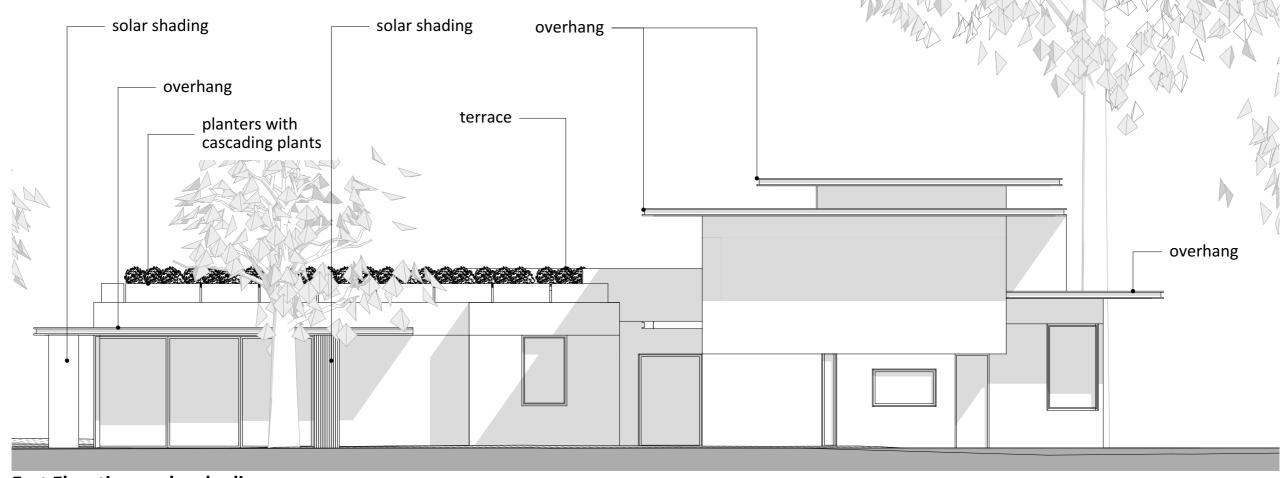
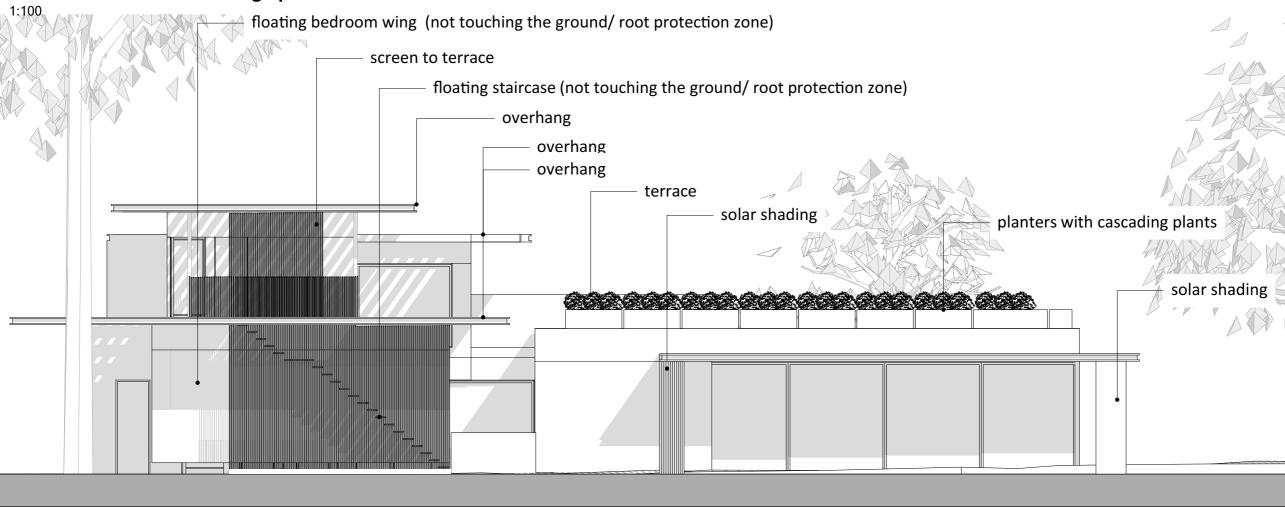
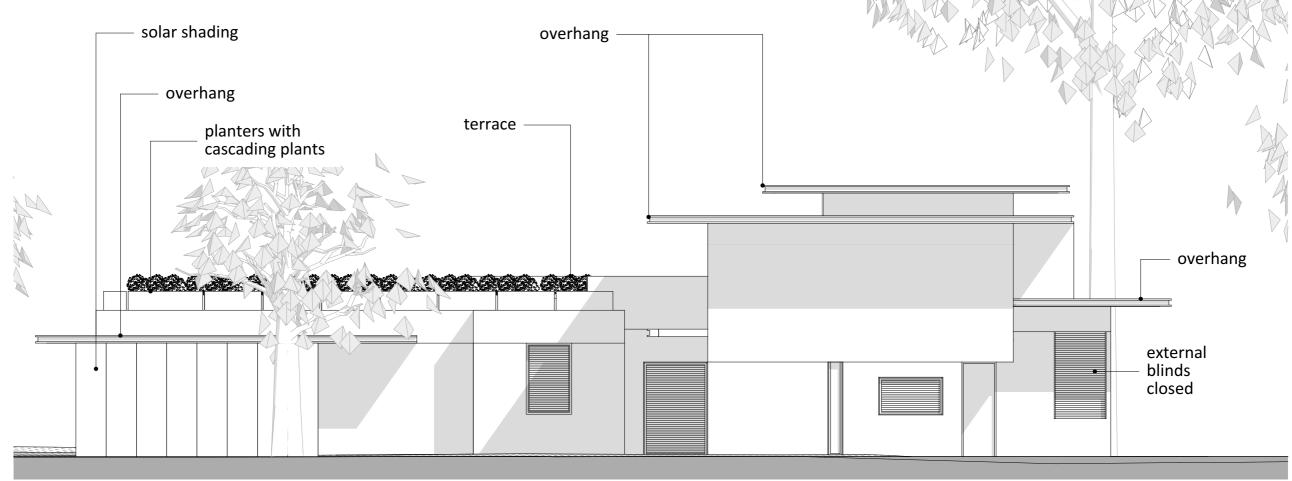


