DESIGN AND ACCESS STATEMENT



Alterations and Renovations at Lamb House, Glasbury

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INTRODUCTION

Lamb House is a combination of; the original house, a stone barn and a link building that now connects the other two. The site around the house has also developed over time with the main access route originally passing to the West moving to the North with the ground level altered to benefit this change. The change in the external ground level has created an unfortunate situation where the Study floor is now lower than the road level with no possibility of moving this ground away from the property. The effect of moisture within the retaining walls has been further exacerbated with the use of cement render externally and the internal use of none breathable materials. The changes that the buildings have experienced over time have also resulted in an ad-hoc arrangement of rooms and floor levels. The design intention is to respect the difference between the elements of the building, to enable the building to breath and discharge water as naturally as possible, while also bringing it up to standard as a dwelling that now forms a family home.

The realisation of this is likely to be in several phases with additional investigations needed to determine exactly how to progress on some matters. Where there is more than one option on how to progress, these will be outlined explaining the constraint that would determine the selection of an option.

EXTERNAL CHANGES

The raised ground level to much of the building has caused the walls to become damp and with cementitious materials used internally and externally, this has not been able to dissipate. Where possible is desirable to move back the ground level to remove this problem.



To the roadside, this is not possible due to the road and kerb abutting the house. The Studio is on a level with the ground around it. The external area to the West of the Utility and Sitting

Room can be moved back, forming a well c. 1m wide, to the South a land drain can be added with infill that when properly compacted can take the loading of a vehicle enabling the existing vehicle access to be retained. The ground to the South of the Kitchen can also be lowered and this forms landscaping works that will have a positive impact on the garden design. Prior to any of this work, there will be a series of test pits dig along the external elevations to ensure that the structure and finish of the walls at this level is capable of this change.



Following investigations, a new soakaway within the garden, 5m from any structure, should be added for this to run to.

The existing concrete steps to the front [North] door are in poor condition. It is proposed to renew these to create even steps with stone treads. As with the other excavations, this is subject to investigation through trial holes.

With the installation of the proposed biomass boiler, an insulated flue will be needed. This is to be located on the garden elevation of the Garage and should only rise slightly over the ridge of the Garage roof.



NEW FLUE TO THE GARAGE

ELEVATIONS

The main issues with the elevations generally are due to the presence of cementitious materials, with cement mortar and remnants of a cement slurry on the barn and render on the house. While it is proposed to remove these, the render in particular must be removed with care and in small sections recording the fabric beneath as it is done. The exact build-up of materials beneath is unknown and while it is likely that the external walls to the house are stone, there remains a chance that timber may be found. If this is the case the condition of this fabric and the structural impact of this needs to be considered before removal or repair.

The barn is more clearly understood. To the North and East, the cement slurry was removed during the summer of 2009. This is evidenced through the google street view images showing rendered elevations in January 2009 with the render removed in September 2009.



JANUARY 2009

IMAGES FROM GOOGLE STREET VIEW

SEPTEMBER 2009

In addition to the cement on the walls the chimney stacks have also been rendered. It is proposed that this render is removed to understand the material and its condition before

forming a sympathetic repair with renewed leadwork. It is requested that the exact finish of the chimney stacks is to be agreed on site.

The South elevation has conserved more areas of the cement slurry and coloured finish. It would be desirable to rake out the cement mortar to the North and in addition to repoint the Barn with lime mortar with a bagged and limewashed finish. The proposed colour for the barn is an offwhite colour. This would be added as a pigment to the lime wash. The exact ratio of the pigment would be determined following some trial areas on the North, East and South façades. The visual effect of the proposed finish to the barn would be similar to the cement slurry, though in lime this will work with the building to dissipate any moisture that could otherwise build up in the structure. The link between the house and the barn is proposed to remain a white in lime render. The house, that has lost its position of significance in the grouping is proposed to be rendered in a yellow ochre. Historically the use of colour shows status, so in adding colour to the house we are showing this.

In addition to the wall finish, the other work proposed to the North Elevation includes; the opening up of the boarded window, retaining the boarding to form shutters and installing glass into the existing frame with a simple glazing bead. Replacing the glass to the existing Ground Floor windows with plain slim double-glazed panels. The existing door within the link is in good condition and other than decoration, there is no need to change this. It is proposed that the joinery currently painted black is redecorated in a sage green colour. The exact tone can also be agreed following sample areas.



