof will be raised by 1.65m to allow for flood mitigation requirements. The additional stone will be locally sourced to match the existing structure. The existing slate roof will be retained as will the principle internal timbers. Any replacement slates will be sourced to match those already in situ.

(i) Developments should not result in the loss of important open space including public and private playing fields

There will be no impact on existing open spaces as a result of the development.

(j) Developments should not damage SSSI's, County Heritage Sites, Local Nature Reserves or other sites of nature conservation importance.

There will be no impact on existing protected areas.

(k) Development should not require culverting, artificial channelling or destruction of a watercourse. Wherever possible watercourses should be maintained within a reasonable corridor of native vegetation.

There will be no impact on existing watercourses as a result of the development.

(l) Developments should be economic in the use of land, water and aggregates and should not prejudice future developments which would provide significant environmental and amenity improvements.

The development will provide a new use for a redundant barn. It will reduce the footprint of the developed site and reuse the existing structure. It will not prejudice any proposed future development.

(m) Where it is the intention to rely upon a private water supply developments should provide an adequate means of water supply that will not derogate existing users.

Mains water passes by the site.

5.8 POLICY G5 *"Outside the main settlement boundaries and the village boundaries planning consent will only be granted for small-scale developments which are:*

- i) essential to the local economy or the social well being of the area; or*
- ii) needed for the purposes of agriculture or forestry; or*
- iii) sites developed for local needs housing (subject to Policy H20 of this plan); or*
- iv) small scale tourism developments and small scale recreational developments appropriate to a rural area subject to Policy RT1; or*
- v) other small-scale uses appropriate to a rural area which conform to the policies of this plan.*

The supporting statement indicates the proposal to be small scale and appropriate in that the site is accessible to local amenities within Sawley and provides an alternative use to a structure that is presently redundant yet is important within the landscape.

ENVIRONMENT

5.9 POLICY ENV2

"The landscape and character of those areas immediately adjacent to the Forest of Bowland Areas of Outstanding Natural Beauty will be protected, conserved and wherever possible enhanced. The environmental effects of proposals will be a major consideration and the design, materials, scale, massing and landscaping of development will be important factors in deciding planning applications (see Policy G1). The protection, conservation and compatibility with policies to enhance the natural beauty of the adjacent Forest of Bowland AONB will be the most important considerations in the assessment of any development proposal."

The site lies on the south east edge of the AONB. Through the development a redundant traditional barn will have a new sustainable use that preserves the essential vernacular features. Through the removal of the modern tin sheeted building the visual impact of the site will be improved adding to the landscape value of the area.

5.10 Policy ENV7

Development proposals which would have an adverse effect on wildlife species protected by law will not be granted planning permission, unless arrangements can be made through planning conditions or agreements to secure the protection of the species

The proposal will have no adverse effect on protected species. A bat and owl survey accompanies the application along with proposed mitigation measures.

HOUSING**5.11 Policy H2**

"Outside of settlement boundaries, as defined on the proposals map, residential development will be limited to:

- i Development essential for the purposes of agriculture or forestry or uses wholly appropriate to the rural area.*
- ii The appropriate conversion of buildings to dwellings. Provided they are suitably located and the form and bulk and general design are in keeping with their surroundings. Buildings must be structurally sound and capable of conversion without the need for complete or substantial reconstruction (see Policies H15, H16, and H17 for advice)*
- iii Residential development specifically intended to meet a proven local need (see section 5.14 for further advice)*

The impact of proposals on the countryside will be an important consideration in determining applications. Development should be appropriately sited and landscaped. In addition scale, design and materials used must reflect the character of the area, and the nature of the enterprise"

The principle of a barn conversion for residential use is accepted in paragraph ii. It is suggested that the barn to be suitably located close to Sawley village and its local amenities including public transport connections. Its form, bulk and general design are in keeping with its surroundings and the building is structurally sound and capable of conversion without the need for complete or substantial reconstruction.

Although the roof height will be raised the increase in height represents only a minor increase in terms of the existing height of the structure. The need for the increase in roof height is based on the need to mitigate the threat of flooding linked to the need to retain the vernacular characteristics of the existing roof structure.

The proposed development therefore meets with the criteria highlighted in Policy H2.

5.12 Policy H15

"Planning permission will be granted for conversion of buildings to dwellings in situations where

- i) there need be no unnecessary expenditure by public authorities and utilities on the provision of infrastructure,*
- ii) there will be no materially damaging effect on the landscape qualities of the area,*
- iii) there would be no unacceptable harm to nature conservation interests*
- iv) there would be no detrimental effect on the rural economy and*
- v) within the AONB the proposal should be consistent with the conservation of the natural beauty of the area.*

All the required infrastructure requirements already exist adjacent to the site. The overall landscape improvement to the area and wider AONB will be provided through the demolition of the unsightly tin sheeted building and through the sensitive conversion of a redundant traditional building. There will be no impact on local nature conservation interests.

The building is not suitable for conversion to workspace due to its isolated location. Without residential use the security of the site would be unacceptable for any form of workspace or storage purposes.

5.13 Policy H16

"Conversion of buildings to dwellings will be granted providing

- a) the building is structurally sound and capable of conversion for the proposed use without the need for extensive building or major alterations which would adversely affect the character and appearance of the building, the Council will require a structural survey is submitted with all planning applications. This should include plans of any rebuilding which is proposed,*
- b) the building is of sufficient size to provide minimal living accommodation without the need for further extensions which would harm the character or appearance of the building*
- c) the character of the building and its materials are appropriate to its surroundings and the building is worthy of retention because of its intrinsic interest or potential or its contribution to its setting.*
- d) the building, if provided under permitted development rights, has a genuine history of use for agriculture or another rural enterprise.*

The building is structurally sound and capable of conversion without the need for major rebuilding works. The only addition will be the increase in roof height as previously described. A full structural survey accompanies the application. The traditional building is of sufficient scale for residential purposes. The proposed design will utilise the existing structure and maintain the existing features. The barn is a traditional field barn located alongside open farm land. Through the removal of the tin extension the traditional character of the building will be reinstated. As such it meets the landscape objectives of the AONB by preserving the vernacular heritage of the area through a suitable and sustainable alternative use.

5.14 Policy H17

"Planning permission for the conversion of buildings will be granted providing

- a) the design of the conversion is of a high standard and is in keeping with local tradition, particularly in terms of material, geometric form and windows and door openings.*
- b) the impact of the development or the effects of the creation of a garden area, together with any garaging or car parking facilities or other additions will not harm the appearance or function of the area in which it is situated*
- c) the access to the site should be to a standard without harming the appearance of the area"*

All external materials will be retained. Existing openings have been utilised with the minimal creation of new openings. The small garden and parking area have been kept to an absolute minimum and will be screened from the flood plain by the proposed native species hedge planting. The car parking area will be screened by the existing internal block wall. There are no additional external buildings proposed. Access to the site will utilise the existing opening onto Sawley Rd.

- 5.15** Policy H17 goes on to provide guidance in respect of roofs, window openings and materials. In respect of the written guidance the following design consideration have been provided:

- i) **Roofs** – Although the roof line will be raised the single unbroken slope will be retained. The existing roof already has five roof lights. The proposed structure will include just one addition. All roof lights will be 'conservation' style openings with non reflective glass.
- ii) **New openings** – The barn benefits from a number of existing openings and a number of older openings that have since been bricked up. The aim is to utilise all the old openings and remove the brick infill's returning the barn to its original stone appearance. Only one small new opening is required in the western elevation overlooking the road.
- iii) **Materials** – All the existing external and internal features will be retained including the stone walls and slate roof. Any new materials including slates and stone will be locally sourced to match the existing structure. New sills will utilise matching locally sourced stone.

