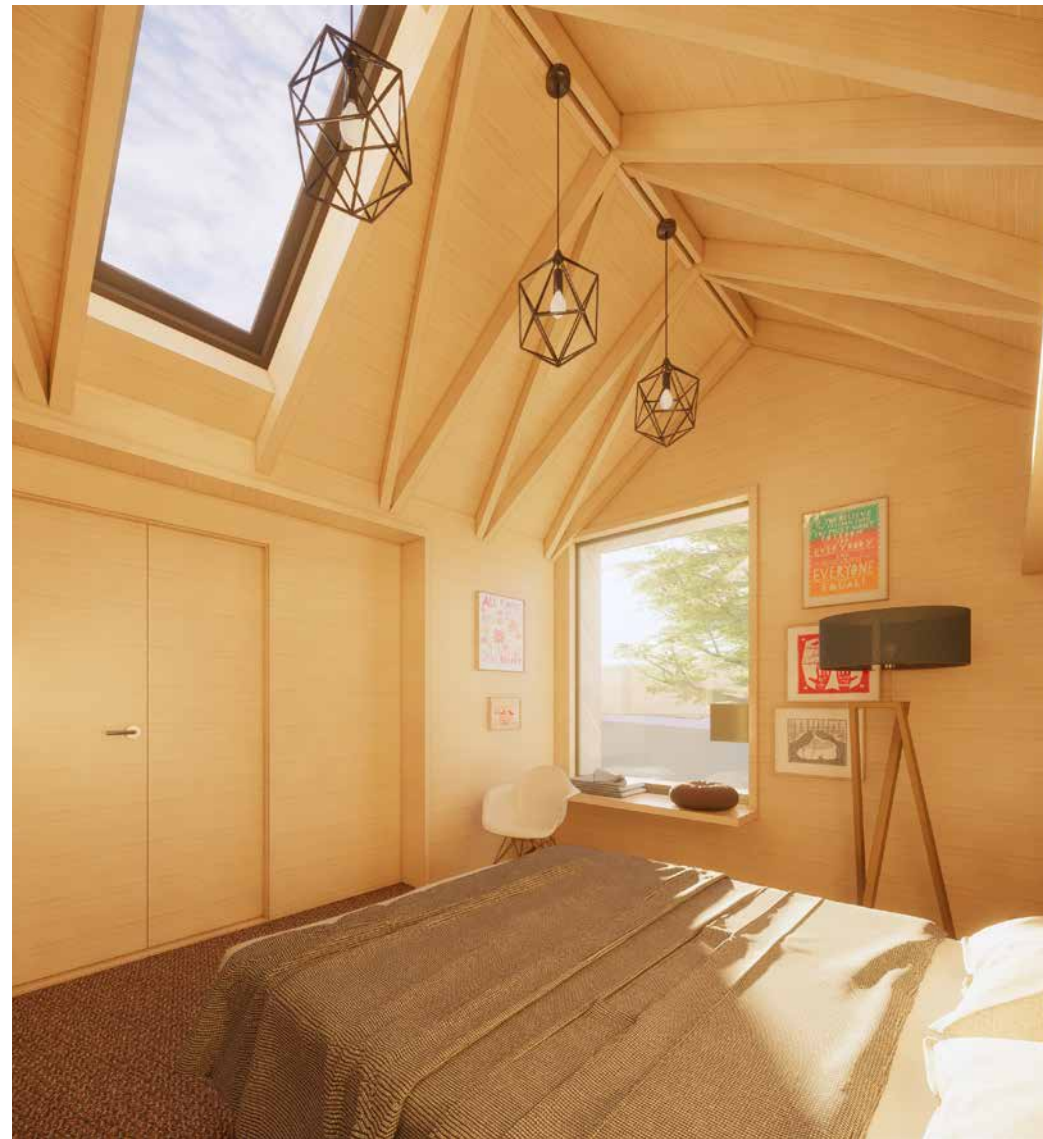




The first floor landing showing the lightweight stair allowing views and light down to the ground floor



