3590 Cloud House Farm

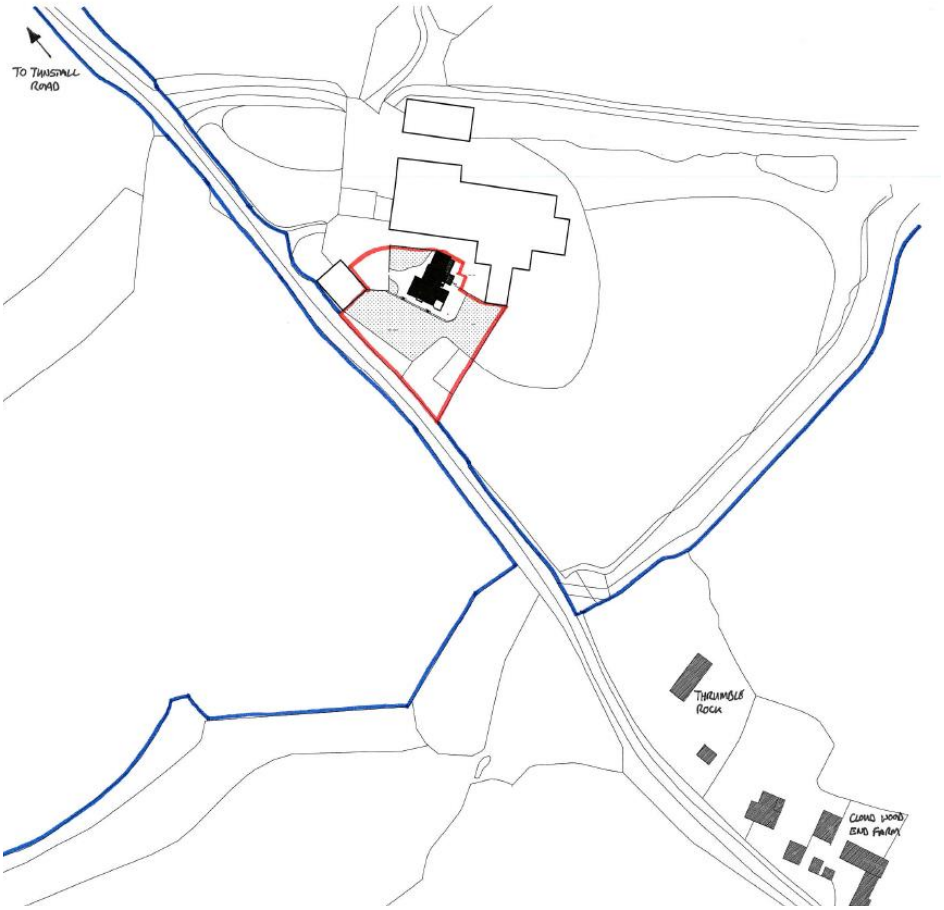
Design and Access Statement

This report has been prepared to support a planning and listed building consent application for the demolition of the utility room, conservatory and lean-to extensions and the erection of single storey extensions and internal alterations at Cloud House Farm, Toft Green CW12 3QF.

This application is a resubmission of Planning Consent reference SMD/2014/0490 and Listed Building Consent reference SMD/2014/0505. These applications also sought consent for the demolition of the utility room, conservatory and lean-to extensions and the erection of single storey extensions and internal alterations

Location

The site is in Toft Green, near Congleton, sitting in the shadow of The Cloud. The site is in green belt.



Site Location

Site - Context

The application site comprises a house and gardens within a working dairy farm. Cloud House Farm has been in the Needham family for five generations. The house is occupied by the current farmer, Robert Needham; the alterations are proposed to accommodate the needs of his young family and farm workers on the site. The proposals seek to make the changes necessary to achieve this while preserving the fabric of the original house. Most of the alterations proposed will replace or alter work carried out in the late C20th.

The gardens are mature with established residential boundaries to which no changes are proposed.

Existing Building

The house is a three storey Grade II listed stone farmhouse, externally dated 1612, although the internal timber frame is likely to date from the C16th. A Heritage Statement has been prepared by Garry Miller and is included with this application.



Front Elevation



Rear Elevation – utility room, conservatory and C20th outbuildings

The house was altered and extended in the 1970s to create a landing, separate bedrooms and a bathroom on the first floor and to add a fitted kitchen, utility and WC at ground floor. The conservatory was added during the 1990s.

Planning History

Planning Permission Ref: SM.1857/LB Approved 17/03/76
Listed Building Consent Ref: SM/LB/15

Planning and Listed Building Consent was granted for extensions to form utility room, WC and chimney stack and demolition of outbuildings at Cloud House Farm.

