

1868 : **Birchwood, Cadbury Camp Lane**

Design & Access Statement

March 2024

Revision: -

Birchwood, Cadbury Camp Lane Design & Access Statement

Client: Martin Day

Project Number: 1868

Revision	Description	Prepared by	Approved by	Date
-	Planning Issue	CS	MG	27.03.2024

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Site Overview taken from Google Maps

1 - INTRODUCTION

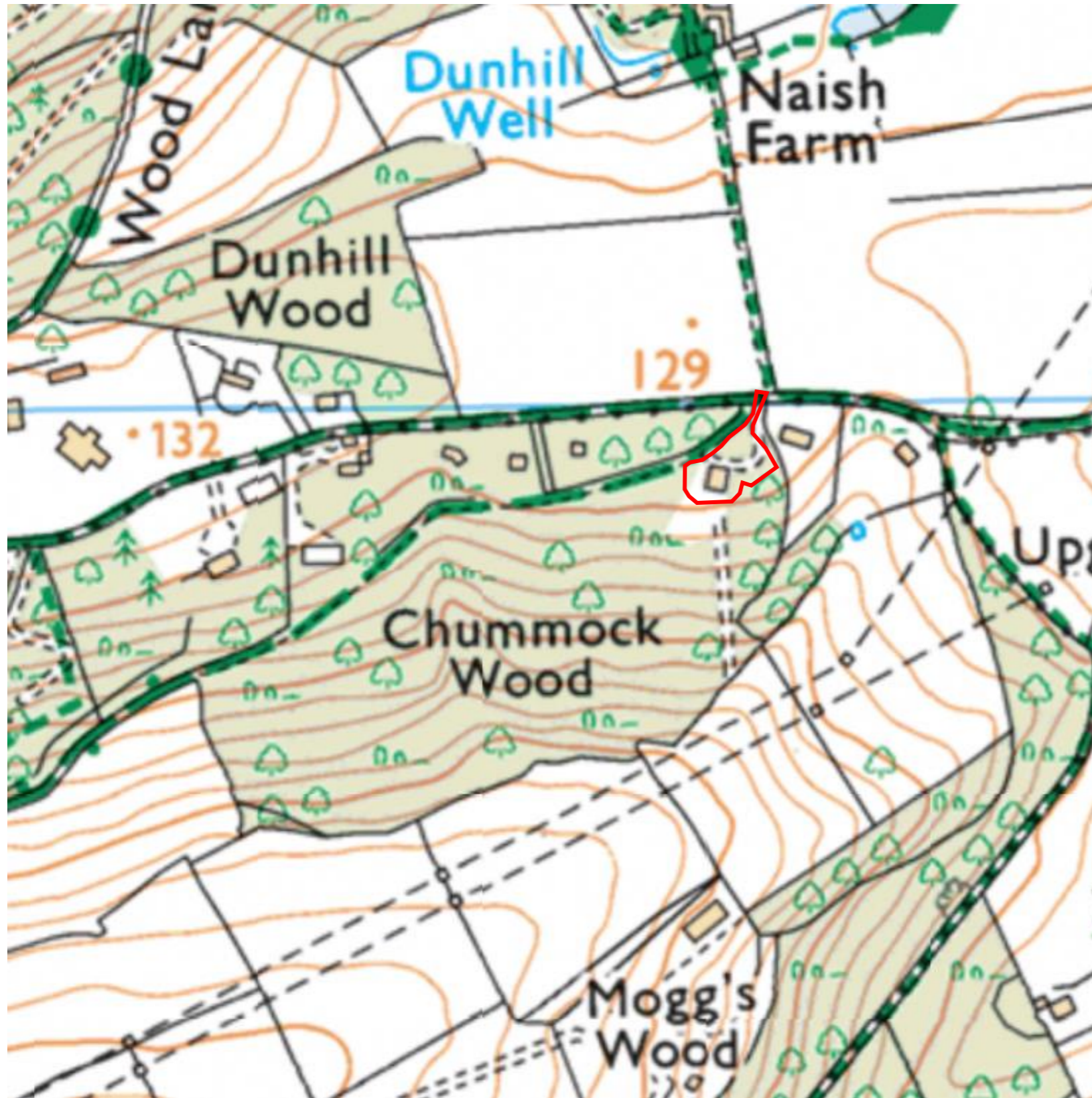
The purpose of this Design and Access Statement is to support an application for planning permission for a replacement dwelling at Birchwood, Cadbury Camp Lane, Cadbury Camp Lane, Bristol, This document should be read in conjunction with the application form and supporting drawings and documents.

The proposal involves the demolition of the existing detached house, with the construction of a new contemporary replacement dwelling, including associated landscape works. The new dwelling will be designed to achieve a high level of sustainability and measure low in both operational and embodied carbon.

