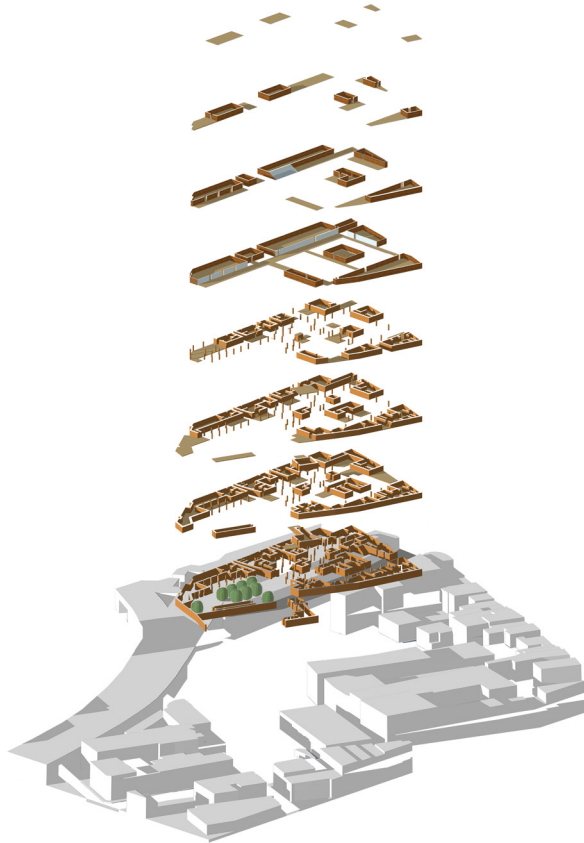


The Village



W1668765
DS3.1 - Semester 1
Sebastian Mortimer
Design Statement

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01. Building from Semester One



Evolving from the semester one project 'The Settlement', which was a project supporting three local artists, an education centre, and three growing techniques off the grid. The project was based on the reduction of waste, and a rejection of societies addiction to over reliance and superfluity. These principals came from studying the Vietnam war, Apollo 11 and Woodstock festival. All costing far more than expected and normalising the reliance on others for basic amenities. In 'The Village' a society in central London would be providing for themselves and their local community, in the heart of a city whose become accustomed to relying on governments and corporations to provide their basic amenities.

The site has an immensely rich history, a more diverse and alternative history to that of Central London. Hosting immigrants, prostitutes, pubs and shipyards Southwark and Borough has much to draw from. Historically a less financially rich part of London, but has a newfound identity through

the sprawl of the corporate mass into the area. Borough, once a market town supplying London has become a part of the cities core.

These projects are looking to mitigate the rapid gentrification with a sustainable, affordable and educational addition to the area. Bringing a vision for an alternative educated sustainable and happy settlement without reliance on steady income or importation of goods or produce.

The building of a community became important for this project, as Borough's is being slowly diluted, along with the old market, which brought diversity and excitement to the area. Borough and its market have brought strangers together, forging communities for centuries. However with the recent gentrification of the market, more work needs to go towards projects such as The Settlement and The Village to encourage what makes Borough Great, its fantastic ability to bring together people who don't fit in.

A Manifesto for Societal Living (on earth) in the 22nd Century

Community is lost; in a modern day texting someone across the world is equivalent in time, cost and ease to someone across the room. A pandemic has spread across the globe with ease, bypassing any barriers we erect. Stress, Anxiety and Chronic Loneliness are at an all time high. Mental illness has never played a larger role in society. At a time where nothing stays still, little appears to be changing to improve our connection. This societal circus, driven by the media and social networks is beginning to force cracks in our frantically overpopulating world. Climate change has begun to humble the human race, and she is not about to start slowing down.

A ceaseless pressure is mounting on our manic web of society. An often incompetent and unfair society forged in the violent collision of capitalization and globalization; selfishly, carelessly forced upon humanity by the 'western world' for centuries. This system humanity has indulged itself in has affected the way we live, particularly on our independence (or lack of it). Products and produce in our restaurants, shops, and which increasingly start to arrive at our doors come from anywhere but nearby. Despite efforts, global meat consumption is rising; eight and a half billion people are expected to inhabit the globe by 2030. Each of which will want to have rich and fulfilling lives.

This is not possible without systematic change in the way we live; failing that were doomed for an apocalyptic intervention.

Community, socialism and sustainability should be principle in all settlements, dwellings and urban areas in the 22nd Century. We cannot allow greed to prosper; cannot allow a society where exploitation of natural resources brings endless riches to the already wealthy. There should not be space for class division, or for companies and governments to control basic human needs.

On our current path fresh food will become less and less readily, easily and cheaply available. Water is becoming polluted and air is increasingly difficult to breathe. Cities, towns and urban areas will be realized for the huge amounts of under-utilized space withheld from the public. Safe and comfortable shelter, food, waste management and access to clean water should be easily and readily accessible to all. The democratization of human essentials is a necessary step to ensure equality and perhaps prevent mass loss of life. To make this a reality I suggest societies have the capability to live independently, providing their own essentials. This increases hygienic, food, water and electric security; societies will begin to sustain themselves, leading to the eradication

of unjust financial burdens. This will cause a huge reduction in stress and anxiety, which are too often connected with money. Financial capital's reduced importance in life will mean people will be able to enjoy life in a far more social and sustainable manner. Using money for less essential products and services, instead of relying on it to survive.

