

# LAND AT THE COACH HOUSE, UNDERHILL LANE, WEST SUSSEX, BN6 9PJ

## DESIGN AND ACCESS STATEMENT

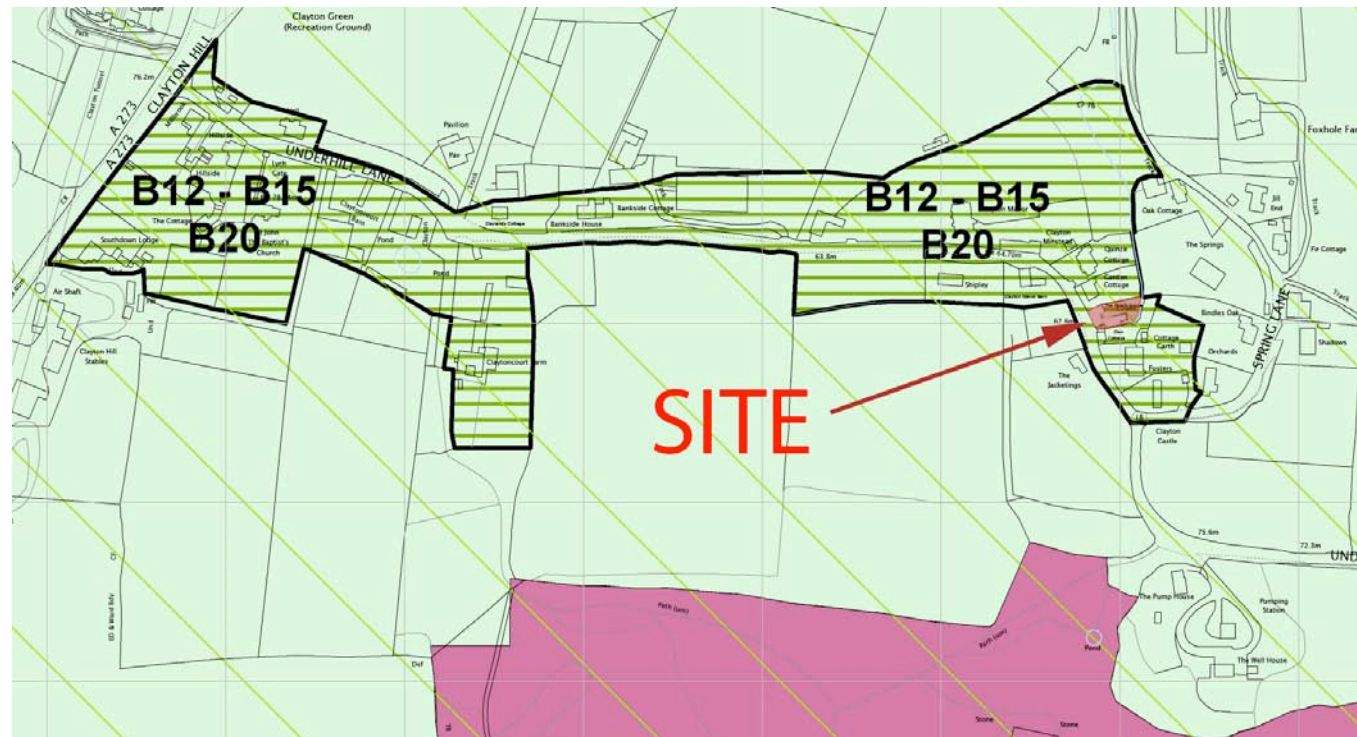
### 1 INTRODUCTION

This Statement is submitted in support of an application for planning permission for the above building plot. The applied design principles and concepts relate to the present use; amount; layout; scale; and appearance of the proposed development. Their purpose is to improve on conditions and provide reasonable space and amenities for a present day family, to be a good neighbour and to preserve the character of the conservation area. Other documents included with this application comprise:

- Location plan
- Existing and Proposed plans and elevations
- Existing photographs
- 3D CAD model images of the Existing and proposed.

### 2 DESCRIPTION AND SIGNIFICANCE

- The Site is situated on the Eastern edge of Clayton Conservation Area as shown in the map below



- The Hamlet of Clayton lies at the foot of the South Downs about one and a half miles to the south of Keymer and Hassocks. It has an attractive rural setting within the Sussex Downs Area of Outstanding Natural Beauty and enjoys magnificent views of the South Downs.
- To the south of the Hamlet is the Clayton to Offham Site of Special Scientific Interest. The famous Clayton (Jack and Jill) Windmills, which attract thousands of visitors each year, overlook the hamlet from the rising downland to the south. Jack is in private ownership but Jill is in the ownership of Mid Sussex District Council and is managed as a tourist attraction by the Jill Windmill Society.
- The hamlet itself is divided into two main parts separated by land, which forms part of Clayton Court Farm. The original settlement forms the western part and is centred around the fine Saxon Parish Church of St John the Baptist, a Grade I listed building.
- The following features, in particular, contribute to the character of the Conservation Area:
  - the rural setting with the Downs rising steeply to the south;
  - the rural character of Underhill Lane with its attractive walls and hedgerows;
  - the use of flint as a building material; and
  - the sense of enclosure created by the narrow sunken lane.
- The area of the site is 378sqm.
- Presently the site is used as a three-bedroom house. The oldest parts of the house front the road. The most recent additions to the property are located to the rear. Due to the sloping topography of the site the recent additions cannot be seen from the road.
- The existing most recent additions detract from the character and appearance of the conservation area. The proposal will enhance the conservation area.
- The existing recent additions have been poorly situated on the site resulting in damp, dark external areas due to the sites location and topography.
- The existing recent additions are built to a very poor standard resulting in excessive heating demands.
- The existing recent additions are also excessively damp and require the continual use of dehumidifiers, resulting in poor living standards and further excessive energy usage.
- The oldest parts of the property are either oak framed or solid brick construction, with very poor insulation standards. This further exacerbates the excessive energy use of the property.
- The current heating requirements of the property has been very poorly designed resulting in both cold spots and excessive heating requirements. This is made worse by very low levels of insulation and draught exclusion in the entire property.