South Elevation - solar shading closed 1:100

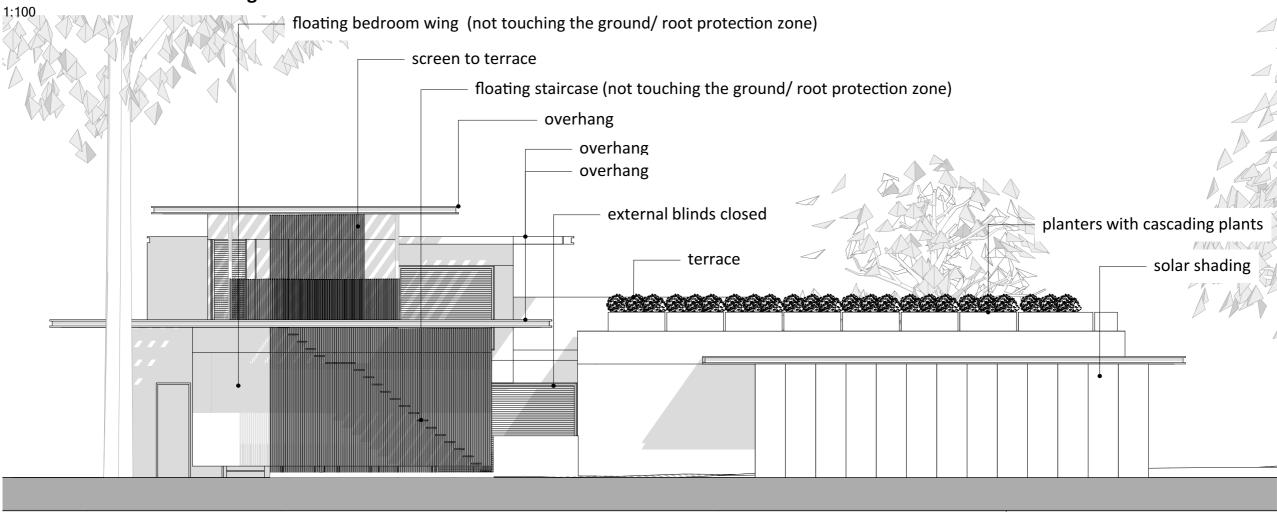


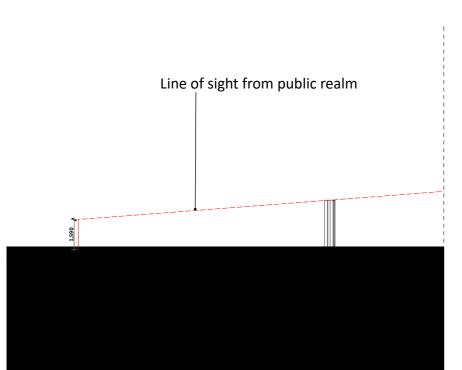
### East Elevation - solar shading open

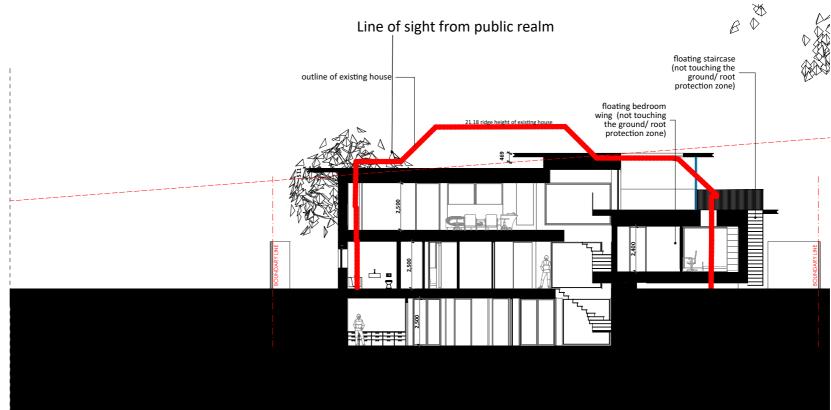




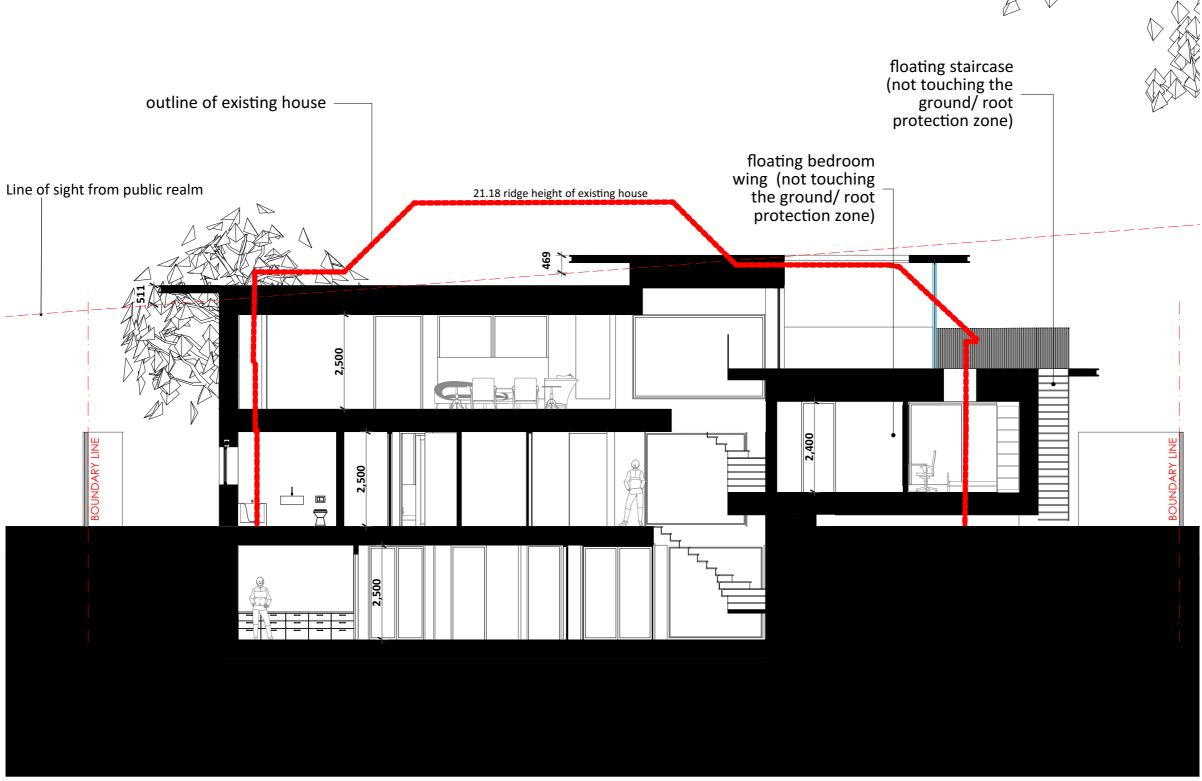
### **East Elevation - solar shading closed**





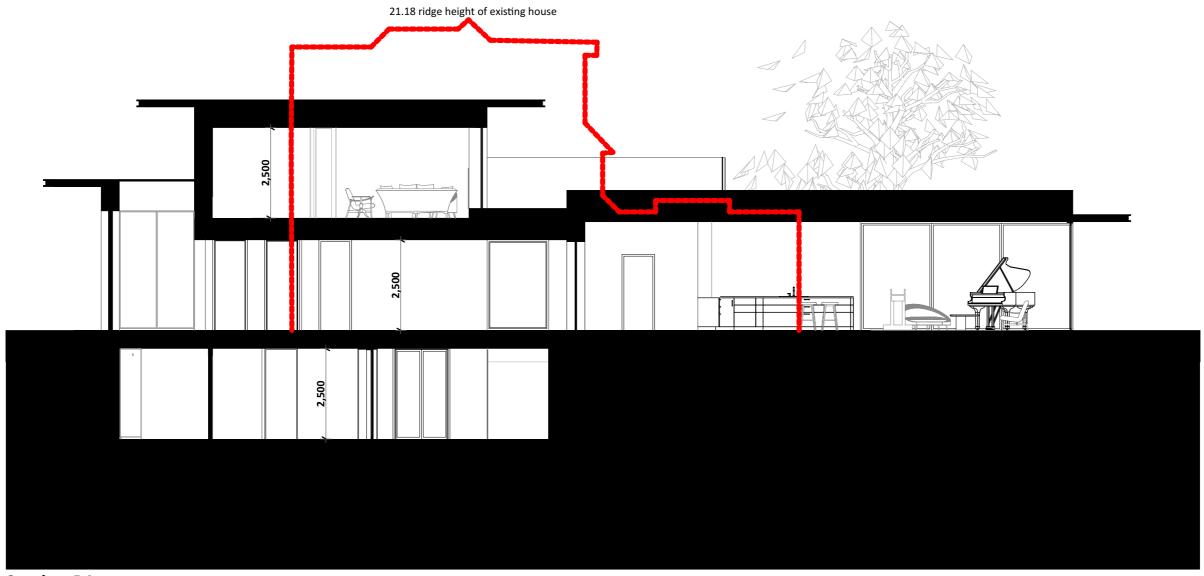


Section A1
1:200



Section A1

1:100



**Section B1** 1:100

### **Design Evolution**

The design evolution process entailed a meticulous synthesis of environmental considerations, historical context, and site-specific characteristics. The design team began with an in-depth site analysis, evaluating its physical, ecological, and contextual attributes to guide the design and ensure that the proposed house harmonized with its surroundings.