Alterations to the existing detached garage have also been proposed to improve its appearance and tie it in with the proposed new dwelling.

List of supporting documents:

1. Planning Statement – Grassroots Planning
2. Energy & Sustainability Statement – Grassroots Planning
3. Arboricultural Report – Silverback Arboricultural Consultancy
4. Ecological Report – Nash Ecology



OS map taken from Bing Maps

2 – SITE DESCRIPTION AND CONTEXT

The site is located within the Bristol and Bath Green Belt, approximately 9 miles west of Bristol, just south of the M5 Junction 19.

Cadbury Camp Lane is a private road, with large private residences on either side of the lane. The majority of the dwellings have private gated access, and are set back and surrounded by trees, which provide a sheltered, private and secluded environment for the residents.

The site sits on the northern boundary of Chummock Wood and a public bridleway runs along the north-west boundary. The existing house is well screened by tree canopies, fence boundaries, and steep topography.

The character of the area is not limited to a specific architectural style, with every house on the road being both unique and non-conventional, demonstrating both contemporary and traditional house typologies.



3 – EXISTING DWELLING

The existing dwelling is a two-storey pitched roof, 3-bedroom detached building with single-storey flat roof garage and car port to the north. Constructed in the 1970s the dwelling is clad with white bricks with raked feature horizontal joints, and cedar timber shingle roof covering.

The house characteristics are fairly unique and contemporary for the time it was built, however in recent years has become outdated and in constant need of repair. The brickwork has become dirty and stained, and the cedar shingle roof is coming to the end of its life span.

The primary glazed elevation is south facing and experiences extreme overheating issues in the summer months, as well as significant heat loss throughout the winter due to its uninsulated fabric, under-performing glazing and lack of solar shading.



Existing dwelling photographs from North and South



3 – EXISTING DWELLING

The single storey garage is constructed from a darker brick and partially clad with cedar shingles, which are tired and coming to the end of their life cycle.

The detached garage at the end of the driveway was constructed in 2019, has an asymmetric pitched roof, and is clad with khaki green Kingspan panels, with dark grey fascias, soffits, roller doors and rainwater goods.



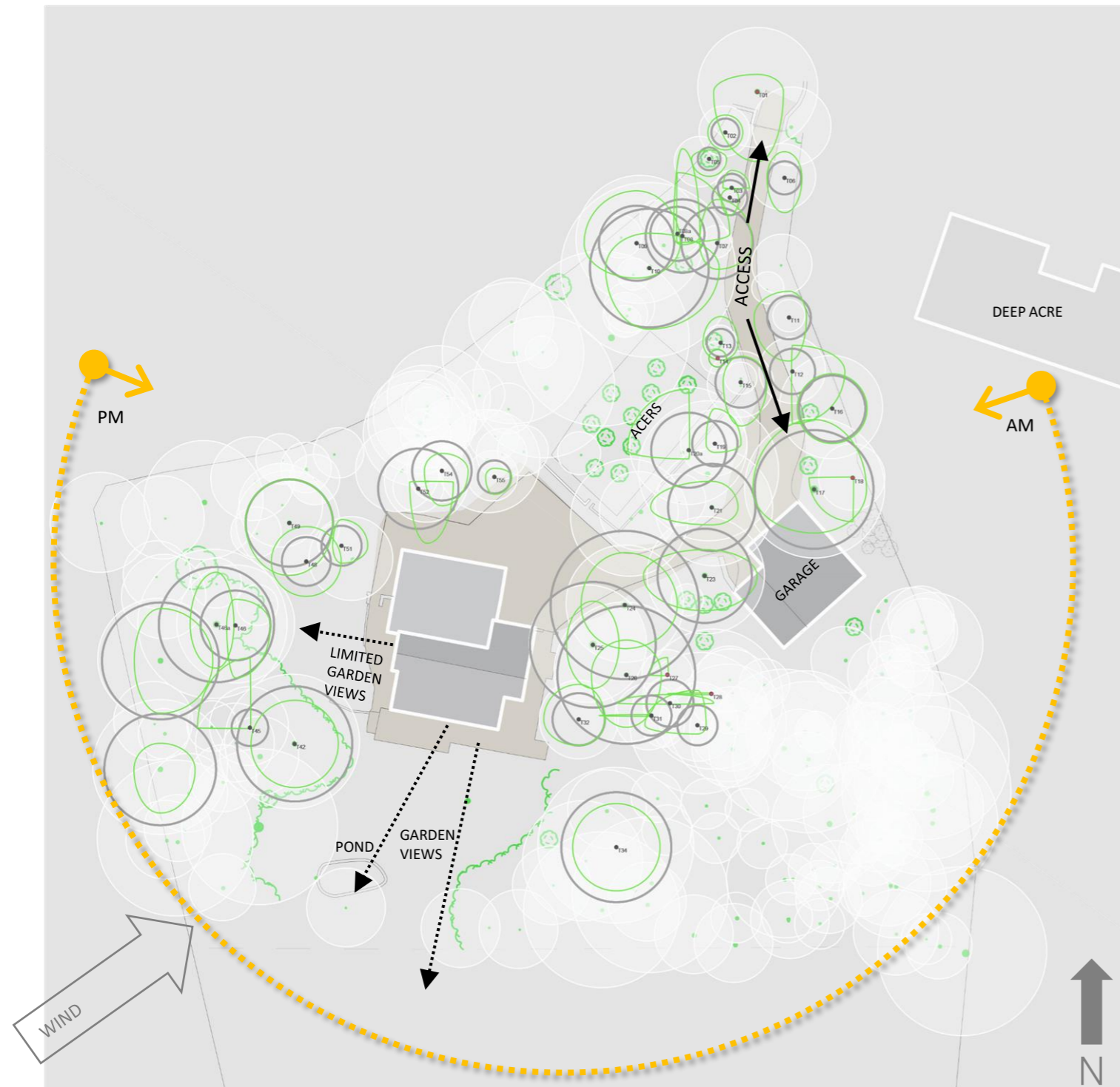
Existing photographs of dwelling and garage