### 3 PLANNING HISTORY

Application number 12/01030/TCA for: 2 Oaks - fell, Oak - remove largest limbs on north and west side and reduce height by 20%, Oak - Reduce height by 20% and reduce limb on western side by 2m, 2 Oaks - Reduce height by 20% and reduce canopy by 1m; was submitted with no objection on the 22 March 2012.

There is no other planning history associated with this property.

### 4 AREA

- The existing buildings have the following accommodation
  - Basement - 12msq
  - Ground Floor - 104sqm
  - First Floor - 48sqm
  - **TOTAL - 164sqm**
- The proposed building has the following accommodation
  - Basement - 25sqm
  - Ground Floor - 110sqm
  - First Floor - 66sqm
  - **TOTAL - 201sqm**

This results in a net increase of 37sqm or 22% of the original floor area.

### 5 AMENITY

- The current use of the site respects the amenities of neighbours. The proposal retains this level of respect. The proposed ridge level of the rear extension has been moved away from the Southern neighbour by approximately 750mm and has only been increased in height by 350mm – see drawing number 1316 - SK19.
- The proposed windows serving bedrooms 2 and 3 are set at an oblique angle to ensure that the amenity of Garden Cottage is maintained and respected.
- The proposal has used the topography of the site to increase habitable accommodation whilst also respecting current neighbour amenity.
- The new bathroom and closet extension to the master bedroom at first floor level will not reduce light reaching any of the neighbour's properties due to its northern location in respect of the closest neighbour. It has also been designed to incorporate glass in the large East facing window that will become opaque at the touch of a button – i.e. when the light switch is turned on the glass will go white. It will therefore not be possible to see into the bathroom when the light is on from any direction.
- The bathroom window is oriented such that it is not possible to see directly into any neighbouring gardens, thus respecting all aspects of neighbour amenity.
- The proposal retains the current level of amenity space for the Coach House.

### 6 RELEVANT CONSTRAINTS

There are a number of constraints that limit development of the site, the most significant are:

1. National Planning Policy Framework.
2. Mid-Sussex Local Plan
3. Clayton Conservation Area

Due to the size and character of this settlement the Council does not wish to encourage any further development in or around Clayton. A positive decision has been made not to define a built-up area boundary around the settlement. This means that the Countryside Area of Development Restraint policies will be applied within, as well as around, Clayton.

#### NATIONAL PLANNING POLICY FRAMEWORK

Government Policy for good design is as set out in section 7 of the National Planning Policy Framework – 'Requiring Good Design. Paragraph 56 states '**The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.**' Paragraph 57 States '**It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.** Paragraph 60 states '**Planning policies and decisions should not attempt to impose architectural styles or particular tastes and they should not stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms or styles. It is, however, proper to seek to promote or reinforce local distinctiveness.** Paragraph 61 states '**Although visual appearance and the architecture of individual buildings are very important factors, securing high quality and inclusive design goes beyond aesthetic considerations. Therefore, planning policies and decisions should address the connections between people and places and the integration of new development into the natural, built and historic environment.** Paragraph 65 states '**Local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design (unless the concern relates to a designated heritage asset and the impact would cause material harm to the asset or its setting which is not outweighed by the proposal's economic, social and environmental benefits).**

Government Policy for identifying and protecting conservation areas is as set out in section 12 of the National Planning Policy Framework – 'Conserving and enhancing the historic environment'. Paragraph 137 states '**Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites**

and within the setting of heritage assets to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably. Paragraph 128 States 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Paragraph 129 states 'Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

Paragraph 132 states 'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II\* listed buildings, grade I and II\* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.'

Paragraph 135 states 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'

Paragraph 137 states. 'Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites and within the setting of heritage assets to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably.'

Paragraph 138 states 'Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 133 or less than substantial harm under paragraph 134, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

## MID SUSSEX DISTRICT COUNCIL LOCAL PLAN POLICY

### H13 Extensions to Dwellings in the Countryside

Outside defined built-up areas, the extension of existing dwellings will be permitted if:

- (a) the building and site are physically suitable;**
- (b) the proposal does not result in the loss of a small dwelling;
- (c) highway, access and parking requirements can be met;
- (d) the proposal is appropriate to its setting and not obtrusive in the landscape, particularly in an Area of Outstanding Natural Beauty; and**
- (e) the proposal is appropriate to the scale of the existing dwelling and its built and natural setting.**

For the purpose of this policy a small dwelling is defined as a dwelling having a gross floor space measured externally (excluding separate, external, garages and outbuildings) of 100m<sup>2</sup> or less.

**B1 A high standard of design, construction and layout will be expected in new buildings, including alterations and extensions.**

All proposals for development will be required to:

- (a) demonstrate a sensitive approach to urban design by respecting the character of the locality in which they take place, especially to neighbouring buildings, their landscape or townscape setting and the regional and/or local building style. Regard should be given to the proposal's contribution to a sense of place. **In the case of alterations and extensions, including new shop fronts, the proposals must be sympathetic to the building to which they relate. Factors to be taken into consideration include the scale, massing, siting, density, views, height and orientation of the new buildings in relation to those already existing;**
- (b) use materials of a quality, type and colour appropriate to the site and its surroundings, which conform to the general range in the vicinity, and which enhance the distinctiveness of traditional building materials and styles;
- (c) show that adequate consideration has been given to the spaces between and around buildings, and that effective use has been made of any existing landscape features; and
- (d) provide suitable new planting of trees and shrubs appropriate to the site and its location. Where appropriate, existing wildlife habitats including green corridors and river courses should be protected and enhanced.

All planning applications should include a design statement, unless otherwise agreed with the Council.