There is an immeasurable amount of untapped potential in our cities. Streets lined with material rivers flow with objects, material and mud. The immense amount of output created and discarded daily by our cities inhabitants will become invaluable to building new societies. These materials are an important part of new communities and their buildings. Plastics, cardboards, mud and scrap metals, currently so casually disregarded will be used to build greenhouses, waste treatment plants, recycling centres, accommodation and other buildings. Appreciation of craft will grow. The longing for our local roots will re-emerge. Flying won't be so casual, shipping won't be so common and cement won't retain its seductively inexpensive ease.

If nothing changes farms will begin to abandon hungry cries from cities in favour of feeding their own. Subsistence farmers will lead our new age, leaving investment bankers and property developers to re-train for the new and largely local economy. This will leave over 30 percent of us, who inhabit large cities without means for nourishment, and with little knowledge

about where to start.

This drives the necessity for design to fill cracks and exploit crevices, to utilize our cities, creating spaces to create, grow and sustain ourselves. Empty houses in Kensington and Knightsbridge, rooftops and walls, quiet voids lurking between 15 storey buildings will endure a fast and radical occupation. The growth into these spaces will benefit all and it will begin with the destruction of the confining walls withholding London's and the world's siloed societies. There will be a reduction in stress through providing cleaner air, the new lives more wholesome and with less financial costs. All will be able to produce their own food and sustain themselves, a factor far more important than money. For the rich a sense of community rarely witnessed by the top 10%. For the poor, financial burdens will not hold the same imposing urgency. Social and geographical restrictions originally imposed by money will flee.

Governments will meet their environmental targets and crime will be at an all time low due to the hugely increased financial equality as well as the reduced immediate requirement for money. However the government's roles will change, as the people will provide their own food, electricity, clean water, and waste. We will provide for ourselves, even the poorest have access to these amenities for free after the initial and cost of installation. In this largely craft and local trade based economy taxation will be more difficult

to monitor. Governments will receive less, however will also have less work. Borders will become realised for their fictional nature, as they begin to blur people will stop obsessing about the movement of people around the world. Wars over oil, water and political views will slow to a standstill as oil will be obsolete, water and food will be more readily available through increasingly accessible technologies and they will not be centrally controlled, and as governments lose power, their people will realise the futility of the hatred projected by politicians, spelling the end of rich orange bigots leading the worlds most powerful countries.

While trade will slow, globally information will be more readily accessible, apps will be open sourced, labs will employ globally and artists will collaborate creating a huge scientific and artistic upswell. An enormous untapped potential of humanity will be seized as education will become globally accessible, proven it will work through the COVID-19 pandemic. Those growing up in Boston, Vienna, Maseru and the Honiara will have equal opportunities in education, jobs and information resulting in massive developments to scientific and artistic communities worldwide. A truly societally globalized world.

The exponential rise in resource consumption and waste has become normalised; land has burned and rainforests fallen. Globalisation has manifested in capitalist urbanisation, founded on land ownership and profit,

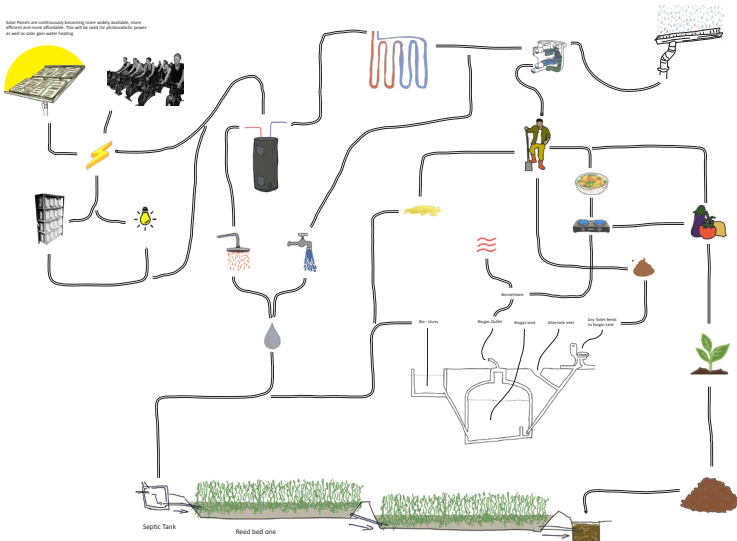
creating greater social inequality and dependency on the privatisation of food production and access to it.

The current economic crisis resulting from the Corona 19 pandemic, highlights issues around the capitalistic privatisation of fundamental human needs; the provision of shelter, electricity, water, food and waste management needs to be democratised.

Capitalism assumes that social needs are met through capitalist growth, this system is working perfectly for those with power, with money. However this method is failing for those who cannot, or will not play the system in which money is the be-all and end-all.

Communities need to have the ability to survive independently and locally, *The Village, in Central Southwark, explores the potential for neighbourhood autonomy*, proposing a living, working and growing community for self-sustaining, off-grid living. It explores the potential for living without inherent social dependence. It explores the (somehow radicalised) idea that people may be able to live without reliance on anyone, or more importantly, without reliance on capitalism.

The Village builds on the adjacent project 'The Settlement' which supports three artists. This project will go further than providing respite for individuals, it will revitalise the local economy, create a greater sense of community and bring people a sense of connection to their basic requirements for happiness.



This diagram shows the techniques and services to be used in the project to ensure it is able to stay off grid.



Early concept collage showing lightweight greenhouses built onto heavy mudbrick buildings.