One of the most crucial aspects was the decision to keep the proposed house lower in profile than the existing house on the site. This choice was essential for maintaining visual harmony and appropriate scale within the surrounding context. A lower profile not only minimizes the building's visual impact but also prevents it from overshadowing the landscape or obstructing sightlines, particularly for neighbouring properties. This ter Bed with a intentional design decision honours the architectural character form a Connection of the area, facilitating a seamless integration with the local environment. Furthermore, a lower-profile structure enhances energy efficiency by reducing wind exposure and maximizing natural light, contributing to a more sustainable living space. This approach ultimately nurtures a balanced relationship with constitutions open the existing landscape and community, reinforcing values of conservation while offering modern living amenities.

As the project progressed, concepts evolved through iterative sketches and models, integrating innovative features such as passive solar design, rainwater harvesting, and green roofs aimed at minimizing energy consumption and promoting biodiversity. Collaboration with the Planning & Conservation Officer during the pre-application process proved pivotal to ensuring that the design honoured the unique character of the area. Ultimately, the project sought to cultivate a harmonious blend of contemporary sustainability practices and design language with the rich heritage of Hampton, resulting in a home that not only meets modern living standards but also positively contributes to the conservation area.



Early feasibility stage site plan & Section

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### **Footprint Analysis**

Site Area: 359m2

House/ Outbuildings Total Footprint: 128m2

**Built Area as Proportion of Site: 35%** 

Site Area: 357m2

House/ Outbuildings Total Footprint: 128m2

Built Area as Proportion of Site: 35%

Site Area: 2,062m2

House/ Outbuildings Total Footprint: 169m2

Built Area as Proportion of Site: 8%

Site Area: 1,173m2

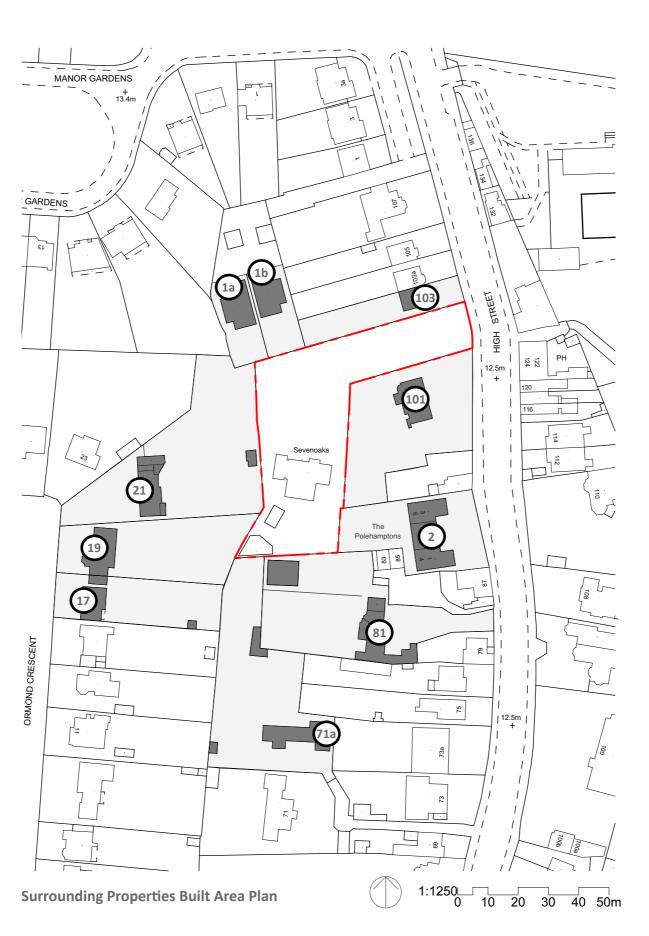
House/ Outbuildings Total Footprint 129m2

Built Area as Proportion of Site: 11%

Site Area: 833m2

House/ Outbuildings Total Footprint: 108m2

Built Area as Proportion of Site: 12%





Site Area: 500m2

House/ Outbuildings Total Footprint: 61m2 **Built Area as Proportion of Site: 12%** 



Site Area: 1,481m2

House/ Outbuildings Total Footprint: 125m2 **Built Area as Proportion of Site: 8%** 



Site Area: 981m2

House/ Outbuildings Total Footprint: 238m2 **Built Area as Proportion of Site: 24%** 



Site Area: 1,743m2

House/ Outbuildings Total Footprint: 277m2 **Built Area as Proportion of Site: 15%** 



Site Area: 1,762m2

House/ Outbuildings Total Footprint: 192m2 **Built Area as Proportion of Site: 11%** 

The purpose of this map is to show the built areas of surrounding properties, as % proportions of their respective sites. Due to the variation in results, we have taken an average of the built areas on the sites directly surrounding the Sevenoaks boundary. The average Built Area as Proportion of Site is 17%.

Therefore, we have ensured our proposed design sits below 17%, to ensure the proposed built area on site is proportionate to that of the surrounding sites and properties.

#### **Sevenoaks Existing**

Site Area: 2,655m2

Existing House/ Outbuildings Total Footprint: 274m2

Built Area as Proportion of Site: 10%

#### **Sevenoaks Proposed**

Site Area: 2,655m2

Proposed House Total Footprint: 306m2 **Built Area as Proportion of Site: 11%** 

(significantly less than the average 17% on surrounding

sites)