4 – SITE CONDITION

Access to the site is through private electric gate with long single track tarmac drive leading towards the recently built detached garage, with the house eventually revealed once out of the trees. The front garden is primarily taken up by woodland as well as recently planted Japanese acers.

The site is extremely sheltered by trees which have matured around the existing dwelling. The main house runs on an East to West axis, with the primary living, kitchen, living, dining and first floor bedrooms south facing.

Views from the property are limited by the trees that surround the site. The site has a fairly steep topography from north to south, with the primary rear garden space falling away from the property.



Initial Site Analysis Diagram

5 – PROPOSAL

5.1 – Proposal Overview

To work within the site constraints, existing area character, and address the client's brief requirements, we have gone through a rigorous design process to create a high quality, contemporary dwelling that is in keeping with the site.

The proposal includes a generous sized dwelling with 5 bedrooms, double garage, open plan living and dining space, home working office facilities, leisure and entertainment facilities, and enhancement of the immediate landscape and external amenity space. Ecology measures have been considered and the dwelling will be highly sustainable, with a lower energy demand than the existing dwelling.



Proposed Site Plan



Ground Floor Plan

5 – PROPOSAL

5.2 – Design – ground floor

The house is envisaged as a series of interconnected semi-open plan spaces at ground floor, taking full advantage of the southerly aspect.

A simple recess demarcates the primary entrance to the dwelling – once inside, all key spaces and circulation routes are accessible from the hall. Looking east-west, the double height sunroom leads you into the house on arrival with tree canopies and sky beyond as the landscape falls away from the house. You're then led into the generous open plan kitchen, dining, living space at the heart of the house with a seamless transition between the inside and outside terrace space, immersed in the matured Ancient Woodland that surrounds. The cantilevered first floor volume provides solar shading to the south.

