



# RE-ENVISIONING PHOENIX 2.0

Why aim low, Lewes?

Fourth Door Research



## Introduction

The re-energised debate about the future of the Phoenix Estate has meant that parts of Lewes's community are again talking about what could happen around the run-down site. Oliver Lowenstein, as originator of the group operating as MakingLewes [www.makinglewes.org](http://www.makinglewes.org), and also working under his Fourth Door moniker, has long used the Phoenix as a source and subject for imaginative 'green sky thinking' of how the Phoenix Estate site could be re-envisioned. This document outlines an integrated version of these re-envisionings, illustrating how they can combine, be woven and drawn together into a single, holistic design.

This Re-Envisioning Phoenix 2.0 document draws on earlier Fourth Door Research work conducted between 2000 and 2006 and presented during 2006 as Re-Envisioning Phoenix. This includes a number of projects reprised and revisited in this document, namely the 12102000 Research and Visitor Centre and the Skywalk bridge. Aspects of the Re-Materialise Eco-Industries centre rework research consultancy carried out for Atelier One through 2004/5 have influenced the document while the inclusion of the Cycle Stations concept continues engaging with a long term Fourth Door Research project.

Re-Envisioning Phoenix 2.0's focus is on an organic envisioning of how the cultural and sustainability eco-industries infrastructure could develop, rather than on the affordable housing dimension. It is assumed, however, that the proposals explored below are completely consonant, work with, and integrate into the affordable housing agenda currently being promoted by various Lewes community groups.

More broadly Re-Envisioning Phoenix 2.0's design thinking is informed by a number of key starting points, from which the integrated design concept and ideas unfold.

## Context and Methodology

**I)** Re-Envisioning Phoenix 2.0 presumes a commitment to the site and Lewes as a centre of green excellence, a pioneer of environmental best practice. This commitment is characterised by the integration of overlapping 'visionary', and forward-looking sustainable projects at the social, environmental and economic levels, which build on Lewes's green identity and character, and act as an exemplar beacon for other similarly scaled-small towns at regional, national and international levels.

**II)** Next, these starting points - centre of green excellence, pioneer of environmental best practice - are based on the fact that Lewes has a significant and ground-breaking green history, which can be built on and developed further. These include: The founding of International Greenpeace in the town. The site of a major piece of contemporary environmental art, Chris Drury's Heart of Reeds land art piece on the Railway Land. Lewes as one of the founder Transition Towns, originating its own currency, and garnering substantial international media attention in the process.

**III)** A third key starting point is that Lewes's broad and prodigious Maker culture is a key asset. This includes the diverse community of makers currently working on the Phoenix site, and which bring to the town another, youthful energy,

**IV)** Fourth, arguably the critical element to all this, and Lewes's key asset, is its individual quirky, idiosyncratic character and identity. This has fed and continues to feed the maker and environmental strands of the town. Take it away, or remove its' feeding, and elements may well continue, but they won't contain the same life force, the likely consequence being a gradual withering of the town's distinctiveness. An overlapping aspect, is the community dimension of the town, which again contains elements of the individual and idiosyncratic increasingly absent in contemporary Britain.

These starting points have been well rehearsed within Making Lewes and other contexts, most fully in the recently developed Phoenix Rising alternative application. As such they form the bedrock of the integrated design approach which the rest of this document outlines.

## Real and Imaginary

The core design concept is hardly original, and is being discussed in the town, how to use and remake the Phoenix in ways that are in the best interests of the town, its communities and its citizens. Re-Envisioning Phoenix 2.0 focuses on how to do this in ways which integrate, highlight these four starting points, making the most of the town's maker, eco-tech and sustainability strands aligned with Lewes's background and history.

The conceptual examples of an integrated co-makers quarter are a mixture of the already discussed, and the novel and new. This mixture is based on Fourth Door's 'Real and Imaginary' methodological approach; this posits that the imagination and possible need to be allowed space to be developed as design options, alongside the pragmatic 'real world' parameters, from which much design thinking begins from. Such an approach accommodates a wider spectrum of possible futures generally ignored by both mainstream and many orthodox green design approaches. One consequence to applying this Real and Imaginary methodology is that it uses current activity on the Phoenix as a starting point, and doesn't limit its proposals in relation to planning regulation, the current developers brief, or planning or regeneration orthodoxy regarding commercial viability.

While acknowledging these as 'real', indeed critical, considerations, too early an integration of the 'real' can undermine the imaginable, so that 'dream theory' elements are relegated to what is perceived as unrealistic, for the most part through appeals to binary logic and category distortion. By contrast the proposals below fold, fuse, and integrate the real and the imaginary into a seamless single re-envisioning, informed by and forming the whole.

The following three sections outline three discrete and adaptive elements for re-envisioning the Phoenix, which work either as standalone proposals or as a fully integrated imagineered design.

## The Four Core Strands

All four primary elements of Re-Envisioning Phoenix 2.0; the Green Hive, the Re-Materialise Eco-Industrial Quarter, the Copia and 12102000 Cultural Infrastructure are conceived as an integrated whole system and designed to be mutually supporting.

Each begins from a specific strength in Lewes's cultural landscape and develops one fully if specifically imagined realization of its' possibilities. The final third section discusses sustainable transport infrastructure, town signage and eco-tourism. By definition transportation extends beyond a specific site, and the section offers an 'imagineering' of the Phoenix Estate integrated into and contributing to Lewes's transport infrastructure. The section also uses the opportunity to apply aspects of the infrastructure proposals integrated into the wider Lewes context. As such the constituent parts of the proposal have been developed out of the Phoenix context but can be considered as discrete design elements with the potential to be sited in other parts of the town.