The vaulted ceiling, roof window and window seat in the masterbedroom



The extensions gradually increase in height and relate directly to the garden



Bedroom 3's bay window becomes a window seat



The living room now enjoys a view across the meadow grass roof of the kitchen

Frameless Glass Bay Window

Key features of the proposals with precedents

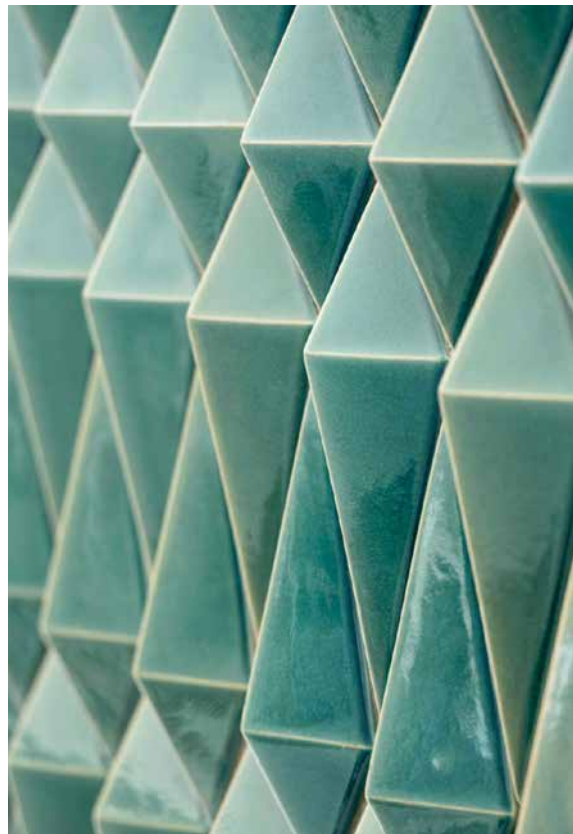
The design references the bay windows which are such a common feature of the rest of Lanchester Road but re-interprets them as large frameless glass bays.

The bay is echoed above and below by the large dormer and ground floor window. Each of these is occupied by window seats and become a canvas for digital art. Alongside some visualisations we have included photos of completed examples.



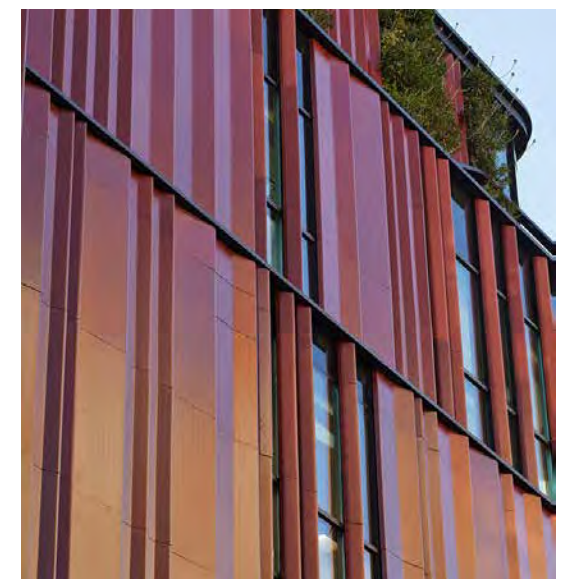
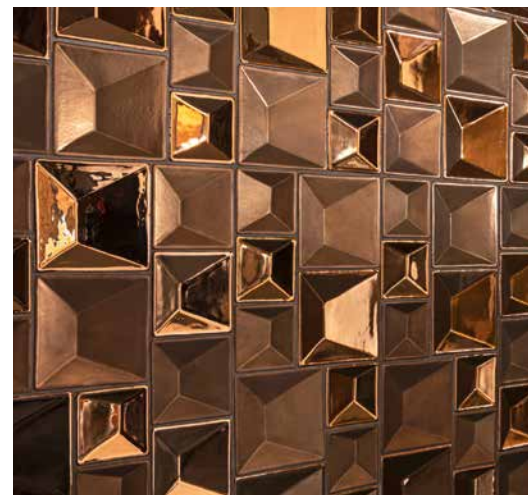
Glazed Decorative Tiles

Key features of the proposals with precedents



The cladding of the north facing ground floor presents particular challenges. The lack of direct sun, the long distance from the pavement and the narrow frontage combine to make this potentially a dark, overshadowed and unwelcoming space. To overcome this we propose a glazed ceramic tile with a 3 dimensional faceted form that will catch light and reflections to become animated at all times of day. Its angular geometry echoes the bay windows of Lanchester Road.

A visualisation of this is included to the left with photos of examples of similar glazed tiles included below and on the far side of the page.



Atrium Stair

Key features of the proposals with precedents

The central stair is designed to allow daylight from the large rooflight and gable windows to reach the ground floor. The intention is that this stair will be constructed using a computer numerical controlled (CNC) manufacturing process, where plywood can be precision engineered economically to create a bespoke pattern.

The stairs incorporate two reading platforms / study areas as well as numerous locations where house plants and storage are incorporated to create a lightfilled heart to the home.

To the right is a view of the stair looking down from the top of the atrium and below that are some examples of similar staircases.

