

LANDSCAPE – DETAILED DESIGN DEVELOPMENT

LANDSCAPE DEVELOPMENT

At the core of the design is the principle that **architecture and landscape should operate as a single, integrated system**. The proposed garden is conceived not as an isolated domestic space, but as a **continuation of the surrounding landscape**, transitioning sensitively from agricultural pasture to a biodiverse and resilient residential setting. The built form is deliberately moderated through landform and planting, ensuring that the **house remains visually discreet and embedded within its context**.

A key driver of the scheme is **ecological regeneration**. Existing hedgerows are retained, restored and extended to **reinforce landscape structure** and **improve habitat connectivity**. Woodland shaws are reintroduced and expanded, linking fragmented areas and strengthening the wooded character that defines the wider landscape. New tree planting is carefully considered, with species selected for **resilience and long term contribution**, including the establishment of future veteran trees within open pasture to reflect local precedent.

Water is treated as an integral component of the landscape strategy. A network of swales **slows and stores surface water**, feeding into a naturally formed, rain fed pond designed to function seasonally. This approach supports biodiversity, enhances visual and experiential quality and contributes to **sustainable water management**, reducing pressure on existing infrastructure and improving resilience to both drought and flooding. Wetland habitats associated with existing hydrology are protected and enhanced, including the **restoration of riparian planting and wet meadow conditions**.

The design also responds to the need for **sustainable land management practices**. Traditional techniques such as coppicing are reintroduced to support woodland health and biodiversity, while deadwood habitats are retained where appropriate. The use of on site materials is prioritised, with spoil carefully shaped to create landform, achieving a **net zero cut and fill** balance while supporting **soil regeneration and habitat creation**.

Movement through the landscape is guided by a series of organic, curvilinear forms that respond to topography and existing patterns. These routes create a sense of continuity and flow, reinforcing the project's overarching theme of **movement and transition**. Hard landscape elements are integrated with planting from the outset, ensuring that materials, form and vegetation work together to create a **cohesive and enduring environment**. Traditional half-timbered houses are referenced through the use of **timber louvres, decking and walkways** around the proposed building. Rubble coursed flint and knapped flint walling are acknowledged through **flint gabion walls**, which define the boundary between the domestic garden and the wider site. **Horsham stone boulders** are scattered throughout the sunken gravel garden and swales leading to the seasonal wetland, and give a nod to local Horsham slabs that are typically found covering hipped roofs. **Purbeck limestone paving** references the chalk scarps found nearby in Steyning Downland and the South Downs. **Permeable crushed limestone chippings** are used to surface the gravel garden and driveway, and allow rain and surface water to return to underground aquifers without overwhelming local water networks, whilst also referencing local chalk pits that define the South Downs landscape.

OUR PROPOSAL

SITE PLAN



- 1 ARRIVAL**
Enhanced hedgerow road boundary by deepening with native hedgerow and scrub. A SUDs compliant permeable driveway approaches the house, which is obscured from the road through long grass mounds.
- 2 ENHANCED WOODLAND SHAW**
Including oak and hazel coppice and resilient lime, hawthorn and blackthorn with wetland species adjacent to proposed pond. Interlinking with existing hedgerow and proposed copses to enhance landscape, cultural heritage and biodiversity.
- 3 SEASONAL POND AND WET WOODLAND**
A natural, un-lined pond acts as a seasonal buffer for excess rainwater, and is allowed to empty and fill for the benefit of wildlife and water management. Damp-loving native and naturalised tree and shrub species will be planted around the back of the pond.
- 4 NEW WOODLAND SHAW**
Including oak and hazel coppice and resilient lime alongside other native shrub & scrub species. Combining with new hedgerow installed at adjacent Sunningdale plot, re-linking fragmented landscape by restoring hedgerows and shaws and creating corridors using field margins.
- 5 ORCHARD AND LONG GRASS MEADOWS**
Late season fruit trees are underplanted with UK native wildflowers. Winding mown paths cut through the meadows, mimicking livestock paths found in the South Downs and increasing opportunities for invertebrate biodiversity.
- 6 SEASONAL SWALES**
Seasonally wet swales collect rainwater from the roofs and mounds, transporting it across the landscape to the seasonal pond. The swales are planted with native streamside vegetation such as rushes (*Juncus* sp.), creating seasonal wetland landscapes associated with the nearby river Adur floodplain and catchment areas.
- 7 VETERAN TREES IN PASTURE**
We propose to plant trees that can become future veteran trees in the wider landscape such as *Quercus ilex* and *robur*, *Tilia cordata* and *Sorbus torminalis*.
- 8 COPPICED WOODLAND EDGE AND BUFFER**
A short coppiced woodland made up of UK native or naturalised species (eg. Hazel, Hornbeam and Alder), screening from neighbouring properties. Trees are strategically placed to allow some to establish as mature veteran specimens.
- 9 SWIMMING POOL**
Timber South-facing decking overlooks the swimming pool. A timber boardwalk leads from the pool to the property, as well as the formal lawn.
- 10 EXTERNAL GATE**
A 5 bar agricultural style gate maintains visual connection to the road, and reflects local materials.

PLEASE NOTE:
If western boundary reduction is not achievable without removal of any trees, any removed plants are to be planted within the property boundary.

EXISTING TREES TO BE RETAINED (TBR)		
Latin Name	Quantity	ID
Corylus Avellana	7	Co-Av
Crataegus Monogyna	1	Cr-Mo
Fraxinus excelsior	8	Fr-Ex
Fruit sp.	1	Fr-Sp
Quercus robur	4	Qu-Ro
Sambucus nigra	3	So-Ni
Unknown Tree	2	U/T

WIDER TREE SCHEDULE					
Latin Name	Height at Purchase	Girth Circumference	Form	Quantity	ID
Alnus glutinosa	n/a	10-12cm	Standard	1	Al-Gl
Betula nigra	200-250cm	n/a	Multistem	2	Be-Ni
Betula pendula	200-250cm	n/a	Multistem	6	Be-Pe
Carpinus betulus	n/a	10-12cm	Standard	5	Ca-Be
Corylus Avellana	200-300cm	n/a	Multistem	9	Co-Av
Crataegus Monogyna	200-300cm	n/a	Multistem	6	Cr-Mo
Malus x robusta 'Red Sentinel'	200-300cm	n/a	Multistem	2	Ma-Red
Quercus ilex	n/a	12-14cm	Standard	4	Qu-Ile
Quercus robur	n/a	12-14cm	Standard	3	Qu-Rob
Tilia cordata	n/a	10-12cm	Standard	7	Ti-Co
Tilia platyphyllos	n/a	10-12cm	Standard	4	Ti-Pl

ORCHARD SCHEDULE			
Latin Name	Rootstock	Form	Quantity
<i>Malus domestica</i> "Annie Elizabeth"	MM106	Half Standard	7
<i>Malus domestica</i> "Carnation"	MM106	Half Standard	2
<i>Malus domestica</i> "First & Last"	MM106	Half Standard	6
<i>Malus domestica</i> "Grenadier"	MM106	Half Standard	3

EM4 Meadow Mixture for Clay Soils - 2446 m2
Wild Flowers – 20%

- 1.00% Achillea millefolium – Yarrow
- 0.40% Agrimonia eupatoria – Agrimony
- 2.00% Betonica officinalis – Betony
- 3.00% Centaurea nigra – Common Knapweed
- 12.00% Galium verum – Lady's Bedstraw
- 0.40% Geranium pratense – Meadow Crane's-bill
- 0.40% Knautia arvensis – Field Scabious
- 0.20% Lathyrus pratensis – Meadow Vetchling
- 0.20% Leontodon hispidus – Rough Hawkbit
- 2.00% Leucanthemum vulgare – Oxeye Daisy
- 0.60% Medicago lupulina – Black Medick
- 0.80% Primula veris – Cowslip
- 2.00% Prunella vulgaris – Selfheal
- 2.0% Ranunculus acris – Meadow Buttercup
- 0.60% Ranunculus bulbosus – Bulbous Buttercup
- 0.80% Rumex acetosa – Common Sorrel
- 0.20% Silaum silaus – Pepper-saxifrage
- 1.00% Silene flos-cuculi – Ragged Robin
- 0.40% Taraxacum officinale – Dandelion
- 0.80% Vicia cracca – Tufted Vetch

GRASSES – 80%

- 2.60% Agrostis capillaris – Common Bent
- 8.00% Cynosurus cristatus – Crested Dogstail
- 0.40% Deschampsia cespitosa – Tufted Hair-grass (w)
- 1.40% Festuca ovina – Sheep's-fescue
- 6.00% Festuca rubra – Red Fescue
- 0.60% Schedonorus arundinaceus – Tall Fescue (w)
- 1.00% Schedonorus pratensis – Meadow Fescue

EW1 WOODLAND MIXTURE - 1969 m2
to be sown below native buffer whip planting

WILD FLOWERS - 20%.