SECTION 6 CONCLUSION

- 6.1 Although this is an isolated field barn it is located in a highly accessible location and is suitable for conversion to residential use. The building is redundant for agricultural purposes and unsuitable for work space due to the lack of security on site. As such it has little sustainable future other than through sensitive conversion to residential use. The landscape impact of the development will improve the existing views across the flood plain through the removal of the unsightly corrugated extension.
- 6.2 The design evaluation required that the development mitigated any potential flood risk while at the same time improving the appearance and preserving the vernacular character of the building within the AONB. The proposed development reduces the overall built footprint by 20%, removes the modern extension and preserves the traditional character of the existing structure including the internal timber beams. To achieve these objectives the roof has been raised to accommodate the residential use.
- 6.3 The proposal is for a sensitively designed structure that meets policy in terms of housing, landscape and environmental impact. As such we hope that the planning authority will grant planning permission for the proposed residential use.

Annex 1

Proposed Package Treatment Plant

Under Circular 03/99 Planning Requirements in Respect of the Use of Non Mains Sewerage Incorporating Septic Tanks in New Development the following information has been provided.

i) Alternative disposal options:

The nearest mains sewage is 200m to the South East at Sawley. This connection is on the south side of the Ribble. This leaves two options; either a septic tank or some form of treatment plant. Due to the flood risk present at the south end of the site a septic tank is not appropriate as its integrity could not be guaranteed in the event of flood inundation. Package treatment plants are sealed systems that do not allow water ingress. The applicant has looked at various providers of sewage treatment plant and has decided that the Matrix Treatment plant provides the highest levels of efficiency

ii) Final Discharge:

The treatment plant will discharge into the existing field drain to the south of the site (See Proposed Site Plan). From here it passes through a culvert into an open drain that eventually leads to the Rv. Ribble. The route of the drain is highlighted on the inset Location Plan. Subject to planning approval the applicant will apply to the EA for a discharge permit for the treatment plant. Details of the proposed plant are provided below.

iii) Assessment of Discharge:

A Matrix CLF 1 will be utilised. This is rated for six persons. This system provides a maximum flow rate of 1.2m³ per day into the discharge point. Maximum BOD from this system is estimated at 0.36kg/day

The proposed Matrix Treatment plant provides an efficient, reliable, sewage treatment system for all residential, commercial and industrial applications. With the imminent implementation of mandatory legislation, the MATRIX treatment plant has undergone extensive independent testing in accordance with EN12566-Pt 3 making it fully compliant with the New European Standard.

The Matrix treatment plant is a very tough impact resistant tank with outstanding performance and exceptional effluent quality.

- Industrial grade propylene body with high impact resistance
- Stable base for stability and ease of handling and storage
- Compact design for easy handling and installation
- BS EN 12566 – PT3 (tested and certified to the new European Standard)
- Average performance rating up to 97% efficiency
- BOD, SS & NH₄ up to 98.8% efficiency based on maximum individual results
- Failure alarm systems as standard
- Can operate when submerged
- No mechanical or electrical parts in the plant
- No visual intrusion. Flat, flush ground covers suitable for 1 tonne load.
- Low running and maintenance costs.
- Simple non specialised maintenance

320110790 **PSA**
DESIGN

engineering your environment
CIVIL, STRUCTURAL, GEOTECHNICAL, TRANSPORT

Mr S Dobson

Proposed Conversion to dwelling at 'Jacksons's Barn', Sawley, Lancashire.

Structural Appraisal Report

D1491 rev0

September 2011

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Mr S Dobson

Proposed Conversion to dwelling at 'Jackson's Barn', Sawley, Lancashire.
Structural Appraisal Report

Document Control Sheet

**Proposed Conversion to dwelling at 'Jackson's Barn', Sawley,
Lancashire.**

Job	Date	Issue	Copy
D1491	September 2011	0	

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Mr S Dobson

Proposed Conversion to dwelling at 'Jackson's Barn', Sawley, Lancashire.

Structural Appraisal Report

1.0 Survey

- 1.0.1 The scope of this Structural Appraisal is to offer opinion as to the structural integrity of an existing agricultural building, presently derelict, prior to consideration of conversion to an individual residential dwelling. The structure in question to be surveyed is owned by Mr S Dobson.
- 1.0.2 This report is to be read in conjunction with PSA Design Limited's drawings referenced D1491/PL01 and 02 providing existing and proposed floor layouts, sections and elevations.
- 1.0.3 The structure under consideration is situated approximately 0.5km north of the village centre of Sawley and approximately 6.1km north east of Clitheroe town centre, within a rural environ of the County of Lancashire. The area of proposed refurbishment comprises a traditional masonry constructed; dual pitch roofed ancillary agricultural building, presently derelict.

The ground floor aspect of the property is presently utilised as a storage facility for agricultural products/equipment. Based upon the existing layout, it is reasonable to postulate that the structure has historically been used for animal housing.

Extending beyond the westerly facing masonry gable, a more formatively constructed timber framed, corrugated sheet clad annexe is proposed for demolition with respect to redevelopment. As such, this element of the existing property does not form part of our survey/investigation.

The surrounding landscape is primarily 'soft' in nature. To the rear of the property, an existing walled courtyard extends to the south, bounded by the 'Sawley Road', running adjacent to the eastern boundary of the property.

- 1.0.4 The structural inspection undertaken was limited to the area of proposed redevelopment. We would point out that during the course of our inspection, no intrusive/destructive investigation methods/procedures were utilised to ascertain the nature of construction of the property substructure and superstructure elements. Whilst comment/opinion may be made regarding perceived wall elevation/stability, such opinion is based upon visible evidence of superstructure elements, not upon visual inspection of foundation/substructure.

The structural inspection undertaken was limited to external and internal visual observations made during the course of our survey undertaken on 30 August 2011. All external observations were made from adjacent ground level. All internal observations were made from adjacent corresponding ground floor level.

Whilst opinion may be made regarding perceived points of a structural nature, such opinion is based solely upon visible evidence observed and experience/knowledge with respect to such issues. Such opinions where given, should, at the earliest opportunity be confirmed or otherwise by suitable and appropriate further investigation techniques.

This report addresses the adequacy of the existing structural integrity of 'Jackson's Barn', and the perceived adequacy to accommodate the Architectural proposals detailed upon drawings referenced D1491/PL01 & 02. Any deviations with respect to structural alterations and proposals from these details should be further assessed prior to construction commencement.

- 1.0.5 Appended to this report, photographs taken during the course of our inspection. Where reference is made thereto, the proceeding commentary should be read in conjunction to their reference, and where appropriate, annotation of the photographs has been made to highlight pertinent points.
- 1.0.6 The area of redevelopment is an unoccupied, dilapidated, ancillary agricultural property. Of load bearing masonry (sandstone) presumed rubble cavity filled construction, generally 600mm thickness, the roof being of traditional timber construction, holding a thickened slate tile finish, supported by means of timber purlins spanning between gable elevations and two number timber truss profiles situated equidistant within the roof plan area.

The ground floor construction is that of a more formatively renewed concrete ground bearing slab, channelled within the central regions, raised adjacent to the existing north and south facing elevations.

1.0.7 **External Elevation Survey**

Front Elevation (North facing); Plate 01 refers to the coursed stone masonry, north facing front elevation of the 'Barn' structure. The slate finishes to the front elevation roof pitch clearly exhibit evidence of previous historic deflection of underlying structural members.

The elevation holds a brick infilled former main door opening, containing a Perspex glazed window opening. The original timber lintel member to the door opening remains insitu (reference Plate 02), exhibiting signs of excessive shrinkage and historic wood boring insect infestation. Emanating from the underside of the left hand lintel bearing, mortar bed and perpend cracking extends in a downward, diagonal trend. Vertical cracking emanates from eaves level adjacent to both gable returns, more prominent to the right hand side (reference Plate 03), with evidence of remedial repointing having been undertaken to the left hand side.

Generally, the elevation is reasonably plumb, to the left hand side of the infilled door opening, with slight 'bulging' noted at eaves level (reference Plate 04). To the right of the former opening, 30mm lateral and vertical displacement was recorded over a 1.0m measured length within the localised elevation (reference Plate 05).

Gable Elevation (West facing); Plate 06 provides record of the westerly facing gable elevation general appearance. The elevation holds a sand/cement rendered application, with cracking noted throughout; however no evidence offered of underlying historic or progressive structural movement. The render has spalled within the mid-section of the elevation at approximate first floor storey height.