02. The Approach

A current idea throughout anthropologists is asking people to re-assess what makes people happy. James Lancaster asks in 'The New Yorker' "did hunter gatherers have it better off" and says that "We're flattering ourselves by believing that their existence was so grim and that our modern, civilized one is, by comparison, so great," This truly scary notion that our current society is worse off than we were nearly 10,000 years ago, despite the invention of vaccines, planes, rockets and the control of electricity. We as a society have forgotten what we are living for. Other than reproduction, shouldn't creating enjoyment to your and to others lives be the primary goal in life? Our society has become too complex, too reliant, we are constantly bombarded with information, constantly being told how we should want to live, and constantly being told that you aren't successful unless you're rich (fiscally).

This project is looking at build happiness from the ground up, looking at some essentials to living a happy and (relatively) stress free life. Looking back to our ancestors for inspiration, I noticed two important factors missing from our society today. Combining the best of ancient life with modern technology. Aiming to do this through, firstly reducing our reliance on money, as ***Society has been pushed into a system of over-reliance***, this needs to

stop. People in The Village will be able to provide for themselves, nobody will have to worry about paying their water bill, or whether they'll have enough food for their children without sacrificing nutrition.

Another important factor in building happiness, is through a close knit community, within which people socialise and help each other, as today it is ever easier to sit alone on your phone, without any real contact for days or weeks at a time outside of work or education.

The necessity for such projects are highlighted by events such as the COVID-19 pandemic, had our food and trade networks been far closer to home the spread of the virus wouldn't have seemed so inevitable. Globalization sounds like a beneficial idea to all, as ideally it brings people closer together, and distributes wealth globally. However in its current form people are becoming more isolated, not being brought closer. We may get food from all over the world, but people barely interact with their neighbours.

Without people going into university, work, or schools social interaction becomes further estranged, with some fighting back and going out of their way to see people, but with many accepting and growing comfortable in their new and lonely life.



Legend : The Tower of Babel
Over 2km tall mudbrick tower

The tower of Babel was a monumental tower, hosting an entire town inside. Despite the only evidence of such a tower existing being in the bible. It is believed that a great tower did exist (probably not as large) but this inspired my conception of mudbrick and cob. To create a thriving settlement within cob towers.



Russian Dacha Gardens
Increasing food security

During the Soviet era land was given to people by local governments for free for them to farm in. This greatly improved food security and allowed people respite from bustling cities. The architecture usually lightweight timber frame buildings brought the idea to farm, and provide a respite from the city above the project.



Early concept models of project
Heavy cob structures sit beneath lightweight timber buildings which host gardens and vertical farms.

03. Re-Addressing the Site

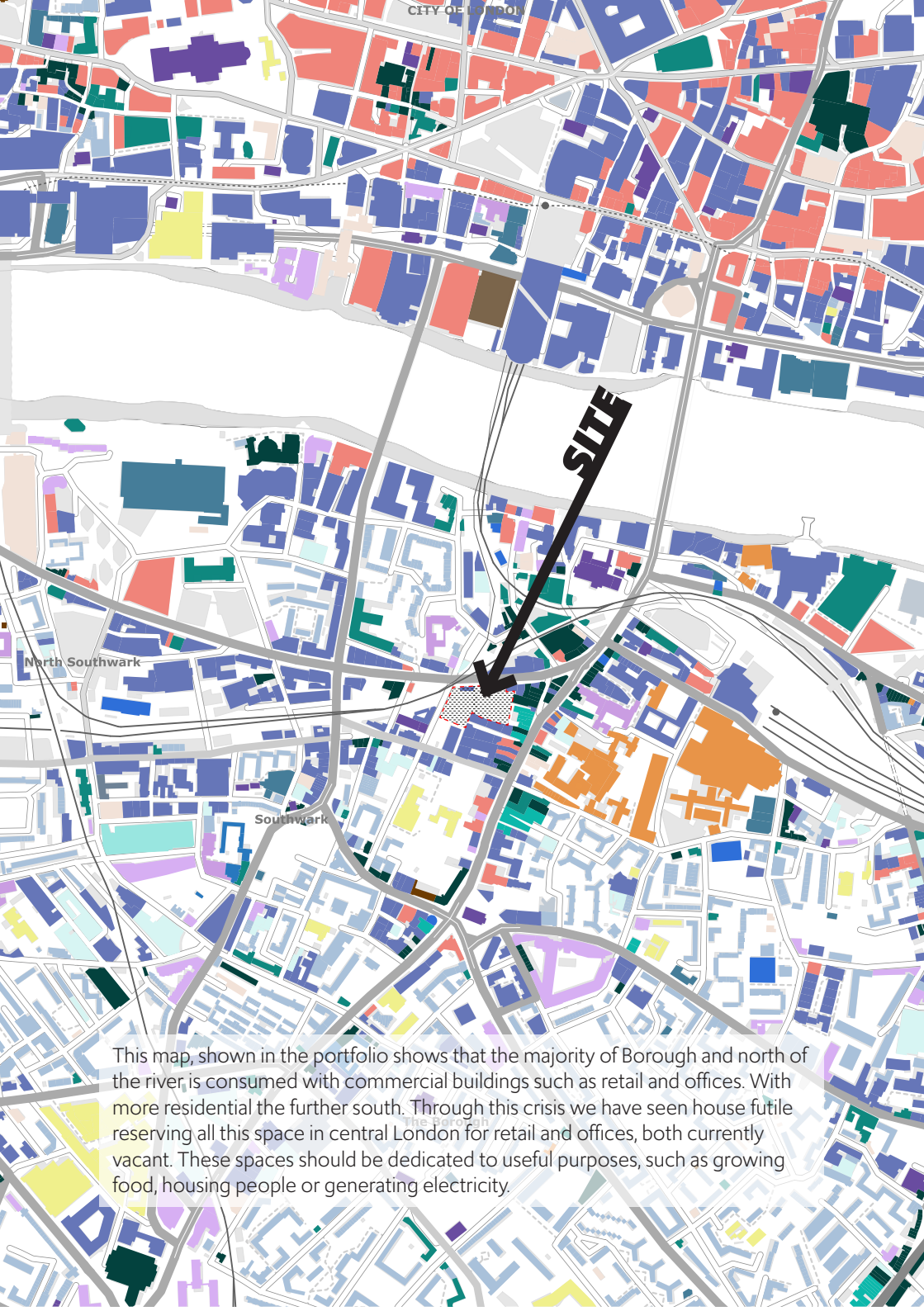
Borough has a rich and diverse history as a market town, due to its location it has been able to establish its importance as a vital supplier of London, this access to central London has attracted many immigrants through history. This incredibly old town, settled by Romans in 43CE, was not founded long after Londinium. After the first bridge across the river was constructed near Southwark, the area grew rapidly as people flocked to access the docks and towns on the south, in order to access the walled city on the north bank. This allowed London to grow larger without the strain of food production, as it would be brought into the city in whole sale markets such as Borough Market and Covent Garden. This is the beginning of our story of over-reliance.

