

An aerial architectural rendering of a courtyard. The central feature is a large, circular building with a complex, grid-like facade. Surrounding this building are various green spaces, including circular lawns with trees, winding paths, and a larger rectangular area with a track or path. The entire scene is overlaid with a semi-transparent green filter.

KENT SCHOOL OF ARCHITECTURE AND PLANNING

MASTER OF ARCHITECTURE, RIBA PART II

UNIT 5

SPRING 2022

STAGE 4

DESIGN 4B

[BERTANKOTILARCHIVE.COM](http://BERTANKOTILARCHIVE.COM)

**BERTAN KOTIL**



# WHITSTABLE

THE TOWN'S DEFINING INDUSTRY HAS ALTERED SINCE THEN. LOCAL PRODUCERS MIGHT PLAY A BIGGER ROLE IN LOWERING CARBON EMISSIONS.

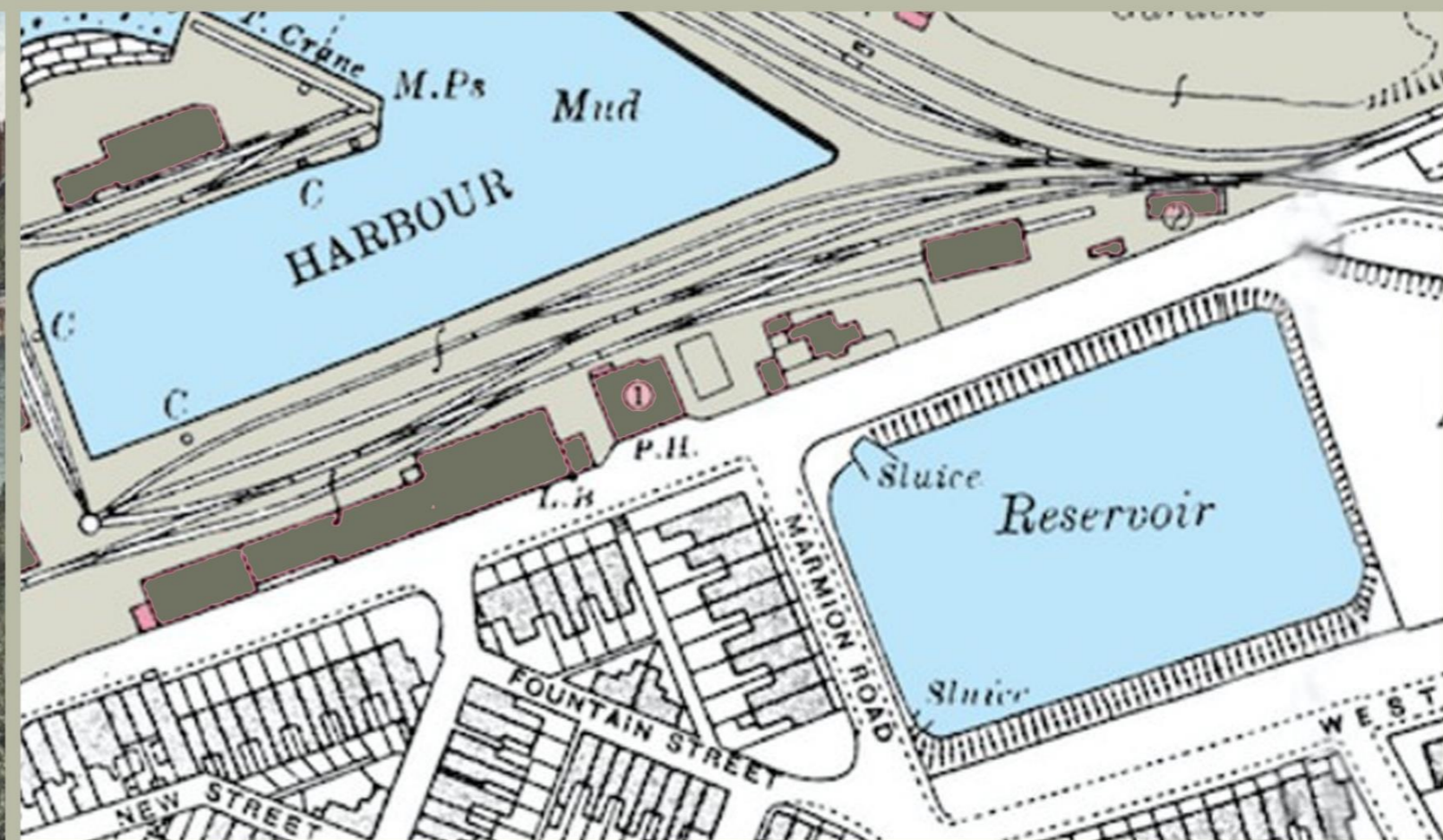
SEVERAL NATIVE CRAFTS ARE PRACTISED IN THE REGION, INCLUDING WEAVING AND CERAMICS. THESE PROCESSES SHOULD BE CELEBRATED MORE.

