

TOBB University of Economics and Technology – School of Architecture

MIM 402 Undergraduate Diploma Project

2020-2021 Bahar

Nur aęlar | Selda Bancı | Isıl Sipahioglu | Zelar ztoprak

Upcyclers ~~Anka~~ - park

22 Nisan 2021



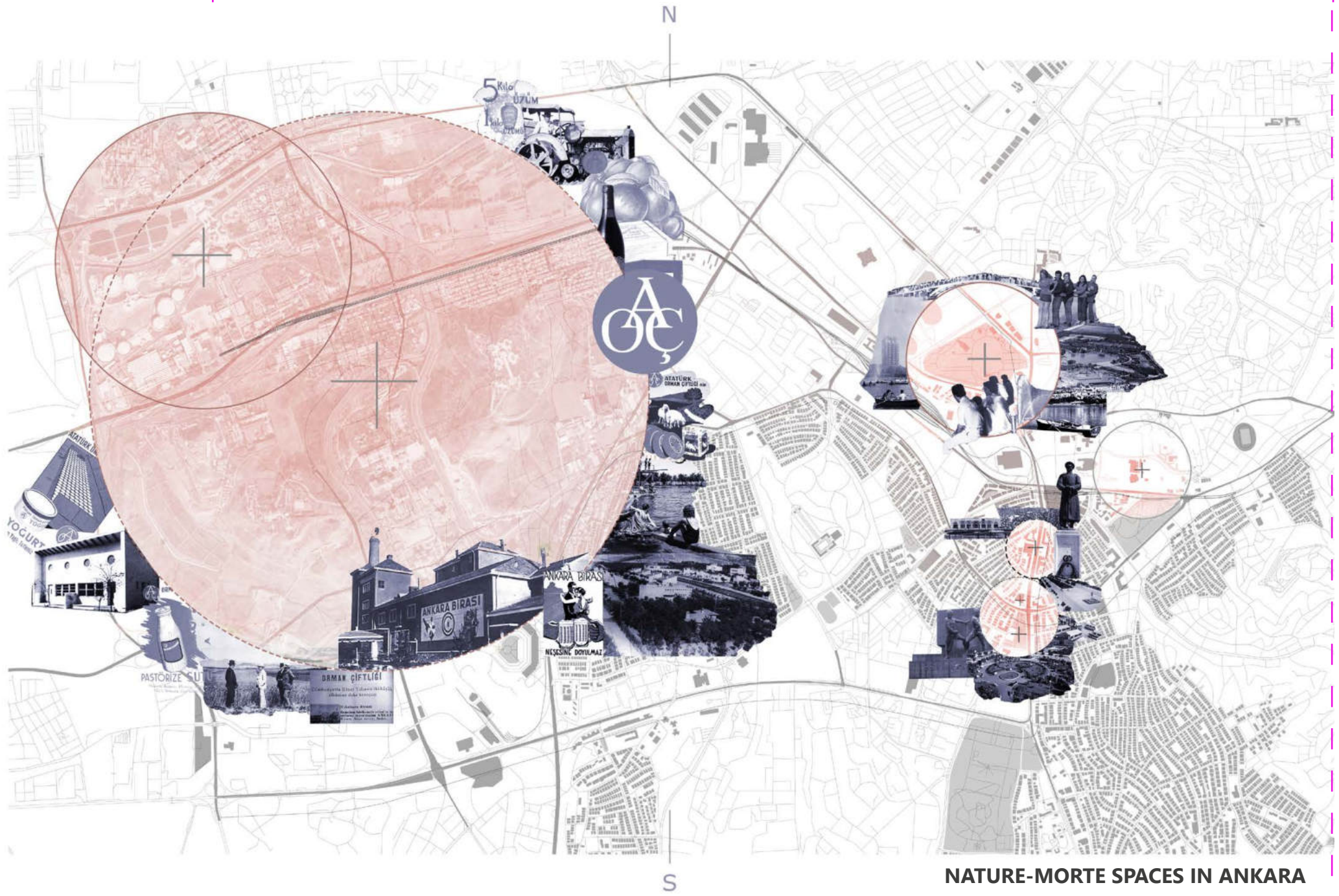
Beyza Ayaz | Irem Tmy | Yasemen Engin

# Outline

- φ 01 DESCRIPTION OF CONCEPT
  - | 1.1 Mind Map
  - | 1.2 Urban Justice
- φ 02 PROJECT SITE - ANKAPARK
  - | 2.1 Layers
  - | 2.2 Site Analysis
- φ 03 AIM?
  - | 3.1 Upcycling
  - | 3.2 Algae
- φ 04 HOW?
  - | 4.1 Strategies
- o 05 UPCYCLER
  - | 5.1 space organization - optimization
  - | 5.2 Program
- φ 06 SYSTEM OF UPCYCLER
- o 07 PARTICIPATION AND FUTURE SCENARIO







NATURE-MORTE SPACES IN ANKARA

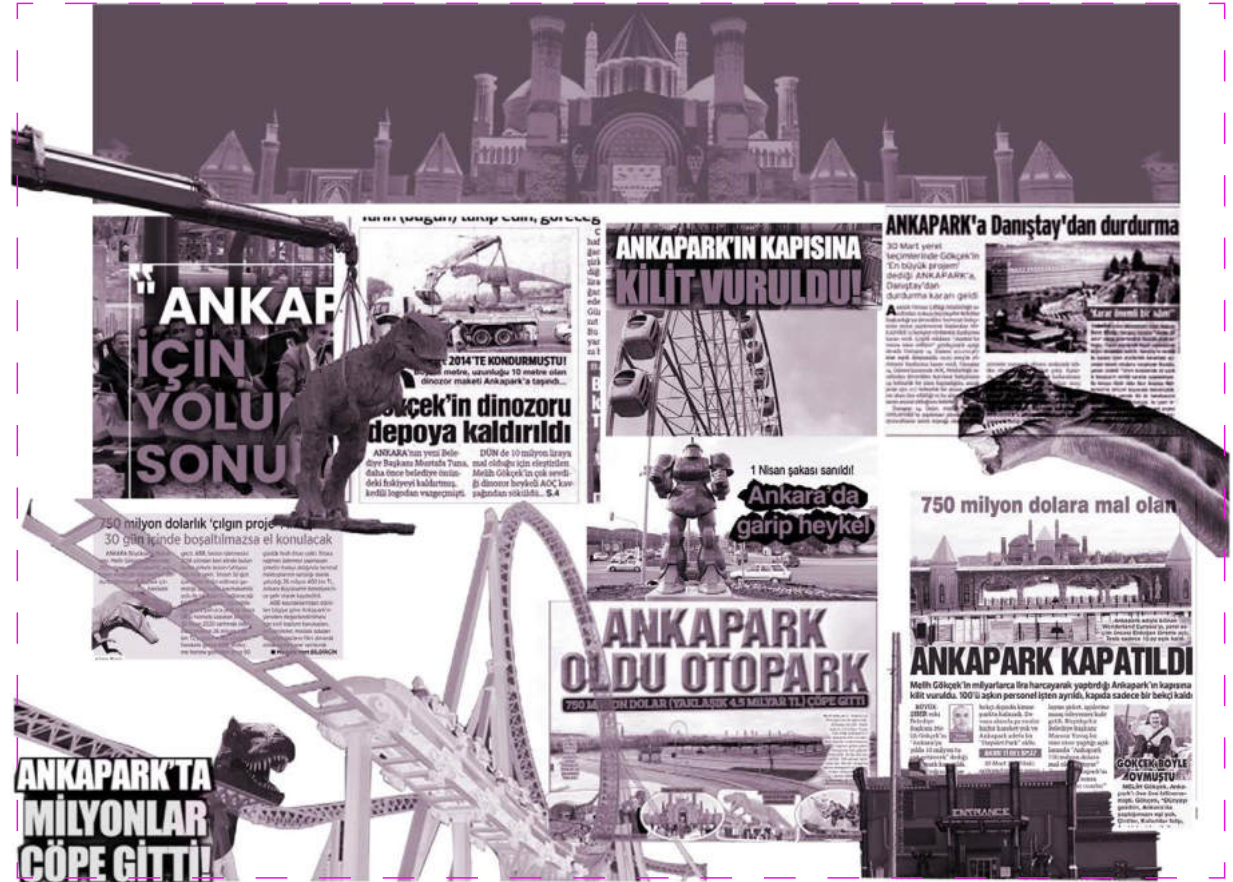
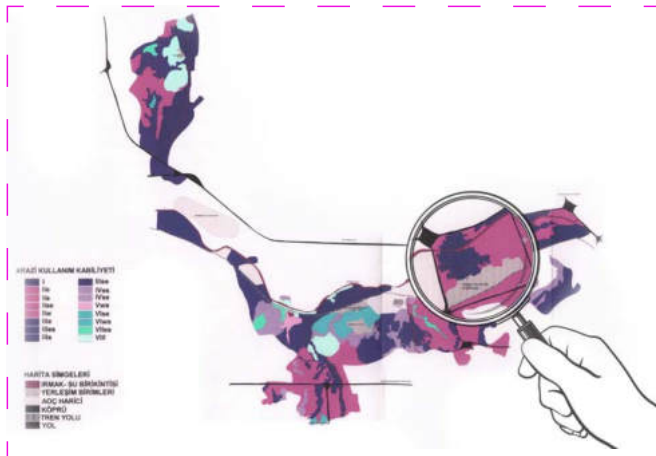
# Urban Justice

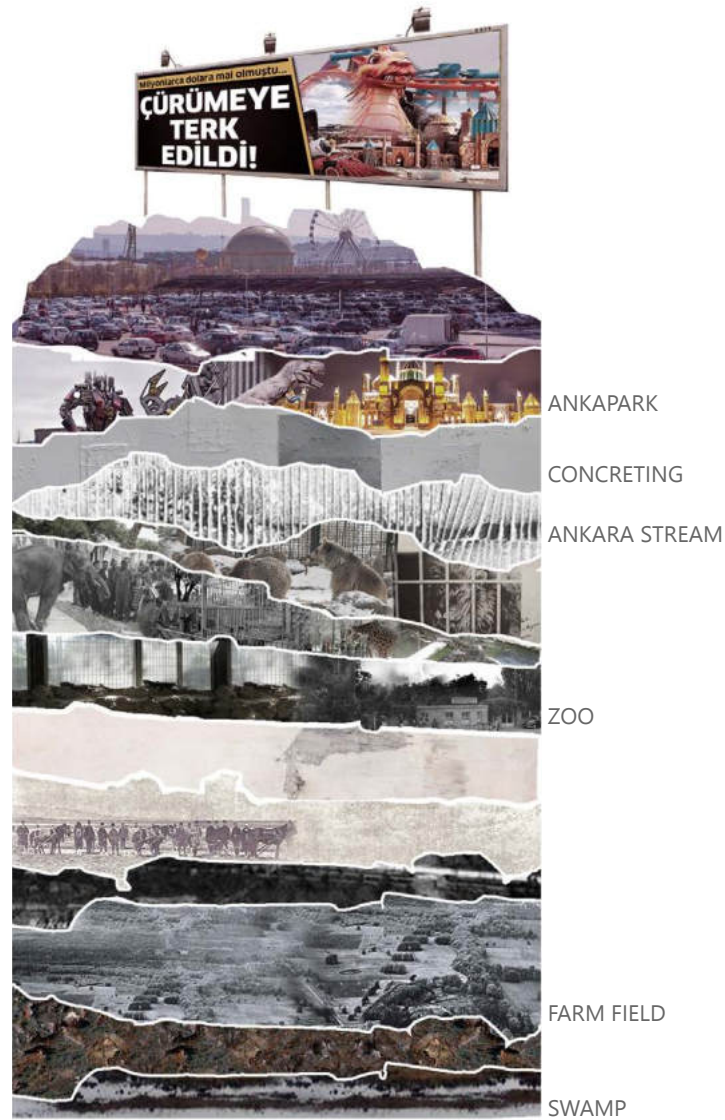


## ATTACK ON ATATÜRK FOREST FARM 1: ANKAPARK

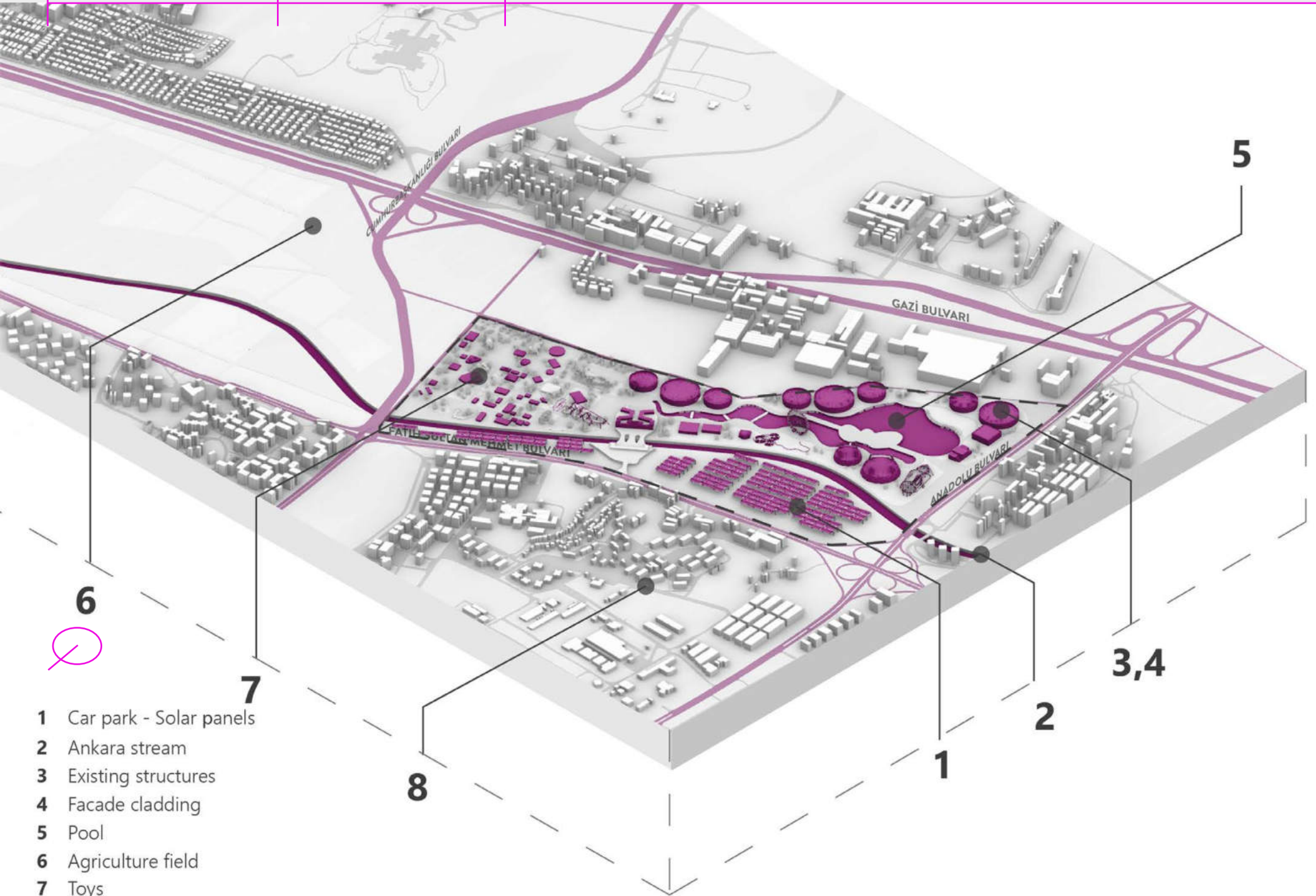
750 MILLION DOLLARS WASTED! ANKAPARK HAS BECOME THIS!

THE DECISION TO EVACUATE IN ANKAPARK HAS COME TO AN END FOR ANKAPARK, WHICH TURNED INTO AN IRON PILE.





LAYERS OF ANKAPARK



- 1 Car park - Solar panels
- 2 Ankara stream
- 3 Existing structures
- 4 Facade cladding
- 5 Pool
- 6 Agriculture field
- 7 Toys
- 8 Neighborhoods



Plastic Toys



Hexagonal panel



Roller coaster



Solar panels



Ankara Stream



Roller coaster



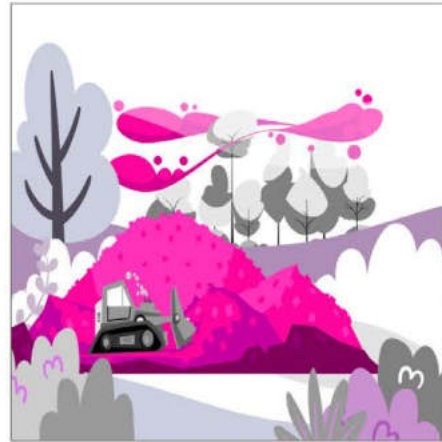
Existing structures







1. The first stage is a faithful image/copy, a "reflection of a profound reality".



2. An unfaithful copy, which "masks and denatures" reality.



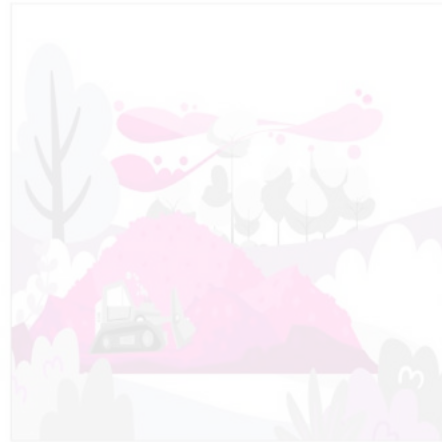
3. The third stage masks the absence of a profound reality, where the sign pretends to be a faithful copy, but it is a copy with no original.



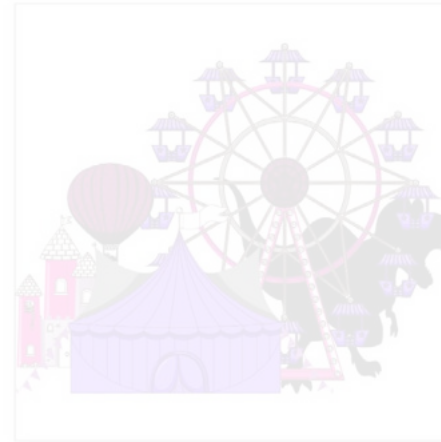
4. The fourth stage is pure simulacrum, hyperreal, in which the simulacrum has no relationship to any reality whatsoever.



1. The first stage is a faithful image/copy, a "reflection of a profound reality".



2. An unfaithful copy, which "masks and denatures" reality.



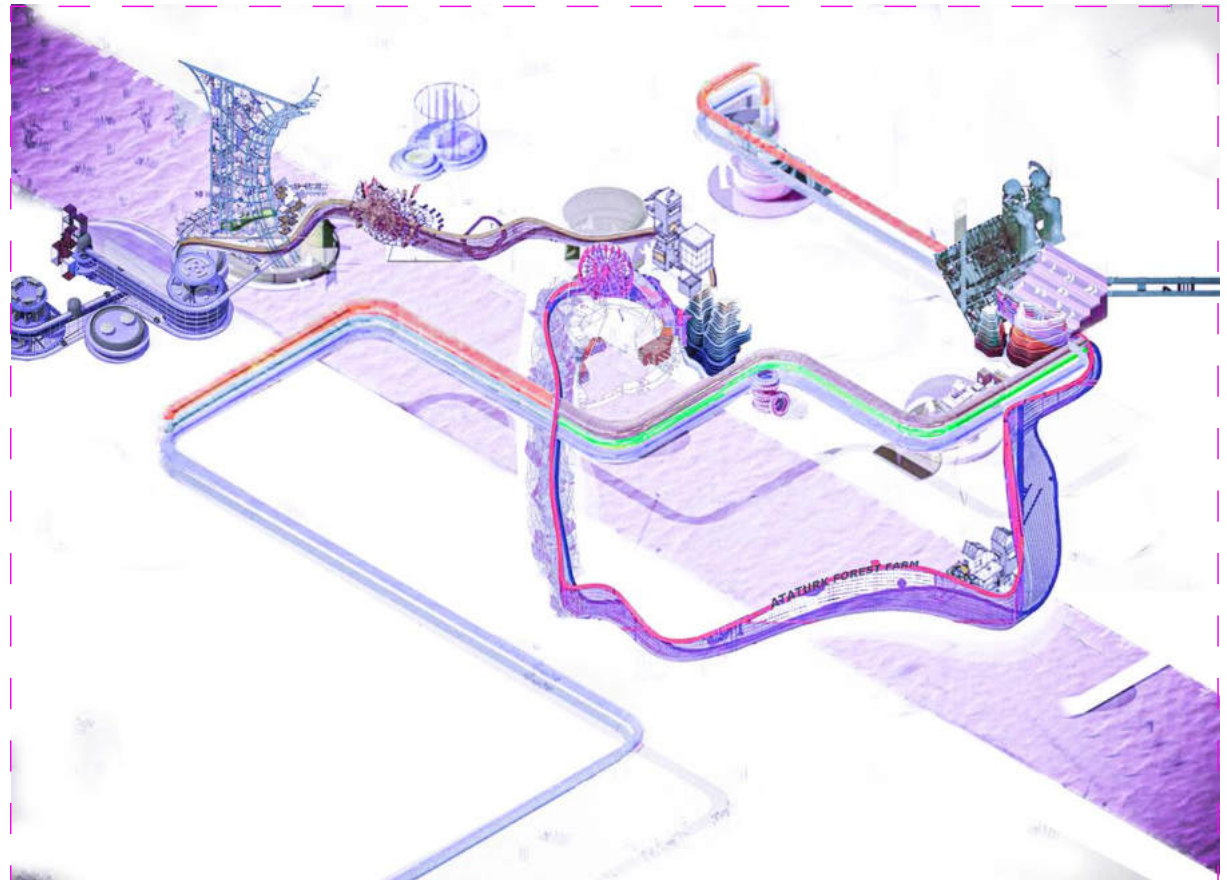
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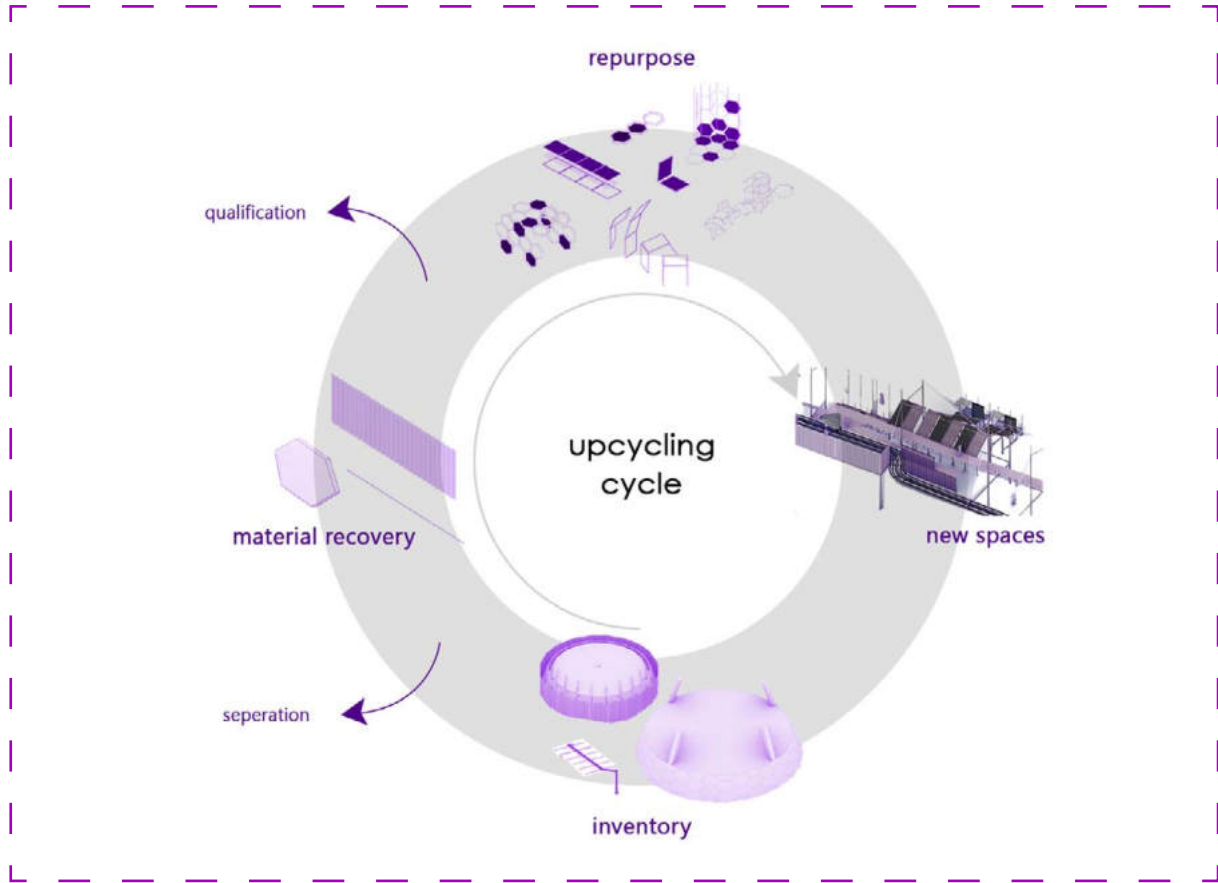
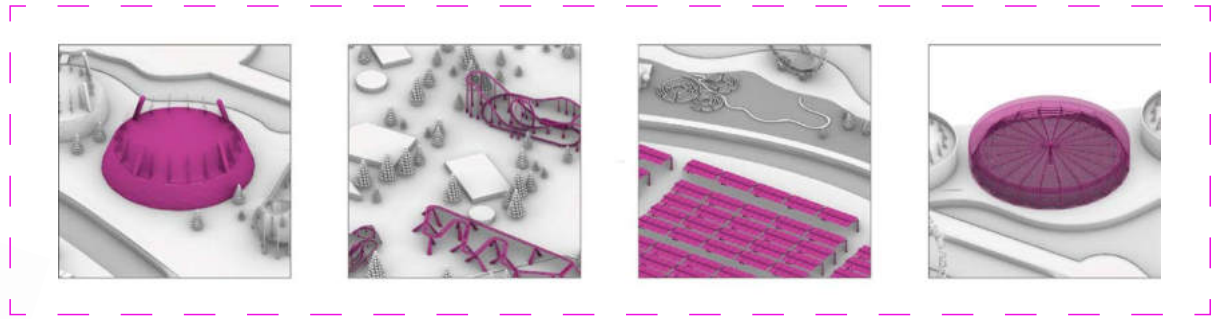
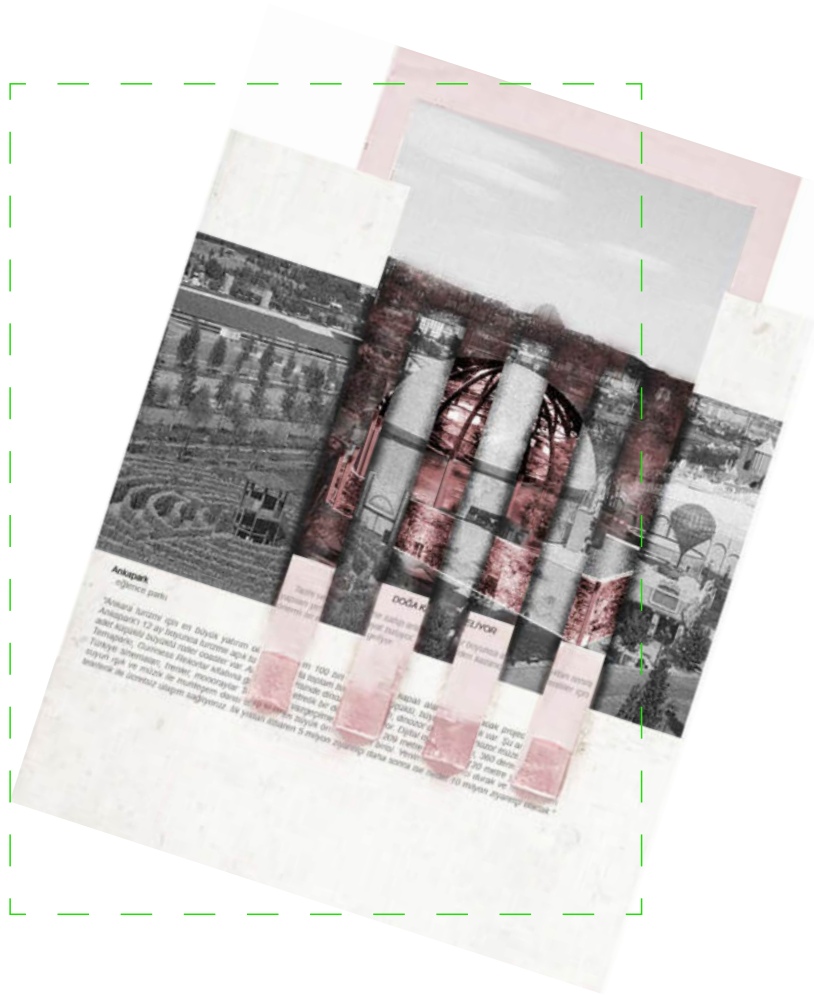