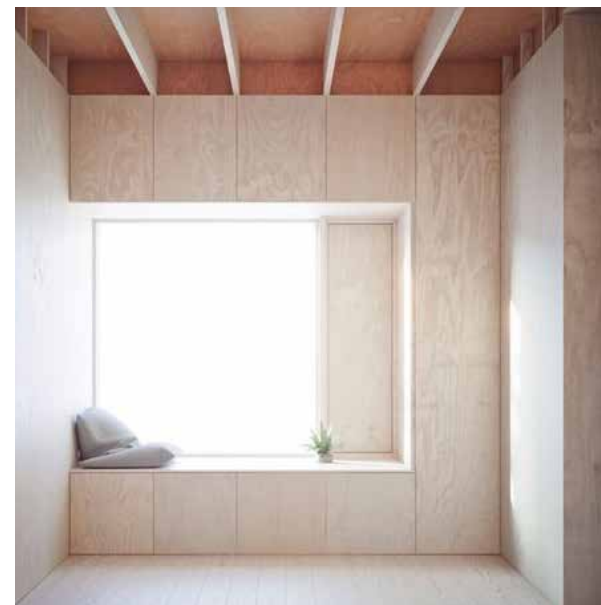
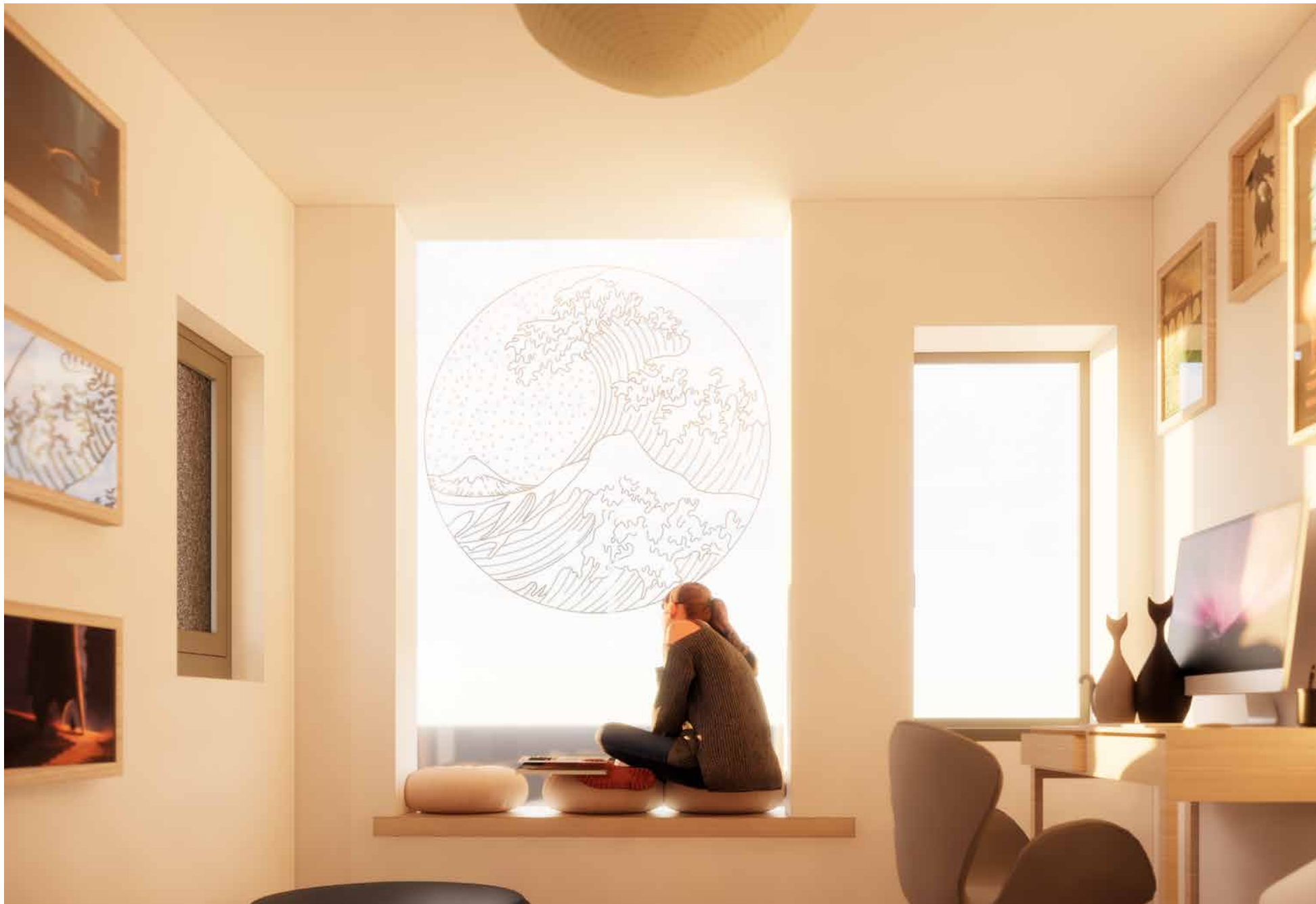


Window Seats

Key features of the proposals with precedents

The large windows in the living room, front reception (converted garage), master bedroom and bedroom 3 all incorporate window seats of varying designs.

