

'The Cottage' 73 Park Lane SG3 6PP - New Detached House Proposal



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1. Introduction

The following document has been put together by Alan Cox Architects on behalf of Gary and Hillary Withersfor the redevelopment of ‘The Cottage’ 73 Park Ln, Old Knebworth, Knebworth SG3 6PP (figure 1.1).

2. The site

The existing property on the site is a bungalow/garage which has a white render finish, a tiled roof and some brick and wood features on the front entrance way. This property is secondary to the neighbouring 3 story house which is made up of black painted timber, white render and red brick. The two properties currently share an access road to Park Lane. 73 Park Lane has an alternative entrance to the west. The neighbouring buildings along Park Lane such as 75 Park Lane, Mews Cottage and 77 Park Lodge are mostly 2 to 3 story detached dwellings.

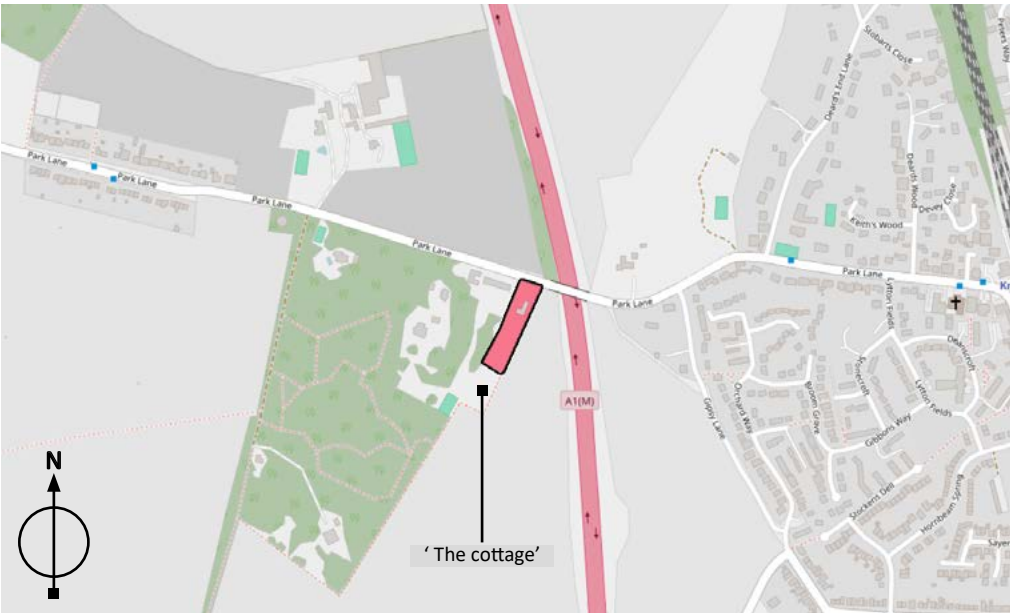
73 Park Lane is located adjacent to the A1M motorway, which is a significant source of noise and light pollution. Across the motorway to the east is the village of Knebworth, a civil parish in the north of Hertfordshire. Both Old Knebworth and Knebworth village are located just south of the town of Stevenage in Hertfordshire.

To the west and south west of the site is Park Wood, a small network of woods with paths and walking trails throughout. Surrounding the woods are commercially farmed crop fields the proliferate further to the south and south west.

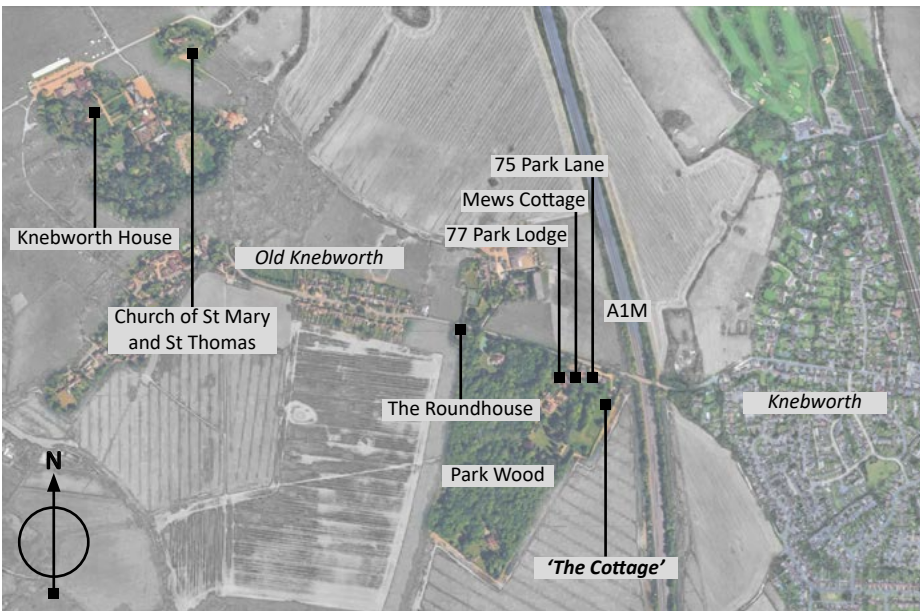
Nearby, to the north west, is the lavish Tudor stately home of Knebworth House. This local tourist attraction is surrounded by a few small commercial buildings and the village Church of St Mary and St Thomas.