BARN

HOUSE

PROPOSED NORTH ELEVATION



PROPOSED EAST ELEVATION

As with North elevation, the blocked-up window at Ground Floor level is proposed to be opened up, adding in a simple casement to match the window W11 on the North Elevation. The existing external door appears capable of repair, with a glass panel inserted in the existing open section. The existing window surrounds are also proposed to be redecorated in sage green. The Kitchen end elevation is proposed to remain as it is other than joinery decoration. The area of First Floor elevation of the house would have its cement render carefully removed as elsewhere and rerendered in lime. The window within this section, W20 is an openable metal casement that cannot be closed due to the fixed internal glazing. It is proposed that this casement is repaired and a double-glazed metal casement fitted internally for thermal comfort. The new casement would open inward into the existing window reveal.



SOUTH ELEVATION

The remaining finish on the South elevation appears to contain some earlier whitewash and a cement slurry. It is proposed to clean this back and recover with lime and a coloured whitewash as elsewhere. The existing Oak lintel over door D5 requires replacement with a new oak lintel bedded into lime mortar.

It is proposed add 2 new rooflights within the link. These would be inserted into an area of warm roof. While it is highly unlikely that any bats would be present, if any were found, work would be immediately stopped and an ecologist called to advise. The new roof lights are proposed to be installed between the rafter to result in a flush finish to the slate roof. The existing rooflight sits proud of this surface, so it is proposed to replace this with a between the rafter rooflight to match the new.





At Ground Floor level is proposed to replace the existing window, W8, with double doors following the style of the existing door D2. Window W8 is a modern window with thick glazing bars and lacks the simplicity of the other openings to this elevation. See image opposite.

The modern stone tile lintel detail will be covered with the lime finish both over window W8 and the First-Floor window above this, W21.

The changes to the Kitchen are the removal of the solar hot water panels, to be relocated with a new, more efficient version, and ground mounted in the place of the existing oil tank. The final proposed changes to this elevation are the installation of five new rooflights to the Kitchen roof. These are proposed to be the Neo range of rooflights from the Conservation Rooflight Company. The Neo range is designed to appear frameless, giving the sleek look of a pane of glass inside and out. As with the new conservation rooflights, these would sit between the rafters, resulting in a flush finish with the slate roof.



WEST ELEVATION

In addition to the new lime render and the land drain around the perimeter of the perimeter, a new surface water drain is proposed to be added to pick up the discharge form the rainwater pipes. This, along with the land drain would discharge to a new soakaway. A low hedge, in shrub planting creates a low barrier to the lowered ground level. As Elsewhere the joinery is proposed to be in sage green.

GROUND FLOOR



FLOOR LEVEL CHANGES

At present there are multiple changes in level on the Ground Floor. It is proposed to rationalise these to form three zones that respect the various elements of the building. The original house floor is in Aqua, this stays at the existing level of the Sitting Room. The existing step up to the hallway remains forming a common level to the Utility, WC, Kitchen and, following investigatory test pits, the Loving Room. The Studio will stay at its current level. The only door that will need to be altered is D16 between the Boot Room and Living Room. This will be raised within the existing opening to allow the existing door to remain.

FLOOR BUILD-UP

With the level changes it is also proposed to dig out and improve the existing build-up. Depending upon the method used this may also require an element of tanking to the external walls where the external ground level can not be lowered. The two possible options for the floor build-up will depend upon further investigations on site and working with a drainage engineer to fully understand the ground water levels and risk of flooding. The first option is to build up from the new formation level with; Geotextile membrane, 150mm glapor insulation, 100mm limecrete with underfloor heating. In this scenario there is no need for tanking. Any moisture within the walls will take the easiest route out. The Glapor layer with perimeter drainage gives the easiest route for any ground moisture in the retained earth to move. However, to ensure that this will work a drainage engineer will have to be engaged to carry out the required assessment and undertake the technical design.

The alternative is to use the Newton tanking system (shown in green on the illustration above. The technical design for this would be undertaken by Newton. The Newton system includes a base drain around the perimeter of the external walls with a tanking membrane that allows ground water to filter into the base drain. A membrane would also cover the floor, acting to resit the upward movement of rising ground water levels. This system is more usually used with concrete and rigid foam insulation. The Newton membrane along with these other components are by their nature non breathable so their inclusion within an historic building should only be where absolutely necessary. The system does however work with lime plaster, so once applied, should not be obvious to the observer.