4. The fourth stage is pure simulacrum, hyperreal, in which the simulacrum has no relationship to any reality whatsoever.

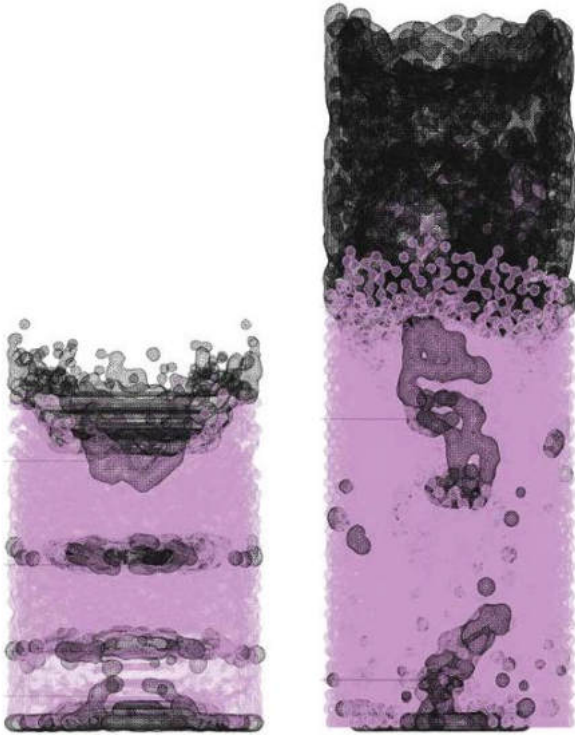
In the cities of the 21st century and the future, the definition of nature in the city is questioned and reconstructed, aims to remove this area from **pretending to be nature**, establish educational and experiential spaces, and while doing this, it is to produce a **sustainable urban landscape for the future** using the code of urban nature ecology.

Project; **Algae uses as a catalyst** in the fiction of giving the city to the city. Algae can create an interactive experience space to create **social awareness** while creating a new ecology to the environment on an urban scale.





### CATALYZER

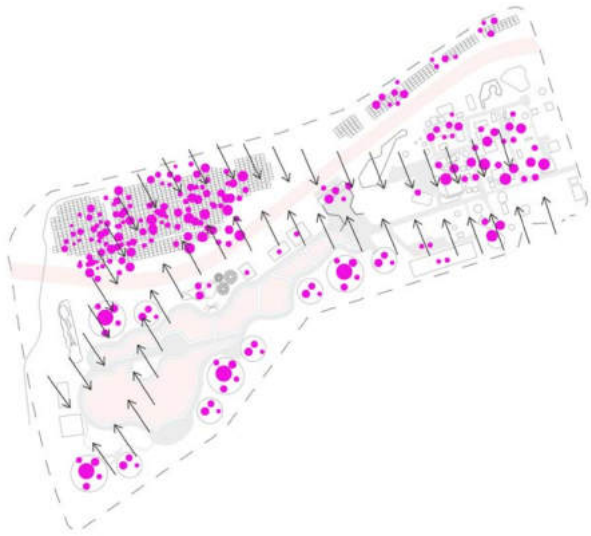


### ALGAE PRODUCTS

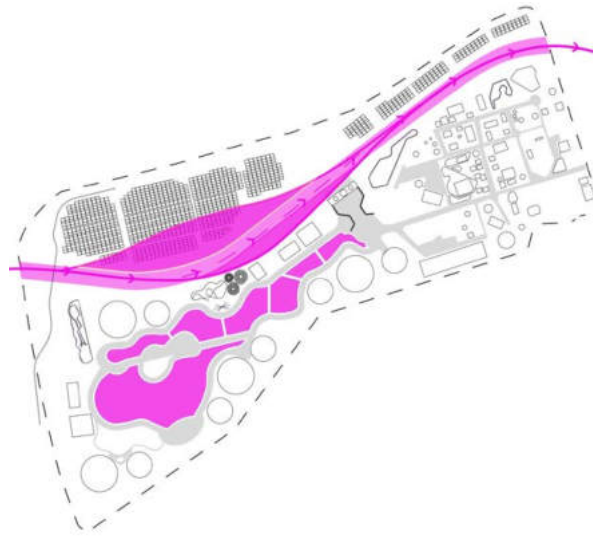


### GET A TASTE OF ALGAE

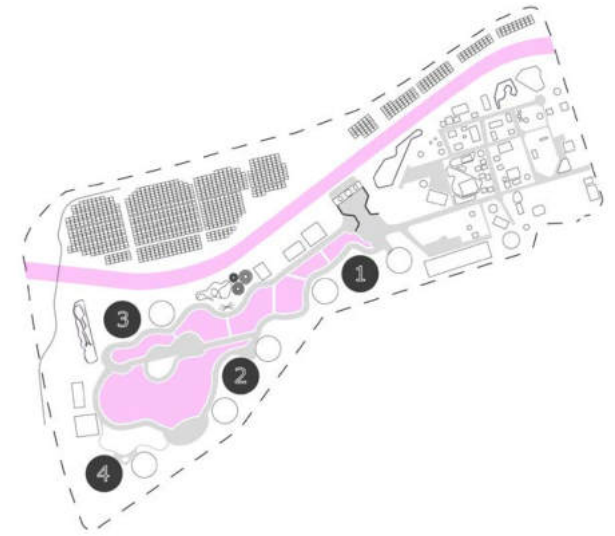




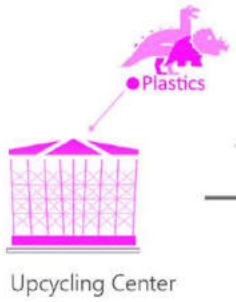
strategy 1 - Plastic Density



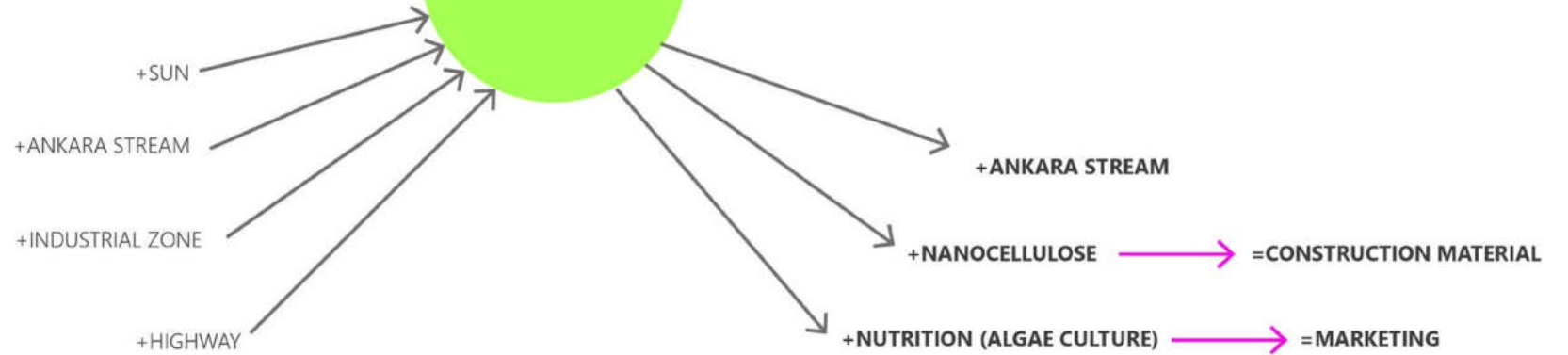
strategy 2 - Water

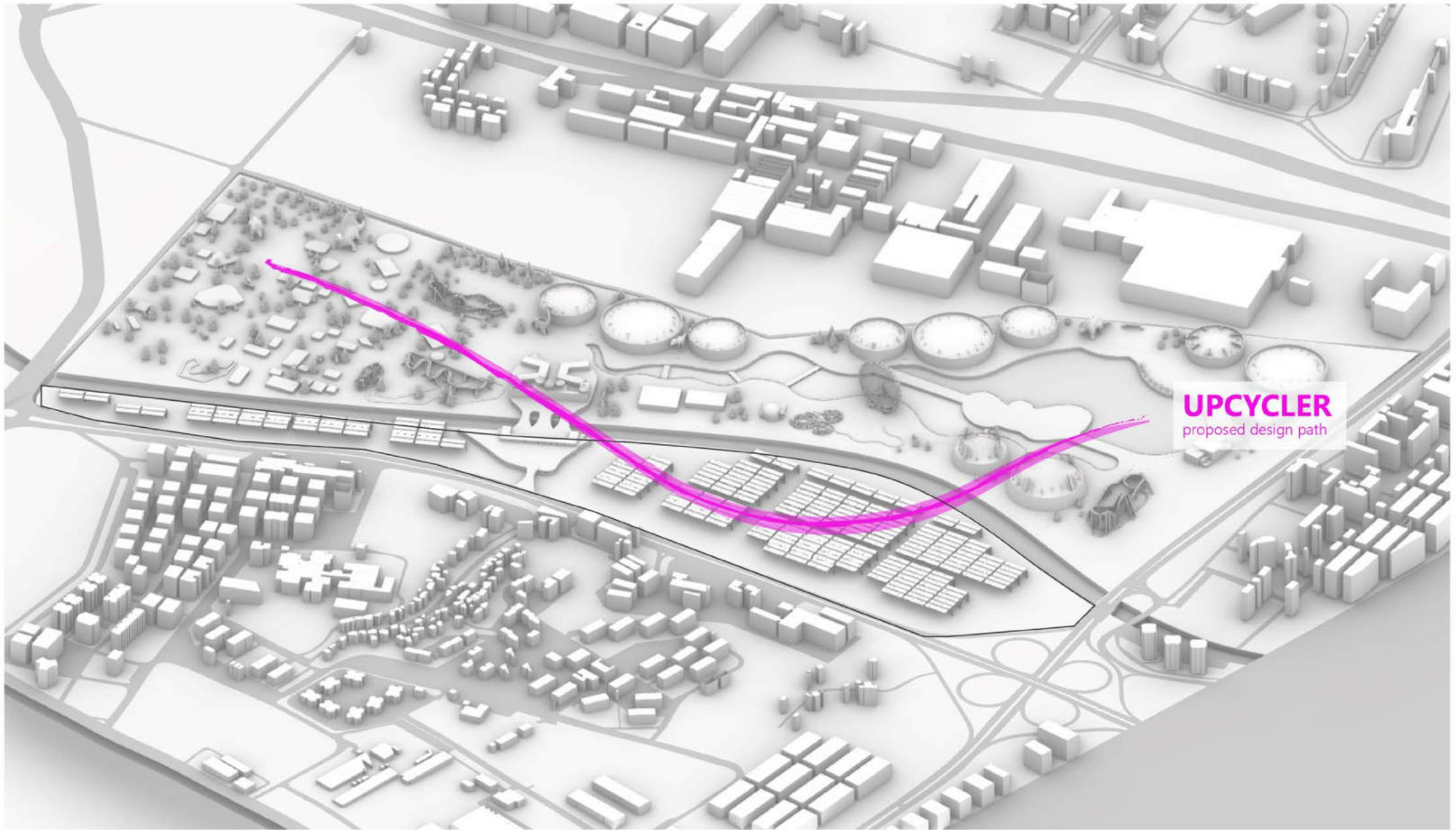


strategy 3 - Upcycling Center



**THE ALGAE**









THE Algae Culture

optimal orientation for

Pavillion & Workshop

Algae Products Selling & Festival Area

THE Algae Institute

Water Purification

**UPCYCLER**  
proposed design path

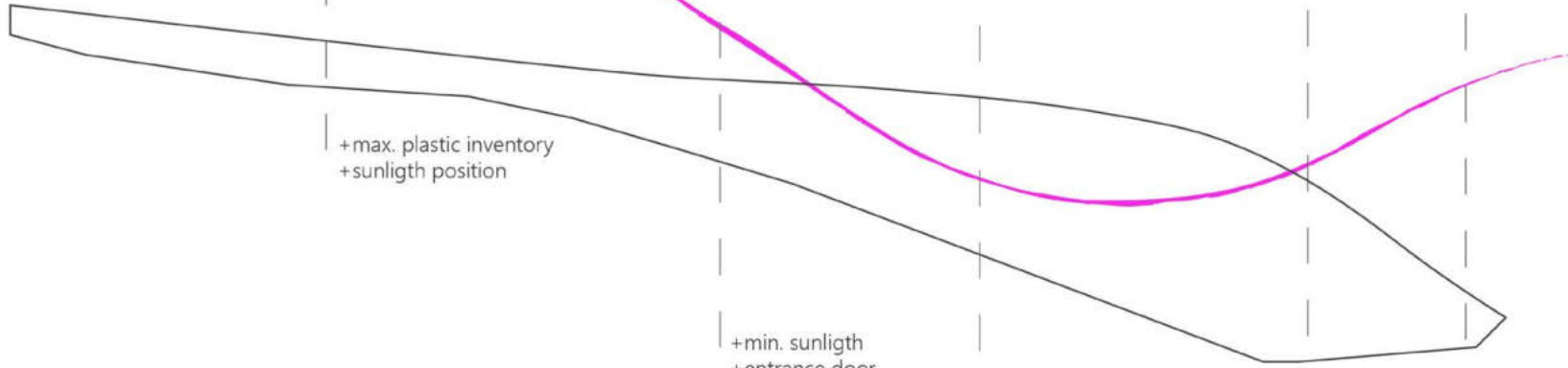
+max. plastic inventory  
+sunligh position

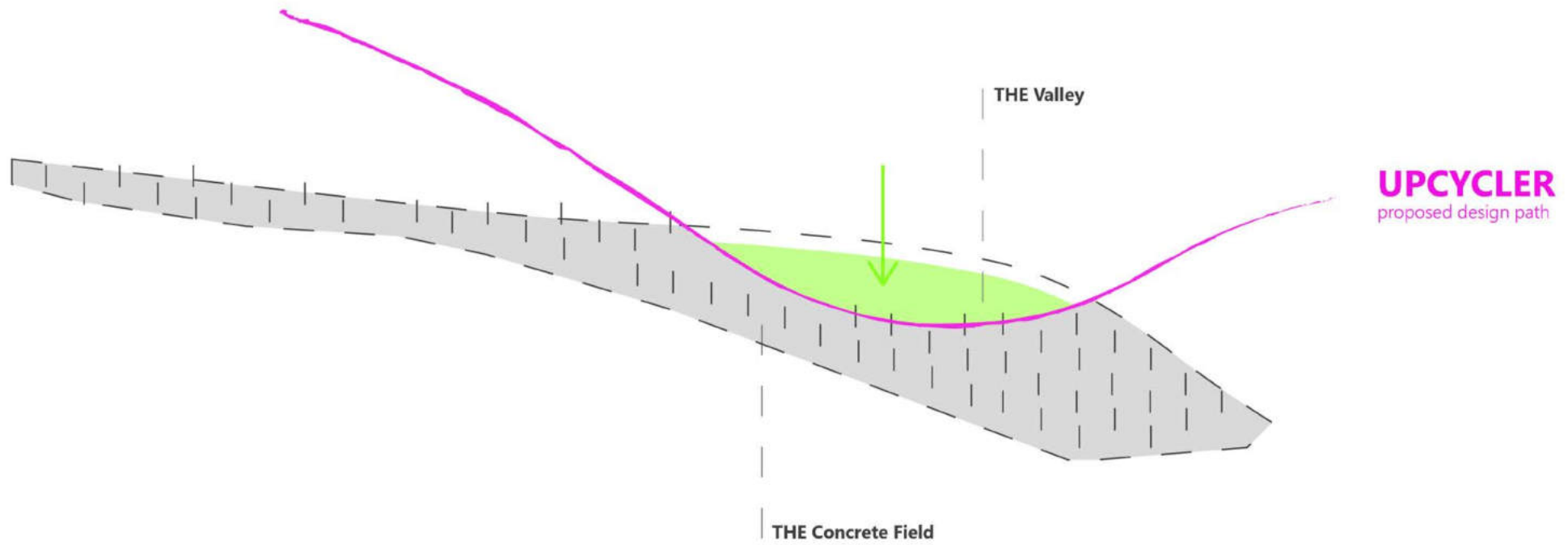
+min. sunligh  
+entrance door

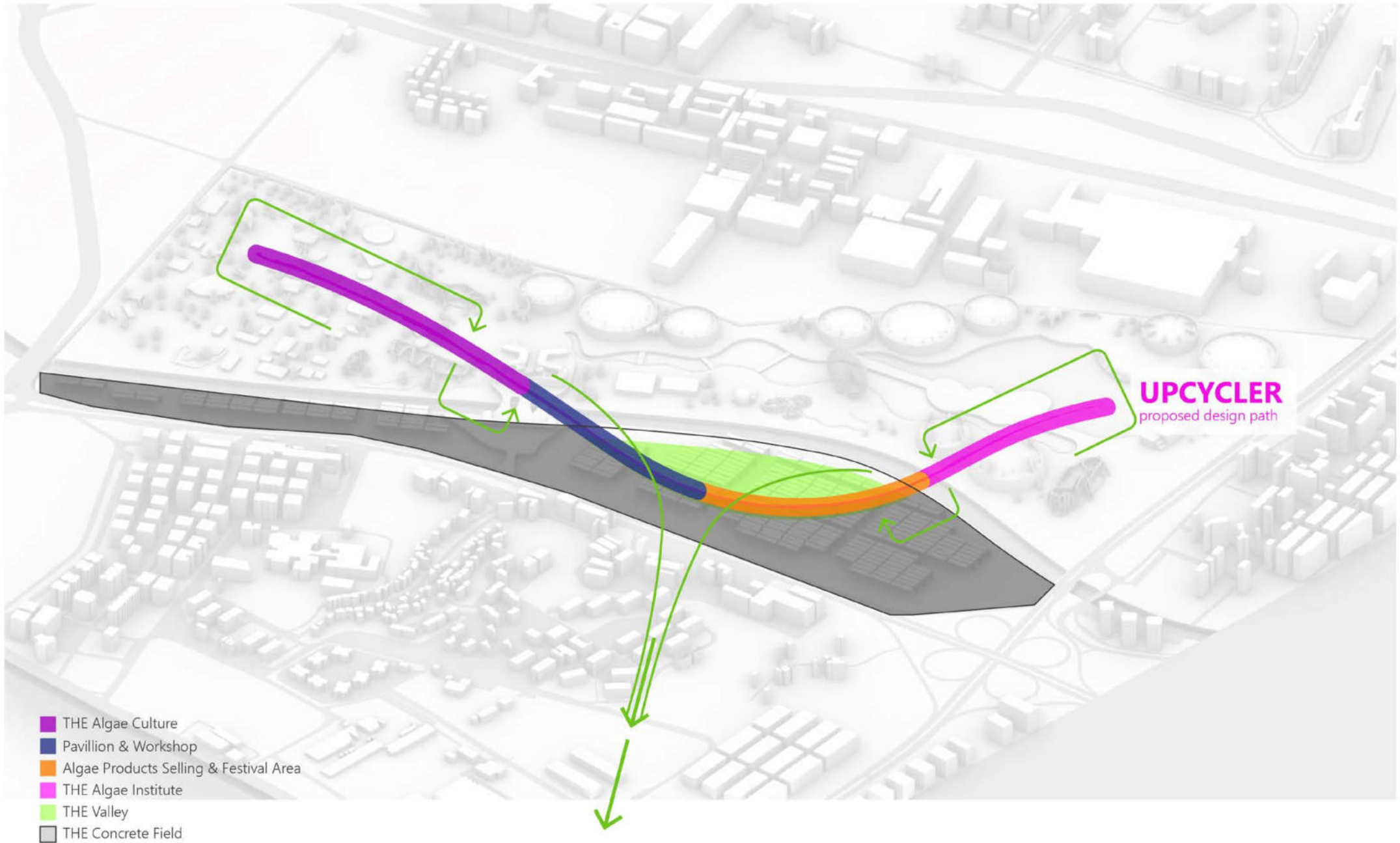
+relation with transportation  
roads  
+sunligh position

