



The central section's flat roof provides a greater contrast to the two wings as well as allowing extensive solar panels on it to be hidden from view.





DESIGN DEVELOPMENT 4.15 MODELS

PHOTOGRAPHS OF MODEL Presented to second Design Review Panel February 2020

The design of it is now more dynamic and exciting, with the detailing serving to both contrast with and tie the whole composition together.





1 - This is the set-up currently proposed. Virginia's part of the house will include a large master suite, two further en-suite bedrooms and a mezzanine study that could alternatively be a 4th bedroom.

Roddy's 1-bed accommodation to the south of the central part can be accessed (or blocked off) at either level from Virginia's. Roddy's entrance is at the ground floor level with a guest entrance on the first floor.

Emma's wing will have 3 bedrooms and be completely self-sufficient.

2 - The junction between Virginia's and Roddy's could easily be moved to allow each wing to have 3 bedrooms, each self-contained, and with the possibility of semi-linking two of them.

The spaces can adapt as families change over time. Perhaps Roddy might need more space for a family of his own or Virginia might want to down-size in later life. Flexibility is the key, with the houses able to accommodate whatever life throws at them - not least, the ability to isolate areas, which would have been particularly important of late with Covid-19.

Lifetime Homes / DDA has also been a consideration, with plenty of options for living all on one level, and for level access.



3 - Another possible configuration would be for Roddy's and Virginia's wings to combine to form one 5-6 bedroom house.



4 - There is plenty of adaptability in Emma's wing too, which could easily become a fabulous livework space. The current open plan kitchen / living space would be the studio / workspace, and the downstairs bedrooms and bathroom would be the new kitchen / living space.

DESIGN DEVELOPMENT 4.16 MULTI-GENERATIONAL FLEXIBLE LIVING

A survey highlighted in the NHBC foundation report on multi-generational living from 2017 said 2/3 of people believed the solution to Britain's ageing population would be to move towards multi-gen living - yet only 16% said their current house would be suitable.

This house leads us to fundamentally question how we might live together in the future.

At a time when we are increasingly isolated, individually preoccupied and lost in personalised digital worlds, designing homes where families come together - in their many permutations - is an increasingly important aim. Whilst this might seem to be a particular brief for one extended family, it is also asking how we collectively might live inter-generationally as social structures evolve.

This is a family enjoying each other's time and company, but also enabling timeless layers of support to emerge between generations.

This project offers a new prototype. In deploying homes that cater for extended families, this may offer solutions not only to the country's housing crisis, where families might live together longer, but also by providing care solutions for young and old alike.



DESIGN DEVELOPMENT 4.17 MULTI-GENERATIONAL FLEXIBLE LIVING

CONSTRUCTION & MATERIALS

An important and dramatic feature of the design is Virginia's wing projecting out over the water, and deciding how best to construct this was a key starting point.



In order to keep the profile as elegant and slim as possible and not have supporting structure visible at the edges, choosing a system that could span in two directions and cantilever was logical.

Cross laminated timber (CLT) is able to do this, and is the perfect material from which to construct the slab, walls and roof (it will also help with the slightly unconventional roof shape).



As shown above, much of the footprint of the building is over either the existing or the proposed lake, and so, piled foundations will probably be necessary. Not only would this be structurally sensible, it would also lead to minimal disruption on site. Lightweight, prefabricated construction is a logical next step, again, minimising groundwork and site disruption.

examples cantilevering CLT construction:







Blackwood (near Swindon) by Seymour-Smith Architects, completed May 2018, and constructed from CLT

CONSTRUCTION & MATERIALS 5.1 CROSS LAMINATED TIMBER

