
Design, Sustainability and Access Statement

Erection of a new 4 bedroom detached dwelling on
land at Autumn Close, Emmer Green, RG4 8UL



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1.0 Background

This document accompanies the submission of a planning application to erect a new dwelling on the land adjoining 5 Autumn Close and to the rear of 3 Kiln Cottages. It should be read in conjunction with drawings prepared by Deepsea Engineering Ltd as submitted to Reading Borough Council. This application seeks to develop the site and constructing an environmentally sustainable and energy efficient family home.

2.0 Analysis of Site and Context

2.1 Location and Site Description

The application site is located at the north edge of Emmer Green, approximately 1km from Emmer Green shopping precinct and within the settlement boundary of Reading borough as defined on the Local Plan Proposal Map. Emmer Green town centre is located at the southwest end of Kiln Road. The application site of approximately 0.175 acres is formerly part of disused garden of No. 3 Kiln Cottages, No. 5 Autumn Close and vacant land in between. The proposed development site nests between No. 5, No. 6 Autumn Close and No. 2, No. 3 and 3a Kiln Cottages and No. 2 Felix Cottage. The site is not within a Conservation Area.

The site has public transport connects with regular bus services serving Emmer green, Caversham and Reading town centres and train station. Emmer green town centre is within walking distance.

Birdseye views (Figure 2-1 and Figure 2-2) illustrates the location of the site and its relationship with the surrounding buildings and roads.



Figure 2-1: Satellite View of the Proposed Development Site



Figure 2-2: Birdseye View of the Proposed Development Site (3a Kiln Cottages not shown)

2.2 Building Form

There is a relative uniform scale and type of dwellings in the surrounding area. There is a predominance of detached post war and 1970s housing grouped in a reasonably regular pattern around residential cul-de-sacs. Being mass developed in the similar period, the buildings to the east of the site has a strong uniformity in size, style, form and materials. To the southwest of the site to the edge of the countryside, there are four 1.5 storey Victorian terraced cottages known as Kiln cottages and traditional style semi-detached houses known as Felix cottages.

Autumn Close is a cul-de-sac serves 8 residential houses and connects to Kiln Road to the southeast via Marchwood Ave. The dwellings at Autumn Close are modest size 1970s developments including a mix of two story houses and bungalows similar in scale, style and massing, featuring yellow/red brick construction and a shallow pitched gable roof. The two storey houses are clad in brown tiles/timber cladding at the first floor level. South side of the development back on to the rear gardens of Kiln Cottages, which are two storey Victorian terrace cottages with high pitch red clay tile gable roofs. To the Northeast, the site adjoins the side of the long garden of No. 2 Felix Cottage. No. 1 and No. 2 Felix cottages are 2 storey traditional red brick houses featuring high pitch gable roof with red clay tiles.





Figure 2-4: Site Photograph (view towards 2 Felix Cottage)



Figure 2-5: Site Photograph (No. 6 Autumn Close)



Figure 2-6: Site Photograph: View from Autumn Close



Figure 2-7: No.5 Autumn Close



Figure 2-8: No.6 Autumn Close



Figure 2-9: No.6 Autumn Close

2.3 Views

There are limited views into and out of the site. Views to the site are restricted to the close range views from Autumn Close (Figure 2-6). From Autumn Close, the proposed driveway is in between No. 5 and No. 6 Autumn Close. Part of the proposed dwelling may be visible from Kiln Road through the spacious front garden of No. 2 Felix cottage, however the view may be further blocked by the construction of the approved detached house at the side of No.2 Felix Cottage.



Figure 2-10: No. 2 and No. 3 Kiln Cottages, View from Kiln Road (Prior construction of 3a Kiln cottages)



Figure 2-11: No. 2 Felix Cottages, View from Kiln Road

3.0 Review of Planning History

3.1 Planning History:

Outline planning application for the erection of new bungalow (Access and Layout Only) with Reference: 09/01889/OUT has been refused on 09 March 2010 and subsequent appeal (APP/E0345/A/10/2135967) dismissed on 15 March 2011. The proposed layout in the outline planning application is shown in Figure 3-1.