Before long Borough was absorbed into London. Meaning it had to be supplied for itself, as the population grew and the *urban area began sprawling further into the countryside*, the local food supplies were no longer strong enough. Borough market has been swallowed by London, it has since ceased to be a local market. Now home to exotic and expensive foods, a tourist attraction, instead of local food supply which is so desperately needed, not just in London, but in all urban areas.

Borough has been a place for those who are looking for a more alternative and affordable solution to central London for hundreds of years. However the area is gentrification even the oldest of strongholds. The area used to welcome swathes of migrants, be an affordable place for people to settle and live more affordably. However with transport links and ever rising house prices these people are being pushed out even further from London.

The average commute in the UK is nearly an hour, the average commuter in London will pay £122 per month for this honor. This cost often disproportionately affects people with lower incomes as they may not be able to afford life in Central London, meaning the less you earn, the more you pay in money and more importantly, time.

The Village will provide food and products, supplying London with useful material and essential food, grown on their doorstep. It will host its own market allowing Borough Market to carry on bringing money into the local economy, these two markets will collaborate and cooperate to provide more fresh and local produce. It will also provide housing in an area which is difficult to live in without money.



This map, shown in the portfolio shows that the majority of Borough and north of the river, is consumed with commercial buildings such as retail and offices. With more residential the further south. Through this crisis we have seen house futile reserving all this space in central London for retail and offices, both currently vacant. These spaces should be dedicated to useful purposes, such as growing food, housing people or generating electricity.



A busy Borough Market (pre-pandemic)



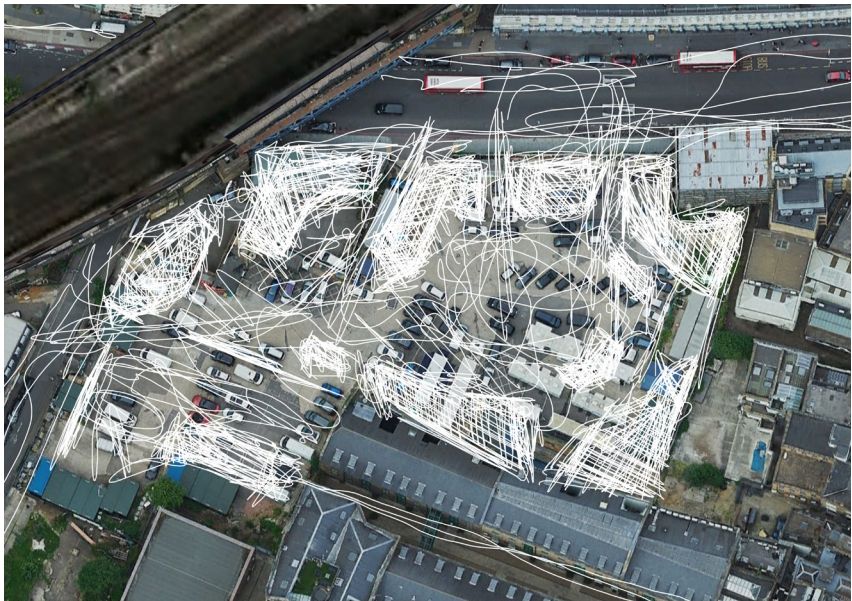
Site, a carpark a short walk from the Southbank and Borough Market, overlooked by the shard and the Hop Exchange.

Families living on the poverty line have little opportunity to change their situation, as with what work they get they have to pay for these amenities, they cannot afford life near better paid work, and they work no less hard than many who make vastly more money. Being constrained to neighbourhoods with higher crime and worse funded education services. Without the restrictions of these payments people will be able to

My project will vastly increase the economic diversity of Borough, living in one development, as well as seeing a growing community looking to live and work together.

Through semester ones project I learnt about Boroughs rich history and how it is becoming more urban and conventional than ever. How Borough was so reliant on foreign food imports and how the local communities were beginning to sour on the invading urbanisation, initially catching their eye for the promised financial influx.