This permission included internal alterations, demolition of the existing rear section of the house below, a catslide roof and the construction of rear extensions including a utility room, plant room and inglenook fireplace and chimney. The proposals included the creation of new window openings in the rear elevation to light first floor bedrooms and bathrooms.

The proposals include the installation of new concrete floor slabs throughout the ground floor of the house. These works were implemented.

Planning Approval Ref: SMD/2014/0490 Approved 27/01/15
Listed Building Consent Ref: SMD/2014/0505

Planning and Listed Building Consent was granted for internal alterations, the demolition of the existing utility room, conservatory, plant room and storeroom and the construction of two separate rear extensions containing a boot room, plant room and garden room.

Approved Alterations:

Ground Floor:
Reuse of external door to study/farm office, installation of partition forming hallway, new WC to the rear of the office, reopening of external doorway to the rear.
Relocation of internal doorway within kitchen and installation of new kitchen.

Removal of C20th partitions around the staircase.

First Floor:
Rearrangement of existing internal partitions to form separate bathroom, shower and enlarged bedroom 3.
Installation of partition and door within bedroom 4.
Enlargement of existing window opening in bedroom 3

Approved Extensions:
Boot room, staff WC and shower
Replacement plant room
Lean-to oak glazed garden room, with zinc roof and conservation rooflights.

Services
Installation of slimline underfloor heating system throughout the ground and first floor of the house.

Elements Deferred/Removed from Proposals
The elements removed from the LBC application pending submission of further information/evidence were:
Insulated wall linings to external walls
Re-glazing of existing fixed glazing and new steel casement windows
Laundry room on first floor level
Works to second floor, including roof insulation

Current Application

This application seeks planning and listed building consent for an enlarged single storey rear extension. The enlarged extension accommodates the utilitarian functions of the house, which reduces the requirements for the listed building.

Revised Alterations:

Ground Floor:
Reuse of external door to study/farm office, installation of partition forming hallway, the approved WC is now accommodated within the rear extension. There is therefore less impact on the listed building.

The kitchen/dining area is now accommodated within the enlarged rear extension where plenty of space and natural light are available. The living spaces within the listed part of the building will be allocated to functions which do not require good levels of natural light.

The laundry function is now accommodated within the enlarged rear extension, reducing the impact of trying to accommodate the space at first floor level.

First Floor:
Rearrangement of existing internal partitions to form separate bathroom and enlarged bedroom 3. The proposed shower room has been omitted from the proposals to achieve a better proportion for the bedroom.
Enlargement of existing window opening in bedroom 3 to three bays, following removal of C20th chimney breasts – to suit the enlarged bedroom.

Second Floor:
Removal of C20th trap door and installation of new partitions and doors to create separation between the first and second floor.
Roof insulation to be laid between and under C20th rafters.

Revised Extensions:
Enlarged rear extension accommodating kitchen/dining space, staff welfare space (WC and teapoint), guest WC, and laundry.

Elements Reintroduced to the Proposals
The elements reintroduced to the proposals, along with the submission of further evidence and information, are:
Replacement of existing single glazing in fixed lights
The installation of new double glazed steel casements in opening lights
Installation of partitions at second floor level
Installation of insulation at roof level

Design Process

Brief

The current occupant and his family moved into the house several years ago when his parents retired from full-time farming. His young family have different requirements for the house.

The farmhouse kitchen and utility are currently used by five permanent farm workers; two to three staff are employed on a seasonal basis. The farm workers are on site from 5:00am until 6:30pm and have at least two meals a day at the house leaving outer clothing and dirty boots in the conservatory or utility room.

With young children in the house, our client wanted to separate the farm activities from the private family spaces. A new boot room, WC and wash facilities with hot water are required which would allow the segregation of farm and family activities and provides a wheelchair accessible toilet. This new arrangement will allow the existing areas of the property to provide a clean and safe environment for the young family.

It is proposed to replace the existing utility and conservatory with an open plan kitchen/dining space, suitable for use by the family and farm workers. This would be connected to an enclosed external play area to prevent the children having access to the farmyard.

The existing kitchen, at the back of the house, is small and dark; artificial light is permanently required. It was intended to open the kitchen up to other rooms to borrow light and enlarge the space visually. This is not possible due to impact on historic fabric so an alternative approach is being sought.

On the first floor, our client needs a space where he can prepare for the morning milking without disturbing other members of the family. Separating the shower to bedroom 4 can provide this function. It was felt that bedroom 3 was compromised both in shape and lack of natural light and that these issues should be addressed in the proposals.