1.00% *Alliaria petiolata* - Garlic Mustard
1.00% *Allium ursinum* - Ramsons
0.50% *Angelica sylvestris* - Wild Angelica
0.40% *Arctium minus* - Lesser Burdock
4.00% *Digitalis purpurea* - Foxglove
0.80% *Eupatorium cannabinum* - Hemp-agrimony
0.80% *Pimpinella ulmaria* - Meadowsweet
1.60% *Galium album* - Hedge Bedstraw
0.40% *Geum rivale* - Water Avenas
4.00% *Hyacinthoides non-scripta* - Bluebell
0.20% *Iris foetidissima* - Gladdon
1.60% *Prunella vulgaris* - Selfheal
0.40% *Ranunculus acris* - Meadow Buttercup
3.00% *Silene dioica* - Red Campion
1.00% *Vicia cracca* - Tufted Vetch

GRASSES - 80%

4.80% *Agrostis capillaris* - Common Bent
28.00% *Cynosurus cristatus* - Crested Dogstail
6.00% *Dactylis glomerata* - Cocksfoot
1.60% *Deschampsia cespitosa* - Tufted Hair-grass (w)
20.00% *Festuca rubra* - Red Fescue
9.60% *Holcus lanatus* - Yorkshire Fog
6.00% *Poa nemoralis* - Wood Meadow-grass
4.00% *Poa trivialis* - Rough-stalked Meadow-grass

LEGEND	
	EXISTING VEGETATION (TO BE RETAINED)
	EXISTING HEDGING (TO BE RETAINED)
	EXISTING HEDGING (TO BE REMOVED)
	EXISTING VEGETATION (TO BE REMOVED)
	PROPOSED WOODLAND BUFFER WHIP PLANTING - SEED MIXES SOWN UNDER WHIPS
	PROPOSED TREES
	EXISTING TREES TO BE RETAINED (TBR)
	UNMARKED EXISTING TREES TO BE RETAINED (TBR)
	PROPOSED PLANTING BEDS

ELI FLOWERING LAWN MIXTURE - 2610 m2
WILD FLOWERS - 20%
 100% Anthyllis vulneraria - Kidney Vetch
 100% Betonica officinalis - Betony
 160% Centaurea nigra - Common Knapweed
 100% Galium album - Hedge Bedstraw
 140% Leucanthemum vulgare - Oxeye Daisy
 0.10% Lotus corniculatus - Birdsfoot Trefoil
 0.70% Medicago lupulina - Black Medick
 2.40% Plantago lanceolata - Ribwort Plantain
 100% Primula veris - Cowslip
 120% Prunella vulgaris - Selfheal
 160% Ranunculus acris - Meadow Buttercup
 100% Silene vulgaris - Bladder Campion
 0.40% Taraxacum officinale - Dandelion
 5.60% Trifolium repens - White Clover (ag)
GRASSES - 80%
 8.00% Agrostis capillaris - Common Bent
 28.00% Cynosurus cristatus - Crested Dogstail
 24.00% Festuca rubra - Red Fescue
 0.00% Phleum bertolonii - Smaller Cat's-tail
 16.00% Poa pratensis - Smooth-stalked Meadow-grass

**EMS MEADOW MIXTURE FOR WETLANDS – 441 m2
WILD FLOWERS 20%**

- 100% Achillea Millefolium – Yarrow
- 0.40% Agrimonia eupatoria – Agrimony
- 0.10% Angelica sylvestris – Wild Angelica
- 2.00% Betonica officinalis – Betony
- 3.00% Centaurea nigra – Common Knapweed
- 0.80% Filipendula ulmaria – Meadowsweet
- 16.0% Galium verum – Lady's Bedstraw
- 0.40% Lathyrus pratensis – Meadow Vetchling
- 0.20% Leontodon hispidus – Rough Hawkbit
- 16.0% Leucanthemum vulgare – Oxeye Daisy (Moon Daisy)
- 0.20% Lotus corniculatus – Birdsfoot Trefoil
- 0.10% Lotus pedunculatus – Greater Birdsfoot Trefoil
- 0.40% Plantago lanceolata – Ribwort Plantain
- 2.00% Primula veris – Cowslip
- 2.00% Prunella vulgaris – Selfheal
- 2.00% Ranunculus acris – Meadow Buttercup
- 0.60% Rumex acetosa – Common Sorrel
- 100% Silene flos-cuculi – Ragged Robin
- 0.40% Taraxacum officinale – Dandelion
- 100% Vicia cracca – Tufted Vetch

GRASSES 80%

- 8.00% Agrostis capillaris – Common Bent
- 4.80% Carex echinata – Star Sedge (w)
- 36.00% Cynosurus cristatus – Crested Dogstail
- 3.20% Deschampsia cespitosa – Tufted Hair-grass (w)
- 20.00% Festuca rubra – Red Fescue
- 16.0% Phleum bertolonii – Smaller Cat's-tail (w)
- 6.40% Poa pratensis – Smooth-stalked Meadow-grass

EHI HEDGEROW MIXTURE - 1557 m2
to be sown below native buffer whip planting

WILD FLOWERS - 20%

- 0.9% Achillea millefolium - Yarrow
- 0.4% Agrimonia eupatoria - Agrimony
- 0.4% Alliaria petiolata - Garlic Mustard
- 0.4% Arctium minus - Lesser Burdock
- 0.2% Centaurea nigra - Common Knopweed
- 0.4% Chaerophyllum temulum - Rough Chervil
- 0.6% Cruciata laevipes - Crosswort
- 0.1% Daucus carota - Wild Carrot
- 0.2% Galium album - Hedge Bedstraw
- 0.2% Lathyrus pratensis - Meadow Vetchling
- 0.4% Lathyrus sylvestris - Narrow-leaved Everlasting-pea
- 0.1% Leucanthemum vulgare - Oxeye Daisy
- 0.2% Origanum vulgare - Wild Marjoram
- 0.1% Plantago lanceolata - Ribwort Plantain
- 0.8% Primula veris - Cowslip
- 0.2% Prunella vulgaris - Selfheal
- 0.2% Ranunculus acris - Meadow Buttercup
- 0.2% Silene dioica - Red Campion
- 0.1% Silene vulgaris - Bladder Campion
- 0.1% Stachys sylvatica - Hedge Woundwort
- 0.8% Torilis japonica - Upright Hedge-parsley
- 0.4% Vicia cracca - Tufted Vetch

GRASSES - 80%

- 4.80% Agrostis capillaris - Common Bent
- 28.00% Cynosurus cristatus - Crested Dogstail
- 6.00% Dactylis glomerata - Cocksfoot
- 1.60% Deschampsia cespitosa - Tufted Hair-grass (w)
- 20.00% Festuca rubra - Red Fescue
- 9.60% Holcus lanatus - Yorkshire Fog
- 6.00% Poa nemoralis - Wood Meadow-grass
- 0.00% Poa trivialis - Rough-stalked Meadow-grass



MATERIALITY

HARD LANDSCAPING

- LOCALLY QUARRIED STONE
- NATURAL MATERIALS
- PERMEABLE SURFACES
- MUTED TONES REFLECT LOCAL CHARACTER
- SUSTAINABLE MATERIALS



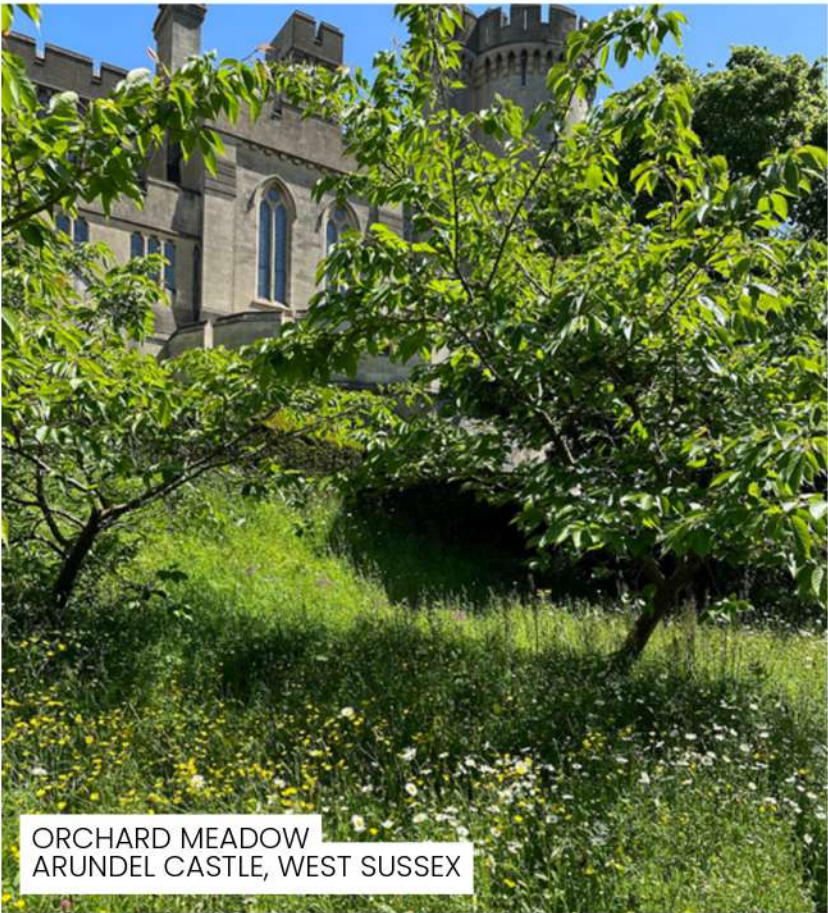
MATERIALITY

SOFT LANDSCAPING

- ⌘ LOCALLY QUARRIED STONE
- ⌘ NATURAL MATERIALS
- ⌘ PERMEABLE SURFACES
- ⌘ MUTED TONES REFLECT LOCAL CHARACTER
- ⌘ SUSTAINABLE MATERIALS



GREEN OUTBUILDING ROOF
EAST SUSSEX



ORCHARD MEADOW
ARUNDEL CASTLE, WEST SUSSEX



RAIN GARDEN
LOCKSHILL, PORTSLADE



NATIVE WOODLAND BUFFER
GRAVETYE MANOR, EAST GRINSTEAD



WILDLIFE POND
ARUNDEL CASTLE, WEST SUSSEX



NATURAL SWIMMING POOL
HIGHLANDS, UCKFIELD

PLANTING STRATEGY

SUNKEN GARDEN

Inspired by livestock tracks that run through lowland heathland habitats, our proposed planting for the sunken garden features native plants and related cultivars that represent authentic plant communities found in the South Downs. The palette includes edible plants such as Thyme and Salad Burnet, alongside evergreens such as Juniper and Pinus, with seasonal flowers and pollinator friendly, long-flowering species for a beautiful display that blends with the wider landscape and supports local wildlife.