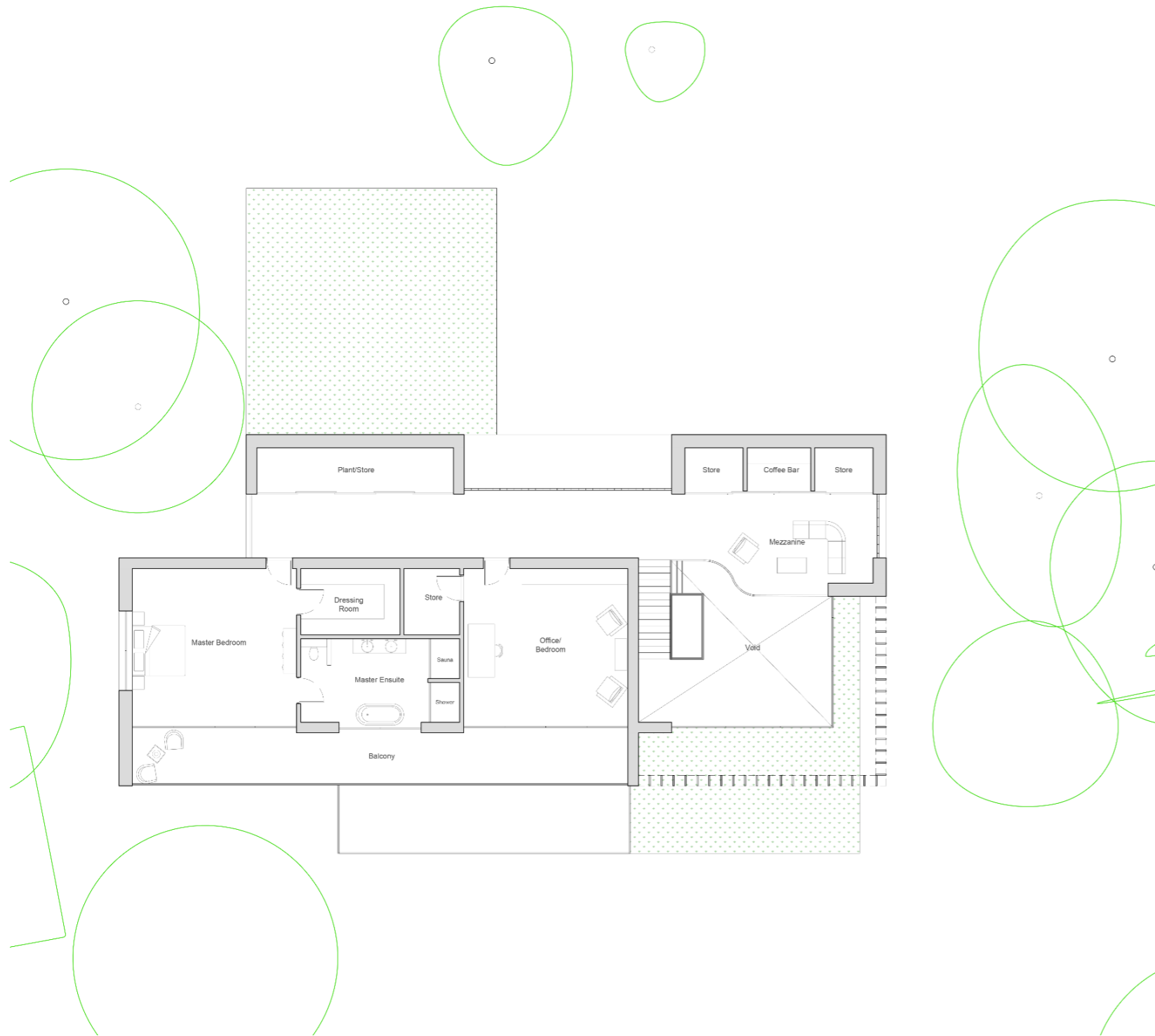
The north of the house serves as a private games/media space, with back of house utility washroom, double garage and plant equipment.

5 – PROPOSAL

5.2 – Design – first floor

The first floor hosts the Master bedroom, large ensuite and home working office space, benefiting from its own covered terrace to provide solar shading.

The first-floor landing provides the client with adequate storage along the northern wall, momentarily broken by the soft light coming through large opening of vertical glass channels, with a break-out mezzanine seating space overlooking the double height sunroom.



First Floor Plan

5 – PROPOSAL

5.2 – Design – lower ground floor

The lower ground floor has three guest bedrooms, cinema room and gym, accessible from the central stair lightwell. Each bedroom and the main stairwell will have views out into the garden. The cinema room and gym have been positioned to the rear due to their reduced requirement for natural light.



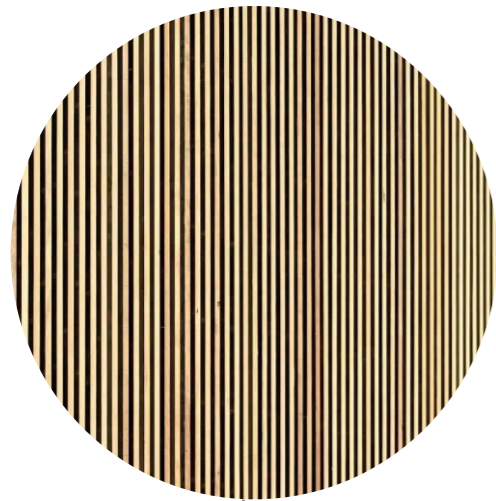
Lower Ground Floor Plan

5 – PROPOSAL

5.3 – Materials

The simplistic proposed material palette consists of Natural stone, metal cladding, channel glazing and vertical timber cladding battens.