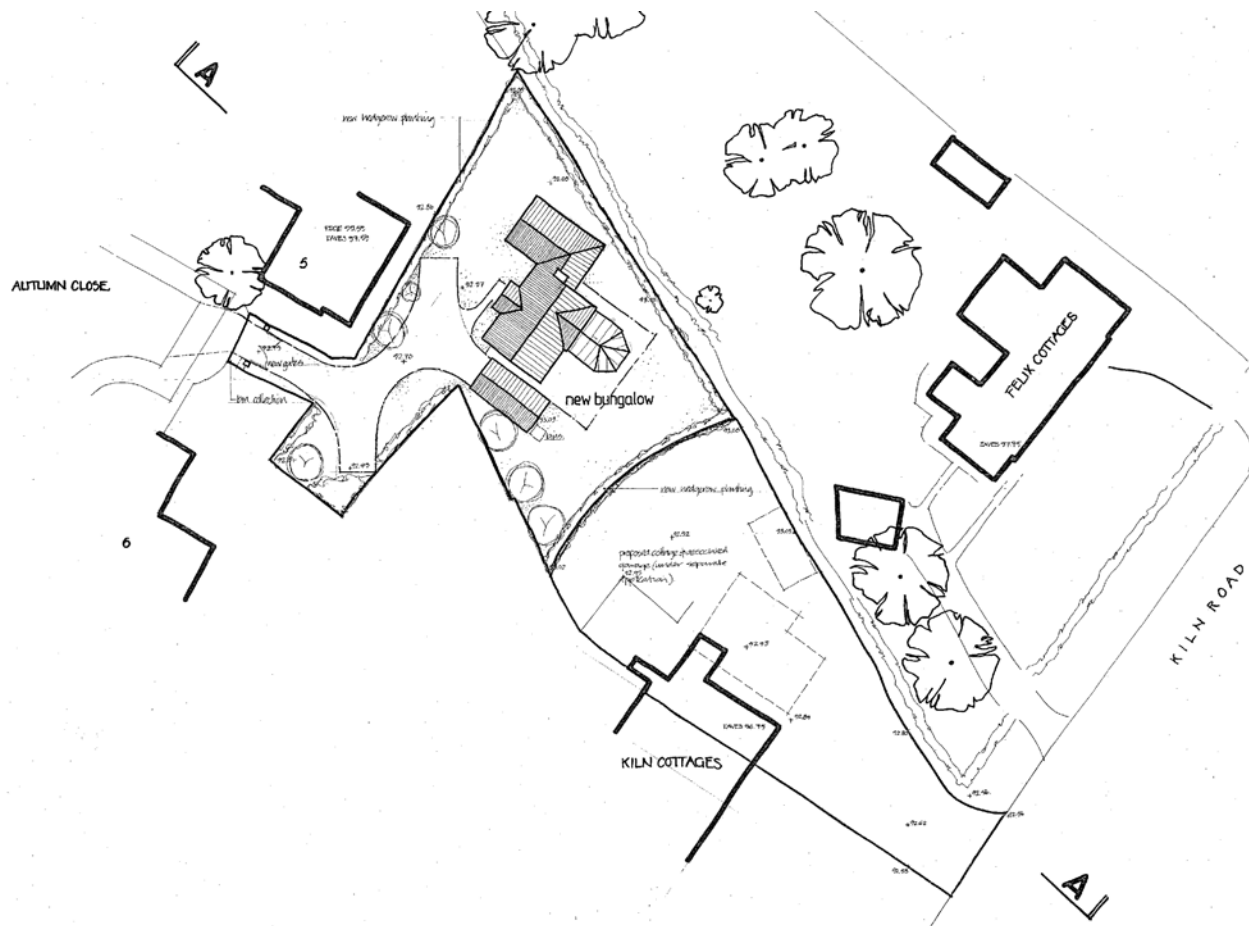


Figure 3-1: Previously Refused Outline Planning Application for a Detached Bungalow (Ref. 09/01889/OUT)