Thymus serpyllum
Wild Thyme
June–Sept



Molinia caerulea subsp.
arundinacea 'Transparent'
Purple Moor Grass
July–Nov



Festuca rubra
Red Fescue
May–July



Calluna vulgaris
Heather
July–Sept



Pulsatilla vulgaris
Pasque flower
March–May



Sanguisorba minor
Salad Burnet
May–Sept



Phyteuma orbiculare
Pride of Sussex
June–August



Echium vulgare
Vipers Bugloss
June–September



Juniperus communis
Juniper
Evergreen



Pinus mugo
Mountain Pine
Evergreen

PLANTING STRATEGY

ORCHARD AND MEADOWS

Representing themes of movement and transition, the meadow and orchard planting is inspired by edge habitat and coppiced woodland that supplied fuel for the historic hammer ponds that once powered the iron industry across West Sussex. Including seasonally transitional species such as Bluebells, alongside coppiced Hazel and native wildflowers, the planting is a biodiverse mosaic of grassland and woodland habitat.



Rumex acetosa
Sorrel
May-June



Betonica officinalis
Betony
June-Aug



Cynosurus cristatus
Crested dog's-tail
June-July



Ranunculus acris
Meadow buttercup
June-Aug



Centaurea nigra
Common knapweed
June-Sept



Festuca rubra
Red fescue
June-July



Galium verum
Lady's bedstraw
June-Sept



Prunella vulgaris
Self-heal
June-Sept



Malus domestica sp
Apple
April-June



Agrostis capillaris
Common bent
June-Aug



Crataegus monogyna
Hawthorn
May



Silene flos-cuculi
Ragged-robin
May-July

PLANTING STRATEGY

BOUNDARY SCREENING

Drawing inspiration from the ancient woodlands within the South Downs and the restoration of woodland within Steyning Downland Scheme, the woodland boundary will create screening to neighbouring properties with mature native trees and understory. Woodland edge species thrive at the front of the boundary, and provide seasonal colour throughout the year whilst also increasing biodiversity and supporting local wildlife such as butterflies and hoverflies.



Cynosurus cristatus
Crested dog's-tail
June-July



Crataegus monogyna
Hawthorn
April-May



Primula veris
Cowslip
April



Quercus ilex
Holm Oak
Jan-Dec



Digitalis purpurea
Foxglove
June-Sept



Carpinus betulus
Hornbeam
March-Nov



Tilia cordata
Small-leaved Lime
March-Nov



Hyacinthoides non-scripta
Bluebell
April-May



Festuca rubra
Red fescue
June-July



Achillea millefolium
Yarrow
June-Sept

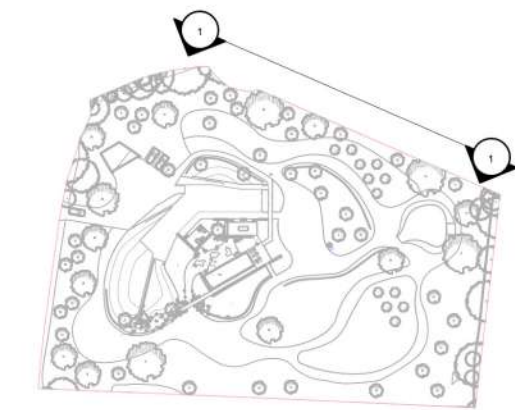


Corylus avellana
Hazel
Jan-March



Ilex aquifolium
Common Holly
Jan-Dec

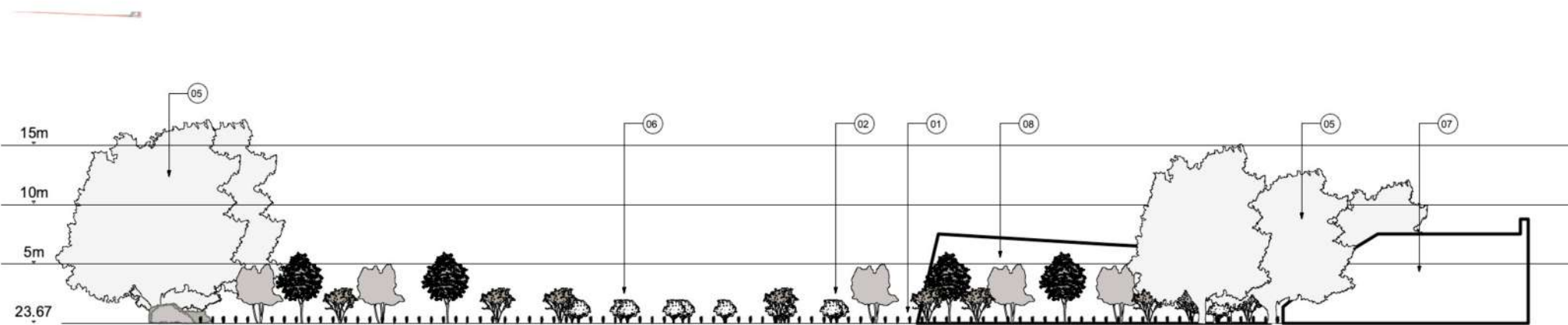
BOUNDARY SCREENING ELEVATION – 10 YEAR PLAN



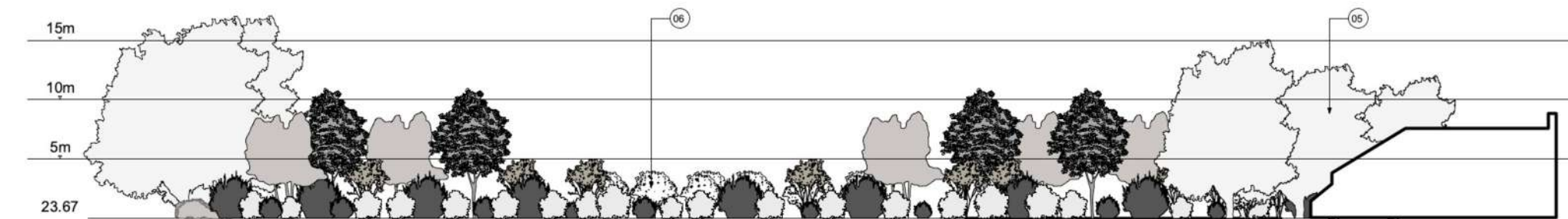
ELEVATION KEY;

- 01** Tree and shrub planting within matrix at 1m centres
- 02** Proposed larger stock trees -
Acer campestre 3-4m, Betula pendula 4-5m, Corylus avellana 2.5-3m, Crataegus monogyna 2.5-3m, Carpinus betulus 3-4m, Prunus avium 3-4m
- 03** Established tree and shrub matrix planting
- 04** Trees originally planted at larger stock size create screening of boundary up to 12m height
- 05** Existing mature trees
- 06** Proposed larger stock fruit trees
- 07** Sunningdale
- 08** Scarp House

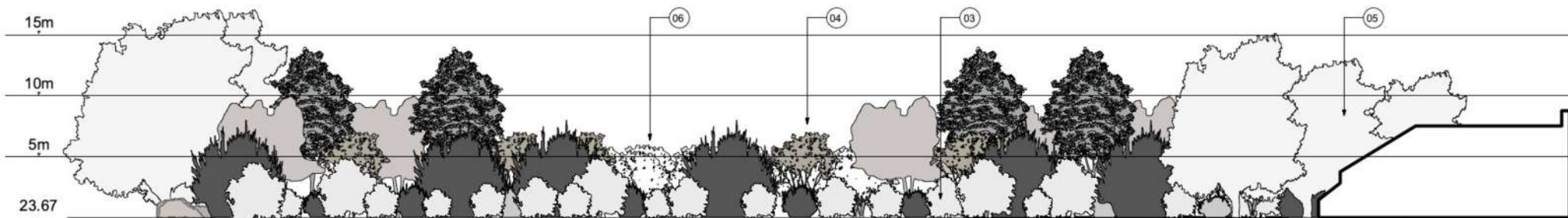
NOTE: Established tree and shrub sizes shown are indicative only