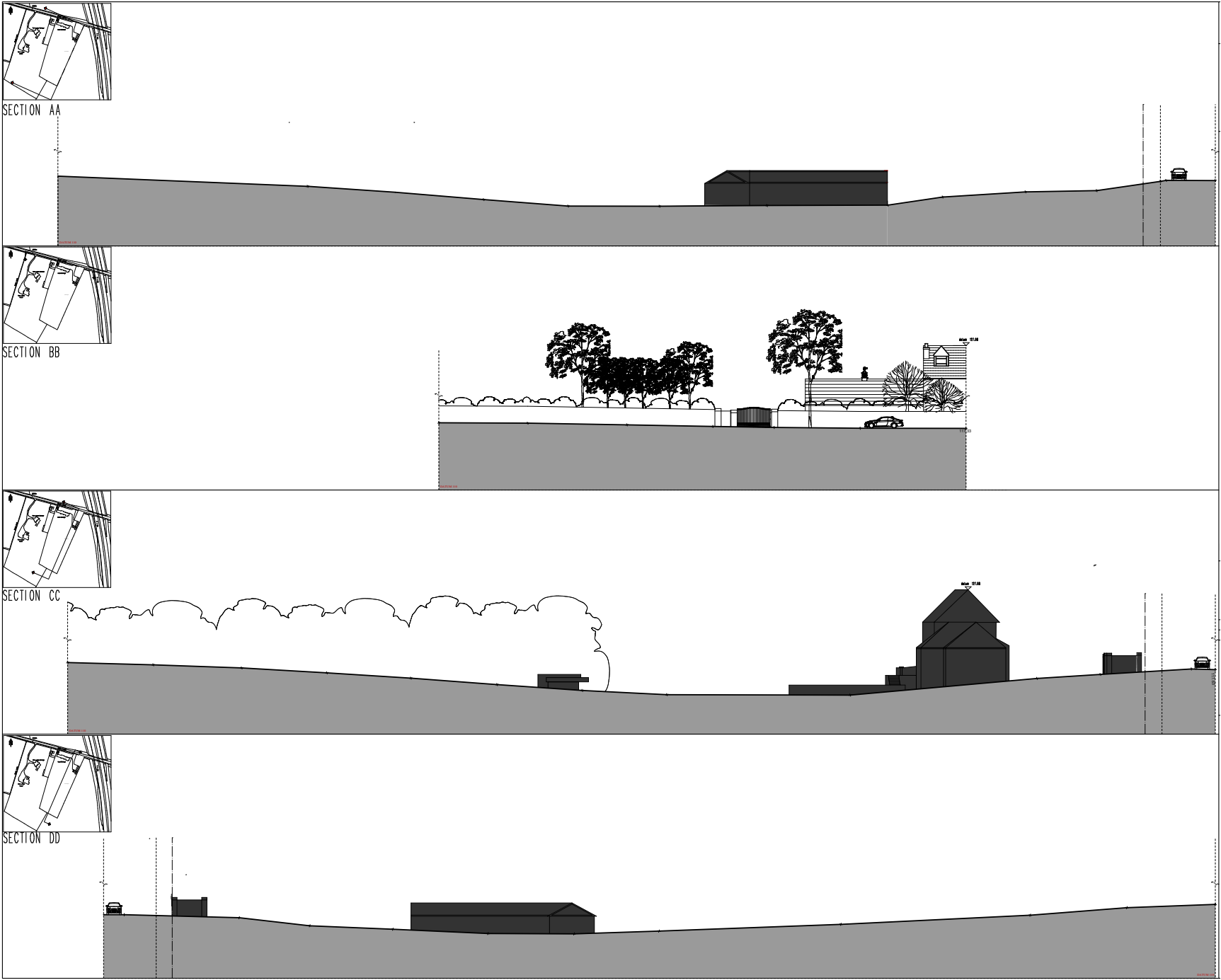
Existing bungalow to be redeveloped figure 2.2



SITE BOUNDARY (not to scale) figure 1.1



Aerial View (Source: GOOGLE EARTH) figure 2.1



Existing site Sections figure 2.3

3. Neighbourhood and Surrounding Area

Views from Park Lane into 73 Park Lane are mostly obscured by a high fence line and a row of large trees and bushes. As shown in figure 2.3 and 3.1, the adjacent main road is elevated higher than the existing building at 73 Park Lane and is only viable through the entrance gate to the site.

After entering the site, the neighbouring main house building on the right hand side is the most dominant presence on the site. As previously mentioned, it is made up of black painted timber, red brick, white render and a dark roof tile. The property's high roof and clock town feature make it a stand-out feature of the site.

The proposed redevelopment of the adjacent bungalow will maintain the proportions between the two buildings while strengthening the aesthetic of the bungalow to suit the colours and materiality of the primary building.



View from Park Lane into 73 Park Lane entrance



View from Park Lane towards 73 Park Lane



View into site from North Via access Road from A507



View of southern site boundary

Views of site figure 3.1

Neighbourhood and Surrounding Area

The nearby neighbouring buildings, as shown in figure 3.2, are a varied mix of building styles, materials, shapes.

As shown in figure 2.1, The Roundhouse is located further down Park Lane, on the other side of Park Wood. The home has a unique cylindrical shape and is primary constructed from red brick and cream coloured stone. There is also a substantial amount of black framed glazing and roof solar panels.

Figure 3.2 also shows approved elevation drawings of 75 Park Lane. This house has a more typical shape and size for a two story family home but also uses a wide variety of materials. 75 Park Lane has substantially more glazing than most of the properties of Park Lane. The heavily glazed elevations face away from the main road and are not overlooking any properties.

It is evident that, after analysing the existing properties on 73 Park Lane and the surrounding neighbours, there is no dominant vernacular for future development to adhere to.



View of The Roundhouse, Park Lane



View of The Roundhouse, Park Lane



Approved drawing of 75 Park Lane, South Elevation



Approved drawing of 75 Park Lane, East Elevation

4. Site Analysis

The chart of existing materials (fig 4.1) highlights the prominent local features of the neighbourhood. The proposed redevelopment will use a variety of external cladding, materials and glazing which will respectfully integrate into the street.

Analysing the yearly sun path of the local area (fig 4.2) shows that living areas will benefit the most from solar gain by facing any glazing towards the south of the site. Considering the nearby traffic (fig 4.3) from the motorway and local A roads, the proposal must avoid facing any fenestration or living spaces toward the east and north to reduce traffic noise pollution and increase privacy. The new proposal will also have great connections to local public buses and trains. This proximity will reduce the need to rely on carbon polluters like cars for transport and provide access to greener modes of transport like cycling and trains.

The land use map (fig 4.4) indicates that 73 Park Lane is part of a small cluster of residential plot of land to the north side of Park Wood. Developing the site from a single story bungalow to a family home will seamlessly integrate into the other residential properties that surround Park wood.