Review Listed Building Consent SMD/2014/0505

The approved scheme, shown on drawing no.3590/05 revision N, included retaining the kitchen in its existing location at the rear of the main house, with the informal family dining space located within the rear extension.

The applicants would have liked to open up the space between the kitchen and the garden room to improve the natural light levels in the kitchen and access between the two spaces. This proved impossible in listed building terms as the wall between the house and the proposed garden room was original fabric.

The applicants also hoped to remove the plasterboard infill panels within the oak screen to create a greater openness between the kitchen and the formal dining space. The submitted proposal retained the surviving wattle and daub panels but removed the modern infill panels.

During the determination of this application, it became clear that the conservation officer was keen to retain the spirit of the oak screen by preserving the modern plasterboard infill as well as the wattle and daub panel.

During the determination process, a first floor laundry room was removed from the proposals. A laundry room/utility room needed to be accommodate within the revised proposals.

It was agreed that the extant consent did not provide a suitable arrangement for the long term use as a family dwelling, nor did it achieve suitable segregation of family and farm areas to function as a working farmhouse.

It was agreed that the functions which require a good level of natural light, such as cooking, and those requiring services, should be accommodated in an enlarged rear extension. This would reduce the need to enlarge existing windows to achieve better light levels within the listed fabric of the building.

Following research on the insulation of listed buildings, the applicant was concerned that insulating the external walls could cause interstitial condensation, leading to damage to the original fabric. In response to this issue, the applicants decided to install a cheap source of heat rather than upgrade the thermal envelope. This has reduced the need for insulation in the external fabric of the building.

Existing problems in the property

The existing single glazing is causing a significant condensation problem throughout the house. Photographs below show the extent of the problem which results in mould growth on the stone mullions and cills. At present, continual mopping up of water around the windows is required.

The increased dampness cause the timber casements to swell which prevents their function as opening lights during the winter months; they cannot be opened or closed.



Mould growth on stone mullions.



Mould growth on stone mullions and transoms.

In the areas where broken panes of glass have been replaced with slim-line double glazed units, these problems do not arise.



Bedroom window with timber framed opening light.

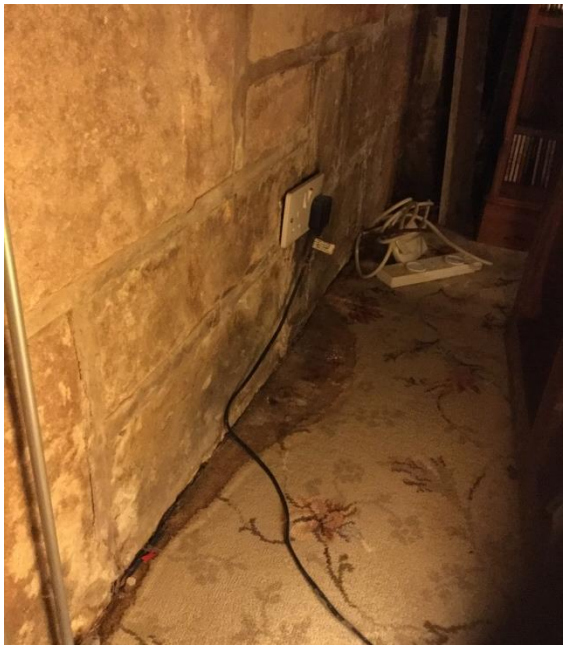


bedroom window with condensation on all window panes.

The external space between the utility room and the chimney is permanently damp due to its sheltered aspect.



Window near 1970's chimney with damp ingress



Damp ingress next to Sitting Room fireplace

Water ingress and condensation issues are priorities in the schedule of repairs required to the building. External repointing is required and this will be carried out at the same time as construction of the rear extensions.

Analysis of Existing Fabric

One of the first tasks was to establish the extent of original fabric to ascertain what should remain and what could be altered or removed.