These window seats incorporate a variety of storage, the front reception room incorporates space for storage of shows while the master bedroom creates a set of low drawers for bedding and shelves for book storage.



Master bedroom

Key features of the proposals with precedents

The master bedroom makes the most of the new roof form with a vaulted ceiling. This design allows the introduction of roof windows which bring daylight into the space and maximise ventilation to reduce overheating. The extra volume and height allows warm air to stratify above the sleeping area and results in a dramatic cathedral ceiling. The use of timber and soft furnishings throughout deliver a comfortable acoustic environment.





Master bedroom

Key features of the proposals with precedents



A large window with seats frames the view to the ancient oak tree which sits at the bank to the rear of the house. As the window is south facing it benefits from an external sliding shutter.

Sliding pocket doors offer access to the adjacent bedroom which can act as a dressing room and study.

Full height wardrobes and shelves frame the entrance to the room making the most of the additional height for storage.



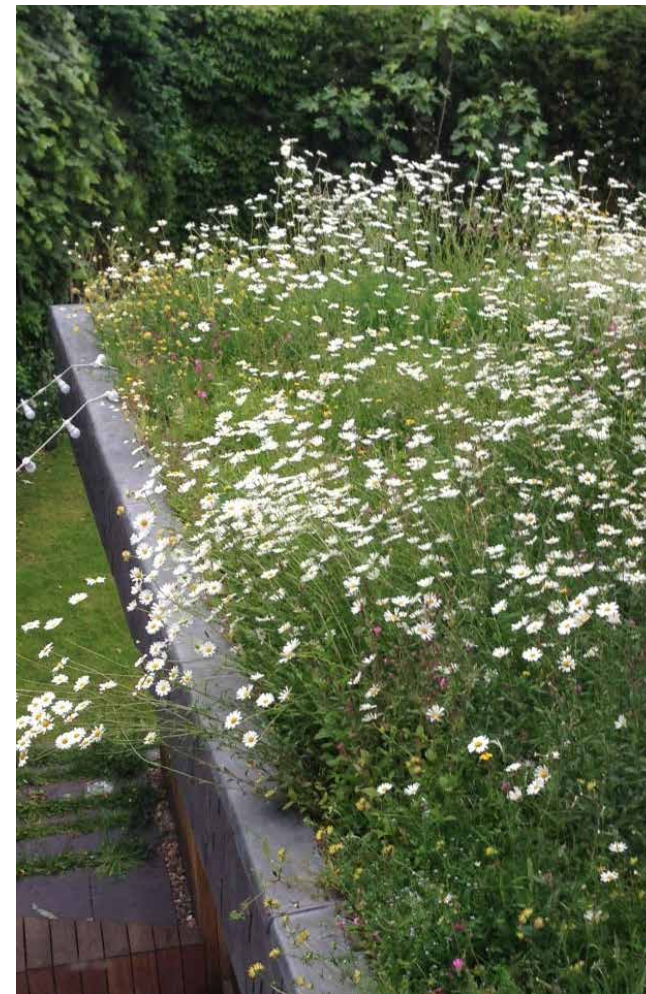
Meadow Roof

Key features of the proposals with precedents

The proposal is for the taller volume of the rear extension to feature a meadow grass roof (semi-intensive). This offers the following benefits:

- Maximise biodiversity
- Reduces the potential for urban heat islands
- Helps to reduce overheating within the home in the summer through the cooling effect of evaporation
- Improve climate resilience through water retention, reducing water run off through increased levels of absorption within the roof build up





Meadow Roof

Key features of the proposals with precedents

In addition to the sustainability benefits outlined on the previous page the other key reason for including the meadow grass roof is to ensure an attractive outlook for the first floor living room. As shown by the below illustration this will frame views to the ancient oak tree which sits beyond the end of the garden.