Using this, alongside more research into the UK's food production, the UK's happiness, the UK's distribution of spending and the utility of spaces through Southwark led me to this proposal, for its huge advantages to the local area.



Sketching over the site, looking at the flow and relationship between the street and buildings.

04. The Client, Users and Stakeholders

This project is for the vendors at Borough market, who will be able to source food locally. It is for the creatives throughout the world who desire life in central London but could never afford it. It is for bankers and city dwellers who need to reduce their stress. It is for those who have realised money is not happiness.

This project is for artists who want to work with found and grown materials. It is for horticulturists, for hobbyists and for people who liked lego when they were young but haven't made anything physical since.

This project is for anyone who wants to substitute time spent sat behind a desk for time caring for plants, making art, making products or furniture. It is for disgruntled engineers unhappy with the direction their company is taking the world.

This project will grow and expand, it is for Henry, Ali and Rurari (the artists living in The Settlement). It is for the local community who will witness and take part in a new and local revolution. The defiance of traditional capitalism and social dependence.

It is for you, for me, for everyone, this project brings people together. It is a respite from what is wrong with society.



Henry and Ali outside their greenhouse

Neighbours : Who will see benefits from the new market, and a nicer sight than the car-park, it will bring some life to the street, which currently is very quiet. However, they will no longer be able to use the carpark, meaning that they may have to park further away than they would like.

Council : The council may initially see the project as a rejection of them, a dangerous denial of their rules, however, Southwark has been trying to re-create their image of controversy and alternative spirit. This project sums up this image well, helping the advertising board. It would also cast a positive light on their eco/green agenda.

Students : will able to learn ways to live and thrive off-grid. Normalising this behaviour during their youth will mean that these lifestyles may become more common in the future.

While the project would not bring much in terms of property taxation, it will contribute to the local economy on a more local level, promoting the movement of money, through creating and then selling their goods and produce. This money would then be spent locally, promoting the economy.

Contribution to the cultural surroundings is far more prominent however. Stirring large political and social ques-

tions, creating a counter-culture in the hearth of Southwark for all to witness and be a part of

As the project expands it may begin retro-fitting under-utilised spaces and buildings, this may change the urban aesthetic of the area, which may not be to everyones taste, however this is a small price to see London start becoming self sufficient.



The Settlement



The Village



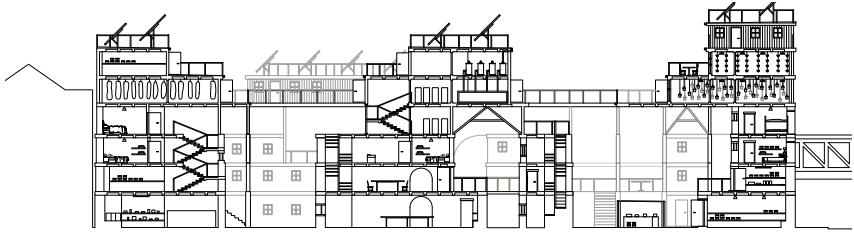
The Town



The City

The Village is a development of The settlement, providing more accommodation and off-grid facilities, after the Village grows it will become The Town and later once the project is promoting and enabling communities all over London to live sustainably and without reliance it will become The City, as a normal settlement evolves and becomes all of these things, this project will slowly seep into pre-existing towns and settlements providing them with independence and freedom.

05. Architectural Ideas and Aspiration



The project will initially consume a single storey carpark next to 'The Settlement'. It will house up to 30 people combining those who already may live unconventional lifestyles, with regular people who are interested in learning more about living off-grid. They will all stay in the accommodation without having to pay with money. They will stay for as long as they contribute to the society. Gardening, Farming, Fixing, plumbing, creating art, making furniture etc.

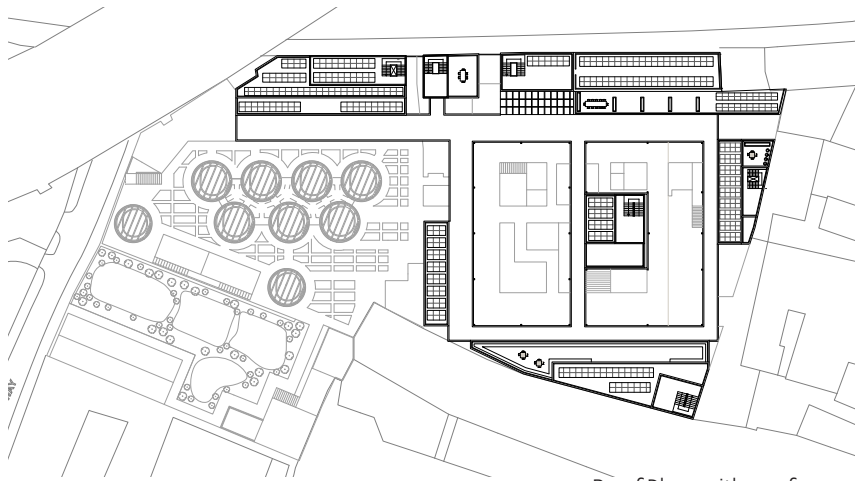
From the construction to its use, this project will be carbon efficient, using waste and local material. There is a monumental amount of waste daily, The Village looks to utilise this, not only cleaning up the streets, and preventing more landfill, but also being able to create things for very little money. Primarily cob structures for the lower structure was inspired through ancient design, as well as resource availability and carbon costs, of which cob is zero, and can be mixed with hemp shiv or straw grown on site, and then coated with flaxseed oil, also grown on site, meaning that it didn't require any outside material, it was efficient, cheap, and sequestered more carbon than it produces. Above the cob would be a predominantly timber structure.