The elevation 'bulges' from ground to eaves over its full length, recorded at 50mm vertical displacement over a 1.0m length at mid-height.

Rear Elevation (South facing); The south facing rear elevation of the structure is detailed within Plates 07 and 08. The slate finishes to the visible roof pitch exhibit evidence of historic underlying member deflection. Extending in an easterly direction, a more formatively constructed, timber framed 'shed' is located adjacent to the junction with the gable elevation, holding a corrugated profiled sheet metal cladding. Redevelopment proposals indicate the demolition of this annexe.

The heavily weathered, random stone masonry elevation is reasonably plumb throughout, offering signs of more formative repointing remedial works. Vertical cracking emanates from eaves adjacent to the westerly facing gable elevation, extending in a downwards trend to mid-height. Within the area of this cracking (reference Plate 09), a vertical displacement of 20mm is recorded over a 1.0m measured length. Additionally, vertical cracking is noted to the right hand side of the Barn entrance door (reference Plate 10).

Visual evidence would suggest by the colouration of the masonry directly adjacent to the crack location that such corresponds to historic infilling of an originally wider door opening.

A previous door opening within the central area of the elevation has been subject to historic stone masonry infilling.

Gable Elevation (East facing); Plate 011 provides record of the easterly facing gable elevation general appearance. The elevation, of coursed sandstone masonry is reasonably plumb, offering no evidence of historic or progressive structural movement. It is conjectured that this elevation may be the subject of more formative rebuilding?

1.0.8 Internal Survey

Roof Structure; The roof is of traditional timber construction, supporting slate tile finishes. Internally, the back pointed mortar application to the slate offers evidence of damp penetration and excessive spalling (reference Plate 12).

More formatively replaced timber rafter members span front to rear elevation, supported by means of original purlin members (two number per pitch) and a more formatively replaced ridge beam. In turn, the purlins span from gable to gable elevations, intermediately supported by two number original truss profiles.

Throughout the structural timber roof members, evidence of damp, rot and wood boring insect infestation is clearly evident, particularly at the westerly truss bearing with the front elevation (reference Plate 13) and the purlin bearings with the westerly gable elevation.

Barn; Plate 14 (westerly facing gable elevation) provides an indicative general appearance of the internal aspect of the Barn structure. All internal elevations hold an applied sand/cement render application, with cracking noted throughout. All wall elevations lean 'outwards' from ground to eaves level.

Of note, more significant render cracking is noted at the bearing location of the westerly truss with the rear elevation (reference Plate 15)

The ground floor slab, would by appearance, be of more formative construction, formed at a level 650mm below the adjacent external ground level of the easterly gable elevation (reference Plate 16). The slab is channelled within the central regions, presumably as a consequence of the structure's former usage. There are no obvious signs of historic or progressive movement within the existing ground floor finishes.

2.0 Conclusions and Recommendations

2.0.1 The property is generally of 'reasonable' structural condition considering its age and nature of construction. At present, the structure is stable; however, subject to historic movement and levels of deterioration, we are of the opinion that in its present condition, the medium to long term structural integrity of the property cannot be categorically guaranteed. We would therefore recommend a number of remedial measures to address deterioration of structural timber members and masonry stability/restraint, thus improving the long term structural integrity of the building, particularly based upon the proposed change of use to that of residential.

2.0.2 It is recommended that a "specialist" timber survey is undertaken upon the timber elements of the existing structure that are to be retained in redevelopment proposals. Such a survey should identify the nature and extent of any wood boring insect infestation, dry/wet rot and fungal attack and recommend the extent of remedial works necessary to arrest such and maintain the structural member strength to continue to provide necessary support.

Should remedial treatment solutions be a viable option, we would recommend structural design assessment of the existing truss members be undertaken to verify, or otherwise, their suitability to provide adequate support to the roof structure if required.

It is our considered opinion that the existing timber ridge, purlin and lintel members are not structurally adequate to sustain the proposed loading, and as a result, be replaced by structurally competent support members.

2.0.3 Whilst not of structural concern, we would recommend a "damp" survey be undertaken to all masonry elevations within the proposed area of refurbishment. If as expected, the level of the moisture within the wall elevations is excessive, remedial treatment solutions should

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be considered if necessary, particularly as proposals necessitate the 'physical connection/tie' to a blockwork lining wall.

- 2.0.4 Where vertical cracking is noted externally emanating from eaves level, we are of the opinion that such is attributable to the historic 'spread' of roof members particularly based upon their proximity to return wall lengths. We would recommend the remedial 'stitching' of all external crack locations, adopting a suitably approved remedial method
- 2.0.5 Whilst not necessarily of structural significance, we would recommend the property mortar bed and perpend joints are re-pointed, particularly where vertical cracking is noted within the external elevations, previously addressed by remedial stitching recommendations.
- 2.0.6 Based upon proposals, a blockwork lining skin is to be constructed internally throughout adjacent to the existing masonry inner leaf. This leaf should be fully tied into the existing masonry using appropriate proprietary wall ties at 900mm horizontal and 450mm vertical centres; 150mm distance from and 300mm maximum vertical centres at all openings.
- 2.0.7 Based upon redevelopment proposals raising the existing ground floor slab level, the provision for a replacement ground floor slab should comprise of a 150mm thick, ground bearing concrete slab, laid upon suitably compacted hardcore and a single layer of 1200 gauge damp proof membrane ("Visqueen" or approved equal), formed upon approved competent sub-base strata, or alternatively if competent bearing strata is proven beneath the existing slab, directly off such. Nominal mesh type reinforcement (A193) to the top of the slab should be provided with 25mm cover. Adjacent to external wall elevations, and where requirement necessitates the provision of foundation for internal load bearing wall elevations, the requirement of a thickening/downstand should be accommodated upon which formation of the proposed blockwork internal leaf can be made. Further investigations to ascertain existing foundation depth and nature of existing bearing strata should be undertaken in order that proposals do not compromise their integrity.
- 2.0.8 Proposals necessitate the elevation height, and subsequently, the ridge height of the property to be raised by 1.655m. Therefore, we would recommend that further intrusive investigations are undertaken to fully ascertain existing wall construction and determine the nature, depth and size of the existing property foundations to determine their suitability or otherwise to accommodate the proposed additional loading. Further investigations are also recommended to determine shallow sub-strata conditions with respect to their load

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bearing capabilities, and the potential influence that such could have on the increased foundation loading

- 2.0.9 No lateral restraint is presently afforded to the wall elevations. Whilst evidence of lateral displacement is noted throughout, it is not of immediate detrimental effect. The provision of a proposed inner blockwork leaf tied to the existing masonry wall elevations will provide enhanced stability. However, notwithstanding this point, we would recommend as part of the refurbishment proposals, restraint strapping at eaves and apex levels are undertaken throughout.

Additionally, where first floor levels are proposed, again, the introduction of restraint strapping is recommended to be undertaken.

- 2.0.10 Where proposals necessitate the removal and/or demolition of existing structural elements of the property, careful consideration to the method and sequence of temporary support works should be given, not only to ensure the safety of site personnel, but so as not to compromise the structural integrity of the immediate property area.