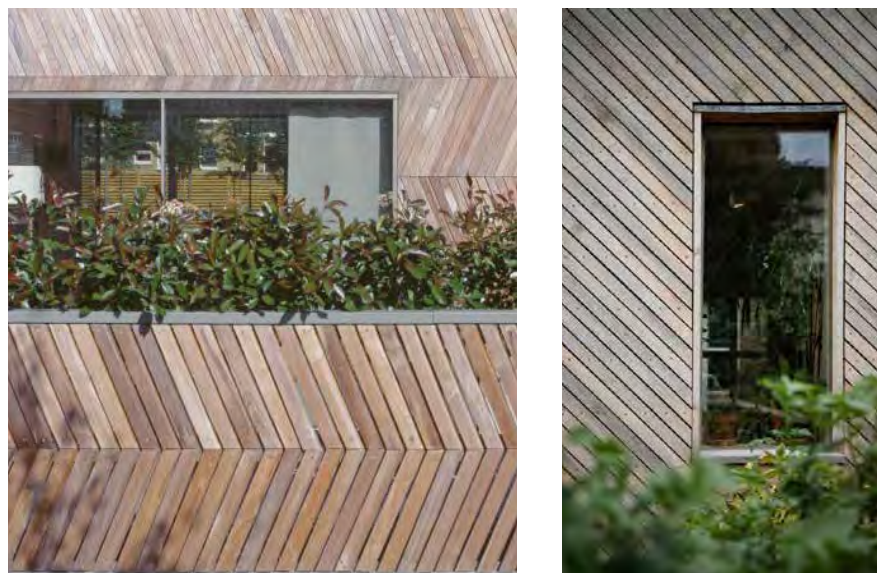


Timber Cladding

Key features of the proposals with precedents

The rear extension is proposed to be clad in timber, and this was selected for a number of reasons:

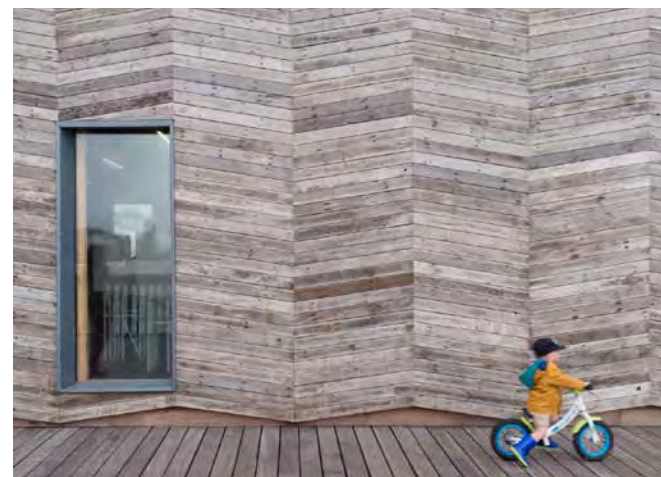
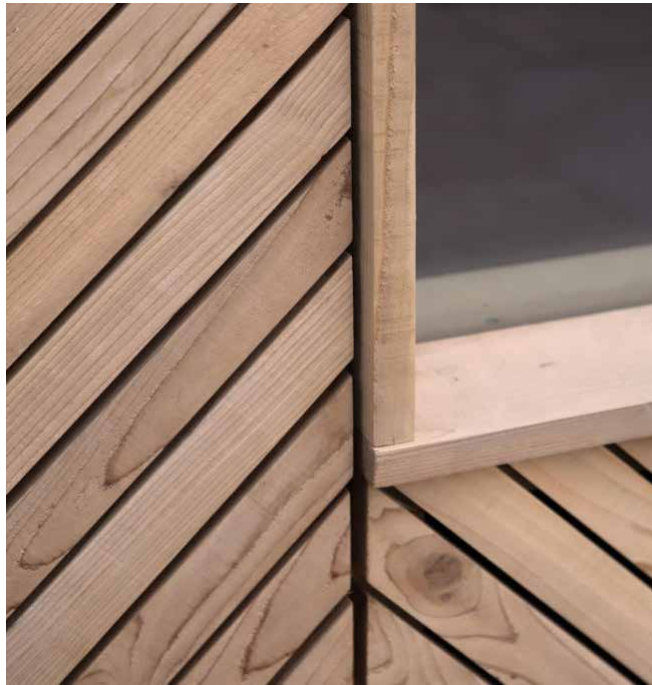
- A sustainable material - it is renewable, has low embodied energy and low weight to minimise the extent of foundations and other higher carbon elements
- A contextual choice - there are a number of half timbered properties along Lanchester Road while the ancient woodland of Highgate Wood wraps around the rear of the house
- An adaptable material that allows creative approaches - timber can be combined with modern digital fabrication techniques including CNC cutting that has informed the construction as well as the cladding.



Timber Cladding

Key features of the proposals with precedents

A herringbone pattern is proposed for the cladding to emphasise the variety of natural patterning of the timber through varying their orientation. The timber will be treated to ensure the longevity of the material.



