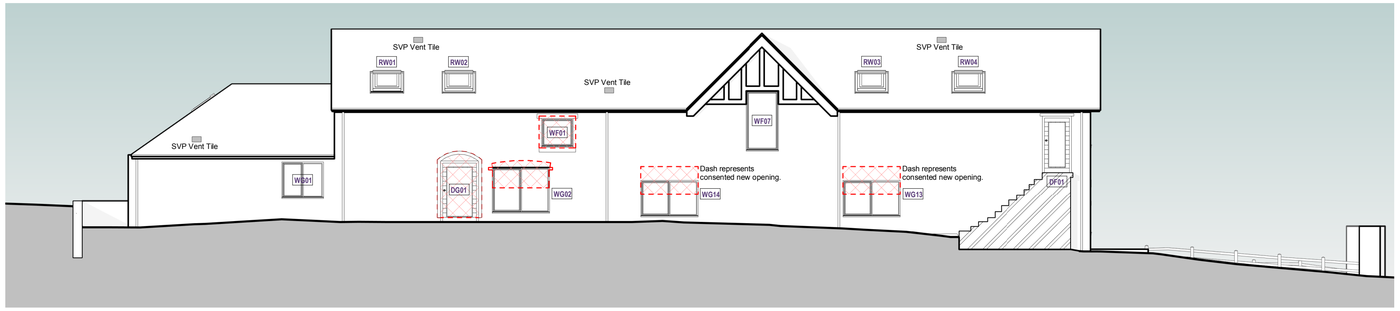
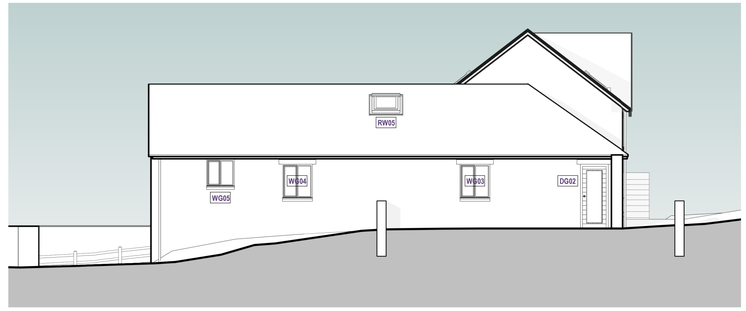