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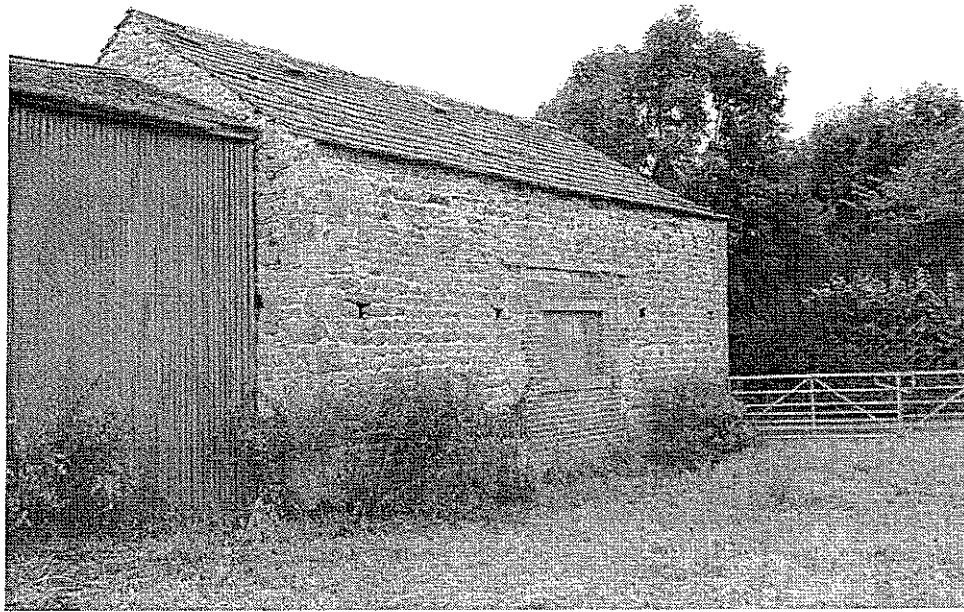
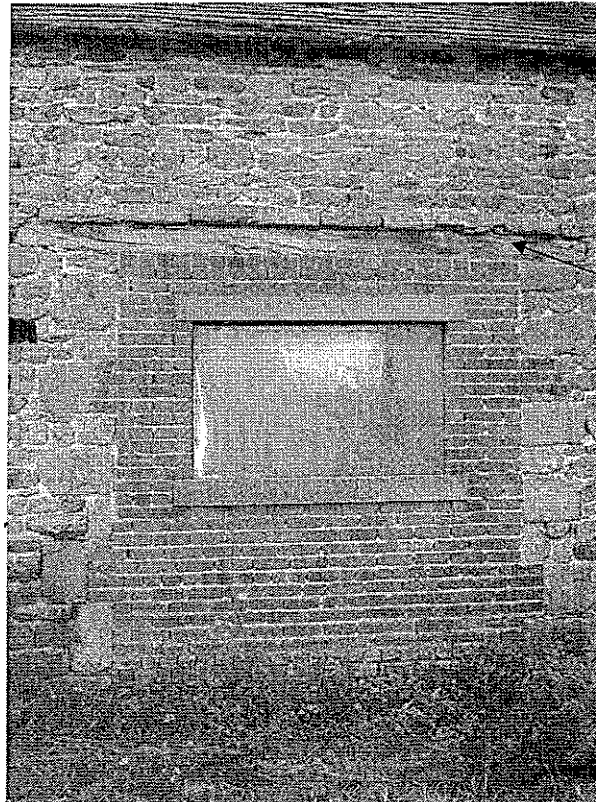


Plate 01. Front Elevation



Original timber lintel
member

Plate 02. 'Infill' door opening to Front Elevation

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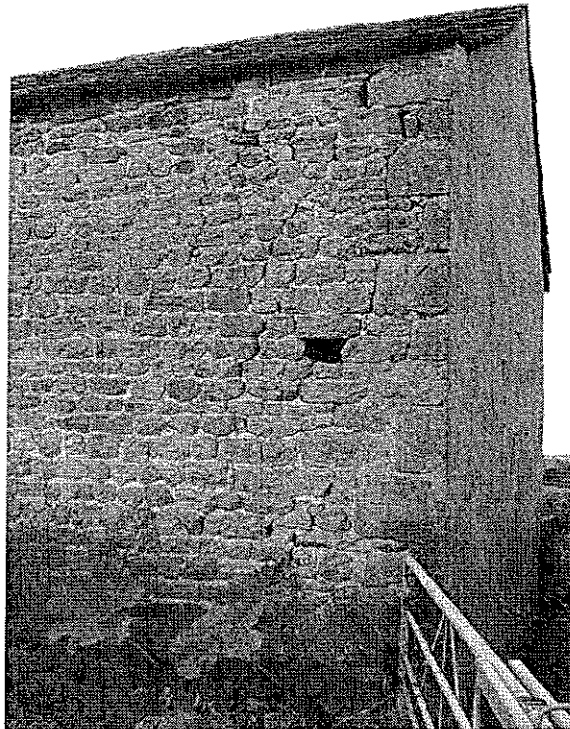


Plate 03. Vertical cracking in Front Elevation adjacent to Westerly Gable

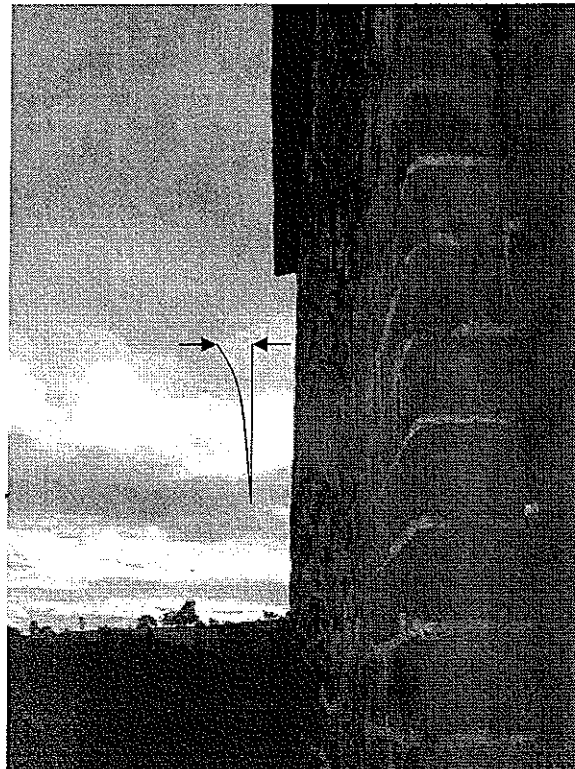


Plate 04. 'Bulging' at eaves to LHS Front Elevation

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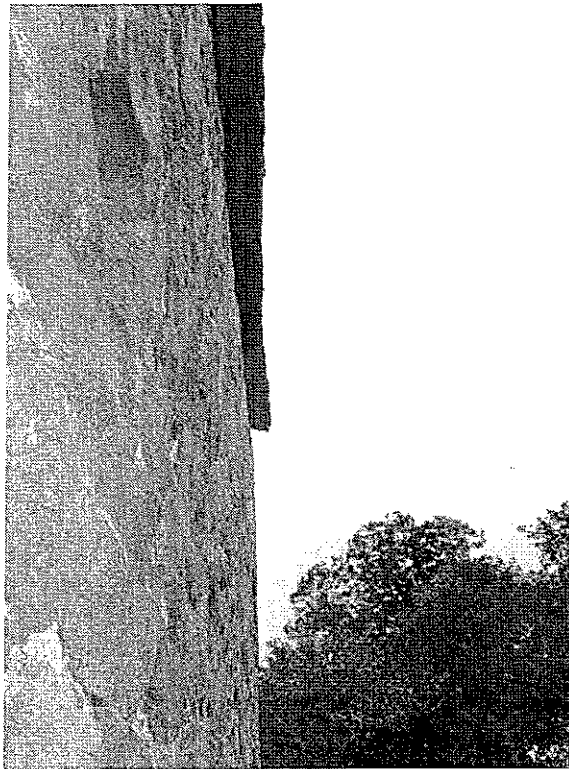


