2 - The Water

The water as existing

The water is much more important than the trees in affecting the possible siting of the proposed dwelling.

The water enters the site via a braided stream from the north / north west, and leaves from the south east corner. This cannot be altered.

The lake between these two points is an artificial rectangular shape, which could be much improved upon. However, in any change to the shape of the water, the main body must still be positioned between the points where the water enters and leaves the site.

The shape of the water could be changed as we wish, anything like the following random examples...



DESIGN DEVELOPMENT 3.5 SITING



However... the site slopes.

These are the contours, with the highest point in the north west corner and the lowest where the water leaves in the south east corner:



the moment:



if extended, a retaining wall would be required

DESIGN DEVELOPMENT 3.6 SITING

So, we get to the point where the water's size and local outline can change to suit our purposes, but it must remain in roughly the same place as it is at So, the site is broadly bisected by the water, leaving the three possible broad locations for the house shown here:



OPTION 1 (below)

To the west of the water, there is plenty of room, and fine views out via gaps in the southern boundary. However, southerly orientation being a prerequisite for an efficient dwelling, the building wouldn't have much relationship with or be looking out much over the water, which rather misses the point of building in this magical spot by the water.

The driveway would also have to be really long, or would have to pass in front of the house to the south side, which would be far from ideal.





The advantage of building in the south east corner would be a short driveway, but little else. It feels quite squashed, and isn't able to offer each part of the house its own outside space. The need for the building to have a southerly orientation for passive solar gain means there would be little relationship with the lake. There is also a conflict with the boundary trees here resulting in too much shading.

OPTION 3 (below)

Like Option 2, this enjoys the benefit of a relatively short driveway. Car parking and service areas could be out of sight to the north. Being situated to the north east of the water means that the building can enjoy a southerly aspect AND the view out over the water. The water could be just quite locally re-shaped to make the most of the building's relationship with the water without serious groundworks.

Much of the footprint of the building could be over the location of the current lake, meaning that less of the existing trees would be affected with this option than with the other options. (Although it is accepted that the ash will all eventually be replaced as they die, it is nevertheless good to keep as many as possible whilst the new trees are being established.)



DESIGN DEVELOPMENT 3.8 SITING

DESIGN DEVELOPMENT: FORM & USE











Having explored earlier the built form in the locality, it is a mixture of mostly modest sized

cottages with pitched roofs;

and agricultural barns, some stone and some larger scale modern ones, but with the same form;

Existing buildings on the site are a **stone** barn;

and a **shepherds' hut**.

Pitches vary, but the form does not. All very simple and unadorned.

The woodland site elicits a wish for a playful / magical response, and the ideas of a **treehouse** - perhaps on stilts - lightly touching the ground - or a cabin in the woods, are natural responses.

All of these naturally lead to the key form / motif of the building:



- 1 and 2 cottages in Wigginton 3 typical modern agricultural shed
- 4 the existing barn on the site
- 5 the existing shepherds' hut on the site

DESIGN DEVELOPMENT 4.1 ARCHITECTURAL TYPOLOGY





The design needs to accommodate what is effectively three households, in this flexible multi-generational approach.

So, it makes sense to break the volume up into constituent parts to enable the scale to remain appropriate and domestic feeling.

Looking at how the spaces needed to relate to each other (left), it became apparent that it would make sense for the building to be broken into three main volumes. Two of these would be connected and one separate, allowing for maximum flexibility of different spaces that can be used in a variety of different ways, separately or together.

Looking back at the typical groupings of agricultural buildings found in the area, they are generally arranged at right angles to one another, enclosing or semi-enclosing a natural courtyard space.

Distributing the spaces so that all could be served from a communal entrance courtyard, but each had its own distinct outlook was important.

So, we have three volumes, broadly Virginia's, Emma's and Roddy's (although with some overlap):



DESIGN DEVELOPMENT 4.2 ACCOMMODATION



We want to maximise southerly orientation, whilst giving each a different outlook and having a shared courtyard and parking arrangement to the north side (so as to be out of the view and southerly aspect and away from the water).

To create the courtyard, the elements can't all be facing south, so, it makes sense for the longest sections to face south and the shortest to turn through 90 degrees:



This arrangement doesn't work though, as Virginia's wing looks out over the arrival courtyard, and the other wings block light from it.



Moving Emma's and Roddy's wings to the west and the parking to the east negates the light blocking problem of the previous version, but Roddy's wing still benefits from little solar gain and Virginia's still looks out over the arrival courtyard:



Shifting Virginia's left and Emma's right starts to allow each wing a distinct entrance side and garden side, although Roddy's still has no southerly aspect.



DESIGN DEVELOPMENT 4.3 MASSING

This arrangement allows Virginia's wing to project out over the water, really capturing the magic of the woodland setting and reflections in the water:



Starting to explore the form of the three main volumes, we look to introduce the key motif:



... and it makes the most sense to do so on the two elongated wings, particularly Virginia's, projecting out over the water, raised up on stilts like a treehouse. Virginia's and Emma's wings then become reflections of each other, and Roddy's a contrast - picking up on the key themes described earlier of **reflections** and **contrasts**:



Looking at the form of Virginia's and Emma's barn-like wings - one end would be open, framing the key view out to the distance:

DESIGN DEVELOPMENT 4.5 FORM







DESIGN DEVELOPMENT 4.6 FORM

Looking now at the form of the central section - this will have a flat roof, in **contrast** to the pitched roofs of Virginia's and Emma's wings.

> The timber cladding of the central part will be very three dimensional, with the timber fins articulated on the lower storey to reflect the verticality of the trees - in contrast to the timber cladding on the two wings, which will be flat.



The flat roof will be the perfect place for extensive PV and PV-T panels

The sloping roofs of Emma's and Virginia's wings will be reflected in the sloping line of the top of the projecting cladding of the central part:

DESIGN DEVELOPMENT 4.7 FORM









DESIGN DEVELOPMENT 4.8 FORM



DESIGN DEVELOPMENT 4.9 FORM



Gaps in the fins allow for windows and access

The fins also extend up around Roddy's terrace, not only to support it, but also to give it a sense of enclosure.

The fins to the east side of Roddy's terrace are angled to allow views out whilst blocking overlooking to and from Emma's terrace