## Two sides of the same story

This section of Re-Envisioning Phoenix 2.0 highlights the potential for the Phoenix to be host to a genuinely pioneering, dynamic green hub, highlighting Lewes's maker communities, along with a full spectrum of the town's green culture, spanning the food and farmers market culture and the eco-industrial and materials re-use small industry currently operating across the Phoenix. It envisions how a core part of the Phoenix – at present – the recycling, re-use and remaking of materials – can be fused with the town's homegrown food culture. In the process this fusion is revealed as a mutually supporting and coherent vision for highlighting the town's green credentials.

### The Green Hive

At the heart of the creative quarter is the Green Hive, a centre for makers, artists, designers, growers and eco-sustainable business and organisations.

**i)** The Green Hive is a single umbrella, or suite of integrated buildings, ideally an adaptive re-use of extant standing buildings – highlighting how renovation, retrofit and re-use are key sustainable strategies for drawing down building and construction energy and carbon budgets.

**ii)** The Green Hive also follows well-known regeneration principles and strategies of renewing existing buildings, upcycling urban and industrial fabric as part of recreating cultural quarters and tourist and visitors sites.

**iii)** The Green Hive is envisaged as structurally adaptive for diverse forms and scales of uses, embracing both small scale, one person makers, to larger small and medium sized creative, commercial and environmental operations.

In addition to these well-rehearsed versions for a 'Creative Hub', the Green Hive underlines Lewes's sustainability and environmental credentials by emphasizing and developing two key aspects, which are very much part of the town's fabric and culture.

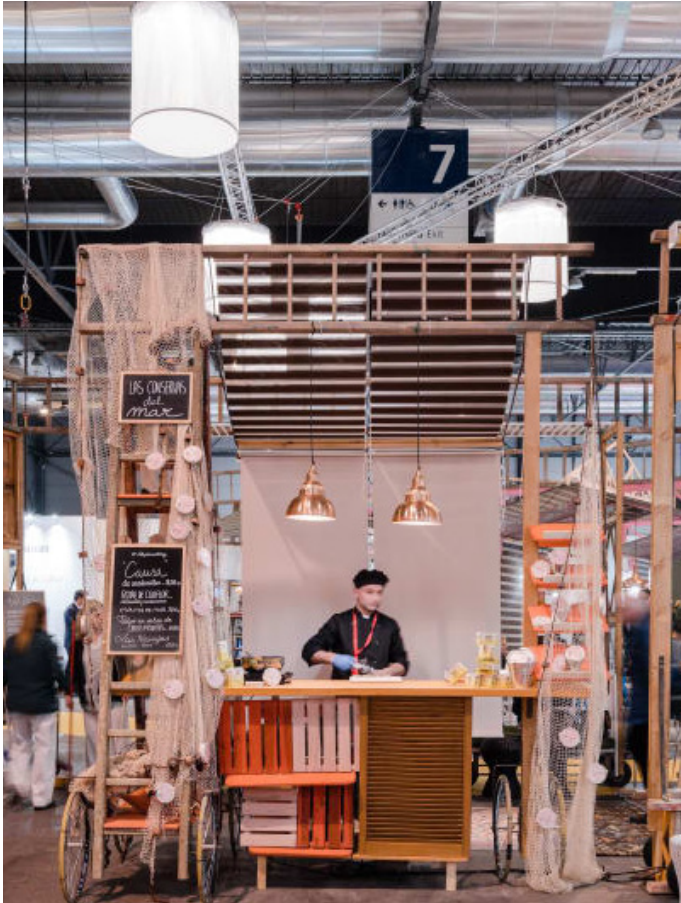
**I)** A local food culture and farmers market space

**II)** An eco-industrial sector, emphasizing Lewes's green history, partially organised as a visitor, educational and research centre

Both of these are outlined in the next sections



Don Valley Brickworks, Toronto



Farmers Market Izaskun Chinchilla



Farmers Market Torvehallerne, Copenhagen

## Heart of the Hive

### The Food Hall & Farmers Market

A distinctive aspect of Lewes's life is its local food culture and markets. Lewes has been a pioneer in developing and supporting the local food economy, particularly at the scale of a small market town. A food hall and/or dedicated farmers market facilities takes these an obvious step further.

The Food Hall will provide permanent and bespoke outlet support for local produce farming and food companies. (This portion of the envisioning needs to consider and complement, rather than potentially replace other well-developed food and produce hub around the old river bridge, i.e. the Riverside and Bills outlets etc.)

The need for improved Farmers Market infrastructure has been a discussion point for a considerable time, i.e., since the different local markets became established. Such infrastructure will be either internal or external, or a mixture although would require a section of lockable units, with stalls and basic storage including, potentially, ambient and other longer term produce storage etc.

An external farmers market facility will be part of the heart of an open or internal town square, or agora (the ancient Greek equivalent, where a town community went to discuss and make decisions about its affairs.) These facilities will be integrated with a local low energy (bicycle and electric vehicle goods transportation, see Part 3's Transport Focus and Eco-Depot sections. Making Lewes are in discussion about a Farmers Market serving as one project in a MakingLewes student competition to be launched in the autumn.

The Heart of the Hive farmers market is presented as complement to any wider strategy for integrated food production within the town's urban fabric, and as part of a 'localist', food self-sufficiency agenda, supported by local food transportation infrastructure. Food production is also seen as semi-continuous with farmland within Lewes' and the Ouse Valley's immediate environs.

To this end both the domestic and work contexts of the Phoenix site are interpreted as a potential food lab for food production, growing experiments and research and development, fully integral with other structural and urban fabric research both on the Phoenix site and more generally within Lewes. This Re-envisioning Phoenix 2.0 proposal includes further projects - including vertical allotments and a local food transport network - below, but does not expand on developing this agenda beyond the farmers market proposals at present.

