

Love Shack, Cumbria.

DESIGN RESEARCH

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INTRODUCTION

The focus of all the work of our practice is concerned with 'context' and the genius loci of place. Our work builds upon our experiences as design assistants within the office of James Stirling back in the late 1980s and early 1990s, at a time when his own work had shifted from the technically inventive (eg the Cambridge Library, Florey building in Oxford and Leicester Engineering) to an interest in contextualism (such as the StaatsGalerie in Stuttgart and the Tate in London).

Since setting up our own practice in 1996 we have been fascinated with the idea that every place has its own unique qualities, both in terms of its physical qualities and its cultural, political, economic and social characteristics, and that logically the responsibilities of the architect to be sensitive to those unique qualities, to enhance them rather than to destroy them.

As a practice we have been influenced by the ideas first expounded by Ken Frampton in his book *'Towards a Critical Regionalism: Six points for an architecture of resistance'* where he recalls Paul Ricoeur's "how to become modern and to return to sources; how to revive an old, dormant civilization and take part in universal civilization". According to Frampton's proposal, critical regionalism should adopt modern architecture, critically, for its universal progressive qualities but at the same time value should be placed on the geographical context of the building. Emphasis, Frampton says, should be on topography, climate, light; on tectonic form rather than on scenography.

And it is in this context that we write about The Love Shack, a very modest dwelling located on a steeply wooded hillside in Cumbria. It is one of a trilogy of projects carried out by our practice at roughly the same period and all located in the Lake District National Park - Grizedale Visitor Centre, Lawson Park (an Artist Centre) and Loveshack (a dwelling). All three projects address a common theme - how contemporary architecture can address a rural context in a sympathetic and poetic way, without resorting to pastiche and scenography.

Love Shack was completed by the practice in 2010 and went on to achieve international acclaim as a small but nevertheless significant example of how one might address contemporary rural architecture without resorting to pastiche and scenography.

LOVE SHACK, - LAKE DISTRICT, UK



Love Shack



Grizedale



Lawson Park

NARRATIVE



There are two key questions that this project explores:

- **How do we arrive at an appropriate scale for a building?**

Is size something that can be determined through empirical deduction and functional determinism, (as was used in the 1960s with the introduction of the Parker Morris standard in Britain) or are there other factors to consider that offer a more complex, less tangible set of considerations, based on experience, feeling and perception? In a world where consumerism increasingly demands larger and larger homes to confer status and comfort, this modest little project offers up an alternative paradigm. It explores ideas of cosiness, of dolls houses, tree houses and dens - small spaces in unique settings that have a magical relationship with nature. And so our modest little project in the woods attempts to explore more universal questions of scale, intimacy, cosiness and context and, in so doing propose an alternative view of how we might live in a world of diminishing resources.

- **How do we build a contemporary architecture that is sympathetic to its context?**

Architectural language is derived from a set of often quite pragmatic decisions - the physical attributes of site, the client's requirements, available constructional techniques, choice of materials and economic constraints. The tools at our disposal today are very different from those available in the past and, as a result, the architectural language of building today is inevitably different from the historic context in which a project is set. This dichotomy has created a schism, severing contemporary architecture from its past and in so doing creating buildings that look alien in their context. This project explores this dichotomy and proposes a way forward for contemporary architecture to re-engage with its context and historical lineage.

CONTEXT

The design of this small house needs to be assessed within the context of the times in which it was conceived. We currently operate in an environment of conflicting demands and pressures.

Post-war Britain has witnessed huge pressures on the existing housing stock in the UK with massive shortages, particularly in the south-east, and at a time when environmental concerns and issues of sustainability have never been so acute.

Before the 2008 recession there was an increased interest in the idea of the 'micro-house'. This began in London, prompted by the pressures on land and limited housing stock creating a massive price bubble. Micro-flats were seen as a way of allowing young professionals onto the property ladder for the first time. However this concept quickly came to represent all that was wrong with the housing boom - tiny apartments, barely habitable, being sold by greedy developers with little attention to quality.

With the recession in 2008, a re-evaluation has taken place with demands for the return to statutory minimum area requirements along the lines of the Parker Morris standards set out in 1961. But how do we make an assessment of minimum acceptable size? Is it based purely on functional needs (as the Parker Morris standards attempted to do) or are there psychological and emotional imperatives at play?

Amidst these very real and tangible concerns of sustainability and inhabitation there also exists in the UK a strong yearning for traditional values which has resulted in the planning process becoming intangled in a set of less easily quantifiable concerns - how should we construct our houses? what should they look like? should they have any concern for their location and, if so, to what extent should they conform to the surrounding vernacular?

The surrounding stone buildings of this particular site, were conceived from purely pragmatic reasoning - availability of stone, a craft based society, and relatively cheap labour. We live in a different age with different forces at work - the potential of new technologies, prefabrication to minimise site work and expensive labour, and the relative expense of using traditional materials such as stone.

Over the past thirty years rural Britain and Ireland have witnessed a proliferation of swiss-chalet or hacienda style buildings emerge in response to a growing demand for rural houses with large open views, constructed of prefabricated timber kit and with large single storey floorplates . These have had a disastrous impact on the landscape bearing no relationship to either the historical vernacular or the landscape in which they are set.