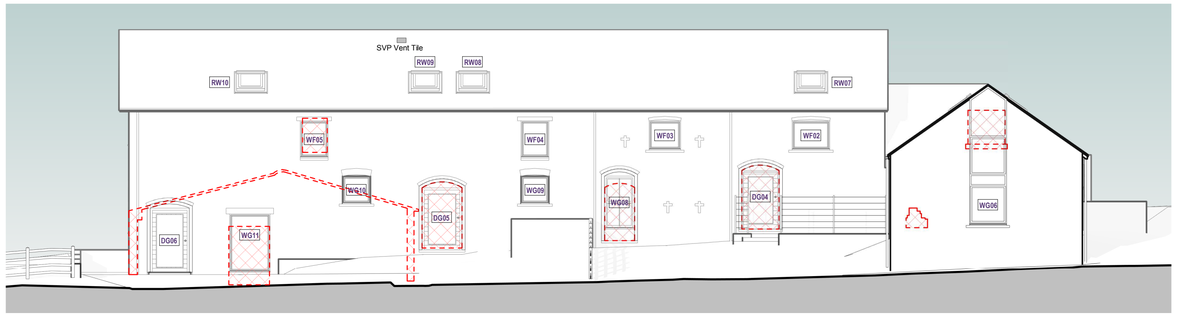
Proposed North Elevation

SCALE 1 : 100



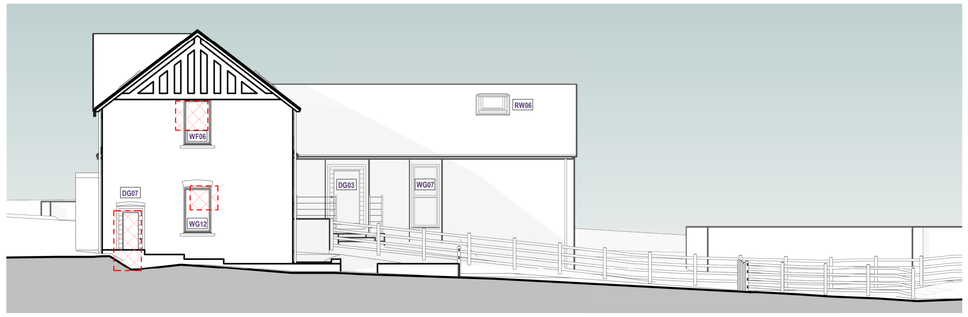
Proposed East Elevation

SCALE 1 : 100



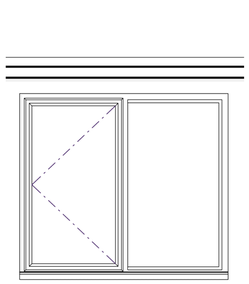
Proposed South Elevation

SCALE 1 : 100



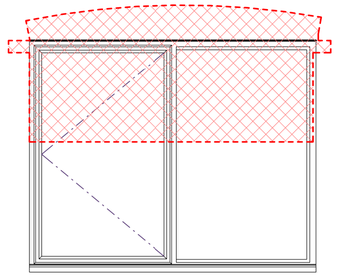
Proposed West Elevation

SCALE 1 : 100



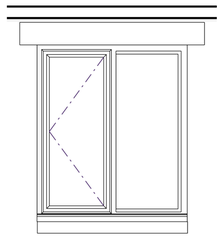
WG01 Elevation

SCALE 1 : 20



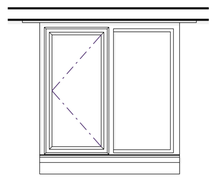
WG02 Elevation

SCALE 1 : 20



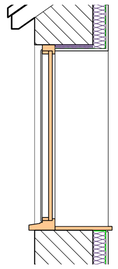
WG03 & WG04 Elevation

SCALE 1 : 20



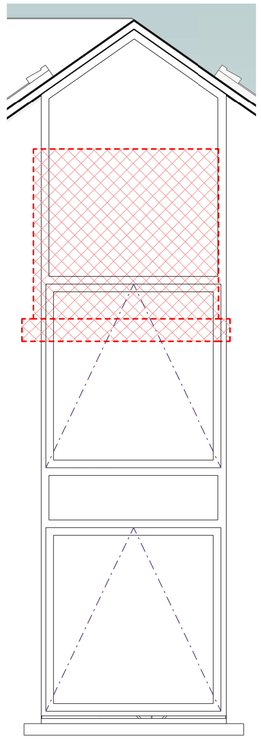
WG05 Elevation

SCALE 1 : 20



Typical Section

SCALE 1 : 20



WG06 Elevation

SCALE 1 : 20

WG01



Analysis
New window unit within existing opening.

Heritage Value
Retention of plan form retains slight evidential value and demonstrates historic fenestration.

Considerations
- A timber framed window shall be used with slim frame profile.
- A deep traditional reveal shall be utilised to retain character.
- No repairs to opening required.

WG02



Analysis
Former opening reinstated. New window inserted within new reinstated opening.

Heritage Value
Reinstating the original opening is positive from an aesthetic and evidential perspective, the current window type is due to adhoc adaptation and low quality repair. Historic value is low. It is not of 'special interest' historically.

Considerations
- A timber framed window shall be used with slim frame profile within the larger opening. A deep traditional reveal shall be utilised to retain character.
- The bricks removed will be salvaged and re-used elsewhere.
- The previous brick infill was low quality, care will be taken to reinstate the opening without compromise to the surrounding brickwork coursing.

WG03 & WG04



Analysis
New window unit within in-filled opening.