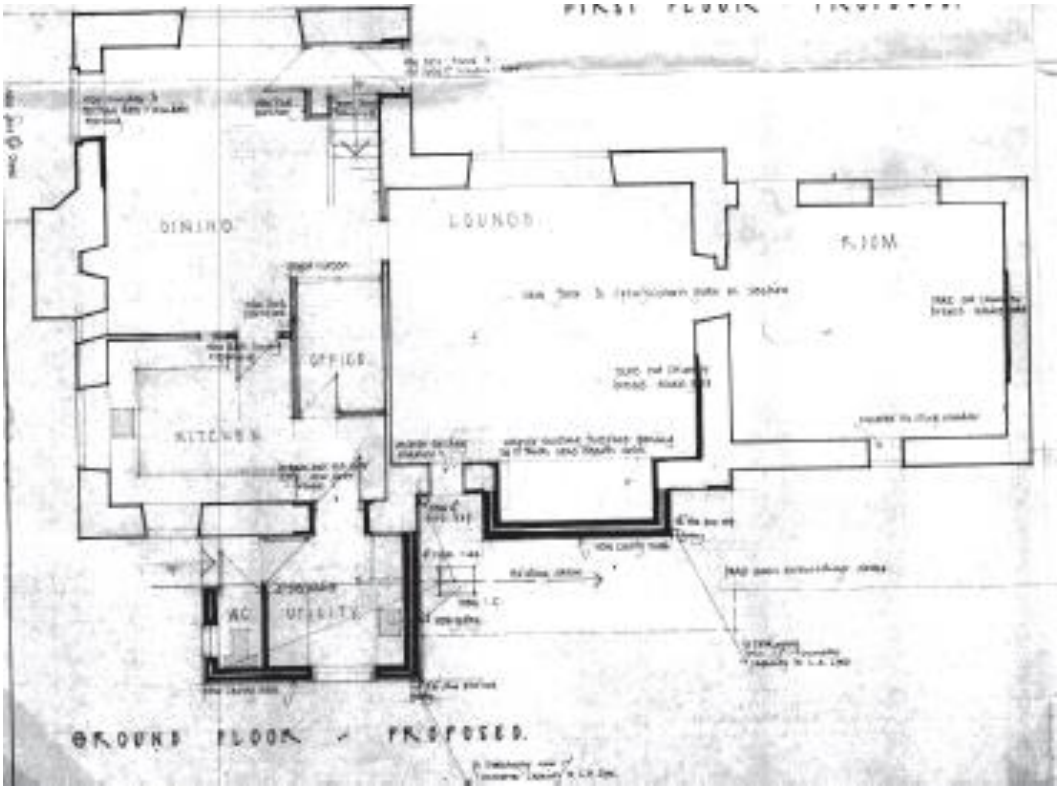
C20th Alterations

Drawing 3590/02 revision F, submitted with this application, shows the changes made during the C20th. These include internal alterations and the addition in 1976 of a utility room and toilet at the rear and the addition of a conservatory in the 1990s.

This extent of the 1970s work is shown on the approved planning drawings dating from 1976 - copies of the existing and proposed drawings have been included in this application.

The scope of work included new ground bearing concrete floor slabs throughout, construction of the inglenook fireplace, chimney, and wall above and amendments to the kitchen and utility extension and altering the internal wall between the kitchen and dining room to provide a study.

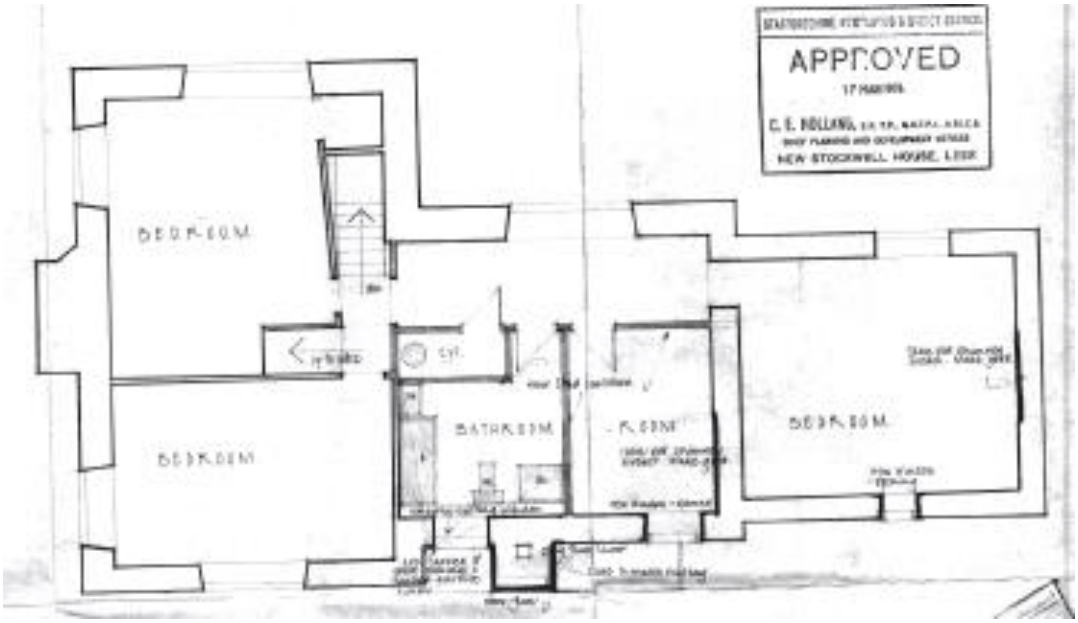
The oak screen between the kitchen and dining room has been altered; wattle and daub panels were removed to install a glazed opening, wall lights and wiring. One wattle and daub panel remains behind the existing hob.