Our project , though modest in scale and budget, is part of a number of projects across Britain, that attempts to offer up clues as to how we can create architecture that both recognises our contemporary situation, understands the genius loci of place and responds with delicacy and sensitivity to the surrounding context.



Rural Design



Dualchas

QUESTIONS

1. Building in a National Park - how should we build contemporary buildings in a rural landscape?
2. How do we determine the size of a building beyond a client's brief? Do we revert to simple functional criteria or are there less tangible determinants that are just as important? - the role of light, views, perception and materiality in how we 'experience' inhabitation.

QUESTION 1

Building in a National Park - how should we build contemporary buildings in a rural landscape?

The challenges presented with this project were similar but more extreme than our other projects in the Lake District (Lawson Park and Grizedale) - a steeply sloping woodland site overlooking Lake Windermere and surrounded by a cluster of traditional vernacular houses constructed of stone walls and slate roofs.



Construction

The first decision concerned the construction method. Traditional solid stone wall construction would have been totally impracticable - the site was too difficult for access and the slope too steep for traditional construction. Our choice of construction method most appropriate for this project, came about through a series of pragmatic decisions:

- The planners were concerned about how the foundations and ground slab might impact on the existing tree roots.
- The steep sloping site necessitated the use of simple manhandleable components that could be positioned on site without recourse to a crane
- The scale of the project and the difficulties of any sitework suggested pre-fabrication wherever possible would be advantageous.

The office had been exploring the use of SIPs (structural insulated panels) on a few other projects and this particular set of challenges seemed to lend itself very well to this type of construction.

SIPs is a composite building material. It consists of an insulating layer of rigid polymer foam sandwiched between two layers of structural board and shares the same structural properties as an I-beam or I-column. The rigid insulation core of the SIP acts as a web, while the OSB sheathing exhibits the same properties as the flanges. SIPs combine several components of conventional building, such as studs and joists, insulation, vapor barrier and air barrier. They can be used for many different applications, such as exterior wall, roof, floor and foundation systems.

SIPs has been an established part of the construction industry in America for many decades but it is only recently that the UK has looked at the potential benefits and started to use it. The benefits and drawbacks can be summarised as follows:

- The cost of SIPs are higher than the materials for a comparable framed building.
- A well-built home using SIPs will have a tighter building envelope and the walls will have higher insulating properties, which leads to fewer drafts and a decrease in operating costs.
- due to the standardized and all-in-one nature of SIPs, construction time can be less than for a frame home, as well as requiring fewer tradesmen.
- The panels can be used as floor, wall, and roof, with the use of the panels as floors being of particular benefit when used above an uninsulated space below.
- the total life-cycle cost of a SIP-constructed building will, in general, be lower than for a conventional framed one -- by as much as 40%.

- the total construction cost (materials and labour) is lower than for conventional framing appears to depend on the circumstances, including local labour conditions and the degree to which the building design is optimized for one or the other technology.
- An OSB skinned system structurally outperforms conventional stick framed construction in some cases; primarily in axial load strength. SIPs maintain similar versatility to timber framed houses when incorporating custom designs. Also, since SIPs work as framing, insulation, and exterior sheathing, and can come precut from the factory for the specific job, the exterior building envelope can be built quite quickly.



The choice of SIPs had a significant impact on the language of the building:

- a lightweight expression
- cantilevered structure
- wide window openings unencumbered by structure associated with loadbearing construction.

This lightweight structure necessitated a lightweight facade and the obvious choice was timber.

Materials

The entire building is constructed from locally sourced timber - vertical T&G larch boarding fixed back to a timber (SIPs) structure. It's literally built from the forest. From the road it is almost invisible as it sits back from the other houses, screened by trees and camouflaged with its timber skin.

This is very much a building set in its landscape which is inspired, not by the nearby man-made context of the stone and slate vernacular, but by the immediate context of the forest in which it sits. It is lightweight, offering generous views through the forest to the lake beyond and is inextricably connected to its site.



QUESTION 2

How do we determine the size of a building? Do we revert to simple functional criteria or are there less tangible determinants that are just as important?

In spite of the fact that the overall area of the project is only 40m² the house provides the user with all the comforts afforded to contemporary living. Though the living and sleeping spaces are tiny, they do not feel claustrophobic or cramped. This is in part due to the expansive windows affording panoramic views that open the interior out to the landscape, and in part a function of careful consideration to how the spaces will be used.

The spaces appeal to a much deeper psychological feeling inside us - offering a retreat and sanctuary from urban life and a re-connection with nature. This project explores the possibility for very small spaces to feel cosy and snug. Every detail is considered in relation to the user's comfort and aspect, the interior spaces offer unique tree-top views that remind us of tree-houses. The window openings offer ever-changing aspects from the immersion in the forest to the long views across the lake. The interior spaces feel directly connected to the landscape.



There is no simple 'scientific' methodology for measuring such experiential phenomena. However the house has been rented out for over two years now as a weekend retreat and has received nothing but praise. The Guardian newspaper described it as *"one of the best cabins in the world"* whilst an extract from the client's visitor book include the following quotes:

"What a perfect place in the woods"

"The love and skill which went into creating the Shack is evident in every detail. It feels like a privilege to spend time here. It surpassed all our expectations"

"We immediately felt at home and will be recommending it to everyone we know!"