# **Existing and Proposed Footprint and Height Comparison**

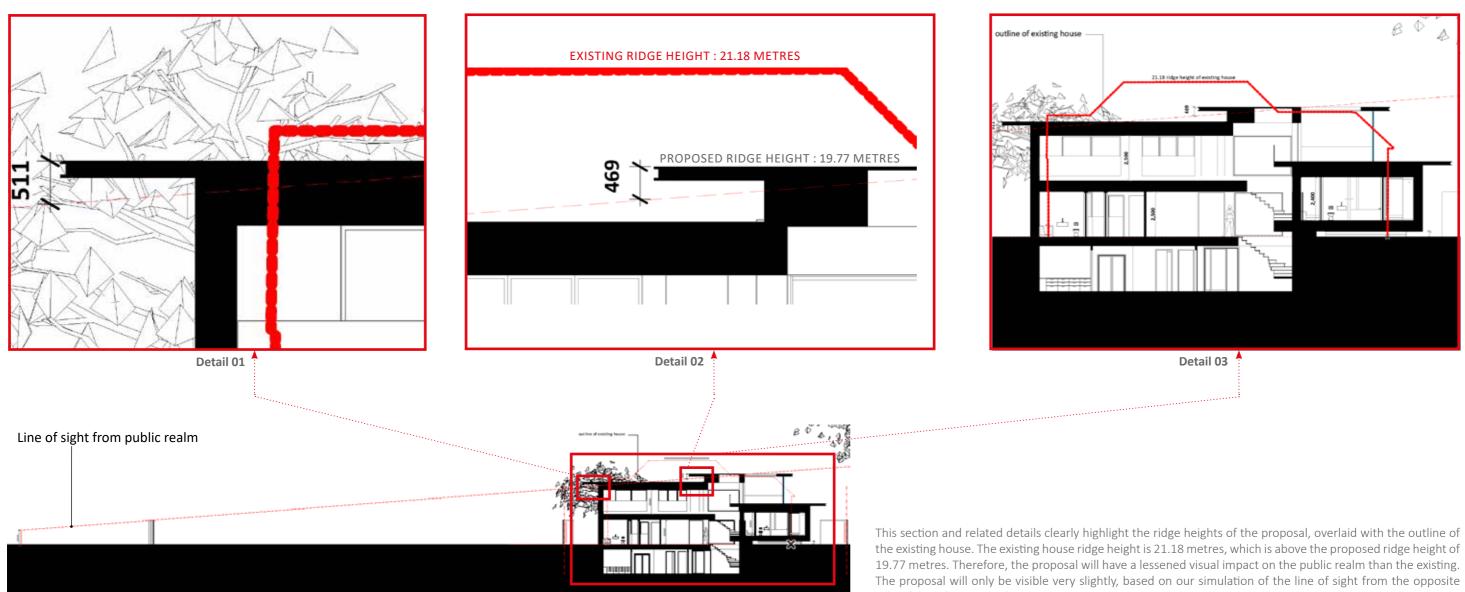
### Existing & Proposed House & Outbuildings

Site Area: 2,650m2

Existing Footprint and Height:	Footprint	Height
1 House	194m2	21.18m
2 Outbuilding 1	26m2	N/A
3 Outbuilding 2	54m2	N/A
	274m2	
Proposed Footprint and Height:	Footprint	Height
House	308m2	19.77m
	308m2	



## **Height Comparison Continued**



Section A1 showing line of sight from public realm of proposed house

side of the adjacent road.

## **View Analysis**

#### Existing



This view shows the line of sight towards the existing house, when stood on the opposite side of the High Street. The red tile roof profile of the existing house is largely visible from the public realm.

#### Proposed



This view shows the line of sight towards the proposed house, when stood on the opposite side of the High Street. The proposal was designed to sit 1.41 metres beneath the existing ridge height, therefore it is even less visible from the road than the existing. This is further helped by the flat roof profile, which minimises its impact on the public realm and makes it only very slightly visible over the top of the wall. No windows or design features other than the top of the roof are able to be seen from this line of sight from the public realm.

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### **Housing Design Standards**

The development comprises of demolition of existing house and 2 no. outbuildings and erection of new net zero family home, alongside associated works including driveway alterations and landscaping.

This brief report summarizes how the design responds to the Richmond Residential Development Standards, (RRDS), in addition to Nationally Described Housing Standards (NDHS).

#### Sunlight & Daylight

There will be no impact on neighbouring dwellings. The closest part of the proposed development will be 26m away from Elmgrove House. The distances to all other neighbouring properties are in excess of 30m.

#### Sense of Enclosure

For Elmgrove House, the sense of enclosure will be reduced as the proposed house will be significantly lower in profile than the existing house on the site.

The proposed building will extend southward towards the rear garden, but this will have no impact on the neighbours as this section of the building will be single storey. The existing outbuildings to the rear of the site will be demolished, increasing the sense of openness to the site.

#### Privacy & Space Between Buildings.

As discussed above, the change in the relationship between the proposed development and the neighbouring buildings will be neutral in regards to proximity. The change in relationship between the proposed development and the neighbouring buildings will be positive in regards to the reduced height of the proposed dwelling.

#### **Amenity Space**

The proposed amenity space will more than satisfy the required space standards.

Proposed garden area = 2338m2

**Basement Accommodation** 

Gym = 16m2

Utility = 7m2

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Studio = 18m2

Play Area = 11m2

Store = 4m2

Bathroom = 4m2

Plant Room = 7m2

**Ground Floor Accommodation** 

Kitchen / Dining / Living = 85m2

Pantry = 11m2

Snug = 12m2

Bedroom 1 = 15m2

Bedroom 2 = 18m2

Bedroom 3 = 12m2

Bedroom 4 = 16m2

Office = 8m2

Boot Room = 6m2

First Floor Accommodation

Master Bedroom = 18m2

Ensuite = =16m2

Dressing Room = 14m2

Relaxation Room = 22m2

Each room in the property benefits from ample natural light and opportunity for natural ventilation.

This property exceeds the minimum internal floor areas of the NDHS and significantly exceeds the space standards of the RRDS.

#### **Residential Space Standards**

Where the NDHS proposes higher standards than the LBRUT SPD, the higher standard has been followed.

In all rooms, except bedrooms 3 & 4, the ceiling height will meet or exceed 2.5m. Bedrooms 3 & 4 have a ceiling height of 2.4m in order to keep the building profile low in this area.

In the round, the ceiling heights throughout the proposed dwelling will meet or exceed 2.5m for more than 75% of the floor area.

#### **Internal Space and Layout**

The proposed dwelling has been designed to create a spacious layout which affords each habitable room ample natural light.

#### Accessibility

The dwelling has been designed to be easy to access and to adapt to suit future needs of the occupants. The design is fully compliant with Part M4(2) Category 2: Accessible and Adaptable Dwellings.

#### Parking, Landscaping & Recycling

Refuse storage for the dwelling has been provided at the front of the site, with bins in storage cupboards along the boundary wall of the property. On collection day, the refuse bins can be collected by the refuse collection operatives and returned to the store.

The dwelling will have recycling sorters under the sink in the kitchen to encourage separating refuse at source.

There will be cycle storage with vertical racking to enable ample bike storage within the boot room.