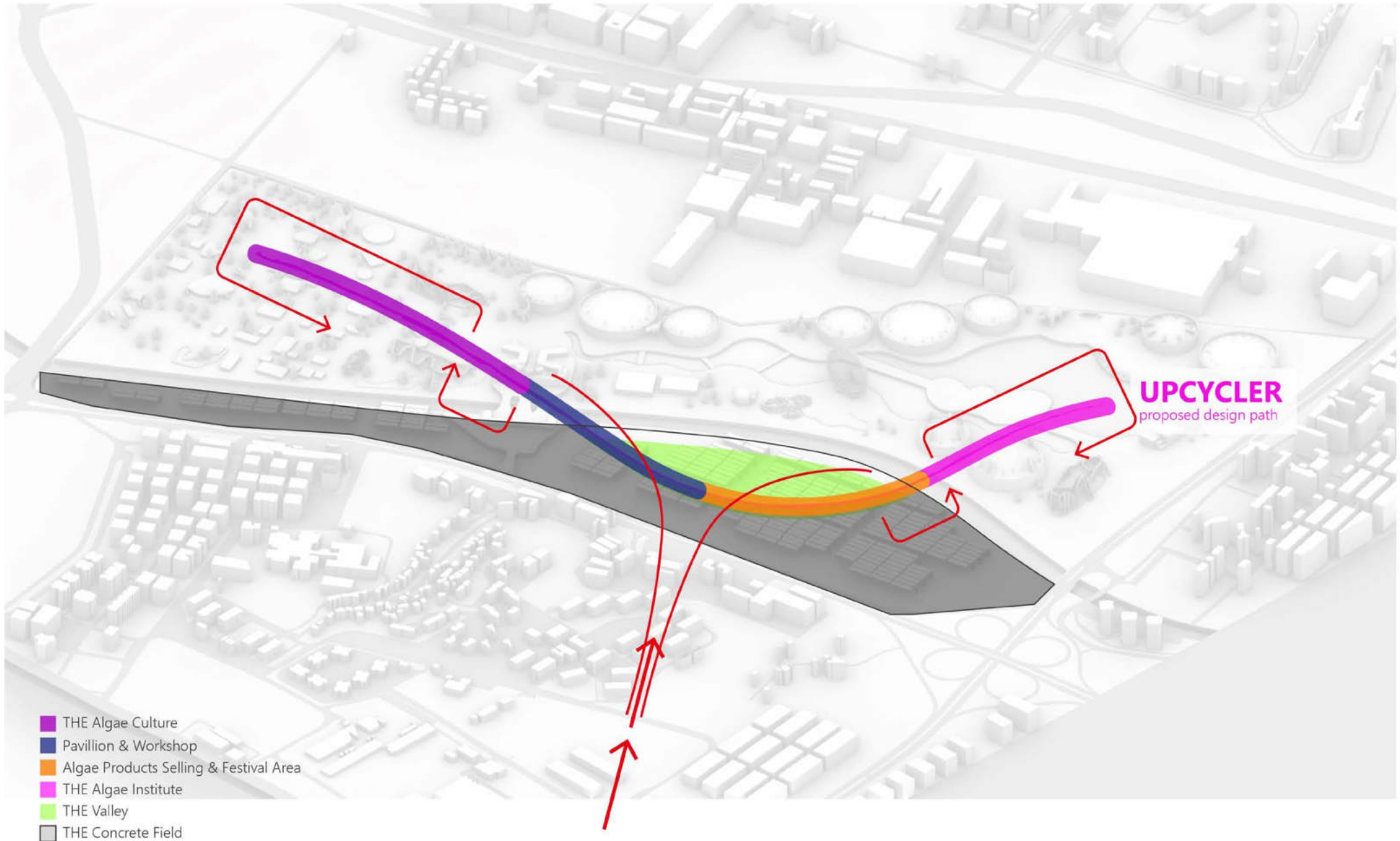
+relation with stream

+existing structure  
+unused space









# ALGAE

Light      pH      CO<sub>2</sub>(%)      Chromoplast      Density      Temperature(°C)

Conditions  
Growth

Amount

0

5

7

9

10

20

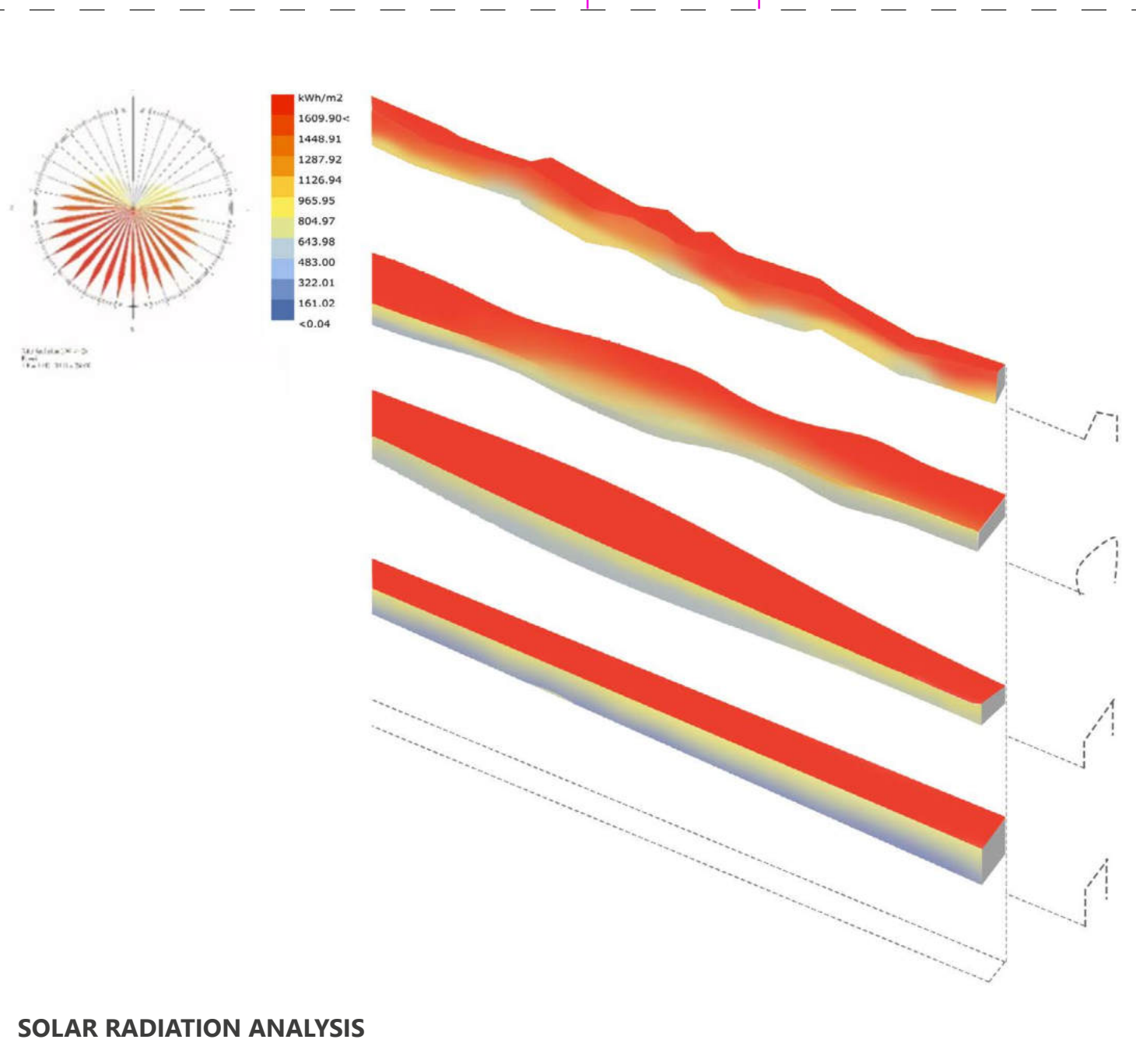
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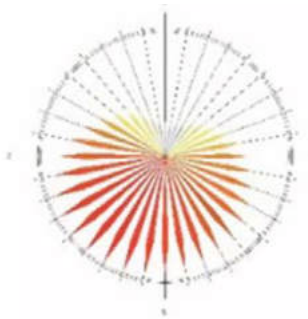
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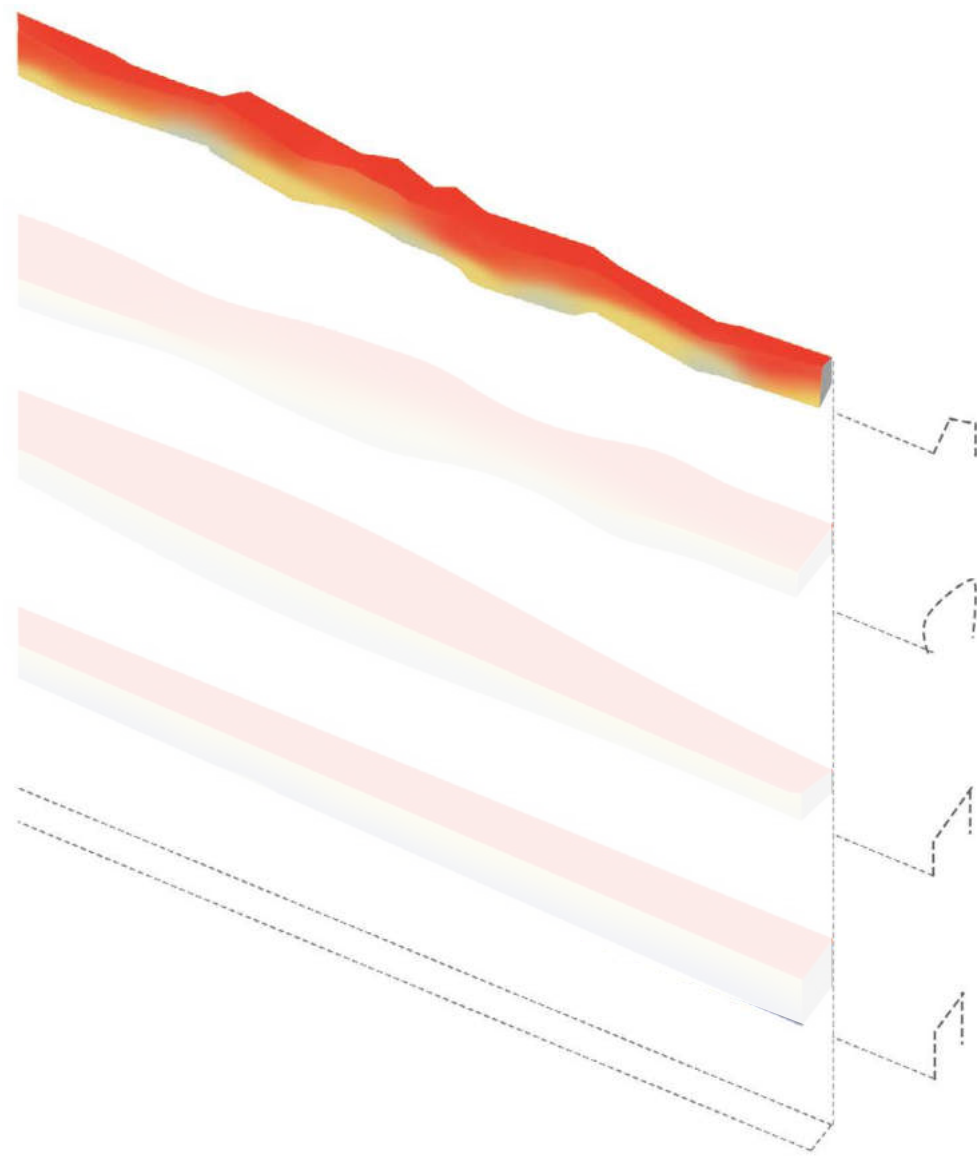
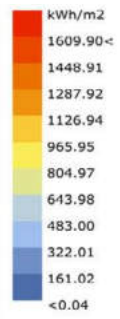