Materiality

Figure No. 4.1



Red Brick



White Render



The Roundhouse



Tile Roof



Cream Stone



73 Park Lane, Main Building



Black Painted Wood Cladding



Black Aluminium Window Frames



73 Park Lane, Bungalow/Garage



Wood Porch



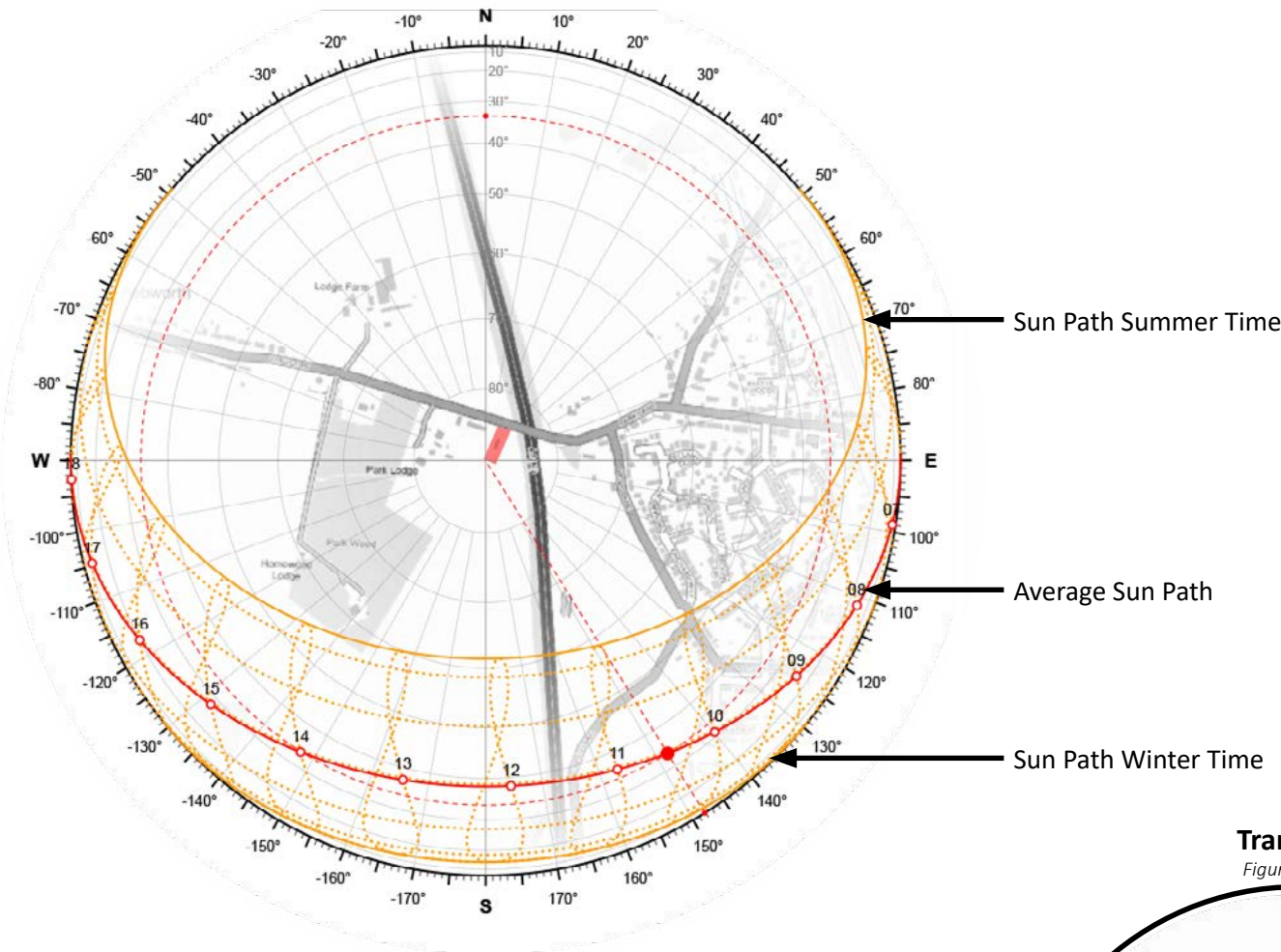
Solar Panels



Mews Cottage

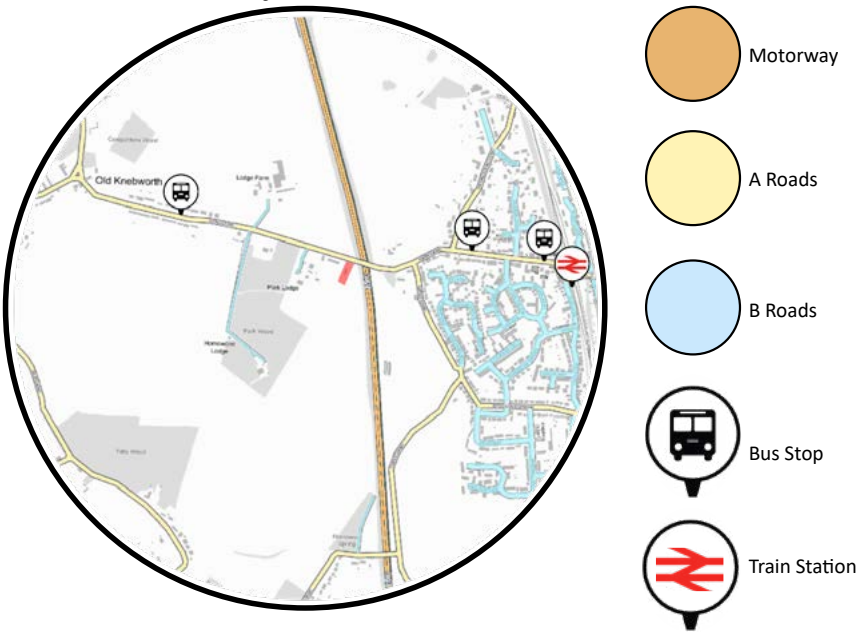
Local Yearly Sun Paths

Figure No. 4.2



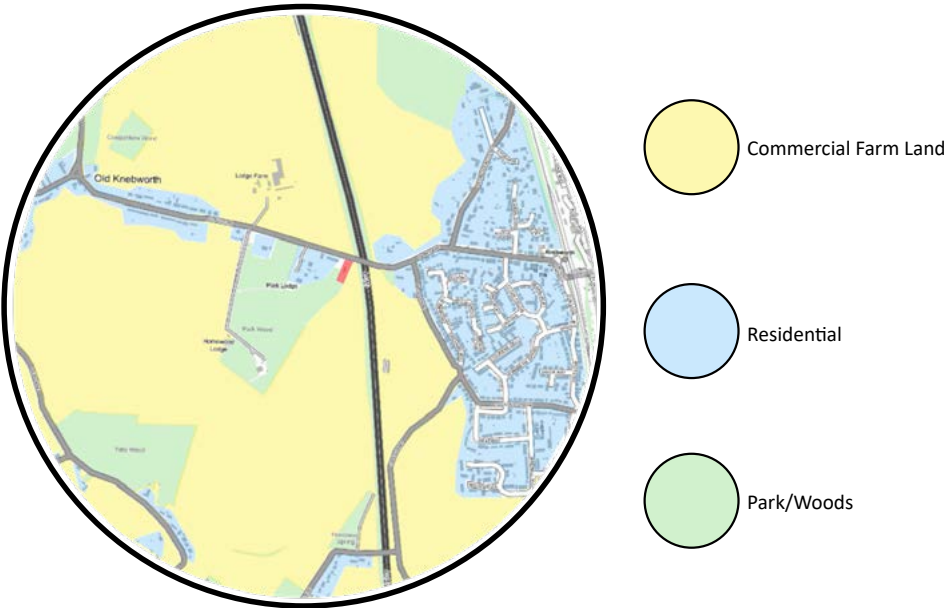
Transport

Figure No. 4.3



Land use

Figure No. 4.4



5. Design Precedence

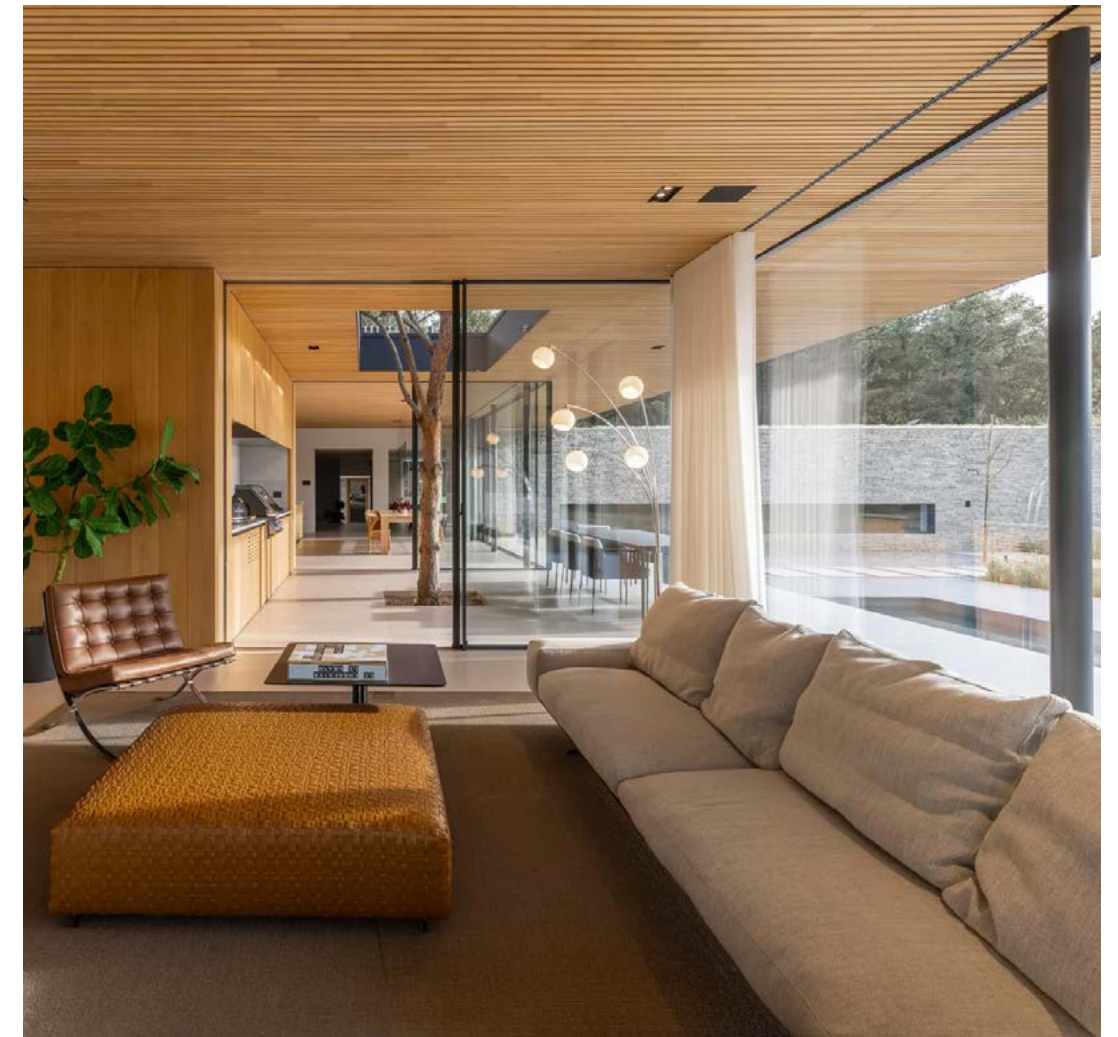
Meadow House by Strom Architects is an appropriate precedence to follow for the redevelopment of 'The Cottage' 73 Park Lane because of its similarity of rural setting as well as the sympathetic use of materials also used elsewhere along Park Lane.

The Meadow House project was developed as a replacement dwelling for a property on the outskirts of an Essex village. The layout of the site has been designed to place emphasis on the surrounding landscape to help integrate the new building into the natural environment.

This scheme has influenced the design of the new house by responding to the geometry of the existing property and by employing a material palette that inspired both the architect and the applicant.

The material palette selected for both the precedent and the proposed house relates well to the materiality of the neighbouring dwelling at No. 73, utilising three complementary materials.

