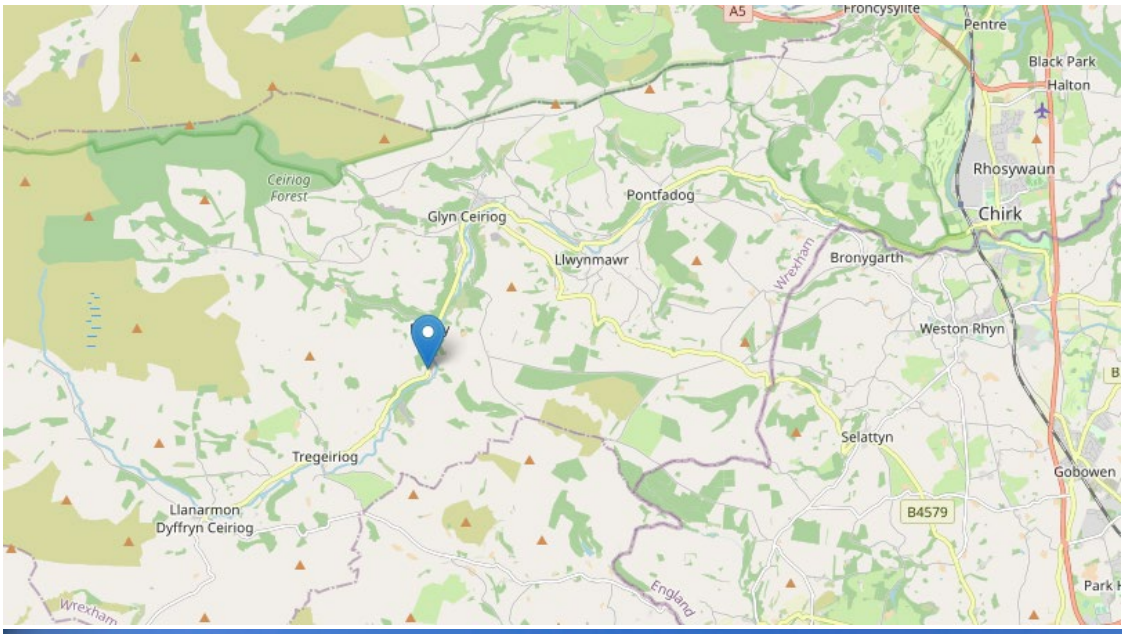
Heritage Impact Statement
Proposed Barn conversion Farm Building to the South of Pont y Meibion Farmhouse.



1. Introduction

The proposal is to convert the existing Grade II listed farm building and return the existing farmhouse to resemble its original appearance whist altering the surrounding outbuildings and shelters to compliment the listed structure and its setting.





View from roadside –Listed barn partially obscured by lower shed (left)