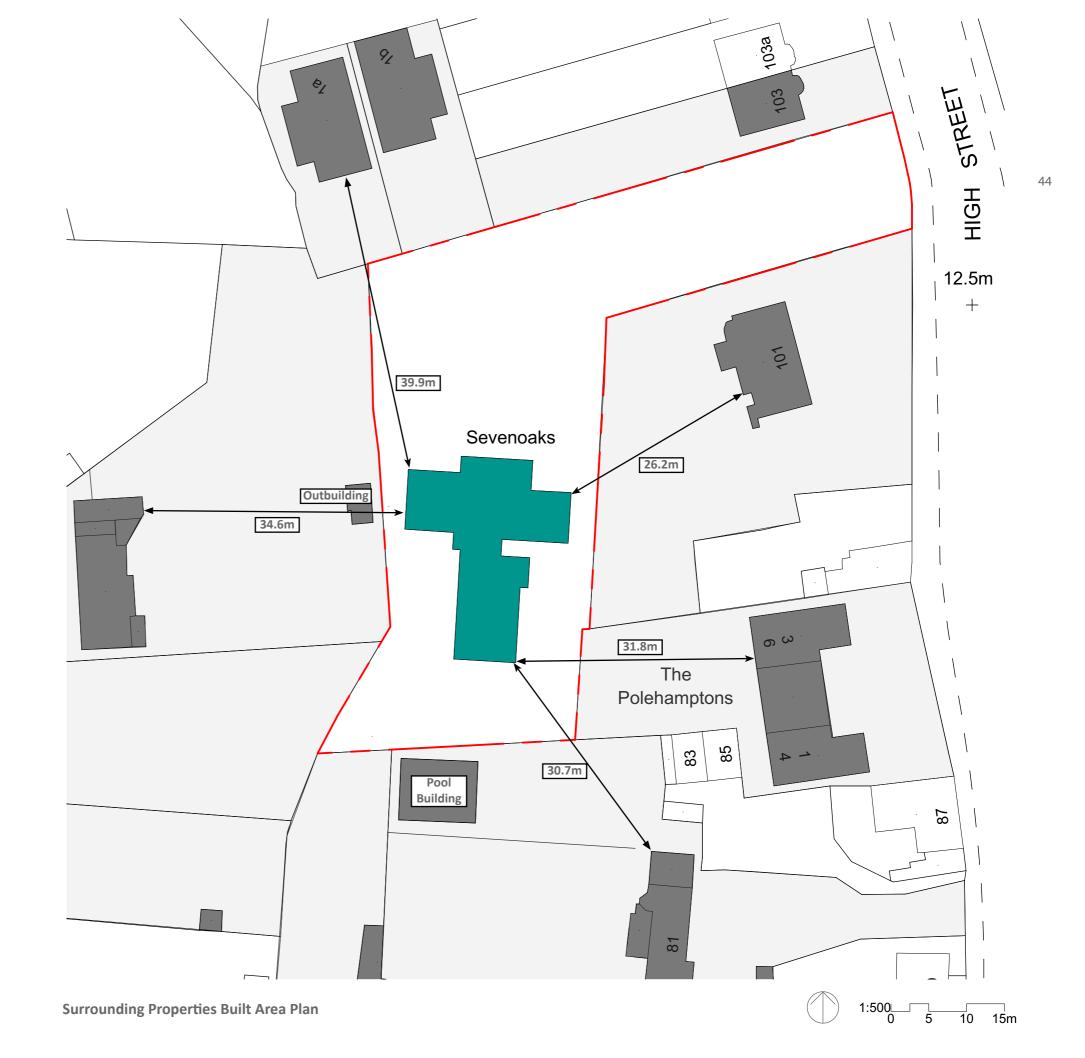
There are two dedicated vehicle parking bays in front of the proposed dwelling, with overspill parking also available.

#### **Sustainable Design**

Please refer to the Design & Access Statement and the Sustainability Report prepared by Hodkinson.

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## **Residential Amenity**



As seen from this study, the distances of the proposal to the main houses of neighboring properties is no closer than 13.5 metres. Therefore, the proposal will not affect the natural daylight to any of the adjacent properties, and residential amenity will be maintained.

### **Inclusive Design**

The development comprises of demolition of existing house and 2 no. outbuildings and erection of new net zero family home, alongside associated works including driveway alterations and landscaping.

This brief report summarizes how the design meets the requirements of Part M(4)2 Category 2: Accessible and Adaptable Dwellings.

#### **Performance**

The design of the new dwelling complies with the requirements outlined in optional requirement M4(2) by ensuring accessibility and adaptability for a wide range of occupants. The property includes a step-free approach and entrance, allowing seamless access from any associated parking spaces and communal areas within the curtilage. Inside, step-free access continues throughout the entrance storey, providing unhindered movement to the WC, main living spaces, and directly connected private outdoor areas. The design accommodates older individuals and wheelchair users, with features that support easy navigation and use of sanitary facilities. Additionally, the layout allows for common adaptations to be easily implemented in the future, enhancing accessibility and functionality as needed. Wall-mounted switches and controls will be positioned at accessible heights for individuals with reduced reach, ensuring a comfortable and inclusive living environment for all residents and visitors.

#### Section 2A: Approach to the dwelling

The design aligns with the requirements of Section 2A by ensuring that both external and internal areas are fully accessible and adaptable, in compliance with optional requirement M4(2). The approach route from the car parking area to the dwelling is step-free, providing seamless access at the entrance and throughout the curtilage of the property. This design consideration extends to all pathways and access points within the plot, ensuring that they are wide and smooth enough to accommodate disabled occupants or visitors. Communal facilities like refuse and recycling storage are conveniently accessible without obstructions, ensuring practicality and ease of use. Thoughtful design ensures that the house meets accessibility standards while offering a comfortable living experience for a wide range of occupants.

The design complies with the specified approach route requirements by ensuring all exterior and interior paths are safe, convenient, and adopt the shallowest gradient available, remaining step-free throughout. The main and alternative entrances feature doors with a minimum clear width of 850mm, facilitating easy access. External approach routes are firm and durable with appropriate ground surfaces, ensuring accessibility in varying weather conditions.

The approach route complies with all of the following:

- a. The route is level, gently sloping or where necessary, ramped
- b. The approach route has a minimum clear width of 900mm
- c. No localised obstructions occur close to or opposite a doorway
- d. All external parts of the approach route have a suitable ground surface
- e. The front gate exceeds the minimum clear width of 850mm and has a 300mm nib to the leading edge

#### Car parking & drop off

Within the private curtilage of the proposed dwelling, the following will occur:

- a. At least one space is a standard car parking bay that can be widened to 3.3m wide
- b. Access between the parking area and the front entrance is step free
- c. The parking space is level
- d. The parking space has a suitable ground surface

#### Section 2B: Private entrances and spaces within the dwelling

The principle private entrance complies with the following:

- a. There is a level external landing with a minimum width and depth of 1200mm
- b. The landing is covered for a minimum width of 900mm and a minim depth of 600mm
- c. Lighting is provided which uses fully diffused luminaires activated automatically by a dusk to dawn timer of by detection motion
- d. The door exceeds the minimum clear opening width of 850mm
- e. A minimum 300mm nib is provided to the leading edge and is maintained for a minimum of 1200mm beyond it
- f. The depth of the reveal on the leading side of the door is a maximum of 200mm
- g. The threshold is an accessible threshold

All other doors comply with points d-g above

#### Circulation areas and internal doorways

To facilitate movement into and between, room throughout the dwelling, doors and corridors comply with all of the following:

- a. The minimum clear width of every hall or landing is a minimum of 900mm. In nearly all cases, all corridors exceed this minimum requirement.
- b. No localised obstructions occur opposite or close to a doorway, or at a change of direction, and no corridors will be reduced to below 750mm width at any point.
- c. Every door has a minimum clear opening width of 800mm
- d. A minimum 300mm nib is provided to the leading edge of every door within the entrance storey

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#### Private stairs and changes of level within the dwelling

To allow people to ,move between storeys, and to allow a stairlift to be fitted to the stairs from the entrance storey, the stairs complies with the following:

- a. Access to all rooms and facilities within the entrance storey is step free
- b. Level changes within storeys have been avoided
- c. The stair to all storeys has a minimum clear width of 850mm
- d. The stair meets the provisions of Part K of the Building Regulations for private stairs

#### **Habitable Rooms**

The living, kitchen and eating areas comply with the following:

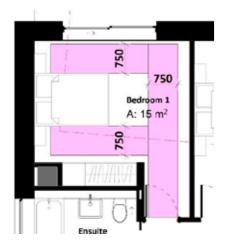
- a. The kitchen, living areas and dining areas are within the entrance storey
- b. 1200mm clear width is provided between all kitchen units and appliances
- c. No glazing to the principle windows in the principle living areas start above 850mm finish floor level#

#### **Bedrooms**

To enable a wide range of people to access and use the bedrooms, they comply with all of the following:

- a. Every bedroom provides a clear access route of minimum 750mm width from the doorway to the window
- b. All bedrooms provide a clear access zone of minimum 750mm to both sides and the foot of the bed

c.





Above: Bedrooms 1 & 2 on the entrance storey demonstrating clear access routes of 750mm from the door to the window and all sides of the bed

#### **Sanitary Facilities**

All walls, ducts and boxings to all WC/cloakrooms, bathrooms and shower rooms will be strong enough to support grab rails, seats and other adaptations that could impose a load of up to 1.5kN/m<sup>2</sup>.