Heritage Value
Reinstates previous historic fenestration. Enhances the building character and reinstates former aesthetics.

Considerations
- A timber framed window shall be used with slim frame profile.
- A deep traditional reveal shall be utilised to retain character.
- Repair and repointing to brickwork, cill, and insertion of a timber supporting lintel as per WG05 in the following photo.

WG05

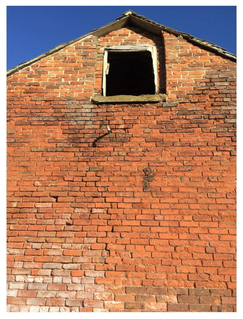


Analysis
New window inserted within existing opening.

Heritage Value
Retention of opening conserves the slight evidential value and historic fenestration.

Considerations
- A timber framed window shall be used with slim frame profile and a deep traditional reveal shall be utilised to retain character.
- Repointing is required to the masonry around the opening, the existing poor repair to the right will be scraped out and repaired in accordance with the Method Statement by Smytheman Architectural.
- The blue plinth brick cill shall be repaired and reinstated.

WG06



Analysis
Panoramic window inserted into gable end, poor condition cill removed. Masonry requires repair, repointing and restraining (note- metal tie is to be removed).

Heritage Value
The existing window to be altered was part of the host buildings evolution, and thus carries some evidential value. However, this is a typical agricultural building with normal window openings, as can be seen in various examples across Staffordshire and the UK. The elevation faces away from the public views and as result, has no communal value. It is not aesthetically significant and the building is not old enough or rare enough to hold historic value worthy of listing. As result, there is no 'special interest' or character lost through the adaptation of this window.

Considerations
- A modern panoramic window will be clearly identifiable which Historic England suggest is appropriate for 'new work'. The conversion of this barn is part of the buildings evolution and this alteration represents honest authentic alteration as national policy promotes.

All heights, sizes and dimensions should be checked on site by the contractor before any work is put in hand.

Figured dimensions should be taken in preference to scaling and any errors or omissions reported to the architect at once

This drawing has been prepared in accordance with the CDM (Construction Design and Management) and all foreseeable design risks to those involved or affected by construction have been avoided wherever possible

Building Regulations References

Approved Document A

Re-covering of roofs

4.2 The re-covering of roofs is commonly undertaken to extend the useful life of buildings. Roof structures may be required to carry underdrawing or insulation provided at a time later than their initial construction. This section considers when the re-covering of roofs with work to a roof constitutes a material alteration under the Building Regulations.

4.3 Where the work involves a significant change in the applied loading the structural integrity of the roof structure and the supporting structure should be checked to ensure that adequate strength is provided and that it is not less compliant with Requirement A1 than the original building.

4.4 A significant change in roof loading is when the loading upon the roof is increased by more than 10%. Consideration might also be given to whether the roof covering being replaced is the original as-built covering.

Assessment
As part of the change of use to extend the viable use of the former barns modern levels of insulation is required. To accomodate this, the building structure will require upgrading to take additional load.

Material changes of use

4. The act of erecting a new dwelling is not a material change of use. Approved Document L1B applies where a dwelling is being created in an existing building as the result of a material change of use of all or part of the building.

Approved Document L1A- Assessment

The creation of a 2 No. new residential units will be treated as the alteration of a dwelling under L1B.

Historic and traditional buildings where special considerations may apply

3.8 There are three further classes of buildings where special considerations in making reasonable provision for the conservation of fuel or power may apply:

a. buildings which are of architectural and historical interest and which are referred to as a material consideration in a local authority's development plan or local development framework;

b. buildings which are of architectural and historical interest within national parks, areas of outstanding natural beauty, registered historic parks and gardens, registered battlefields, the curtilages of scheduled ancient monuments, and world heritage sites;

c. buildings of traditional construction with permeable fabric that both absorbs and readily allows the evaporation of moisture.

