folkes architects

Design & Access Statement
Heritage Statement
Sustainability Statement

Proposed New Dwelling at

Land to the rear of
Glebe House,
Upper West Lane
North Lancing
BN15 0EX

19.03.24 - Rev A – Sustainability statement additions

1.0 Introduction & Planning History

This Design & Access Statement has been prepared to accompany the planning application for a new dwelling in the grounds of Glebe House, North Lancing. The site and the proposed development are described in detail below.

The site has not had been subject to any previous planning applications, with only a number of Section 211 applications recorded on the public register.

The existing dwelling on the site has an overall footprint of 144.0m², with an approx. Gross Internal Area (GIA) of 288.0m².

There is a detached single garage to the west of the site adjacent to the road which has a footprint of 60.1m². Additionally. There are a number of smaller buildings on the site including the remnants of a timber frame glasshouse with a brick base.

2.0 Planning Policy

The National Planning Policy Framework (NPPF) was originally published in 2012, with a revised version published in July 2018. A further updated versions of the NPPF was published in February 2019 and July 2021, comprising only minor alterations to the 2018 publication. The latest version of the NPPF was published in September 2023

The NPPF confirms that planning law, as set out at Section 38(6) of the Planning and Compulsory Purchase Act 2004 and section 70(2) of the Town and Country Planning Act 1990, requires that applications for planning permission to be determined in accordance with the development plan, unless material considerations indicate otherwise.

The focus of the revised NPPF continues to be achieving sustainable development. The NPPF clarifies that *"at a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs"* (taken from Resolution 42/187 of the United Nations). However, at paragraph 8, the Framework sets out that in planning terms, and in order to achieve sustainable development there are *"three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives)".* These objectives are economic, social and environmental. The economic objective is to *"help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure…".*

At Paragraph 9, it states that these objectives *"should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area"* (paragraph 9).

The Adur Local Plan was adopted in 2017. The following policies are considered to be of relevance: -

Policy 2: Spatial Strategy
Up to 2032 the delivery of new development in Adur will be managed as follows: Development within the Built Up Area Boundaries (defined on the Policies Map) of Lancing, Sompting, Shoreham-by-Sea, Southwick and Fishersgate will be permitted subject to compliance with other policies in the development plan. Development which would result in the coalescence or loss of identity of settlements will be resisted.

Policy 15: Quality of the Built Environment and Public Realm
Development should be of a high architectural quality and respect and enhance the character of the site, and the prevailing character of the area, in terms of proportion, form, context, massing, siting, layout, density, height, size, scale, materials, detailed design features and landscaping

Policy 17: The Historic Environment For All Heritage Assets
Where a proposed development would lead to substantial harm to, or total loss of a designated heritage asset, this will not be permitted unless there are compelling circumstances. 5 Development should not adversely affect the setting of a Listed Building, Conservation Area, archaeological feature or Scheduled Ancient Monument.

Conservation Areas: Development in Conservation Areas will be required to be of a high standard of design and materials so as to respect, preserve and enhance the character and appearance of that area.

Policy 18: Sustainable Design
Residential:
All new dwellings must achieve a water efficiency standard of no more than 110 litres/person/day (lpd).

Developers will be expected to provide certification evidence of the levels for BREEAM at the design stage and on completion of development.

Policy 20: Housing Mix and Quality
New residential development (including through conversions and changes of use) should incorporate a range of dwelling types, tenures and sizes (including affordable housing) that reflect and respond to Adur's identified housing needs and demands.

This will include market housing, based upon the following principles:
- *Family sized housing should be provided through infill developments, identified strategic locations, and town centre regeneration. Such dwellings should mainly provide 2-3 bedrooms.*
- *Town centre developments should aim to create family sized housing as well as flatted developments, to enhance the housing offer and support town centre regeneration.*

New residential development for older people, including specialist retirement accommodation and registered care homes, in both affordable and market tenures in accessible locations within the Built Up Area will be supported.