Earlier photo showing dormer roof and fenestration to dwelling





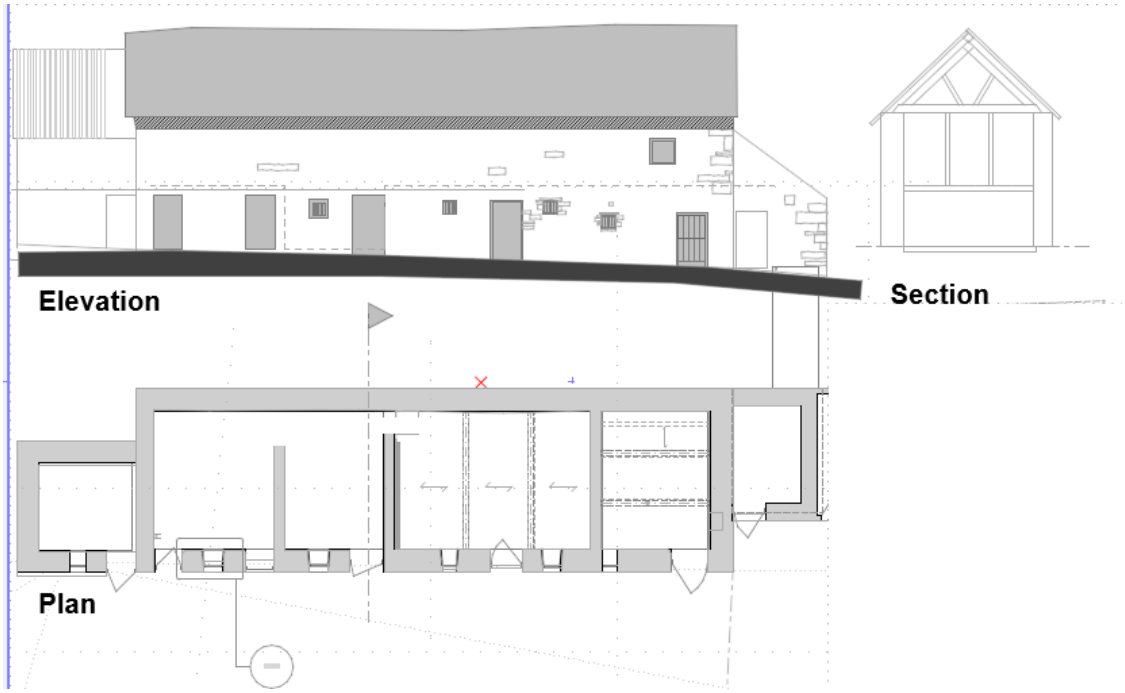
The site is located overlooking the Ceriog valley, a picturesque landscape of historic significance.

2. Description of the Heritage Asset

Farm Building to the S of Pont y Meibion Farmhouse:
Reference no :647
Date of designation 04/01/1966

'The barn is listed as a good example of a farm building using the local vernacular constructed from local stone with slated roof, with some original slots. Dovecote in one gable. Dovecote with ledges to the north gable end, doorways with split doors and ventilation slits to front.'

The description suggests the character of the barn rather than a specific element to be the reasoning behind the barns Listing, with this in mind the proposed conversion should look to retain the external appearance and internal layout as a priority only removing elements where impractical and with clear justification.



Existing Layout







The farmhouse is not listed but the external appearance is more visible from the road and its proximity next to the listed barn suggests a more sympathetic approach to fenestration would be welcomed.





The Stone outbuilding with steel frame shed as viewed from outside the listed building.





Poorly built infill shed to be removed integrating lean to into new extension.