It is proposed to retain the flagstones set within the Hall. The individual positions of these should be recorded before lifting, then put aside for safe storage to be returned where they have come from following the installation of the new floor. The Floor to the historic house is proposed to be flagstone to match, as close as possible, the existing Hall flagstones. To the Kitchen, Utility and WC, it is proposed to replace the existing ceramic tiles with a good quality stone tile. This should also suit the colour of the existing Hall flagstones. The floor to the barn is proposed to differ, to show that a different building is being entered. The proposed to be wide oak engineered boards to cope with the underfloor heating.

The underfloor heating manifold would be set within a new cupboard within the Utility Room with the new pellet boiler and hot water store within the Garage.

In lowering the raised area of floor to the Living Room, the threshold of door D5 will also be reduced. As the base of this door is already in poor condition, it is proposed to add a horizontal board to the base of the door in matching timber. This 'repair' matches the repair to door D3. This will be carefully detailed to ensure that existing fabric can be retained internally of the repair. A

new threshold stone with traditional brass weather strip will also assist in keeping out the weather.

There are two proposed changes to the internal walls. Firstly, within the House section the window W15 is blocked up. To the Sitting room side the open sections of the mullioned window have been infilled with mirrored glass, to the Hall side, the whole line of wall is boarded. It is proposed to remove the boarding from in this section of the Hall to explore what is between this and the window. It is hoped that a new surround can be made to fix over the opening in the boarding to allow the window to be seen from the Hall side. By removing the mirrored glass within the Sitting Room, potentially replacing with plain glass, a visual connection from the Sitting Room to the Hall can be made. The Second change is to the door D16 between the Kitchen / Dining Area and the Living Room. It is proposed that the door is removed and the opening widened by c.300mm. Lastly there is one repair to be made. This is to the Window W14. This is a vertically sliding opening to a counter. The sash cords that should move the timber boarded screen have broken. It is proposed that this is returned to full working order.

PARTITION BETWEEN THE SITTING ROOM AND STUDY

It is thought that wall between the Sitting Room and Study was originally a timber framed wall. This is due to the peg holes remaining in the wall plate at the top of this wall. The wall is currently finished in plasterboard and cement plaster. It is proposed that some areas of the modern finish are removed to investigate any remaining historic that may be there. If there is any historic fabric, it is proposed that this is exposed and potentially repaired.

INTERNAL WINDOW UPGRADING GROUND FLOOR.

Most of the window at Ground Floor and some at First Floor level are single glazed. It is proposed that Storm glazing supply and install internal secondary glazing to these windows. Storm is known for its sensitive work on historic buildings and SPAB awards. Appendix one, Window schedule, provides more information.

FIRST FLOOR



INTERNAL PARTITION CHANGES

There are three changes proposed to the First-Floor partitions; To reconnect the existing Bathroom one and shower Room as one Bathroom, to relocate the door to the WC to form a larger room with a shower, to remove a partition wall between Bedrooms 4 and 5 to create one larger bedroom and an ensuite bathroom to Bedroom 3.

All of the partition walls for these proposed changes are understood to be modern partitions. However, due to the potential for there to be concealed historic fabric, care should eb taken during the removal of areas of walling and should anything of historic interest be found, work should stop so that this can be recorded and any potential changes to the plans agreed.

PLUMBING CHANGES

With the removal of the solar panels to the garage, the hot water cylinder and associated pipework can be removed and the internal fabric made good to match existing materials. With the addition of a large hot water store, receiving water from both the solar hot water panels and a new utility biomass boiler, the remains of the earlier heating systems can be removed.

INTERNAL WINDOW UPGRADING FIRST FLOOR

Most of the windows at First-Floor level are double glazed and in good condition. It is proposed that the windows to the West elevation receive storm secondary glazing along with W19 and W20. Window W27 is a casement in need of repair. It is proposed that while this window is removed for repair, slim double-glazed units are installed in the place of the existing glass. Appendix one, Window schedule, provides more information.