3.9 When undertaking work on or in connection with a building that falls within one of the classes listed above, the aim should be to improve energy efficiency as far as is reasonably practicable. The work should not prejudice the character of the host building or increase the risk of long-term deterioration of the building fabric or fittings.

3.10 The guidance given by English Heritage[1] should be taken into account in determining appropriate energy performance standards for building work in historic buildings.

In addition English Heritage has produced detailed technical guidance on how to implement specific energy efficiency measures. (See list of available guidance documents at http://www.english-heritage.org.uk/professional/advice/advice-by-topic/climate-change/energy-efficiency/.)

3.11 In general, new extensions to historic or traditional ***dwellings*** should comply with the standards of energy efficiency as set out in this Approved Document. The only exception would be where there is a particular need to match the external appearance or character of the extension to that of the host building (see paragraph 4.2i).

Approved Document L1B

Assessment
Document L1B does make some exceptions for building performance relative to historic significance, within the proposals there are instances where doors and windows require alteration in order to allow energy efficiency measures.

Table 2 **Standards for new thermal elements**

Element[1]	Standard W/(m².K)[2]
Wall	0.28
Pitched roof – insulation at ceiling level	0.16
Pitched roof – insulation at rafter level	0.18
Flat roof or roof with integral insulation	0.18
Floors[3]	0.22[4]
Swimming pool basin	0.25

Notes:
1. 'Roof' includes the roof parts of dormer windows, and 'wall' includes the wall parts (cheeks) of dormer windows.
2. Area-weighted average values.
3. A lesser provision may be appropriate where meeting such a standard would result in a reduction of more than 5% in the internal floor area of the room bounded by the wall.
4. A lesser provision may be appropriate where meeting such a standard would result in disproportionate difficulties for low energy levels. The U-value of the floor of an extension can be calculated using the exposed perimeter and floor area of the whole enlarged dwelling.

4.19 Manually controlled trickle ventilators (the most common type of ***background ventilators***) can be located over the window frames, in window frames, just above the glass or directly through the wall (see Diagram 1 in Key terms). They are positioned typically 1.7 m above floor level to avoid discomfort due to cold draughts. These ventilators often incorporate a simple flap that allows users to shut off the ventilation – depending on external weather conditions. Trickle ventilators are intended to be normally left open in occupied rooms in dwellings. A window with a night latch position is not recommended because of the difficulty of measuring the ***equivalent area***, the greater likelihood of draughts and the potential increased security risk in some locations.

Approved Document F

Assessment
Document F requires that ventilation is acheived at 1.7m above floor level. This has resulted in the need to adapt some window heights.

Private entrances

Principal private entrance and alternative entrance

2.20 The principal private entrance, or the alternative private entrance where step-free access cannot be achieved to the principal private entrance, should comply with all of the following.

a. There is a level external landing with a minimum width and depth of 1200mm.

b. The landing is covered for a minimum width of 900mm and a minimum depth of 600mm.

c. Lighting is provided which uses fully diffused luminaires activated automatically by a dusk to dawn timer or by detecting motion.

d. The door has a minimum clear opening width of 850mm when measured in accordance with Diagram 2.2.

Approach routes

General

1.3 The approach route should be safe and convenient for everyone, including older and disabled people and some wheelchair users. It should adopt the shallowest gradient that can reasonably be achieved and be step-free where possible.

1.4 The approach route should be level, gently sloping, or, where necessary, ramped. On steeply sloping plots, a stepped approach can be used.

Approved Document M- Assessment

Part M requires that the approach to a dwelling should be gradiented to acheive a safe level access. An 850mm clear opening is required.

Rev	Date	By	Detail
P0.1	23-05-19	BJ	Plans updated to Planning Status

Drawing status
S3 - Planning

Client
Mr & Mrs Bostock

Project/Location

Barn Conversion

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Drawing title
Proposed Elevations & Window Details (1)

Scale(s)	Date	Drawn	Checked	Job Number
As indicated @A1	16-04-19	BJ	SS	3120

Drawing number MB19-SA-XX-XX-DR-A-0401

Revision P0.1