1 YEAR 1 ELEVATION
Scale: 1:250



2 YEAR 5 ELEVATION
Scale: 1:250



3 YEAR 10 ELEVATION
Scale: 1:250

STAGE 2 OUTCOMES

DETAILED ARCHITECTURAL REVIEW AND ZONING OF THE PROPOSED SCARP FORM, FORMALISING THE GENERAL ARRANGEMENTS & COORDINATING THE PROPOSALS WITH THE FINAL ENERGY CONSULTATION TO RATIONALISE LOCATION OF THE EXTERNAL LOUVRES AND PROPOSED PLANT REQUIREMENTS TO CONFIRM OPTIMUM EFFICIENCY OF THE PROPOSED DWELLING

FABRIC FIRST DESIGN APPROACH DELIVERING ENERGY EFFICIENCY AND PERFORMANCE

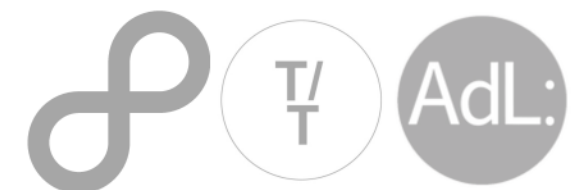
ZERO CARBON READY HOUSE DELIVERING ONSITE ENERGY GENERATION CONFIRMED THROUGH ENERGY MODELLING AND DATA

A SUSTAINABLE DESIGN AND SPECIFIC CONSIDERATION OF FUTURE CONSTRUCTION METHODOLOGY INCORPORATING PASSIVHAUS PRINCIPLES AND USE OF LOCALLY SOURCED MATERIALS, LIKE FLINT AND TIMBER INTEGRATED INTO THE CORE DESIGN PRINCIPLES

BIO-DIVERSE ROOFING & WATER HARVESTING CONTRIBUTING POSITIVELY TO THE WATER NEUTRALITY OF THE PROPOSED DWELLING

BIODIVERSITY NETT GAIN POTENTIAL OF 16.74 %

LANDSCAPE DESIGN & METHODOLOGY APPROVED BY DRP



DETAILED DESIGN & COORDINATION WITH ENERGY CONSULTANTS RECOMMENDATIONS

The design strategy prioritised a **"Fabric First" approach**, utilising **PassivHaus design principles** to minimise energy demand before employing low-carbon technologies.

To mitigate solar gain without active cooling in a PassivHaus, glazing is carefully chosen based on the dwellings orientation.

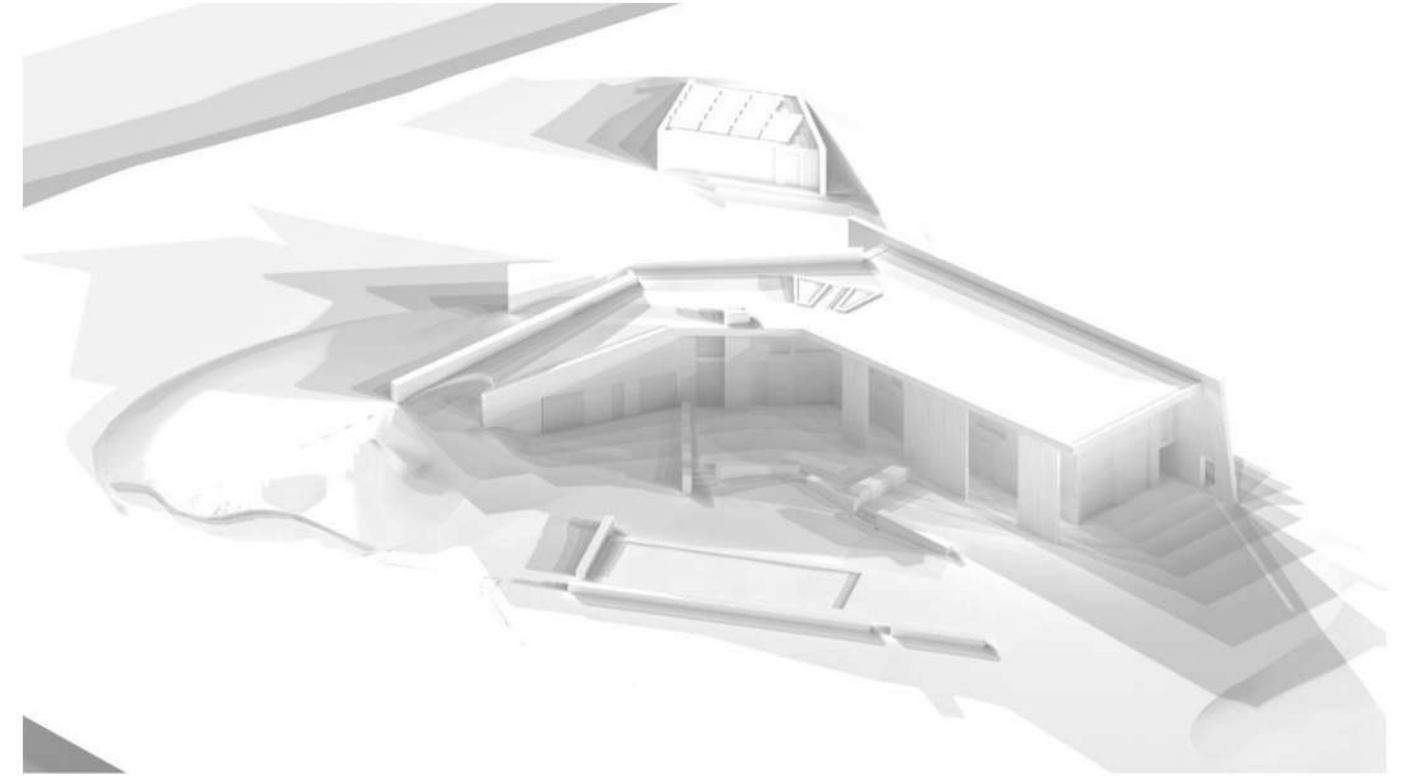
Modelling confirms that all occupied zones, including bedrooms and living areas, are currently projected to pass both CIBSE TM59 Criteria A and B for overheating risk. **Triple Glazed (Low-E) units** with insulated frames have been chosen, positioned and orientated to optimise solar gains while minimising heat loss.

On the south and east facing facades **solar glazing** will be specified to further manage the amount of solar energy entering the building.

The overall energy strategy of this design follows the **"Be Lean, Be Clean, Be Green" hierarchy**. The proposed building fabric is designed to significantly exceed the requirements of Approved Document L1 2021, incorporating high standards of thermal insulation and air tightness. Energy Strategy (Approved Document L1 2021).

To meet the residual heating and hot water demand, a Ground Source Heat Pump (**GSHP**) alongside photovoltaic arrays (**PV's**) on the garage roof form have been carefully integrated into the architectural and landscape designs.

Compliance with Approved Document O has been assessed using CIBSE TM59 dynamic thermal modelling methodology. The assessment utilises the Southampton CIBSE DSY1 2020s weather file. The strategy relies on natural ventilation via openable windows and doors, supplemented by mechanical ventilation with heat recovery (**MVHR**) providing a continuous supply of fresh air at 0.6 l/s/m², maintaining good indoor air quality with minimal energy loss.



CLAY MODELLING

The design balances :