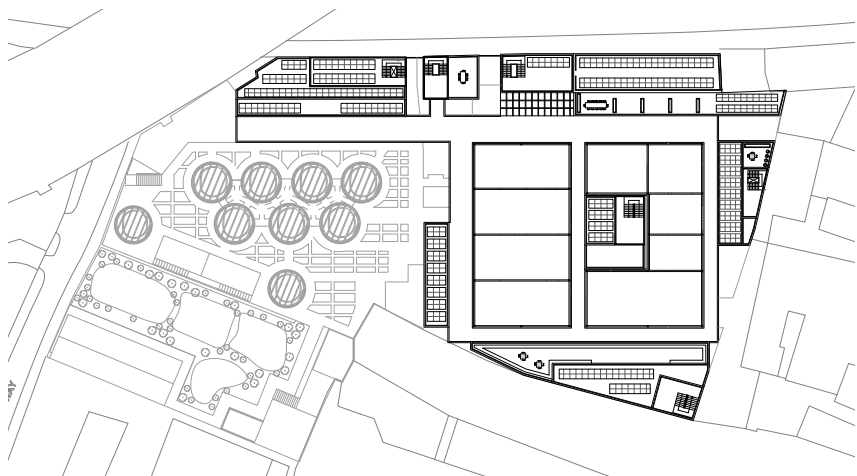
I wanted the junction to the street to have high walls and narrow passages to allow a glimpse down into an alternative city, enticing passers by inside

Construction of the project will be largely self built, by the artists, their friends and volunteers, however as the project gets higher professionals will need to be solicited. Professionals would also need to install the services, and their connections to the rest of the project such as the solar panels, the waste management system, and the water filtration / collection.

The roof of the project will be able to open and close, this will allow the project to collect more rainwater, while protecting those below, it will also prevent the sun on hot days and reduce energy used to cooling the buildings down.



Roof Plan, with roof open



Roof Plan, with roof closed

When I began this project, fires had been burning in Australia, raging for over 200 days, covering an area larger than Scotland; an increase in the ferocity and frequency of these natural disasters is only expected even in the most conservative of environmental predictions. This, sadly is just the first of what is to come in the next decades.

Since then society and the economy has been consumed with the pandemic. Globalization has its place, however, is being abused, and the frightening speed at which this virus spread is proof of its instability.

'The Village' proposes a series of buildings, expanding on 'The Settlement', an off-grid residence for three local artists. 'The Village' will support more people in this lifestyle, alongside a small market selling produce and products grown/made on site. This settlement will act as a beacon, dispelling vacant assumptions about off-grid living, that having an off-grid, sustainable lifestyle can be done in the centre of a city, that you don't not need to become a recluse and that it can lead to a happier, healthier and more beautiful life.



Elemental Social Housing Chile

This development saw bases of buildings built, and with additional parts built alongside catering to the needs of the inhabitants. This changing architecture alongside the solid base with lightweight structure connecting also inspired the design



Rural Studios

Construction using minimal new material, affordable, exciting buildings using waste for a socially conscious purpose



This Vocational School in Rudrapur, India combines a thick, heavy mudbrick base with a light bamboo structure above it to create two very different atmospheres within the same building. The light bamboo structure was built atop the mudbrick structure as though it was a second separate building being

All grey and black water will be transported to the reed system which will filter the waste into water which can be used again as grey water (for toilets, outdoor faucets and plants)

Looking to combine ancient passive heating and construction techniques for low carbon, local building such as cob, alongside high tech systems such as photovoltaic panelling and solar heating is an important route to the future and an integral part of this project. Together these technologies work similarly to the concept of the project, the new and the old coming together to create something we have thought we are too good for. Coming back to simpler routes can help us realise what fundamentals we were missing.



A journey through the project, you become immersed in another world, with high buildings on the outside, looking in is difficult, once inside it is difficult to see out creating the illusion of escape

06. The Programme

Roof + : Solar panels, water collection, small scale gardening

Sixth Floor : Services, batteries, some growing

Fifth Floor : Growing, education spaces, Services

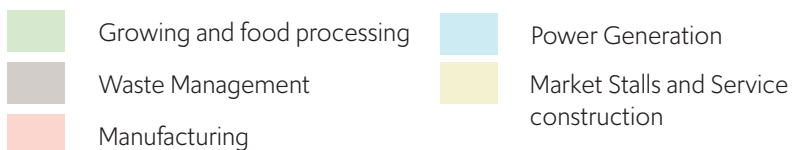
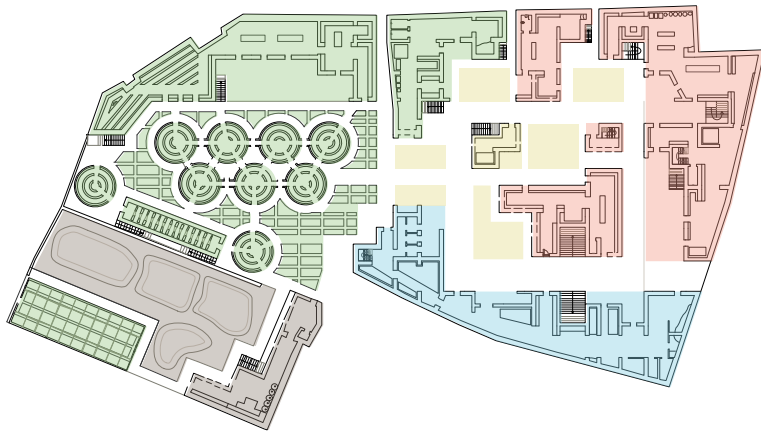
Forth Floor : Growing and educational allowance, water storage, batteries