#### WC facilities to the entrance storey

To provide step free access for a range of people who may require use of the facilities, they will comply with the following:

- a. A WC with a basin is provided on the entrance storey and meets the requirements of diagrams 1.3 and 1.4 of Part M of the Building Regulations and the door opens outwards
- b. The bathroom meets the provisions of diagram 2.5 of Part M of the Building Regulations

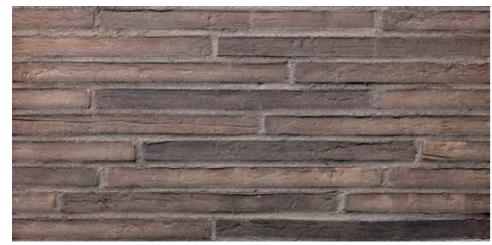
#### **Services and controls**

To assist people who have reduced reach, services and controls will comply with the following:

- a. Consumer units will be mounted so that the switches are between 1350mm and 1450mm above floor level
- Switches, sockets, stopcocks and controls have their centre lines between 450mm and 1200mm above floor level and a minimum of 300mm measured horizontally from an inside corner
- c. The handle to at least one window to the principle living area will be located between 450mm and 1200mm above floor level
- d. Handles to all other windows will be locate =d between 450mm and 1400mm above floor level
- e. Boiler timer controls and thermostats will be mounted between 900mm and 1200mm above floor level

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### **Proposed Materiality**







Proposed precedent imagery of style and materiality

#### **Materials**

The proposed materials have been informed by the appraisal conducted of the local context and although contemporary in nature, they match the materials found in the Conservation area.

The proposed materials are as follows:

- Long format brick by Petersen TEGL (K54).
- Rammed earth.
- Bronze cladding.

Petersen TEGL K54 brickwork is 100% hand-made, hand-moulded and blue-tempered, i.e. fired in low-oxygen conditions, with four equally usable sides and a rough, varied surface. The grey shade will pick up on the colour and variation of the existing listed curtilage wall. The new bricks will have a harmonious relationship with the curtilage wall.

Utilising these materials in a contemporary manner will provide a stylistic contrast, signaling that the proposed building is of the 21st Century, whilst at the same time whilst being sympathetic to the Conservation area.

Eco friendly materials such as rammed earth will provide thermal mass, which will greatly assist in reducing embodied carbon and energy demand.

The materials selected for the new areas of landscaping will also tie in with the existing materials found in the Conservation area.

### Landscaping

#### **Existing and Proposed Landscape**

The existing garden and house are not clearly connected. The existing planting a little incohesive without clear style or purpose. The site has many mature trees and some sections of formal hedge. Existing lawn area cover most of the garden footprint.

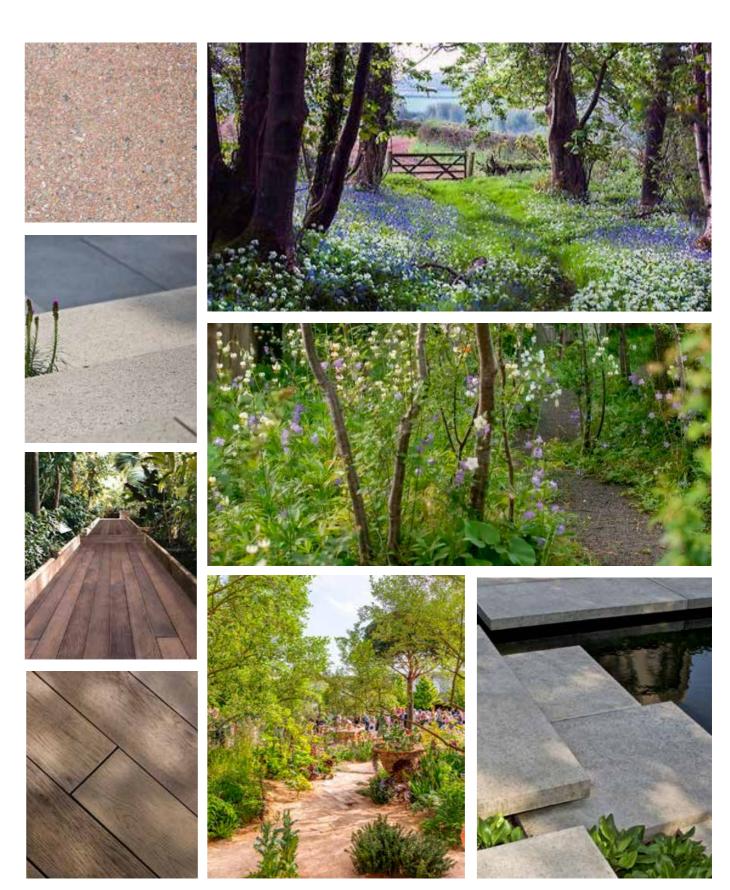
The proposed landscape design is to set the new property softly and naturally into the surrounding environment. The retained landscaping elements will be complimented harmoniously with new. To pay tribute to the sites former use, a new orchard will be introduced. New trees, meadows, hedgerows and planting aim to tell a gentle story of the landscape evolving through the site, providing context and connection. A critical objective of the design is to connect the residents to the outdoor spaces, various open spaces and seating areas allow for more practical and entertaining use.

#### **Longevity and Sustainability**

New trees, hedging and planting will be carefully selected to establish and thrive in the existing conditions and in future conditions, taking into account the everchanging climate. It's our responsibility to ensure the planting can be enjoyed by residents and local wildlife for many generations. This garden is designed to merge into the surrounding landscape and the property timelessly, mitigating requirement for major future change, ensuring longevity for the garden. Wherever possible, existing materials will be utilised and retained on site. Surplus materials will be used to create new seating and lawn areas.

#### **Materials**

The proposed materials for external area will focus on recycled materials and porous systems. Recycled concrete paving, composite timber decking and self-binding gravel will form new seating areas and paths. Soft tones and colours will allow hard landscaping to fade into the periphery with soft landscaping becoming the focus, with foliage's blurring lines and edged. Proposed materials will be



#### **Ecology & Trees**

We've liaised closely with ecologists and arboriculturists to ensure our impact on existing biodiversity is minimal, focusing development on low value areas whilst enhancing other areas on-site. Established trees and shrubs will be retained and protected whilst new native trees, native hedging, wildflower meadow and nectar rich herbaceous planting will be introduced. Creating new habitats, shelter and food sources for pollinators, invertebrates, birds and mammals will allow the garden to become a wildlife corridor set within the surrounding landscape. Emphasis has been put on succession of flowering plants, food sources and natural habitats available throughout the year. The design includes the introduction of a new pond, creating huge benefits for biodiversity on site.

To ensure there is no impact on trees, the construction of the proposed house sits comfortably outside all tree protection zones. The west wing of the proposal, where Bedrooms 3 & 4 are positioned, "float" above the tree protection zones, with a single, small, hand dug pad foundation proposed by the structural engineer to assist with the structural strategy.

The proposal seeks to remove 3 category C trees:

T22 – Chusan Palm

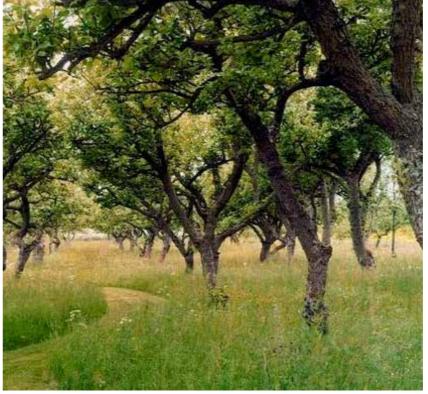
T23 – Cabbage Palm

T24 – Cabbage Palm

These trees are low grade and non-native, making them unsuitable for the site and the broader Conservation Area. They have no impact on the Conservation Area's value and are not visible from the public realm. Their presence does not enhance the surrounding character or appearance of the area.