"The Love Shack is fantastic – so beautiful, quiet, cosy,quirky"

"We had such an amazing time for our first wedding anniversary. It was a pleasure staying in this beautiful luxurious home in the stunning woodland"

"Inspirational design"

"An idyllic woodland sanctuary"

"An escape which truly restored our faith in nature and life!"

"Not only are the views of the lake beautiful but so is the atmosphere and comfort of the house"

"We had time, peace, energy. Loved it."

In 2011 it gained international recognition by being awarded an RIBA National Award and also being shortlisted for the RIBA Manser Medal. The objective of the RIBA Manser Medal has always been to encourage innovation in house design, to show how social and technological ambitions can be met by intelligent design and to produce exemplars to be taken up by the wider housebuilding industry.

METHODOLOGY

Methodology

The design process involved a number of tools and procedures:

1. Accurate topographical and photographic analysis of the site together with a detailed tree survey to fully understand the existing root systems
2. a series of regular face to face meetings with the client in order to establish their needs and aspirations together with the understanding their financial constraints and timetable.
3. a series of 3-D computer models were presented on the laptop at these meetings enabling us to show all aspects of the design as it developed - from general massing and siting to choice of materials and internal views.
4. As the design became more developed perspective renderings showing the building in its context were taken from the computer model and developed using Artlantis and photoshop.

Beyond the merely factual information collecting, we spent some time on site with the client to understand the movement of the sun, the optimum views from the site as well as views back to the site from the road.

Armed with the site analysis and a client brief we returned to the office and started to develop an initial concept for both the siting and formal idea that might unlock how the house would be organised. We now 'sketch' our ideas directly through computer modelling from the outset - a somewhat unusual process to most architectural practices but one we find helps in understanding scale, massing and spatial complexity right from the start. The study models would be then interrogated thoroughly through meetings with the client, other consultants and later the planners. The design would then be adjusted to answer all concerns and another iteration completed.

A strength of the practice, proven in our built work, is to transpose the initial design concept to the finished product, through details, materiality and construction. This produces coherent buildings with a simple integrity. The computer model of the concept was then developed further and both structure and materials tested. Essentially an iterative process continues through to construction.

GENERAL DESCRIPTION

General Description

The site for this cabin is a steeply sloping wooded copse on the edge of Cunsey village on the shores of Lake Windermere. There was an existing shed on the site and therefore it was deemed possible, though challenging, to obtain planning permission for a modest dwelling.

Our clients were Adam Sutherland, director of Grizedale Arts, and Karen Guthrie, a video artist of some repute. They were living in the adjoining cottage to Grizedale Arts, located half a mile away and with work about to commence on their new headquarters for Grizedale Arts, they were looking to build themselves a bolt-hole as a retreat from their work and with view to intermittently renting it out as a weekend retreat. They were interested in building a micro-house of no more than 40m² which contained all the necessary accommodation for a weekend retreat - a modest living, dining and kitchen space with bedroom and bathroom - all of which would take advantage of the wonderful views across the lake and into the forest.

The design proposal broadly consists of two rooms perched on the steep hill and accessed via a stepped ramp. The rooms are staggered with the main living space leading via a tiny hidden staircase to the bedroom above. The rooms enjoy wonderful views through the forest and across the lake.

Design development

The project went through a number of design iterations in response to the concerns raised by the planners. The original design proposed a building bedded into the ground with the bedroom located at the lower entrance level, and only two stories in overall height. However it became clear that the planners concern as to how the building would touch the ground was going to make this very difficult. The scheme evolved into essentially a three storey building - a lower level entrance and terrace, rising to a first floor living space and then ascending again to the bedroom, half depressed into the section to keep the overall height of the building to a minimum.

Circulation

Circulation, both in the daily use of the building once completed, and for access during construction was extremely challenging. The precise location for the building was determined by a number of factors - where the best views and aspect were to be had, the location of the existing shed, the proximity to existing trees (so as to avoid undermining any existing root systems) and the most easily accessible siting in which to get to the building from the road below on this steeply inclined site.

Access for daily use is via a long stepped ramp that terminates in a lower terrace of timber decking. The front door is at this level. Immediately upon entering a stair ascends to the next level which contains the main living spaces - living room, kitchen, dining room and small shower room. Behind a secret door another stair winds up a further level to the bedroom, perched at the top of the building and amidst the surrounding tree canopy. All rooms are orientated to the lake and enjoy spectacular views through the forest canopy.

ESTEEM INDICATORS

The significance of this particular project is reflected in it being awarded an RIBA Award in 2011, one of only ninety projects across the UK to receive such an accolade. And the judges summarize as follows:

“This intriguingly named rural retreat is a delightful essay in doing much with very little. The two rooms are anchored around a deck that is reached via stepped ramp and which defines a courtyard and Lakeland and other views.

This is a highly skilled architectural piece that is also a demonstration of how a small domestic residence might touch the earth lightly: both literally as it floats on piles and practically as it is clad in timber boards from the hillside wood in which it is carefully placed between mature trees. This building works with its locale by preserving what is there, and exploiting for pleasure the local resource of timber, topography and views. What’s more, it’s available for rent.”