Third Floor : Top Mudbrick floor, access to upper floors, some residential

Second Floor : Residential, Some services

First Floor : Residential, Food processing, Storage, power storage, education spaces

Ground Floor : Shown below



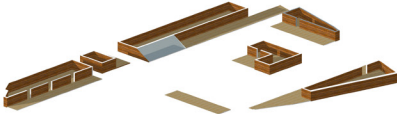
Roof +



Sixth Floor



Fifth Floor



Forth Floor



Third Floor



Second Floor



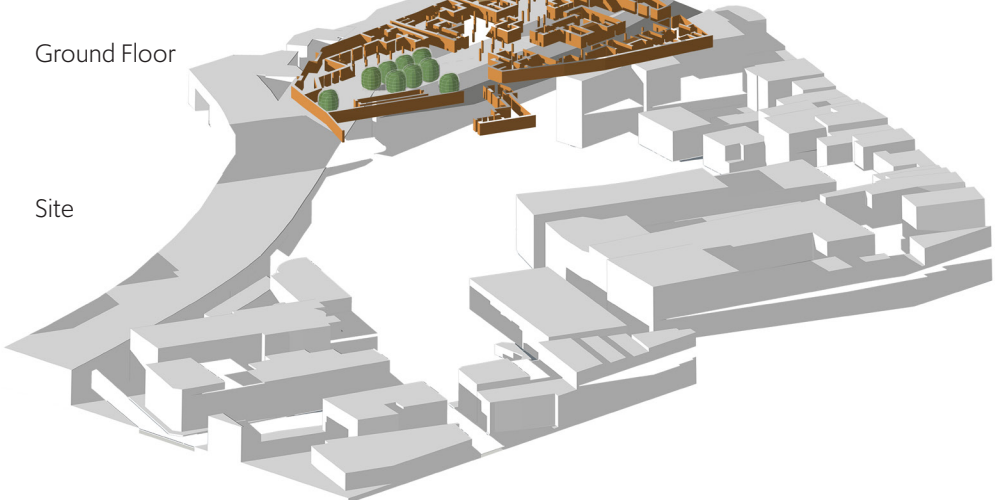
First Floor

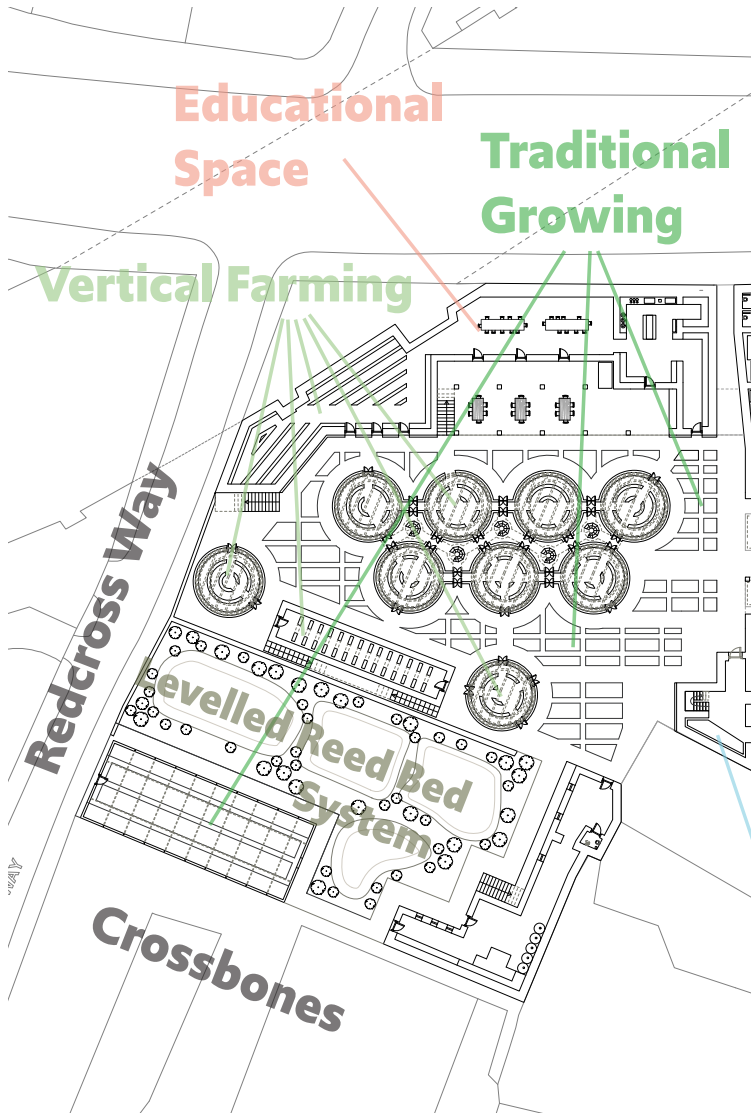


Ground Floor



Site





Educational Space

Traditional Growing

Vertical Farming

Redcross Way

Levelled Reed Bed System

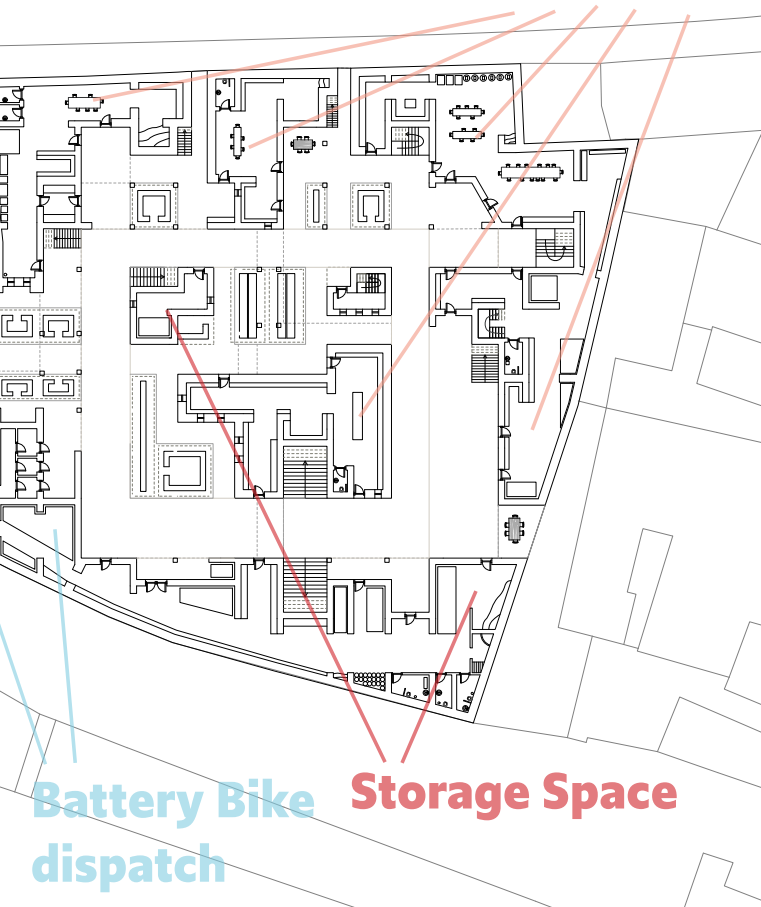
Crossbones

Alva

Hop Exchange

Southwark St

**Mixed Educational
and Services space**



**Battery Bike
dispatch**

Storage Space

07. The Environmental and Economic Strategy

Environmental and Economic strategies are often seen as conflicting. However, this project has been using them together, to compliment each other.

Construction

Materials used in the construction of The Village are:

'Eco'

Cheap

Cob : Mud, sourced from the river. Water, also sourced from the river. Straw, this will be grown on site. Linseed oil, Also grown on site



Timber Structure: The majority of this will be bought as it is difficult finding timber of structural quality, however there are lots of timber sources which are sustainable, renewing their forests at the pace of cutting down.



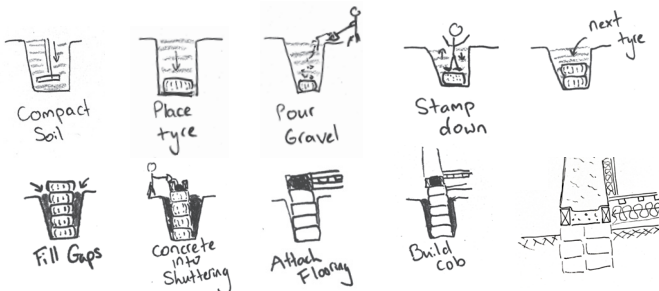
Concrete: Small amounts of concrete will be used in the foundations, while this impacts the environment poorly, the other two materials are carbon negative, mitigating the consequences of this use.