**B3 Proposals for new development.**

**including extensions to existing buildings and changes of use, will not be permitted if significant harm to the amenities of nearby residents is likely to be created due to noise and disturbance; loss of privacy; overlooking; reduction in sunlight and daylight; and reduction in outlook.**

**B12 The protection of the special character and appearance of each Conservation Area will receive high priority.**

When determining planning applications for development within or abutting the designated Conservation Areas, special attention will be given to the desirability of preserving or enhancing the character or appearance of the area and to safeguard the setting of any Listed Building.

Circumstances may arise where the importance of an open space, including private gardens, is such that development upon it will be resisted in the overall interest of the Conservation Area.

**New buildings and extensions, both in broad form and detailing and in the relationships with other buildings and spaces between the buildings, should be sensitively designed to reflect the characteristics of the area in terms of scale, density, colour and materials.**

Where permission is to be granted to carry out alterations and/or extensions, appropriate traditional materials should be used. The replacement/installation of UPVC windows will be strongly resisted.

Existing trees and hedgerows should be retained. If felling or removal is unavoidable, replanting with approved species will be required.

In Conservation Areas consent for a new shop front or an alteration to an existing shop front will only be granted where the design is sympathetic to the character of the building and the street scene in which it is located. Particular attention will be paid to the use of appropriate materials, the size of the windows and fascias in relation to the scale of the building. The retention of stallrisers, transoms, mullions and pilasters will be encouraged. Dutch blinds will not normally be permitted. The impact on the street scene of any shop front security measures, particularly when a proposal affects a Conservation Area and/or listed building should be minimised.

When development in a Conservation Area is permitted, the retention or reinstatement of original features including walls and banks, and the removal of any unsympathetic features may be required.

## 7 RECOGNISED ORGANISATIONS OFFERING CONSERVATION GUIDANCE

There are a number of organisations that offer guidance. The most significant being:

1. The Society for the Preservation of Ancient Buildings - SPAB
2. English Heritage.

### SOCIETY FOR THE PRESERVATION OF ANCIENT BUILDINGS MANIFESTO

The manifesto of the SPAB was written by William Morris and other founder members and issued in 1877. Although produced in response to the conservation problems of the 19th century, the manifesto extends protection to "all times and styles" and remains to this day the philosophical basis for the Society's work. It reads as follows:-

*A society coming before the public with such a name as that above written must needs explain how, and why, it proposes to protect those ancient buildings which, to most people doubtless, seem to have so many and such excellent protectors. This, then, is the explanation we offer.*

*No doubt within the last fifty years a new interest, almost like another sense, has arisen in these ancient monuments of art; and they have become the subject of one of the most interesting of studies, and of an enthusiasm,*

*religious, historical, artistic, which is one of the undoubted gains of our time; yet we think that if the present treatment of them be continued, our descendants will find them useless for study and chilling to enthusiasm. We think that those last fifty years of knowledge and attention have done more for their destruction than all the foregoing centuries of revolution, violence and contempt.*

*For Architecture, long decaying, died out, as a popular art at least, just as the knowledge of mediaeval art was born. So that the civilised world of the nineteenth century has no style of its own amidst its wide knowledge of the styles of other centuries. From this lack and this gain arose in men's minds the strange idea of the Restoration of ancient buildings; and a strange and most fatal idea, which by its very name implies that it is possible to strip from a building this, that, and the other part of its history - of its life that is - and then to stay the hand at some arbitrary point, and leave it still historical, living, and even as it once was.*

*In early times this kind of forgery was impossible, because knowledge failed the builders, or perhaps because instinct held them back. **If repairs were needed, if ambition or piety pricked on to change, that change was of necessity wrought in the unmistakable fashion of the time;** a church of the eleventh century might be added to or altered in the twelfth, thirteenth, fourteenth, fifteenth, sixteenth, or even the seventeenth or eighteenth centuries; **but every change, whatever history it destroyed, left history in the gap, and was alive with the spirit of the deeds done midst its fashioning. The result of all this was often a building in which the many changes, though harsh and visible enough, were, by their very contrast, interesting and instructive and could by no possibility mislead.** But those who make the changes wrought in our day under the name of Restoration, while professing to bring back a building to the best time of its history, **have no guide but each his own individual whim to point out to them what is admirable and what contemptible; while the very nature of their task compels them to destroy something and to supply the gap by imagining what the earlier builders should or might have done. Moreover, in the course of this double process of destruction and addition, the whole surface of the building is necessarily tampered with; so that the appearance of antiquity is taken away from such old parts of the fabric as are left, and there is no laying to rest in the spectator the suspicion of what may have been lost; and in short, a feeble and lifeless forgery is the final result of all the wasted labour.***

*It is sad to say, that in this manner most of the bigger Minsters, and a vast number of more humble buildings, both in England and on the Continent, have been dealt with by men of talent often, and worthy of better employment, but deaf to the claims of poetry and history in the highest sense of the words.*

*For what is left we plead before our architects themselves, before the official guardians of buildings, and before the public generally, and we pray them to remember how much is gone of the religion, thought and manners of time past,*

*never by almost universal consent, to be Restored; and to consider whether it be possible to Restore those buildings, the living spirit of which, it cannot be too often repeated, was an inseparable part of that religion and thought, and those past manners. For our part we assure them fearlessly, that of all the Restorations yet undertaken, **the worst have meant the reckless stripping a building of some of its most interesting material features**; whilst the best have their exact analogy in the Restoration of an old picture, where the partly-perished work of the ancient crafts-master has been made neat and smooth by the tricky hand of some unoriginal and thoughtless hack of today. **If, for the rest, it be asked us to specify what kind of amount of art, style, or other interest in a building makes it worth protecting, we answer, anything which can be looked on as artistic, picturesque, historical, antique, or substantial: any work, in short, over which educated, artistic people would think it worthwhile to argue at all.***