It went on to be shortlisted for the RIBA Manser Medal for the best new house in the UK. The objective of the RIBA Manser Medal has always been to encourage innovation in house design, to show how social and technological ambitions can be met by intelligent design and to produce exemplars to be taken up by the wider housebuilding industry.

In 2001 Lynne Greenwood wrote in the Sunday Times:

“When someone names their home the Love Shack, it had better come with a romantic setting. And this striking modern retreat in the Lake District certainly does: it’s perched on a hillside, with views of Lake Windermere. But it could easily have been called the Treehouse.

Hidden in mature woodland, the timber-clad, two-room residence seems to float on the hill. It has a deck with a hammock, where you can watch red squirrels and listen to birdsong from the forest canopy. Inside, the rooms have reclaimed timber panelling and more leafy views.”

In 2008 the design drawings were exhibited in the Royal Academy Summer Exhibition. The Summer Exhibition remains a much anticipated highlight of the arts calendar, serving as a unique window on to all areas of the contemporary art world. It is the world’s largest open-submission exhibition, displaying more than 1,000 works in all styles and media, including painting, printmaking, photography, sculpture, architecture and film.

In 2011 Jonathan Glancey, foremost architectural critic for the Guardian wrote:

“In 2003 Sutherland Hussey, an Edinburgh-based practice whose partners have worked for James Stirling, Renzo Piano and Hadid, came to national prominence with their low-cost design for a beautiful ferry shelter on the island of Tiree; it won the Royal Incorporation of Scottish Architects award that year for the “most popular building in Scotland”. Now, they have been allocated a RIBA award for Love Shack, a low-cost “eco-house” in the English Lake District with views over Lake Windermere. Happily you can rent this timber hideaway, and understand why the architects deserve the awards – and, perhaps, to be better known than they are.”

DISSEMINATION

EXHIBITIONS

The Royal Academy of Arts Summer Exhibition 2008, London- exhibiting the love-shack project'