Plate 05. Vertical and lateral displacement to RHS Front Elevation

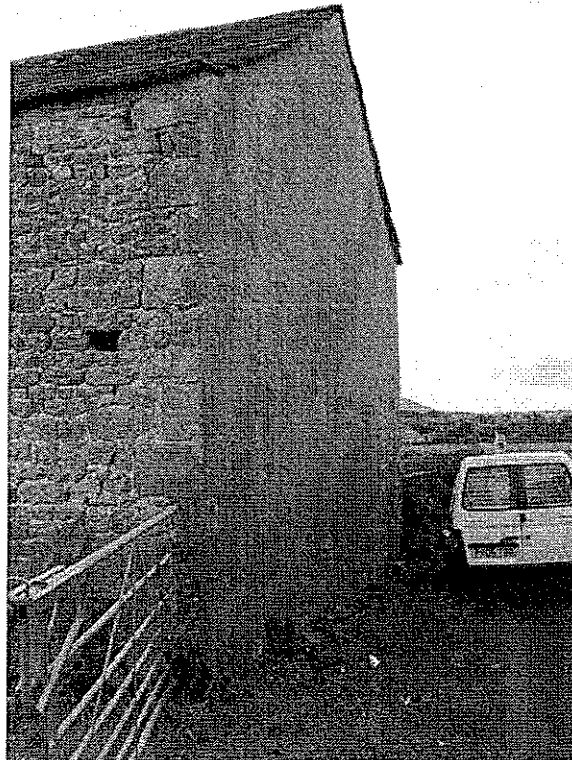


Plate 06 Easterly Gable Elevation

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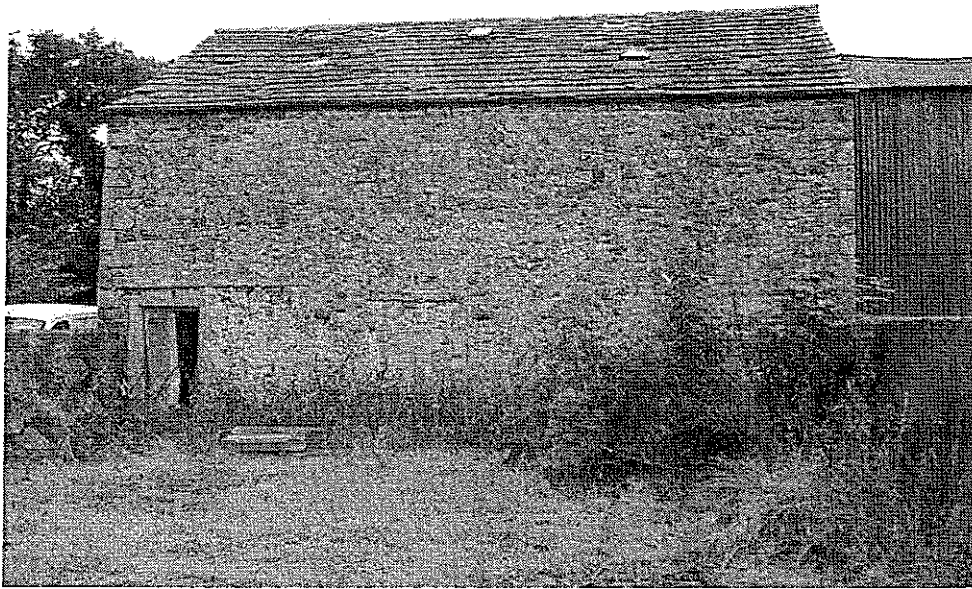


Plate 07. Rear Elevation



Plate 08. Rear Elevation

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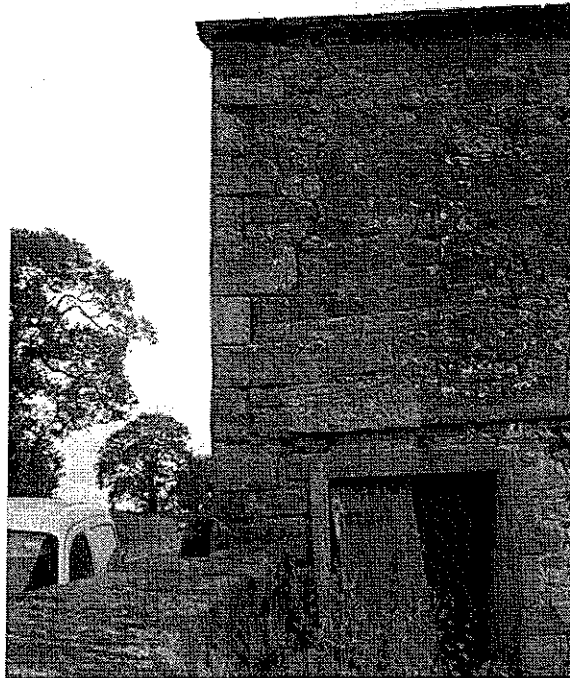


Plate 09 Vertical cracking to Rear Elevation adjacent to Westerly Gable



Plate 10. Vertical cracking adjacent to entrance door in Rear Elevation

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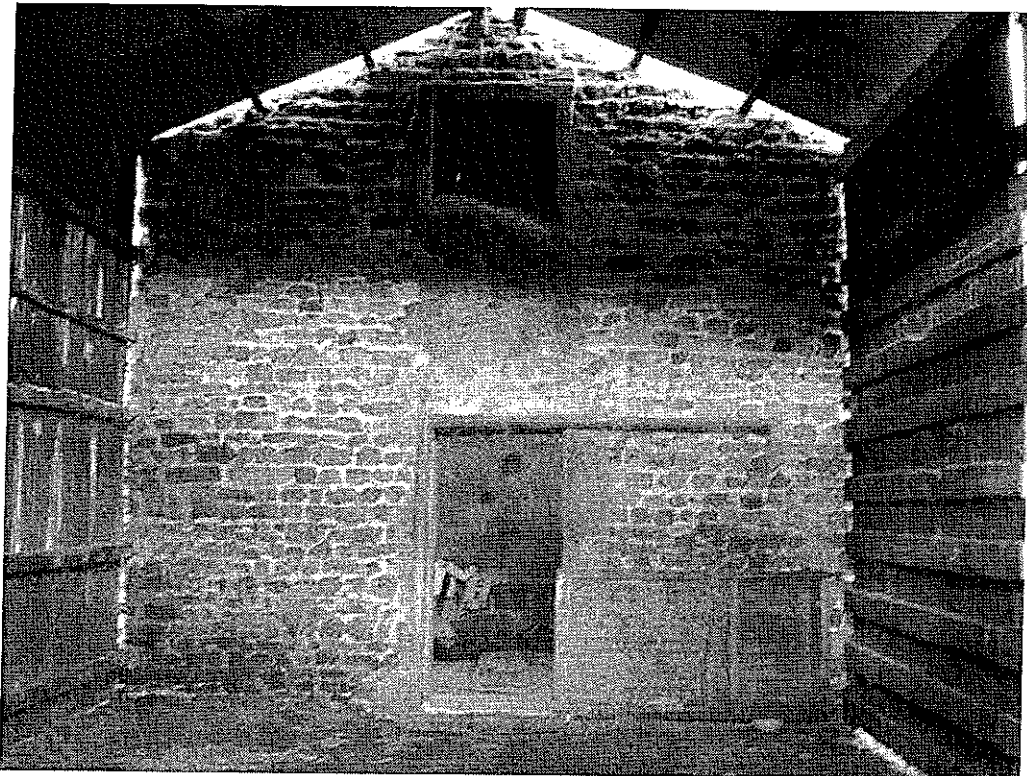


Plate 11. Easterly facing Gable Elevation



Plate 12. Roof structure

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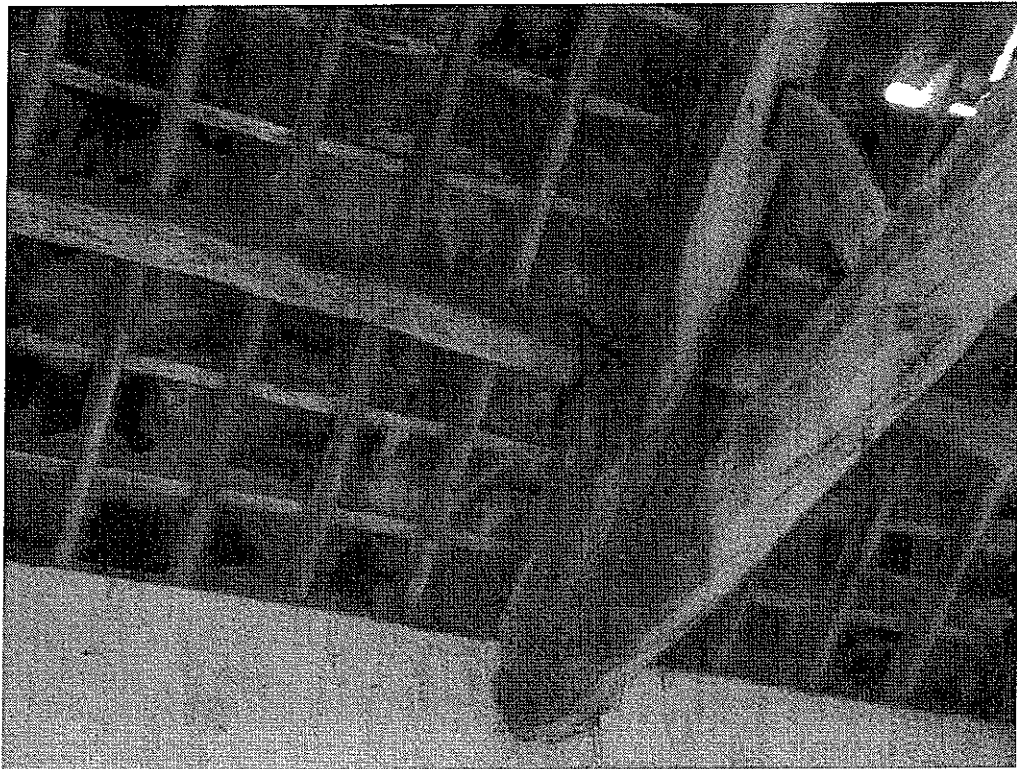