Existing catslide to farmhouse to be replicated for extension to barn



Steel shed to be adapted



Internal spaces retain frame – remove metal sheeting floor – new floor structure



Step down to kitchen between retaining stone transition

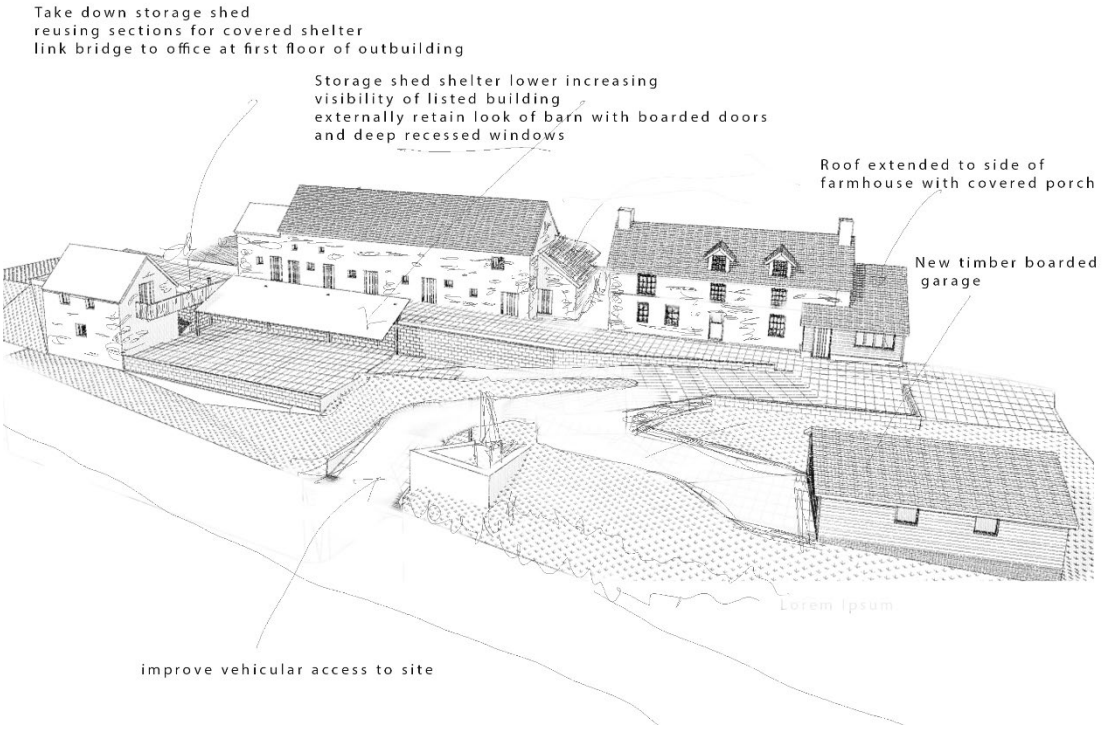


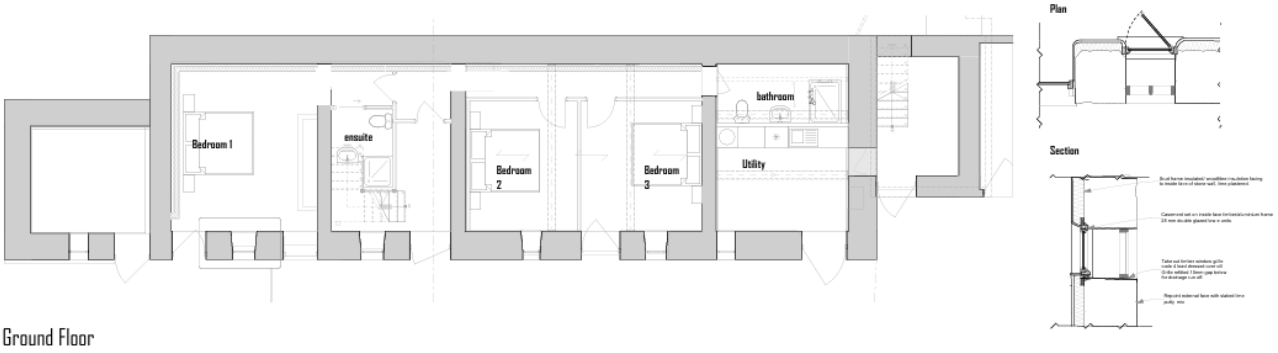
Glaze existing opening

Proposed Development

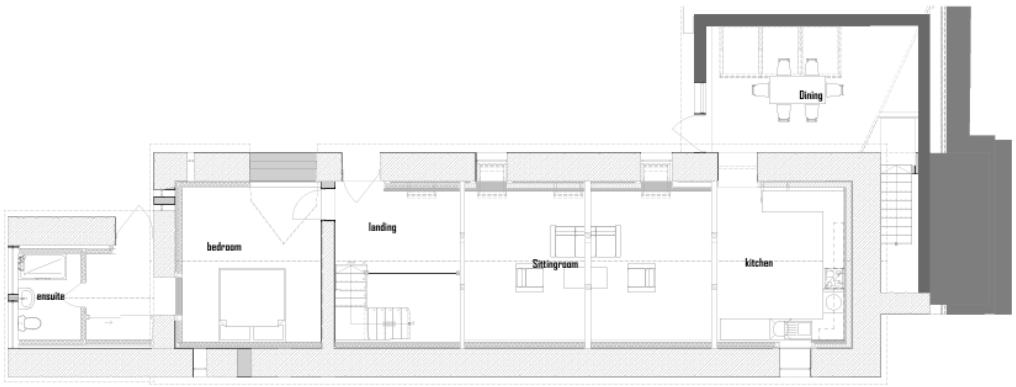
The proposal is to convert the building for holiday use as accommodation for cyclists/ walkers exploring the area. The property lends itself to this type of conversion with self-contained sleeping accommodation for individuals with a shared kitchen, dining and sitting area for socialising, ideal for cycling and walking tours. The farmhouse fenestration will be restored to its original appearance removing the later gable additions. The lower set steel frame building will be adapted to provide shelter for cycles (and some parking) improving the visual setting when approaching the site in relation to the asset.