*It is for all these buildings, therefore, of all times and styles, that we plead, and call upon those who have to deal with them, to put Protection in the place of Restoration, to stave off decay by daily care, to prop a perilous wall or mend a leaky roof by such means as are obviously meant for support or covering, and show no pretence of other art, **and otherwise to resist all tampering with either the fabric or ornament of the building as it stands**; if it has become inconvenient for its present use, to raise another building rather than alter or enlarge the old one; in fine to treat our ancient buildings as monuments of a bygone art, created by bygone manners, that modern art cannot meddle with without destroying.*

*Thus, and thus only, shall we escape the reproach of our learning being turned into a snare to us; thus, and thus only can we protect our ancient buildings, and hand them down instructive and venerable to those that come after us."*

## **ENGLISH HERITAGE CONSERVATION PRINCIPLES POLICY AND GUIDANCE and THE NATIONAL HERITAGE PROTECTION PLAN.**

### **Consider the effects on authenticity and integrity**

Paragraph 93 states 'A desire to retain authenticity tends to suggest that any deliberate change to a significant place should be distinguishable, that is, its extent should be discernible through inspection. The degree of distinction that is appropriate must take account of the aesthetic values of the place. In repair and restoration, a subtle difference between new and existing, comparable to that often adopted in the presentation of damaged paintings, is more likely to retain the coherence of the whole than jarring contrast.'

Paragraph 94 goes on to say 'Integrity (literally, 'wholeness, honesty') can apply, for example, to a structural system, a design concept, the way materials or plants are used, the character of a place, artistic creation, or functionality. Decisions about recovering any aspect of integrity that

has been compromised must, like authenticity, depend upon a comprehensive understanding of the values of the place, particularly the values of what might be lost in the process.'

### **Consider the potential reversibility of changes**

Paragraph 100 states 'In reality, our ability to judge the long-term impact of changes on the significance of a place is limited. Interventions may not perform as expected. As perceptions of significance evolve, future generations may not consider their effect on heritage values positive. It is therefore desirable that changes, for example those to improve energy efficiency in historic buildings, are capable of being reversed, in order not unduly to prejudice options for the future.'

### **New work and alteration**

Paragraph 138 states - New work or alteration to a significant place should normally be acceptable if:

- a) there is sufficient information comprehensively to understand the impacts of the proposal on the significance of the place;
- b) the proposal would not materially harm the values of the place, which, where appropriate, would be reinforced or further revealed;
- c) the proposals aspire to a quality of design and execution which may be valued now and in the future;
- d) the long-term consequences of the proposals can, from experience, be demonstrated to be benign, or the proposals are designed not to prejudice alternative solutions in the future.

Paragraph 142 goes on to say 'The need for quality in new work applies at every level, from small interventions in an historic room, to major new buildings or developments. Small changes need as much consideration as large ones, for cumulatively their effect can be comparable.'

Paragraph 145 states 'New work frequently involves some intervention in the existing fabric of a place, which can be necessary to keep it in or bring it back into use. A 'presumption in favour of preservation' (doing no harm), even preservation of evidential value, does not equate to a presumption against any intervention into, or removal of, existing fabric; but such interventions require justification in terms of impacts on heritage values.'

Paragraph 148 states 'As with repair, the use in interventions of materials and techniques proven by experience to be compatible with existing fabric, including recycled material from an appropriate source (paragraphs 98-99), tends to bring a low risk of failure. Work which touches existing fabric lightly, or stands apart from it, brings progressively greater opportunity for innovation. Energy efficiency (in production as well as use), sustainable sourcing of materials, and environmental good practice should guide all new work, but not to the extent of causing harm to the heritage values of the place.'

## **8 THE NEW EXTENSION WILL BE DESIGNED TO PASSIVHAUS STANDARD MEETING LEVEL 6 OF THE CODE FOR SUSTAINABLE HOMES MAXIMISING ENERGY USAGE.**

### **Passivhaus Standard**

## Summary:

There are two main aims of the Passivhaus Standard

- 1 Reduce the energy needed for space heating and cooling,
- 2 Whilst creating excellent indoor comfort levels throughout the year.

This is primarily achieved by adopting a 'fabric first' approach to the design, by specifying high levels of insulation within the thermal envelope (outside areas of the building) with exceptional levels of airtightness and by using whole house mechanical ventilation.

## Context:

Passivhaus is an internationally recognised low-energy standard developed in the 1990's in Germany by Dr Wolfgang Feist. It is the fastest growing energy standard in the world, with over 30,000 buildings built in accordance with Passivhaus principles to date on all continents, the majority built since 2000. The standard is being adopted in the UK and there are 30 or so projects that have been built in the last 2 years, but to date, none in West Sussex. Certifying a building to the Passivhaus Standard is a mark of quality assurance

## Features at a glance:

- High levels of continuous insulation on all external parts of the building (floor, walls & roof)
- Continuous insulation eliminates thermal bridges (cold spots where extra heat is lost)
- Airtight construction (to remove drafts)
- Mechanical Ventilation System with Heat Recovery (MVHR) to supply fresh air
- Use of high performance certified components for windows, doors & ventilation system ensures quality control

## Code for Sustainable Homes

### Summary:

The Code for Sustainable Homes is an environmental assessment method introduced in 2007, which covers a wide range of environmental issues. It is the standard by which all new homes in England, Wales and Northern Ireland are assessed.

- **Energy & CO<sub>2</sub> Emissions:** operational energy and resulting emissions of carbon dioxide to the atmosphere (different minimum standards that must be met at each level of the Code)
- **Water:** internal and external water saving measures specified (minimum standards that must be met at each level of the Code)
- **Materials:** responsible sourcing and environmental impact of materials used to build the home (minimum standards present)
- **Surface Water Run-off:** management of surface water run-off from the development to reduce flood risk (minimum standards present)

- **Waste:** storage for recyclable waste and compost, and care taken to reduce, reuse and recycle construction materials (minimum standards present)
- **Pollution:** use of insulation materials and heating systems that do not add to global warming
- **Health and Well-Being:** provision of good daylight quality, sound insulation, private space, accessibility, and adaptability (minimum standards present for Code Level 6 only)
- **Site Management:** a Home User Guide, designing in security, and reducing the impact of construction
- **Ecology:** protection and enhancement of the ecology of the area and efficient use of building land

## Context:

Homes are assessed at the design stage and post construction phases of a construction project. Each dwelling has its own assessment, and if it meets the required criteria, then it is awarded a certificate, which ranges from Level 1 to Level 6.

