

aerial perspective showing the entrance from Grange Lane



elevation as seen from Grange Lane

House at Grange Lane

DJD Architects were appointed to develop designs for a new, one off house for a private client for a garden land site adjacent to their current home.

The Clients' brief comprised the usual domestic requirements commensurate with a four bedroom property. In addition they wished to accommodate a small gym, a study and domestic sprinkler system. They wanted the living areas to feel spacious and be open plan to suit the way they would like to live. There was also a strong focus on connecting with the external environment and achieving high levels of sustainability.

The site is outside of the settlement boundary and has a gentle fall to the south, bounded by a historic sunken lane to the west and open fields to the east. There are domestic & agricultural buildings nearby. DJD Architects worked with the Client and design team to develop a proposal for a new house to take advantage of the existing topography, views and orientation.

A concept for the house was developed by investigating previous uses of the site and its surrounding areas. Historic quarries and brickworks led our thinking towards excavations; extraction; and the emergence of solidity from holes in the ground. The road name was found to have historic links to a monastic grange which encompassed livestock and arable farming.

The house is sunken into the ground alluding to the areas historic use as the distinct, circular forms emerge from the ground.

The concentric layout provides a framework arranging internal accommodation through a series of circumferential and radial walls. As the forms radiate from the central focal point, the building arrangement becomes more organic with opposing and non-concentric geometries forming ancillary elements of the scheme.

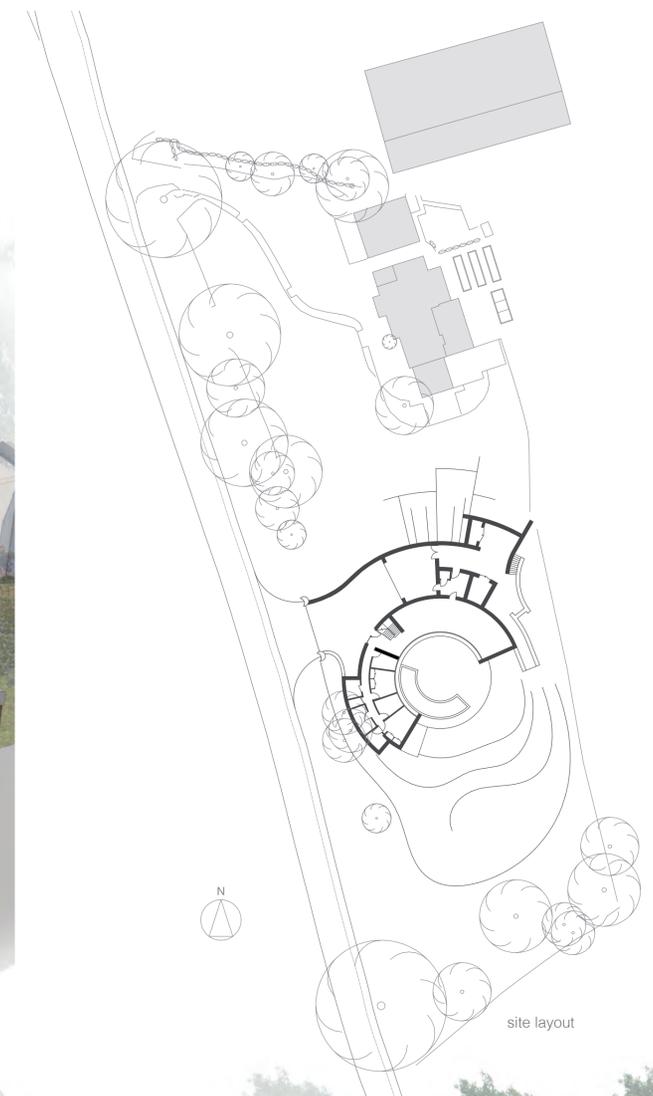
The tilting roofs give an appearance of 'spinning plates', creating visual movement around the dwelling emphasising its horizontality. The ground storey roof wraps around the front elevation pronouncing this play as the different roofs visually interact with each other.

The plan has a clear arrangement of 'public' family areas and 'private' accommodation separated by the circulation core.

The dwelling has been designed to be zero carbon, and a fabric first approach has been adopted to limit the amount of energy required to heat the dwelling. Building services engineers were commissioned to assist with design of the low energy building services. Real-time simulative software modelling has demonstrated that the dwelling should achieve a zero carbon rating of zero or less, using a biomass boiler and 5kW PV array. The generous overhangs provide good solar shading to ensure the dwelling does not overheat.



aerial perspective from the south east



site layout



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elevation from the east showing the partially submerged house, views out from top floor over fields



elevation from the north