The main reasons for refusal are:

- The harmful extent of the layout of the large access, drive and parking and turning area would dominate the frontage of the plot and would be at odds with the regular rhythm and open appearance of the frontages of the existing dwelling.
- The application fail to demonstrate that the layout of the new development will provide adequate privacy from other dwellings
- Absence of sufficient information to demonstrate the appeal site has any right of access over the strip of land which separates it the public highway.
- The proposal does not make adequate provision for meeting the appropriate standards under the Code for Sustainable Homes.
- Lack of S106 unilateral undertaking.

The proposed scheme in this application has addressed all the issues arise from the previous outline planning application through careful site analysis and innovative design. The above issues are therefore overcome by:

- A more efficient and compact parking and turning arrangement in the frontage featuring the use of car turntable.
- Carefully designed building orientation and position of windows and doors to ensure privacies of other dwellings and the proposed dwelling.
- Supporting title plan is submitted together with this application as a proof of access right to the public highway without passing third party land.
- The requirement of Code of Sustainable Homes has been withdrawn by Reading Borough Council in 2015, thus no longer applicable.
- The applicant is willing to make S106 agreement if required.

In addition, since the refusal of previous outline planning application, there are significant changes in national planning policies with the publication of NPPF in March 2012. The NPPF recognises how good design, good planning and sustainable development are related. The NPPF also makes clear that planning policies and decisions should not attempt to impose architectural styles, or stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms or style.

The proposed design scheme therefore is seeking to deliver an inclusive good design in a highly sustainable manor to overcome the previous refusal.

4.0 Design Proposal

4.1 Design Principles

This proposed scheme design has been prepared following a review of the reasons for refusal of the previous outline planning application and the analysis of the site and surrounding context as outlined in the above sections. This planning application proposes the erection of a part single storey part 2 storey house. The proposed dwelling will be accessed from Autumn Close with new dropped curb at Autumn Close. A courtyard and double garage will be provided in front of the dwelling with space for permanent parking of 3 cars. Further parking spaces are also available for guest visiting at the front court yard with the utilisation of a turntable for turning.

The proposed building is conceived as a composition of two elements; firstly a well insulated simple 2 storey gable house containing the main living space on the ground floor and three bedrooms on the first floor. It has the same ridge height, roof pitch and similar in shape and scale as the surrounding houses at Autumn Close. The second element is a single storey gable structure in similar geometry and set parallel to the 2 storey form which could be utilised as multifunctioning space, i.e. bedroom, living room, game room or office space. The single storey and 2 storey elements will be linked through a single storey entrance hall.

A key design approach is to ensure transparency and connection between the internal spaces and the garden. This has been achieved through the use of full height glazing and large sliding doors within the living spaces on the ground floor.

The proposal is designed to create the highest quality of internal space while maintain privacy of the occupants and the quality of life of the neighbouring properties and best utilised the irregular shape of the site. The proposed design not only allows flexible use of space as a family home but also designed

to be suitable for multi-generation living, disabled accommodation and work-home arrangement which are scarce in the local housing supply.

4.2 Use

The proposed use of the site for a single residential dwelling is consistent with the broadly residential area in which it is located. The application site is located in an area of predominantly detached houses with modest size gardens. The use of the site as a single dwelling will maintain this existing character.

4.3 Amount

The proposal will have a gross internal area of 187 square metres and a foot print of 135sqm. The double garage will have a foot print of 40sqm occupying the irregular corner of the site. The overall foot print and garden space are similar to those of nearby properties in Autumn Close (i.e, No. 5, No. 8, No. 3) and the new build at No.2 Felix Cottage.