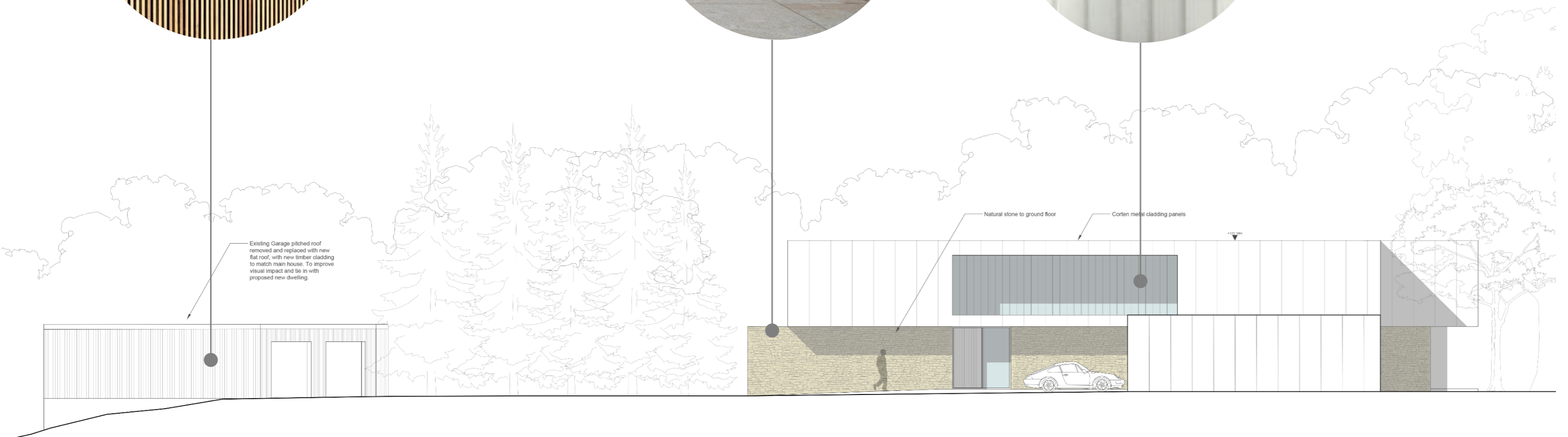
Natural timber cladding



Metal Cladding & Natural Stone



Vertical translucent channel glazing



Proposed North Elevation

5 - PROPOSAL

5.4 – Visuals

Approach view from driveway – existing (left) and proposed (right)



5 - PROPOSAL

5.4 – Visuals

Front Elevation – existing (left) and proposed (right)

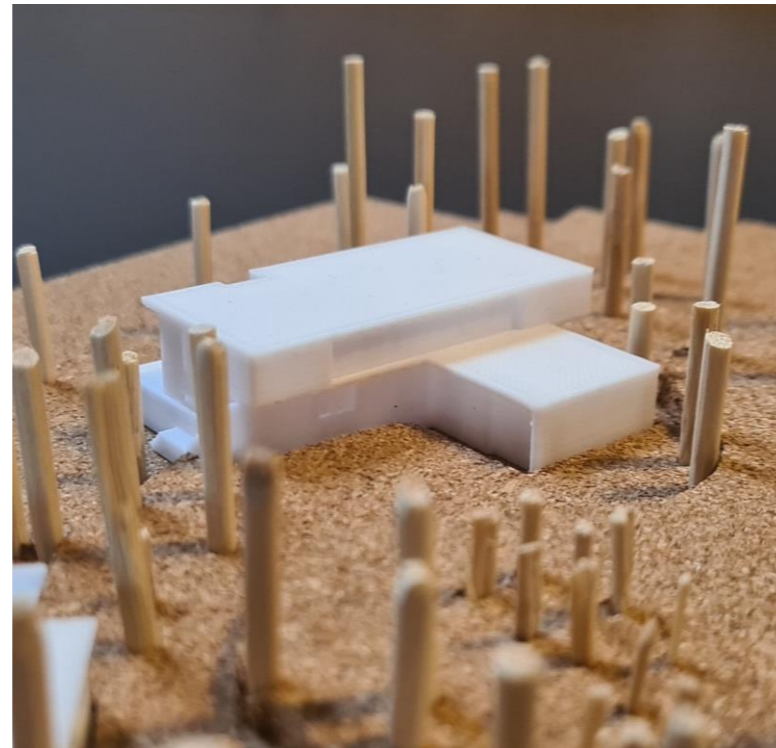
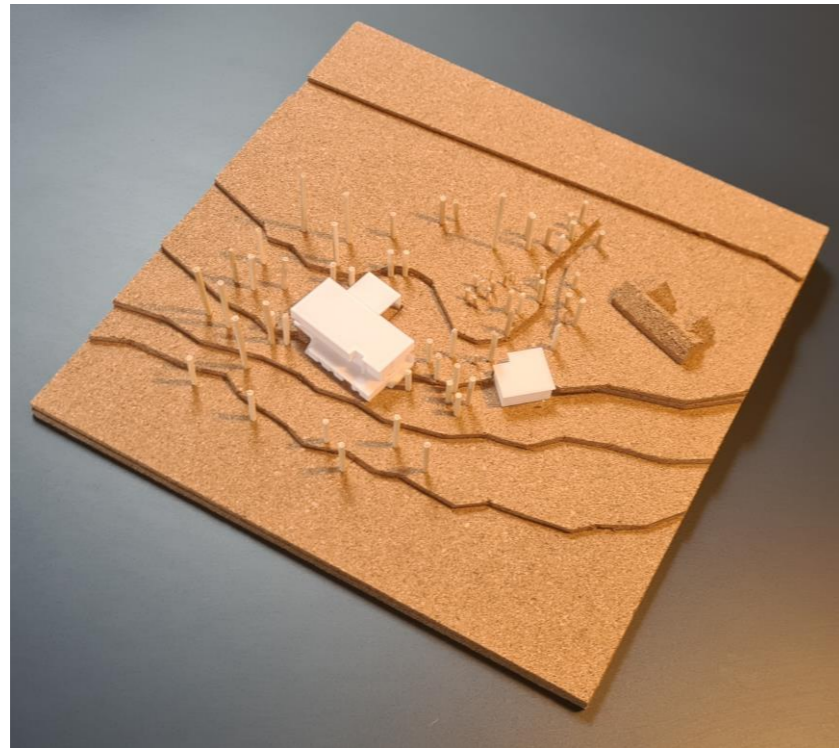