THE YOUTH CENTRE IS IN A LIMITED AREA. MORE MIGHT BE DONE, SUCH AS WORKSHOPS AND CLUBS, TO MEET THE NEEDS OF THE LOCAL YOUNGSTERS.

WHITSTABLE USED TO HAVE A MARKET, BUT THE PEDESTRIAN AREA HAS DIMINISHED DRAMATICALLY. THERE IS A NEED TO RECLAIM THE STREETS FOR PEOPLE, NOT VEHICLES.







THE SITE IS LOCATED IN EXISTING **GORRELL TANK CAR PARK** IN **WHITSTABLE, UK.**

The Gorrell Tank reservoir (now beneath the car park) was built in the 1840s to retain water from the Gorrell stream to assist clear silt from the port.





## PRECEDENTS



REGEN VILLAGES IS A NEW VISIONARY MODEL FOR THE DEVELOPEMENT OF OFF-GRID INTEGRATED AND RESILIENT ECO-VILLAGES THAT CAN POWER AND FEED SELF-RELIANT FAMILIES AROUND THE WORLD. REGEN STANDS FOR REGENERATIVE, WHERE THE OUTPUTS OF ONE SYSTEM ARE THE INPUTS OF ANOTHER

## REGEN VILLAGE COMMUNITY

PRESENTED AT THE 2016 VENICE ARCHITECTURE BIENALLE, THESE NEW COMMUNITIES ARE DESIGNED TO BE ENTIRELY SELF-RELIANT, RECYCLING THEIR OWN WASTE, GENERATING THEIR OWN FOOD. URBAN SUBURBAN AND RURAL STRATEGIES ARE COMBINED IN FRESH WAYS THAT COULD LEAD TO A NEW PARADIGM FOR SUSTAINABLE LIVING.







## **THE CISTERN HOUSING, WHITSTABLE**

THE CISTERN IS A NEW FORM OF HOUSING COMMUNITY THAT AIMS TO BE COMPLETELY SELF SUFFICIENT, PRODUCING ITS OWN FOOD AND ENERGY, AND HANDLING ITS OWN TRASH IN A CLOSED LOOP. EACH DWELLING WOULD BE OUTFITTED WITH REGENERATIVE SYSTEMS PROVIDING AN INFINITE LOOP OF RESOURCES FOR RESIDENTS. USING AND STORING THE WATER FROM THE HISTORIC RESERVOIR LAKE WHICH IS LOCATED DOWN BELOW THE SITE.



MASTERPLAN IN CONTEXT





HARBOUR STREET

MASTERPLAN



LEGEND

- 1- RESTAURANT, GYM & HOUSING FACILITIES
- 2- EXTERIOR GATHERING SPACE
- 3- DEMENTIA GARDEN
- 4- MICRO FOREST
- 5- URBAN GYM
- 6- RAINCATCHERS

- 6- RAINCATCHERS
- 7- LAKE
- 8- VERTICAL GARDEN
- 9- HYDROPONICS FACILITY
- SHOP UNITS IN ALL DWELLINGS

- 2 BEDROOM WITH GREENHOUSE ROOF
- 1 BEDROOM WITH HYDROPONICS KITCHEN
- 2 BEDROOM WITH GREENROOF



ELEVATIONS





# 2 BEDROOM FLAT WITH GREENHOUSE ROOF

- GROUND FLOOR - SHOP UNIT 60 m<sup>2</sup> or 30 m<sup>2</sup>
  - FIRST FLOOR - LIVING ROOM AND KITCHEN - 60m<sup>2</sup>
  - SECOND FLOOR - BEDROOMS AND WC - 60m<sup>2</sup>
  - TOP FLOOR - GREENHOUSE ROOF AND BALCONIE - 80 m<sup>2</sup>
- HOUSE TOTAL FLOOR AREA = 200 m<sup>2</sup>