In 2013 all new build private housing must be built to Code level 4. Code level 6 (Zero Carbon) is a high standard and requires a rigorous approach that encompasses all aspects of sustainability to reach it. Our research concludes that there are currently no Code level 6 houses in West Sussex.

## Features at a glance:

- **Reduced greenhouse gas emissions:** with minimum standards for energy efficiency at each level of the Code, there will be a reduction in greenhouse gas emissions to the environment.
- **Reduced impact on the environment overall:** inclusion of measures which, for example, promote the use of less polluting materials, and encourage household recycling, will ensure that our future housing stock has fewer negative impacts overall on the environment.
- **Mark of quality:** the Code for Sustainable Homes can be used by home builders to demonstrate the sustainability performance of their homes.
- **Flexibility:** the Code is based on performance which means it sets levels for sustainability performance against each element but does not prescribe how to achieve each level. Home builders can innovate to find cost-effective solutions to meet and exceed minimum requirements.

## Comparison between Passivhaus standard & Code for Sustainable Homes

The Code for Sustainable Homes is an environmental assessment method; which is used to assess and improve the environmental performance of buildings on a more holistic level than Passivhaus. It includes, for example, consideration of the materials used in construction, water consumption of the building, provision of recycling bins etc.

Passivhaus on the other hand is concerned with energy efficiency, which is a very important part of creating sustainable buildings, along with the comfort of occupants. Therefore

Passivhaus and the Code for Sustainable Homes are complimentary and mutually beneficial; a Passivhaus that also addresses the wider sustainability issues in the Code may also achieve a rating under these schemes.

Passivhaus is a very good place to start when setting out to attain the higher-level ratings within the Code for Sustainable Homes.

## 9 PARKING

There are no proposals to alter the current parking provisions.

## 10 PROPOSALS

- The drawings and photographs illustrate the existing dwelling.
- The overall height of the new building is only slightly higher than the existing rear extension.
- The part of the dwelling fronting the road has not been altered.
- A high quality of contemporary design is considered to respect its neighbours in an area of mixed types.
- The massing of the proposal is considered to respect the scale and grain of its surroundings.
- The existing rear extension is constructed of inferior materials and detracts from the character and appearance of its surroundings. The proposal is a contemporary high quality design using high quality materials with a similar roof form to that of the existing parent building.
- The layout form and design contributes positively to the local environment.
- The proposed alterations will retain the Western entrance from the road. The side entrance to the South West of the site from the road will also be retained.
- Natural building materials are to be used in both a modern and traditional way, whilst also ensuring that materials are selected for their low carbon footprint and/or ability to be recycled at the end of the buildings life.
- Further focus of attention in the design has been to minimise the need for energy and then generate enough renewable energy to satisfy the reduced demand therefore creating a more sustainable form of construction.
- The structure will be made of locally sourced timber. The insulation and main bulk of the walls will be made of hempcrete with the retaining walls and floor slabs constructed of limecrete.
- Passive solar design – takes advantage of the sun.
- The sun's energy heat-gains from people/equipment is captured with the aid of 'thermal mass', the capacity of heavy materials to store heat.
- The thermal mass of the building dampens diurnal temperature changes resulting in a stable internal thermal environment. It does this by absorbing heat gained and releasing it slowly during the cooler overnight periods.
- This design aims to take advantage of solar-oriented windows for direct solar gain. However the site's orientation and location make it impossible to eliminate openings in the opposite façade.
- Heat gained through the sun's energy and through use in spaces such as bathrooms and kitchens can be recovered rather than expelled, and the heat exchanged with incoming fresh air, which, now warmed, is re-circulated to where it is needed. This system will need a well-insulated and airtight envelope.
- It is proposed to insulate the existing retained parts of the building to a high level, thus reducing heat loss from the retained fabric.
- With the home working study this enables a more flexible and efficient way of working where daily commuting can be avoided.
- Buildings impact the environment when they are built, when they are in use and finally when they are demolished. With good design we can minimize these impacts at every stage of the energy lifecycle of the house. We have opted mainly for materials that have been grown, such as timber or hemp products and materials that can be easily recycled, such as metal roofs, lime mortar/render and a minimal amount of fired clay bricks.
- There is generally far less energy involved in making buildings out of wood, hemp and lime. The materials are renewable (it can be re-grown) and wood and hemp products lock carbon out of the atmosphere through photosynthesis, as a result of which this building has very low carbon emissions.
- The plinth wall is made from locally sourced brick and lime mortar. It is designed to lift the timber structure and vulnerable hempcrete wall off the ground keeping it clear of ground water and rain splashes.
- Above the plinth wall, the house is constructed of prefabricated timber frame. FSC Plywood is then fixed internally with hemp rope connected externally between the individual timber elements to provide additional binding. Hempcrete is then sprayed into and onto the structure to a thickness of 400mm.
- Hempcrete regulates the temperature and humidity of a building;
- Hemp grows far more quickly and densely than trees - it can be harvested just 120 days after planting, whereas trees take at least five years to produce paper or pulp. It requires far less fertiliser, water and pesticides than cotton, and over 99 per cent of the plant can be used. While growing, it stores carbon from the atmosphere and overall the CO2 balance of the hemp crop means that CO2 may actually be removed from the atmosphere and locked away into the fabric of the buildings that are constructed from it.
- There are much lower emissions of CO2 from the manufacture and curing of lime (to mix with the hemp) than with Portland cement, a component of concrete. Hemp used for construction has great thermal capacity and, applied appropriately, will reduce overheating in summer and retain heat in buildings longer in winter.
- And, when you need to dispose of hemp products they can be ploughed back into the soil without harming the environment.
- A metal sheet roof is applied to parts of the roof.
- Metal sheet can be easily stripped off and reused at the end of the buildings life.
- Rainwater from the metal roof and patio area is channelled into underground rainwater harvesting tanks to be used for flushing toilets, running the washing machine and top-up irrigation for plants and shrubs.
- There will be 3 renewable energy technologies generating all the required energy for the house on site;