The proposed plans





Ground Floor



Layout

The proposals look to retain the same cellular arrangement to ground floor retaining the feeding trough detail to the end bedroom but removing the hay rack to the proposed utility room. Upstairs the first floor will be reached via the same double height section as existing retaining trusses but installing a structural timber floor to replace the sheeted covering over the existing supporting beams to be lath and plaster/ wood fibre board and plastered to the underside for fire separation and sound. From the landing access to the upper floor bedroom on the left with a new opening made to access the lower roof abutting stone enclosure (currently woodstore) that will be converted to use as an ensuite. To the right-hand side will be open plan sitting room stepping to kitchen with truss divides and flush conservation rooflights providing the required natural daylight and ventilation. From the kitchen using the existing rear opening the building is extended with catslide roofing and steps down the side into the existing side extension which will be used as the main entrance to the building for visitors.



Hay rack to be removed



Feeding trough in proposed ground floor bedroom to be retained within fitted wardrobe.



Random sections of stone flags in soil bed to be recorded then lifted for new floor slab excavation and laying of insulated slab base.

Structure

The following memo observations had been made prior to application by structural Engineers Grace & Howe with regards to potential conversion:

The Barn

The Barn is a long narrow structure subdivided internally. Some areas have been split with the installation of a first floor. The walls are again constructed in stone and the north wall has a dovecote set into the upper section of the gable pike. The roof is slate clad in Welsh slate supported on utilitarian crafted rafters, purlins and trusses. The roof planes are not perfect and indicate movement of the supporting structure has occurred. It was noted that slippage of the slates has occurred in numerous locations allowing water ingress and hence the likely cause of damage to the supporting structure The walls are generally in reasonable condition , with the exception of one area of the west wall which has a significant bulge from ground level internally to the higher ground level externally, presumably caused by lateral earth pressure or water ingress or a combination of the two. The ground floor to the barn is generally finished in flagstones or in some cases concrete indicating the presence of an agricultural function of some kind in the past. The flags are in variable condition. Points for consideration: 1) Timber survey as point 2) above. Repair damaged timber members and replace damaged or lost slates. The advice of a reputable roofing contractor should be sought regarding the treatment and extent of the replacement of the slates as stripping and re-use can be problematic. 2) Upgrading the existing ground floors. Depths of new construction are critical, to ensure that the existing walls, which are not likely to have a foundation are not undermined. Refer to the

Historic England document.as 3) above. 3) Install rainwater goods drainage, as item 4) above. 4) Repointing as item 5) above. 5) Careful dismantling and rebuilding of bulging section of wall up to eaves is probably required. Temporary works for propping etc would be required. 6) Installation of a geo-composite fin drain to the rear of the west wall of the barn in conjunction with a land drain. Please note this will not waterproof the wall but should relieve water build up from the rear of the wall.