PLASTER TO EXTERNAL WALLS

Investigation to the internal wall finish of the house and link, is to be undertaken. Any cement plaster to be removed and replaced with lime plaster. All decoration to the external walls is to be with a breathable paint.

ROOF TRUSS REPAIR



There is an historic crack in one of the roof trusses that we propose to repair with a flitch plate. The exact design of this will be provided by a structural engineer but is likely to be constructed of black painted steel plates to each side of the truss with bolts through.

ACCESS

The existing gate opening from the parking area to the garden is no longer wide enough to comfortably bring a modern car into the parking space within the garden.

APPENDIX 1

Window schedule

No.	Location	Existing	Proposed	Notes
W1	Study	Single glazed casement window		Storm internal secondary glazing
W2	Sitting Room	Single glazed sash window	OTO TO BE ADDED	Storm internal secondary glazing
W3	Sitting Room	Single glazed sash window		Storm internal secondary glazing
W4	Utility	Single glazed casement		New double-glazed panes to replace existing.
W5	WC	Single glazed casement		Replace with Alitherm heritage bottom hung casement

W6	Kitchen	Single glazed casement	Storm internal secondary glazing
W7	Dining	Single glazed casement	Storm internal secondary glazing
W8	Studio	Double glazed casement	Extend opening for a new door
W9	Studio	Blocked in opening frame in place boarding on inner face	New casement with slim double glazed panel to follow window W11
W10	Studio	Blocked in opening frame in place boarding on inner face	Slim double-glazed pane to be installed into the frame and held in place with a glazing bead and putty. Detail drawings to be provided.

W11	Living Room	Single glazed casement	Existing glass to be replaced with plain slim double-glazed pane.
W12	Living Room	Single glazed casement	Existing glass to be replaced with plain slim double-glazed pane.
W13	Boot Room	Single glazed sash window	Storm internal secondary glazing
W14	Boot Room	Internal sliding	Repair sash cords
	Sitting	Blockod up	Open up, replacing mirrors
VV 15	Room	window	with single pane glazing between mullions

W16	Bedroom 2	Single glazed sash window	Storm internal secondary glazing
W27	Bedroom 2	Single glazed casement	To be removed and fully refurbished due to rot within the existing frame.
W17	Bedroom 1	Single glazed sash window	Storm internal secondary glazing
W18	Shower Room	Single glazed sash window	Storm internal secondary glazing

W19	Bathroom	Single glazed sash	Storm internal secondary glazing
W20	WC	Single glazed casement	Storm internal secondary glazing
W21	Bathroom	Double glazed casement	Existing glazing retained. Window to be refurbished to reduce draught.
W22	Bedroom 5	Double glazed casement	Retained as existing

W23	Bedroom 4	Double glazed casement	Retained as existing
W24	Bedroom 4	Double glazed casement	Retained as existing
W25	Bedroom 3	Double glazed casement	Retained as existing
W26	Bedroom 3	Single glazed casement	Storm internal secondary glazing

APPENDIX 2

Pre-app Advice

GROUND FLOOR INTERNAL CHANGES

Concrete slab.

The most dramatic alteration discussed was the removal of the concrete slab within the barn. This slab creates a level change from the house to the end of the barn and between the internal and external levels. I will be at Lamb House on Monday to get more detailed information about the levels to better inform the proposals. However the implication fo removing the concrete slab is that 1, a large area of damp concrete will be removed from the building allowing the floor to be properly laid with glapor, (a hydrophobic insulation material that decreases heat loss and prevents the capillary movement of moisture). The roadside elevation will also have to be addressed, likely with an internal tanking material and base drain as it is extremely unlikely that the footpath level would be dropped. Should the concrete slab be removed a new section could be added to the external door that with a new stone sill would improve the performance of the door. This resolves the issue of repair to the door. Adding anything to the exterior of the building at the door location is unlikely to be supported due to the visual impact.

Kitchen.

We discussed the addition of roof lights over the existing windows. Sam suggested to look at sheet glazing between the rafters from the ceiling to the eaves. This could work well, allowing more light than would be achieved with a conservation roof light. This is similar to our initial proposal and can be drawn up for review.

Sitting Room

The partition wall between the Sitting Room and Study appears to be formed with light weight plasterboard. It is desirable to open this up to see if there is any framing remaining that is inferred to have been there by the peg holes in the timber above. We would like to propose careful removal of this fabric to determine what is there. If there is nothing there, it is desirable to replace the plasterboard wall with a vertical oak screen.