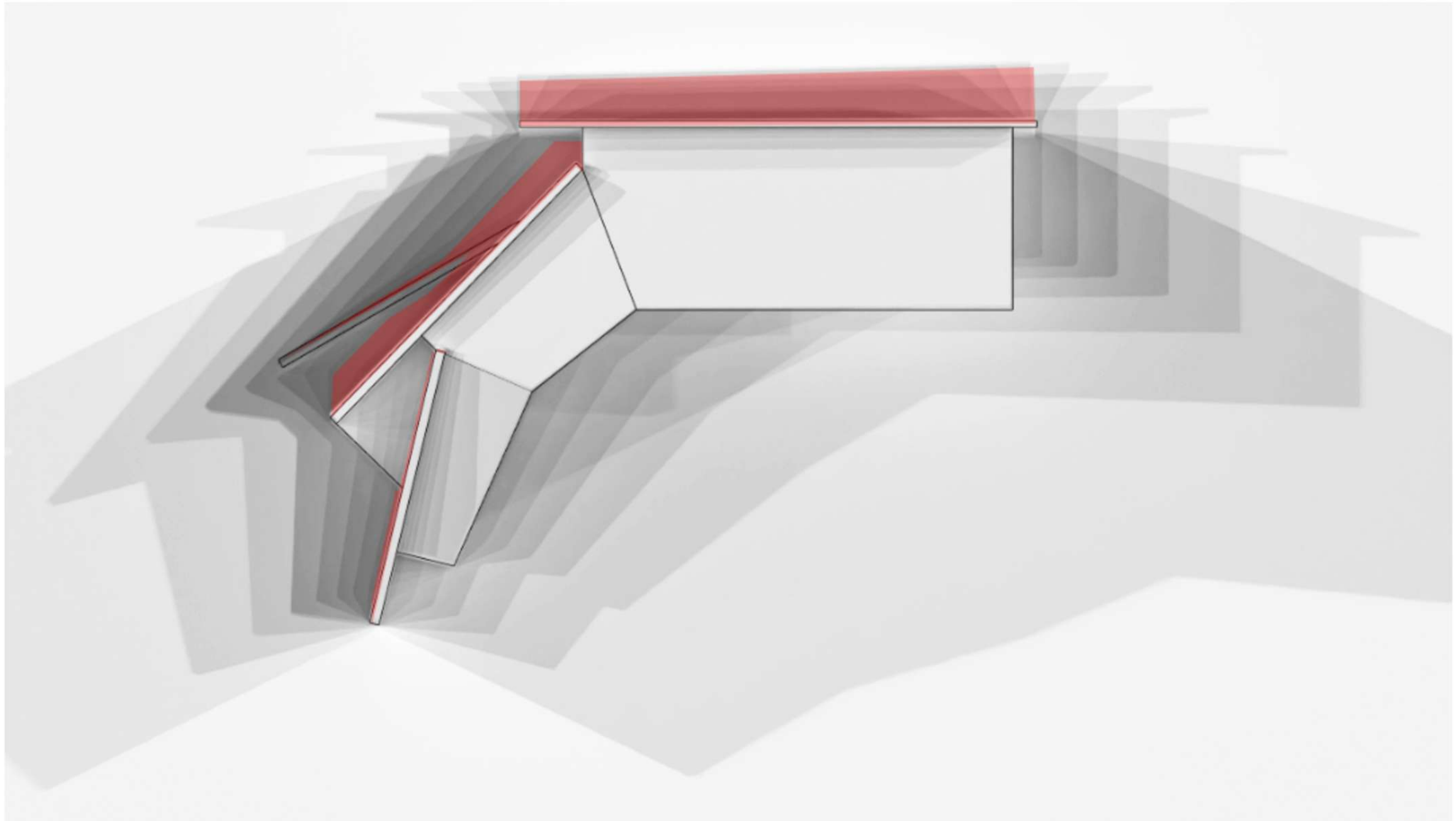
1. Heat gain in winter.
2. Overheating prevention in summer.
3. Daylight quality.
4. Heat loss reduction all year round.

Overall advantages confirmed through the daylight modelling :

1. Lower heating and cooling energy use.
2. Improved occupant comfort.
3. Optimum daylight utilisation.
4. Supporting net-zero and Passivhaus performance goals.

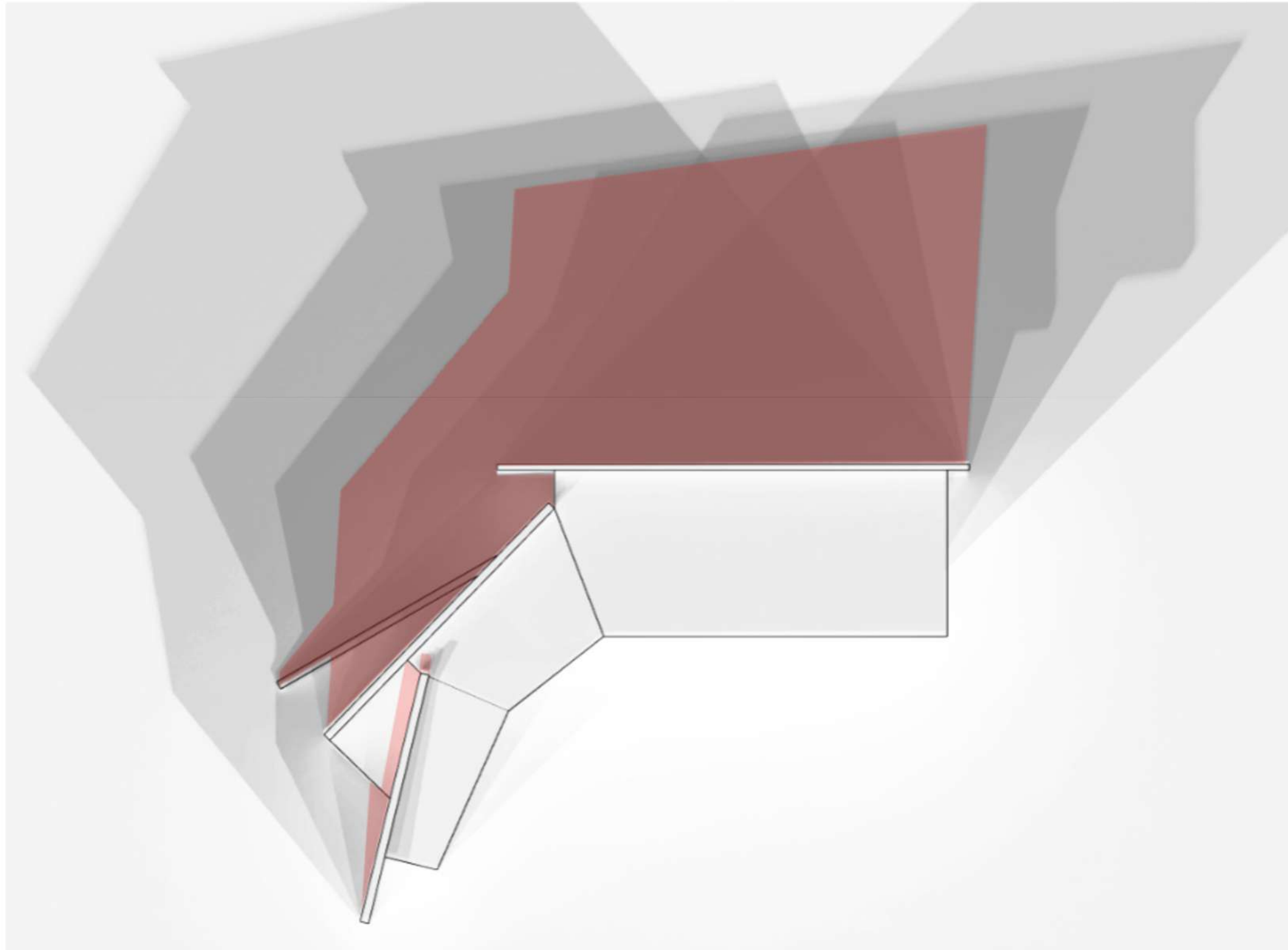
DETAILED DESIGN & COORDINATION WITH LANDSCAPE AND ENERGY CONSULTANTS RECOMMENDATIONS

WINTER SOLSTICE SHADOW STUDY



DETAILED DESIGN & COORDINATION WITH LANDSCAPE AND ENERGY CONSULTANTS RECOMMENDATIONS

SUMMER SOLSTICE SHADOW STUDY



RENDER SHOWING RELATIONSHIP OF THE PROPOSED DWELLING WITH ITS IMMEDIATE
RESIDENTIAL CURTILAGE & PROPOSED GARDEN AND OUTDOOR LIVING SPACES



SUSTAINABILITY & EFFICIENCY

PLEASE REFER TO ADDENDUM ENERGY EFFICIENCY
METRICS SUPPLIED BY ACHIEVE GREEN



RESULTS – CARBON REDUCTION

Metric	Performance
Baseline Emissions (Part L 2021)	4.4 Tonnes CO2 per annum
Proposed Emissions	0.8 Tonnes CO2 per annum
Total Carbon Reduction	77.90%

A COMPARISON OF THE PROPOSED FABRIC SPECIFICATION AGAINST THE BUILDING REGULATIONS BASELINE IS DETAILED BELOW

Element	Proposed Specification	L1 2021 Requirement
External Wall U-Value	0.12 W/m2K	0.26 W/m2K
Floor U-Value	0.12 W/m2K	0.18 W/m2K
Roof U-Value	0.12 W/m2K	0.16 W/m2K
Glazing U-Value	0.70 W/m2K	1.60 W/m2K
Air Permeability	3 m3/h.m2	8 m3/h.m2
Thermal Bridging	Y = 0.04	Y = 0.15