4.4 Layout

Environmental design has played an important role in every aspect of the design. The proposal has been conceived to take full advantage of the environmental opportunity within the constraints of the site.

The layout and sitting of the proposed dwelling has been informed by the context of development in the area and characteristics of the site. The proposed dwelling respects the relationship with No. 5 Autumn Close and orientates parallel to No. 5 in the southeast-northeast direction. The large glazing at the main living spaces and bedroom windows are designed facing the southeast which not only maximize the solar gain and reduce heat lost from the northwest but also avoid overlooking to No. 5 Autumn Close and vice versa.

The single storey wing has its front window in the southwest facing the front parking court yard. A rear patio door is located on the northeast facing the north portion of the garden. This arrangement gives the single storey wing a well-lit configuration and a private use of the north garden. This arrangement also create large clear distance between the first floor of No.5 Autumn close and the proposed house to ensure sunlight at the No.5 Autumn close would not be adversely affected by the house.

The layout of the proposed dwelling will ensure that there is no material impact on neighbour amenity. There are no windows directly overlooking neighbours. The distances between the rear of the proposed dwelling and the rear of No. 3 and 3a Kiln cottages are in excess of 20ms which will ensure there is no overlooking or privacy issues. The distance between the two storey wing is positioned 10m away from No. 5 Autumn Close and the single storey element at 3.5m away. This arrangement is consist with the general building pattern of the surrounding area where there is generally spacious gaps between dwellings or separated by single storey extension or garages.

The detached double garage will be sitting and occupying the irregular corner at the east of the site. There will be a parking and turning area utilising a car turntable between the garage and the front of the dwelling. The layout arrangement significantly reduce the hard surfacing required and provide rectangular shaped front garden which will be in keeping with the character of the surrounding houses.

4.5 Form

Critical to the design approach is the importance to root the proposal within the existing characteristic of the area. The design has sought to echo the existing massing and features around Autumn Close and Kiln Roads. The proposed building adopts a simple linear gable form which follows the characteristic in the area. As a result, the proposed development sits well within the contexts.

4.6 Appearance

Many traditional vernacular characteristics, details and material has been reinterpreted and incorporated in the design at in a contemporary manner. The simple gable roof form resonance with the local building form.

A simple palette of materials is proposed. At the ground floor of the main house, brick similar to surrounding houses is proposed. On the first floor and the single storey wing, the building will be wrapped around with timber cladding.

The design of the proposed dwelling is functional and contemporary and follows the proportions of adjoining dwelling to ensure that it is contextually acceptable.

4.7 Scale

The proposed building has a footprint compatible with neighbouring houses. The ridge height of the proposed 2 storey wing is 6.38m, which is the same as that of No. 5 Autumn Close. The eave height is at 4.64m.

The proposed dwelling divides the garden space into three area, front parking courtyard, northern garden and southern garden. The front parking area has an area of approximate 75sqm (exclude driveway). The northern garden has an area of 130sqm and the southern garden has an area of 260sqm. The scale of the garden space is considered appropriate for the size of the development and the character of the area and satisfies the standards defined in Council's Supplementary Planning Guidance "appendix 4: Space Around Dwelling (March 1994).

4.8 Landscaping

The spacious southern garden at the southeast of the site will be used as the main garden area. Large glazed sliding doors at the open plan living space opens directly into the southern garden. The first floor bedrooms will also benefit from the view of the southern garden. The single storey wing has patio doors opening directly to the north garden.

The garden will be carefully landscaped with native flower beds, hedges and trees to enhance the open characters of the area and create habitation for wild life. There are no mature trees at the development site. All existing fences and hedge will be retained and improved. A green roof on the garage is proposed to reduce the impact of losing in green space due to the construction and provide habitat area for wild life. New 1.8m wildy friendly wooden fences will be erected along the boundary to the footpath adjacent to No.2 Felix Cottage which replaces the existing wired fences.