# 1 BEDROOM FLAT WITH HYDROPONICS KITCHEN

GROUND FLOOR - SHOP UNIT **60 m<sup>2</sup>** or **30 m<sup>2</sup>**

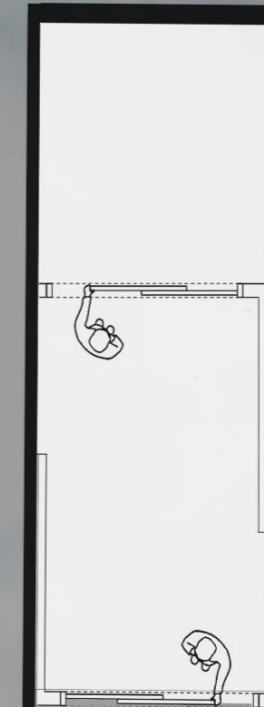
FIRST FLOOR - LIVING ROOM AND BEDDROM EN SUITE - **60m<sup>2</sup>**

SECOND FLOOR - BEDROOMS AND WC - **60m<sup>2</sup>**

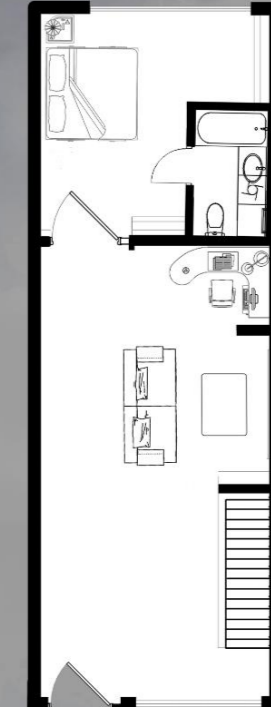
TOP FLOOR - GREENHOUSE ROOF AND BALCONIE - **80 m<sup>2</sup>**

HOUSE TOTAL FLOOR AREA = **200 m<sup>2</sup>**

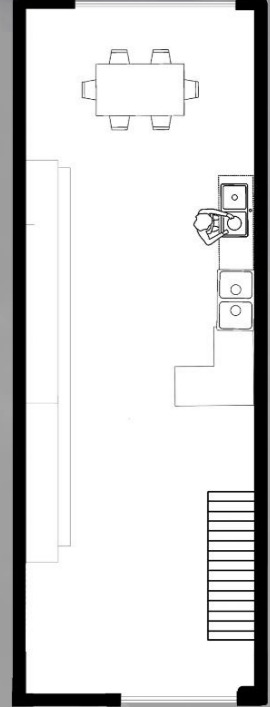
GROUND FLOOR



FIRST FLOOR



TOP FLOOR





# 2 BEDROOM FLAT WITH GREEN ROOF

GROUND FLOOR - SHOP UNIT **60 m<sup>2</sup> or 30 m<sup>2</sup>**

FIRST FLOOR - LIVING ROOM AND KITCHEN - **60m<sup>2</sup>**

SECOND FLOOR - BEDROOMS AND WC - **60m<sup>2</sup>**

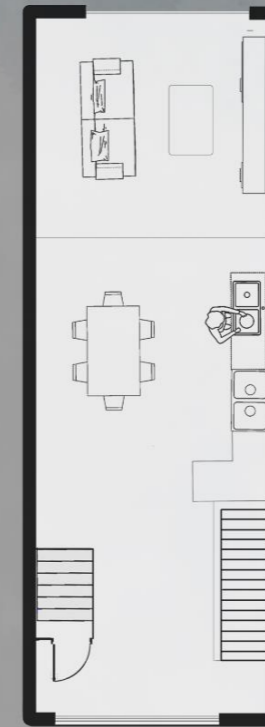
TOP FLOOR - GREENROOF - **80 m<sup>2</sup>**