Plate 13 Rot/damp penetration at truss bearing

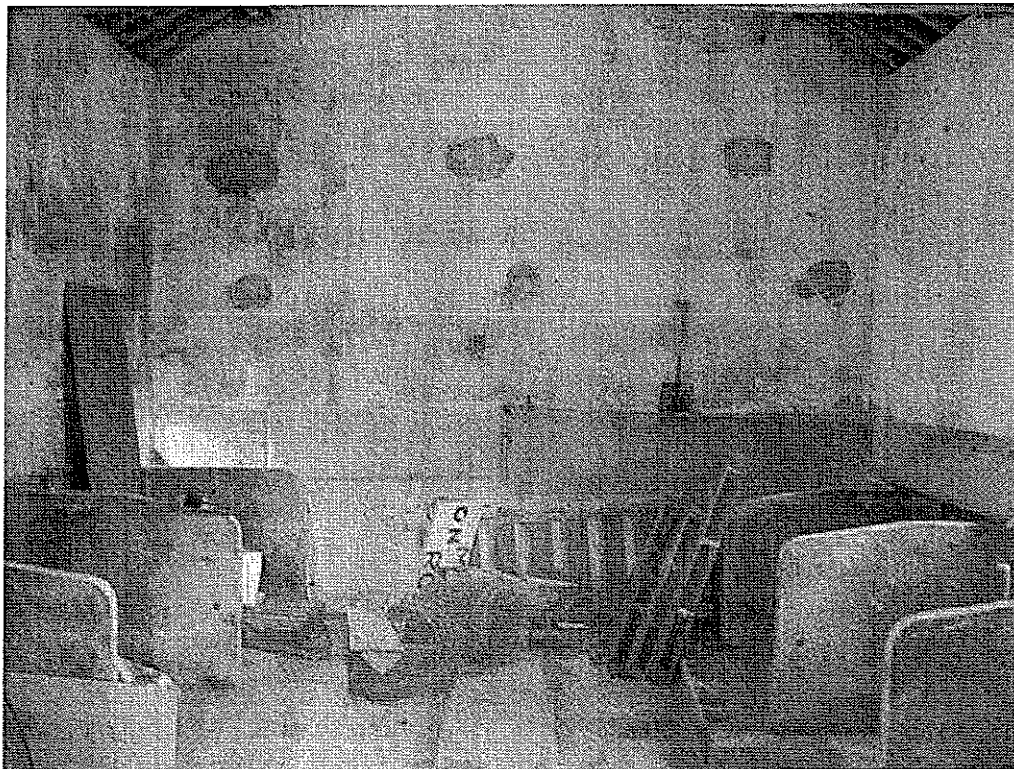


Plate 14. Typical internal aspect (westerly facing gable)

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Plate 15. Cracking in render beneath truss bearing

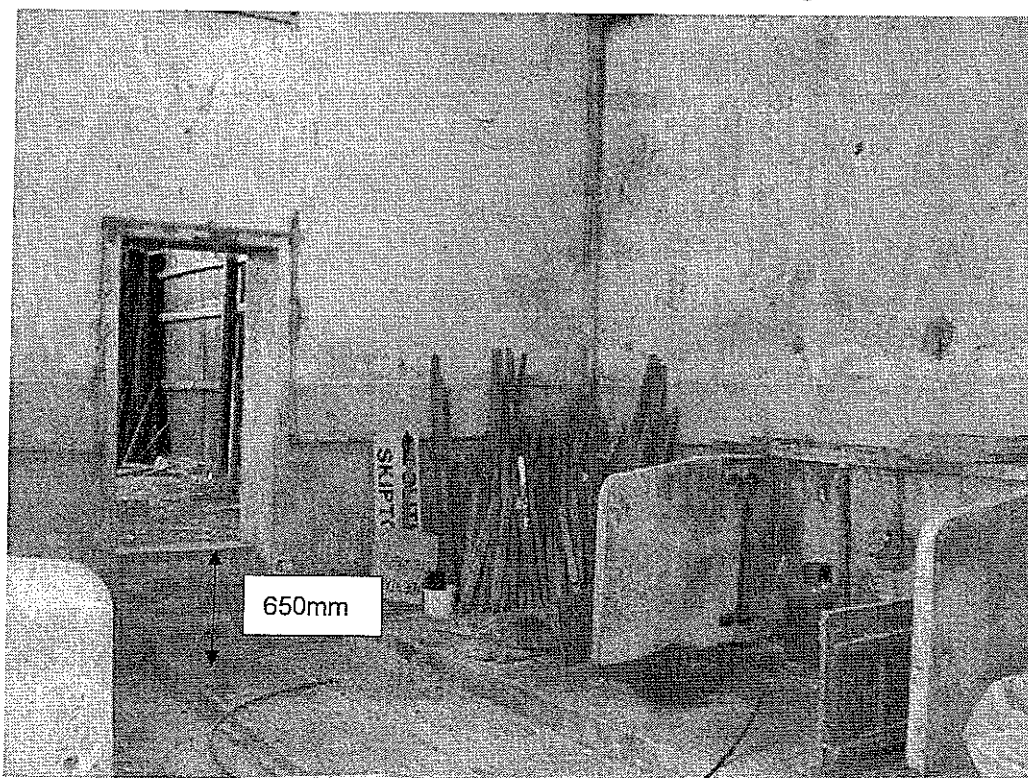


Plate 16. Existing concrete ground bearing slab

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Flood Risk Assessment

PROPOSED CONVERSION OF A REDUNDANT FIELD BARN INTO A SINGLE RESIDENTIAL DWELLING.

Applicant
Mr S Dobson
Hill House Rd.
Sawley Rd
Grindleton
Clitheroe
BB7 4QS

Site
Jacksons Barn
Bolton By Bowland Rd.
Sawley
Clitheroe
BB7 4NJ

John Welbank
Rural Futures
1 The Creamery Estate
Kenlis Road
Preston
PR3 1GD
01995 600724
johnw@ruralfutures.co.uk