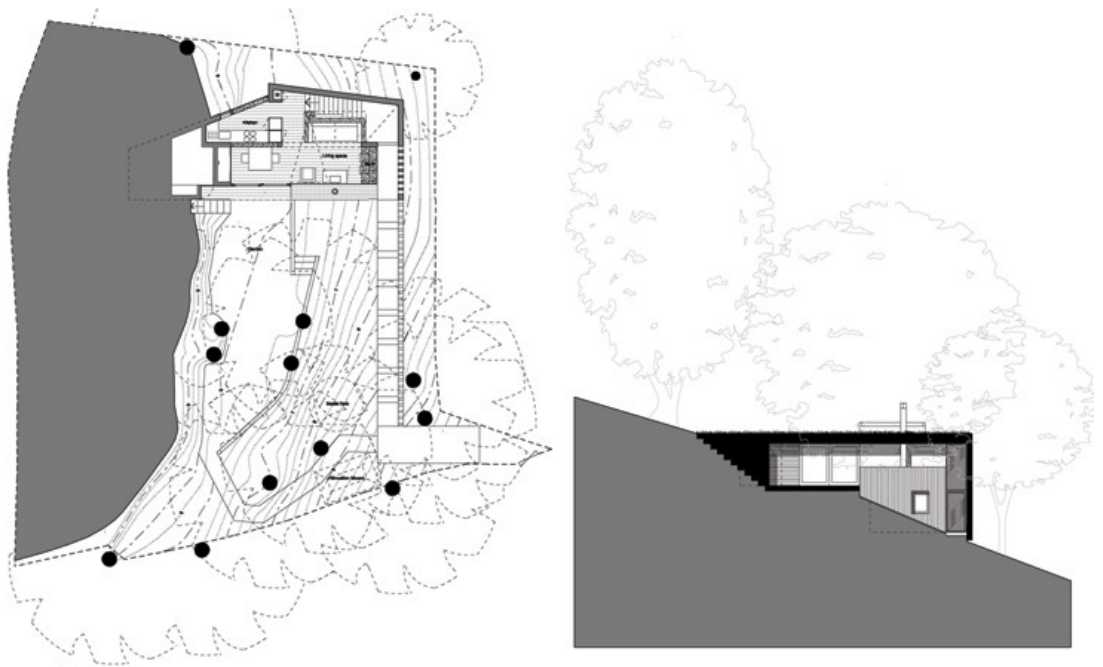
AWARDS

- 2011 RIBA National Award
- 2011 Shortlisted for the RIBA Manser Medal

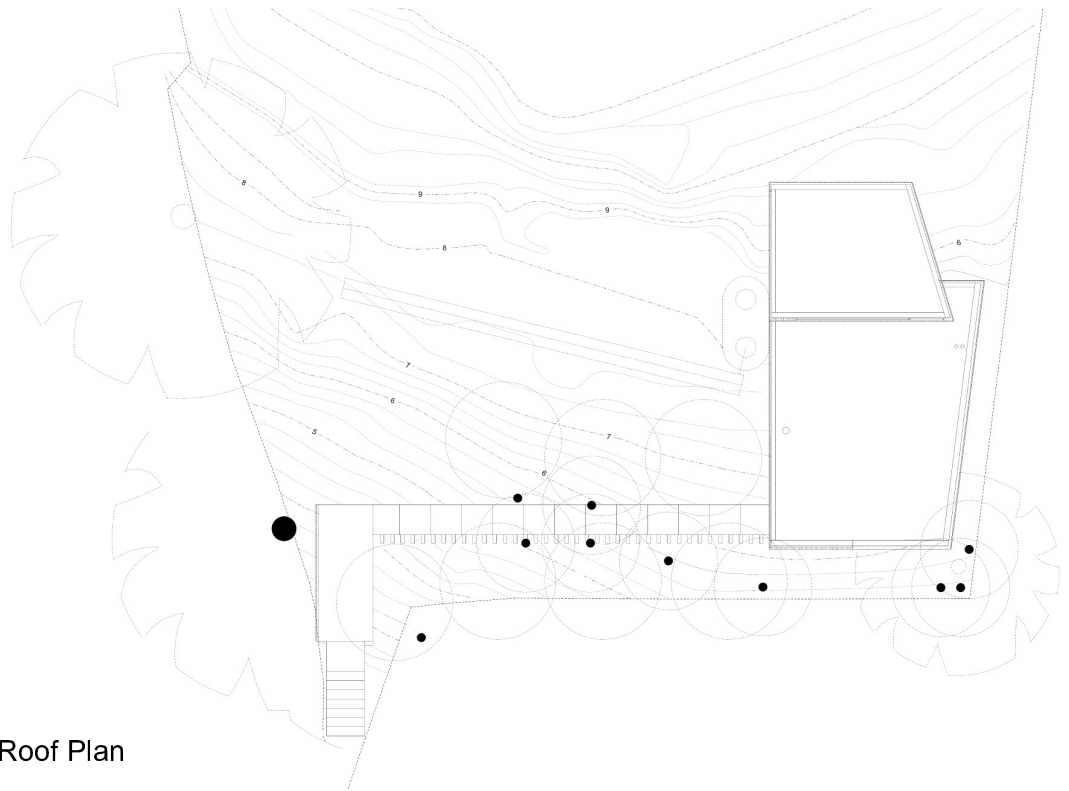
PUBLICATIONS

- October 2011 NEO2-Love shack
- 16.06.2011 AJ – RIBA Awards 2011
- 19.05.2011 BBC News – In pictures: RIBA awards 2011
- 19.05.2011 Guardian.co.uk – RIBA awards 2011: the winners – in pictures by Jonathan Glancey
- 19.05.2011 RIBA – RIBA awards North West winners 2011
- 2007 e-architect announces planning approval being granted
- 21.08.2011 The Sunday Times - Home:People Section “Modern treehouse branches out”