## Re-Materialise – a 21st century exemplar Eco-industrial zone

The Phoenix Estate currently contains a number of eco-industry companies and organisations, and Lewes and its environs are home to a number of others. Presently the highest profile is Ovesco, the 2014 finalist winner in the Ashden Sustainability and Community Awards. The town's Recycling Centre and Furniture Now are both long-term core estate infrastructure. Lewes Recycling Centre is also home to a number of local green organisations, such as Common Cause. This is a significant, if less visible, green presence on the industrial estate.

Alongside dedicated eco-industry companies and organisations, many of the Phoenix's smaller maker and designers specialise in working with existing materials, and together comprise fully up and running network of upcycling, re-cycling and re-use cottage industries.

Re-Materialise– is conceived as a fusion of these older re-use, recycling approaches and new, cutting edge, digitally enhanced approaches to sustainability and integrated whole systems eco-industries thinking.

Re-Materialise thus builds on the existing Eco-Industrial activities and will be an incubator of new sustainable industries and community eco-infrastructure. It will also act as a research beacon and training centre, integrated into local, regional and wider parallel and comparable networks and research.

As such Re-Materialise will serve to highlight and draw in awareness of eco-industries through showcase, educational examples, such as renewable natural material walls, and the sandbag flood wall – discussed below. It will complement the Green Hive, with material, waste and energy flows running between the two interlinked sites.

Current orthodoxy regarding eco-industries and recycling are represented on the Phoenix Estate, including the already referenced Recycling Centre, Furniture Now and the solar and renewable energy companies and organisations.

Re-Materialise takes these relatively conventional pieces of eco-infrastructure several steps further, applying an integrated and systems approach. These can be divided into two principle strands.



Re-Used cladding from the Re-Beauty project  
Vand Kunsten Architects, Copenhagen



An example of local natural materials - Thatch Panelled Facade, The Enterprise Centre, UEA, Norwich



Materials Library, Institute of Making, University College London

## I) Eco-Industrial and Re-use systems

### What are Eco-Industrial districts and Building Materials Re-use Centres?

Eco-Industrial districts are based on designing industrial systems to behave like ecological systems, co-designing and harnessing materials and energy flows to work as optimally as possible between and within a cluster of eco-industry businesses, in effect, the industrial equivalent of an ecological system. see MakingLewes's eco-industries page.

Building Materials Re-Use Centres (BMRC's) are dedicated centres promoting and supporting the re-use of building materials in construction. A good (albeit large city) example is the Seattle BMRC. The MakingLewes website includes a page dedicated to BMRC's.

BMRC's are specific instances of material re-use focused on the construction sector, within the wider re-use infrastructure spectrum encompassing all potential waste-streams, from the small (eg, needles and threads) to large (airplanes chassis and ship hulls.) Furniture Now is a mid-scale re-use centre.

### Re-Materialise as Eco-Industrial district and

**Re-Use hub.** A core design strategy of Re-Materialise is therefore the integration of both Eco-Industrial and Re-Use Hub thinking into the site, with the aim of optimizing materials and energy flows across the different eco-companies, organisations, and initiatives on the Phoenix Estate, aimed at creating a well tuned eco-industrial metabolism within the site.

Materials re-use will be foregrounded at a range of scales, including the building materials scale, and the overlap between materials re-use and grown food production, so that materials reuse is integrated with the local – urban - food production and the Green Hive farmers markets.

**The Wastehouse and Waste House Networked.** The Waste House is a new showcase building on Brighton University main art campus, designed by BakerBrownMcKay Sustainable Architects. The Wastehouse has been designed to showcase re-use, highlighting how building materials and waste streams can be re-used in many and imaginative ways, to the extent that whole buildings can be built entirely through re-use.

A Wastehouse Network can be envisaged, using eco-transport collection across the immediate Lewes environs, as a next stage in re-use, up-cycling and recycling collection. A network of Wastehouse satellite centres (or waste materials pick-up points) to source re-usable materials across the area, i.e., in outlying parts of Lewes and the immediate Ouse Valley.

**Lewes Making Materials Resource Centre and Library.**

Materials resource centres and libraries are becoming increasingly popular both in academic research centres and in architecture, design and engineering studios. To complement Re-Materialise re-use agenda and the maker's community, a materials library will be a key educational and resource element of the Phoenix site.

Knowledge, awareness and experience of types, availability, and the properties and uses of materials are prerequisites for their effective use and application. While experienced makers will have developed knowledge through experience, on-hand information and assistance supports the educational and visitor dimension and remit of the joined-up elements of Re-Materialise.

The Materials resource centre and library will be showcased across the different buildings through a distributed series of experimental walls, each highlighting a spectrum of natural renewable and re-used materials, each one elements of a composite teaching and learning instruments. These will include locally sourced timber and other Bio-Based natural materials from the South East, highlighting the spectrum of locally sourced materials.

**II) Digital Technologies**

As part of its leading edge eco-industries exemplar agenda Re-Materialise would integrate the comparatively traditional eco-industrial thinking – as above - with the latest in the revolution in Digital Technologies.

**FabLabs.** Fabrication Laboratories have been mushrooming across the world. A community FabLab facility in Lewes could easily be integrated into the broader eco-industries/sustainability agenda. The eco-sustainability dimension is underlined by the FabLab foregrounding ecologically oriented research and development, with a focus on supporting eco-based industries, from renewable materials and energy technologies to local food production and rural and local agriculture foci.

**Materials Re-use and 3D printing.** The fusion of materials re-use and 3D printing draws together recycled and renewable materials with this 21st century technology, i.e., using FabLab technologies on the materials waste-stream, reducing core materials down to granular level – e.g., wood, recycled newsprint or salt – which is then used in 3D print designs, approaches which are becoming increasingly common.