The Council will expect all new build dwellings to meet the optional higher Building Regulations Standard M4(2) for Accessible and Adaptable dwellings. The requirement to provide affordable dwellings constructed to Building Regulation Standard M4(3) Category 3: Wheelchair Accessible Standards, will be dependent on identified need at the time a planning application is submitted and the suitability of the site.

New dwellings across all tenures will be expected to meet the minimum nationally described space standards unless it can be demonstrated that, in terms of dwellings created through conversion or subdivision, there are exceptional reasons why some or all of these requirements cannot be met. When considering proposals for the conversion of dwellings into flats or maisonettes, account will be taken of the size and type of property to be converted, the effects the proposal will have on the amenity of adjoining dwellings and the character of the area, including the current mix of dwellings.

In order to protect the existing residential stock, proposals which result in the loss of dwellings to non-residential use will not be supported. An exception may be made if the loss would facilitate the provision of a community facility.

Policy 22: Density
New residential developments should achieve densities of a minimum of 35 dwellings per hectare.

Development in the defined town/village centres and Shoreham Harbour will be expected to achieve higher densities.

In exceptional cases residential development may be permitted at a lower density, where it is demonstrated by the applicant to the satisfaction of the Local Planning Authority that the minimum density specified above would result in an unacceptable impact on the surrounding area.

Proposals for new dwellings will be expected to comply with the criteria contained in the Council's adopted Development Management Standard No.1 "Space Around New Dwellings and Flats" or any other appropriate national standard.

Policy 28: Transport and Connectivity
In order to secure significant improvements to transport and mobility in Adur, new development should:
- *Improve public transport and access to it where opportunities arise.*
- *Work with West Sussex County Council and Brighton & Hove City Council to promote a sustainable transport system along the coast to help in the regeneration of the area including Shoreham Harbour, ensuring that the A259 is improved.*
- *Provide for improvements to the road network, including the A259 and A27. Measures include junction improvements, traffic calming, and where necessary new roads. Appropriate mitigation measures to address capacity issues at a number of key junctions on the A259 and A27 will be sought.*
- *Encourage proposals to extend the existing cycle network and secure a network of cycle, pedestrian and bridleway facilities linking urban areas, key sites, open space, countryside and coast. These will include new and improved rights of way (suitable for a range of users, including those with mobility difficulties, where appropriate) as well as improved access across the A27.*
- *Ensure that new development is located and designed to minimise the need for travel, facilitates and promotes the use of sustainable alternatives to the private car, and provides or contributes to the*

necessary infrastructure to serve the development and to mitigate against any adverse impacts to an acceptable level. Travel plans and Transport Assessments will be required for certain developments in line with West Sussex County Council guidance and the National Planning Policy Framework.

- *Ensure new development contributes to the mitigation of air pollution, particularly in Air Quality Management Areas. Air quality assessments may be required. Where practical, new development should be located and designed to incorporate facilities for electric vehicle charging points, thereby extending the current network.*
- *Implement a range of measures to address car parking issues in Shoreham town centre.*
- *Incorporate appropriate levels of car and cycle parking having regard to West Sussex County Council guidance, taking into consideration the impact of development upon on-street parking.*
- *Pursue with West Sussex County Council ways of managing the impact of HGVs in Adur and implement measures as appropriate.*
- *Implement an area-wide behaviour change programme to encourage sustainable modes of transport and reduce demand for the private car. This should include a package of travel behaviour initiatives.*

Policy 30: Green Infrastructure

Green infrastructure will be protected and enhanced and access to it improved where necessary and appropriate. When considering green infrastructure provision, the ecological characteristics of the area will be taken into account in order to maximise the biodiversity benefits.

Developments will be required to incorporate elements of green infrastructure into their overall design, and/or enhance the quality of existing Green Infrastructure as appropriate.

The Council will work with relevant partners and developers to facilitate the creation of an integrated network of green infrastructure within and beyond Adur. A Green Infrastructure Strategy will be produced by the Council and developments will be expected to comply with this document. All new major developments will need to demonstrate how they will contribute to the implementation of the Green Infrastructure Strategy both at site level and with regard to the wider green infrastructure network.