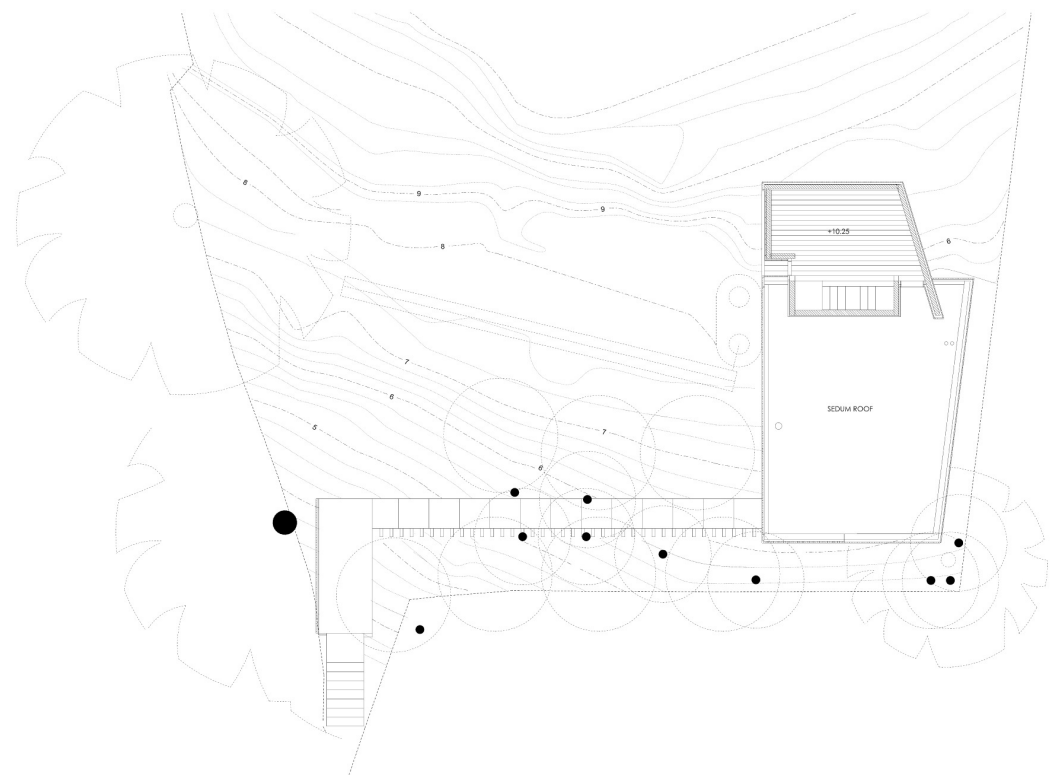
EARLY COMPUTER DRAWINGS



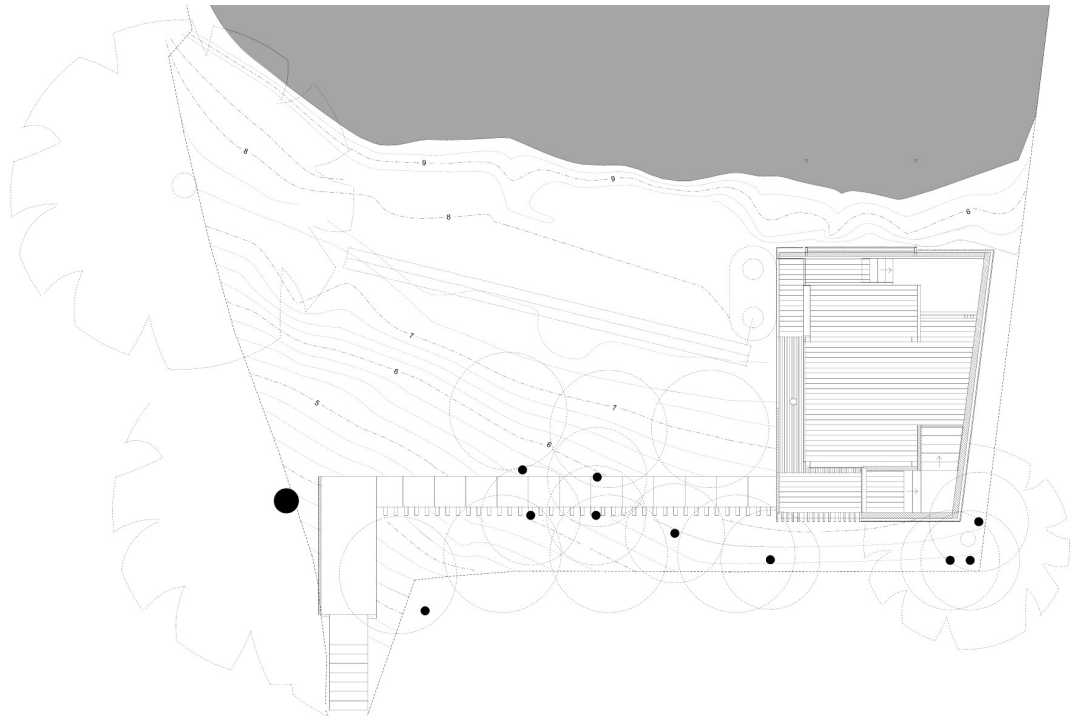
FINAL DRAWINGS



Roof Plan



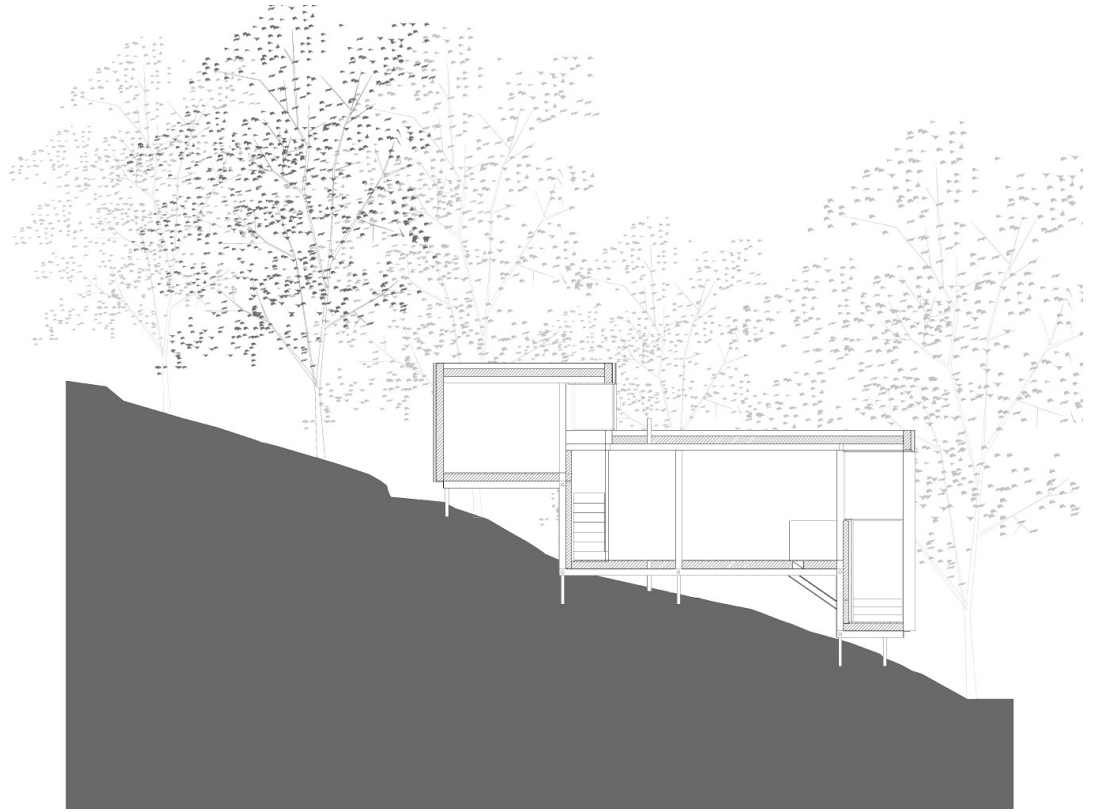
Bedroom Plan