The large timber-clad soffit overhangs provide natural solar shading, while the use of courtyards with integrated landscaping promotes a strong relationship between internal and external living spaces. The linear forms and defined geometry create a sense of high-end contemporary living, which formed a key part of the applicant's brief.



6. The Proposal

6.1 Design - Constraints & Opportunities

The site is located within the designated Green Belt. Working closely with DLA Town Planning, the design team developed a scheme that results in less impact on the Green Belt than the existing dwelling, including the extant permissions previously granted for extensions to the house. A key objective was to reduce both the perceived bulk and visual impact of the development while remaining compliant with Green Belt policy.

The existing layout of the house contained several desirable features, which were carefully assessed and retained where possible, and these elements played an important role in informing the overall design approach and spatial arrangement of the proposal.

The key driving constraints of the proposal were identified as follows:

- 1)

Planning

Constraints
- The proposal was required to comply with strict Green Belt policies, including limitations on allowable volume, Gross Internal Floor Area (GIFA), and Gross External Area (GEA). These restrictions strongly influenced the scale, massing, and layout of the new dwelling.
- 2)

Client

Brief
- The client brief called for an open-plan living space, a rear first-floor balcony accessed from the lounge, a spare bedroom at first-floor level, a generous master suite, and additional living accommodation suitable for an elderly family member. The inclusion of sustainable design features was also a key requirement.
- 3)