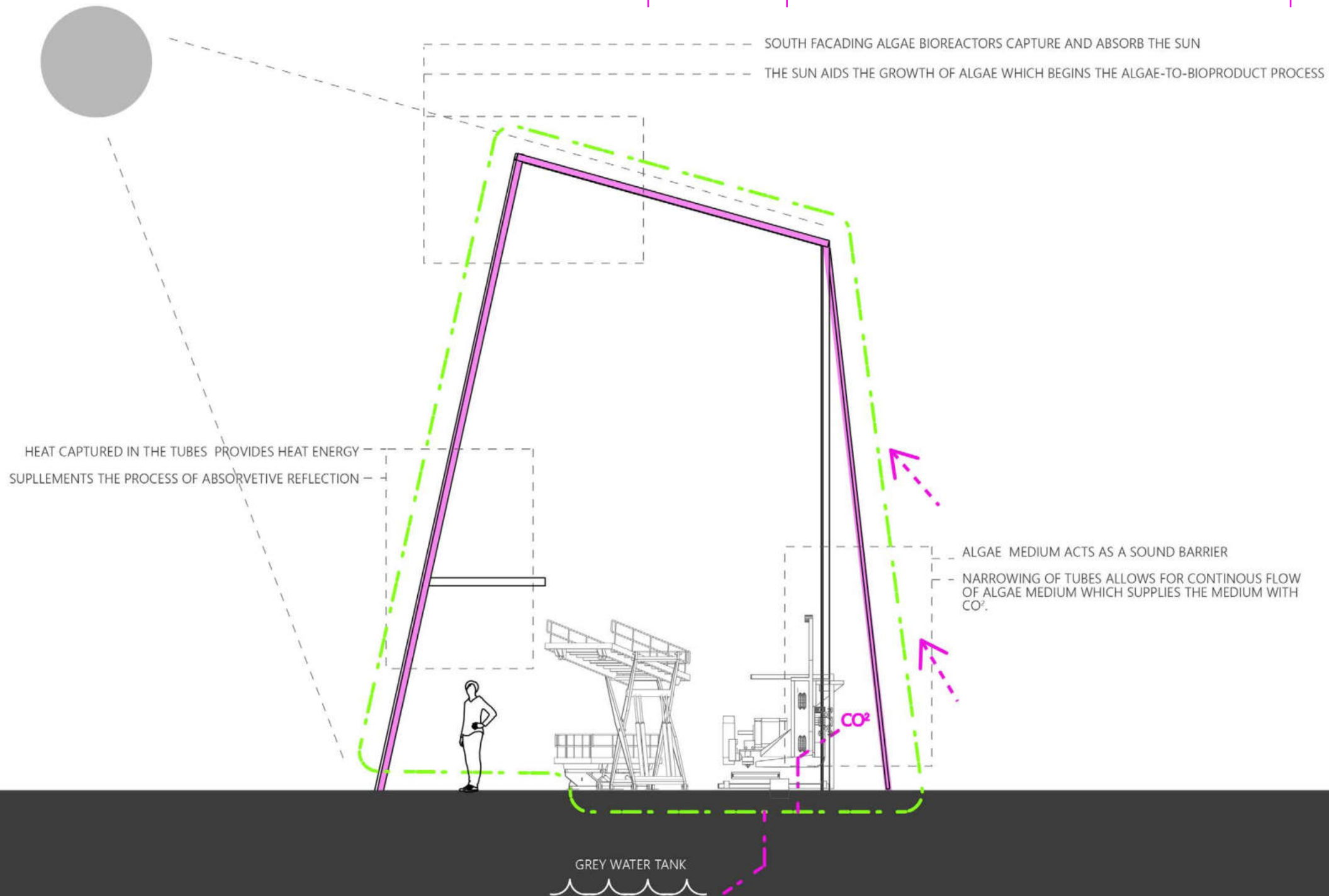
**SOLAR RADIATION ANALYSIS**



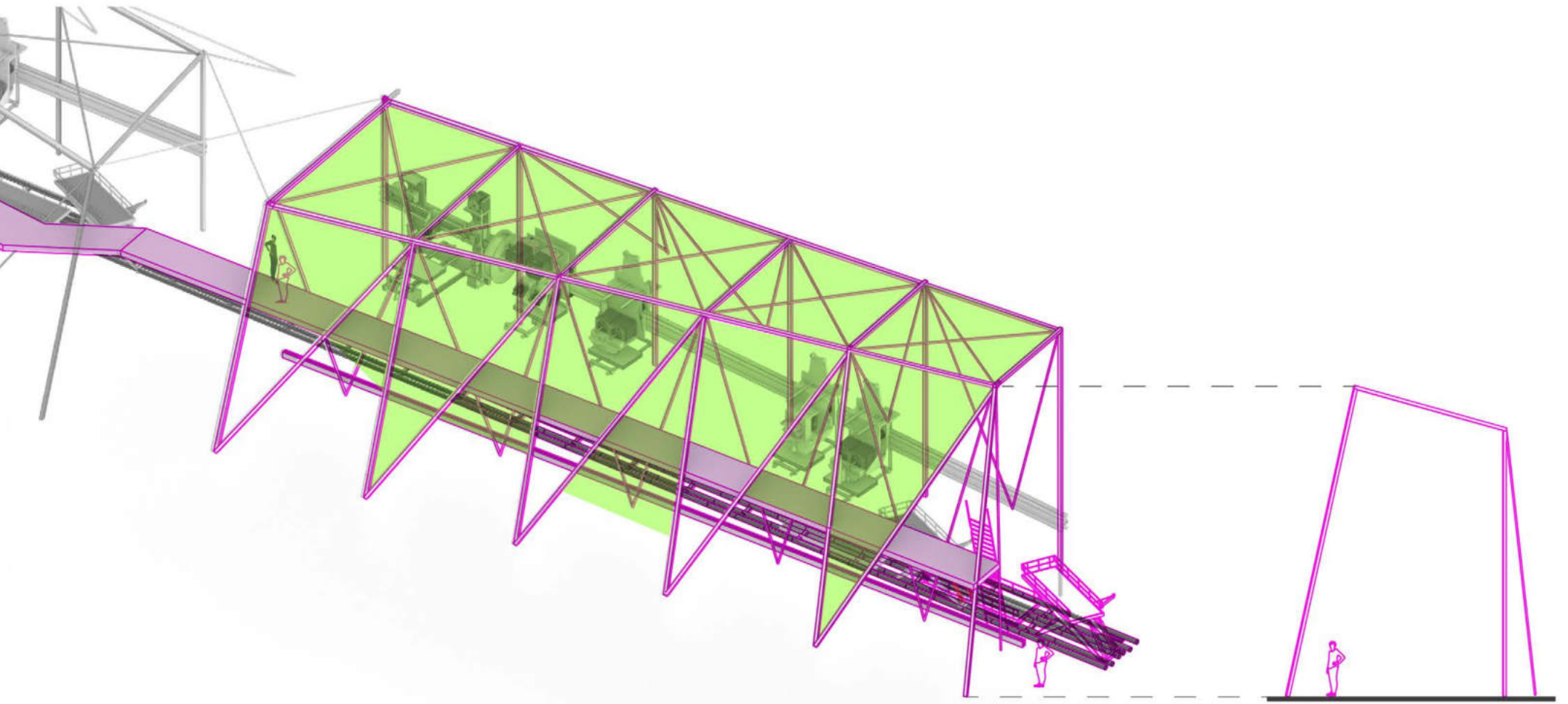
12/16/2014 10:00  
12/16/2014 10:00



**SOLAR RADIATION ANALYSIS**







**ANKARA STREAM**  
The organizer of the space is provided by water Ankara Stream

**ALGAE & BIOREACTORS**  
Steel-frame Support Structure  
Custom-fabricated bio-plastic as algal conduit

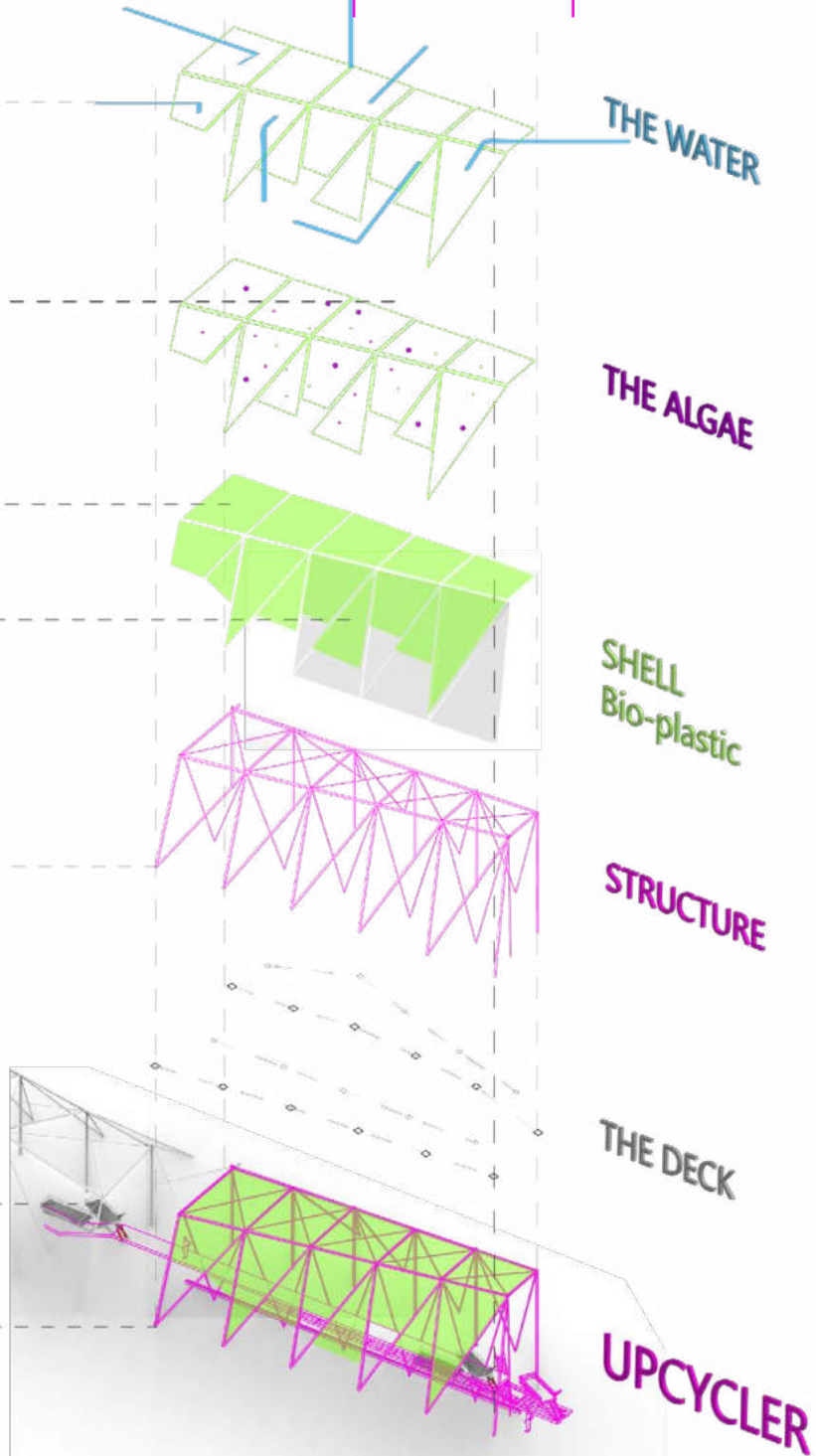
**ROOF-FACING FACADE**

**SOUTH-FACING FACADE**

**EXISTING STRUCTURE**  
20" Steel Frame w/ Trusses  
Reinforced with concrete, encasing existing beams

**TECHNICAL SPACES**

**GROUND LEVEL**



THE WATER

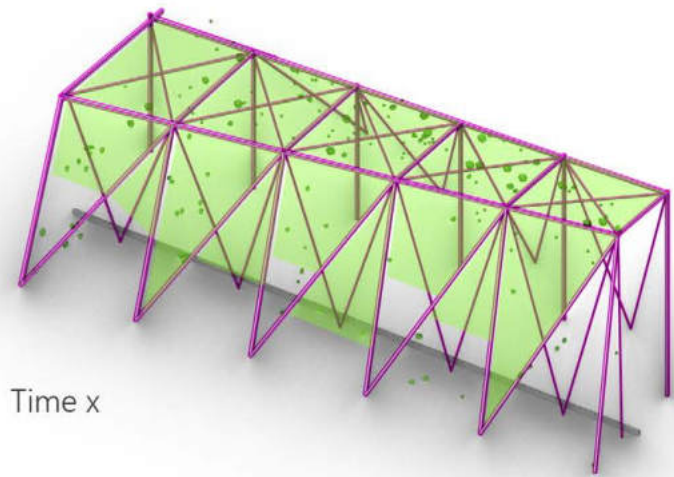
THE ALGAE

SHELL  
Bio-plastic

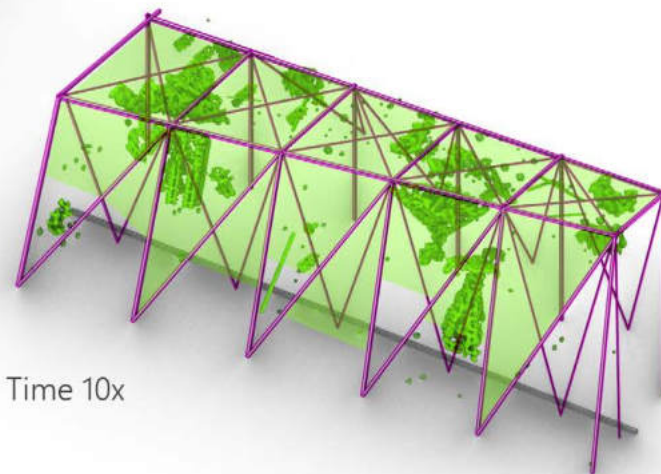
STRUCTURE

THE DECK

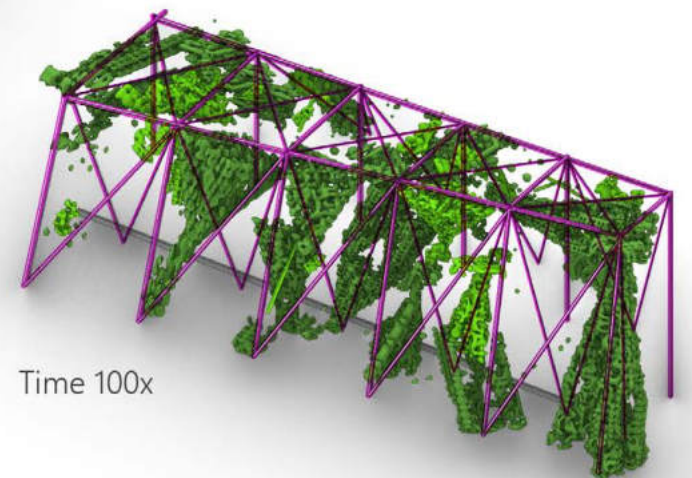
UPCYCLER



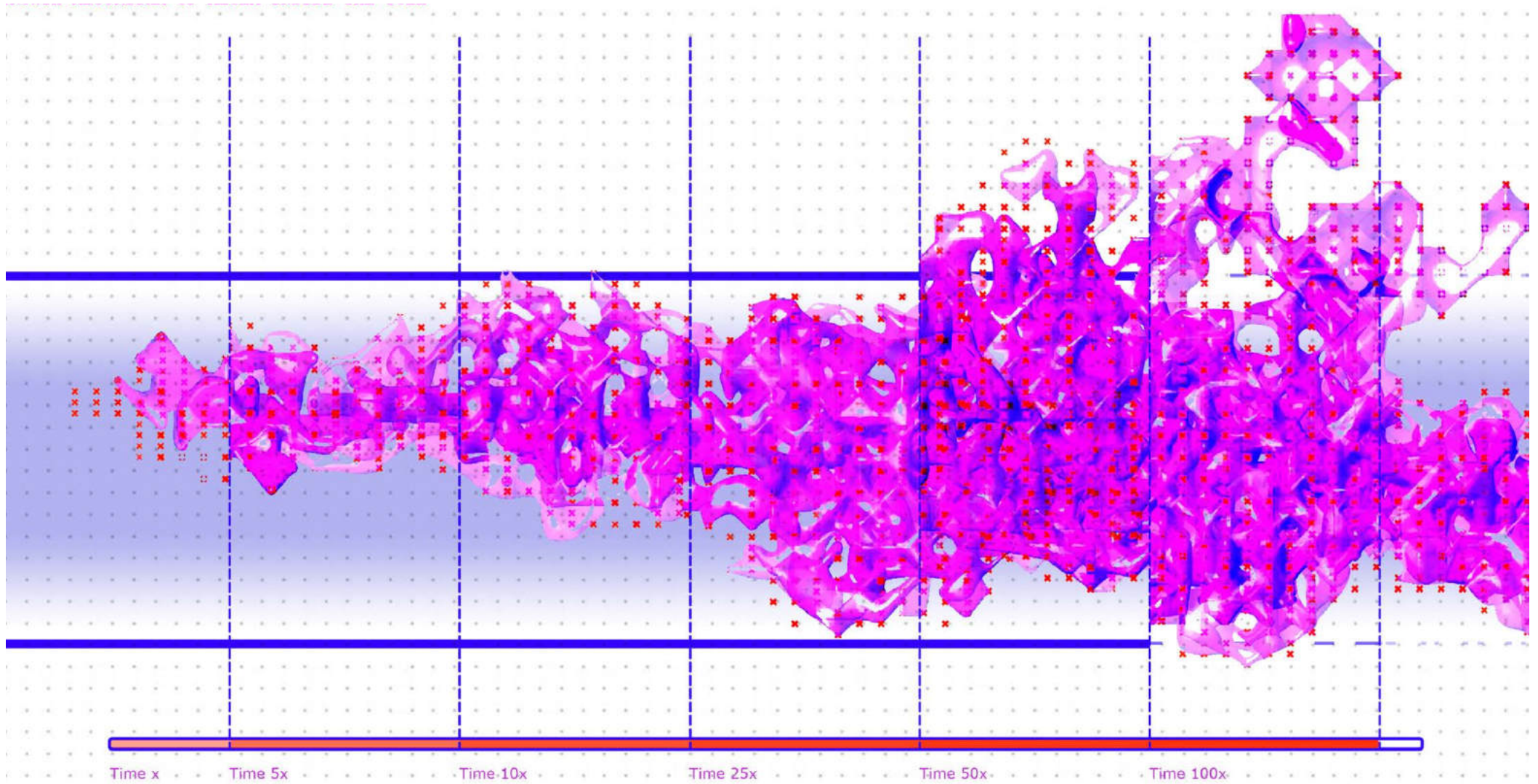
Time x



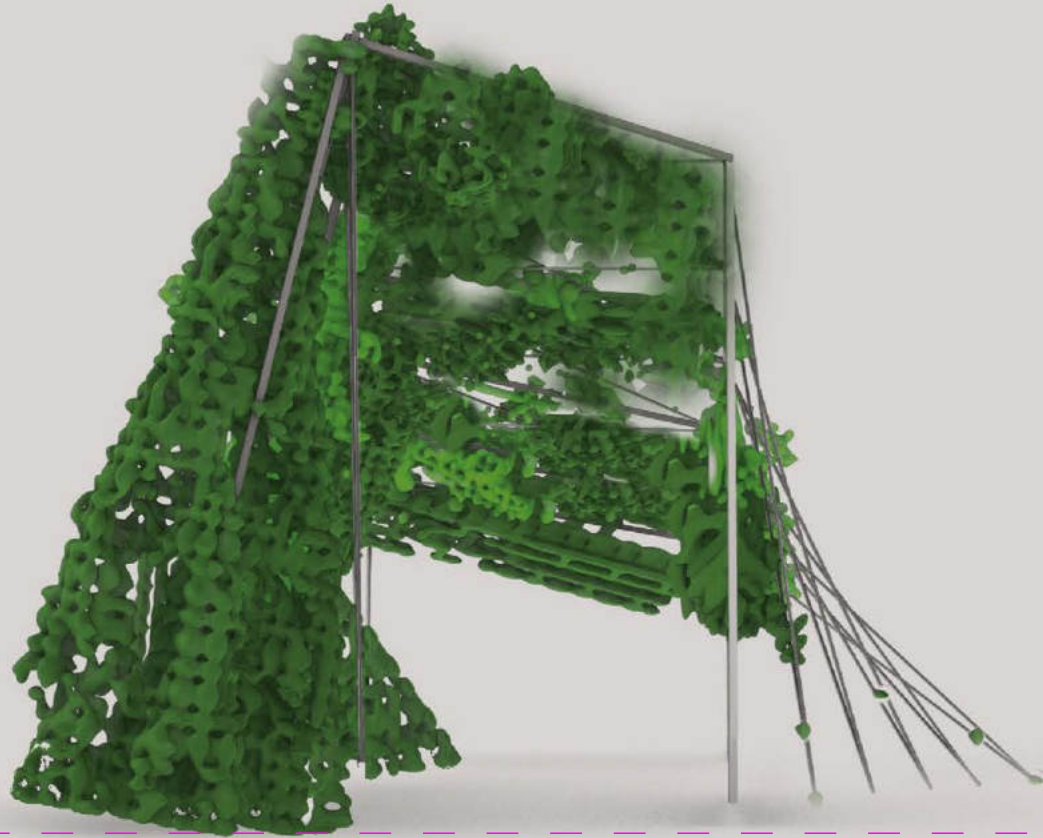
Time 10x



Time 100x

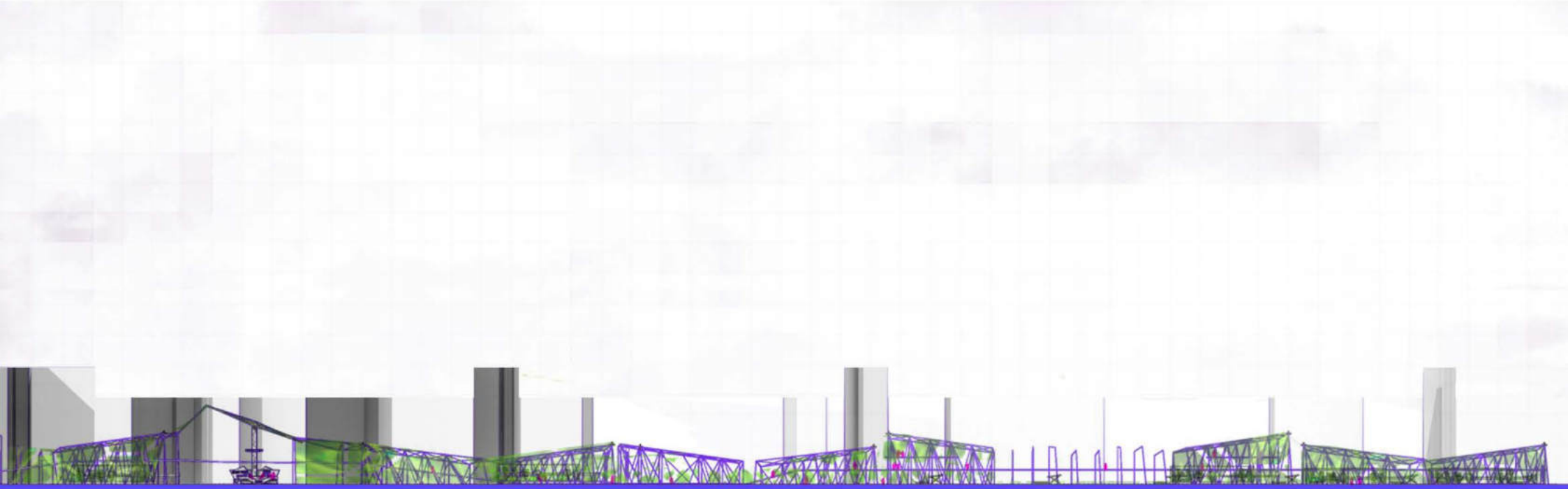


POTANTIAL SPACIAL FUTURE SCENARIO



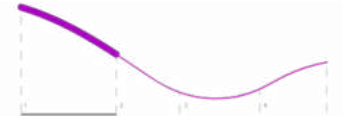




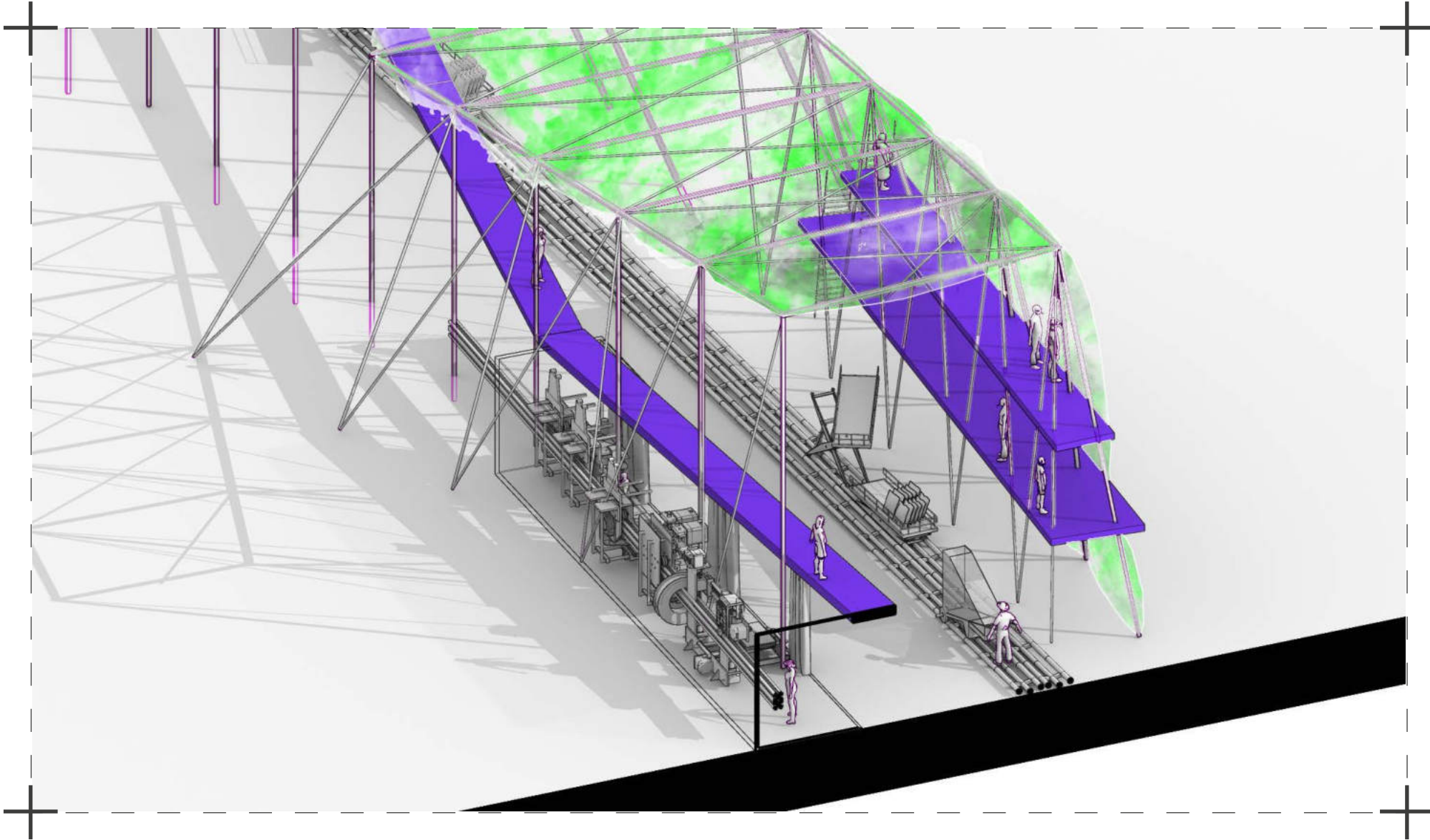


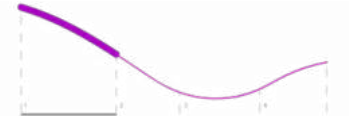
Elevation - ALGAE CULTURE



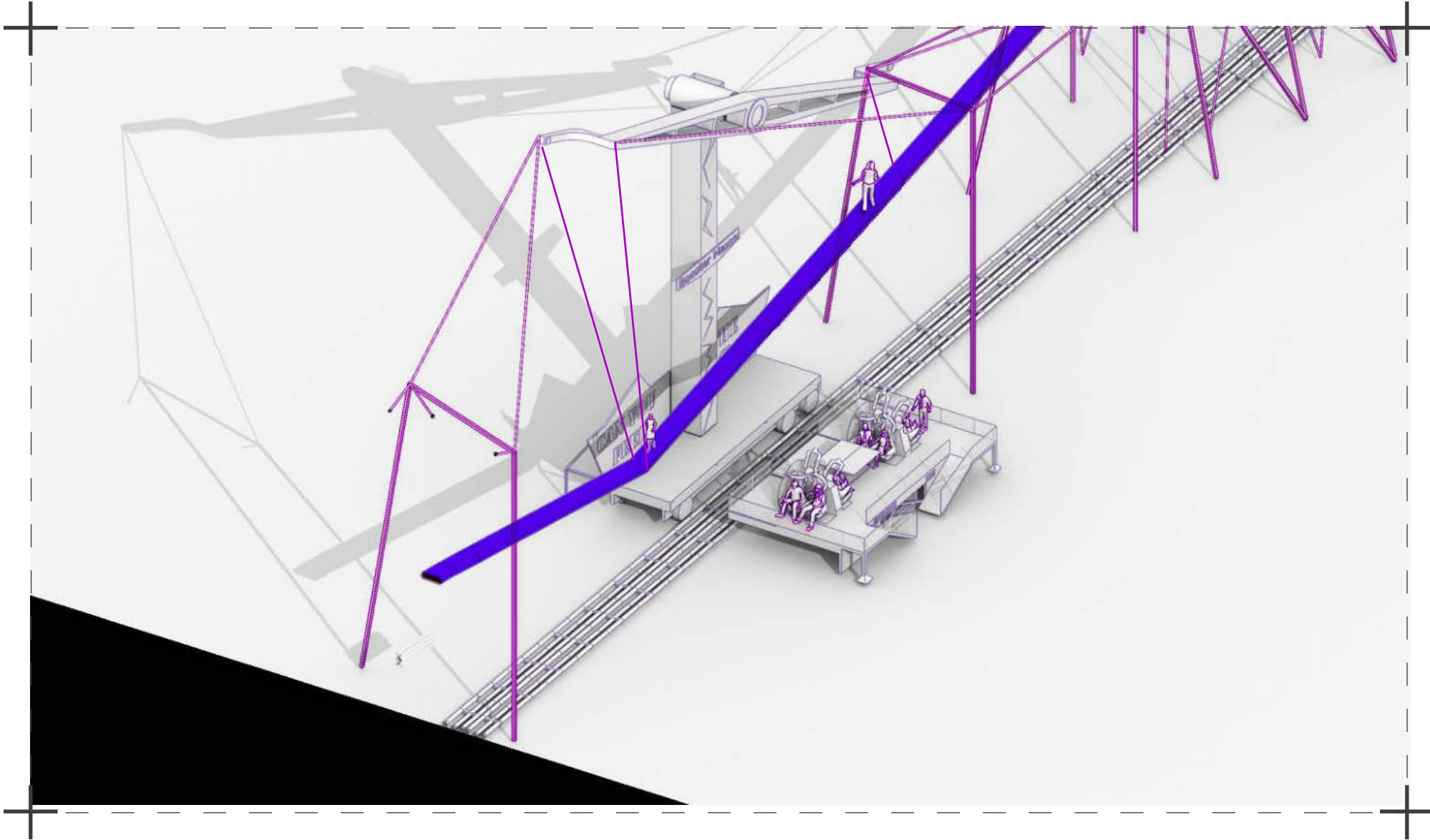


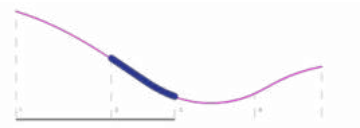
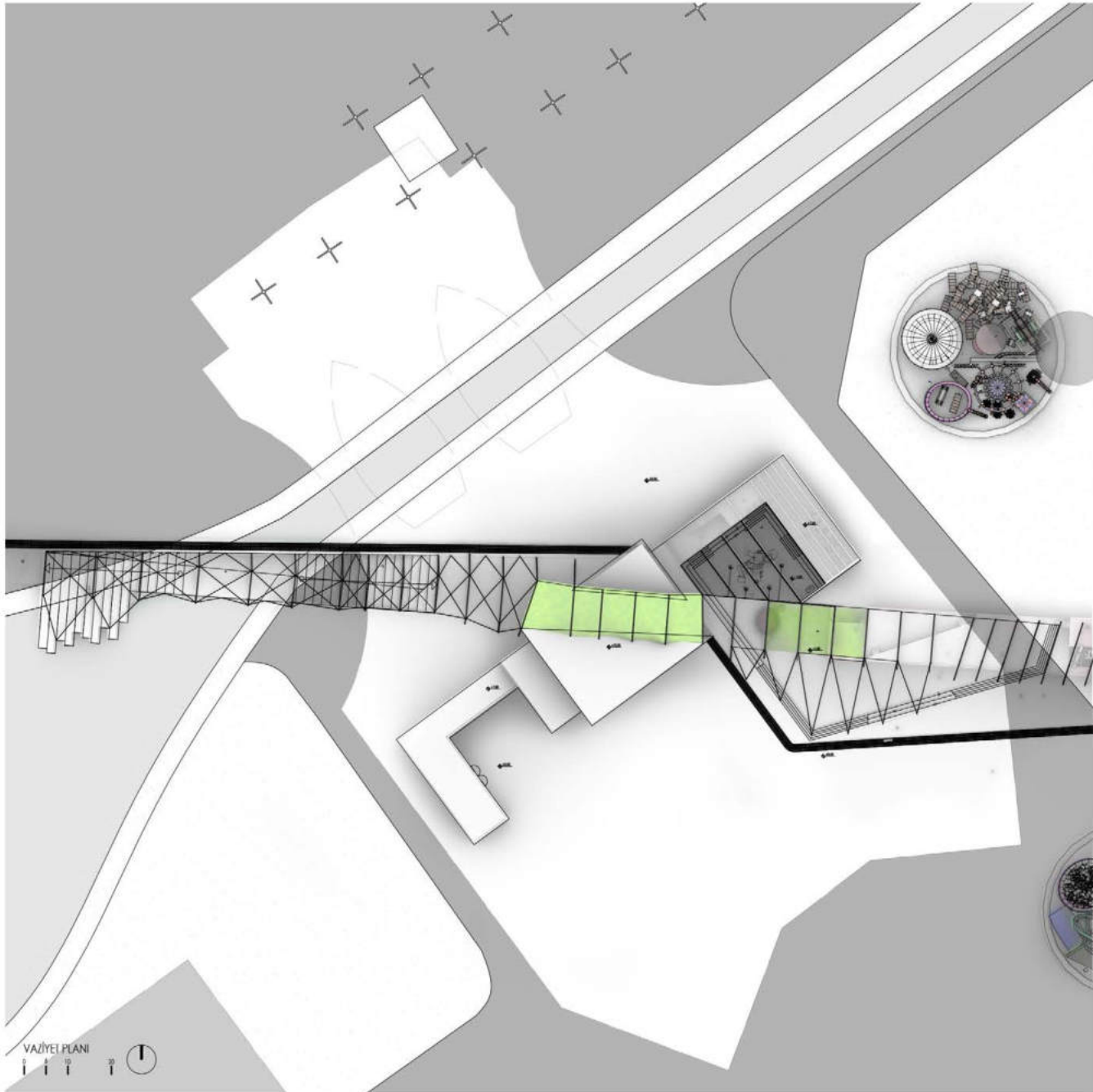
Axonometric Section 1 - ALGAE CULTURE