HOUSE TOTAL FLOOR AREA = **200 m<sup>2</sup>**

GROUND FLOOR



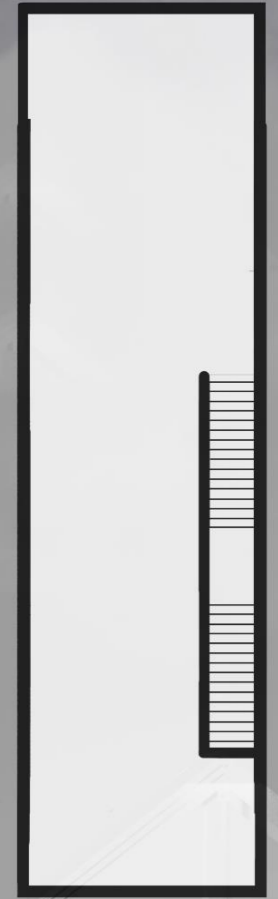
FIRST FLOOR



SECOND FLOOR



TOP FLOOR



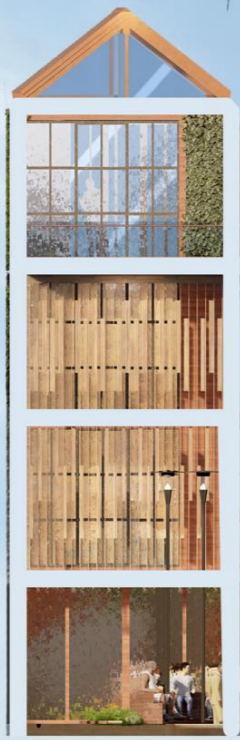




GREENHOUSE ROOF



GROW  
LIVE  
SLEEP  
SELL



SUPPORTING THE LOCAL ECONOMY WITH THE FOOD  
PRODUCED INSIDE THE DWELLINGS AND SELLING  
THEM DOWN TO THE SHOPS  
OR SELL YOUR OWN FOOD IN YOUR OWN SHOP.





SECTION A-A

## HOW THINGS WORK

THE RAIN WATER WILL BE ABSORBED BY THE RAIN CATCHERS AND THE WATER WILL BE STORED IN THE LAKE.

THE WATER FROM THE LAKE BELOW WILL BE USED TO POWER A HYDROPONIC WATERING SYSTEM FOR THE DWELLINGS AND THE PARK.

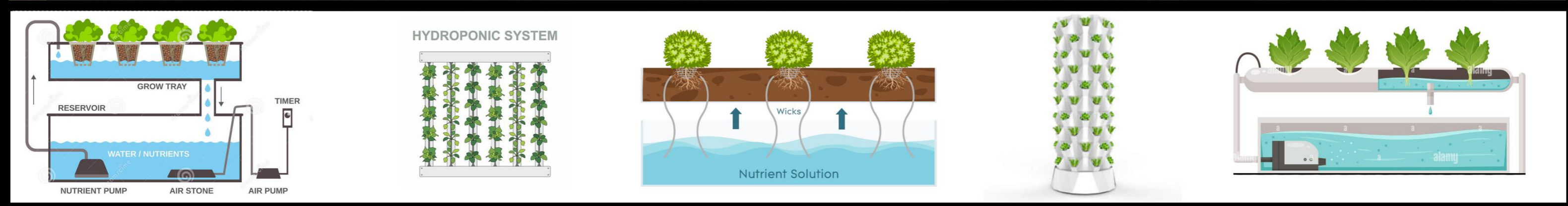
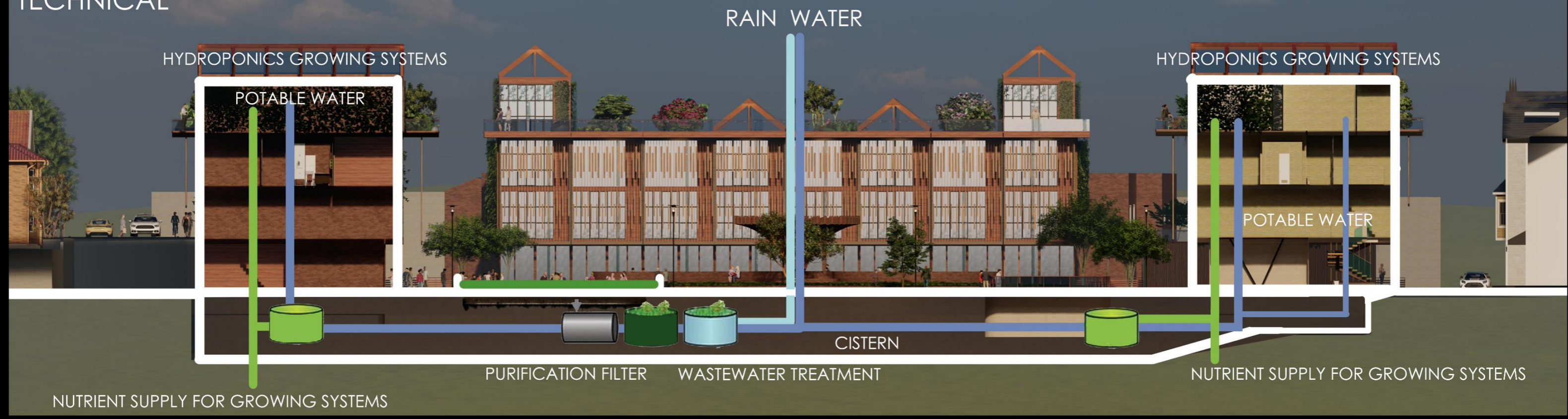
THE HOUSE WILL GENERATE ITS ELECTRICITY FROM THE PV PANELS GETTING ITS ENERGY FROM THE SUN.