Approved Ground Floor Plan 1976

At first floor level, consent for a larger window was given for bedroom 3. This enlarged window is incorporated in the current proposals but with three panes instead of two.

The approved drawings show partitioning was added to enclose the bathroom and linen cupboards at this time. This proves that the proposals for amendments to the bathroom layout will not affect any original timber framing.



Approved First Floor Plan 1976

The planning history shows that the extensions to the rear, including the inglenook fireplace, chimney and rear wall to bedroom 3, date from the late C20th; therefore removal and replacement of these elements should not be an issue.

Analysis of Existing Windows

Mr Needham's great grandmother, Mrs Sissy Bowler born 1882, inscribed her name on one pane of glass on the landing window with her engagement ring - see photograph below.

A family photograph dating from the 1950s, with the applicant's father as a young boy in the centre, shows no evidence of small leaded lights but shows full single glazed panes between the stone mullions, with a timber opening casement.

Therefore the large single panes of glass pre-date the listing of the building, on 1 February 1967, by approximately six decades.

In the late 1970s, new window openings were created in the external fabric of the house. These new windows include the mullioned window on the side elevation lighting the dining room which replaced an entrance door, the window to bedroom 3 and the rear window to bedroom 4. Windows in the bathroom and next to the fireplace were re-instated at this time and glazed with new single glazing.

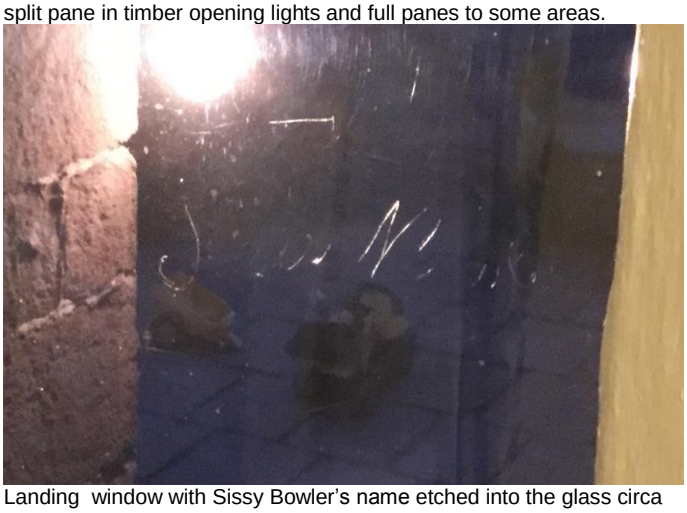
Some broken or damaged window panes in the kitchen window and a single pane in the front dining room window have been replaced with slimline double-glazing. There is little visual difference between the single glazing and the double-glazed units.



Front Elevation of house circa 1950 pre Listing. Existing windows partly split pane in timber opening lights and full panes to some areas.

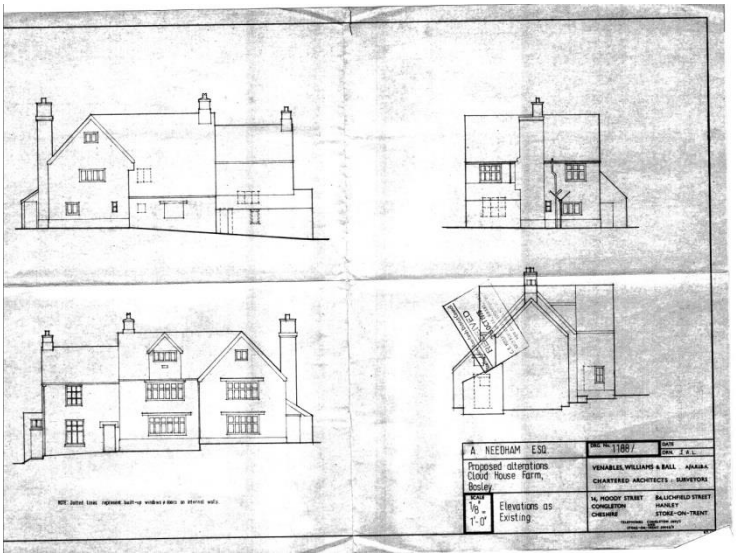


The stone mullioned window to south elevation under construction in 1977. This replaced the side entrance door



Landing window with Sissy Bowler's name etched into the glass circa 1905. Sissy was the applicant's Great Grandmother, born 1882

Rear Chimney – Evidence proves that the chimney and bressumer were constructed after 1975 and are not historic fabric. The chimney is constructed in concrete block, as shown in the photographs below.