The removal of the 3 existing palm trees will provide space for the new landscaping scheme, which will be heavily influenced by native flora. The proposal includes the introduction of 20 new trees, including 6 fruit trees which will re-establish an orchard historically located within the site boundary. The majority of the remaining 14 additional trees will be made up of UK natives as the new scheme. The proposal's variety of new trees compensates for the removal of the low-grade non-native ones and enhancing the site's overall appeal.





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Native Trees & Wild Grass

Orchard with Enhanced Grassland

Native Hedging

Native & Pollinator Friendly Planting

Ornamental Wildlife Pond

Key

Existing tree

Proposed tree

Hardscape

Gravel Decking

Proposed orchard tree

Enhanced grassland Planting/Vegetation

Bark Chipping Path

Basement area Rooftop terrace area

Site boundary

**Ecology & Biodiversity** 

### **Biodiversity**

The BNG assessment by Tunley Environmental have confirmed for the site is exempt from 10% Biodiversity Net Gain regulations due to the selfbuild exemption. Despite the site being exempt, the applicants demonstrate a commitment to ecosystem restoration and environmental infrastructure by implementing a biodiverse green roof, new planting area, new pond, and new native hedgerows.



**Existing Habitat** 

Scale: 1:500



Scale: 1:500



## **Sustainability**

#### **Sustainability Report Key Findings**

The sustainability report and whole Life Cycle Carbon Emissions (WLCCE) Assessment for the proposed development was prepared with the support of Hodkinson Consultancy, a specialist energy and environmental consultancy for planning and development. As outlined in this Design & Access Statement, the proposed development will comprise of the demolition of the existing house and outbuildings and erection of a new eco family home, alongside associated works including driveway alterations and landscaping.

#### The key conclusions drawn from the report are as follows:

- The total emissions, based on the GLA guidance is 1,054 kgCO2/m2 GIA over 60 years excluding sequestered carbon or 839 kgCO2/m2 when sequestered carbon is included.
- 555 kgCO2/m2 for modules A1-A5 (excluding sequestered carbon).
- 499 kgCO2/m2 for modules B-C.
- When operational energy and water emissions are included in the calculation above the total emissions are expected to be 2,244 kgCO2/m2 GIA over 60 years.
- The expected WLCCE are lower than the GLA benchmark for Modules A1-A5 and the total emissions. The B-C emissions exceed the benchmarks due to the increased use of timber on the project. Whilst this has delivered excellent benefits under A1-A3, it currently has a poor End of Life value (C1-C4) as the industry assumes all timber will be incinerated at the end of its useful life.
- Overall the project has demonstrated an exemplar commitment to sustainability in terms of its WLCCE.

## Minimizing Waste and Maximizing Recycling During Construction and Operation

During demolition and construction, the site will operate an avoid, prevent, and minimize strategy to waste and will aim to achieve a 90% diversion from landfill approach, with the Applicant committing to re-using at least 10% of the existing materials in the proposal. During operation, the property will be provided with suitable space for recycling and food waste in line with the Council's waste guidance. The new house will be designed to be low maintenance, avoiding additional finishes and use of harmful products. The team will look to reuse the building materials where possible, such as excavated material being reused for below ground works or landscaping. Structures will be designed in accordance with Eurocodes and will have a design life of at least 60 years.

#### Using Recycled and Recyclable Material Sourced Responsibly

The project will follow the "reduce, reuse, recycle" principle, which will limit virgin material use, reducing extraction, waste, and pollution. The structural specification will consider the use of recycled materials, and recyclability at end of life. Where possible the design will consider the use of self- finished materials which require less maintenance and remove the need for reapplication of applied finishes. Limited use of paint systems in interior environments will also be considered, to reduce the build-up of airborne, harmful compounds.

#### **Conserving Water**

A future planning application will seek to demonstrate that the Part G target of 110 litres/person/day will be surpassed. Additionally, water metering and leak detection systems will be installed for mains supply to identify when irregularly high consumption of water occurs. Rainwater harvesting will reduce the demand for mains water.

#### **Energy & Carbon Strategy**

The energy strategy for Sevenoaks can be summarised as:

- Efficient passive design (to Passivhaus standards) utilising high levels of insulation to minimize heat losses
- Airtight construction to minimize heat losses via air infiltration
- The inclusion of low or zero carbon technology (LZCT) in the form of an Air Source Heat Pump (ASHP) and heat recovery unit for space heating, and hot water preparation.
- A 'fabric first' approach, to reduce the buildings energy demands through a high performing building envelope. Such measures are extremely difficult to implement later.
- Efficient building services, through appropriate selection of heat, ventilation and light

products, good design practices and controls. Minimizing distribution and storage losses from space heat and hot water systems within the multi-leisure scheme. Technologies such as LED lighting, and high-performance ventilation systems with heat recovery will be adopted.

- Renewable energy technology which supplies heat or power from a low (or zero) carbon source
- Rainwater Harvesting will reduce mains water use , hence saving energy.

#### Whole Life Cycle Assessment

It is intended that the Proposed Development will undergo a full WLCCE Assessment during the planning application.

Using the concept sketches provided, Hodkinson Consultancy have undertaken an initial WLCCE assessment to support this pre-application process. This has determined that:

The Proposed Development will fall within the GLA residential benchmarks (March 2022):

- < 800kgCO2/m2 for Modules A1-A5</li>
- < 350kgCO2/m2 for Modules B-C

The reuse of a % of the demolished materials below ground will generate approximately 10-15kgCO2/m2 saving under Modules A1-A3, compared to using only virgin materials.

The increased use of timber in both the new structure and extensive landscaping will have a net positive impact on the embodied carbon emissions through carbon sequestration.

The improved services throughout will improve the operational energy (Module B6) performance drastically.

The re-zoning of the Proposed Development to increase sunlight throughout will ensure there is not an over-reliance on artificial lighting, reducing the energy loads.

The new materials proposed will improve the fabric energy efficiency and will significantly reduce the space heating demands of the Proposed Development.

Installing new sanitaryware systems will improve the water efficiency of the Proposed Development beyond Part G requirements (Module B7), through the installation of efficient sanitaryware.

#### Conclusion

The scheme will aim to achieve a significant reduction in energy following the energy hierarchy, through passive measures, energy efficient systems and low-zero carbon technologies. Furthermore, the site biodiversity gain of at least 10% will be achieved for the site.

## Lighting

Given the proposed development's location within a conservation area, a comprehensive assessment was conducted to evaluate light spillage on the surrounding environment. This evaluation focused on potential spillage beyond the site boundary that might impact neighbouring residential properties.

Using a 3D model developed in IES thermal software, informed by site visit and topographical information, the assessment revealed there would be minimal light spillage, with no residential properties within 27 meters of the nearest light source.

The building's design incorporates features such as large overhangs and shading devices, effectively reducing nighttime light spillage. Additionally, the building's low height and the high boundary wall (ranging from 1.8m to 3.2m) act as further barriers, minimizing light impact on neighbouring areas.

In conclusion, the proposed development is expected to have a negligible impact on neighbouring properties, with light spillage deemed minimal.