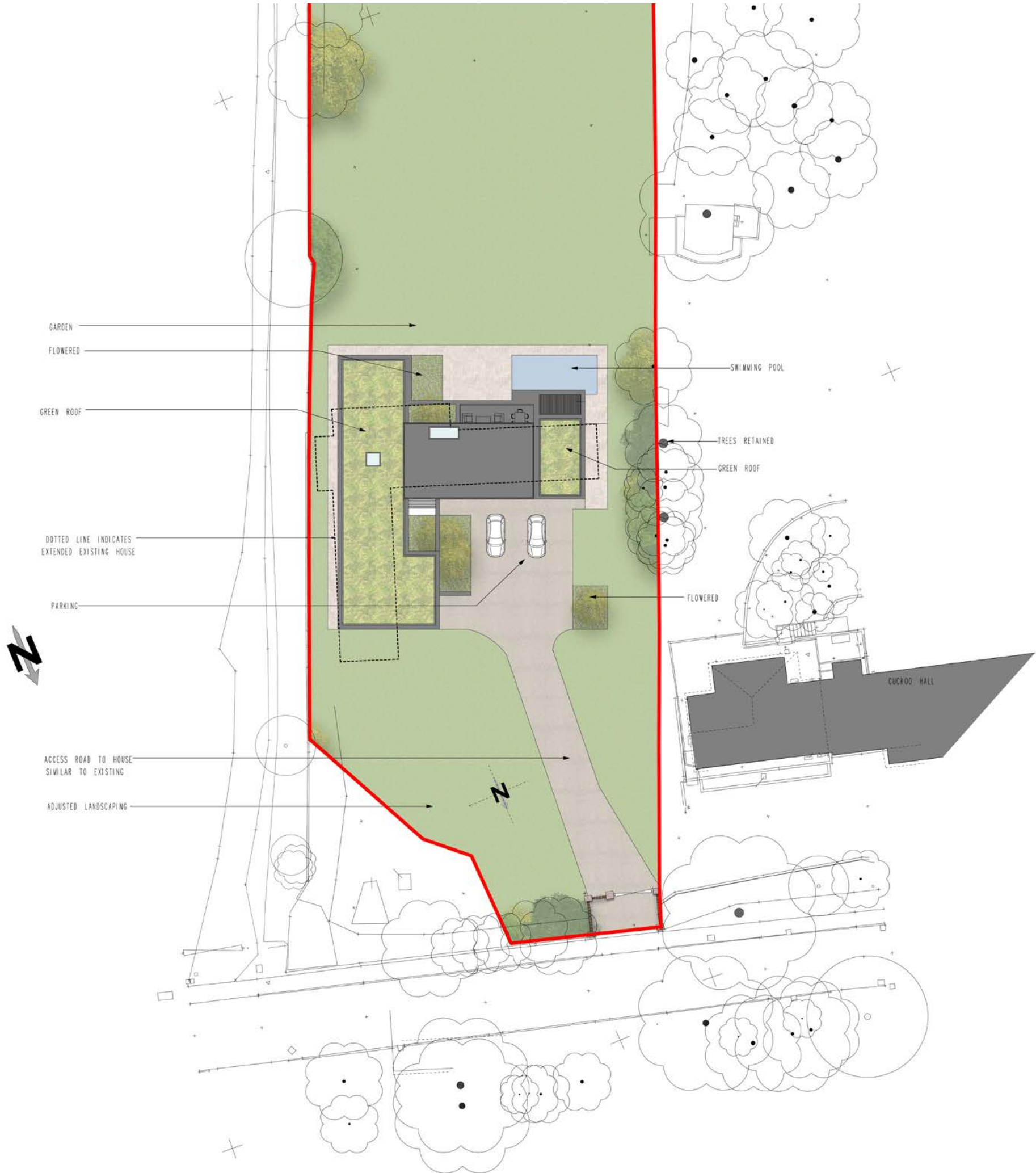
Noise

Noise
- Given the site's proximity to the A1(M), careful consideration was given to mitigating noise impacts through building orientation, layout, and appropriate construction methods.
- 4)

Orientation

Orientation
- As the rear of the house faces south-west, the primary living spaces were deliberately positioned to maximise access to daylight and benefit from the afternoon and evening sun.

In response to these constraints, a collaborative design process was developed with the applicant and planning consultant over a period of approximately three months, resulting in a carefully considered and policy-compliant proposal.



The Proposal

6.2 Design - The Design Process and Proposed Scheme

The design process involved a series of collaborative meetings with the applicants and the planning consultant, allowing the scheme to evolve through ongoing discussion and review. This ensured that both planning policy requirements and the client's aspirations were fully understood from the outset.

The first stage was to undertake a detailed review of the existing dwelling and the extant planning permissions, alongside a comprehensive site and area analysis. This work established the allowable Gross Internal Floor Area (GIFA) for the property and set clear parameters for development. From this analysis, a range of massing options were explored to test how the proposed house could be best orientated to respond to the site constraints, neighbouring context, and environmental factors. These three-dimensional massing studies were presented to the client through plans, physical and digital 3D models, and visualisations. (figure 6.3).

Once the preferred massing, scale, and overall bulk were agreed, the focus shifted to the internal plan layout. The principal living spaces were positioned to the south to maximise daylight and solar gain, while the accommodation for the elderly family member was sensitively located toward the front of the property for ease of access and privacy. A large rear balcony was incorporated off the bar and lounge at first-floor level, creating a distinctive and flexible entertaining space.

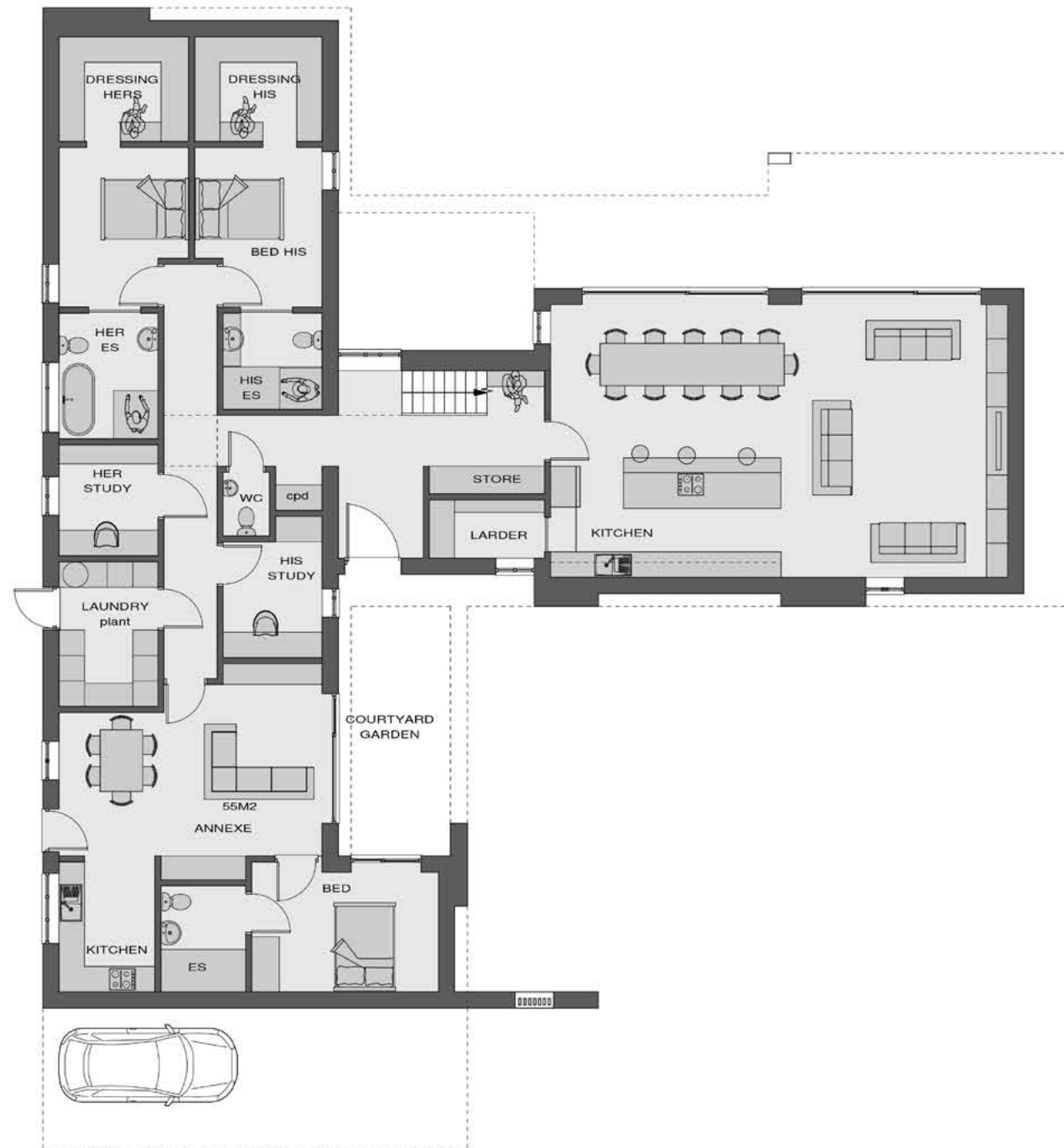
Following agreement of the plan arrangement, the scheme was fully modelled in 3D and the external design development was progressed, informed by relevant precedents provided by the applicant. Ongoing refinement of the architectural aesthetic explored the concept of indoor-outdoor living, with landscaped courtyards integrated into the design to create a sense of enclosure, quality, and visual interest. This approach resulted in a layered and carefully composed environment that enhances both the spatial experience and overall character of the dwelling.