Foundations: Made from used tyres and filled with compressed gravel made from taking up the concrete carpark floor before construction starts



Other: Other materials used in large enough quantities will be found, or bought cheaply from scrap yards etc.



Foundations construction

Use

In the use of the building there are also qualities which can be cheap or environmentally conscious. Particularly in the short run, such as solar panels. The day you buy them they have produced a fair amount of CO₂e in their construction, however over time the solar panel will produce renewable energy, and reduce costs for electricity, meaning in the long run they are both eco and economically friendly.

Solar and Solar gain panels : The main energy producing part of the project. (see above)



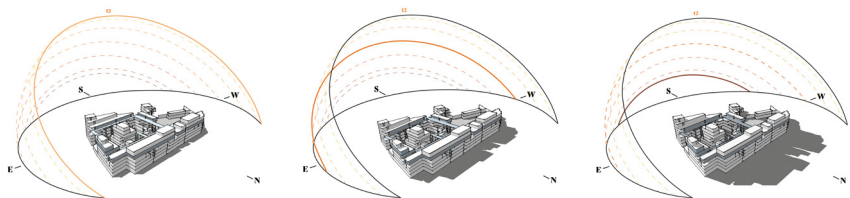
Vertical Reed beds: Reed bed system will convert black water into grey, meaning it can be used for washing and watering.



Thermal Mass: Ancient technique of storing the suns energy in thick walls, to release it when it is needed



Timber Structure and greenhouses: The thinner walled structure above has some insulation, however will need to be heated. Vertical systems use a lot of energy and are expensive to install (compared to traditional growing) However it is a necessary procedure, as with limited space to get enough food, vertical farming will need to be used. However due to increased demand and popularity these systems are becoming easier and more affordable.



Sun path diagrams showing shade in the sight through the year.

Overall this project has considered environmentally and economically conscious design throughout, and the outcome is a low carbon, low emission, affordable community.