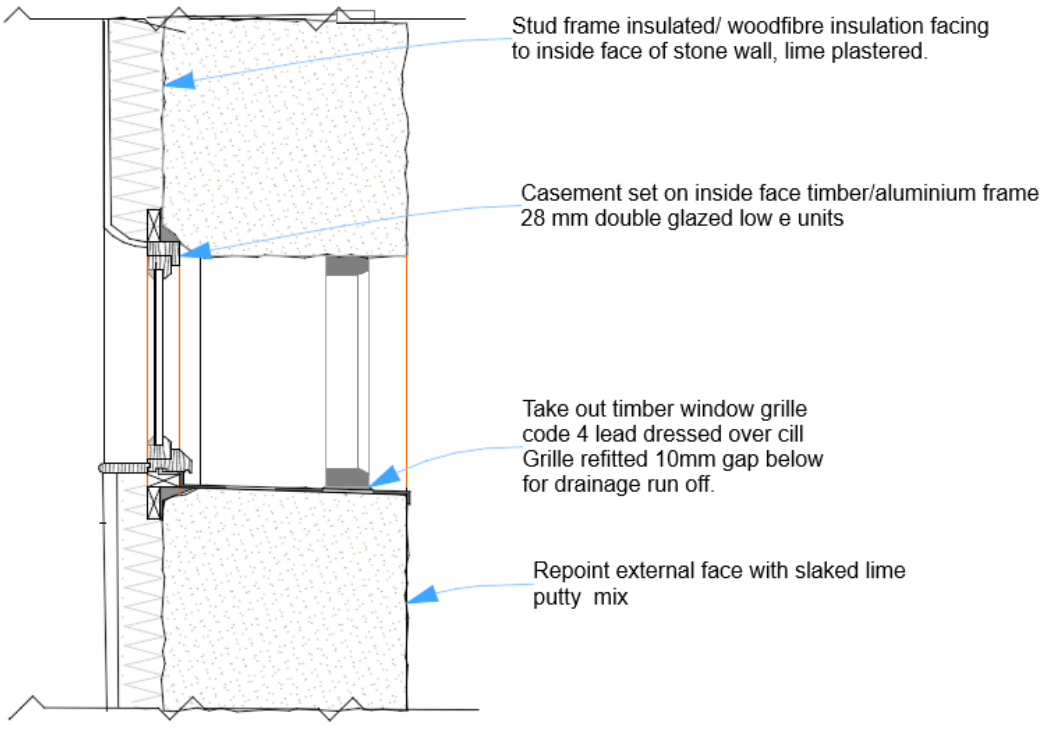
This identifies the main concerns with regards to the existing structures stability, conversion will ensure the existing bulging retaining wall can be excavated externally to remove pressure and determine the extent anchors required to stabilise the wall without rebuilding with the inclusion of a thermal and drainage layer applied externally below ground having no visual impact but ensuring the deterioration is halted. A Level 2 photographic survey will be required to record the existing structure prior to work commencing with construction details to be developed further once the structure is exposed. Natural materials will be used for wall linings and roof to reduce the risk of interstitial condensation.

The Store

The store is a rectangular stone built structure located immediately adjacent the B4500. The ground floor appears to have been used to house stock and has an earth floor. The ground floor is accessed from the yard in front of the barn and is some 3-4m higher than the road. The first floor has a timber floor which seems in reasonable condition and may previously have been used as residential accommodation. The roof is steeply pitched and has been reclad with corrugated asbestos cement sheets. Points for consideration: 1) Removal of the asbestos cement sheets. This is not strictly a specialist removal, but specialist disposal, bagging and protective clothing for the operatives will be required. A full list of removal and disposal requirements can be found on the HSE website. 2) A timber survey by a specialist to check for rot and insect infestation is recommended. Also a check on the species of timber could be useful for future load checks on the structure. The checks for decay and deterioration should be made at vulnerable areas such as at beam/joist ends, exposed areas and areas near or affected by leaks. 3) Upgrading the existing earth floor. If this is considered, then I would recommend that the Historic England document 'Energy Efficiency and Historic Buildings – Insulating Solid Ground Floors' is consulted.
Installation of rainwater goods and a positive drainage system to dispose of storm water. 5) Repointing the stone walls with suitable lime mortar which is compatible with the characteristics of the stonework