The planting of trees will be supported and encouraged and Tree Preservation Orders will be made to ensure that healthy locally important trees that make a positive contribution to the street scene are protected.

Policy 31: Biodiversity

All development should ensure the protection, conservation, and where possible, enhancement of biodiversity, including nationally and locally designated sites, Biodiversity Opportunity Areas (BOAs), marine habitats and other Biodiversity Action Plan (BAP) habitat areas, wildlife corridors, and protected and priority species. If significant harm cannot be avoided (by locating development on an alternative site with less harmful impacts), then such harm should be adequately mitigated. Where it cannot be adequately mitigated then such harm must be compensated for. Where it cannot be compensated for, then planning permission should be refused.

Nationally designated sites: Proposed developments which would adversely affect a Site of Special Scientific Interest (SSSIs) (individually or cumulatively) will not normally be permitted. Exceptions will only be made where the benefits of the development on the particular site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts.

Local Designations: Proposals for development in, or likely to have an adverse effect (directly or indirectly) on a Local Nature Reserve, Local Wildlife Sites (including ancient woodlands or wildlife corridors) or Regionally Important Geological/Geomorphological Site will not be permitted unless it can be demonstrated that reasons for the proposal outweigh the need to safeguard the nature conservation value of the site/feature.

Where appropriate, the Authority will use planning conditions or obligations to provide appropriate enhancement and site management measures, and where impacts are unavoidable, mitigation or compensatory measures.

Where relevant, new development adjacent to the Adur Estuary or the coast will have to demonstrate how it is addressing the issue of coastal squeeze.

Policy 34: Pollution and Contamination

Development should not result in pollution or hazards which prejudice the health and safety of the local community and the environment, including nature conservation interests and the water environment.
New development in Adur will be located in areas most suitable to the use of that development to avoid risks from noise, air, odour or light pollution.

Mitigation measures will need to be implemented for developments that could increase levels of pollution or have a negative impact on drinking water supplies in Adur. Where there are significant levels of increased pollution that cannot be mitigated, development will be refused.

Where appropriate, air quality assessments and/or noise assessments will be required in conjunction with development proposals.

Investigations and assessments of all sites situated in or in close proximity to potentially contaminated land will be required in relation to relevant development proposals.

Policy 36: Flood Risk and Sustainable Drainage

The Council will work with relevant bodies to ensure that flood risk in Adur is reduced. A site specific flood risk assessment must be submitted with planning applications for:

- *Proposals of 1 hectare or greater in Flood Zone 1*
- *All development or changes of use to a more vulnerable use in Flood Zones 2 and 3*
- *All development37 or changes of use to a more vulnerable use, regardless of flood zone or size, where flood risk from other sources (surface water, sewer, groundwater) is identified by the Strategic Flood Risk Assessment.*

The flood risk assessment will need to demonstrate that development:

- *is appropriately flood resilient and resistant, includes safe access and escape routes where required, and that any residual risk can be safely managed;*
- *will be safe for its lifetime taking account of the vulnerability of its users;*
- *will not increase flood risk (including sewer flooding, surface water and groundwater flood risk) elsewhere;*
- *will, where possible, reduce flood risk overall; and*
- *will give priority to the use of sustainable drainage systems.*

The flood risk assessment will also need to demonstrate that, where possible, higher vulnerability uses have been located on parts of the site at the lowest probability of flooding. New development within Adur must include some form of Sustainable Drainage System (SuDS) or other appropriate design measures in order to reduce the risks of surface water flooding and to mitigate the risk of pollution to groundwater sources. SuDS should be considered before other forms of disposal.

Substantial storage through SuDS will be required to achieve a reduction in runoff to levels below that experienced prior to development. On relevant sites, storage of runoff during the high part of the tidal cycle should be addressed. SuDS must be designed sensitively and must seek to enhance landscapes, increase biodiversity gains, and provide quality spaces.