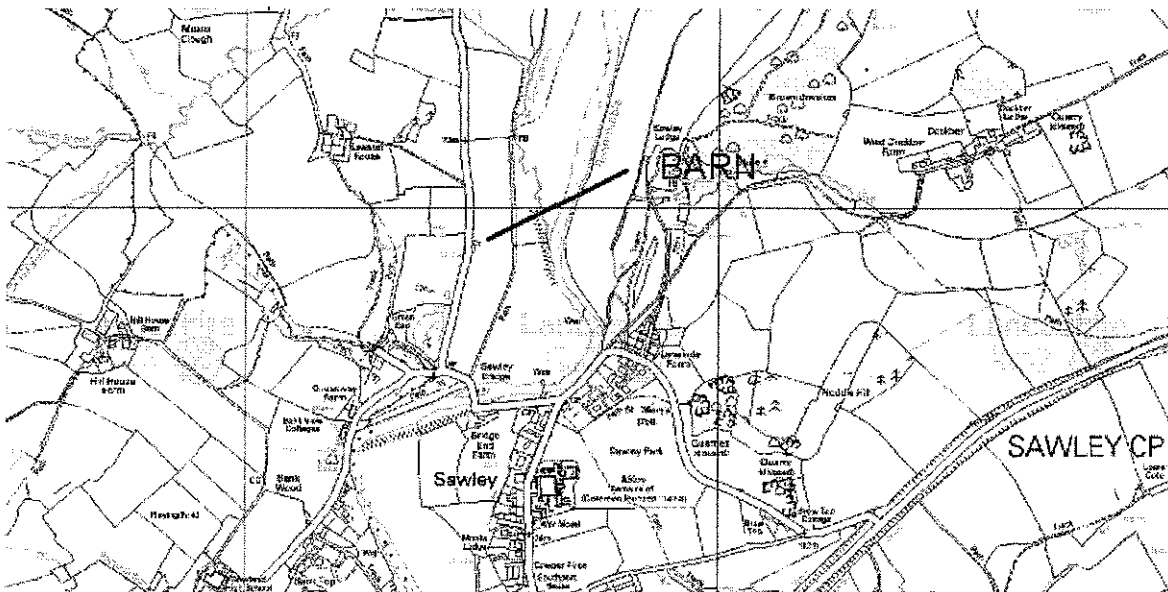


General

The purpose of the report is to address the potential flood risk in respect of the proposed residential development of Jacksons Barn, Sawley. The FRA has been constructed using the template provided within Annex 3 of Ribble Valleys Strategic Flood Risk Assessment – May 2010.

1a. What type of development is proposed and where will it be located? Include whether it is new development, an extension to existing development or change of use etc.

The area of the proposed development is identified below and comprises of an existing field barn located alongside Sawley Road. The proposal is to convert the existing barn to residential use.



1b. What is its vulnerability classification?

Planning is sought for conversion to residential use. Under PPS25 Vulnerability Classifications residential property is classified as 'More Vulnerable'.

1c. Is the proposed development consistent with the Local Development Documents?

Based on the summary of the Planning Policy Statement it is suggested that the development meets with the Local Development Plan. (See Planning Policy Statement)

1d. Please provide evidence that the Sequential Test and where necessary the Exception Test has been applied in the selection of this site for this development type?

The site lies within Flood Zone 2. As a 'More Vulnerable' use under Table D.3 of PPS 25 the proposed development does not require an 'Exception Test'.

Flood Zone 2 is described as Medium Probability. Under PPS 25 the Policy aim is as follows:

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'In this zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area through the layout and form of the development, and the appropriate application of sustainable drainage techniques'

Mitigation measures will be described in more detail later in the report as will the use of SUDS. What is of note is that the policy does accept that the proposed use is acceptable in Flood Zone 2 subject to the application of the sequential test for this *'particular location'*.

With regard the Sequential Test PPS 25 provides the following guidance:

'The overall aim of decision-makers should be to steer new development to Flood Zone 1. Where there are no reasonably available sites in Flood Zone 1, decision-makers identifying broad locations for development and infrastructure, allocating land in spatial plans or determining applications for development at any particular location should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2, applying the Exception Test if required.'

In this instance the key wording is 'reasonably available sites'. The site lies within the Forest of Bowland AONB so landscape considerations are paramount. In addition the Ribble Valley Housing Policy states the following:

HOUSING Policy H2

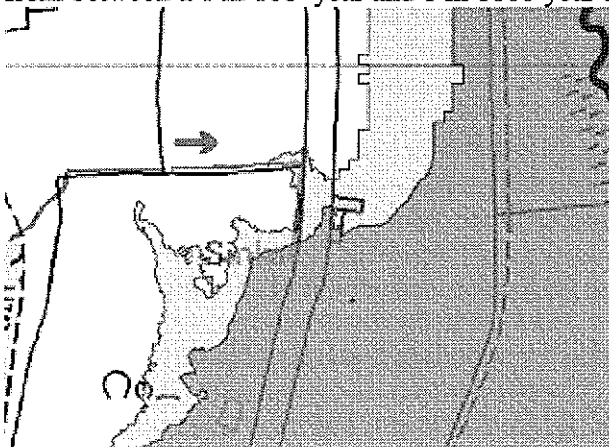
"Outside of settlement boundaries, as defined on the proposals map, residential development will be limited to:

- ii) The appropriate conversion of buildings to dwellings. Provided they are suitably located and the form and bulk and general design are in keeping with their surroundings. Buildings must be structurally sound and capable of conversion without the need for complete or substantial reconstruction (see Policies H15, H16, and H17 for advice)*

Within the immediate area there are very few remaining redundant farm buildings that are available or have the access of the proposed site. There are no similar sites within Flood Zone 1 in the immediate vicinity of Jacksons Barn. As a result PPS 25 allows consideration of available sites in Flood Zone 2. As such the site meets the sequential requirements for this *'particular location'*.

2a. What sources of flooding could affect the site? (see annex C PPS25).

The site is located within the Environment Agency designated Flood Risk Zone 2 as shown below within the extract from the EA flood risk plan. Based on the EA plan it shows that the area is at risk from between a 1 in 100 year and 1 in 1000 year annual probability of river flooding



2b. For each identified source, describe how flooding would occur, with reference to any historic records wherever these are available.

The primary risk is associated with river flooding from both the River Ribble and associated stream some 200m to the East. The Ribble plain extends to the north, east and south of the site with the ground rising up to Sawley road.

Previous Flood Events

There is no history of Jacksons Barn ever flooding despite its proximity to the Ribble. The most recent incident in the area was 2004 when areas of both Sawley and Bolton by Boland were flooded. At this time the barn was used for machinery storage associated with the local steam rally. The occupier at that time stated that although the flood waters reached the ground surrounding the barn it never actually reached the barn itself. Sawley Rd has flooded south of the barn but there is no history of flooding at or above the barn.

The table below shows a list of major historical floods in the Ribble catchment that caused widespread flooding and affected local communities.

Major historical floods recorded in the Ribble catchment and RVBC communities worst hit

(Source Ribble CFMP)

1771 Ribble No information available

1775 Ribble No information available

1866 Ribble, Calder, Whalley, Clitheroe, Ribchester,

1881 Ribble, Calder, Hodder Slaidburn,

1923 Ribble, Calder Clitheroe

1936 Ribble, Hodder, Calder Slaidburn, Whalley, Clitheroe, Bolton-by- Bowland

1995 Ribble, Calder, Darwin Ribchester

2000 Ribble, Calder, Darwin Ribchester,

2002 Calder, Darwen Whalley

Of the major historical flood events recorded there appears to have been a concentration of floods in July and August, many associated with short-lived but very intensive convectional rainstorms, often over built-up areas (for example Preston, Burnley, Blackburn) which produced rapid runoff. The months of March, April and May did not experience any major floods.

As previously highlighted there is no history of flooding at this site.

2c. What are the existing surface water drainage arrangements for the site?

There are no existing surface water drains on the site other than the road drain and a gully that takes water from the barn to a small dyke located at the southern end of the site.

The proposed discharge point for both surface water and package treatment will be through the culvert that runs from the west side of Sawley Rd, under the site and field to the East, then into the Ribble at the confluence with the feeder stream. The location of the discharge route is highlighted on the site layout plan.

Full details of the proposed package treatment plant are included in Annex 1 of the Design and Access Statement.

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3a. Which flood zone is the site within?

Flood Zone 2

3b. If there is a Strategic Flood Risk Assessment covering this site, what does it show?

Ribble Valley Borough Council SFRA Level One – May 2010. The site lies within the defined Upper Ribble and Hodder area. Policy Option P1 is effective 'No active intervention'.

3c. What is the probability of the site flooding taking account of the contents of the SFRA and of any further site-specific assessment?

A full topographic survey was undertaken on the site. The full drawing accompanies the application. Based on the Environment Agency modelling the following data was derived for the site.