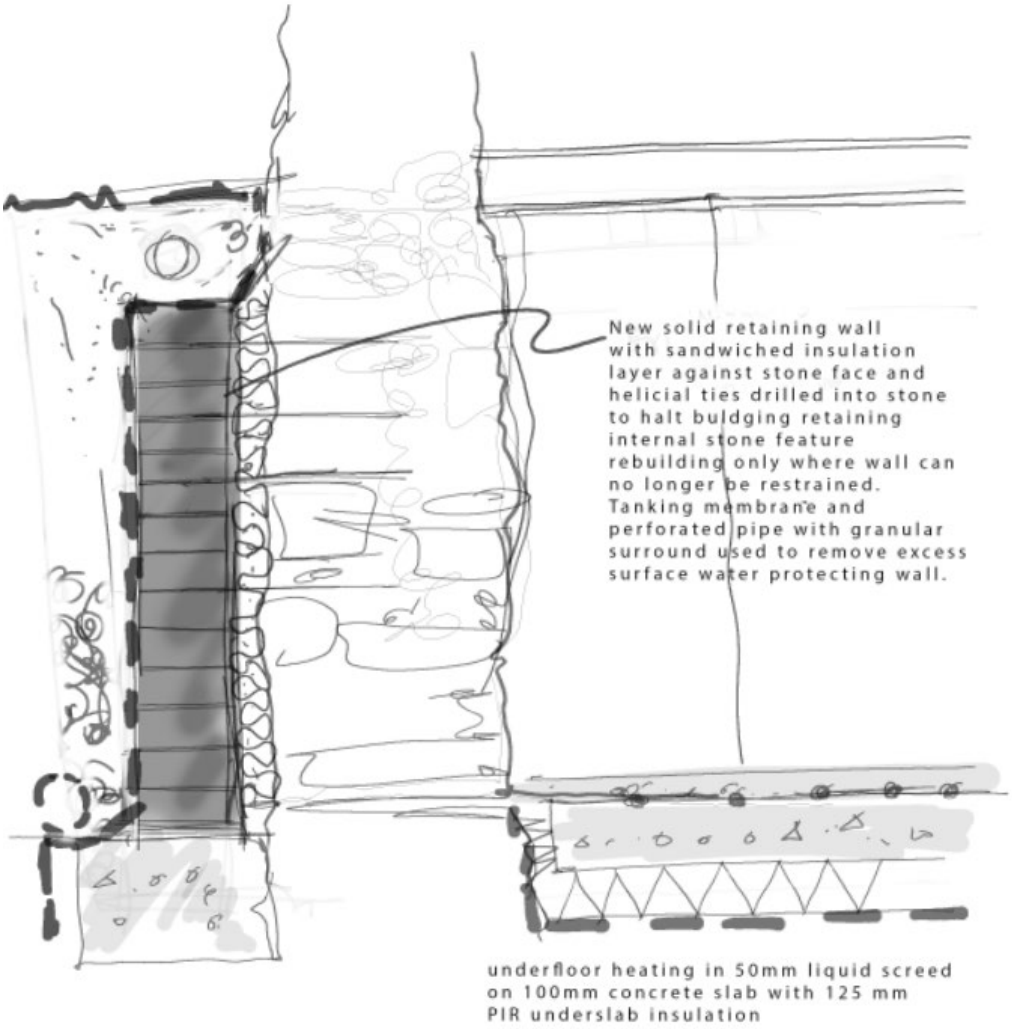


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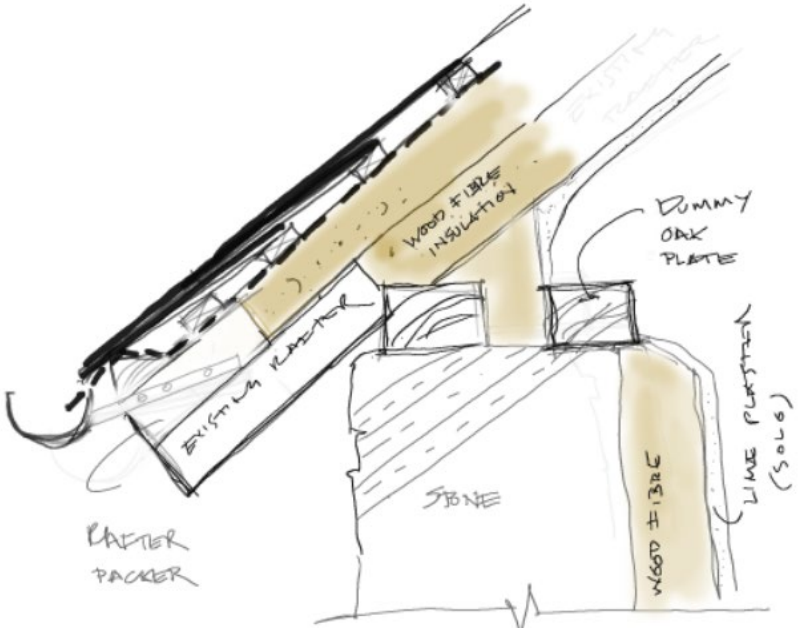


Above shows the proposed approach to retain the external appearance with an inset

window frame to the back of the recess keeping the timbered frame with vertical bars externally.



Above suggested means to protect and waterproof the existing retaining stone wall. The proposal to use a concrete slab rather than Limecrete in this instance is both economic and practical as 1. a greater level of insulation can be achieved with less excavation depth thus less likely to undermine the footing of the stone walls, 2. An effective DPM is advised given the depth below the natural sloping ground levels which will also act as a gas tight membrane against Radon and act as a protective layer from moisture ingress. The installation of underfloor heating can help protect the building fabric with a renewable option such as air-source heating as a potential system only viable if the buildings fabric can be sufficiently insulated.



The use of wood fibre insulation to insulate over and between the rafters will have the added benefit of bracing the structure.

Impact Assessment

The proposal looks to retain and enhance salvageable elements of the existing barn. The proposed conversion would result in new glazed openings and thermally efficient finishes to make the building habitable, but it would look to retain features such as the undulation of the roof, internal trusses within an open plan space and boarded timber entrance doors (painted). Windows will be recessed to create shadow and retain the feel of the barn as it is from the roadside. Extension will be limited to the rear of the building tucked lower with a catslide roof form in matching materials to achieve the accommodation needs for this development.

Consultation