Re-modeling vehicles sculpture  
Michael Johansson



The Kiln Room, Peckham, Ceramics Maker Space

### III) Re-Materialise and the Education and R&D sector

Re-Materialise will be fully integrated into local and regional HE, clean energy companies and organisation partners, working as a critical node in this network. Potential local HE partners include the Universities of Brighton and Sussex, along with other regional, national and international HE partners.

There will be an incubatory and training role within Re-Materialise, serving the growth of capacity in greening regional clean and eco-industries. Research and development into different aspects of materials is emphasised.



Open Source CNC Router

## Dedicated cultural infrastructure for Lewes

Lewes punches above its weight in many ways, but particularly culturally. There is a wealth of creative and cultural activity happening in the town. The Phoenix is only one segment of this activity.

This Re-Envisioning Phoenix 2.0 document has sought to highlight the creativity that continues to flourish in Lewes, with specific reference to the Phoenix site, by underlining the connections to Lewes's history as green pioneer and this potential to act as the basis for the town as a green beacon of excellence.

Alongside the outline in part 1, a significant number of sizeable warehouse and other scaled buildings on the Phoenix Estate also lend themselves to being adapted as cultural infrastructure. This is particularly relevant as there is an obvious need for a performance and events space, given there is no dedicated building currently in the town. While a wide variety of examples could be explored, for this dedicated cultural Infrastructure section two persuasive or plausible and groundbreaking examples are envisioned:

**Copia**, a music and performance space, highlighting both regional and local musical talent, conceived to build upon already existing music, theatre and dance spaces.

**12102000 WaterShed Visitor Centre**, a cutting edge environmental centre, the headline front of house for the different green activities within and across the Green Hive, Re-Materialise and other green activities.

### Copia - Music and Performance Space

Copia is conceived as a contemporary multi-functional performance and community arts training, rehearsal space in the heart of Lewes, either within the Phoenix Estate or on another riverside site, e.g. the old Wenban-Smith barnsheds. Siting a major multi-purpose performance building within the Phoenix Estate is obvious in terms of regeneration capacity, crossover with the many maker and creative communities, and the level of creative activity across the town. The performance centre would benefit from and become a further addition to the already high standing of the town's creative reputation.

It ought to be noted that although the riverside land currently occupied by the old Wenban-Smith and car park, is slated (apparently) as an extension of the Waitrose supermarket, this is another compelling site for a multi-functional performance and community centre.



Siobhan Davies dance studio



Guitarmaker



The London Roundhouse after restoration

Copia will be developed as part of a mutually beneficial co-evolution of the broad range of creative communities already established and flourishing in Lewes.

For instance, like many towns, Lewes is home to a thriving music scene. Although a range of musics can be found in Lewes, it is also evident particular musics have flourished, and are more closely identified with the town than others.

Contemporary folk music is particularly popular, with the success of the independent Union Music Store, its concerts and shop performances, underlining this bubbling music activity. Union Music Store however is only the latest manifestation of a town wide musical bias, which also includes the long running and respected Lewes folk club, the Lewes Guitar Festival, which ran for several years, and the presence of a community of highly skilled and experienced guitar makers. In addition to these samplings, the community and youth based Starfish is a successful part of the Phoenix estate community.

It is clear that both these music cultures, and literally the community of guitar makers, are protean examples of the cultures MakingLewes has been highlighting, Lewes's Making culture. A significant performance theatre, which champions this music culture, and more generally the towns many cultural strands, as one of its starting points, will contain a significant head start.

Reworking buildings, applying an adaptive design approach that highlighted retrofit and re-use would be well suited to inform any re-design. Fourth Door envisages a fusion of the Phoenix's industrial history, though also foresees potential in its pre-industrial history, that of the osier willow beds which grew on the flood plain prior to the beginning of the industrial build up from the early to mid 19th century onwards.

#### **Regional brick and industrial vernacular showcase.**

The highlighting and use and re-use of brick and industrial vernacular, with fantastic bricolage potential are obvious on such an industrial site.

**Regional timber showcase.** A second approach of highlighting local timber materials within a partial newbuild centre, a strategy reflecting and echoing the undulating Southdown hills, will showcase the diverse potential using local wood materials. This approach will also lend itself to the willow and flood plain connection. These examples are intended to inspire and spur thought and ideas for the possibilities of a multi functional perfor-

mance and cultural centre.