For all developments, applicants will be required to demonstrate that acceptable management arrangements are in place and funded to ensure the ongoing maintenance of SuDS into the future. Where it is not practical to provide SuDS on site, the development of strategic level SuDS may be considered appropriate. In these circumstances, contributions may be required through s106 undertakings/ CIL**.**

3.0 Pre-application Advice

The proposal has been submitted for a Pre-application Advice, application No: PREAPP/0053/23

The advice given suggests that the proposal would be acceptable with a number of small changes which have been addressed.

'The proposed house is shown set back from the Lane but sitting forward of the houses to the south and forward of Glebe House to the north. I consider that the site is sufficiently distant from Glebe House to not adversely affect its setting and its positive impact on the Conservation Area. The projecting element closest to the house to the south is shown as being single storey only but it does have a relatively tall, pitched roof and it does have the potential to have some impact on light and outlook to that neighbouring property. You should therefore look to reduce the roof height of the single storey element. Subject to that change, the size and scale as proposed is the maximum likely to be acceptable on the site.'

It concluded *'that the site has potential to accommodate a small dwelling and, subject to further details on design and materials, the proposal has some merit.'*

4.0 Existing Site

The site is located at the eastern side of Upper West Lane, an unmade lane accessed off Manor Road to the north and Upper Brighton Road (A27) to the south, North Lancing.

The site is located within the built-up area of Upper West Lane and is close to local amenities and the town centre. Good transportation is afforded by the A27 to the south of the site. The surrounding area comprises of detached residential plots of varying sizes and orientation. The neighbouring properties are a mix of single storey, chalet style bungalows or two storey dwellings, with a number of plots being re-developed in recent years, or new dwellings being created as back land development.

The overall site is approximately 2064m² (0.2064ha) and from the Lane, the site is reasonably well screened by existing vegetation. The site is bounded on all sides with mature trees and planting, with dense planting covering the southern part of the site.

Glebe House sits to the north of the site with the rest of the site given over to garden. The site is afforded two site accesses with the principal entrance located to the north of the site on to the drive. The second gives access to the garage and sheds. This area is divided from the remainder of the garden by flint walls.

The site is located in flood zone 1 meaning it has *low probability of flooding from rivers and the sea.*

5.0 Heritage Statement

North Lancing is located to the south of the South Downs and on a low spur that reaches out onto the coastal plain.

There is archaeological evidence that the area has been inhabited since the Neolithic era. However, the settlement of North Lancing primarily dates from the Saxon era with the founding of the present church in 1120.

The church was rebuilt between 1280 and 1300 and only small parts of the original building being incorporated into the newer building. This includes the south porch. dating from about 1180. Since, there have been a number of alterations and restorations have been carried out.

Much of the old North Lancing village centre has generally been protect form new development and has maintained much of its settlement structure and village typography.

The late 20th and early 21st there has been increasing pressure on the available land for development residential purposes has meant that few building plots in and around the proposed conservation remain available for development.

The most dominant feature within the conservation area is the parish church of St. James the Less, set within its own churchyard. To the west of the churchyard is Upper West Lane which runs down to Upper Brighton Road (A27). The lane is characterised as being narrow„ unsurfaced with grass banks flint walls overgrown with ivy and several trees. South of the churchyard is Glebe House (A building of high townscape value), flint faced under a slate roof and behind high flint walls. The west side of the lane is less characterful with three small bungalows and a hall, which has been converted into residential housing. The character of the lane is lost completely at its southern end where it joins the busy main road (A27) and where a modern housing estate has been built.

The conservation character appraisal considered that *'many of the existing unlisted buildings and all flint walls (old and new) are of great value and in a sense embody the character of the area.*

The proposed responds to the surrounding context in form and materiality. The new house utilises the existing key feature of the site, principally using the existing flint wall to define not only the proposed site boundary but also the exterior wall fronting Glebe House.