STAGE 3

GENERAL ARRANGEMENT PLANS,
ELEVATIONS & RENDERS



GENERAL ARRANGEMENT

BASEMENT



SCALE 1:200

0m 2 4 10 20

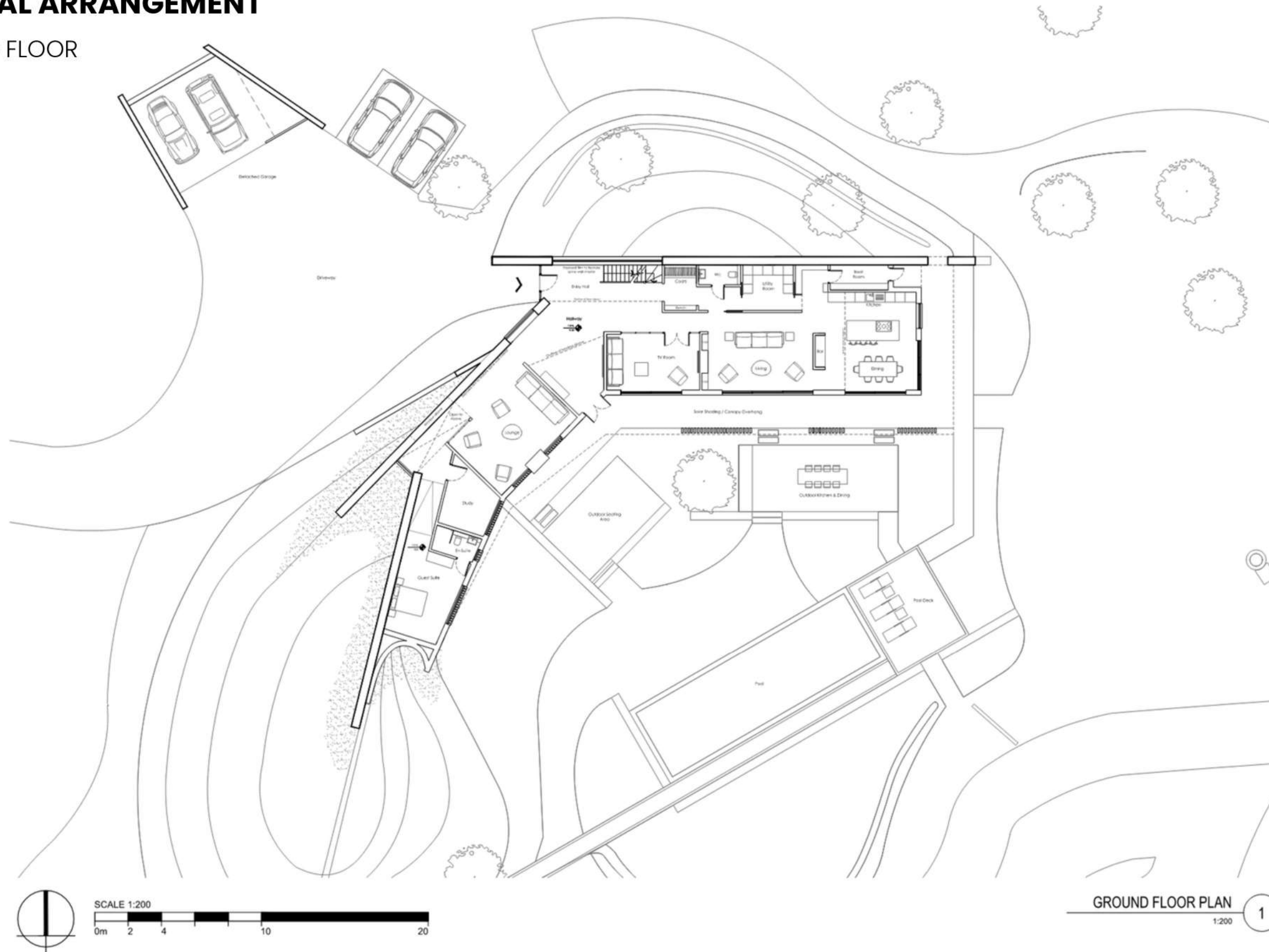
BASEMENT PLAN

1:200

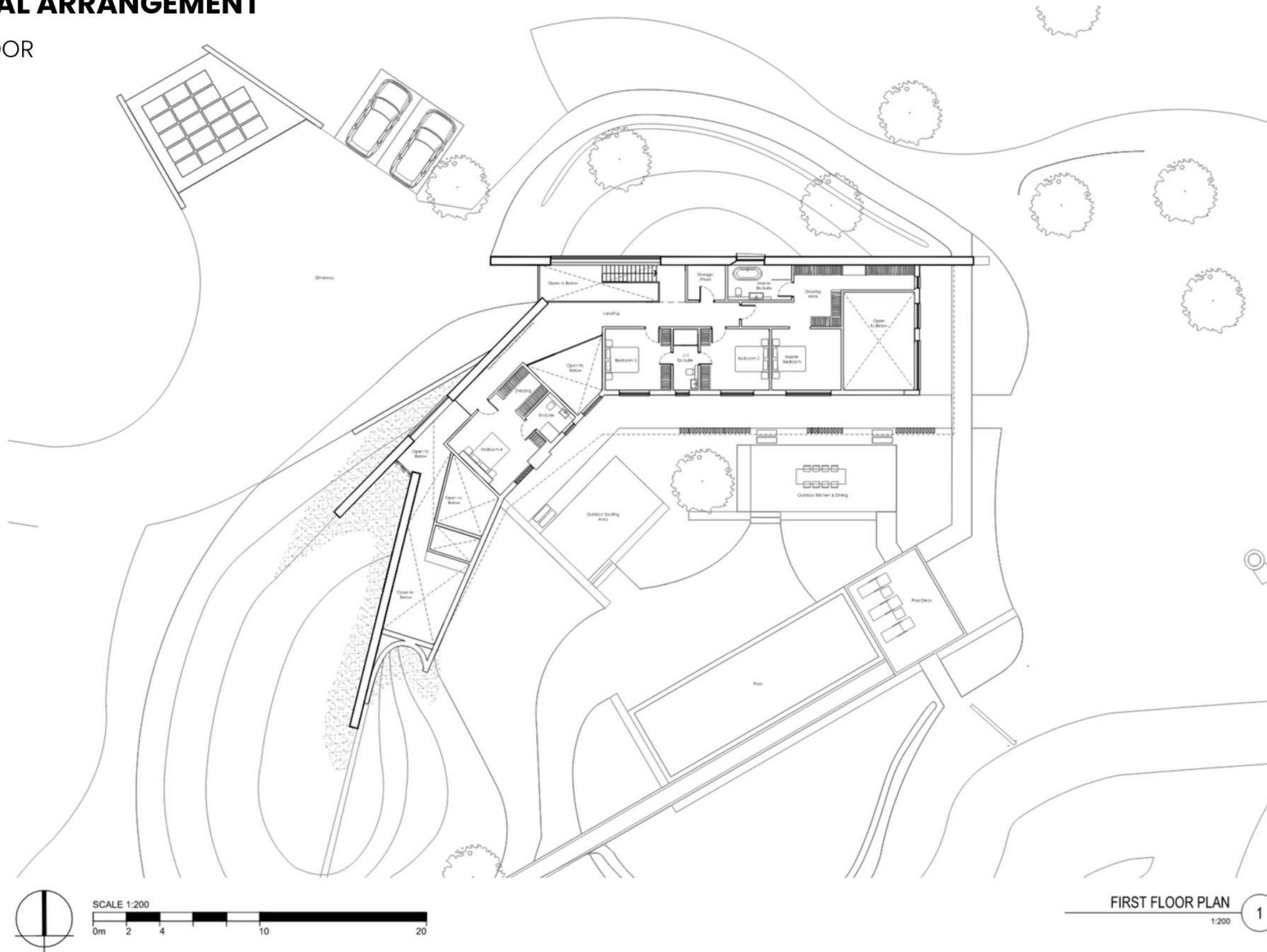
1

GENERAL ARRANGEMENT

GROUND FLOOR