- photovoltaic panels (PV) for generating electricity,
- solar thermal panels for generating hot water and
- a log burning stove for space heating and hot water.
- Hot water produced as a result of the solar thermal panels and log burning stove will be stored in an underground inter seasonal heat store.
- Water is heated in a highly insulated vessel using solar energy. A temperature of between 30 and 40°C is suitable for running an under-floor heating system, unlike a traditional heating system that needs 60-90°C , and this can be provided by an inter-seasonal solar-energy store.
- Excess solar heat from the summer months is conserved so that it can be used in the depths of winter. The heat store will be buried 5m in the ground in the garden. The tank will hold 9,000 litres of water at temperatures of up to 90 degrees Celsius. The control system in the bathroom cupboard will automatically draw heat from the store in the winter when the solar thermal panels do not make enough heat to get the domestic hot water supply (the water that comes out of the taps) up to temperature. Top up heating will be provided by either a log burner with back boiler in the living room or a further gas boiler.
- The limecrete on the floors provide thermal mass preserving stable internal comfort conditions. As a result, occupants should remain cool even when air temperatures are rising above normal comfort conditions. Thermal mass is important for helping to iron out fluctuations in air temperature. It becomes particularly important in very hot weather where outside air brought into the house exceeds normal comfort conditions. If the fabric of the house can absorb excess heat, it acts as a buffer in those extreme weather scenarios.
  - The main benefits of limecrete are
    - maintains the 'breathability' of the building
    - is an environmentally-friendly alternative to concrete
    - can incorporate under-floor heating
    - acts as a thermal store
    - avoids the need for a damp proof membrane
    -

## 11 ACCESS STATEMENT

This is an existing dwelling house for which no other works requiring access alterations are proposed.

## 12 URBAN DESIGNER/PLANNING OFFICER COMMENTS AND OBSERVATIONS

The councils planning officer and conservation officer visited the property on the 23<sup>rd</sup> April 2013 and provided advice in their letter of the 7<sup>th</sup> May 2014. The letter is appended to this document. Significant aspects of the letter have been ***emboldened in italics*** in this document

### DEMOLITION OF EXISTING EXTENSIONS / OUTBUILDINGS

***While this is not a listed building, the frontage in particular has historic interest and character that contributes significantly to the Clayton Conservation Area.***

The existing rear timber clad extension has been unsympathetically imposed on the host building, so its loss is supported in principle.

The timber clad out-buildings that straddle the southern boundary at the rear have a ramshackle configuration that superficially ties in with the appearance of the timber clad single storey crooked beamed Coach House part of the building on the street frontage. ***While these buildings fit comfortably enough in to their setting, they do not have the architectural significance of the frontage building.*** As they are also ostensibly hidden from Underhill Lane, I do not have any objection to their loss.

### PROPOSED REAR EXTENSION / ALTERATIONS TO THE 2 STOREY FRONTAGE BUILDING

The existing house consists of two modest frontage buildings that abut each other. The particularly charming older single storey crooked beam Coach House building is unaffected by the changes. The proposed contemporary 2 storey metal clad extension extends the more recent 19<sup>th</sup> Century part of the frontage. It will be visible from Underside Lane when approached from the north-west with the backdrop of the Downs behind. ***I feel it will appear as an alien element that will inappropriately draw the eye in this sensitive location within the Clayton Conservation Area. Furthermore, when added to the other contemporary interventions at the rear, it risks overwhelming the host building.*** I have no objection to the additional massing. However, ***I feel the solution is to extrude the existing envelope of the building with matching brick, hanging tiles and timber casement windows. Because the existing building has an unusually shallow plan, the extruded form will potentially improve the overall proportions and provide a more substantial anchor for the other proposed contemporary extensions.***

***From the southern approach, the proposed skylights and solar panels will unacceptably clutter/dominate the modest clay tiled roof. A redeeming factor is the proximity of the next door house and the forward position of the chimney that together act to obscure the rear part of the roof (as evidenced by the existing skylight) from the road. I therefore feel that an acceptable compromise would be to incorporate either skylights or solar panels and limit them to the rear half of the extruded roof.***

### PROPOSED OUTBUILDINGS ALONG THE SOUTHERN BOUNDARY OF THE REAR GARDEN

The proposal is linearly configured in the same way as the building it replaces albeit with an increased volume / envelope with the incorporation of a second full storey. Its ridge and eaves line has nevertheless been kept acceptably low with the incorporation of dormers and an asymmetrically profiled double pitch roof. This results in a slightly clumsy roof form; however I am prepared to forgive it for the following reasons: (a) the single storey covered link at one end, and study at the far end, helps to articulate and reduce the mass of the 2 storey element; (b) ***the unfussy contemporary approach helps to cohere and rationalise the building;*** (c) the most clumsy element, the blind dormers on the south side, are fairly tucked away – for this reason, I am also prepared to accept the squeezed-in solar panels.

***While the contemporary approach contrasts with the traditional language of the host building, this is acceptable because it is fairly hidden away and because it, to some***



**extent echoes, the existing irregular juxtaposition of elements of the host building, and the variety of surrounding buildings.** The quality of the proposal will be reliant on the detailing, so further drawings and information on the materials are required to assess this. However, the quiriness of the projecting dormer windows and overhanging clay hanging tiled part of the frontage, and the contrasting single storey elements should give the extension some underlying character of its own.