The ground level element of the building is predominantly knapped flint work with brick quoins and detailing, broken up interspersed with vertically oriented slit aluminium windows coloured in anthracite dark grey. The upper floor to the northern portion of the building is predominantly vertical timber cladding to the gable ends with the roof finish in slate. To enhance the proposed master bedroom suite, it is proposed to include a dormer window clad in dark grey metal cladding on the cheeks in a leaded aesthetic.

6.0 Amount of Development:

It is proposed to demolish the existing garage and surrounding sheds and provide a new detached 3-bedroom dwellinghouse, with room in the roof and a front elevation set further away from the road to respond to the established neighbouring building line. It has also been designed and positioned to address the overlooking issue from the Southern neighbour.

The new house is proposed to be of a high-quality contemporary design consisting of 160.0.m of floor space across two storeys. The first floor is proposed to be 37.7sq.m and will be dedicated to the master bedroom suite orientated towards the west of the site, with the remaining 163sq.m distributed throughout the ground floor to accommodate 2 double bedrooms, living areas, utility room and circulation space.

The new house is proposed to exceed the Nationally Described Space Standards minimum areas of a 3bedroom 6person property. It has also been designed to meet the requirements of Building Regulations Part M4(1) as any higher mobility standard.

7.0 Layout:

The building is made from three distinct parts which are different in form:- the reception room, kitchen/dining area and utility room, the entrance hall, and the three bedrooms split between two on the ground floor and one bedroom within the roof space above. The parts are configured in an T-

shaped pattern to respond to the site and surrounding constraints, whilst maximising the use of natural light.

It is proposed, to situate the new dwelling approximately 4.1m away from the public highway, with the principal façade set 8.5m from the road, to allow for parking provisions and driveway to the front of the property at the West. The house has been designed to address the road by maintaining a stepped frontage and existing screen vegetation further reduces the impact on the street scene. The proposed house follows the existing pattern of development.

The proposed property has been designed to consider the impact of overlooking to and from neighbouring properties and their respective private amenity space. There will not be any upper floor, side-facing windows in the property and the roof lights and dormer facing East will be set above 1.5m. All windows will look out towards the proposed private garden space, or towards the front of the property to the East which faces the public highway.

The two-storey portion of the building is situated entirely towards the North of the property so as to not be visually overbearing or to overshadow any other properties. Any shadows caused by the new dwelling will not be cast over any other properties.

The kitchen/dining area is situated on the South side of the site, reducing the impact of the existing overlooking window owned by the neighbouring property, thus protecting the occupant's amenity. A utility room has been provided adjacent to the kitchen/dining space with a back door and direct access from the front of the property via a new pathway. The reception room addresses Upper West Lane to the front.

The bedrooms are located towards the North in a separate part of the building. There are three bedrooms, two to be en suite, and an additional family bathroom room. There is also a separate W.C. which would be compliant with Building Regulations Part M4(1) close to the front door and feature coat cupboards to create a sensible entrance hall.

The property has been considered with all fair and reasonable standards of Lifetime Homes. Ample parking will be provided at the front of the site and the proposed stairs can be adapted to accommodate a stairlift. All switches and sockets will be located between 450mm and 1200mm from the floor level and more than 300mm away from internal corners. Additionally, windows will be installed so as to allow views out when seated.

There are two bedrooms on the ground floor with the option to use the proposed reception room at the front of the property as fourth or guest bedroom. These ground floor bedrooms on the entrance level can be easily accessed by spacious circulation space and can link coherently to the entrance level living area, W.C. and shower provisions. The bathrooms will be designed with walls suitable to accommodate fittings and grab rails and be spacious enough to allow for ease of movement within the room.

8.0 **Scale:**

The building has been designed in response to the neighbouring context and residential properties along Upper West Lane. The surrounding properties are generally two storey and set back from the road. Generally, these are a mix of two storey houses and chalet bungalows with rooms in the roof. The proposals address this by keeping the building volume to a similar scale, with a mix of single storey and single storey with room in the roof.