The pre application meeting with the Conservation Officer was positive with suggestions made on external finish and areas of interest that would be worth trying to save in the proposed design. It was recognised that without intervention the existing structure would fall into further disrepair with the potential to lose the asset.

Conclusion

The proposal does not impact on natural heritage.

As a listed building it is important to respect the identified key details and the external appearance and form of the barn as the main focus when developing the design. To retain and maintain the building however it does need an alternative usage as disused properties generally fall into disrepair. Conversion can act as a way of ensuring that the building fabric is maintained, to do so it does need to be treated

sensitively, retaining the appearance and features that make this building of interest as a historic example of a property of this nature.
The proposal is to convert the building sympathetically but aim to make the buildings usage viable by insulating the property enough to minimise the cost to run and maintain it for the future.
The proposal looks to use modern methods to create a habitable space without losing the key features that make the barn interest, the floor slab requires replacement to make the scheme viable, the roof should be insulated in such a way to retain the undulation and retain the purlin depth internally, walls insulated with a natural material to protect the building. Clear definition being made between old and new shows what has been done to move from barn to habitable space - a new solid warm floor where earth and stone lie allows the occupant to focus on the original exposed features of stone and wood that explain the history, modern partition divides allow the user to see past to what the original spaces would have been. In the same instance the material finish used can be natural, lime paint and plaster compliment the feel and appearance.

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