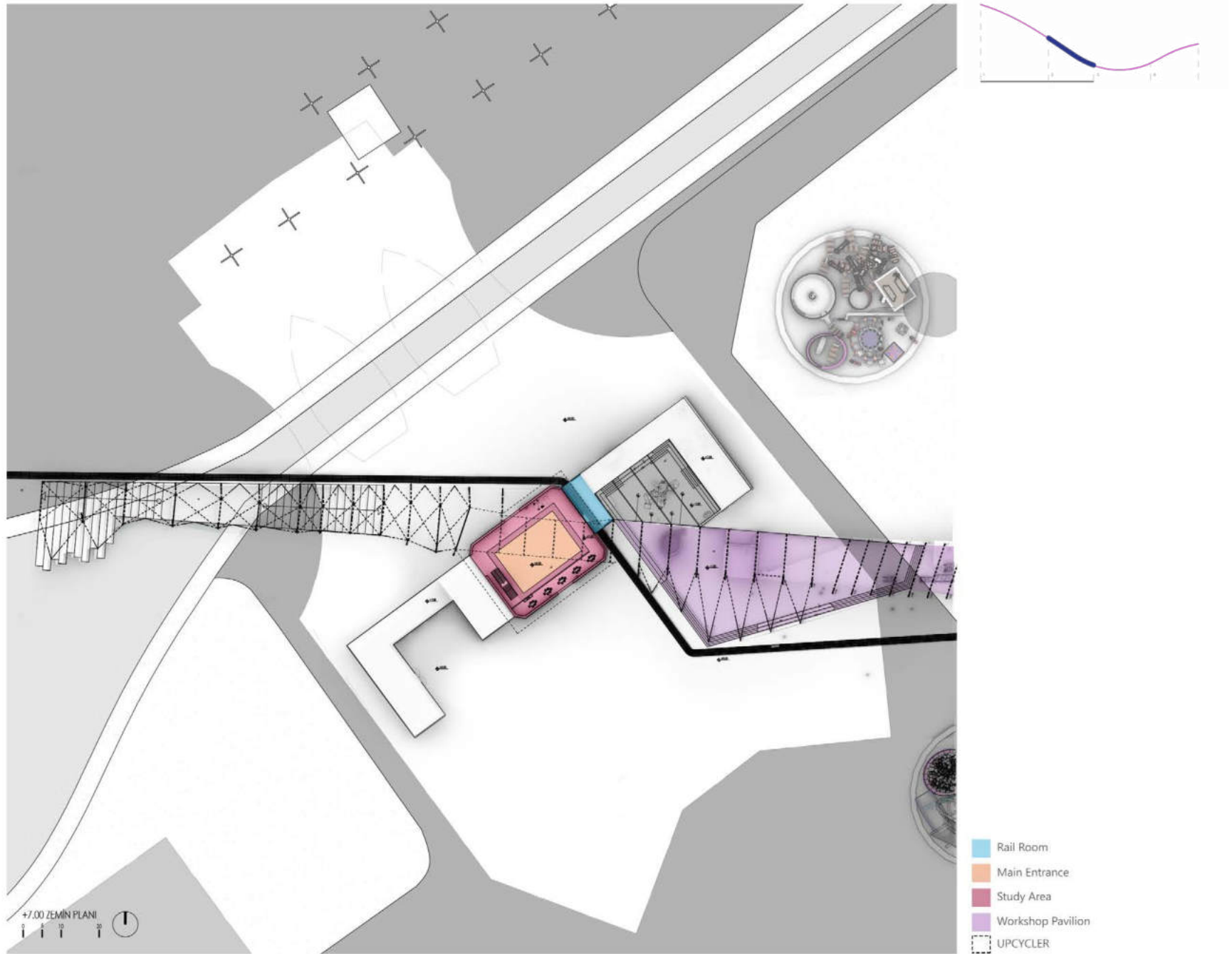
Axonometric Section 2- ALGAE CULTURE

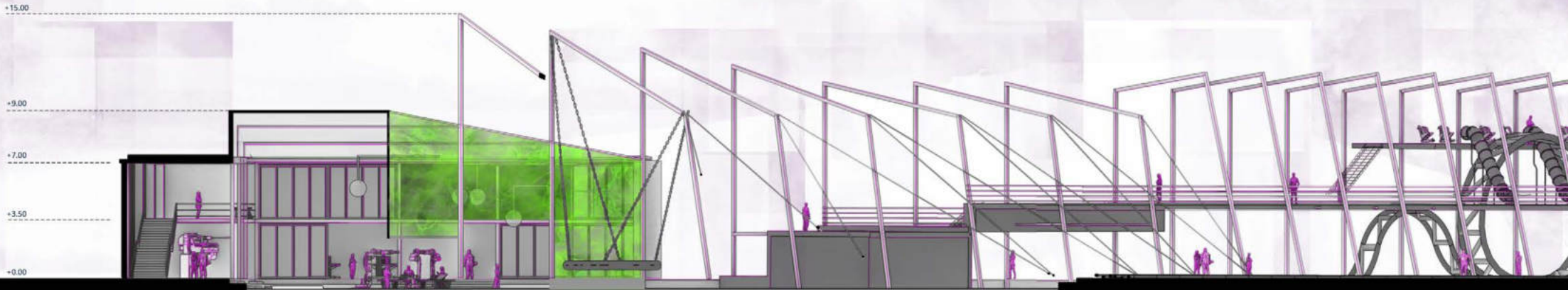




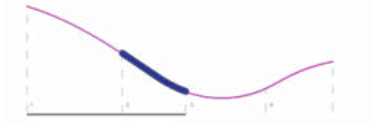
VAZİYE PLANI



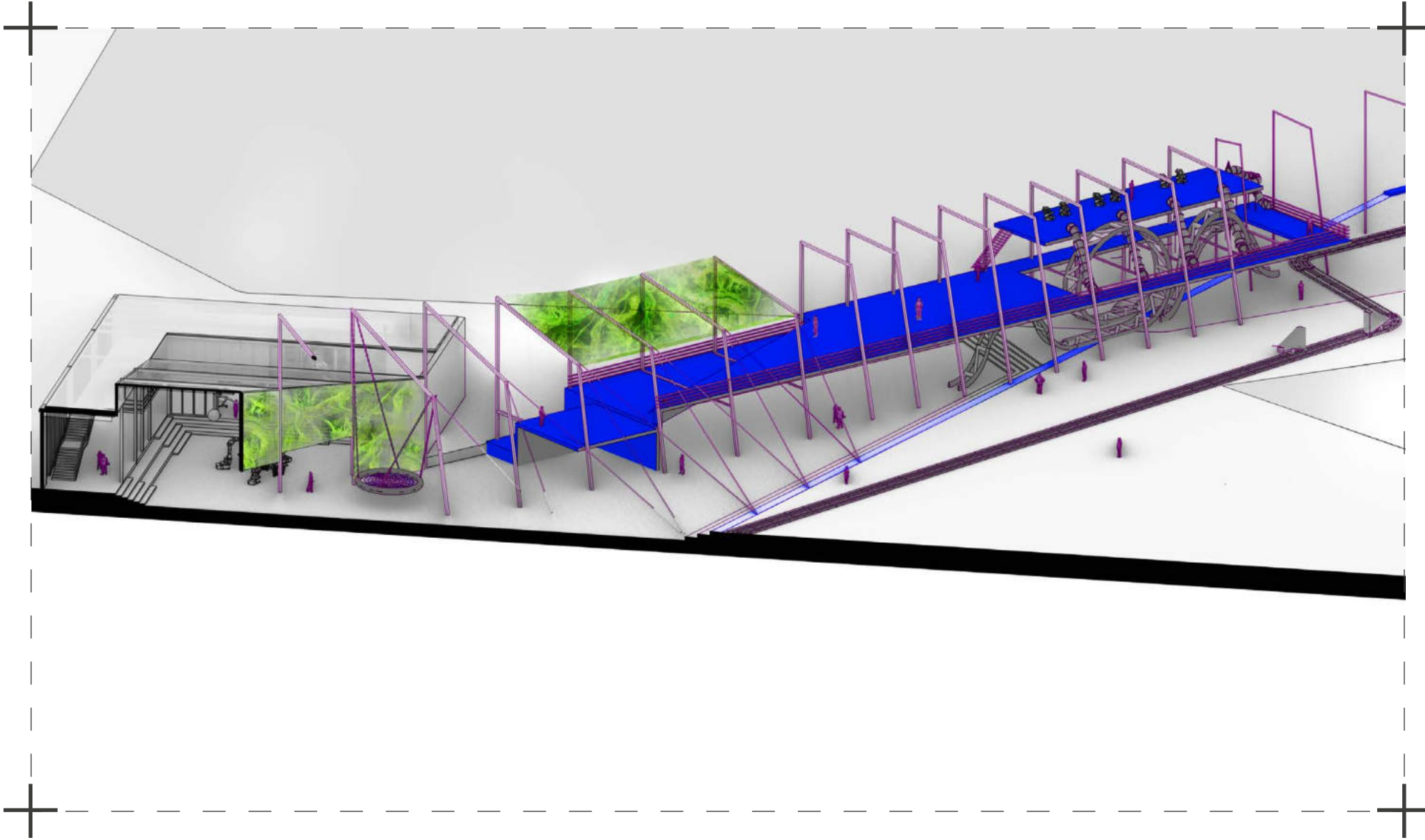


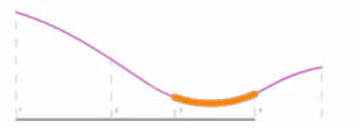
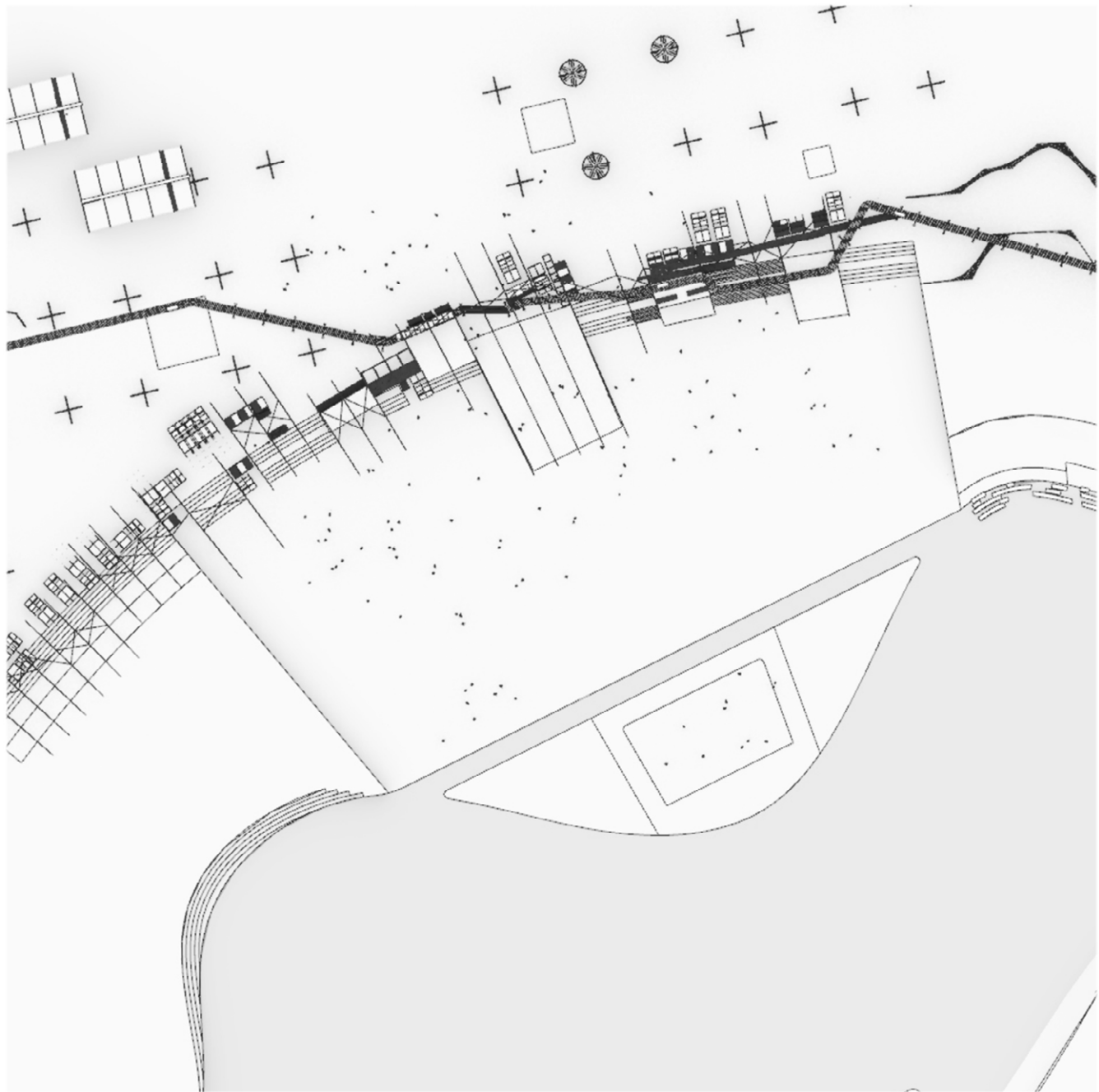


Section - WORKSHOP & PAVILLION

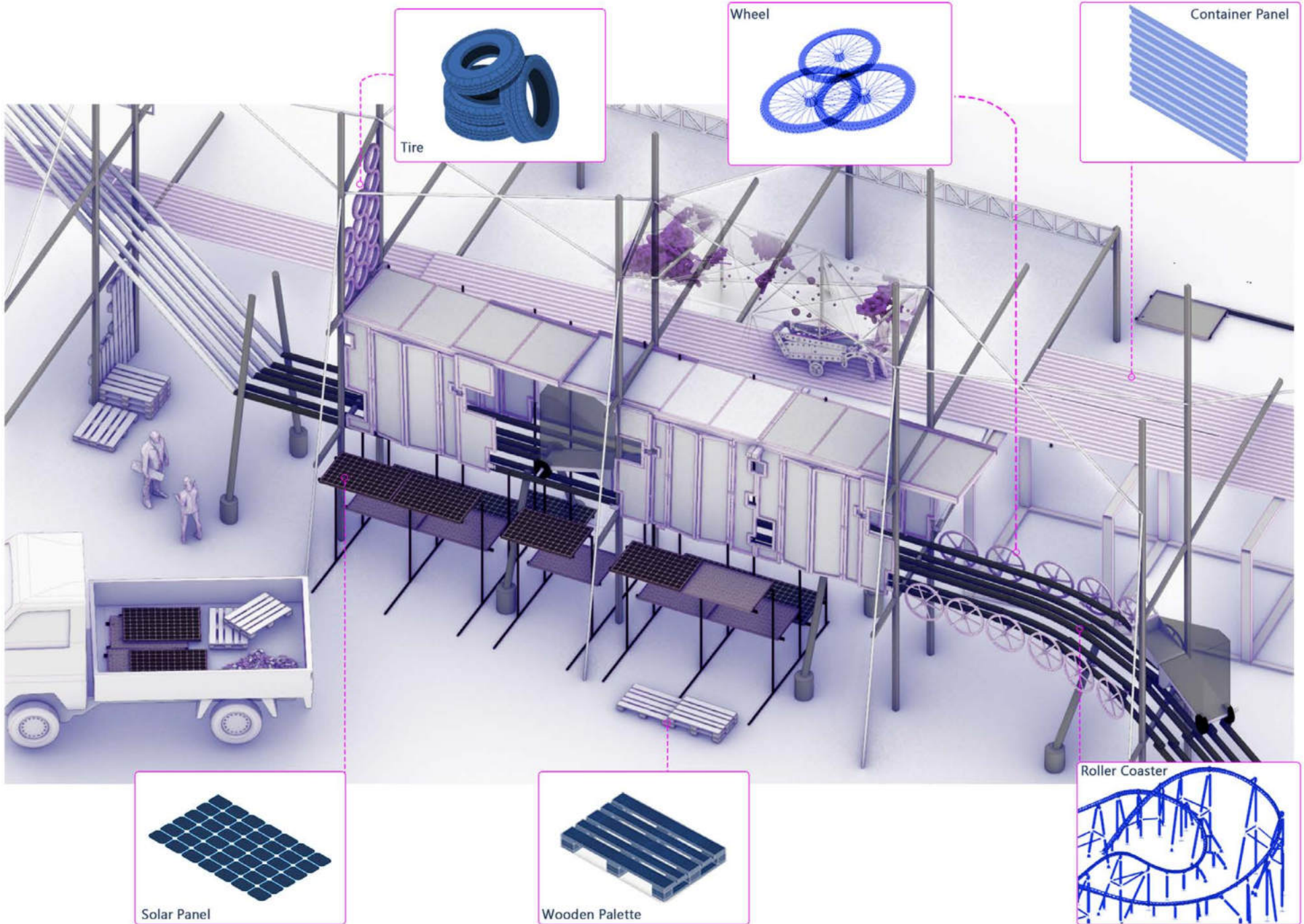


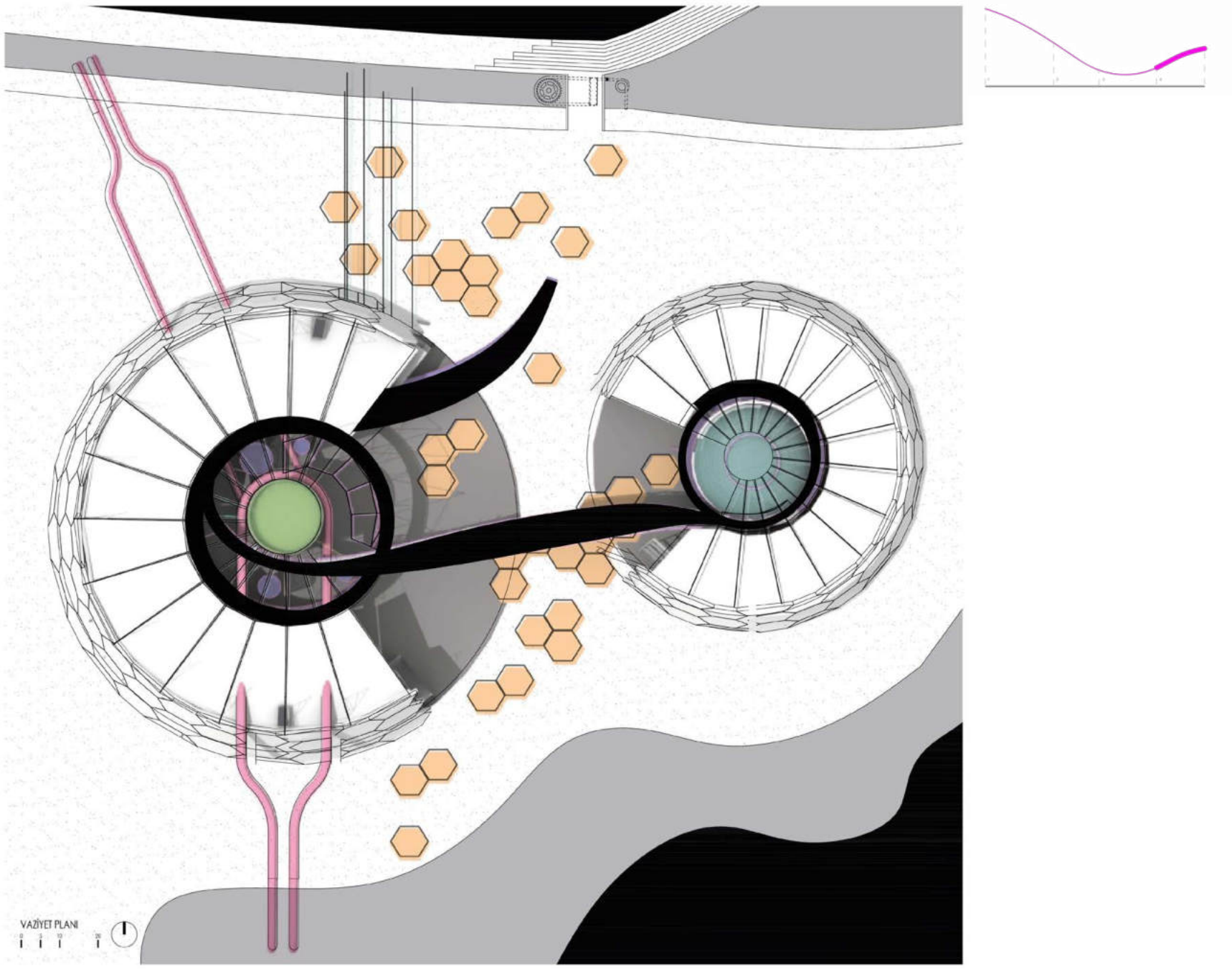
Axonometric Section - WORKSHOP & PAVILLION