FIRST FLOOR

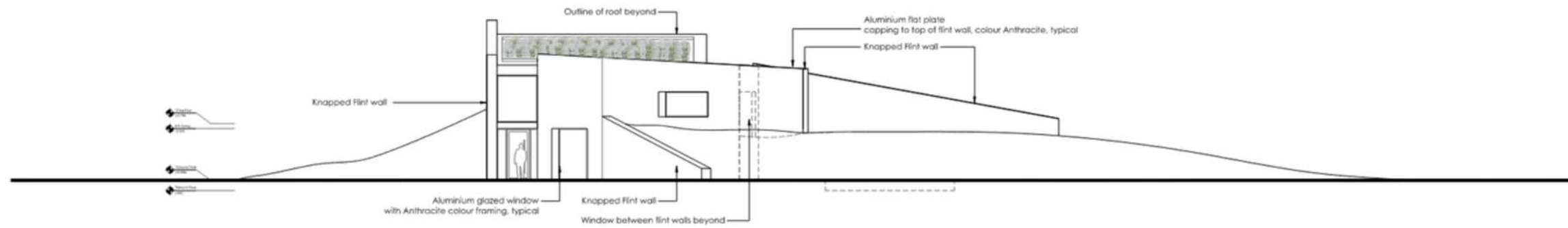


ROOF



ELEVATIONS

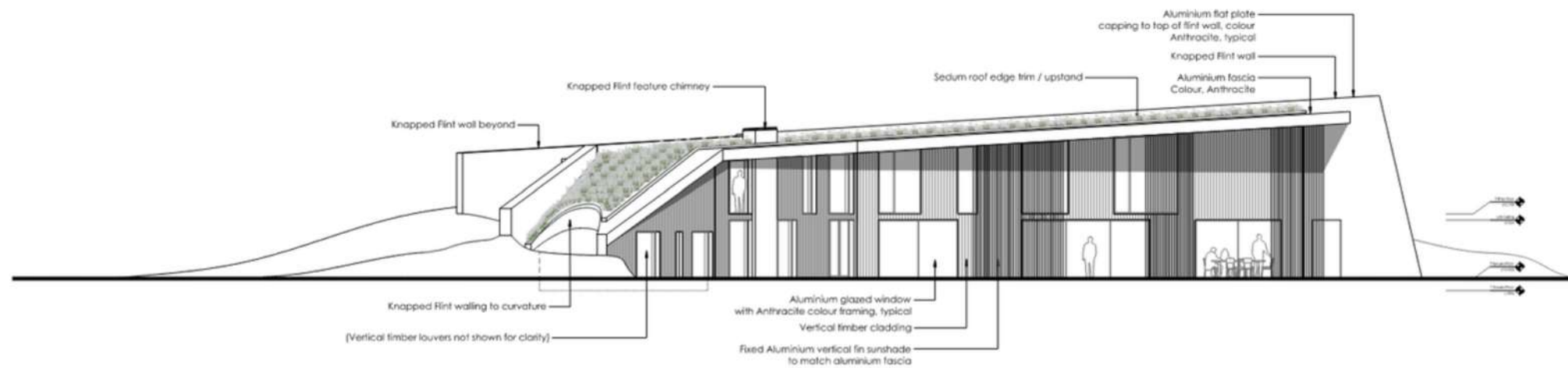
WEST & SOUTH



WEST ELEVATION

1:200

2



SOUTH ELEVATION

1:200

1

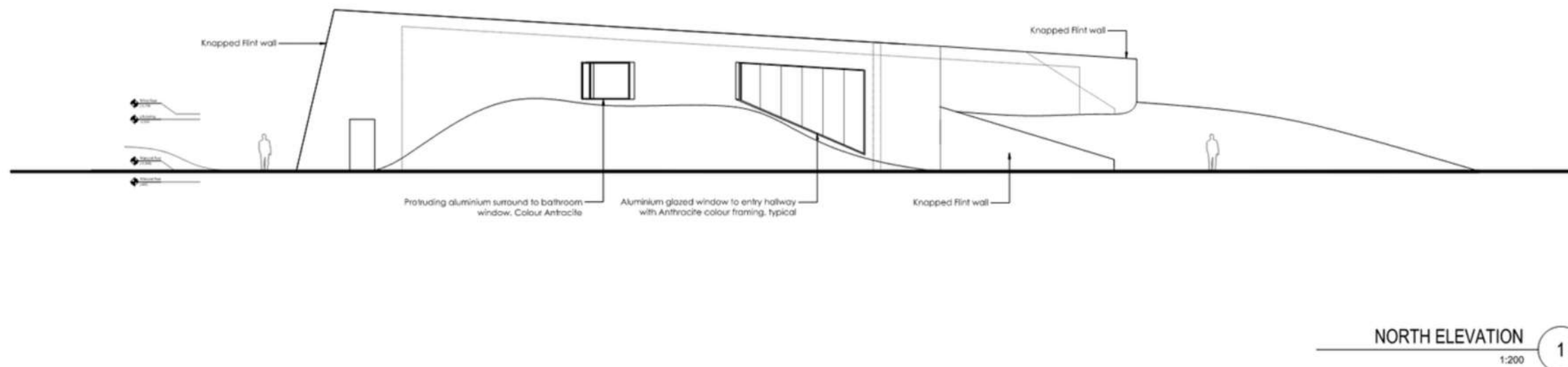
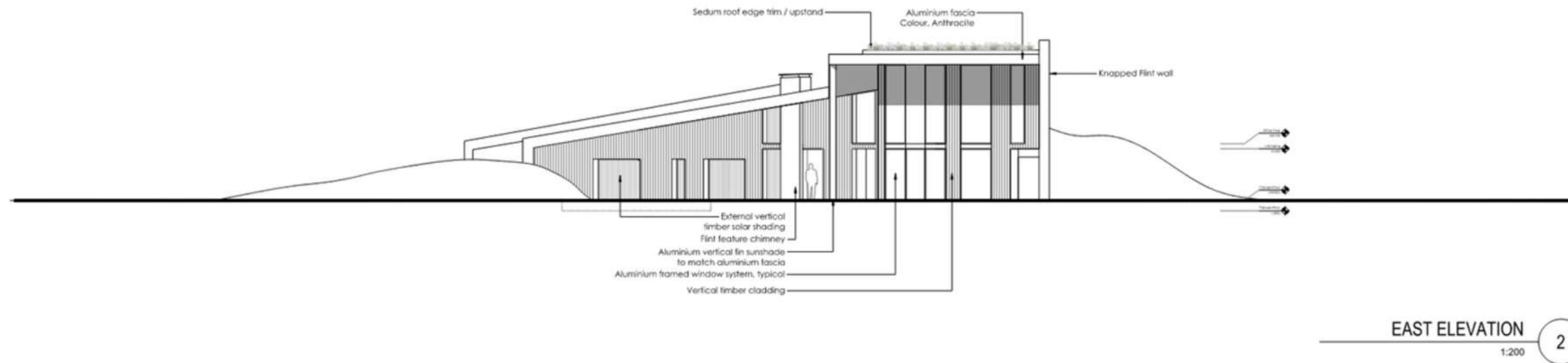