## The 12102000 WaterShed Visitor Centre

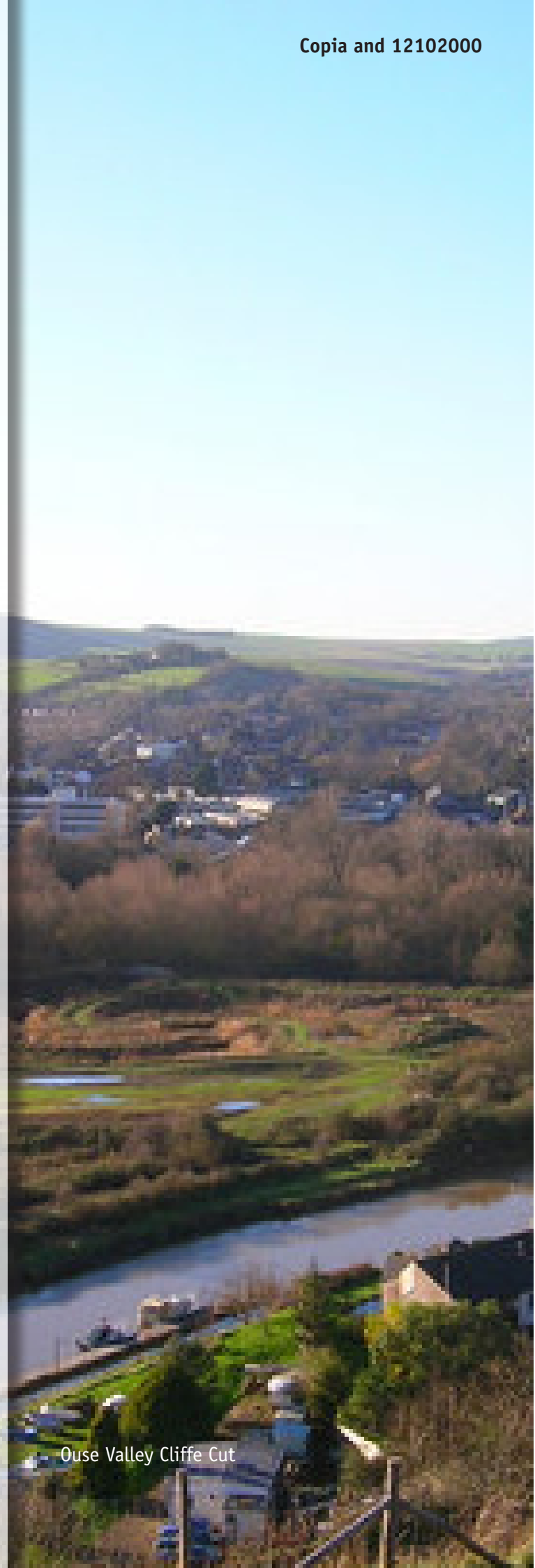
12102000 Watershed Visitor Centre is envisioned as a visitor centre and international research hub focused on 21st century water issues and water culture. It is also intended to take on front of house for the visitor centre aspects of the Green Hive, Re-Materialise and other related educational eco-infrastructure.

12102000 WaterShed is premised on Lewes being one of the first urban communities in Britain to experience the recent upsurge in flooding incidents (October 12th 2000.) While not attributed directly to ongoing changes in climate, it has coloured many Lewes citizen's perception of changing weather and climate patterns. In the intervening fourteen years flooding has become an increasingly widespread river-related phenomena in many parts of Britain. There is increasing evidence of flooding and other changes to weather and climate patterns, that makes water a key early 21st century concern, ranging from water and resource wars, to water as a source of wealth and power (for instance for Northern Sub-Polar countries with their large fresh water reserves), to the immediate and local dimension of the Ouse Valley as an ecological watershed.

**Water channel integration in the Phoenix.** An earlier Floating World Water Centre proposal was conceived as a response to the 2000 floods. The Floating World proposal aimed at showcasing the potential of floating building systems and technologies as one response to increasing vulnerability of low lying land to increased flooding. In this proposal water and flooding was interpreted as an opportunity, which in the early Re-envisioning Phoenix documents, was expanded through water features becoming part of the Phoenix's potential identity, including channels and leats integrated into the site as part of the flood mitigation and resilience strategies.

This continues to be an option, although it has so far hardly featured in discussions regarding the future of the Phoenix. There is at present no certainty regarding cost for remediation of the site, nor has the level of site contamination been clearly outlined.

Removal rather than re-covering of contaminated land will potentially open up the option of a network of water channels, and potentially of a floating building area, if the cost wasn't prohibitive, which until a thorough cost comparative analysis is conducted, remains opaque.



Ouse Valley Cliffe Cut



Water Museum by Juan Domingo Santos

This section therefore outlines aspects of 12102000 Watershed, which is envisaged both as discrete visitor centre and in expanded form, with a network of water channels, which both function ecologically and extend the water themed visitor centre outwards round parts of the site. What follows are some starting points.

**12102000 Watershed** – A Precautionary Lab from the Future. As Britain wakes up to the need for different approaches to river and flood management, so the need for a ground-breaking educational centre focused on water, with a primary mission to explore and explain changes in water activity in relation to weather and climate, has become increasingly clear. Given Lewes’s early experience of flooding in the millennium year, 2000, siting such a centre in the town contains potent messaging and symbolic value, while also acting as a bridge to the global and international context.

**The 12102000 Explanatory** – Within the Explanatory, the local is connected to the global. Weather and climate, the water cycle and the role water as critical element to explaining many aspects of the early 21st century concerns is explored. This includes the emerging water and resource wars scenarios and the relation of water to wealth, power and poverty, (and famine) a key source of the current massive human (and non-human) migrations.

**The Ouse Valley Watershed** – Within the Watershed the river Ouse river and its role in water cycle at a local Lewes and Sussex level is accessibly communicated; how watershed ecology works and how such ecological systems are comprised of and interdependent on the biotic lifeworld, including animal, insect, flora and soil.

Using web technology, including web-cams 12102000 would develop links to parts of the world where water issues are particularly pronounced, from the Arctic to Bangladesh, Holland to Seychelles Islands, with a longer term role of acting as a hub for water centres network in the developing world in concert with such local academic departments, such as Sussex University’s Institute of Development Studies.

12102000 will act as a knowledge base and research hub into floating buildings, with at least one working example of a floating building at its heart.

This building infrastructure will be a bridge to the wider green projects outlined above, showing the interconnections between material re-use, local farmers markets and sustainable transport with the far away issues of water risk, Arctic ice melt, and mass continental migration.

As front of house for the wider green Phoenix agenda



Living Machine, a natural water purification system



Sandbag wall at Stock Orchard Street Studios, N London by Sarah Wigglesworth Architects



Natural water flow design in Stuttgart, by waterscape designer Herbert Dreitschl

proposed above, this acts as the, or a, 'way in' to the Green Hive, Re-Materialise, the Green Sky Walkway (see below) and other wider Phoenix visitor and educational

An iconic sandbag wall of significant height will be one potential flooding informed wall faces, highlighting the 12102000's visitor centre name, demonstrating the potential of unorthodox construction materials and techniques, and demonstrating the varied re-use of sandbags, as much as their flood protection value. (This 12102000 sandbag wall will also be one of the renewable/re-use materials walls outlined above in the Materials Resource Centre and Library section).