5 - PROPOSAL

5.4 – Visuals

View from bottom of garden – existing (left) and proposed (right)

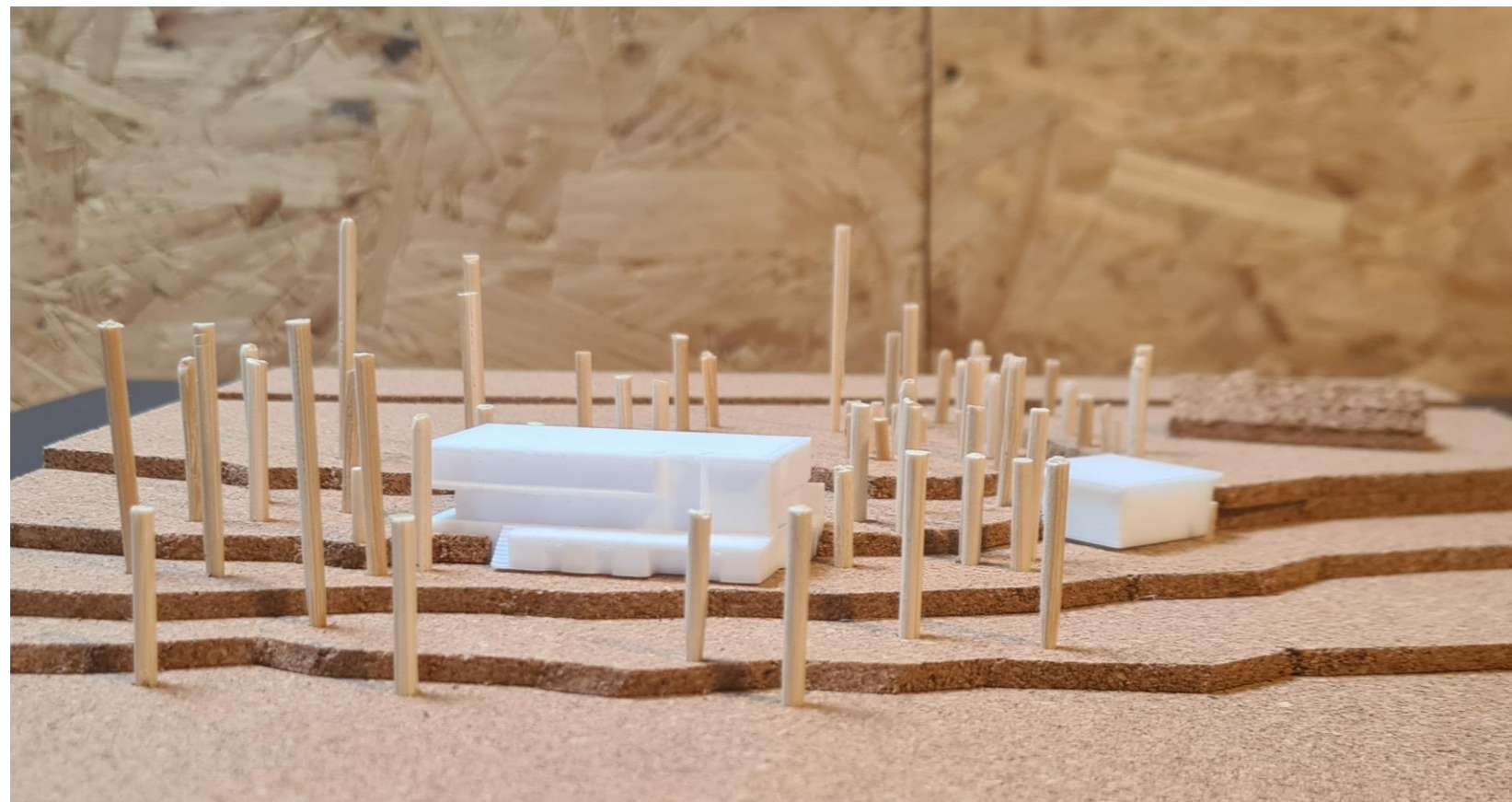


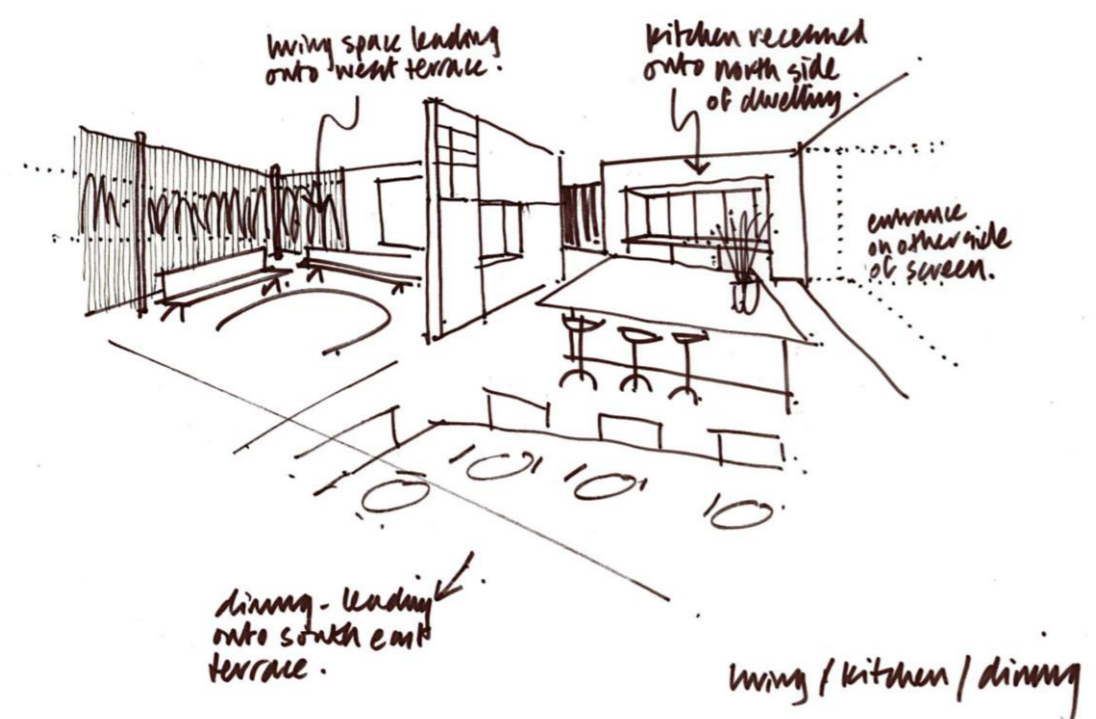


5 - PROPOSAL

5.5 – Physical Model

We used physical models throughout the design process to help understand the topography of the site and overall massing of the proposal compared to the existing dwelling.





Early sketches of internal spatial arrangement

6 – USE

The existing residential use (C3(a)dwellinghouse) will be retained.

The proposed dwelling will be for private use by the client. The client has lived here for over 25 years and wants to continue to do so for many years to come.

7 – ACCESS

7.1 – Vehicle & Pedestrian

The site has an existing vehicle/pedestrian access from Cadbury Camp Lane, with a hardstanding tarmac drive, which will be retained as existing.

Sufficient space has been given at the front of the property for two cars to park in front of the new adjoining garage, with an additional two spaces in the garage, as well as clear space for turning.

7.2 – Occupation

The new dwelling has been designed to be Part M compliant, with level access between all outside and inside spaces, as well as level access throughout each level, designed to be adaptable for the future needs of the client. Adequate space has been left in the circulation/ stair core for a future lift if necessary. This is an improvement on the current dwelling which has split levels throughout the ground floor.