Design Charter Response (Policy DM1)

As required by Haringey policy DM1 and set out under the Validation list below we have provided a specific response to the Design Charter:

Section A

All new development and changes of use must achieve a high standard of design and contribute to the distinctive character and amenity of the local area. The Council will support design-led development proposals which meet the following criteria

<i>A. Relate positively to neighbouring structures new and old, to create a harmonious whole</i>	<i>B. Make a positive contribution to a place, improving the character and quality of an area</i>	<i>C. Confidently address feedback from local consultation</i>	<i>D. Demonstrate how the quality of the development will be secured when it is built</i>	<i>E. Are inclusive and incorporate sustainable design and construction principles</i>
As set out through this Design and Access Statement the design of the proposed extension has been informed through a study of the rest of Lanchester Road. The proposals will make a positive contribution through increased active frontage, landscape improvements. The proposals will successfully relate to neighbouring properties through the modulation of the rear extensions height and form.	The proposed frontage will repair and improve the existing building fabric, integrate increased windows that relate to the prevailing bay windows along Lanchester Road and will introduce high quality materials to the facade that will provide character.	As set out earlier in this statement we have discussed the proposals with the residents of 29a Lanchester Road and our proposals reflect these discussions. We are committed to working with them to provide further information through investigative works if consent for the proposals is gained. We welcome comments from other local consultation and will seek to address these if required during the determination of the application.	The visuals and precedents included within this statement provide a demonstration of the proposed quality. We anticipate conditions would secure further officer confidence that the proposals set out here will achieve the quality proposed.	As set out in the accessibility section of this statement the design of the proposed extension provides level access, replacing the series of steps at ground floor. Access arrangements for the ground floor toilet have been improved. The addition of a living space and bedroom at ground level (within the studio) makes the home easier to visit. As set out the sustainable design reuses existing structure and uses timber construction to minimise embodied energy. Fabric improvements, the addition of photovoltaic panels and the introduction of an air-source heat pump will minimise carbon in operation. The use of green roofs enhances urban greening while reducing water run off from the site. Overheating and climate resilience has been a fundamental consideration in the design.

Design Charter Response (Policy DM1)

Section B

Character of development

A. Building heights

The proposals all fall within the existing ridge line and are below the heights of neighbouring properties.

B. Form, scale & massing prevailing around the site

The form mimics recognisable elements from our study of Lanchester Road - bay windows, pitched roofs and ground floor extensions to the rear.

As shown elsewhere in this statement there is a diverse character along Lanchester Road and as such there isn't a single prevailing scale and massing - clearly illustrated by the shift in scale from the houses to the east of 29 to the large bulk of Hildridge Court to the west.

C. Urban grain, and the framework of routes and spaces connecting locally and more widely

The proposals reinforce the frontage to Lanchester, therefore respecting and enhancing the existing routes along the street.

The proposals to the front of the house will increase the animation to the street, while those to the rear are not visible from the public realm therefore have no impact on the urban grain or surrounding space.

D. Maintaining a sense of enclosure and, where appropriate, following existing building lines

The proposals match the prevailing building line of the homes to the east. Hildridge Court to the west sits to the front of this building line.

E. Rhythm of any neighbouring or local regular plot and building widths

The nature of the house, as an historic subdivision of a larger plot, means that the plot width does differ from the prevailing grain.

The proposed design seeks to address this existing situation by re-designing the street frontage that relates to the width of the bays which are prevalent along Lanchester Road.

F. Active, lively frontages to the public realm

The proposal to change the garage into a habitable room will increase the active and lively frontage to Lanchester Road and this will be reinforced by the increased level of fenestration to the frontage.

G. Distinctive local architectural styles, detailing and materials

The design introduces a number of design elements including the bay window, the use of tiles around the entrance and the details of the timber cladding to the rear which are all modern interpretations of local architectural precedents. The diverse architectural forms of Lanchester Road encourage a unique and distinctive response to the site.

Summary

As set out in through this statement the design has been informed by a careful consideration of the context. The design seeks to create a much more sustainable home with the flexibility to adapt to the families evolving needs.

The frontage is designed to make a positive and distinctive contribution to the street while respecting the neighbouring properties.

The extension to the rear of the house uses left over space and steps in height to be sensitive to the setting. The expression of a gable offers a much clearer relationship between the house and its rear garden while being carefully designed to reduce overlooking into the rear garden of number 29a.

The internal layout is reorganised to provide larger rooms with increased floor to ceiling and increased levels of daylight.

The studio to the end of the garden provides further flexibility and is positioned to discretely sit behind the existing birch tree within the garden.

Together we believe that these proposals will enhance Lanchester Road and offer a flexible modern home for the 21st century.





Appendix A - Lanchester Road Survey

Below is a summary of the survey of Lanchester Road that was completed as part of the analysis of the local character.