At different scales of ambition, water-farming, water channels, and aquaculture would be integrated into 12102000, and extended across the site. Such an experimental sustainable building could double in function as both part of the visitor centre's educational content, and also a part of its research remit.

Integration of water and water-flow based water artworks will be another feature, including examples of work such as the German landscape architect, Herbert Dreitschl, which integrate ecological functions into their design organisation and thinking. This enables the highlighting of the value of ecological systems to human infrastructure and socio-cultural organization, an approach underlining the proposals outlined throughout this Reenvisioning Phoenix 2.0 document.

Regarding water channels, water farming, water artwork and other aqua-culture, 12102000 WaterShed maintains the original design concept; as complement and counter-balance to Lewes's principal existing eco-cultural focus, the Heart of Reeds railway land nature reserve project by land artist, Chris Drury. This is intended to create a complementary balance to these two sides of the town, symbolized as two butterfly wings, continuing to engage in the radically different approach to water management along this section of the Ouse river.

## Sustainable Transport, Town Signage and Eco-Tourism

The Phoenix Industrial Estate lies directly on what was the old rail route between Uckfield and Lewes stations. There has been and is currently renewed engagement in re-opening this rail corridor, in part to support and relieve overcapacity of the main Brighton to London corridor, which could not be enlarged without very significant capital investment.

This section of Re-Envisioning Phoenix 2.0 proceeds from aligning aspects of the town's sustainable travel infrastructure with the potential re-introduction of the Uckfield to Lewes route, see the Brighton Mainline 2 website (albeit that this route does not run into Lewes itself.)

### Sustainable transport focus

The principal focus for transport infrastructure in this outline is cycling. Road infrastructure is not addressed, although as the ideas proposed here advance further, integration with the town's road infrastructure is considered both feasible and persuasive.

Inner and outer town – The primary cycle and improved pedestrian path is described here in two sections, the first inside the inner town boundaries - which is already part of Lewes Steps Forward cycle and pedestrian improvements underway, the second the town's outskirts and boundary:

**I)** Running from/to the railway station along Lansdowne Terrace and past the current Waitrose and Bus Station, across the current main road and into and through the current Phoenix site. This section of cycle infrastructure is under development by East Sussex County Council as part of National Cycle Network regional route 90, the implementation of a continuous east-west cycle route through the town.

**II)** Continue across a planned bridge near or proximal to the current planned bridge between the Phoenix river-side and the Tesco supermarket. The cycle route would then continue out of Lewes either:

along the old Lewes-Uckfield route (through the Malling cutting) and across a major iconic bridge (see the river Ouse to join a re-opened rail route and thence running alongside the proposed Brighton Mainline 2 rail route towards Uckfield.



LUA Mini Vertical Allotment



Cargo Bike



The High Line, New York, USA

along the west side riverbank onto the river path towards Hamsey, and join the rail line from there (see Cycle Stations and Skywalk bridge section below.)

Two further examples of infrastructure and circulation are highlighted below a Land Art Sculptural Trail and Vertical Gardening Structures fused with urban gardening.

**1) A Land Art sculptural signage trail.** One starting point for this Re-Envisioning Phoenix 2.0 document is grounded in Lewes as a town with a groundbreaking green history, with the Railway Land and Chris Drury's Heart of Reeds land art project, already cited as one example of this green history.

The linear sculptural signage trail will begin at the Cliffe bridge, thematically linking the Railway Land with the trail, extending into and through the Phoenix to the Pells area and Ouse river path. There would likely be space for anywhere between six and twelve sculptural pieces, to be partially sited at key junctions and signage points.

The sculptural signage trail could be kickstarted by a national competition, or a series of local schools, etc projects, from which work would emerge. Both could emphasise projects with ecological processes embedded in the work, as is the case with Heart of Reeds. This sculptural signage trail works with and applies the two butterfly wings design analogy referenced in Re-Envisioning Phoenix 1.0 and elsewhere in this document - (the railway land side of the main Cliffe road and bridge boundary line as one wing, land to the north of the Cliffe Bridge including the Phoenix as the other wing.)

**2) Vertical gardening structures.** In order to highlight and draw attention to local produce and the farmers market centre, a second potential signage and circulation concept are a series of Vertical gardening structures. The Vertical gardening or allotment structures will be constructed from locally sourced timber, acting as highly visible beacons for the broad range of strategies for local and integrated food production and infrastructure discussed above, and the potential of Lewes and environs for food production self-sufficiency.

Adapted and re-envisioned from the source of the idea, Russ & Henshaw Architects award winning Vertical Allotments project in Ebbw Vale, Wales in the envisioned for signage and circulation the vertical gardening structures could of course also be a series of stand alone signage towers. They can also be integrated into a broader walkway functionality (see the Green Sky Walkway section.)



Cycle Bridge



Cycle Station model

**3) Art Basket signage.** During 2012 local artist Anne Marie 'O Sullivan created a number of art baskets from local chestnut waste wood strips or laths in the Phoenix Foundry art space. Although her surroundings echoed the Victorian ironworks she was working in, 'O Sullivan's art basket creations also reflected an earlier time when the very same land was a willow osiery, looping history back to Lewes's pre-industrial past.

The earlier project could also be the starting point for a new series of art basketry sculptures, which also act as a signage and circulation route either through the Phoenix Estate or in another part of Lewes. This could also be integrated with the land art sculpture trail option. It is easy to imagine that these different circulation and signage options could be developed as a network of walks in and through the town, rather than necessarily relating to the Phoenix, although the Land Art option, linked as it is to the railway land, remains a poetic as reflection and complement to the Heart of Reeds project.