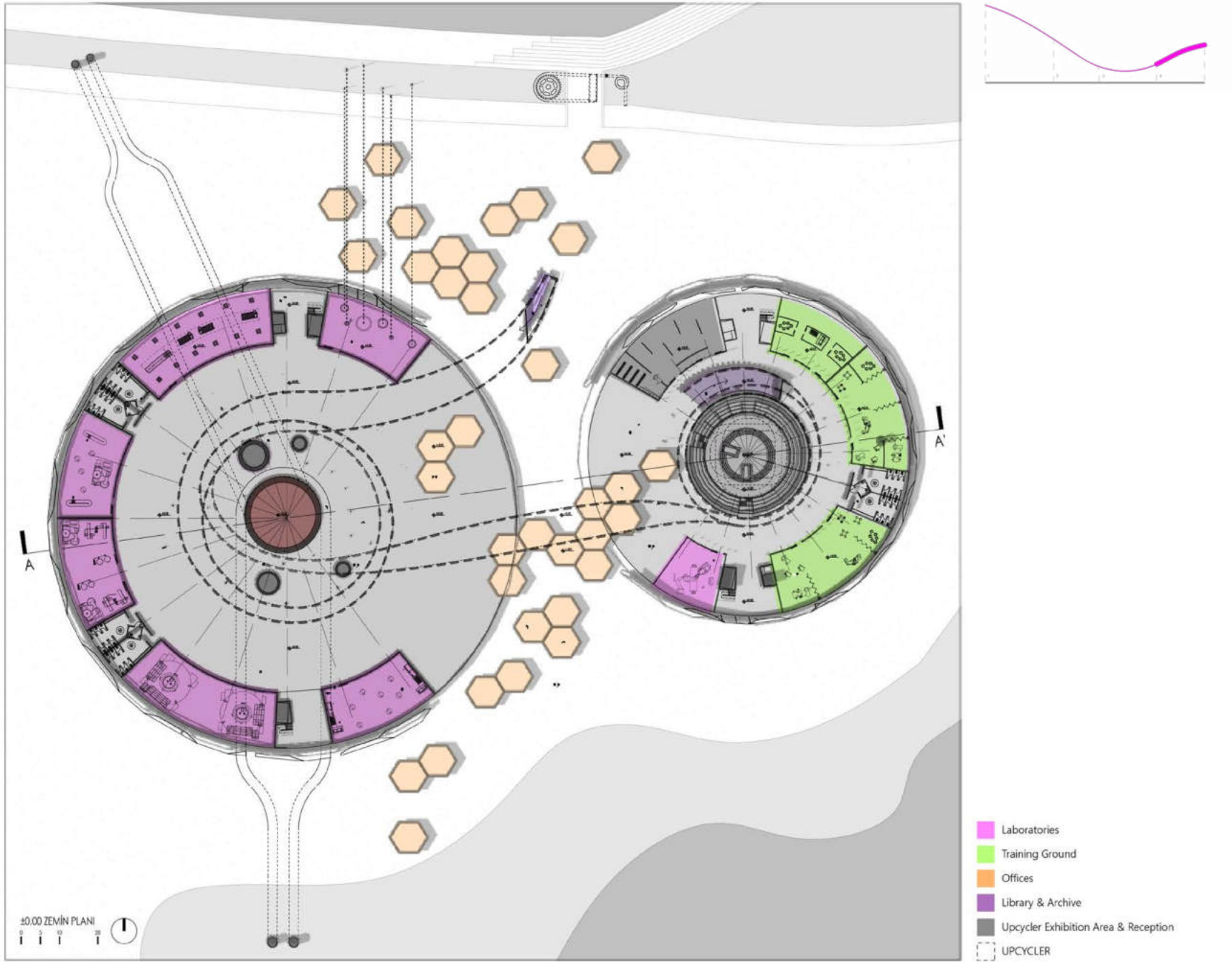




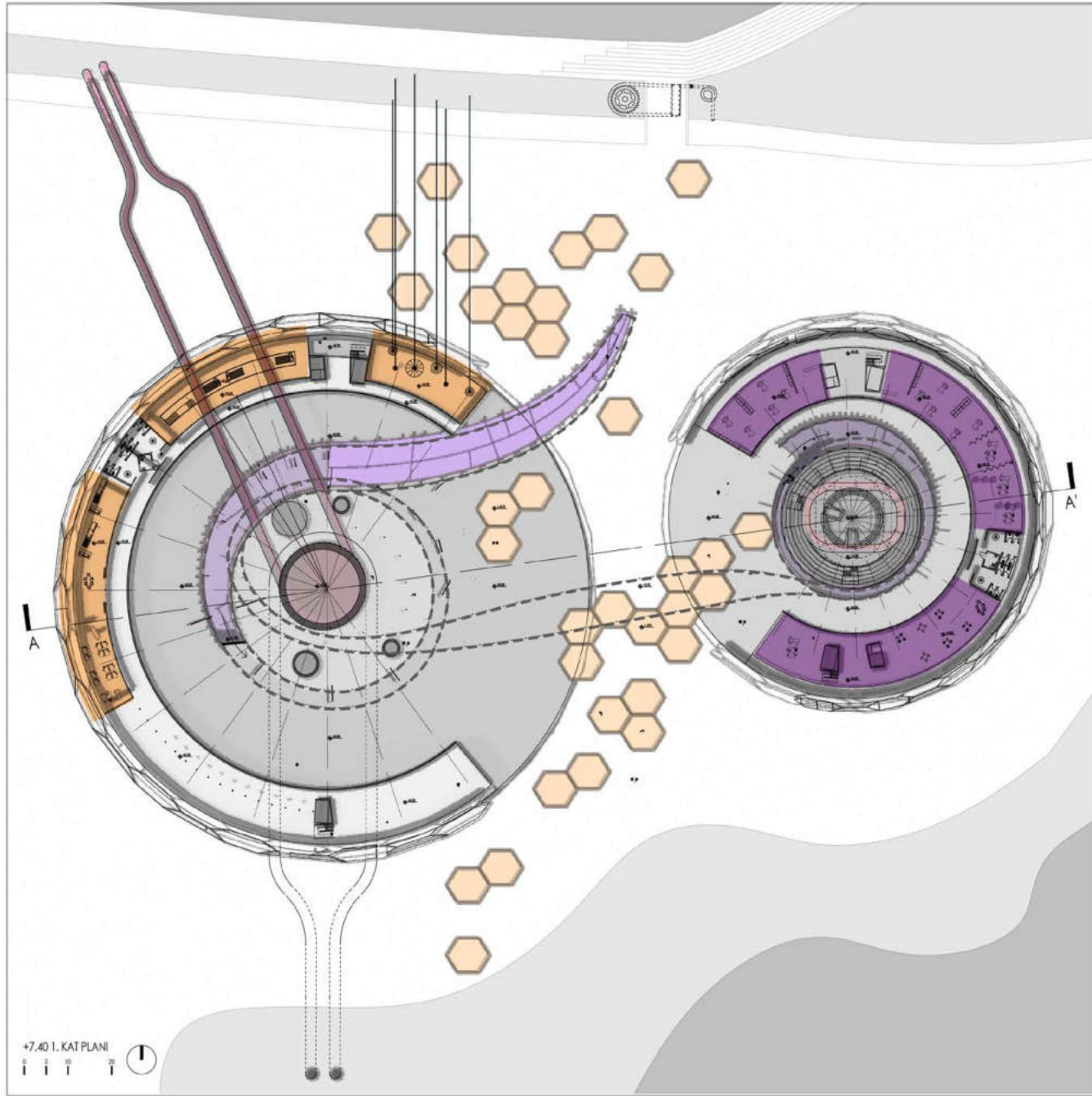






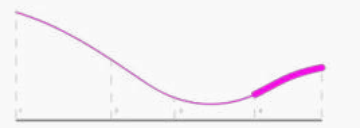
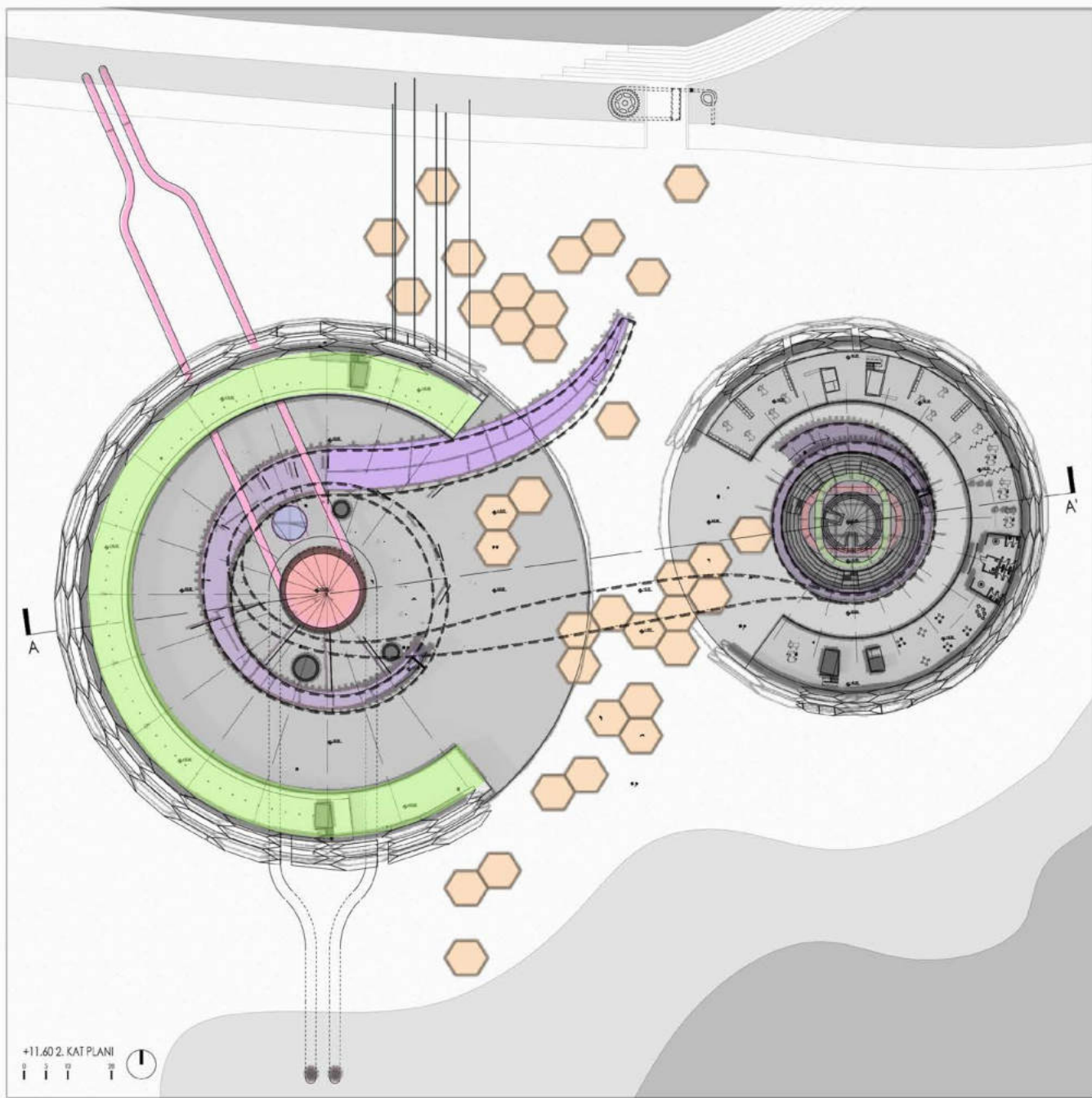


Plan 1 - ALGAE INSTITUTE

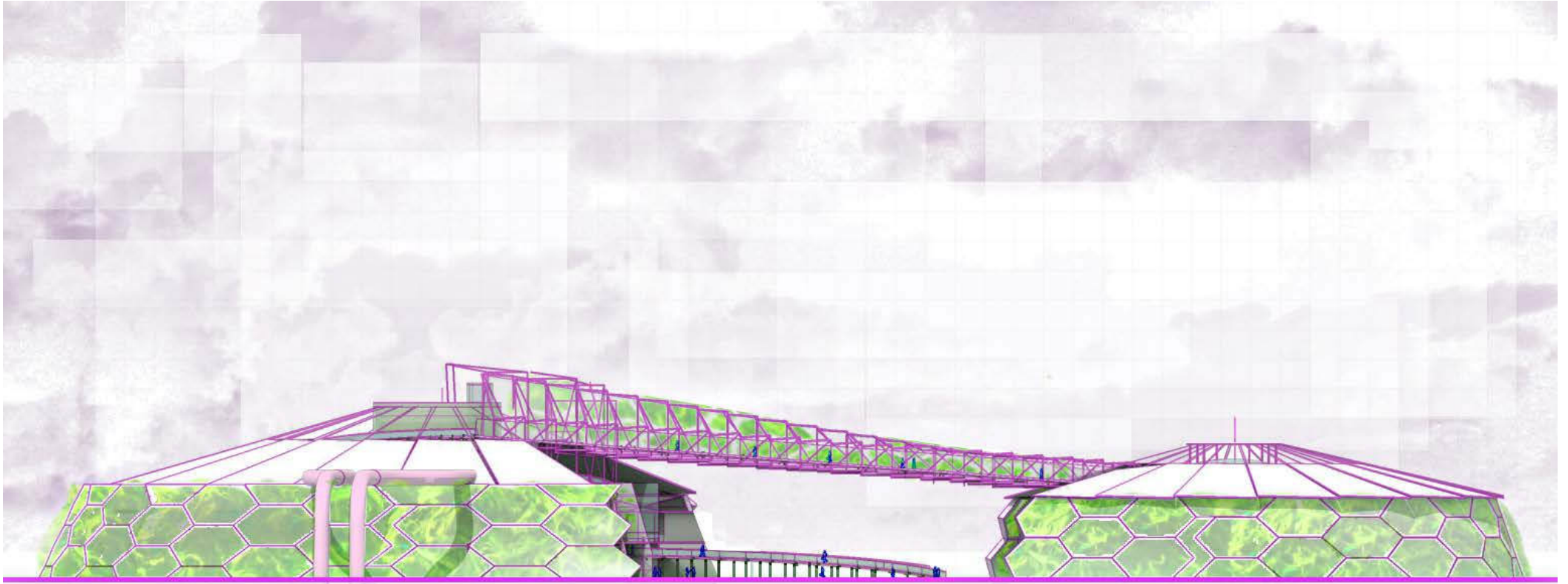
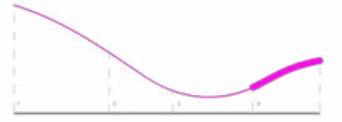


- Laboratories
- Training Ground
- Offices
- Library & Archive
- Upcycler Exhibition Area & Reception
- UPCYCLER

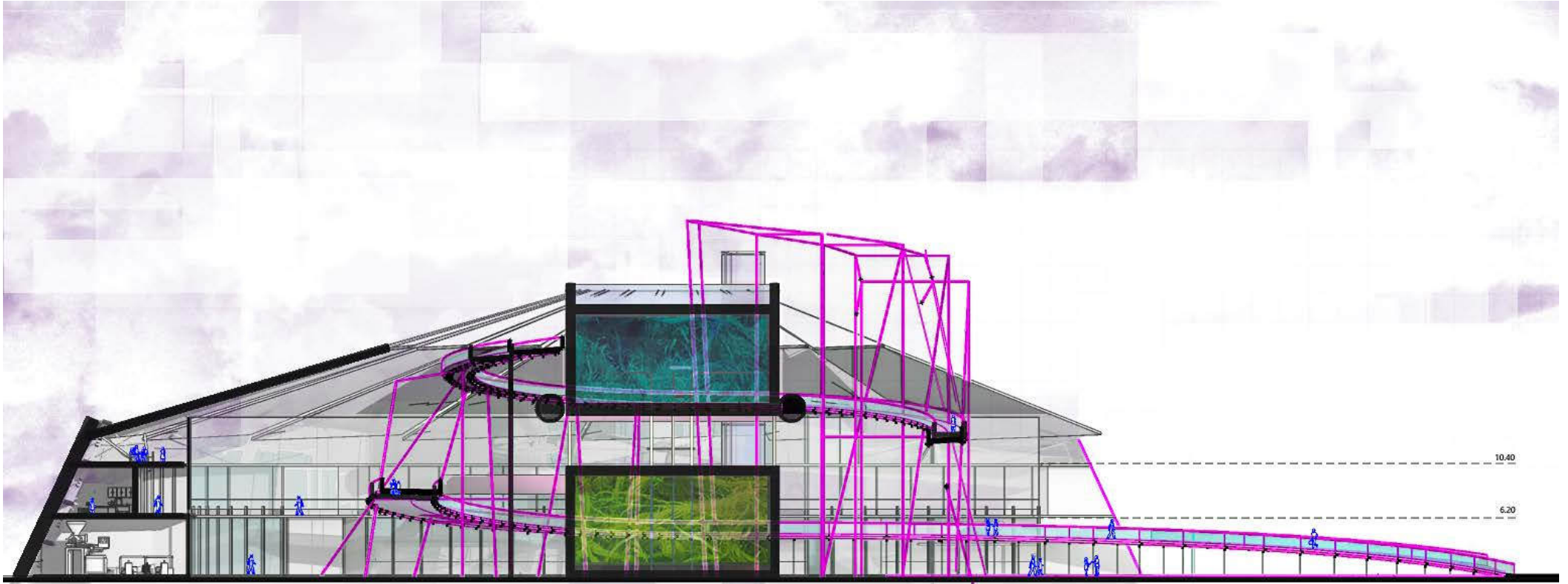
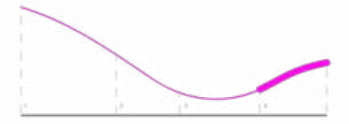
+7.40 1. KAT PLANI



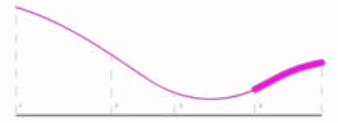
- Laboratories
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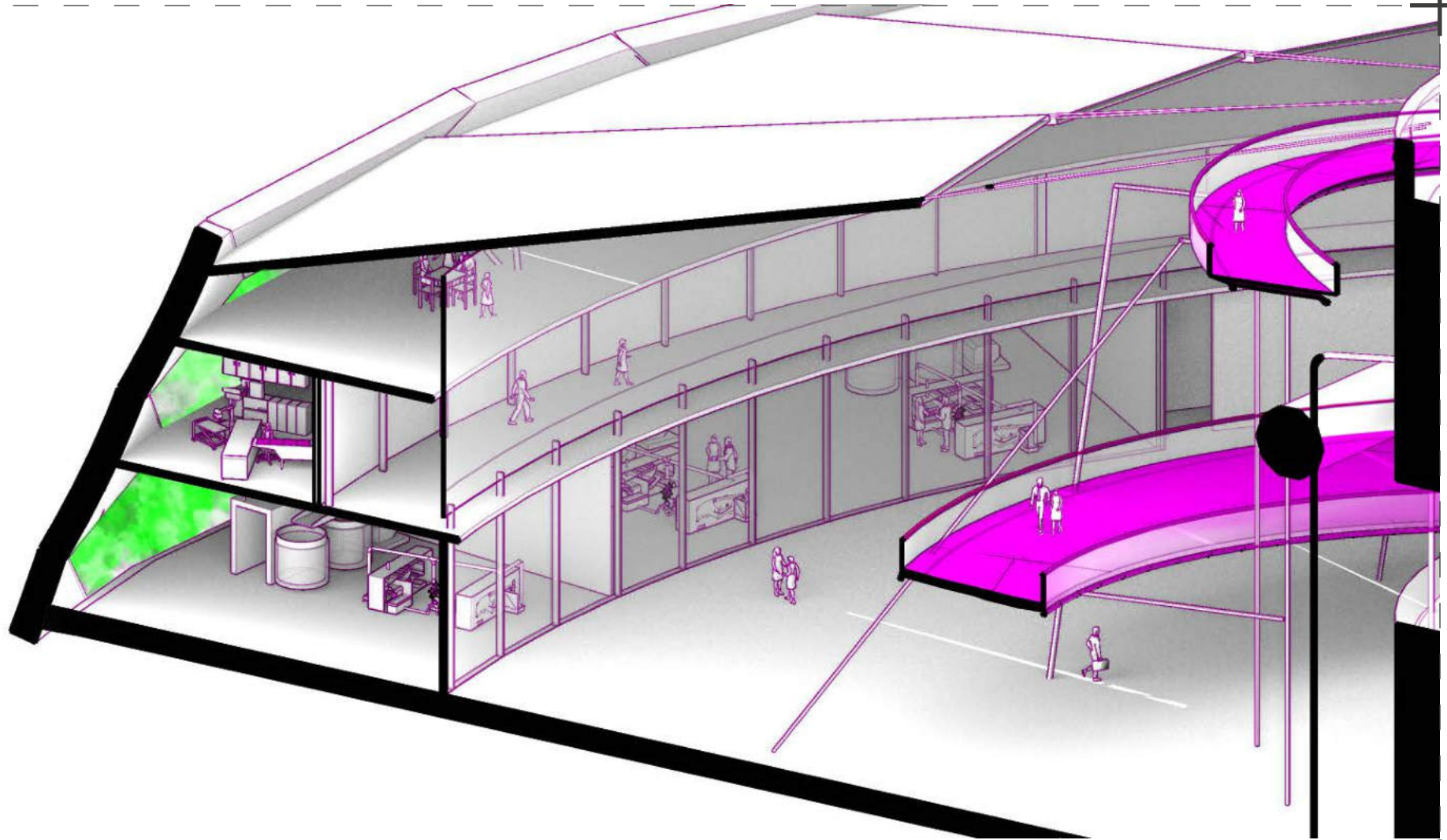
Elevation - ALGAE INSTITUTE