The final design successfully meets the client brief in terms of architectural expression, spatial quality, and accommodation requirements, while responding appropriately to the site constraints and planning context.



Figure no. 6.3

6.3 The Proposal - Proposed Plans



GROUND FLOOR PLAN (GIFA 239M2)



FIRST FLOOR PLAN (49M2 GIFA)

6.4 Proposed Site sections

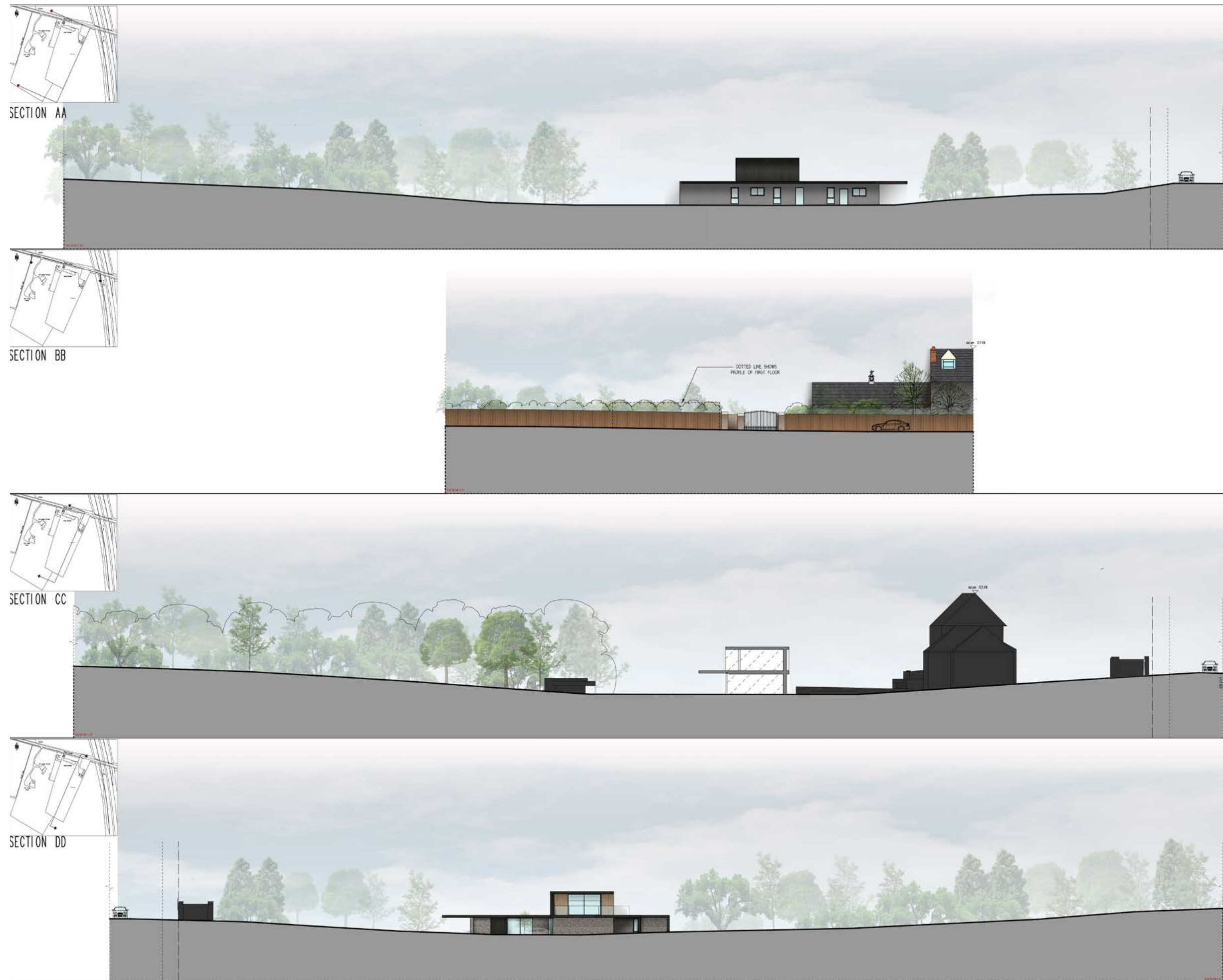


Figure no. 6.5

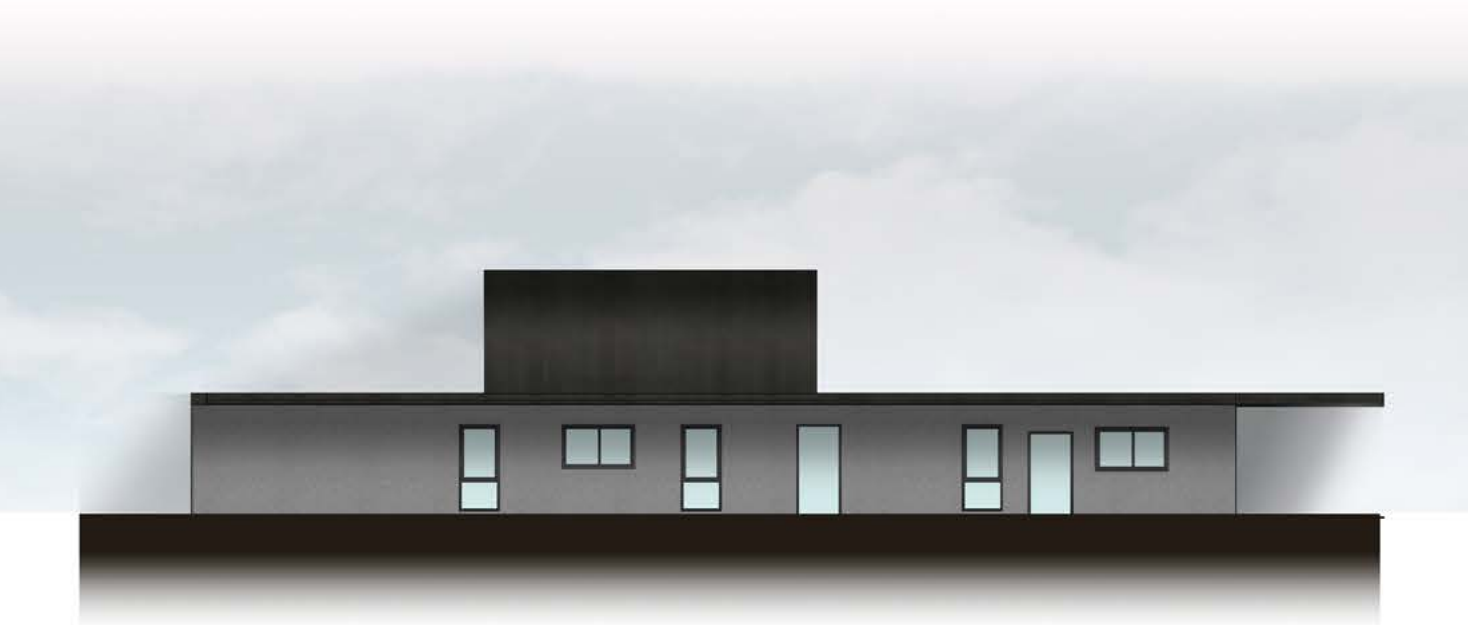
6.5 Proposed Elevations



FRONT ELEVATION (NORTH EAST)