8 – AMOUNT

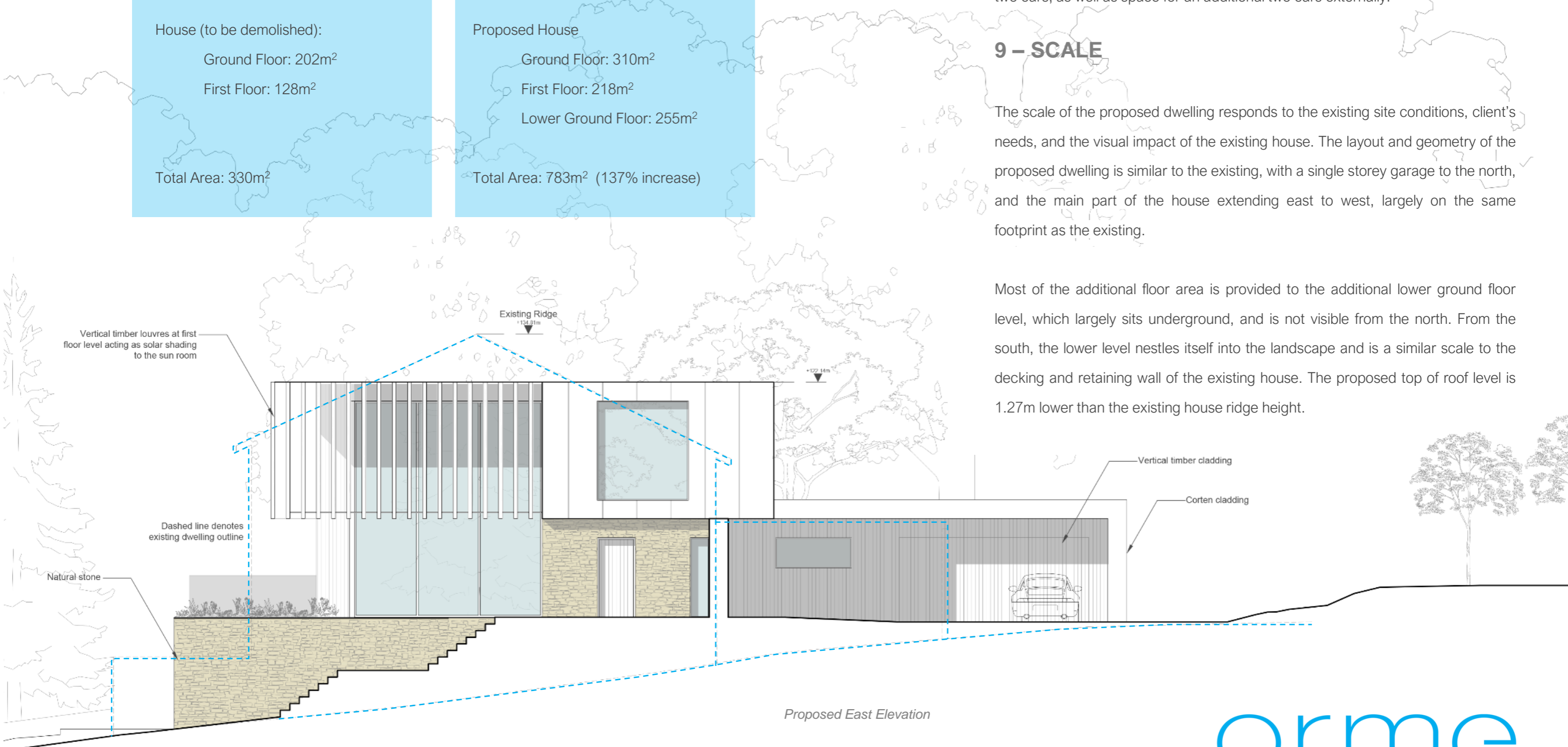
The proposed dwelling consists of 5 bedrooms, open plan living space, entertainment and leisure facilities, dedicated workspace and garaging for up to two cars, as well as space for an additional two cars externally.

9 – SCALE

The scale of the proposed dwelling responds to the existing site conditions, client's needs, and the visual impact of the existing house. The layout and geometry of the proposed dwelling is similar to the existing, with a single storey garage to the north, and the main part of the house extending east to west, largely on the same footprint as the existing.

Most of the additional floor area is provided to the additional lower ground floor level, which largely sits underground, and is not visible from the north. From the south, the lower level nestles itself into the landscape and is a similar scale to the decking and retaining wall of the existing house. The proposed top of roof level is 1.27m lower than the existing house ridge height.

Existing Gross Internal Area	Proposed Gross Internal Area
House (to be demolished):	Proposed House
Ground Floor: 202m ²	Ground Floor: 310m ²
First Floor: 128m ²	First Floor: 218m ²
	Lower Ground Floor: 255m ²
Total Area: 330m ²	Total Area: 783m ² (137% increase)



Proposed East Elevation



10 – SUSTAINABILITY

The proposal will provide a sustainable dwelling to support modern family life. The proposed dwelling will be designed and built to a high standard, using a high quality and well insulated building fabric which far exceeds the building regulation requirements for thermal efficiency, in a fabric first approach, utilising passive house principals.

The overhanging roof volume and dedicated vertical solar shading to the first floor will minimise overheating by permitting low level winter sun but blocking out high level strong summer sun. (Images left)

The building performance will be further enhanced by the use of solar PV on the roof, existing ground source heat pumps, and an MVHR system to minimise heat loss and maximise effective ventilation.

These design consideration will establish thermally efficient environments that are cost-effective to heat with reduced lifetime running costs.

The dwellings garden and mature ancient woodland will remain in its wild, natural state to ensure the wildlife, biodiversity and appearance can continue to thrive, ensuring ecological sustainability.

Images to the left show recent examples of our completed projects to demonstrate the level of finish and balance of thermal performance and contemporary design that we provide.