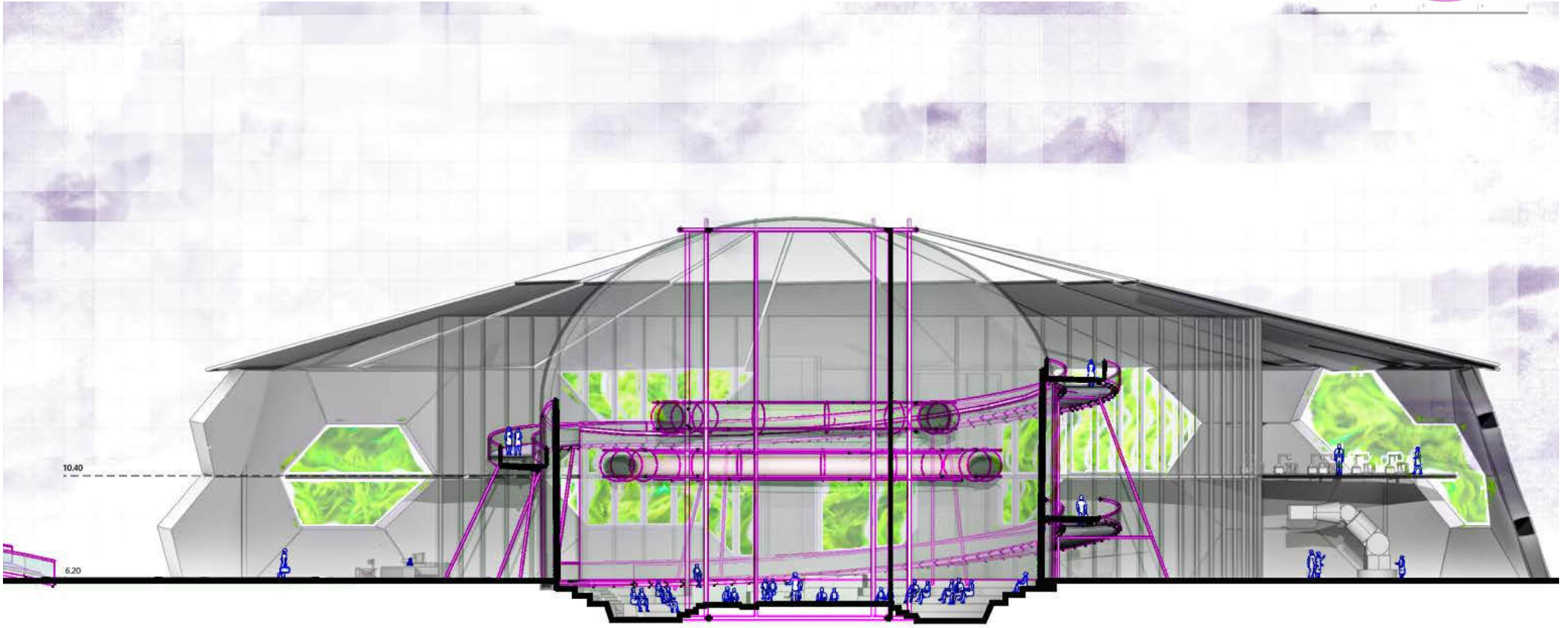
Section 1 - ALGAE INSTITUTE



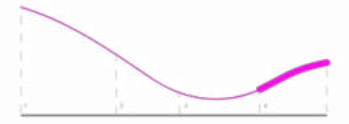
Axonometric Section 1 - ALGAE INSTITUTE



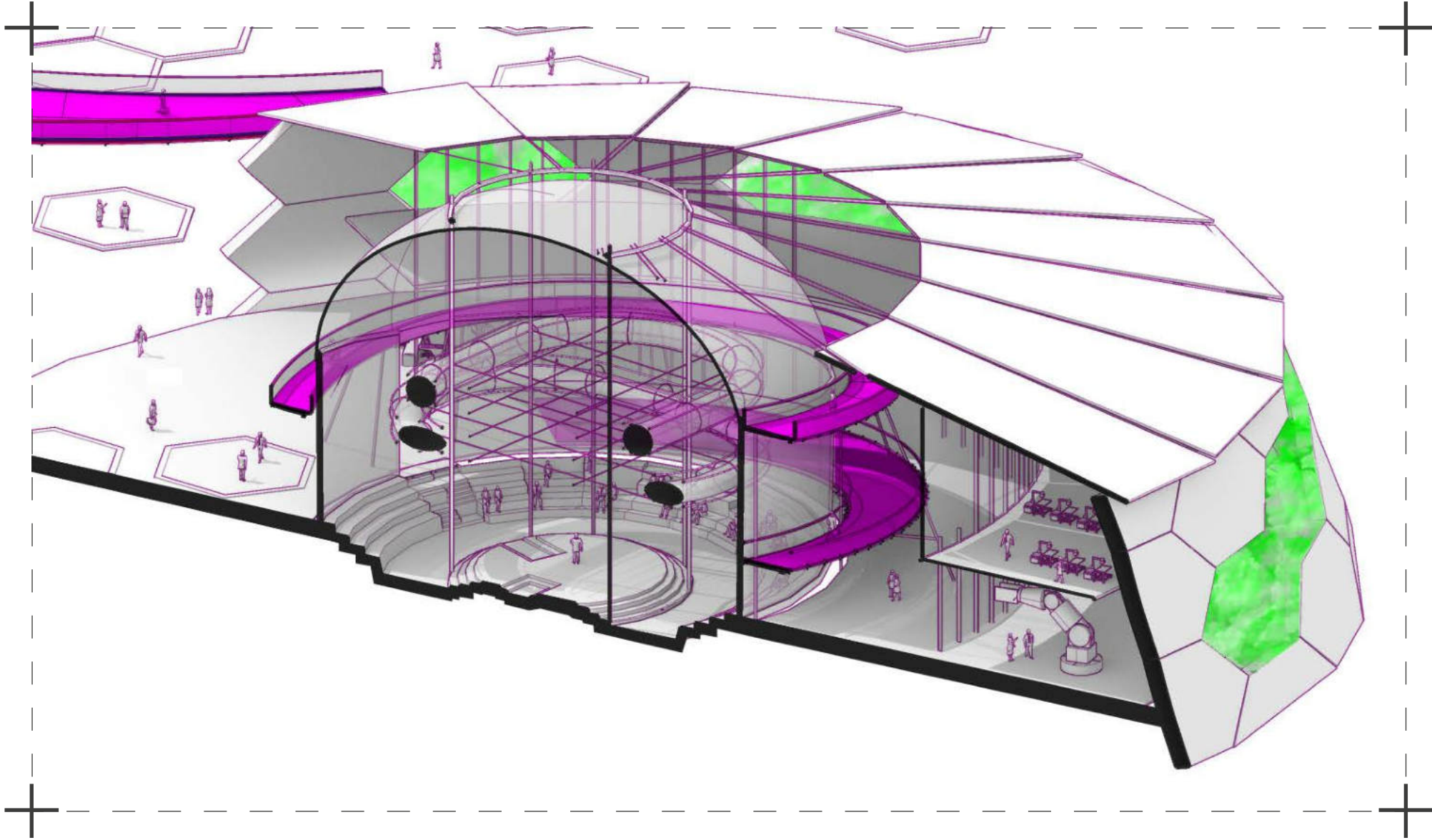


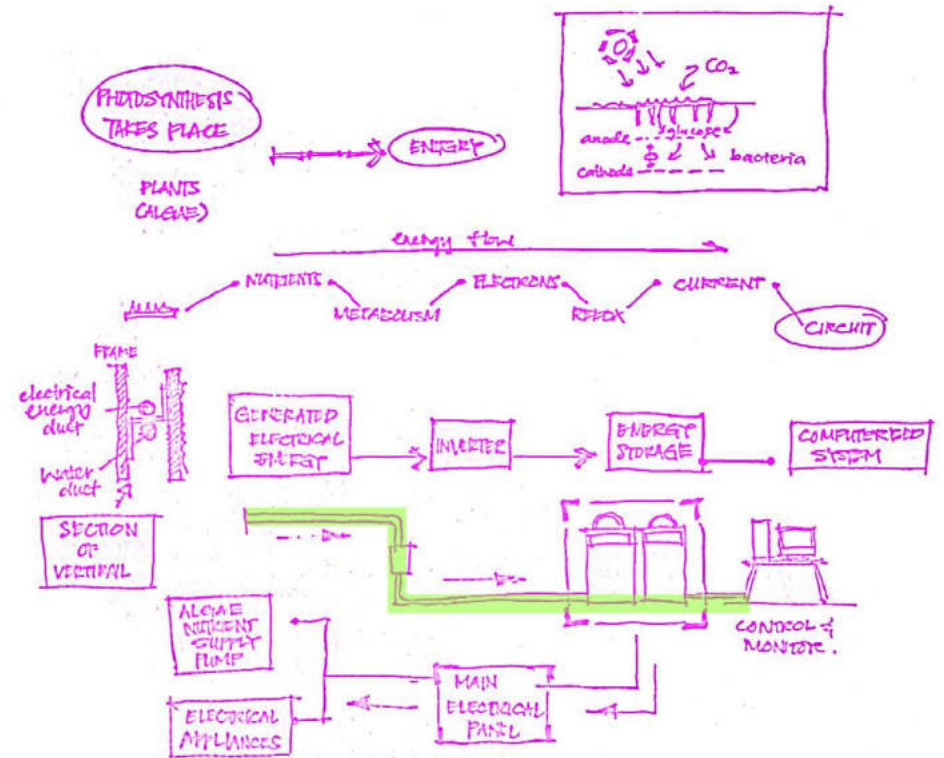
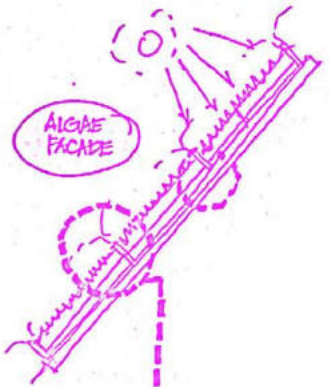
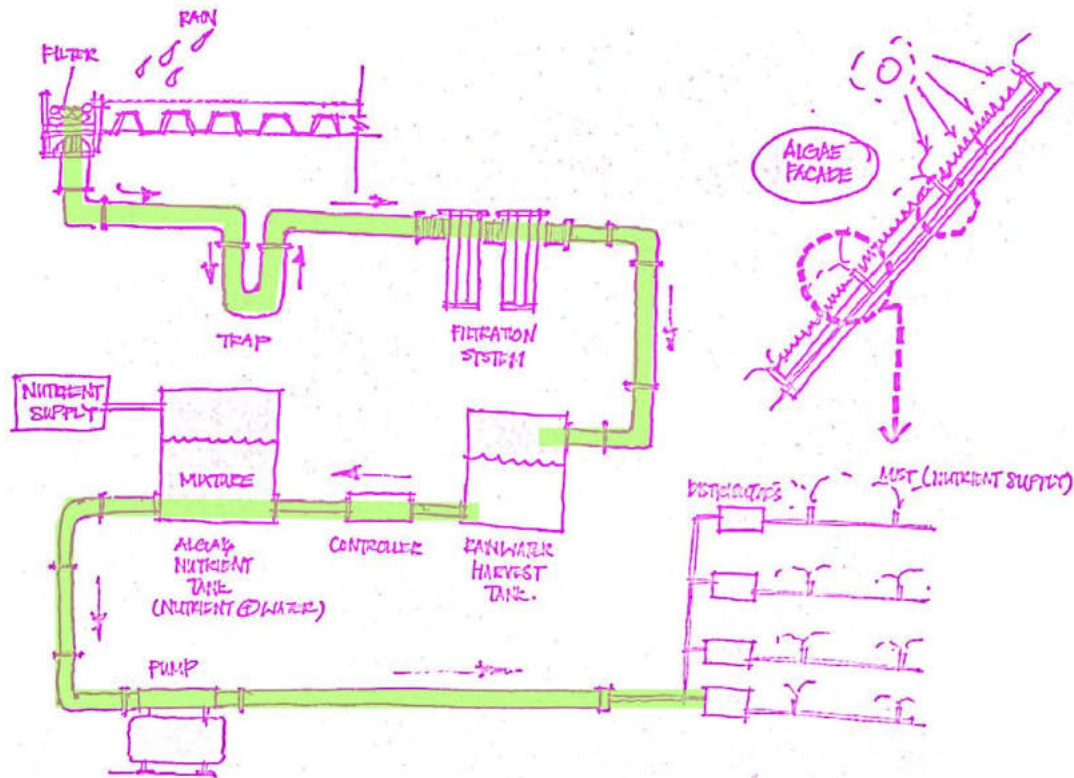


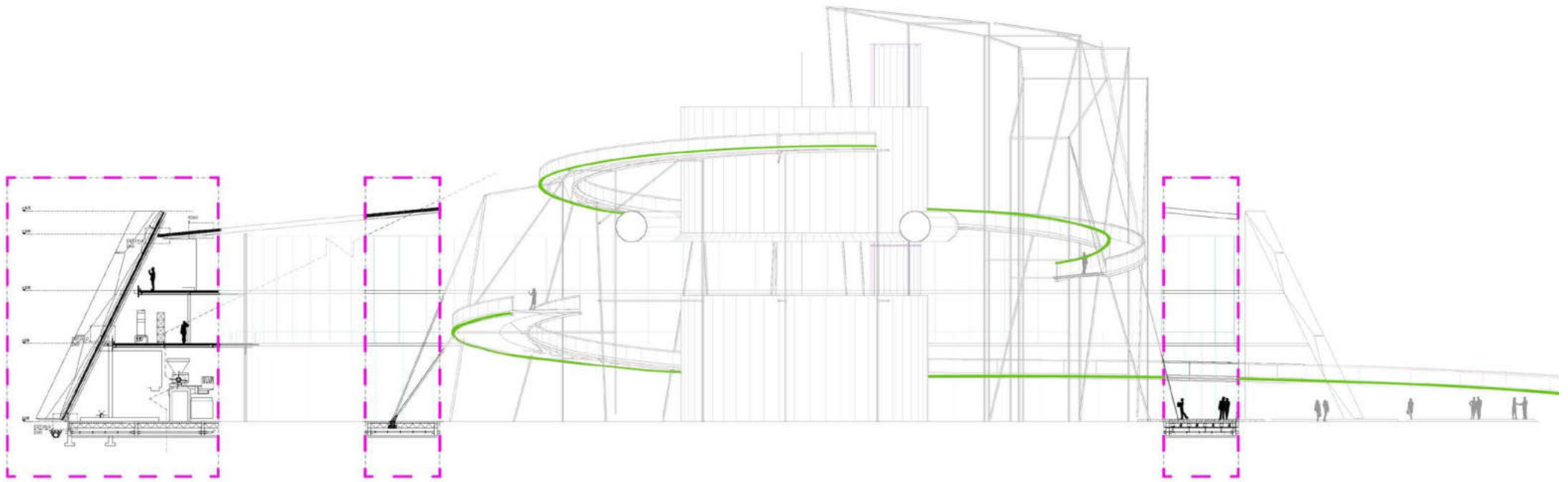
Section 2 - ALGAE INSTITUTE



Axonometric Section 2- ALGAE INSTITUTE



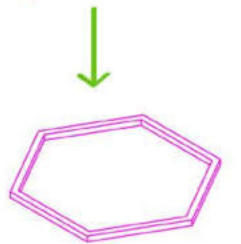




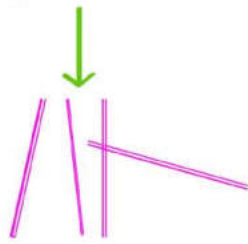
System Detail -1

System Detail -2

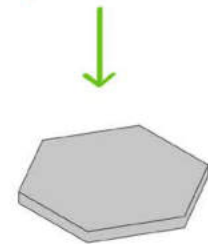
System Detail -3



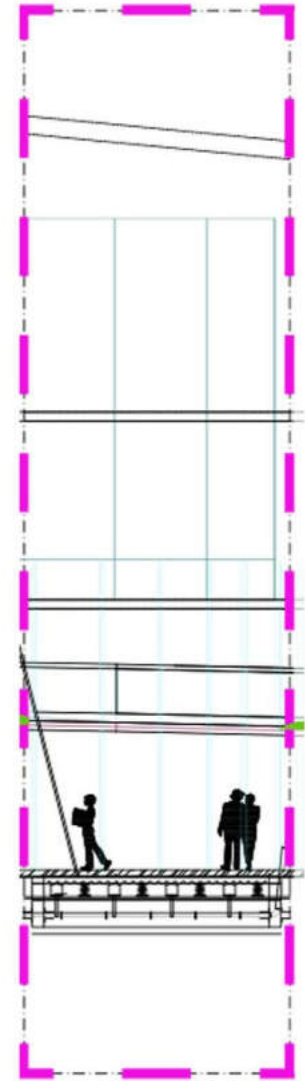
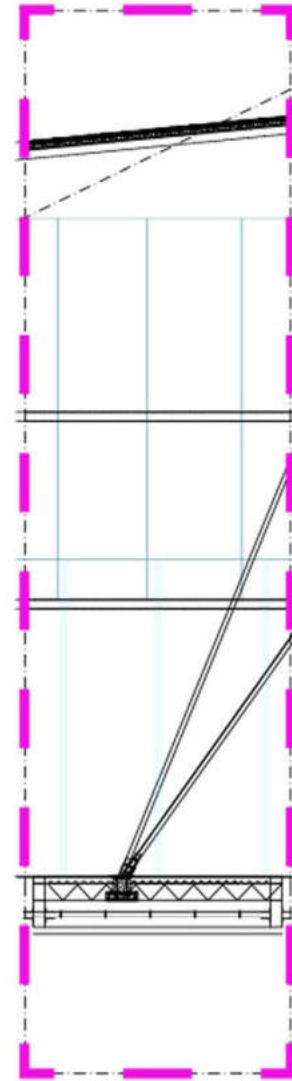
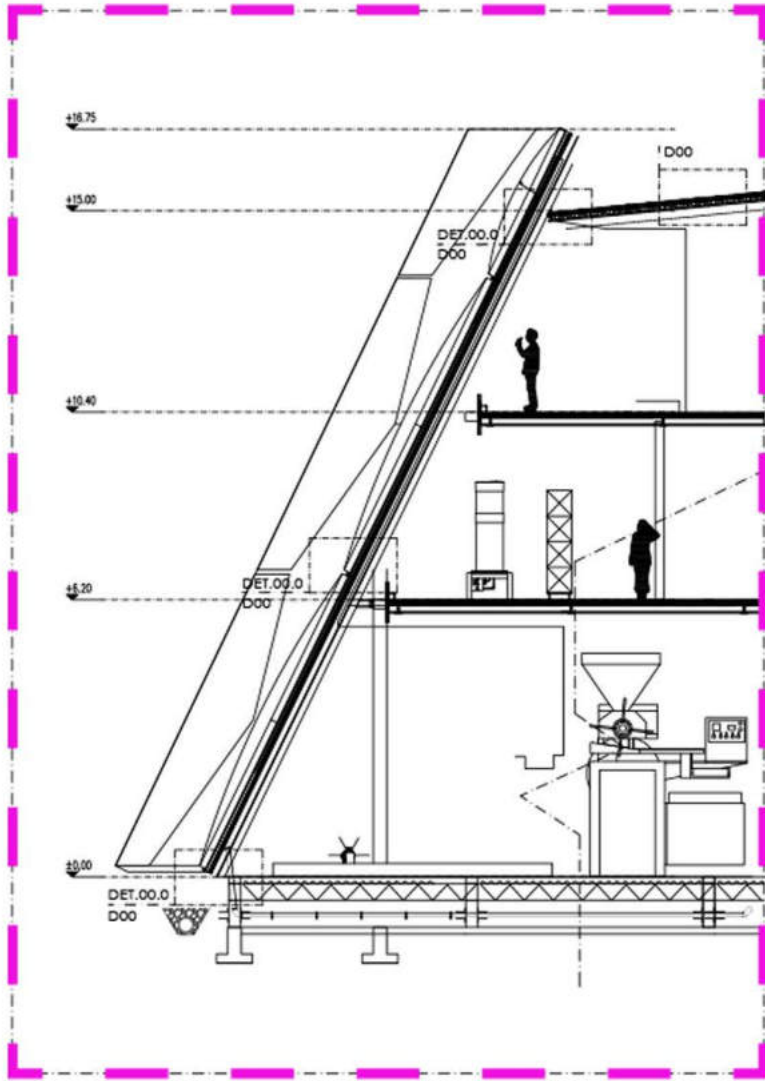
Hexagonal panel frame



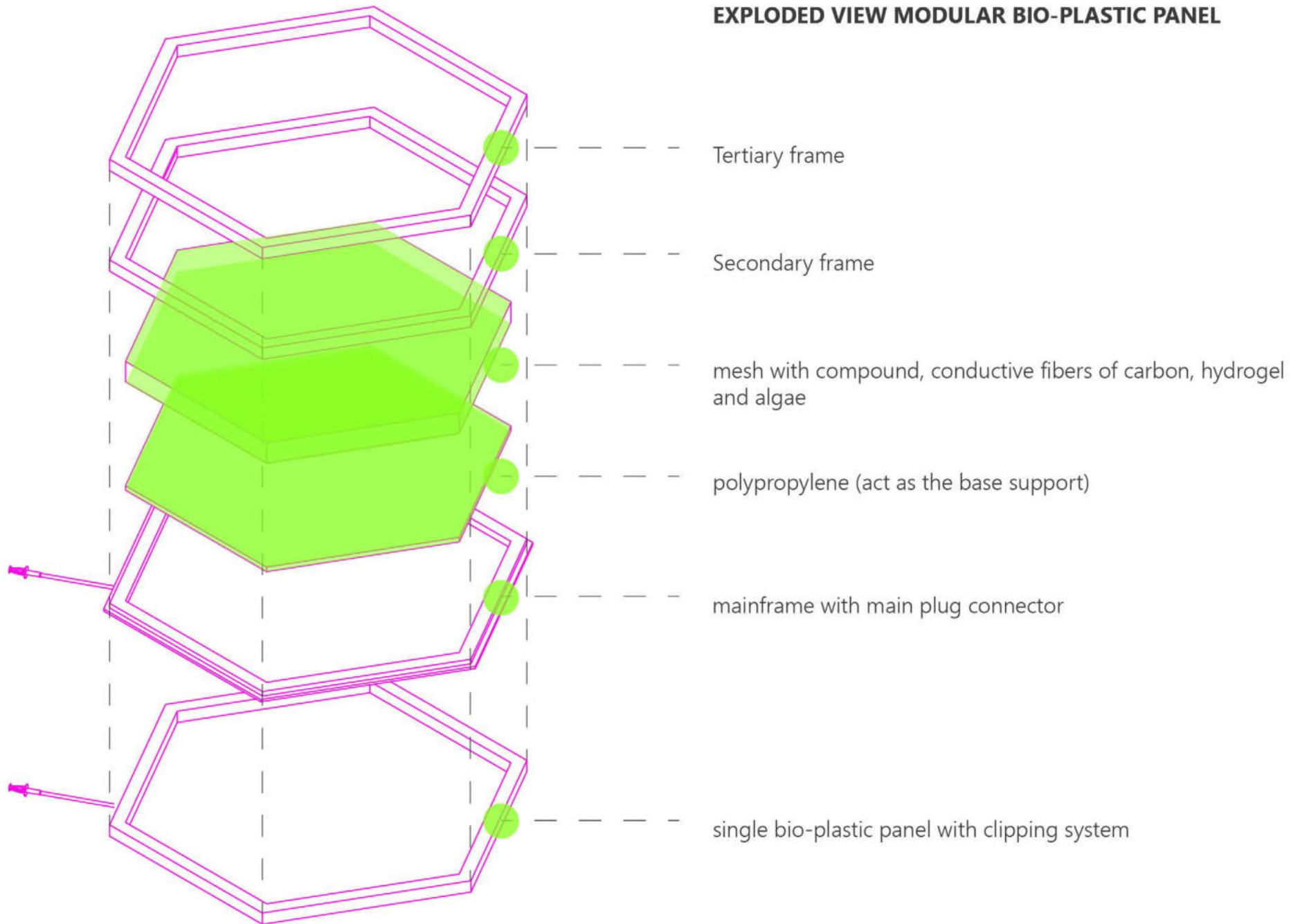
20" Steel frame w/trusses



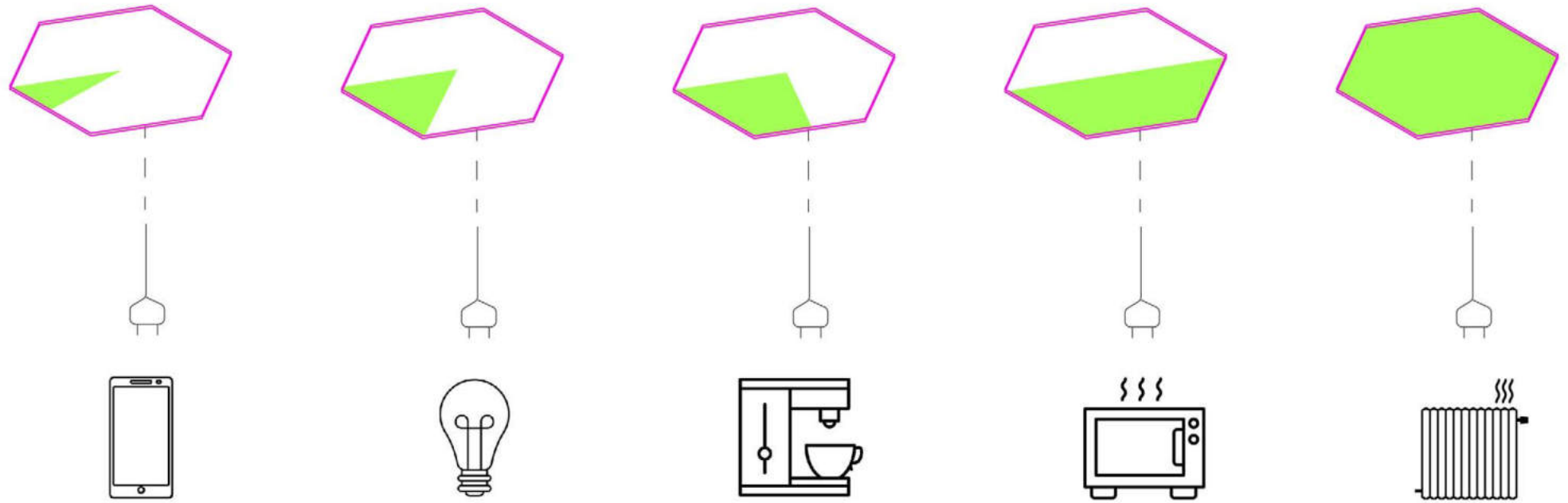
Hexagonal wooden panel



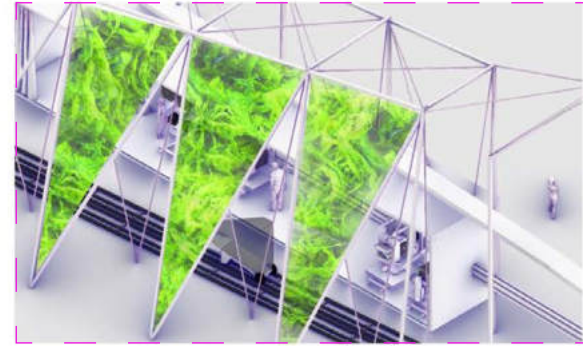
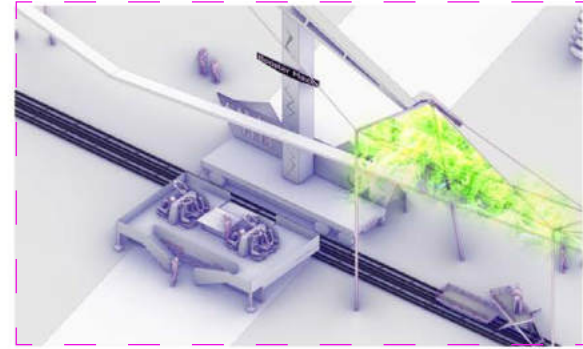
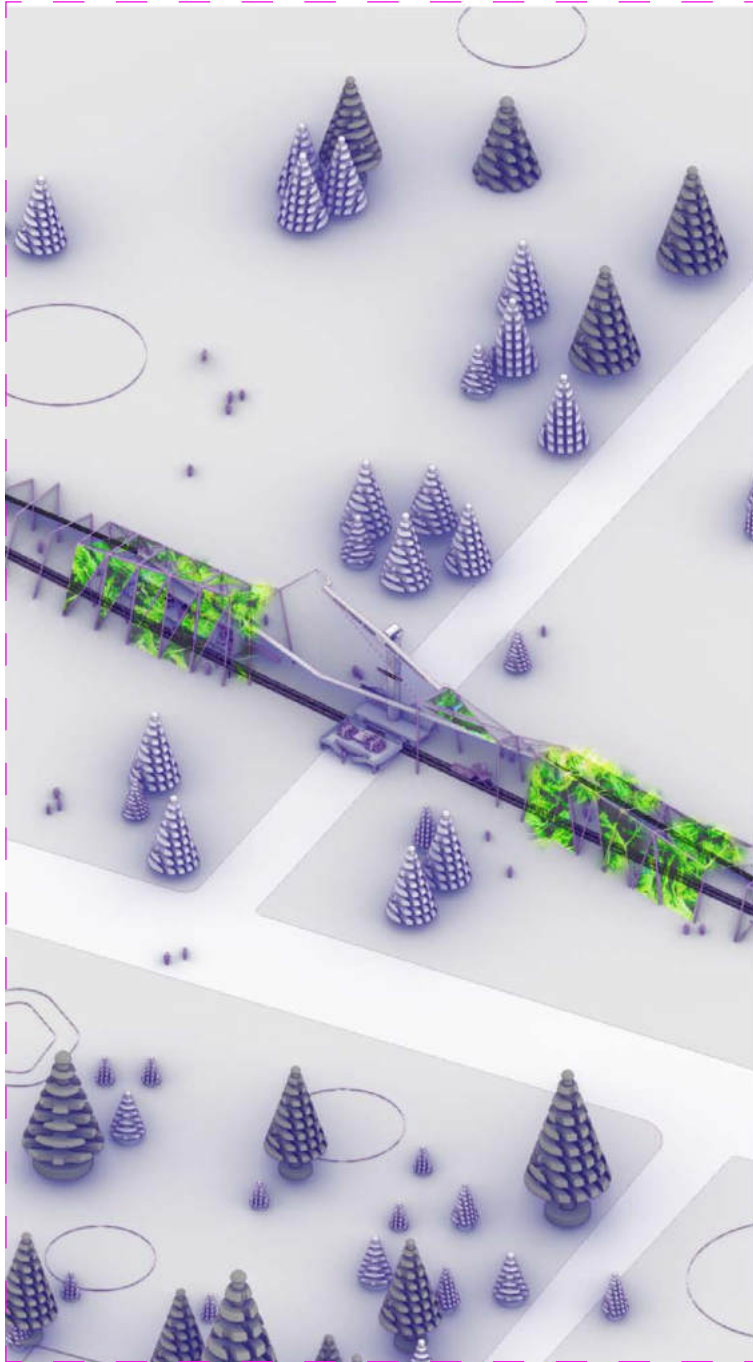
### EXPLODED VIEW MODULAR BIO-PLASTIC PANEL