Survey drawings submitted in 1975 show rear elevation with catslide roof but no rear chimney.



Photograph from the late 1970s showing the reconstruction of the rear elevation, new chimney and extensions following removal of the catslide.

Proposals

Ground Floor

Previously Approved

The proposals included reusing the original external door to provide direct access to the farm office and the installation of an internal partition to create a separate hall and the reopening of a doorway to the rear to reinstate access from the farmyard to the farm office without passing through the kitchen, sitting room or dining room.

C20th partitions are to be removed from the staircase and replaced with a new oak newel post. The C20th infill panels on the kitchen timber dividing wall are to be removed providing a doorway with the existing door opening infilled. The rest of the existing panels are to be retained.

Proposed

The proposals include the demolition of the 1970s extensions to rear of the kitchen (utility, WC), store room and boiler house and 1990s conservatory. These are to be replaced with a single storey extension to provide an open plan kitchen/dining space for use by the family and farm workers for daily meals, a laundry/utility room and boot room with separate WC for farm workers giving access to hot water and welfare facilities.

The extension will be constructed in squared irregular coursed sandstone to match the existing building which is described in the Historic England listing as Ashlar-like rubble. The extension will be roofed with zinc sheet, with low profile roof lights.

The extensions will be separated from the existing house with a ribbon of glazing at the junction with the listed building. This will create a visual separation between the new and the old and allow the existing stonework of the house to be revealed.

First Floor

Previously Approved

A new doorway is provided to bedroom 4 enabling the shower room to be used as a second bathroom removing the need to sub-divide existing rooms.

Planning and listed building consent has been granted for the enlargement of the existing window in bedroom 3 to two bays.

Proposed

The proposed internal layout has been amended to omit the shower room to achieve a greater area and better proportions in bedroom 3.

The proposals include the enlargement of the window in bedroom 3 to three bays, which will be a better proportion for the enlarged room. The width of the existing chimney stack will need to be reduced to accommodate this amendment.

Second Floor

The two rooms on the second floor were used for staff accommodation and are currently used for domestic storage. The proposals include upgrading the thermal insulation and providing heating to bring the rooms back into habitable use.

The existing access to the attic is compromised by a ceiling bulkhead and trapdoor which were added in the 1970s to provide thermal separation between first and second floor level.

The proposals include the removal of the trap door and bulkhead and the installation of stud partitions at second floor level to achieve thermal and acoustic separation between the first and second floors.

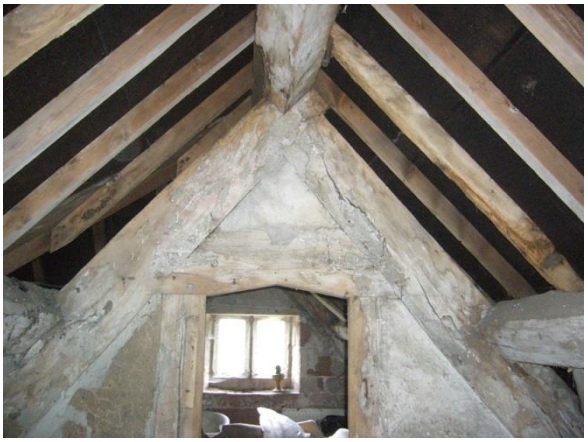
Because of the steep stairs and compromised landing, these rooms will not be used as sleeping accommodation.

The slate roof requires repair and some of the rafters, which date from the 1950s, are in need of replacement. The proposals include reroofing with insulation installed in line with the rafters.

The existing flooring, which comprises a screed, is to be retained and will be protected by the new flooring laid over it. The existing floor is to be boarded over with chipboard and, where required, built-up using timber counter battens to level the surface.



Stair access is compromised by bulkhead and trap door



Existing opening to be retained with door inserted.

Exterior - House

Previously Approved

The existing study window is to be altered to match the stone mullioned window above.