The new house utilises the existing key feature of the site, principally using the existing flint wall to define not only the proposed site boundary but also the exterior wall fronting Glebe House.

The highest ridge levels of the proposed dwellinghouse are set with a proportionality to its surroundings. The single storey portion of the proposed building sits significantly below the immediate neighbour to the South. Similarly, the highest ridge of the two-storey portion to the North sits below Glebe House. The scale of the proposed has been designed to reduce the visual impact on it surroundings.

The new property has been designed to not provide an overbearing bulk when viewed from the street scene. The front elevation is visually broken up by tall, vertically orientated slit windows set within the walls and roof slopes. The building lines of all four elevations are staggered to ensure the impact of the building on the surroundings and the street scene is enhanced.

9.0 **Landscaping:**

The site benefits from extensive planting to the south, west and eastern perimeters, with the northern and eastern half of the site having a number of self-seeded trees of low quality and other ornamental planting. Within the application site boundary, a large beech tree is the only tree of significance. The arboricultural report sets out the strategy for ensuring the minimum of disruption to both the tree and proposed dwelling.

The root protection area of the beech tree has been calculated in strict accordance with *BS5837:2005 - trees in relation to construction*. The RPA's have been indicated on the drawings.

The proposal seeks to retain the existing soft landscaping to the perimeter of the site, although there are a small number of trees and shrubs proposed to be felled as part of the proposals, there are all small trees or ornamental shrubs.

The new driveway is to comprise of a permeable surface finish installed over a geo-cell driveway system in order to create a 'zero-dig' driveway solution to minimise any long-term harm being caused to the trees.

Adjacent to the dwelling hard paved paths will provide level access between the entrance doors and from the parking area.

The existing topography is to be retained and has been used as part of the proposals to create a striking southern elevation.

10.0 Appearance:

The form of the building responds to the existing site feature, neighbouring buildings, highway, and local context. The building takes on a contemporary architectural form and the proposed materials reflects the traditional materiality of its context.

The ground level element of the building is predominantly knapped flint work with buff brick quoins and details, broken up interspersed with vertically oriented slit aluminium windows coloured in anthracite dark grey. This mirrors the colour palette and proportions of Glebe House.

The upper floor to the northern portion of the building is predominantly vertical timber cladding to the gable ends with the roof finish in slate. To enhance the proposed master bedroom suite, it is proposed to include a dormer window clad in dark grey metal cladding on the cheeks in a leaded aesthetic.

The southern single-story range are enclosed in slate wall with the southern wall being in bricks work but is roofed with slate and incorporates integrated photovoltaic panels.

The two elements are joined by a glass linked entranceway with a flat roof in dark grey to match the material used elsewhere in the property. This roof will incorporate a contemporary flat roof lantern to allow a large amount of natural light into the entrance hall.

11.0 Sustainability Statement

The need for sustainable development is well documented and it is estimate that 40% of the UK's carbon emissions are generated by the built environment. The need to decarbonise the built environment is essential in order to achieve the Net Zero standards set by the government by 2050 and it is critical that all new development addresses the issues and works towards reducing the Embodied and Operational Carbon from the early design stages.

The Embodied Carbon is the level of carbon dioxide emissions associated with manufacturing and transport of the materials and the construction processes involved in the realisation of the project.

The Operational Carbon is the levels of carbon dioxide emissions associated with the running, or operation, of the building – i.e. heating, lighting, ventilation.

The construction industry is addressing these issues with the updated Building Regulations, which act to uplift the current requirements to help the construction industry adapt to the changing regulations and low carbon heating.

Although the built environment is a large contributor to the UK's carbon emissions, it is only through a whole shift across the economy and the country that will allow development to truly reach the Net Zero standards.

Building location, orientation, and form: the properties have been designed and positioned to work with the existing topography and have mainly been orientated to maximise their exposure to the sun and utilise solar gain where possible.