***The building nevertheless extends 2m further eastwards. As this may potentially interfere with the root system of the 2 adjacent trees, a way forward will need to be agreed with our arboriculturist.***

#### **OTHER ALTERATIONS AT THE REAR OF THE COACH HOUSE BUILDING**

**Notwithstanding my comments on the 2 storey building, the other changes at the rear of the Coach House building look acceptable, although the render may be one material too many.**

With any application submitted we would also need to consider potential impact upon neighbouring amenities. Policy B3 of the Mid Sussex local plan relates to amenity and states:

“Proposals for new development, including extensions to existing buildings and changes of use, will not be permitted if significant harm to the amenities of nearby residents is likely to be created due to noise and disturbance; loss of privacy; reduction in sunlight and daylight; and reduction in outlook.”

I note that the proposed extension is to be located to the southern (side) of the site, within a similar location to the existing timber clad out-buildings, retaining the existing relationship between Glen Cottage, Garden Cottage and the Coach House. ***Although the overall height of the proposed replacement rear extension is going to be 1.4 meters higher than existing,*** it is my informal opinion that the proposal is not considered to cause a significant detrimental impact in regards to reduction in sunlight and daylight; and reduction in outlook due to the orientation of the extension and the change in site levels from the north to south and west to east.

The main issue is in regards to overlooking and loss of privacy. The proposal shows two northern (side) facing windows serving bedrooms 2 and 3 at first floor level. ***These windows would be located approximately 17 metres from the side facing windows at Garden Cottage.*** It is therefore considered that the proposed extension would cause significant detrimental effect on the neighbouring amenities in regards overlooking and loss of privacy. Therefore I am of the opinion that the proposal, by virtue of the impact upon neighbouring amenities would be unlikely to be supported in its current form.

On site it was suggested that additional boundary treatment could be used to mitigate the privacy issue. However, this would be difficult to enforce and impracticable in the long term, as the boundary treatments would be deteriorate or if other circumstances changed it would be difficult to secure its retention.

Another suggestion was the use of obscure glass, to reduce this impact, nonetheless, within habitable rooms the use of an obscure glazing condition is resisted when it is the only window serving a bedroom. However, a condition could be placed on the bottom half of the side facing dormers to be obscure glazed up to 1.7 metres above floor level. Nonetheless, a more practicable solution would be the removal of the existing northern (side) facing dormer windows and the introduction of high level northern (side) facing windows, with a sill height in excess of 1.7 metres above floor level in the room that it is installed. The above mentioned proposals would reduce the impact upon neighbouring amenity in relation to overlooking and loss of privacy, bringing the proposal in line with policy B3 of the Mid Sussex Local Plan.

### **13 ALTERATIONS AND COMMENTS IN RESPECT OF URBAN DESIGNERS/PLANNING OFFICER COMMENTS**

#### **PROPOSED REAR EXTENSION / ALTERATIONS TO THE 2 STOREY FRONTAGE BUILDING**

The Pre-application advice received from Mid Sussex District Council clearly indicates that the two modest frontage buildings, one of which being the crooked beam Coach House building, have an historic interest and character that contribute significantly to the Clayton Conservation Area. The roof timbers of both the two modest frontage buildings that abut each other are original. The roof is nearly always a dominant feature of a building and the retention of its original structure, shape, pitch, cladding and ornament is important.



Essentially it is the form and appearance of the existing buildings that contribute to the conservation area. The photographs above are views of the Coach House from Under Hill Lane when approached from the North-West. The Coach House included with, and should not be separated from, the surrounding properties and indicate that the numerous roof forms and inherent colours within the forms create a compositional roof scape that forms part of the character and appearance of the conservation area, which, essentially is a positive contribution to the conservation area. The addition of the modest low-level two storey roof form in a subtly different material, in a colour that has been picked to blend in, would add to the already random

configuration of rooftops, whilst also preserving the original forma and appearance of the parent building as shown in the images below.



The Society for the preservation of Ancient Buildings have within their manifesto a statement to the effect that any additions to ancient buildings should be designed and constructed to appear new and not be made as slavish imitations of the old which it sits next to. The manifesto goes on to say that any addition to an ancient building should not only be of its time, but should also ensure that the building is not stripped of its interesting material features. This is echoed by English Heritage in their Policy and Guidance document, paragraph 98 states 'A desire to retain authenticity tends to suggest that any deliberate change to a significant place should be distinguishable, that is, its extent should be discernible through inspection....and further in paragraph 100, which goes on to say '.....Interventions may not perform as expected. As perceptions of significance evolve, future generations may not consider their effect on heritage values positive. It is therefore desirable that changes, ....., are capable of being reversed, in order not unduly to prejudice options for the future' and further in paragraph 138 'the proposals aspire to a quality of design and execution which may be valued now and in the future.'

In the Pre-application advice received from Mid Sussex District Council, the Urban Designer has repeatedly stated '**I feel**' when providing a subjective view of the proposal without making reference to relevant guidance.

If the two storey frontage building is extruded as recommended by Mid Sussex District Council this will not only result in the loss of existing fabric and the original form of the building but will also create a roof form that overly dominates the existing roof scape and could be perceived as having a negative effect on the conservation area. The massing of the 'extruded' roof form as recommended by The Urban Designer is shown by the blue dotted lines in drawing numbers SK17 and 18 and the photo real images below. It would also be contrary to both SPAB and English Heritage Guidance. English Heritage guidance in particular states in paragraph 93 '**A desire to retain authenticity tends to suggest that any deliberate change to a significant place should be distinguishable, that is, its extent should be discernible through inspection.....'**



The roof form proposed by Mid Sussex District Council's Urban Designer would not be discernable from the original roof, which would in effect ensure that the integrity of the original roof form is lost for good.

Contrary to the '**feelings**' of the Urban Designer the proposed two storey metal clad roof form has been consciously designed so as to

- harmonies with the surrounding roof forms,
- be of its time
- have little impact on the conservation area as seen from Underhill Lane;
- be subservient to the parent building, whilst also respecting the existing shape and form of the parent building.