It is noted that the sympathetic development of the site and alongside the provision of an appropriate landscape scheme to the frontage and rear gardens will significantly improve the outlook of the existing site both from the street and from neighbouring properties.

4.9 Access and Parking

Vehicular access to the site would be from Autumn Close through the land between No. 5 and No. 6 Autumn Close (currently fenced off with access gate as shown in Figure 2-4). The access is approximately 5m in width and 7m in length. The new vehicular access will require a dropped curb to be constructed at the turning head. It is noted that there is already vehicular access with dropped curb at the opposite side of the turning head in front of No. 2 Autumn Close and thus the proposed new access is conform to the existing traffic arrangement at Autumn Close.

The entrance to the proposed development will be visible from Autumn Close with clearly identifiable house sign and the inclusion of electric operated gate. The design of the gate (i.e. use of wooden panel

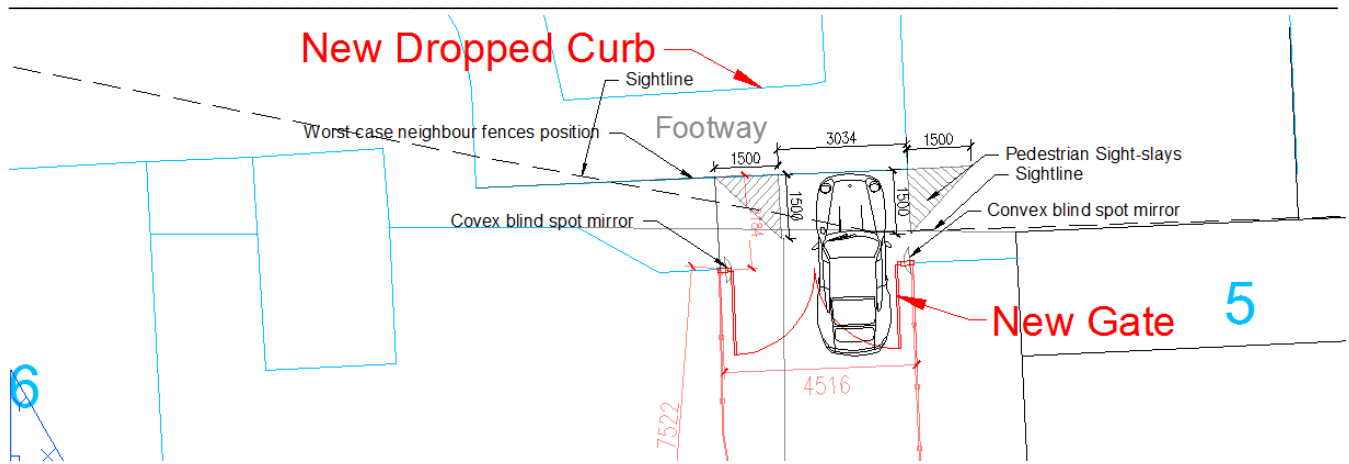
gate) will be carefully selected such that it will blend in well with the surroundings and create minimal disruption of the rhythm of frontages and the spaces in between. It should be noted that the proposed access between No. 5 and No. 6 Autumn Close have been existed at least since 2002 or early instead of being a newly creation by the proposed development. The proposed access will substantially improve the overall appearance of currently site.

A front and parking area of 9m by 8m is provided between the dwelling and the detached double garage. The garage has an internal dimension of 7.7m width by 5.2m long. This differs from the Reading Borough Council Revised Parking Standard and Designs SPD recommended 5.5m width x 7m long; However space for storage to accommodate bicycle would be provided at the side instead of at the rear as suggested by the SPD as the reason for the extra length required, thus the garage layout would be considered acceptable. In addition, this layout also provides opportunities for accessible parking if required. One additional permanent parking space is available at the front driveway at the side of the single storey wing. Provision of 3 permanent car parking spaces are provided within the scheme.