SCALE 1:200

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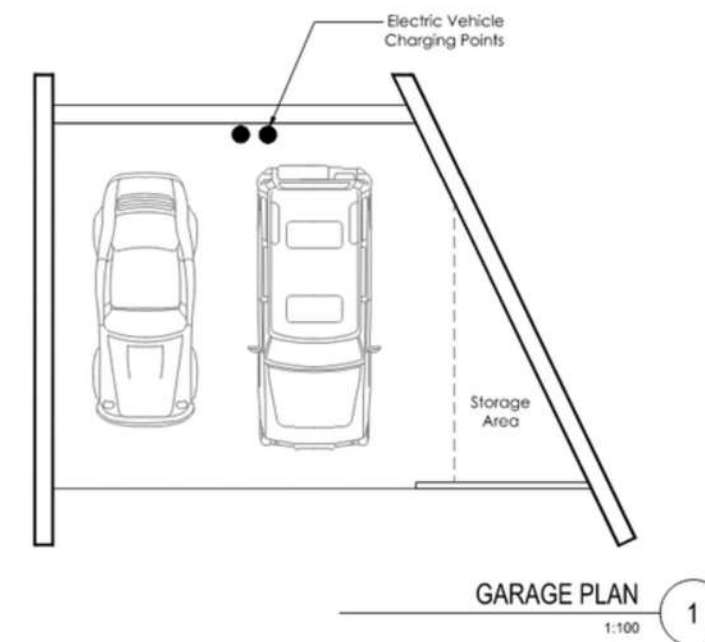
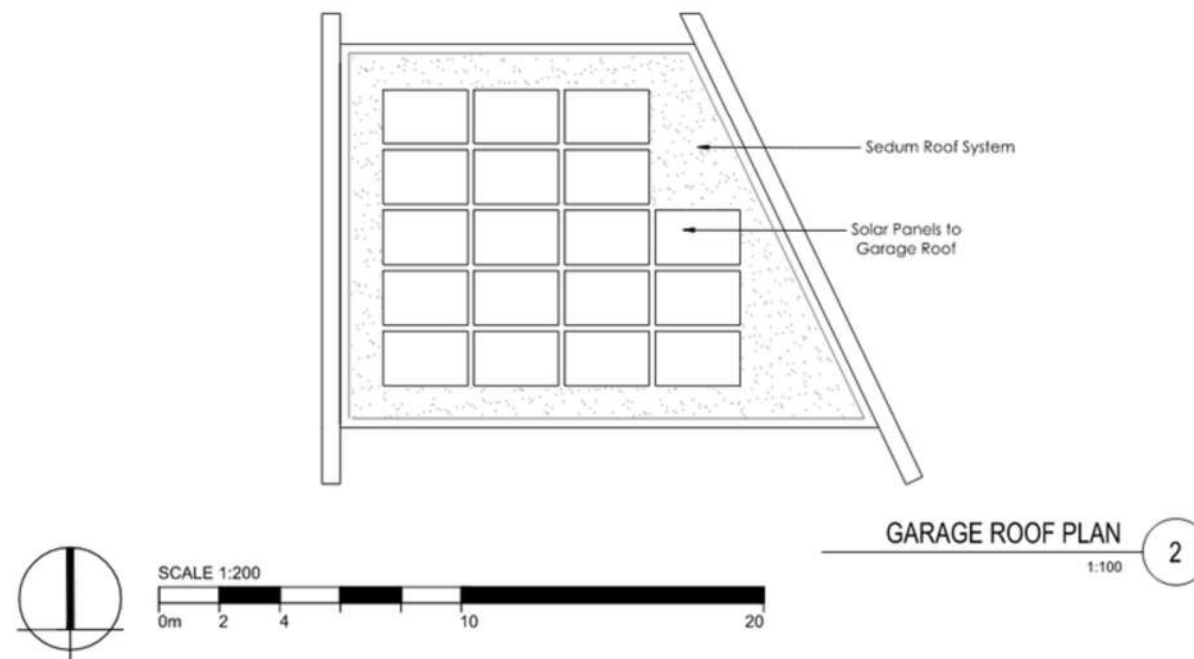
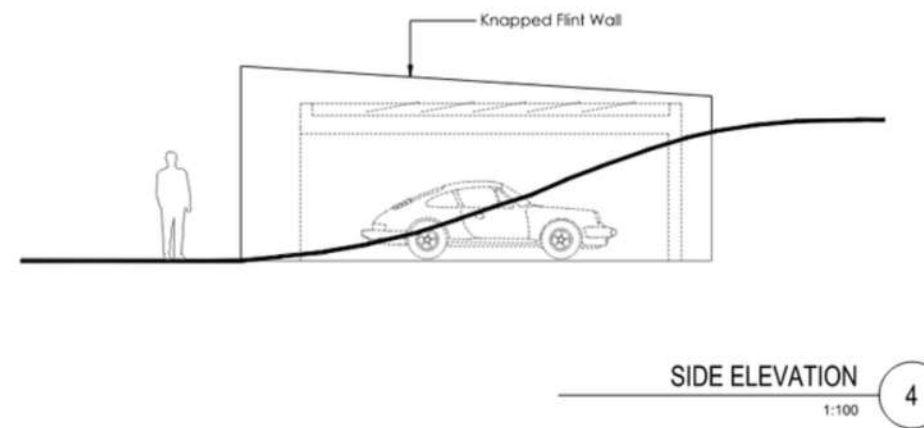
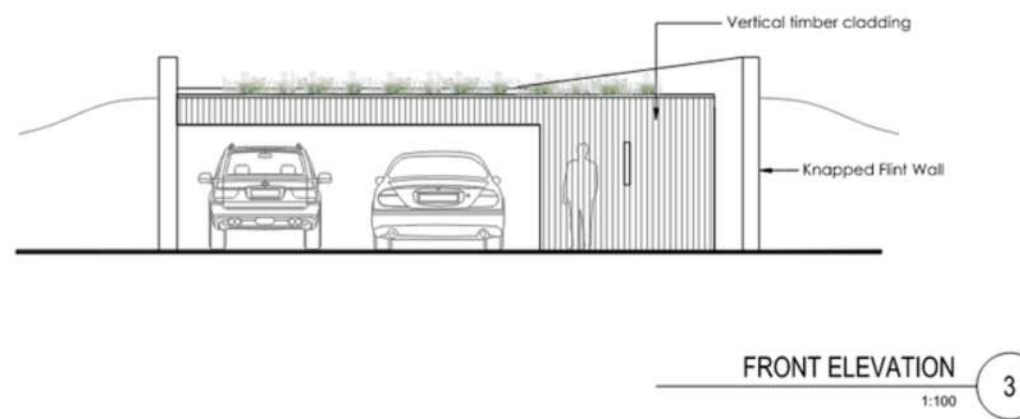
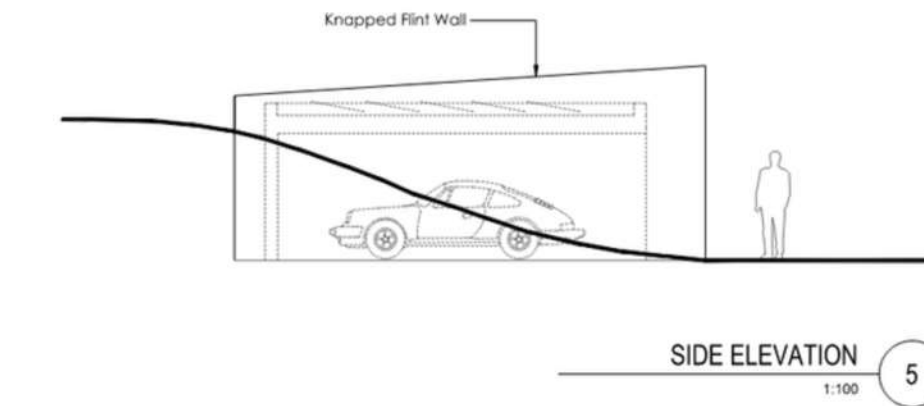
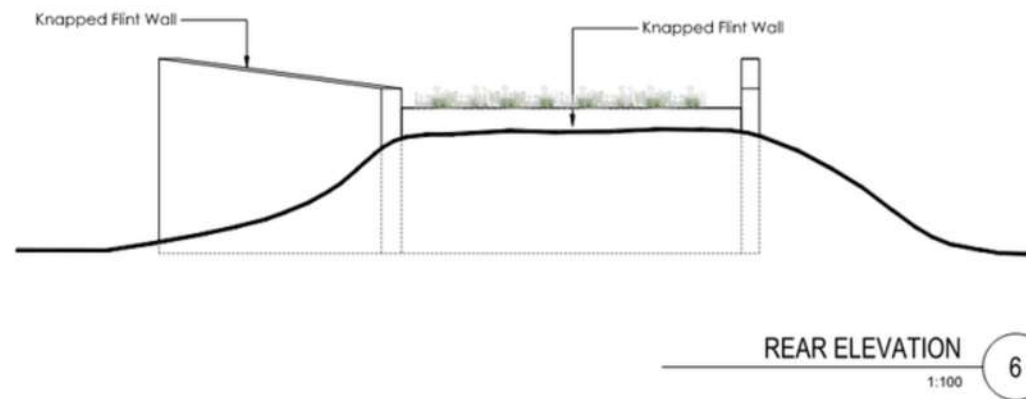
ELEVATIONS

EAST & NORTH



ELEVATIONS & PLANS

GARAGE



TYPICAL SECTION



OUR PROPOSAL

3D VISUALS



OUR PROPOSAL

3D VISUALS



OUR PROPOSAL

3D VISUALS



OUR PROPOSAL

3D VISUALS



OUR PROPOSAL

3D VISUALS



ACCOMMODATION SCHEDULE & PROPOSED GIA

FLOOR	ROOM
Basement	Media/cinema room
	Utility Room
	Plant Room
Ground	Hall, bootroom & utility
	Kitchen/Dining
	Snug
	Lounge
	Study
	Guest Suite

FLOOR	ROOM
First	Bedroom 1
	Bedroom 2
	Bedroom 3
	Landing
	Linen Store
	Master Suite & Dressing Room

Ground Floor GIA – 259 Sq.m
 First Floor GIA – 172 Sq.m
 Basement GIA – 96 Sq.m

Total: 527 Sq.m

(Not including void space at Level 1
 but including Stair well)

GENERAL ARRANGEMENT

ARCHITECTURAL & LANDSCAPE DESIGN KEY RESPONSES TO PREVIOUS DRP CONSULTATIONS AHEAD OF PREPARING THIS APPLICATION

Our clients James and Anna, are truly passionate about innovative architecture. As a team we have embarked on a 12 month journey beginning with early conversations , comprehensive research, and many design team meetings where a unique concept has evolved into what we feel is a truly exceptional design. A concept that integrates the **Scarp house** with a bold vision for a carefully considered growers garden and a home that emerges gently from its wider landscape, which aligns with the clients personal ethos of “garden to table” living, longevity, health and wellness and architecture’s perceived impacts on ones overall wellbeing. It also allows them to build their first **zero carbon ready house** thereby making further positive impacts on the global energy crisis.

Rationalising how the future inhabitants might relax and live within the proposed spaces as well as directly connect them to the natural landscape beyond all whilst delivering a comfortable healthy living environment ,designed for modern sustainable living has been this design teams pleasure.

The Scarp House started truly taking shape when we presented our initial concept sketches to our clients and discovered his specific connection to the local landscape. around Steyning. Since childhood he has enjoyed walking along the nearby scarp footslopes with his dogs and it is where he often goes to relax.

The intention for the built form to **read visually as a scarp footslope** was as much a response to our clients lifelong connection with the nearby landscapes of the South Downs as well as a nod to the emerging forms viewed from the site itself as evidenced in the early LVIA research.

The proposed location of the Scarp form has been thoroughly analysed and tested by the appointed Energy Consultants and the wider professional team. Evidenced through meticulous site analysis and contextual exploration of the Scarp form within its proposed setting. The preceding Design Review Panels were helpful in confirming their overarching support for the Scarp Concept and driving key considerations for detailing the design.

All this work is outlined in the various surveys, reports and documents supporting this application.

Scarp House blends beauty, function and storytelling.It takes specific inspiration from the naturally eroded landscapes of the nearby South Downs. Key contextual relationships with neighbours and it’s wider views have been carefully considered and analysed. The tapering form drops down to its lowest point at the SW corner of the proposed dwelling, this allows it to merge with the mounded landscape and the lowland of the existing site,thereby limiting its impact on the adjacent neighbour, responding meaningfully to its surroundings, and mimicking the point at which a scarp or natural foot slope would merge with its gentler surrounding landscape.

This form seeks to enhance its surroundings without overpowering it, it isn’t intentionally hidden but rather depending on the view point either gently rises out of or merges with the lowland.

Further collaboration with Achieve Green, the appointed Energy Consultant has enabled a more integrated approach to renewable energy, through the relocating of the proposed PV’s within the sedum roof from the main roof to the garage structure and the inclusion of the GSHP’s within the low lying grass mounds and wider landscape we have created a structure that will energy generating for its future custodians.

.Rain water harvesting and seasonal collection of storm water in purpose designed swales will act as habitats for many species, as well as the exceptional landscape design created by Joe Perkins and his team will allow for the site to impact poistively on the ecology of the local area well into the future.

SCARP HOUSE

3D VISUALS





Landscape Architects
Joe Perkins Design



Architects
Atelier De Linde



Architects
Tony Trifiletti