House Number	Plotting		Bay details					Materials				Notes
	Detached	Semi	Bay	Bow	Splayed	Orthogonal	Gable over bay	Garage conversion	Half Timber	Tile Hung element	Other material notes	
1	-	1	1	1	-	-	-	-	1	-	Brick and render	Flat roof to bay
2	1	-	2	2	-	-	1	-	-	1	Brick and render	
3	-	1	1	1	-	-	-	1	1	-	Brick and render	Flat roof to bay, recent refurbishment, anthracite windows
4	-	1	1	1	-	-	-	1	-	-	Brick and render	Brick painted, flat roof to bay
5	-	1	1	1	-	-	1	1	-	1	Brick and render	Enclosed porch, parking removed from front garden
6	-	1	1	1	-	-	-	-	-	-	Brick and render	Painted brick, flat roof to bay
7	-	1	1	1	-	-	1	-	-	1	Brick and render	Painted brick
8	-	1	1	1	-	-	1	-	-	1	Brick and render	Painted brick, brick arch over entrance
9	-	1	1	1	-	-	1	1	-	1	Brick and render	Catslide roof, enclosed porch, garage conversion
10	-	1	1	1	-	-	1	-	-	1	Brick and render	Painted brick, brick arch over entrance
11	-	1	1	1	-	-	1	-	-	1	Brick and render	Catslide roof, enclosed porch
Hildridge Court	-	-	-	-	-	-	-	-	-	1	Brick	Mansard roof
12	1	-	1	1	-	-	1	-	-	1	Render	Recent refurbishment
14	-	1	1	1	-	-	1	-	-	1	Brick and render	Catslide roof
16	-	1	1	1	-	-	1	1	-	1	Brick and render	Conversion and extension over garage, lose of catslide roof
18	-	1	1	1	-	-	-	1	-	-	Brick and render	Hipped roof over gable, extension with gable window and vaulted room to the front
20	-	1	1	1	-	-	-	-	-	-	Brick and render	Hipped roof over gable
22	-	1	1	1	-	-	1	-	-	1	Brick and render	
24	-	1	1	1	-	-	1	1	-	1	Brick and render	
26	-	1	1	1	-	-	1	1	-	1	Brick and render	
28	-	1	1	1	-	-	1	1	-	1	Brick and render	
29	-	1	-	-	-	-	-	-	-	-	Brick and render	
29a	-	1	1	-	1	-	-	1	-	1	Brick and render	
30	-	1	1	1	-	-	1	-	-	1	Brick and render	
31	-	1	1	-	1	-	-	1	-	1	Brick and render	
32	-	1	1	1	-	-	1	-	-	1	Brick and render	
33	-	1	1	-	1	-	-	-	-	1	Brick and render	
34	1	-	1	1	-	-	1	1	-	1	Brick and render	
35	-	1	1	-	1	-	-	1	-	1	Brick and render	
36	1	-	1	1	-	-	1	1	1	-	Brick and render	Dormer and catslide roof
37	1	-	-	-	-	-	-	-	-	-	Render	

Continued over page

Appendix A - Lanchester Road Survey

	Plotting		Bay details					Materials				Notes
House Number	Detached	Semi	Bay	Bow	Splayed	Orthogonal	Gable over bay	Garage conversion	Half Timber	Tile Hung element	Other material notes	
38	1	-	1	-	1	-	1	-	1	1	Brick and render	Dormer and catslide roof
39	1	-	-	-	-	-	-	1	-	-	Brick	
39a	1	-	-	-	-	-	-	-	-	1	Brick	
40	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	45 degree oriel window, dormer, enclosed porch
41	1	-	-	-	-	-	-	-	-	1	Brick	Monopitch roof
42	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	45 degree oriel window, dormer, enclosed porch
43	1	-	-	-	-	-	-	-	-	-	Brick	Monopitch roof
44	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	dormer, enclosed porch
45	1	-	1	-	-	1	1	-	1	-	Half timber, herringbone brick	
46	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	dormer, enclosed porch
47	1	-	-	-	-	-	-	-	-	-	Brick	
48	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	dormer, enclosed porch
49	1	-	4	4	-	-	-	-	-	-	Render	
50	-	1	1	-	-	1	1	-	1	-	Predominatly render, brick base	dormer, enclosed porch
50a	1	-	-	-	-	-	-	-	-	-	Brick	Currently under construction
51	1	-	2	2	-	-	-	-	-	-	Brick	
52	1	-	1	-	-	1	1	1	1	-	Brick and render	Recent refurbishment, sage windows, open porch
53	1	-	1	1	-	-	1	-	1	1	Brick and render	
55	1	-	-	-	-	-	-	-	1	-	Brick and render	No bay but a small oriel to the ground floor
57	1	-	1	1	-	-	-	-	-	-	Brick and render	Flat roof to bay window
59	1	-	1	1	-	-	1	-	-	-	Brick and render	Catslide roof and dormers to both sides
61	1	-	1	1	-	-	-	-	-	-	Render	Recent conversion
63	1	-	-	-	-	-	-	-	-	-	Brick	Recent new build
65	1	-	1	-	1	-	1	-	-	1	Brick and render, tile hung	
67	1	-	2	2	-	-	-	-	-	1	Render	Recent conversion
Totals	24	31	45	31	6	8	30	16	14	28	34	Brick and render
% of homes surveyed	44%	56%	82%	56%	11%	15%	55%	29%	25%	51%	62%	
% of bays				69%	13%	18%						