Maximum limit of Flood Zone 3 – 70.86AOD

Maximum limit of Flood Zone 2 – 71.73 AOD

The internal floor of the barn is lower than the external. The lowest internal point within the barn is at a height of 71.01 AOD placing the lowest point in Flood Zone 2. The majority of the barn lies between 71.01 and 71.52.

This would place the barn at risk of flooding from between a 1 in 100 year and 1 in 1000 year annual event.

Inundation of the area would most likely take place from the south east as this is the lowest area of land within the flood plain.

3d. What are the existing rates and volumes of run-off generated by the site?

Average annual rainfall for the site is 1274mm. Based on the existing roof area and area of hard standing the existing surface water runoff calculations are as follows:

Catchment Area x Rainfall (24hrs) x 0.8 (runoff coefficient)

Present:

Maximum rainfall estimated within a 1 in 100 year fluvial event has been established at 86.35mm for a 24hr period. The rainfall level is based on a maximum rainfall of 44.3mm in one hour. An aerial reduction factor has been applied of 0.967 creating a point source hourly maximum of 42.9mm. A runoff coefficient of 80% has been applied to runoff from the site. From this assessment the maximum discharge from the site is estimated at 21.14m³ over a 24hr period. This equates to 0.00024m³/sec. During the maximum hour period the discharge from the site will be 0.0036m³/sec.

Future:

Following the development the tin barn to the East will be removed. As a result the discharge levels will reduce as follows:

Maximum discharge from site over 24 hrs – 16.99m³

Maximum discharge 24hrs – 0.000196m³/sec

Maximum hourly discharge – 0.0030m³/sec

As a result of the development the total area of hard surface will reduce by some 20%. This will result in reduced levels of total and peak surface water discharge from the site.

4a. How is flood risk at the site likely to be affected by climate change?

Surface Water Discharge.

Analysis has also been undertaken to establish the volume of water discharged from the site for a 24-hour 100-year return period rainfall event including an additional allowance of 20% for climate scenario.

Maximum discharge from site over 24 hrs – 20.39m³

Maximum discharge 24hrs – 0.000235m³/sec

Maximum hourly discharge – 0.0036m³/sec

These levels are below the existing surface water run off as a result of the loss of the tin barn.

Flood Risk.

Detailed flood modelling for climate change impacts is not available for the upper Ribble. Based on the datum levels at the site the Environment Agency advised that mitigation of flood risk should be based on the maximum depth of Flood Zone 2 plus a climate change allowance of 600mm.

Flood Zone 2 – 71.73 AOD plus 600mm

The ground floor level within the design has been set at 72.33 AOD.

5a. Please provide details of the development layout, referring to the relevant drawings.

The use is classified as 'More Vulnerable'. The ground floor includes the kitchen and living area. The three bedrooms are located on the first floor. Full drawings are attached to the planning submission.

5b. Where appropriate, demonstrate how land uses most sensitive to flood damage have been placed in areas within the site that are at least risk of flooding.

The main area of risk is associated with the residential use of the building. This component of the development is furthest from the source of flooding being on the north western corner of the site. The areas that are most at risk and most likely to flood are the garden areas and then car parking area to the south of the main barn.

6a. How will the site be protected from flooding, including the potential impacts of climate change, over the development's lifetime?

Flood mitigation: The principle flood mitigation measure is associated with the ground floor level. As previously described the maximum height of Zone 2 is 71.73AOD. The ground floor level has been set at 72.33 AOD ie 600mm higher than the maximum predicted flood level including an allowance for climate change. This will result in the residential component of the development being above predicted river flood levels now and in the future.

In addition other design issues have been incorporated based on SUDs Guidance namely:

i) Prevention

Managing the site can significantly reduce the total volume of surface water discharge. For the proposal this has included the following preventative measures.

- Minimising paved areas. The total area of hard surfaces has been kept to the minimum required for the proposed development. Those areas that will be hard surfaces will utilise permeable materials that will slow discharge rates as well as the overall volume (see 'permeable surface' below).

- Good housekeeping

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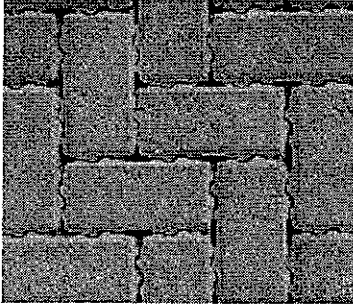
To further improve the onsite systems silt traps and downpipe filters will be incorporated into all external drains. This will maintain the efficiency of the proposed attenuation systems described below.

ii) Permeable surfaces and filter drains

Filter drains and permeable surfaces will be used within the external patios and paths. These systems have a volume of permeable material below ground to store surface water. Runoff flows to the discharge outlet via a permeable surface. This can include:

- Grass (if the area will not be trafficked)
- Reinforced grass
- Gravelled areas
- Solid paving blocks with large vertical holes filled with soil or gravel
- Solid paving blocks with gaps between the individual units
- Porous paving blocks with a system of voids within the unit
- Continuous surfaces with an inherent system of voids

For the proposed development it is proposed to use block paving with gaps between each unit for the external patios and pathways. An example is shown below.



Permeable surface with porous substrate have the additional benefit of filtering impurities out before the water reaches the top water discharge point.

For roads and parking area permeable gravel will be used to increase porosity of the vehicle access points.

iii) Retention Devices

Due to the restricted nature of the site large scale attenuation is not possible however the development will include rain water collection systems for use within the gardens and external areas.

This system uses a combination of filter and a pump to supply rainwater for garden irrigation, car washing and general cleaning. The pump is pressure-sensitive to ensure that electricity consumption is kept to a minimum, and has a 100% water yield.

Through a combination of surface water minimisation, the use of permeable surfaces and rain water harvesting the overall discharge from the site will be significantly less than the existing site. The actual surface water and package treatment discharge point will be through the existing drain to the south end of the site. This drain leads through to the Ribble (See site plan).

Access:

In the event of an extreme flood event the site can be evacuated to high ground immediately to the north and west. Emergency vehicle access will still be available from the north via Sawley Rd.

7a. How will you ensure that your proposed development and the measures to protect your site from flooding will not increase flood risk elsewhere?

No infrastructure works are required to protect the site other than the raising of the ground floor level. Overall surface run off volume and rate will reduce due to the reduction in impermeable surfaces. As a result there will be no impact on flood risk elsewhere.

7b. How will you prevent run-off from the completed development causing an impact elsewhere?

As the overall area of hard surfaces at the site will reduce by 20% the impact of the development will be to reduce the volume and speed of surface water discharge.

8a. What flood-related risks will remain after you have implemented the measures to protect the site from flooding?

No flooding of property should occur as a result of a one in 100 year storm event (including an appropriate allowance for climate change). Through the mitigation measures employed the surface water drainage system should ensure that there is little or no residual risk of the property flooding during events well in excess of the one in 100 year return period.

Foul waste is described within the Design and Access statement (Annex 1). The proposed Matrix package treatment plant is designed to operate when submerged. As a result even if the site is submerged the waste treatment route still operates.

8b. How, and by whom, will these risks be managed over the lifetime of the development?

Danger to residents will be low due to the proximity of safe high ground located immediately to the west. In order that the potential threats can be mitigated the development will include two additional components beyond those already provided within the FRA.

Firstly all properties will be made aware of the Environment Agency Flood Warning Alerts System. Secondly a flood management plan will be produced and transferred to all site occupiers. This will include the following components

- In the event of flood directions to the nearest high ground will be provided and plans produced.
- Routes for emergency services will be highlighted taking into account the most likely escape areas.
- Instructions on how to evacuate the properties in a safe and timely fashion.
- Precautions that could be taken to minimise property damage in advance of a flood event.
- Emergency contact number

Summary

The new development is small scale and due to policy constraints there is no prospect for further development at the location.

The application has fully considered the requirements of PPS 25 including the sequential test. Although the site lies within Flood Zone 2 there is no history of the site flooding. Despite this full mitigation has been incorporated into the design including the raising of the ground floor level above Flood Zone 2 levels. Use of SUDs techniques will be included to minimise surface water runoff. As the area of hard surfaces will be reduced by over 20% the site will reduce surface water discharge rates so there will be no impact off site.