The proposed metal clad two storey form has also been designed and constructed to appear new, whilst also ensuring that the building is not stripped of its interesting original roof form and materials, in line with both English Heritage and SPAB Guidance. The form and the method with which it attaches to the parent building has also been consciously designed to ensure that the change is reversible.

The Urban Designer goes on to say ‘.....Because the existing building has an unusually shallow plan, the extruded form will potentially improve the overall proportions...’ This alteration, not only disregards the original designers perception that the roof form was perfect for the function it served, but is also contrary to English Heritage Policy and Guidance, which states that interventions may not perform as expected in the future, as perceptions of significance evolve. In effect the alteration proposed by Mid Sussex District Council’s Urban Designer to extrude and therefore irreversibly alter the original roof form of the parent building would alter significance. This, in effect, has the danger of being perceived, now or in the future, as a negative change on one of the key roof forms that contribute to the Clayton conservation area.

The use of metal cladding within a conservation area is not a new concept. Ditchling museum, which has won numerous design awards, is a prominent feature within Ditchling Conservation Area. The form of the museum, which has been echoed by the proposed two storey metal clad extension, at the West end of the museum sits comfortably within the conservation area as can be seen in the images below.



Furthermore paragraph 60 of the NPPF, which was adopted in March April 2012, sometime after the adoption of the Mid Sussex Local plan, states that Planning policies and decisions should not attempt to impose architectural styles or particular tastes and they should not stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms or styles and further to this Mid Sussex District Council does Not provide Supplementary Planning Guidance. Planning Guidance provided by other local authorities indicates that the preferred addition of an extension it to set it slightly below that of the parent building, ensuring that the addition is subordinate to the main structure. For instance the SPG related to extensions of Waverley Borough Council states ‘Any proposal for a two storey

extension should be set down from the ridge of the existing house and set back from the front elevation’. Whilst the SPG of Richmond Borough Council states ‘the extension is made to appear as an obvious addition which is subordinate to the main structure, so that the original form can still be appreciated’. It should be noted that the above examples of SPG’s were selected randomly by undertaking a ‘Google’ search.

## SKYLIGHTS AND SOLAR PANELS

The Skylights and Solar Panels will only be seen from the road in a very small area within the conservation area. Drawing number SK10 illustrates the position on the road that it would be possible, if at all, to see the roof. There will be a walking distance of approximately 3m within which it would be possible to see a clear view of the roof and therefore the proposed rooflights and Solar Panels.



Whilst the Urban Designer ‘again’ provides a subjective view and his ‘feelings’ with regards the inclusion of Skylights and Solar Panels on the side-facing roof, the permitted development rights confirm that unless there is an article 4 direction in place (Which there isn’t) planning permission IS NOT required for the addition of a roof light or a PV panel providing they meet the following criteria:-

- Conservation type roof lights are used (i.e. No more than 150mm above the existing roof plane).
- PV panels are no more than 200mm above the roof slope and are NOT fitted to a wall that fronts the highway.

English Heritage and SPAB guidance requires that any alterations can be reversed without damage to the original fabric. It is proposed to install the rooflights between the existing rafters, therefore eradicating the necessity to cut and irreversibly damage any roof timbers.

However, considering the permitted development rights, if the council wish for the Solar Panels and/or rooflights to be removed from this application the owners of the Coach House are more than willing to do so.

#### **TREE REPORT BY LANDSCAPE VISION LTD**

The tree report that is appended to this document confirms that the two trees closest to the proposed development will not be detrimentally affected by the proposals. It concludes by providing recommendations to be undertaken whilst building works are carried out.

#### **OTHER ALTERATIONS AT THE REAR OF THE COACH HOUSE BUILDING**

We agree with the comments made by the Urban Designer regarding the existing rear one storey extension and have changed the weathering material from render to weather boarding to match the existing condition.

#### **NEIGHBOUR AMENITY**

The face to face distance between the side facing windows of Garden Cottage and the northern facing windows serving bedrooms 2 and 3 will in fact be 19.565m, not 17m as stated by Mid Sussex District Council. Since receiving the pre-application advice the windows serving bedrooms 2 and 3 have been angled towards a North Easterly direction to obtain the view as shown in the image below.



They have been set at an angle of 40 degrees in relation to the rear extension serving Garden Cottage – please see drawing numbers SK10 and 11 for a clear understanding and the second image above. The amenity of Garden Cottage is therefore respected, whilst also ensuring that bedrooms 2 and 3 have adequate outlook.

#### **14 CONCLUSIONS**

- The home has been designed to maximise the sun's heating and lighting influence upon the home.
- Locally sourced low carbon materials are proposed alongside passive design principles to ensure minimal heating in winter.
- This exceptional design will be predominantly constructed using natural and recycled materials.
- Building the new rear part of the house to the Passivhaus standard will dramatically reduce energy consumption.
- In addition, the house will make the best use of natural design elements such as high levels of daylight, sunlight and natural ventilation in summer.
- Combined with the use of a variety of renewable technologies to achieve a zero carbon status; and the addition of a garden design which supports the growing of food and recycling of food waste the proposed scheme will make a significant contribution to protecting and enhancing the environment and increasing Biodiversity.
- The proposal complies with all relevant policy and material considerations.
- The proposed additions have been consciously designed in accordance with English Heritage and the Society for the Protection of Ancient Buildings Policy and Guidance.

- The addition of the modest low-level metal clad two storey roof form in a subtly different material, would add to the already random configuration of rooftops.
- The resulting scheme will introduce harmonious, high quality work of our own time.
- The plot and surroundings can accept the proposed changes or additions without detriment, provided they are skillfully detailed and executed.
- The proposed scheme will enhance the character and appearance of the conservation area and will have a neutral impact on neighbour amenity.
- We do not identify any other material considerations that could weigh against granting planning Consent.

**CONRAD A B HOWARD** RIBA CA IHBC FRSA  
**Didacious Designs Architects**