The low-density nature of the design means that overshadowing of neighbouring properties has been minimised. The forms of the buildings have been kept relatively compact in order to reduce the external surface areas, therefore improving the overall energy efficiency of the dwellings.

Fabric element design: the most important aspect of energy efficiency of any building is the fabric of the building, in particular the floor, walls and roof elements. In order to address both the Embodied and Operational Carbon of the dwellings the intention is to utilise Modern Methods of Construction (MMC) namely Structurally Insulated Panels (SIPs) or timber framing. A SIPs/ timber framed superstructure has multiple benefits:
- firstly, construction waste is drastically reduced due to controlled offsite fabrication,

- less time on site, means less disruption to neighbouring properties and reduction in embodied carbon,
- less dust & noise due to construction activities, therefore further reducing the impact on the neighbouring properties,
- improved airtightness due to prefabrication techniques, therefore reducing operational energy use/ costs and improving acoustic performance.

Ventilation & airtightness: ventilation is critical in maintaining indoor air quality and maximise the health of the occupants. Ventilation is to be provided within every building via background trickle vents to the high performance door and window systems, but also by the opening casements within every room. The airtightness of the building is important to prevent heat escaping through the superstructure of the building, and in fact contributes to the comfort levels within the building by allowing the occupants control over the temperature and airflow via opening/ closing windows.

Renewable technology: There is currently no gas supply to the site and in order to future proof the development all of the buildings hot water and heating demands are to be met via high efficiency Air Source Heat Pumps. The proposal includes installing 1no. Vaillant Arotherm 8kW Air source heat pump, located to the north of the new property adjacent to the cycle store.

Photovoltaic panels are to be included to allow microgeneration of electricity, which will either be utilised within the building and/ or sold back to the electricity grid. The potential for storage of electricity within the buildings is becoming more popular and as the technology improves the addition of an energy storage system will greatly benefit the dwellings. The proposal includes a 7.8kWp Solar array with battery storage.

There are many other aspects of sustainability beyond the need to cut Embodied and Operational Carbon, such as the inclusion of water butts and rainwater harvesting to capture rainwater from the roofs for use within the grounds to reduce the amount of water drawn from the mains.

Electric Vehicle Charging points are to be provided within the car parking area. It is proposed to install a MyEnergy Zappi 7kW Type 2 Tethered EV changer, the final location to be confirmed.

12.0 Ecology

Accompanying the application, an ecological impact assessment. This sets out the baseline conditions of the existing site and identify the potential impact of the proposed development and the appropriate mitigation and compensation measures.

The assessment sets a number ecological enhancement to be included are:

- *Creation of 2no. log piles to the margins of the site, to include areas of buried deadwood.*
- *The use of seed and fruit bearing species of tree such as cherry, rowan, birch, hawthorn, and crab apple to provide a foraging resource for birds and insects.*
- *Installation of integrated bird and bat boxes into new buildings, and 'bug hotels', bird and bat boxes to mature trees;*
- *Incorporation of 'Hedgehog Homes' within the scheme design;*
- *Installation of invertebrate boxes in both sunny and sheltered locations to cater for a range of species.*
- *The use of flowering lawn in areas which require regular mowing rather than a standard amenity mix.*

13.0 Conclusion

The proposed development has been designed to respond to and respect the site and its immediate context while considering the private amenity spaces of the neighbouring properties and the applicants alike.

The amount of proposed development creates a new dwelling that is commensurate in scale to those in the local context and is similar in scale to that of the previously approved scheme on the site.

The proposed scheme accords with the relevant policies set out with the NPPF and the Horsham Local Development Framework, as set out above.

The scale, massing and appearance of the dwelling has been carefully considered to create a new dwelling that enhances the currently vacant site and will contribute in a positive way to the sustainable development of the area by creating an additional dwelling within the built-up area of North Lancing.

Through the careful specification of structural materials, the new dwelling can be designed to reduce the energy use of the dwelling through both higher insulation levels, therefore lower energy demand for heating, and lower embodied carbon.