SIDE ELEVATION (NORTH WEST)



SIDE ELEVATION (SOUTH EAST)



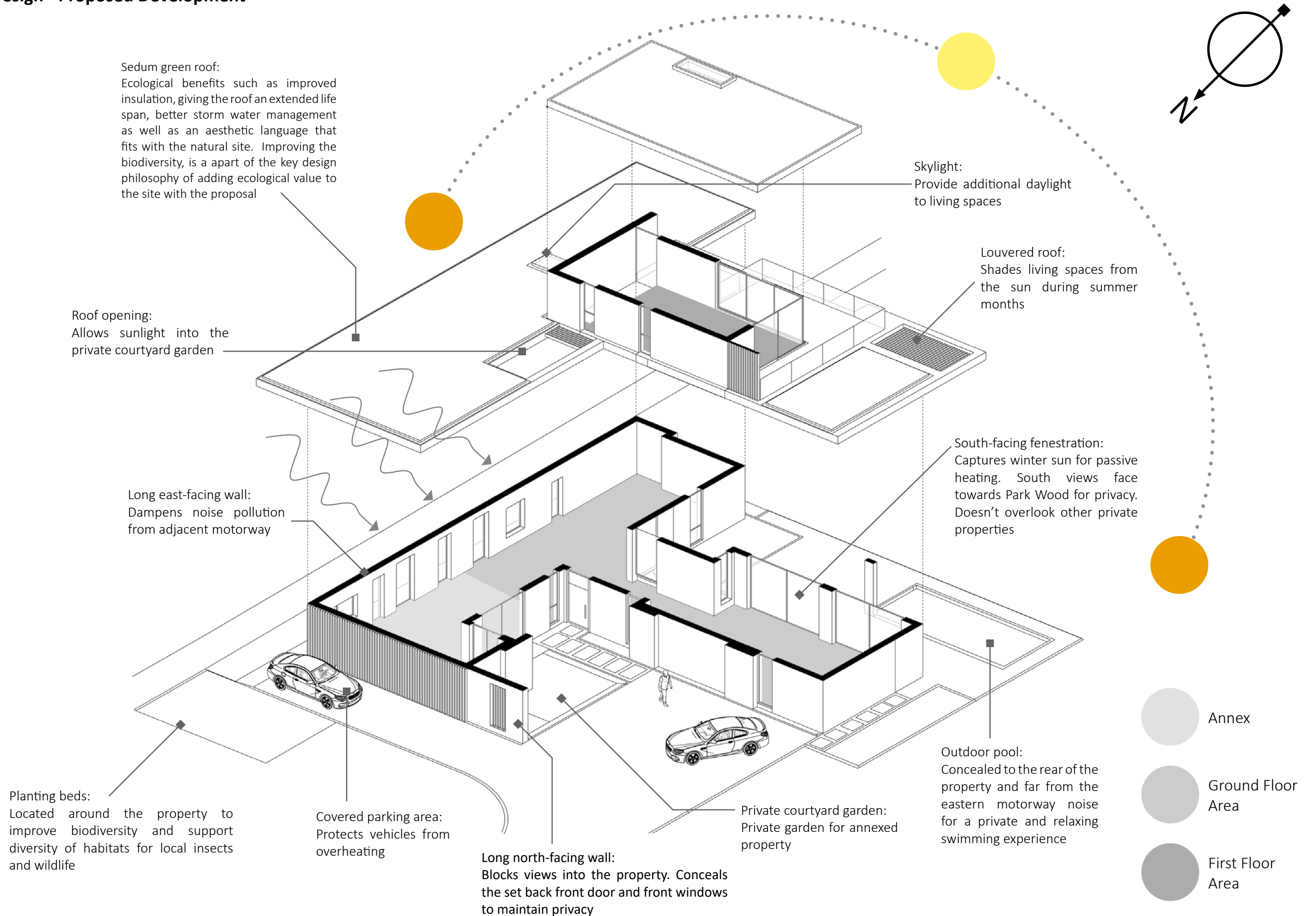
REAR ELEVATION (SOUTH WEST)