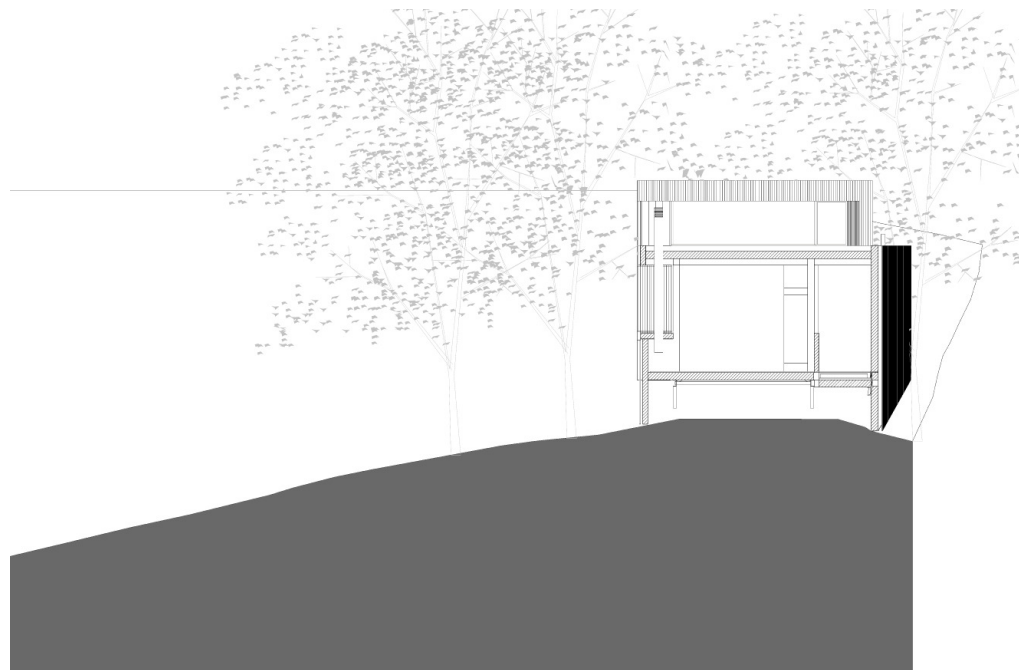
Living, dining and kitchen Floor Plan



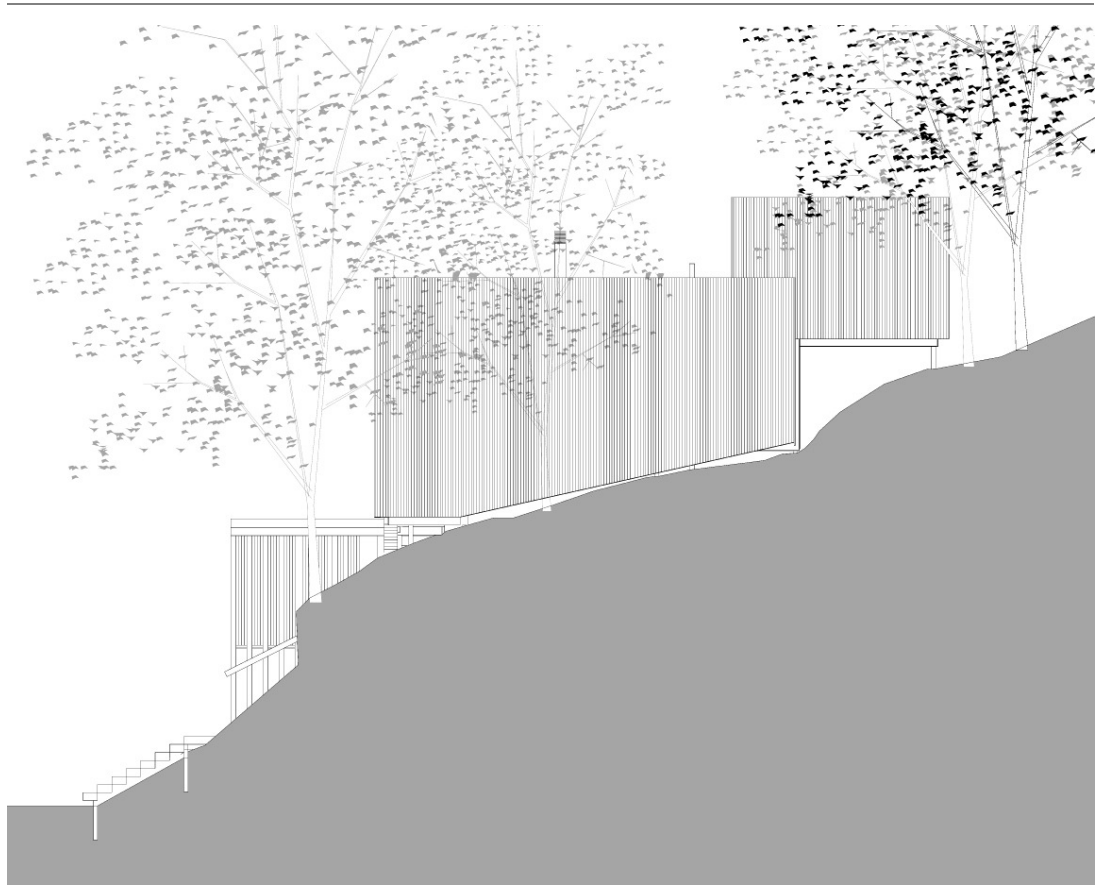
Entrance Level Plan



Long Section



Cross Section

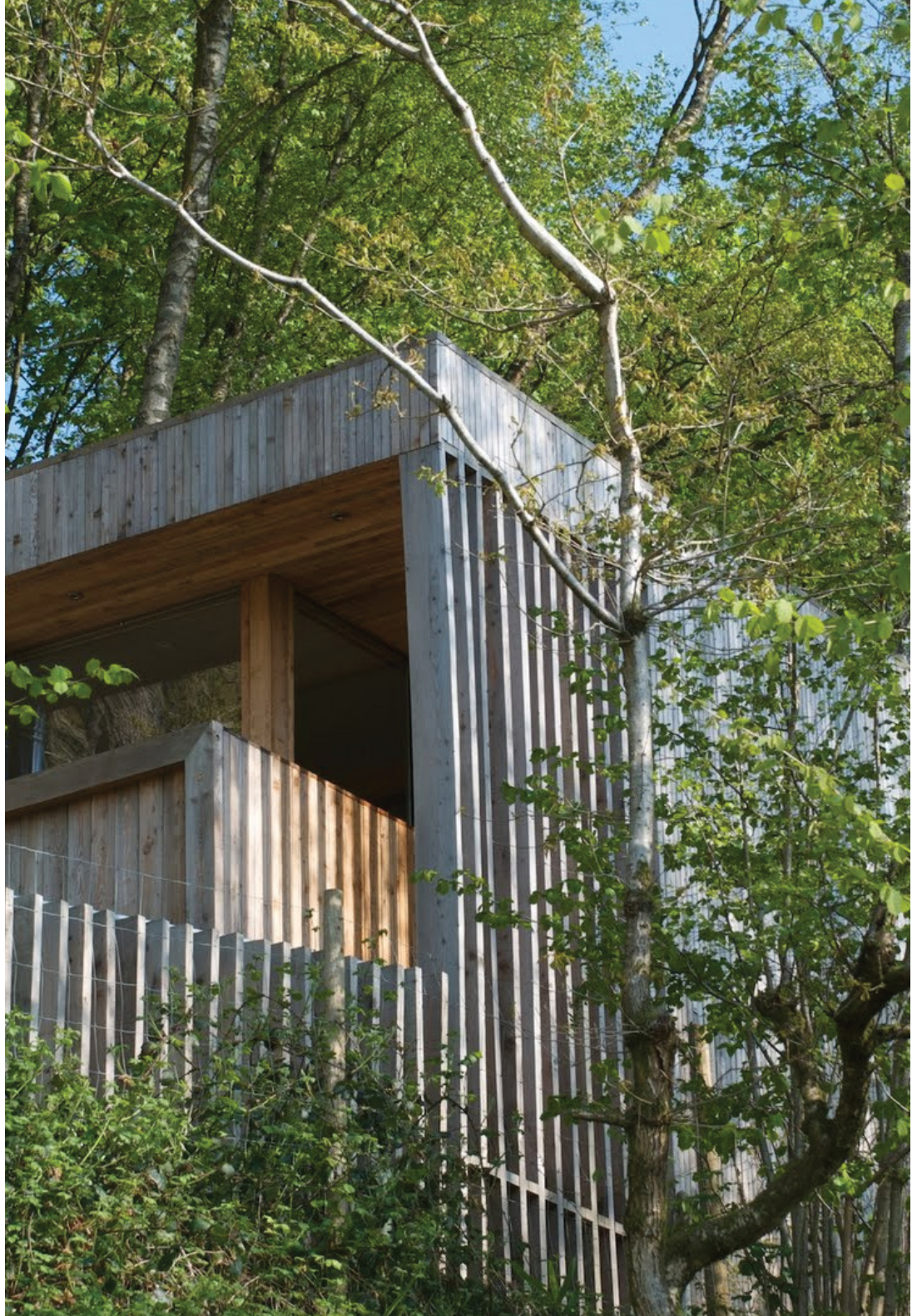


Long Elevation



Front Elevation

PHOTOGRAPHS OF BUILT PROJECT



View from road

LOVE SHACK, - LAKE DISTRICT, UK



LOVE SHACK, - LAKE DISTRICT, UK



View from Terrace





Drawings, photographs



View from kitchen



Living room