Appendix B - Technologies

Facit

We aim to use a modern method of construction for the new building elements of the home and many of the inserted components. One option we are exploring is the use of the Facit system.

Facit Homes uses digital manufacturing technology to create individually designed, high performance homes using computer controlled cutting machine on site to cut plywood panels to custom sizes. These are then used to form boxes that are filled with blown insulation.

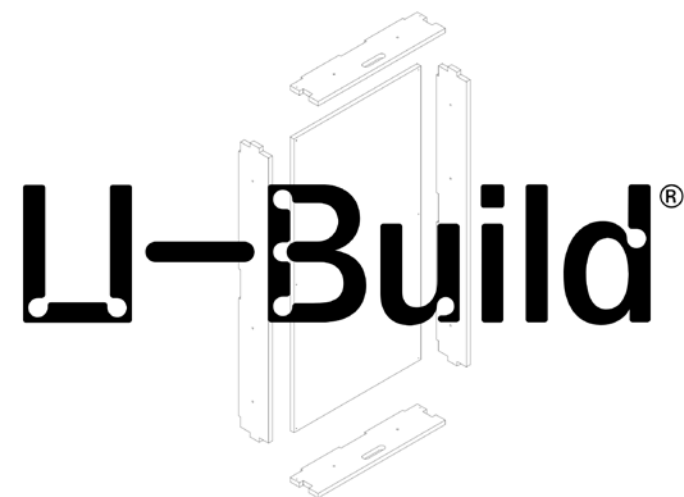
Further details can be found at <https://www.facit-homes.com/>



U-Build

An alternative is the 'U-build' system. This system, developed by Studio Bark, is similarly made of flat pack wooden panels which are produced using a computer controlled cutting machine (CNC). The panels are assembled into 'boxes' on site to form the building blocks. The boxes are stacked and bolted to form the walls, floor and roof structure. The open boxes are filled with natural sheep's wool, which is cut to size. The system is totally demountable and expandable, suitable for a circular economy.

Examples of buildings built with the system are included within this statement and further details can be found at <https://u-build.org/>



Ventive Home-B

Ventive HOME-B is a complete environment management solution, providing balanced ventilation, hot water and comfort by using exhaust air as a source of energy, combined with a high efficiency heat pump and intelligent connected controls. Heat Pump recovers heat from stale exhaust air to ensure maximum energy savings and comfort for occupants. Incoming air is tempered by a heat pump to cool down, without using extra electricity, reducing the risk of overheating – for free.

More details can be found at <https://ventive.co.uk/products/home/>



ThermaSkirt

ThermaSkirt is an energy efficient infrared radiant heating system, designed to look just like a skirting board. As ThermaSkirt provides radiant heat, evenly distributed and from low level, you can run your heating system at lower operating temperatures and still comfortably heat your home. Typically ~13% better than radiators on a gas boiler system, savings up to 25% can be achieved when connected to renewables such as heat pumps or solar.

- Up to 25% more efficient than radiators
- Responsive and controllable
- All radiant heat emitted into the room
- Low water content

More details can be found at <https://www.velux.co.uk/products/smart-home>



Appendix B - Technologies

Nebia Shower

Nebia's proprietary H₂Micro™ technology atomizes water into millions of micro droplets. This saves 65% of water compared to standard showers, setting a new standard for water savings in the home and lowering your water bill.

More details can be found at <https://nebiauk.com/>



Scribit

Scribit is a robot that can draw on walls and windows. It can also erase what's drawn. It is like a giant printer for your wall.

We propose to use this device to animate the large windows to the front of the house with new drawings that change with us.

More details can be found at <https://scribit.design/>



VELUX ACTIVE

The design integrates VELUX ACTIVE windows which track temperature and air quality and automatically open and close to keep the interior fresh and healthy. This includes opening and closing windows and blinds.

More details can be found at <https://www.velux.co.uk/products/smart-home>