#### Precedent image showing example of external venetian blinds



Precedent image of solar shading to Living wing

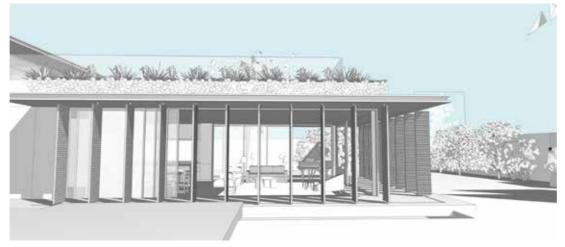




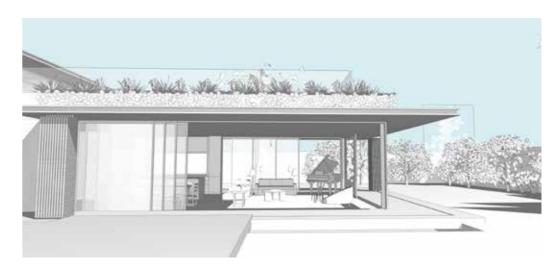
Light Spillage Study



Proposal with additional shading in Use



Proposal with additional shading folded away

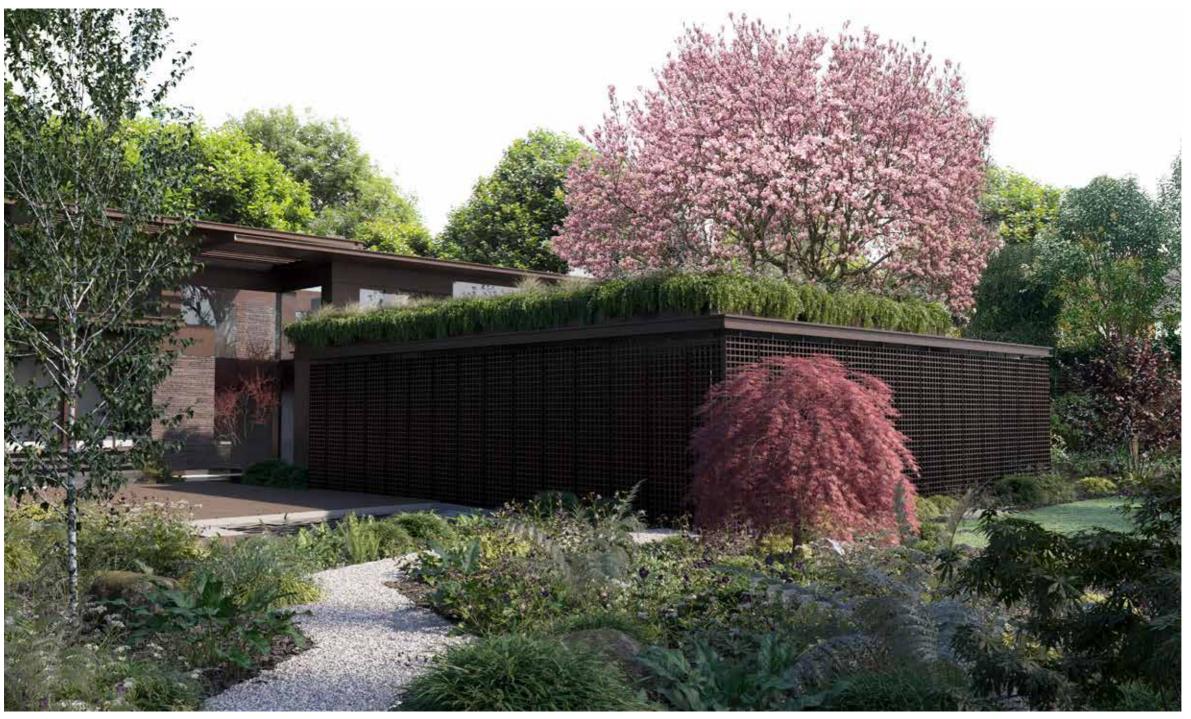




Proposal with shutters stacked



Proposal with shutters open



Proposal with shutters closed

## **Design Impact**

Inconsistent rhythm to the existing facade.

Roofs can be seen from the public realm. Large massing above ground level.

The large building is a jarring and anomalous presence\_ in the context of the conservation area.

Only the central portion offers legibility of the original\_structure.

Existing house is a pastiche representation of Tudor\_architecture.

A building of architectural merit, which presents a clear and coherent design language throughout.

Massing kept as minimal as possible above ground level, so that roof is seen minimally from public realm.

Consistent rhythm to the new facade, with well balanced materials, openings and roofs.

#### Front of Existing House



### **Front of Proposal**



### **Rear of Existing House**

Roofs can be seen from the public realm. Large massing\_ above ground level.

No sustainability measures. -

Inconsistent design language at the rear.

Outdated materials and combination of building\_ techniques means the rear of the building does not read as one cohesive design.



A building of architectural merit, which presents a clear and coherent design language throughout.

Massing kept as minimal as possible above ground level, so that roof is seen minimally from public realm.

Green elements incorporated into the design to soften the architecture and to boost sustainability.

Materials are sustainable and are of high architectural quality.

Proposed landscaping means the proposed building sits far more harmoniously in the site.



#### **Driveway of Existing House**

Existing house is a pastiche representation of Tudor\_ architecture.

Only the central portion offers legibility of the original\_ structure. Additions are of low architectural quality in both materials and design.

Building is exposed, with no landscaping to blend it in\_ with the site.



Proposed landscaping and low profile of the proposal on site means there is less impact on the adjacent-Grade II listed Elmgrove House.

Massing kept as minimal as possible above ground level, so that roof is seen minimally from public realm.

Proposed landscaping means the proposed building sits far more harmoniously in the site.



### **Conclusion**

This statement has discussed the demolition of an existing house and 2 outbuildings on the site of Sevenoaks, Hampton, replacing them with a sympathetically designed contemporary house. From the outset, the objective of this proposal has been to reduce the height and massing of the existing building on the site, which is in conflict with the Conservation area and Elmgrove House. The character of the site will be greatly improved by the proposed development.

The new dwelling would represent a state-of-the-art building of exceptional quality which is innovative and sustainable.

It aims to be more modest in height compared to the existing building respecting the listed building adjacent and intertwined with the landscape and recreate the orchards which once represented the historical character of the site.

The new house will be quietly tucked into the site, with green roofs and vegetation providing visual relief.

Landscaping, biodiversity and ecology will be a strong focus of the development, with the intention of reconnecting the new house to the garden surrounding it.

The development will meet all sustainability requirements, achieving excellent energy performance through renewable technologies, low embodied carbon, efficient building services, airtight construction and the reuse and recycling of materials from the site where possible.

The proposed development achieves net zero operational energy and will be an inspirational example of sustainable architecture.

The demolition of existing, underutilized outbuildings on site will re focus the stunning views from the house, simplify the site's arrangement and reinstate the grade II listed neighbouring Elmgrove House as the focal point of the local area.

The proposal will fulfill the Bradley Ross family's needs, while respecting and complementing the surrounding Conservation area.

This Statement has demonstrated that the proposed development is harmonious with the surrounding area in accordance with national and local planning policy.

This document is to be read in conjunction with the accompanying drawings and statements.

The design has been informed by a team of consultants including planning, heritage, energy to try and deliver the highest quality development as suitable to the site.

The general approach taken by the project team has been to design a scheme that is contemporary, yet respectful the character of the adjacent listed building and neighbouring properties in the

Conservation Area taking cues from character and materiality.

The proposal will create a family home for our clients with well designed and functional spaces which will meet their needs now and for years to come.