Proposed

The C20th single glazing is to be replaced with slim-line double glazed units. The size of the glazed units will match those installed in the house pre-listing. As there is evidence, noted earlier, that the existing glazed panels are over 100 years old, we consider this to be a reasonable approach.

Where historic glass has survived, such as the etched pane on the first floor, this will be removed and reincorporated into a new double-glazed unit by Touchstone Glazing Solutions.

Fixed lights are to be set directly into the stone. The timber opening lights are to be replaced with steel casements.

The existing guttering on the property is predominantly plastic. The rainwater goods and soil vent pipes will be replaced with cast aluminium and painted black.

The existing barge boards to gables at the front and rear of the property are metal, installed because they required little maintenance; these will be replaced with timber and painted white.

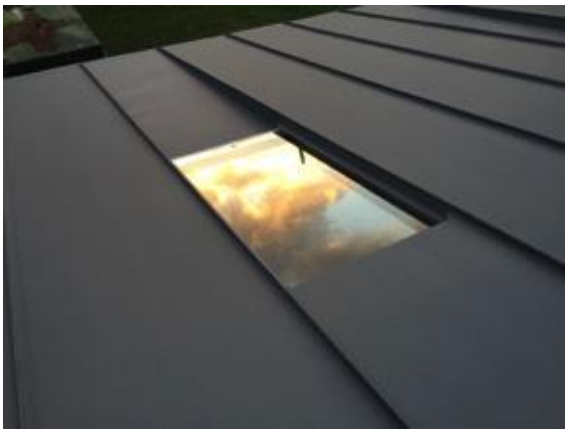
Redundant cables and light fittings will be removed from the exterior of the house to enhance the appearance of the property.

Exterior - Extension

Proposed
The extension is to be constructed in pink sandstone to match the existing house. The walls will be in squared irregular coursed sandstone to match the listed building. The roof will be a low profile zinc with flush roof lights. The new windows and door will be aluminium double glazed units; the 'ribbon' will be structural glazing.

The extension is designed to be 'of its time' and distinct from the existing building in its detailing and material choice.





Examples of flush fixed roof lights to be installed in low pitch zinc roof.

Technical Details

Services

Heating - The house is now linked to a biomass boiler located in an outbuilding. This has reduced the requirement for insulating external walls. The walls will remain uninsulated to preserve the fabric of the existing building. A thin lay-on underfloor heating system is to be installed at ground and first floor level, new radiators are proposed at second floor level.

Ventilation – new extract ventilation will be provided to both bathrooms. These will terminate at roof level at a low profile slate vent.

Glazing

The proposals include the installation of slim-line double glazed units, between existing stone mullions, using Histoglass 13mm thick units. Where historic glass has survived, such as the etched pane on the first floor, this will be removed and reincorporated into a new double-glazed unit by Touchstone Glazing Solutions. The thermal performance of a 13mm pane of Histoglass compared with single glazing can reduce energy loss by 67%.

Fixed Lights - All fixed lights will be secured against the existing stone mullions using Kawo Elastokitt, as recommended by Histoglass. This is a type of putty commonly used in heritage projects.

Opening Lights - Existing timber opening lights are to be replaced with steel casements, set between the stone mullions. These will have 12mm slim profile double-glazed units, within 'Steelyte Slim' stainless steel opening casements byTouchstone Glazing Solutions.

Detailed drawings of the proposed reglazing of fixed and opening lights are included with this application.

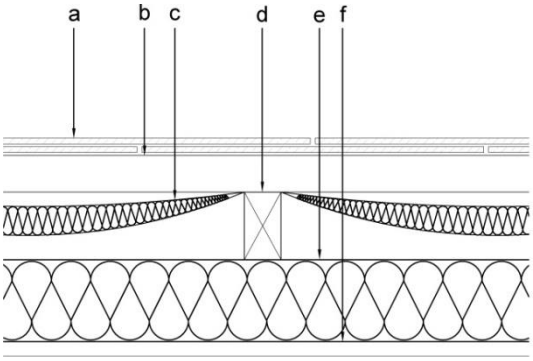




Examples of slim line metal casements installed to stone mullion windows with adjacent frameless glass by Touchstone Glazing.

Roof Insulation

The proposals include the installation of an insulated breathable roof membrane to replace the existing roofing felt e.g. TLX gold breathable membrane, with rigid insulation boards installed below the rafters. The existing blue slate roof tiles will be reused.



Roof build up:

a. Roof Slate
b. 38 x 38 timber battens
c. TLX Gold (draped)
d. Existing Rafters
e. 85mm P.I.R. Insulation
f. 15mm plasterboard

To achieve U-Value of 0.18

Typical roof detail of insulation below rafters.