6.7 Final Renders



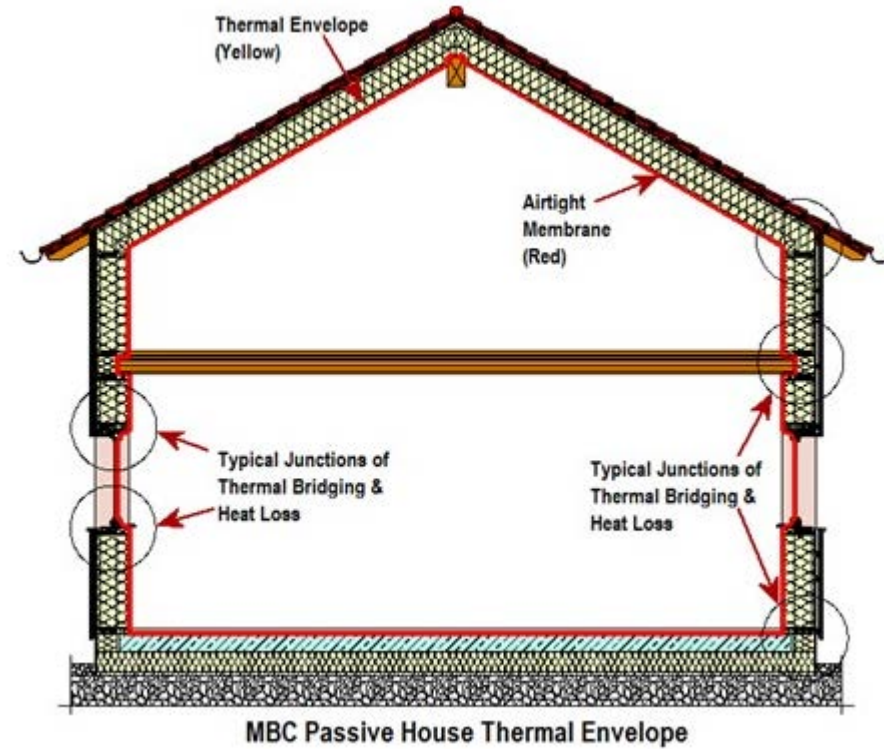
Figure no. 6.7

6.8 Design - Proposed Development

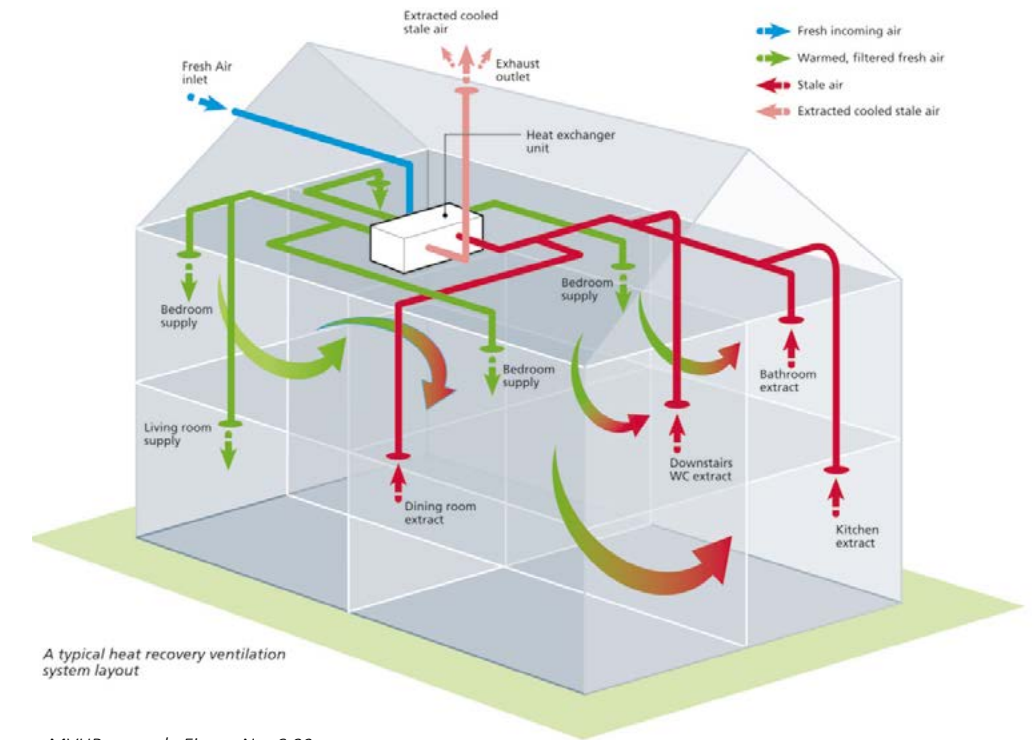


6.9 Design - Sustainability

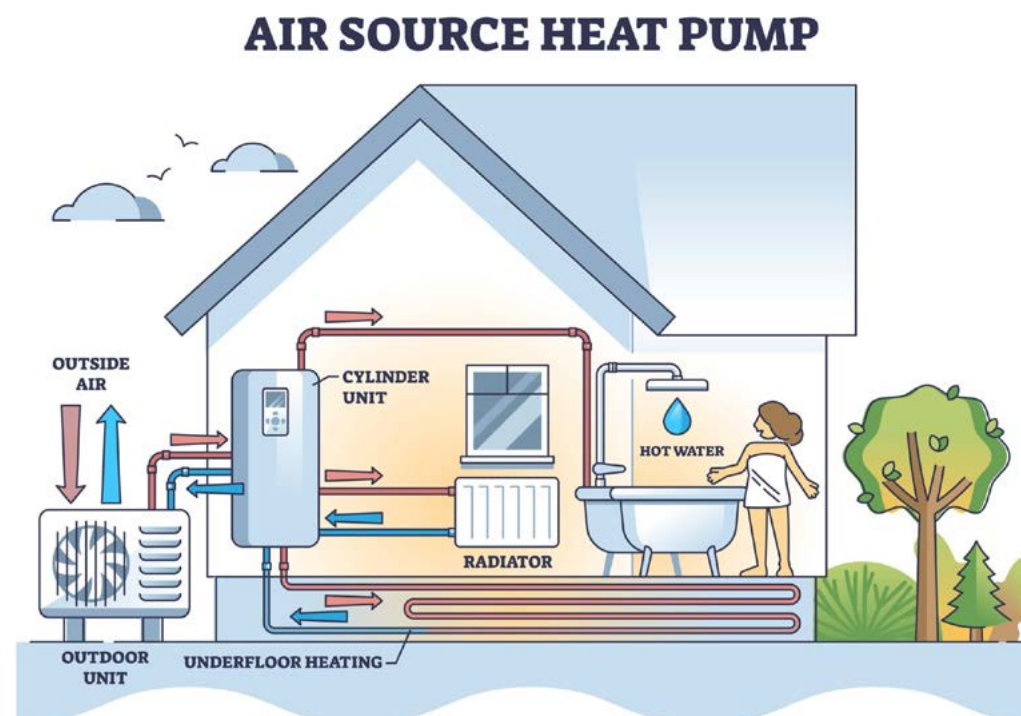
- The applicant is committed to delivering a very sustainable house, where the Dwelling Emission Rate (DER) will be 35% lower than the Target Emission Rate (TER) set by current Part L. (figure)
- The scheme will make use of the air source heat pump as the main heating of the house. (figure 6.93)
- The proposed house will utilise MVHR ventilation system and will be exceptionally airtight taking inspiration from passive house design. (figure 6.92)
- The scheme will take the fabric first approach to delivering a very insulated building inspired by passive house design.
- The scheme will be very air tight, taking inspiration from Passive design detailing to achieve this. (figure 6.91)
- The scheme takes advantage of solar gain with large glazing to the south of the proposal, allowing the benefits of the warmth throughout the year implementing passive house design intent.



Air Tightness example Figure No. 6.91



MVHR example Figure No. 6.92



Air Source heat pump example diagram Figure No. 6.93



Lower Residential emissions Figure No. 6.94

7. Conclusion

In conclusion, the Design and Access Statement prepared by award winning architects, Alan Cox Architects on behalf of the applicant provides a comprehensive overview of the design process and demonstrates how the proposed scheme has successfully met the applicant's brief while remaining fully compliant with relevant planning policy. The statement clearly outlines the careful consideration given to site constraints, Green Belt requirements, and the surrounding context throughout the development of the proposal.

The proposed dwelling represents a high-quality, well-considered architectural response that balances contemporary design with sensitivity to its setting. Developed in close collaboration with a highly regarded planning consultant, the scheme reflects a thoughtful and disciplined approach to scale, massing, and materiality, resulting in a refined and cohesive design. The project embodies the client's aspirations for a distinctive, high-end home while addressing environmental, functional, and planning considerations.

We are proud of the design that has been produced and trust that the planning authority will recognise the level of care, expertise, and collaborative effort invested in creating a sustainable and carefully crafted home that meets the applicant's long-term needs and vision.