ROOFTOPS OF EVERY SINGLE DWELLING WILL HAVE ITS OWN PRIVATE FOOD GROVING SYSTEM.

POTABLE WATER WILL BE PROVIDED FROM THE LAKE BELOW.



# TECHNICAL







HARBOUR STREET









































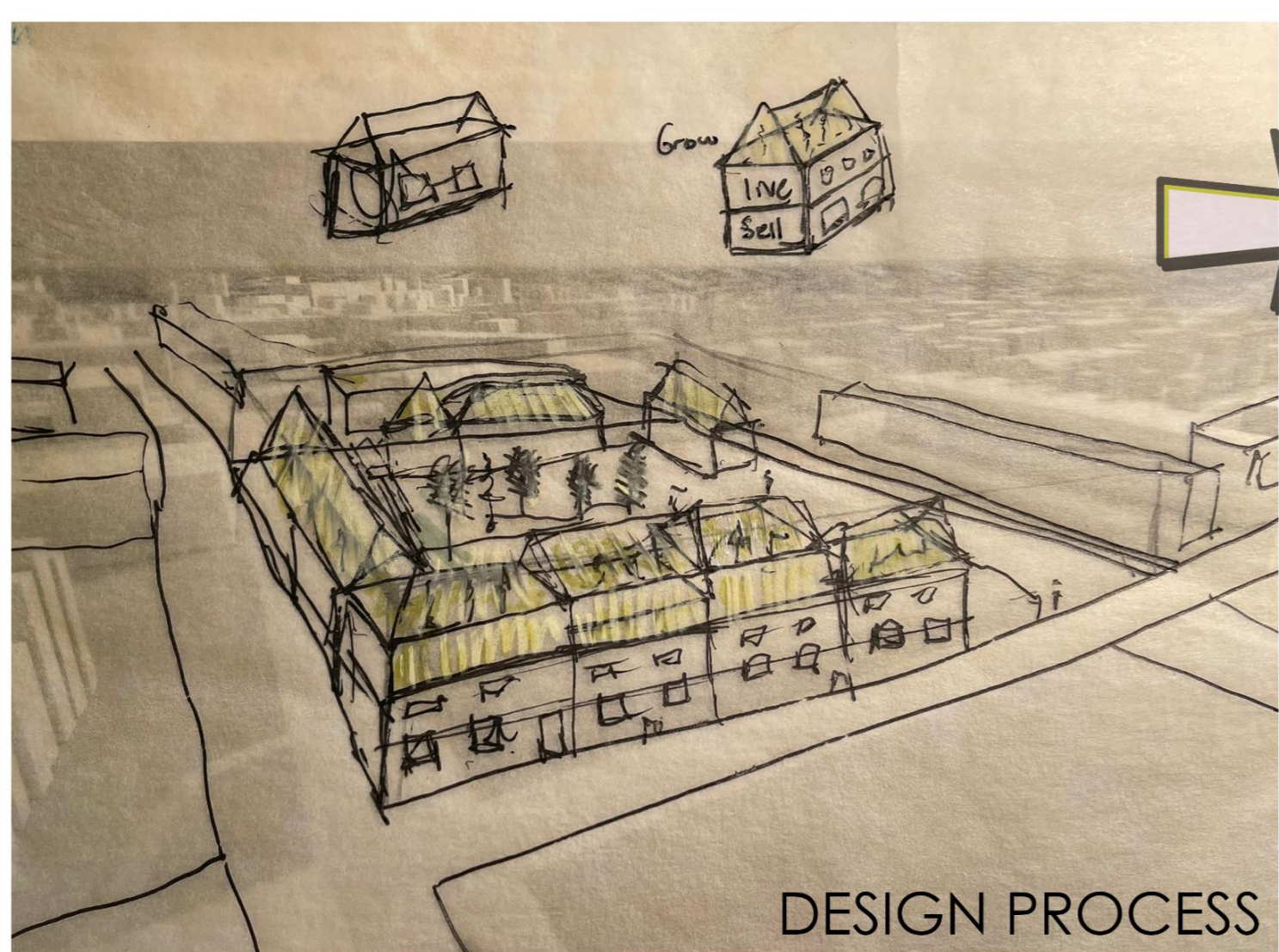