Given the development is serviced off a minor road and serve a single dwelling with sufficient off street parking spaces, it is considered that the intensification is not significant to cause a harm to highway users or increase the on street parking needs in the area. Furthermore, the site facilitates sufficient room for turning at the parking courtyard within the site area to ensure the entrance and exist of motor vehicles in a forward gear. Service and emergency vehicles can easily position themselves within 20m of the dwelling entrance.

There is some concern by the local residence regarding potential guess parking may block the turning head in front of the proposed access and pedestrian safety. These concerns have been incorporated in the design process and addressed and mitigated by the following strategies:

- By utilisation of a turning table at the front parking court, at least 3 additional temporary parking spaces can be accommodated on site. Together with the 3 permanent parking spaces, the total 6 parking spaces are considered to be sufficient to avoid potential on street guess parking at autumn close.
- Two convex blind spot mirror will be installed on both sides of the front gate. This will give both the driver and pedestrians a wider and clear viewing of the surrounding traffic.
- The owner of No. 6 Autumn Close may change its front fencing position which is out of the control of the owner of the proposed property, the pedestrian sight slays has been assessed based on the worst case scenario where they are erected adjacent to the footway. As demonstrated in Figure 4-1, even with the worst case scenario considering the standard allowable of 1.5m (adopted by most local authorities) pedestrian visibility, a minimum driveway width of 3m can still be maintained. This is sufficient to provide a comfortable driveway width for majority of delivery and emergency vehicles while safe guarding the pedestrian safety.
- As shown in Figure 4-1, vehicles exiting the site will have a clear line of sight of the coming vehicles from both directions.
- Some local residents are particularly concerned about potential parking at the turning head; however parking shall be prohibited at the turning head as per Highway Code regardless the existence of the proposed property. A “No Parking” sign will be displayed on the front gate together with CCTV monitoring to provide further assurance that no car shall block the driveway of both No. 5 and the proposed property.



To minimize overlooking to No. 5 and No. 5 overlooking into the proposed site, no principle windows serving the habitable rooms has been proposed in the northwest elevation of the proposed dwelling. A high window of 1.8m above the ground level is proposed at the ground floor kitchen to bring light to the back of the kitchen but avoid possible overlooking between the two dwellings. Windows serving the staircase will be obscured.

To void overshadowing and overbearing, the 2 storey wing is positioned 10m away from the southeast elevation of No. 5, while the single storey wing is positioned 3m from No. 5 boundary. Ridge heights of both structure elements satisfy the 25 degree as recommended by Building Research Establishment Report “Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice”.

The rear elevation of the single storey wing is positioned such that it is within 45 degree angle from the rear of No. 5 Autumn Close and as a result No. 5 will not block the daylight to the proposed development. The large distance between the two storey wing of the proposed development and No. 5 Autumn Close ensures that no block of sunlight and daylight and no overbearing effects to this neighbour

No.6 Autumn Close

No. 6 Autumn Close boundary abuts the proposed site at the southwest boundary, adjacent to the proposed drive way and detached garage. Distance between the main dwelling and boundary is approximately 14m. Only the single storey wing and the garage is within the sightlines of No. 6 Autumn Close. Therefore, the proposed development would not have significant effect on this neighbour.

No. 3 and 3a Kiln Cottages

To avoid potential overlooking between the proposed dwelling and No. 3 and 3a Kiln Cottages, the southeast elevation of the proposed dwelling has been carefully positioned to be more than 20m away from the rear elevation of No. 3 and 3a Kiln Cottages following the recommendation in Reading Borough local policies DM11.

No. 2 Kiln Cottages

The southwest elevation (gable end) of the proposed the dwelling is facing the end of rear garden of No. 2 Kiln Cottages. One window at this gable end are proposed to serve the family bath room only. To avoid overlooking to No. 2 Kiln Cottages garden, this window will be obscured.