**4) Skywalk Bridge.** This element of Re-Envisioning Phoenix 2.0 builds on research conducted in the early 2000's, proposing a cycle route running alongside a re-opened Uckfield-Lewes rail corridor. This research resulted in the design of a landmark gateway bridge by the Brighton based design engineers Millimetre spanning the river Ouse proximal to Hamsey Church for a cycle path spur from Brighton Mainline 2 before/after the main section running alongside the re-implemented rail route.

A prototype Skywalk bridge, with a local timber materials brief for construction, highlighting the synergy between locally sourced structural low energy materials and locally based sustainable transportation. Skywalk highlights a gateway to and from Lewes and cycle culture, as part of wider strategic approach to making Lewes as a centre of green practice excellence, and increasing local cycle travel.

Both the Skywalk bridge and the enhanced cycle route between Lewes and Uckfield will provide an effective, fast (comparatively) low energy cycle corridor between the two urban areas, with consequent impacts on other traffic and infrastructure capacity and carbon reduction.

The Skywalk bridge is an expansion on and contribution to Fourth Door's Cycle Stations Project concept.

## Eco-Tourism

**Gateway to the Southdown's National Park Cycle-Station.** There are a number of pathways from the North West of the town in and up onto the Southdowns proper. With Lewes as the urban 'jewel in the Southdowns Na-

tional Park', and with its close proximity to the South-downs, the prospects for realizing Fourth Door's Cycle Station concept are favourable.

What are Cycle Stations? Cycle Stations are rest and overnight stay accommodation for cyclists, horse-riders and foot-walkers, the cycle infrastructure equivalent of a motorway service station, or historically an overnight coaching inn, designed to a specifically high eco-aware level.

Cycle Station buildings acts as 'teaching and learning tools' highlighting the systemic overlaps between sustainability in the built environment and across transport culture. They support cycle paths as linear parks and environmental educational facilities for schools and the general public. Cycle Stations include overnight stay, and can also include many other facilities, i.e. restaurant, cycle repair and sales, and washrooms, etc.

John Grimshaw, Ex-CEO of Sustrans described the Cycle Stations Project as 'visionary.'

A Cycle Station on, or a short distance from, the northern edge of Lewes, integrated with a new Lewes to Uckfield cycle route and the Skywalk bridge would be a major addition to the town's Eco-Tourist dimension. A Cycle Station can be considered in concert with others, and with other travel infrastructure being developed, for instance, the river cycle path between Newhaven and Lewes opening, and links being developed with the French Avenue Verte, which runs south from Dieppe. A further site option for a Cycle Station could be in the heart of Lewes

#### **Phoenix micro-back-packing overnight 'Stay-tels'.**

The Phoenix site consists of various individual and non-standard buildings and structures. The current plan is for the vast majority of the site is for it to be leveled, removing opportunities for imaginative re-use.

Fire Station training tower. The old fire station training tower is a prime potential backpacking micro Stay-tel. With a series of small-scale rooms on each floor, the practice tower could be a very attractive overnight stay destination if promoted and marketed in a convincing way.

The Pells pool. The Pells outdoor swimming pool could integrate low cost overnight stay accommodation, for instance as a second floor above its changing facilities. This would require some redesigning of the pool, and possible all night staffing. Roof-top cabin Stay-tels – Along with the Green Sky Walking (see below) the Phoenix roofscape.



Crowd funded bridge Rotterdam

**Green Sky Walking – Vertical Gardens version 2.**

In addition to circulation and signage outlined above, the Vertical Garden towers are seen as a relatively low cost yet quasi-iconic and dramatic gateway design for the approach to the Phoenix Estate. This version 2 of Vertical Garden towers envisages the towers as the building blocks for a raised walkway woven through, alongside and across the main buildings, a secondary connective corridor between the main agora square and a teenagers and children’s zone, close to and abutting the Pells pool.

The raised walkway will highlight the series of vertical allotments – in effect vegetable and vegetal towers – at a series of points along the walkway. The walkway will traverse parts of the roofing areas of the main buildings, visual entry points into a number of workspaces for walkway visitors to get a sense of what is happening in these workspaces.

A third element of the walkway is that at key points along the path, a multiplicity of experimental, existing solar power, PV technology would be showcased. This Solar roof would be a key section of the Re-Materialise Eco-Industrial visitor centre, further underlining the local food with renewable technology aspects of Re-Envisioning Phoenix 2.0. The walkway can also interact with potential roof restaurants, gardens, cinemas and party areas.

**Rope adventure and roof skate-park.** The Green Sky Walkway will link to other child and youth activities, such as an Adventure Rope Centre and a rooftop skate park, if the current skate park building necessitated any move. These in turn will be linked to a revitalised Pells swimming pool area. The Green Sky Walkway leading from the main vertical gardening infrastructure across the primary access road into the Phoenix to the Pells swimming pool area.

Either or both facilities will provide a national standard child and youth-centric aspect to the Phoenix. Working with the existing building fabric requires considerably less investment than any new structure. Using low grade, locally grown woods both economic and sustainability considerations could be met.