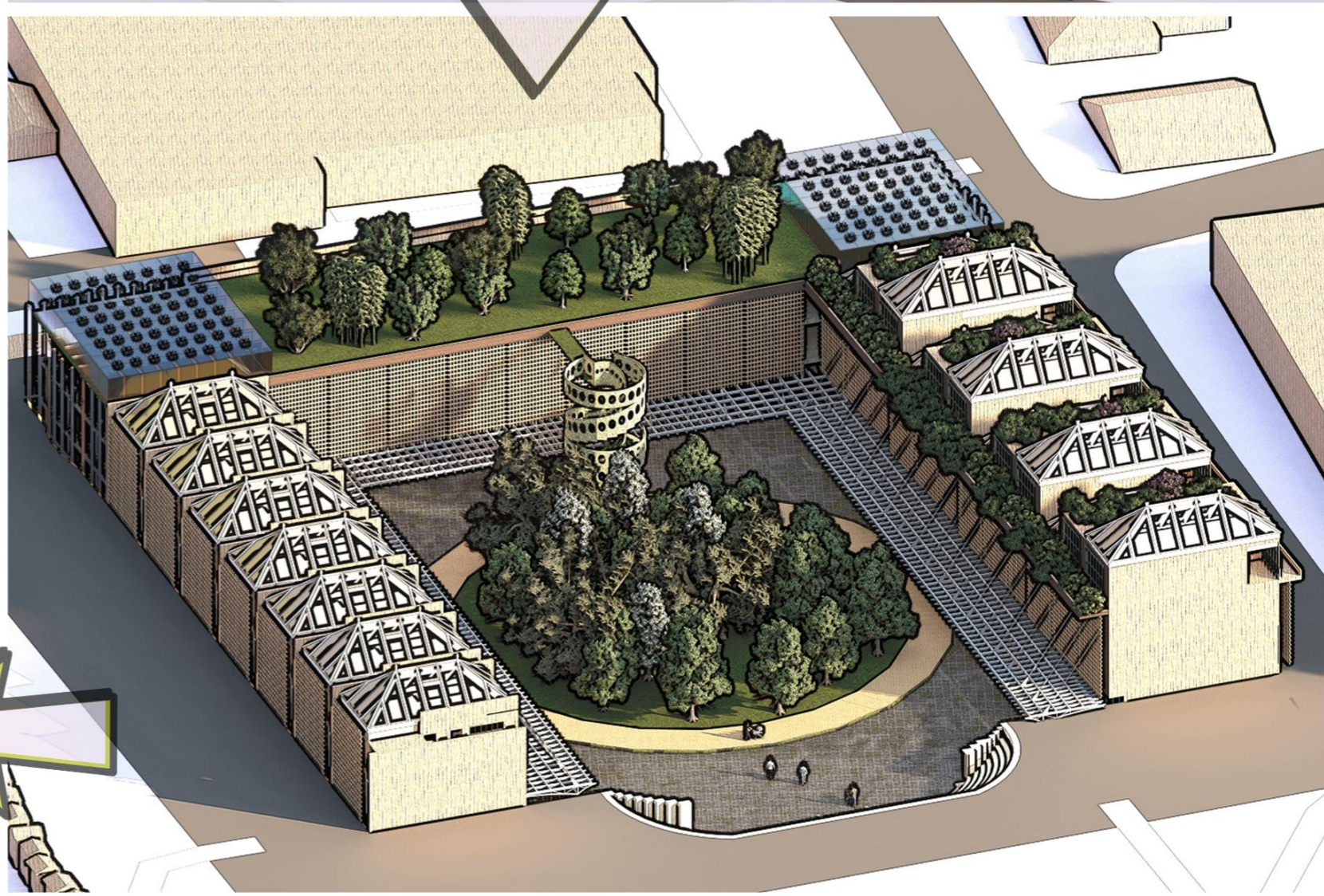
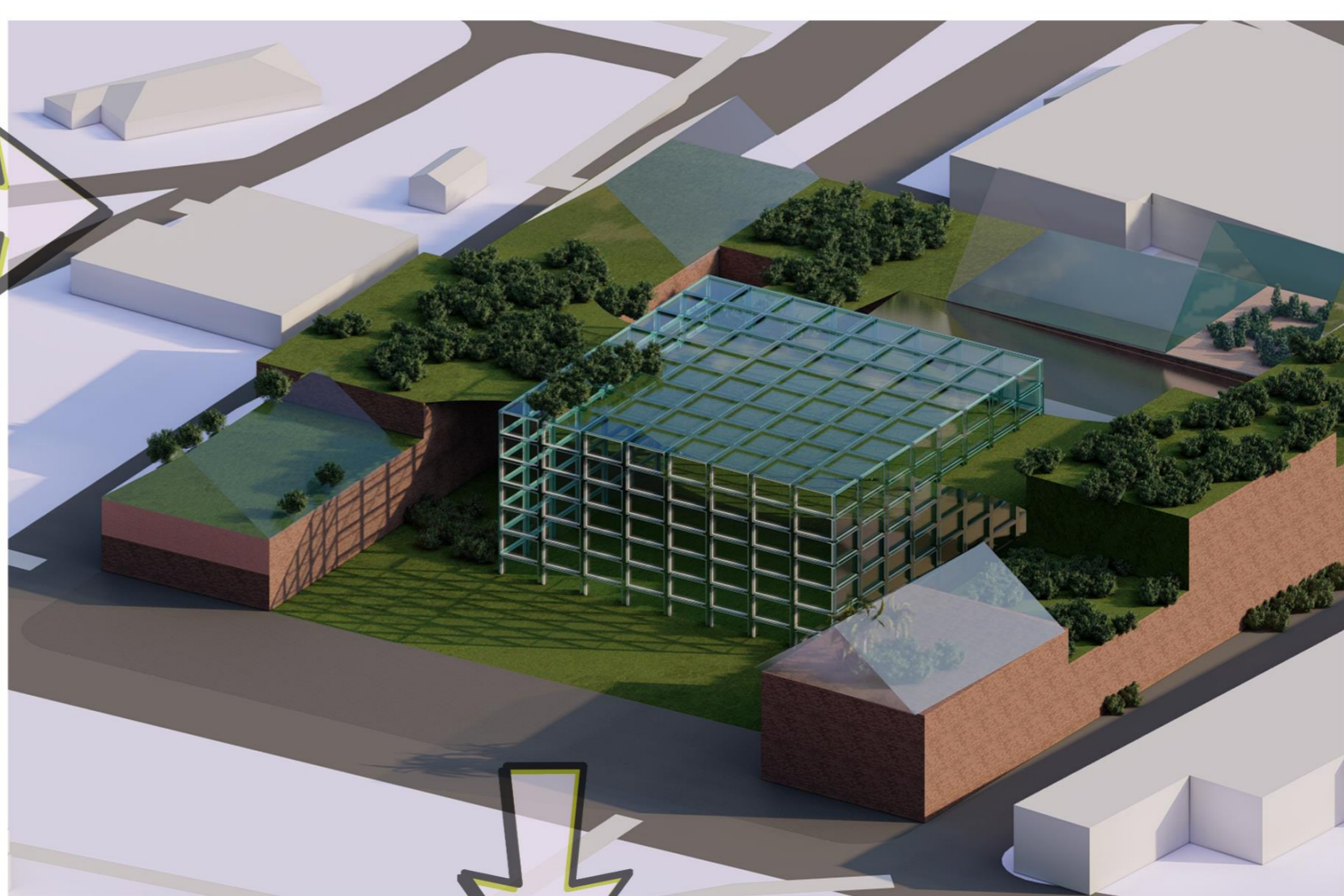








DESIGN PROCESS







- <https://www.youtube.com/watch?v=q98bqPrR40E>