Amount of Development

The amount of development is modest, comprising a single storey rear extension which replaces existing structures. The proposed extension comprises a 25% extension of the original dwelling. The extension is single storey and does not have an over bearing impact on the listed building.

Summary

	Area (m^2)	Uplift	Footprint (m^2)
Original Building (including porch)	353	0%	141
C20th Extension	42.1	11%	42.1
Existing Buildings	389	10%	177.1
Proposed Extension	95.6	27%	95.6
Proposed Buildings	442.6	25%	230.1

Layout

The extension will be at the rear of the building, replacing existing C20th structures. This reduces the impact on the listed building.

Scale

The scale of the extension is modest and has been defined by the parameters of the existing building.

Landscaping

The house sits in a mature landscape setting, with a raised lawn to the side of the house, and paved seating areas to the front and rear.

The proposals include drawing back of the existing raised lawn to create a paved area outside the existing kitchen window. The use of light coloured paving such as Indian Stone, will reflect light into the playroom. A new paved area is to be provided outside the dining room.

No amendments to existing boundary treatments are proposed.

Appearance

The rear extension will be constructed in pink sandstone but with modern detailing. The windows and doors will be aluminium and the roof finish will be zinc with low profile roof lights. The materials will match the palette of the listed building while being precise and modern in their detailing.

The appearance of the rear of the house will be improved by the replacement of the existing C20th extensions.

Use

No change of use is proposed.

Impact on Green Belt

The house is surrounded by farm buildings and mature gardens and hedgerows. The proposed single storey rear extension replaces the existing single storey rear extensions. The impact on the openness of the green belt will be minimal.

Impact on the Listed Building

The proposals seek to remove unsympathetic C20th additions and replace these with a more considered design, which is of its time; there will be a benefit to the appearance of listed structure. The proposals include a ribbon of glazing which provides separation between the existing and proposed elements, more of the listed fabric will be uncovered.

The alterations also seek to rectify existing unsympathetic features on the listed building. This is investigated in detail in the Heritage Assessment.



The proposals will remove C20th single storey additions and replace these with a single storey extension

Sustainable Development

The proposals seek to adapt a 400 year old house to accommodate a growing young family and thriving agricultural business, to give long-term protection to a listed building.

The applicants have installed a renewable energy source of heating which reduces the need for the thermal upgrading of the external envelope.

Access

Existing Access

The existing access drive leads to hardstanding which forms part of the farmyard.

Proposed Access

There are no changes proposed to the existing vehicular access arrangements.

The proposals for the house include two new access level toilets and a new entrance.
The proposals comply with requirements set out Part M of the building regulations.

Supporting Information

Planning Statement

A Planning Statement has been prepared by Jill Naylor of Emery Planning and is included in this submission.

Trees

There are no trees or hedges within the development area.

Protected Species

Although there is a pond at the entrance to the farmyard, this is more than 200m away from the proposed rear extensions; therefore a GCN survey is not required.

The extension will sit on the footprints of existing buildings or existing paved areas.

Structural Analysis

A Structural Inspection was carried out at the property by Mark Edwards and his report is included in this submission. The structural engineer confirmed that the existing rear extensions could be removed without causing harm to the listed fabric of the building.

Heritage Statement

A Heritage Assessment has been undertaken by Garry Miller and a heritage statement and impact assessment is included in this submission.

Flood Risk

The site is not within a flood risk area.
The Flood Risk is noted as 'Very Low' which means that each year, this area has a chance of flooding of less than 1 in 1000 (0.1%).

Consultation

Local Planning Authority

A meeting was held with Conservation Officer, Gillian Bayliss on 10 May 2016.

Following the meeting with Gillian Bayliss, the scheme was also considered by the Conservation Liaison Panel. The comments made have been addressed with amendments to and clarification of proposals as follows:

Rear Chimney - The Conservation Liaison panel consider the chimney and bressumer to be historic. Evidence proving that it was constructed in the 1970s is included in this report; therefore the proposed alteration of the chimney should not cause concern.

Scale of Extension – The Conservation Liaison Panel and Conservation Officer raised concern at the scale of the proposals and the masking of the rear elevation of the listed building.

The extension has been amended to include a ribbon of glazed ribbon where the extension meets the original fabric. This makes a clear distinction between the existing building and the extension and will also allow the rear of the listed building to be seen.

The extension will appear detached from the house with the rear gable referenced in the extension. The roof pitch is low, being no higher than the extant consent.