No.2 Felix Cottage and new house

The north east two first floor windows at the gable end overlooks the end of the very long rear garden of No. 2 Felix cottages (or the new house once constructed). Due to the long distance (in excess of 30m) between the proposed dwelling the No. 2 Felix cottage and the nature of the long garden, it is considered that proposed dwelling does not have significant effect on the living condition, privacy and sunlight on No. 2 Felix cottage and the new house under construction. The bathroom window will be obscured. The bedroom window could be obscured if required.

4.12 Sustainability

This proposal by way of its location on previous garden land, supported by good local infrastructure, responds well to these principles. In addition to its location, there are many principles that have been applied to the scheme in order to achieve a sensitive and sustainable design. Key issues such as orientation and natural daylight were integral to the design of scheme from the outset. A number of design principles covering performance in key areas have been addressed as follows:

1. Energy conservation and CO2 emissions
 - a. The orientation of the building is such that it maximises passive solar gain and minimises heat loss; large opening to the southeast elevation and small opening to the northwest.

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- b. A narrow floor plan ensuring maximum penetration of daylight into the building and providing a highly insulated wrapping element, to minimise heat loss and make use of solar gain from the south.
 - c. An airtight building envelope is proposed, exceeding the targets set down by the current building regulations.
 - d. Dedicated low energy fitting encouraged throughout the building.
 - e. Natural daylight to all living spaces is provided.
 - f. The building will seek to exceed the minimum energy efficiency standards specified in part L of the Building Regulations.
 - g. Integrated cycle storage provided.
 - h. Efficient heating systems proposed.
 - i. A+ rated appliances will be installed.
 2. Water
 - a. Aerated taps to be provided.
 - b. Dual flush WC cisterns to be provided.
 - c. Water butts will be provided to collect rain water from the roof and used for watering the garden.
 3. Materials
 - a. Low environmental impact materials are proposed eg. Timber cladding.
 - b. The scheme will endeavour to use locally sourced materials where possible.
 4. Surface water run off
 - a. Permeable surfaces to driveway and garden are proposed to permit percolation through to the subsoil to reduce water discharge.
 - b. The scheme incorporates new planting and other soft landscaping which will reduce surface water into main drain network.
 - c. Excessive rain water will be dispersed through soakways.
 5. Waste
 - a. Provision of recycling bins and dedicated bin store.
 - b. Standard sized products will be used where possible, minimizing cutting and possible wastage.
 6. Pollution
 - a. Insulating materials to have low embodied energy and NOx emission.
 7. Health and wellbeing
 - a. Natural daylight and sky views to all habitable rooms.
 - b. Acoustic performance in excess of Building Regulations Part E
 8. Adaptability
 - a. The open plan ground floor layout and the separate single storey wing promote superb flexible arrangements that allows for residents choice and customisation. The single storey wing could be used as bedroom or annex for elderly and disabled person, home office, addition living spaces and etc. The layout allows flexible configuration of the ground floor if needed.
 - b. The open plan layout and wider corridors provide adequate circulation space for wheelchairs.
 - c. Car parking space with direct and convenient access. Accessible parking is available within the extra wide double garage.
 9. Ecology
 - a. The scheme will incorporate planting and other soft landscaping to encourage biodiversity.

5.0 Conclusion

The proposal dwelling is considered to be of a design that is respectful of the character of the existing dwelling and the character of the surrounding area in terms of its layout, proportions and materials.

The previous issues raised by the planning officer and planning inspectorate in the outline planning application for a bungalow have been fully resolved through the design process, and the application now propose an innovate and more sustainable design which is contextually appropriate and accords fully with the principle of the requirements of local and national planning policies.

Should the Local Planning Authority require further clarification on any area of the scheme, or wish to discuss matters in further detail they are ask to contact the agent at the earliest possible opportunity.

6.0 Supporting Documents

- (1) Land Registry Title Plan BK19495
- (2) Affordable Housing Statement
- (3) CIL form