Study

It appears that there has been an attempt to keep water from the higher external ground level out by the use of a plaster containing an additive to provide some tanking capacity. This has failed, particularly where an electrical conduit has been chased in. Some of the plaster has been removed and the rest should also be removed with a proper waterproofing solution sought. The optimal choice is to undertake work externally to keep the masonry dry. We will approach highways with this option. If this is not possible then an internal solution of a tanking membrane and base drain could be used.

Proposed new floor build up

It is proposed throughout the Ground Floor of the house, to remove the existing concrete base and install a limecrete slab with underfloor heating. Where there are flagstones, these would be lifted and returned over the limecrete. Elsewhere, a lighter coloured stone flooring is favoured.

Internal secondary glazing.

To the ground floor the glazing is mostly single glass panes. It is desirable to improve the performance of these through the winter months with the addition of secondary glazing. As there are many options available, I would appreciate your recommendation of systems that you find acceptable for use and would support in this situation. The windows that are affected by this are the sash

windows in the Sitting Room, Study and Utility Room and the casements in the Kitchen, and barn ground floor.

Removal of dry lining.

The walls within the Barn section all seem to have been dry lined, some include a modern foam insulation board. Sections have now been cut out of the dry lining to reveal the walls behind. It was agreed that the internal wall could be left as it is but that the external walls would benefit from a layer of an insulating lime plaster to improve the thermal performance. Where the wall has been rebuilt at the end gable it appears that this has been built up with an internal face of concrete block work. The insulating lime plaster would help to reduce the visual impact of this.

Opening up of the blocked windows

This is to the end of the barn where there is a blocked window in the able end and on the roadside elevation. We had talked about putting in a simple casement into the frame but you suggested a less intrusive option of placing a sheet of glass into the rebate of the existing frame and fixing it in place with putty.

Opening up of the roadside doorway, now blocked in as a window I can't remember the outcome of our conversation on this or whether there was an outcome!

Opening up of the door between the barn and the Kitchen extension. My understanding was that we would have to demonstrate a clear need for removing the fabric.

Replacing the barn garden side window with a door.

It appear that as long as we were removing the hideous window you were not too concerned about this becoming a window. We talked about design options for what could go into there and you made some interesting points. Firstly that the Barn gable end window had some sophistication to it and that any replacement windows would do well to follow the design of this. I guess this applies to any changes to windows on the roadside elevation too.

Secondly that the half glazed door to the Through passage was a good template for an additional door.

FIRST FLOOR INTERNAL CHANGES

We discussed that the existing bathroom had been divided into individual shower room and bathroom. This was undertaken quite recently and with lightweight stud work walls with a plasterboard and gypsum plaster finish. We would like to open this back up to a large bathroom and add a shower into the remaining WC area. My understanding was that removing the modern stud work walls was fine.

We also discussed adding in roof lights to improve the light levels in the link building and barn. Your advice was not to go too mad with additional roof lights, that would have a negative effect. I will keep any additions to an absolute minimum.

When we looked at some of the walls in the First Floor of the barn you expressed some concern on the construction of the wall that formed a corridor along the length. That this wall seemed more solid than others and perhaps concealed an earlier wall within it. It would seem sensible to include some removal of fabric here in our investigation phase work so that the plans can be adapted if any material of heritage value should be found. Ideally we would like to rearrange the internal walls to have a better space ratio of bathrooms to bedroom.

EXTERNAL CHANGES

Removing the ground level from the house walls wherever possible.

Damp is a big issue with the property and reduces the ability of the house to retain warmth. While there are only a few places where it is possible to move the ground back, to the garden side and the parking side this is possible. I think that you agreed with this in principle but that we would have to show how this would work in practice.

Moving the utilities from within the house to the garden shed.

While the modern oil fired boiler sits within the shed, detritus from an old system remains within the house. It would seem to be an ideal opportunity to remove remaining elements of the heating system that remain in the house and to install a new large hotter cylinder with a sustainable heating system that can then link into underfloor heating manifolds and hot water distribution pipes within the house. If it is possible to relocate the solar panels from the house to the shed, then this too would be desirable. We need more advice on whether this would work