Vertical Garden Allotments



Dalston Roof Park

## Re-Envisioning Phoenix 2.0

### Final Words

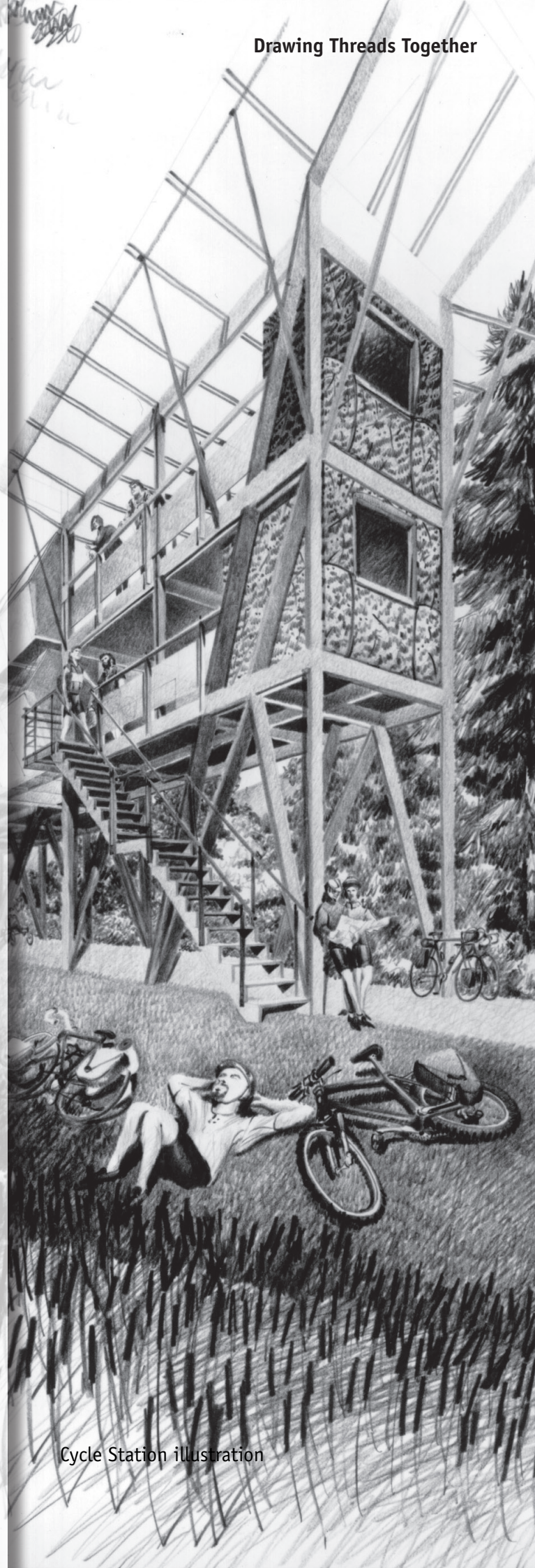
The outline above is ambitious in the extreme. It also describes a variety of projects, while fully conscious that these are unlikely to all be realised. Although the different elements have been outlined as interacting as a holistic entity and in systemic form, it is understood that for some there is too much overlap and crossover to consider – or indeed see – either value or need for the outlined discreet and constituent elements, e.g. Re-materialise and 12102000 Watershed.

This Re-Envisioning Phoenix 2.0 outline also proceeds from an awareness that the extent of land footprint of the integrated proposal version can seem excessive. However any next steps developing this proposal envisages working on how prospective integration and synergy between elements so that a limited land footprint is ensured.

The proposals also anticipate flooding issues, horizontality of the site-scape (ie, there is no attempt for vertical design to gain extra floor space) while utilising height, through roof space, the Green Sky Walkway, and vertical allotments for an eco-iconic structures required for regeneration funding and support etc. These additional infrastructural elements are also framed within low cost budgetary contexts and scenarios, ie, walkway etc. construction would be economic compared to conventional new build cultural showcases. The same considerations are assumed for the cultural and green infrastructure outlined, that these are informed by a retrofit, rebuild, re-use and refurbishment design ethos, rather than new build options.

The aim at present, therefore, is to provide a landscape of possibility, to opening up the discussion from only preserving – ‘saving’ - the Phoenix as it is, to envisaging possible steps in its organic growth, and integration with and envisioning possible ‘real and imaginary’ next steps, steps which highlight and underscore the ‘a beacon of green excellence’ agenda.

This Re-Envisioning Phoenix 2.0 document is therefore intended to inspire and evoke what could be in Lewes. The hope and intention is that it contributes to the broader discussion about the town’s future in these early opening years of the new century.



Cycle Station illustration

## Fourth Door Research

Fourth Door Research is project based research network, generally working in collaboration with a variety of partners. In addition Fourth Door Research provides one-off consultancy and research. At present Fourth Door Research's principal three projects are The Cycle Stations Project – sustainable architecture, design and transport project focused on cycle networks; Arborescence - Distributed new media project which uses wood and tree based data as basis of new media art; Roots Architecture - Humanitarian Architecture workshops and events project running annually at the WOMAD world music festival. Fourth Door Research has significant experience in research and consultancy across a wide spectrum of expertise.

## Oliver Lowenstein

Oliver Lowenstein is a writer and the editor of the award winning green cultural review magazine, Fourth Door Review. He is an established specialist writer on sustainable, timber and regionalist architecture, writing both popular and technical pieces for among others, Financial Times, The Independent, Blueprint, the AJ, the Architectural Review and is the UK architectural correspondent for Detail Green. He works as lead partner in the research network, Fourth Door Research, on the boundary line between actionist, pollinator, and imaginer. As such Lowenstein has catalysed a number of idea projects, including the Cycle Stations Project and Roots Architecture.

## **Feedback and contact information**

This is a draft document and we welcome feedback on all of or any part of the Re-Envisioning Phoenix 2.0. After feedback has been received the document will be developed into a fully designed Fourth Door Research scoping document and made available on the Fourth Door's Research [www.fourthdoor.co.uk/research/index.php](http://www.fourthdoor.co.uk/research/index.php) section of the website.

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This Re-Envisioning Phoenix 2.0 document completed 2nd June 2014.

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