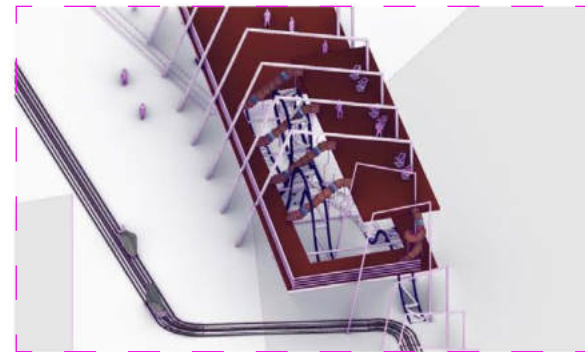
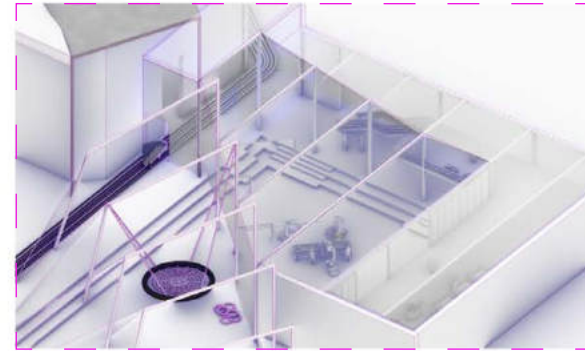
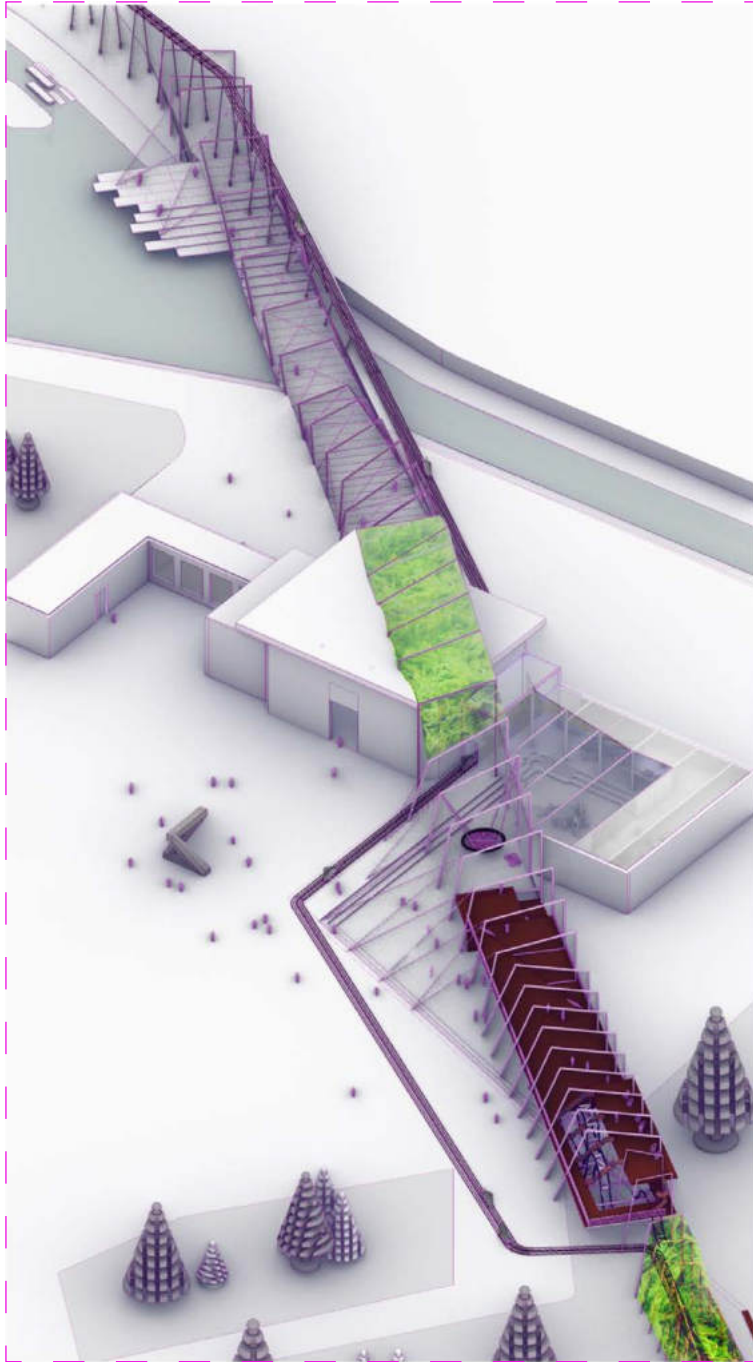
### ENERGY GENERATION DIAGRAM OF BIO-PLASTIC PANEL

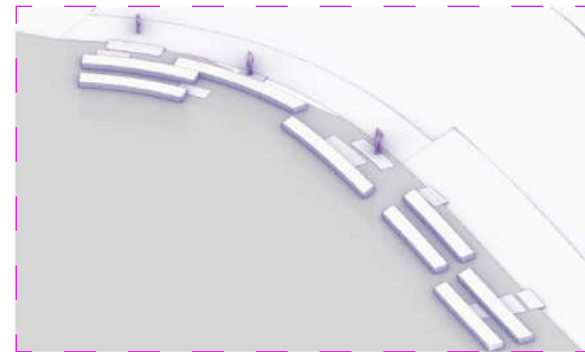
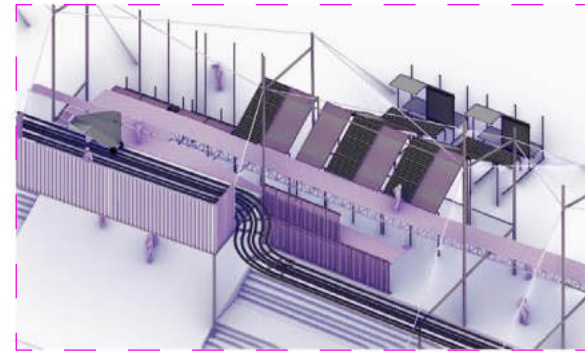
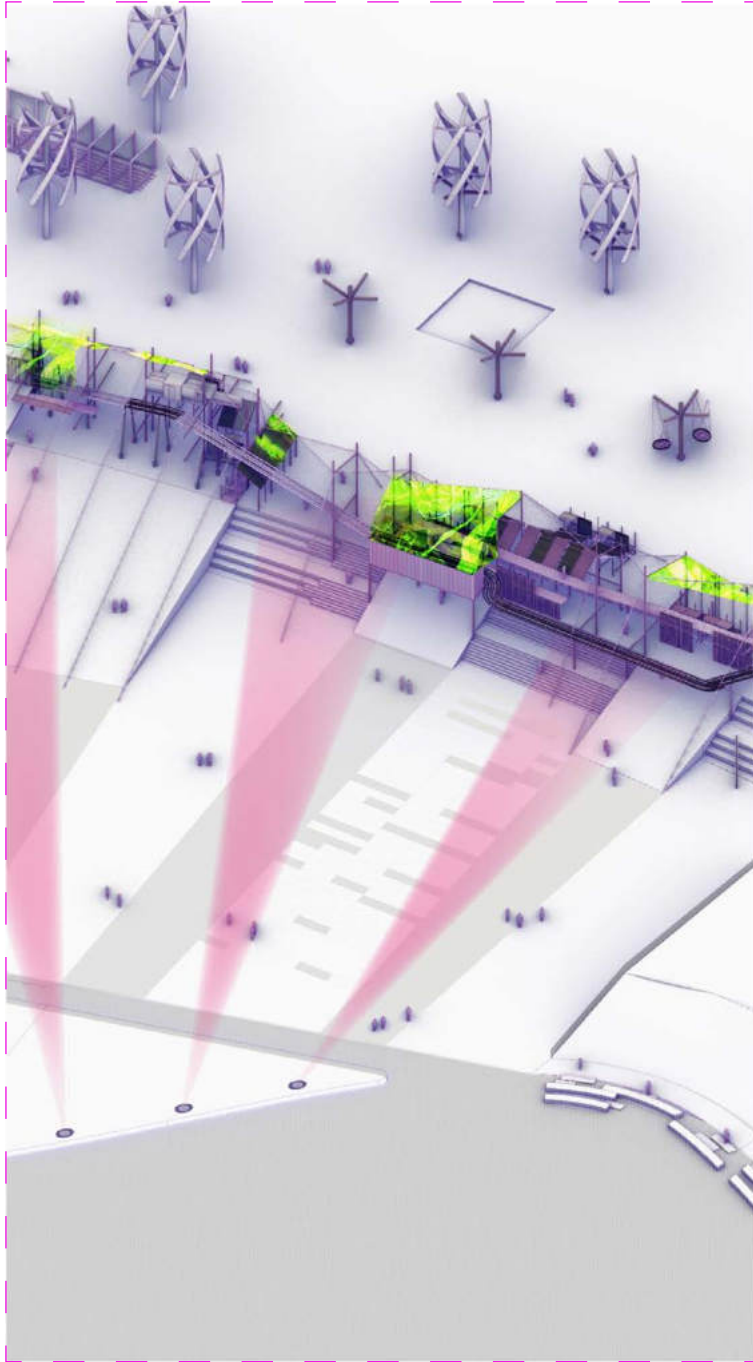


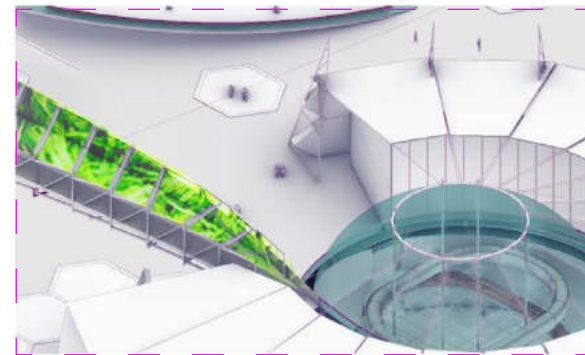
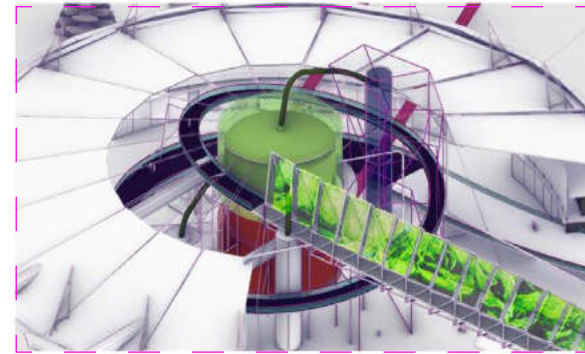
+estimated values, depending on capacitor and type of appliance

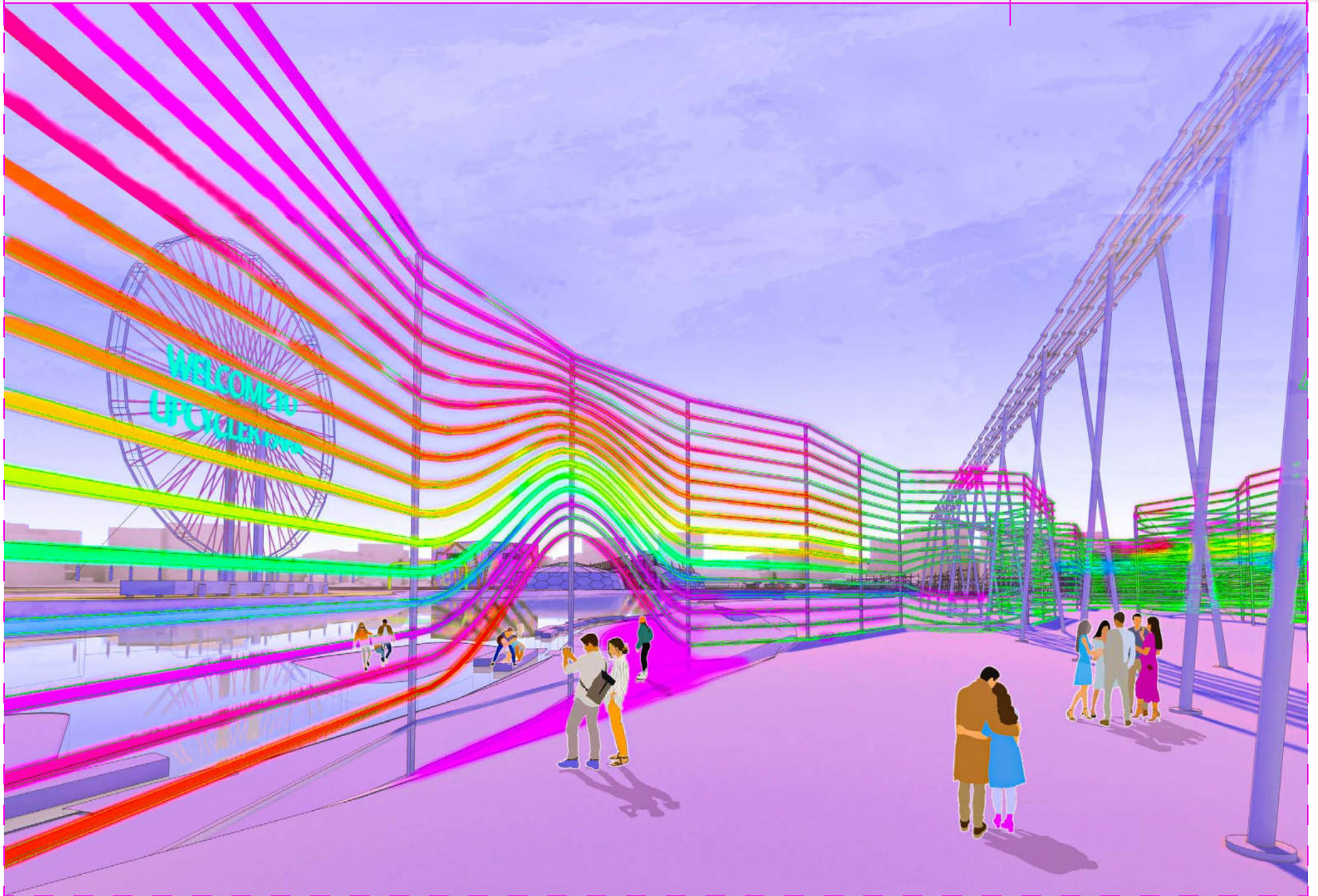


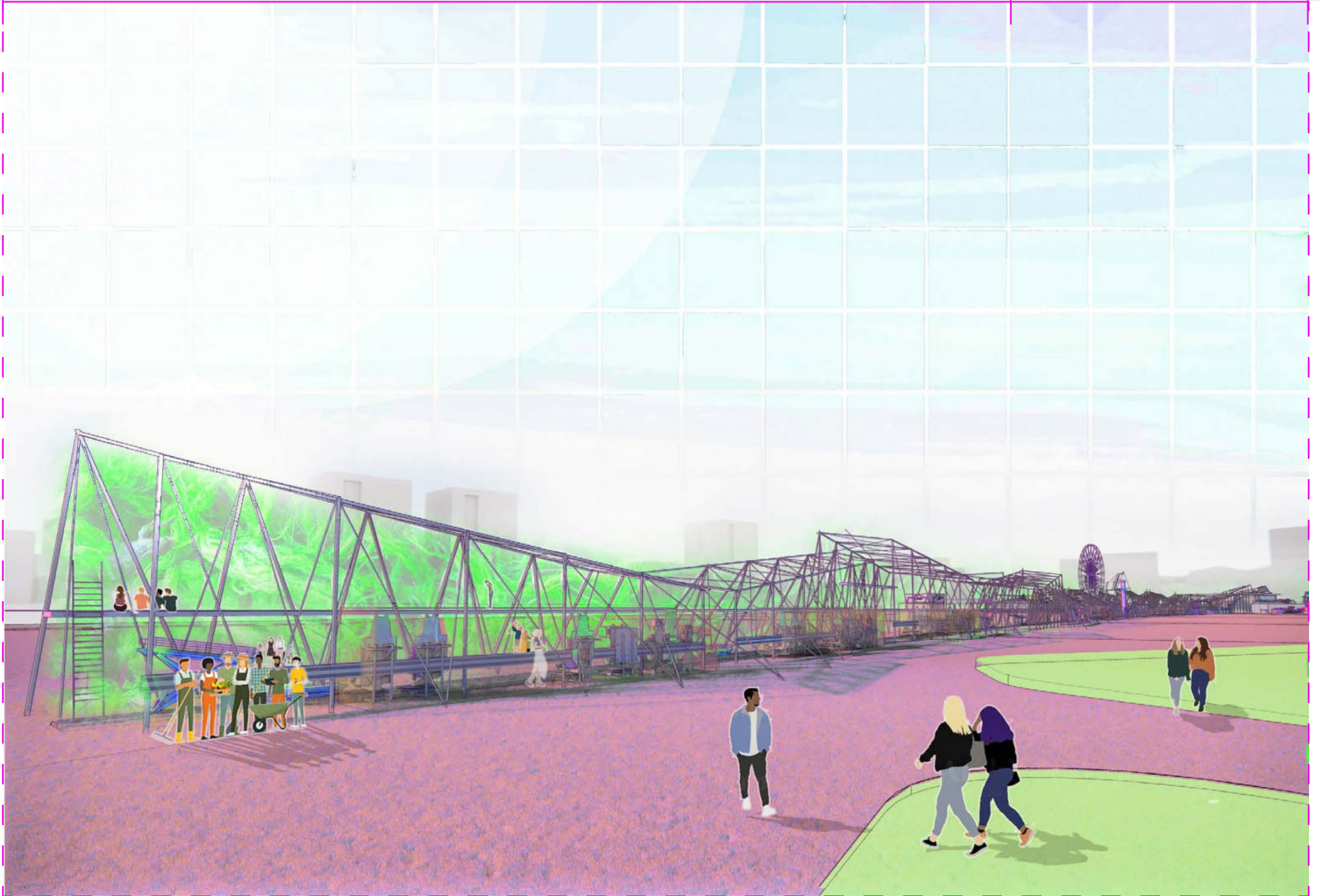




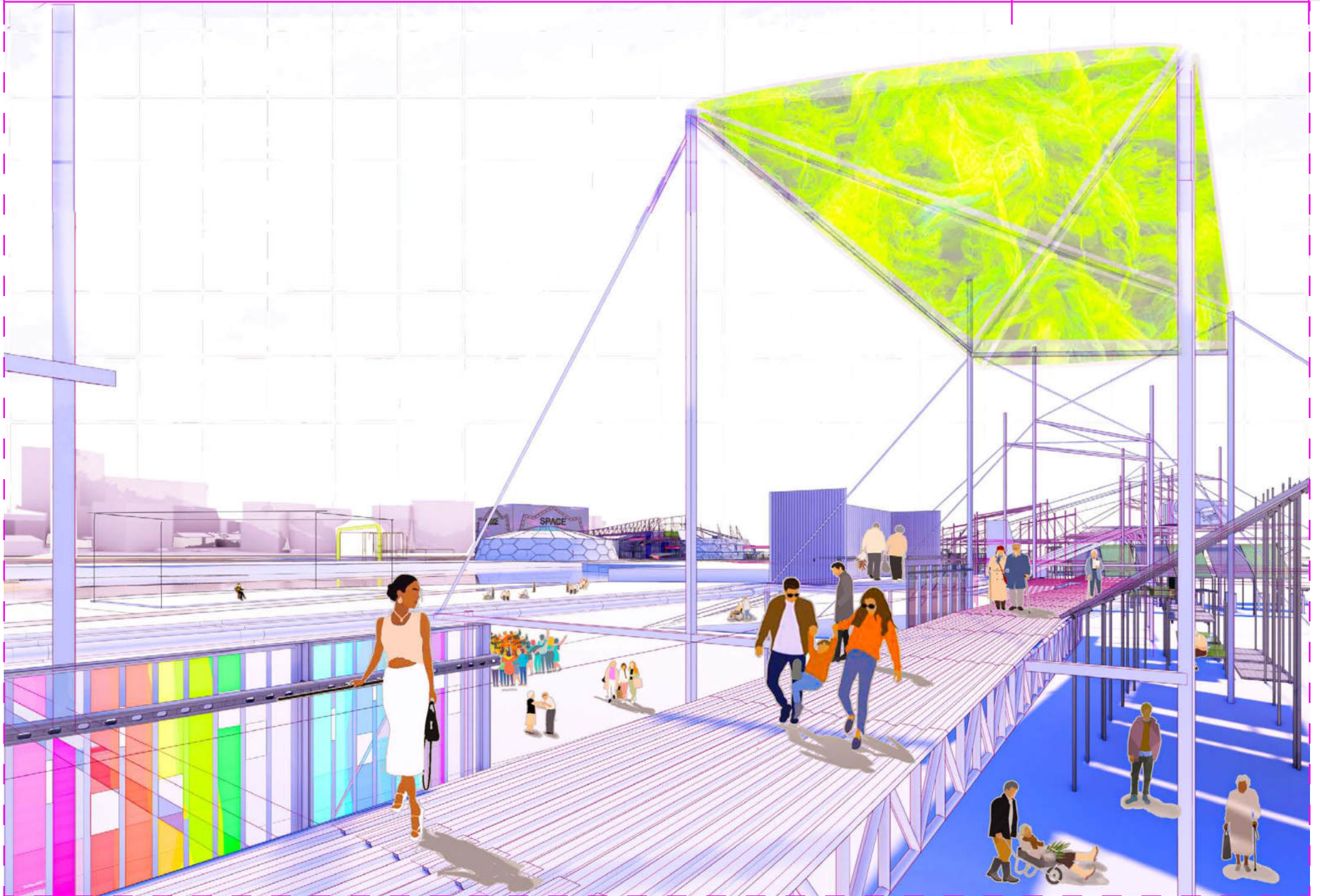


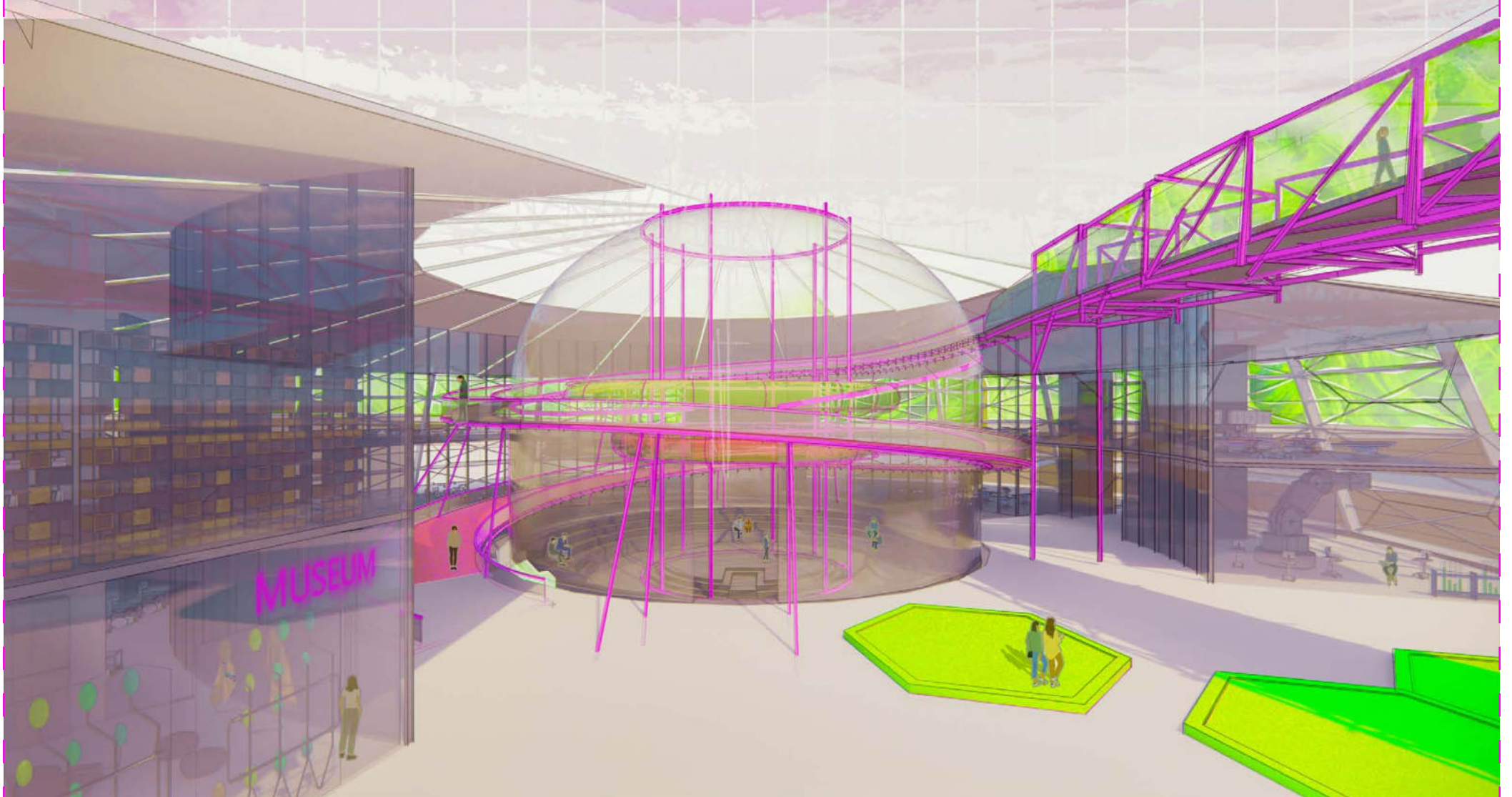






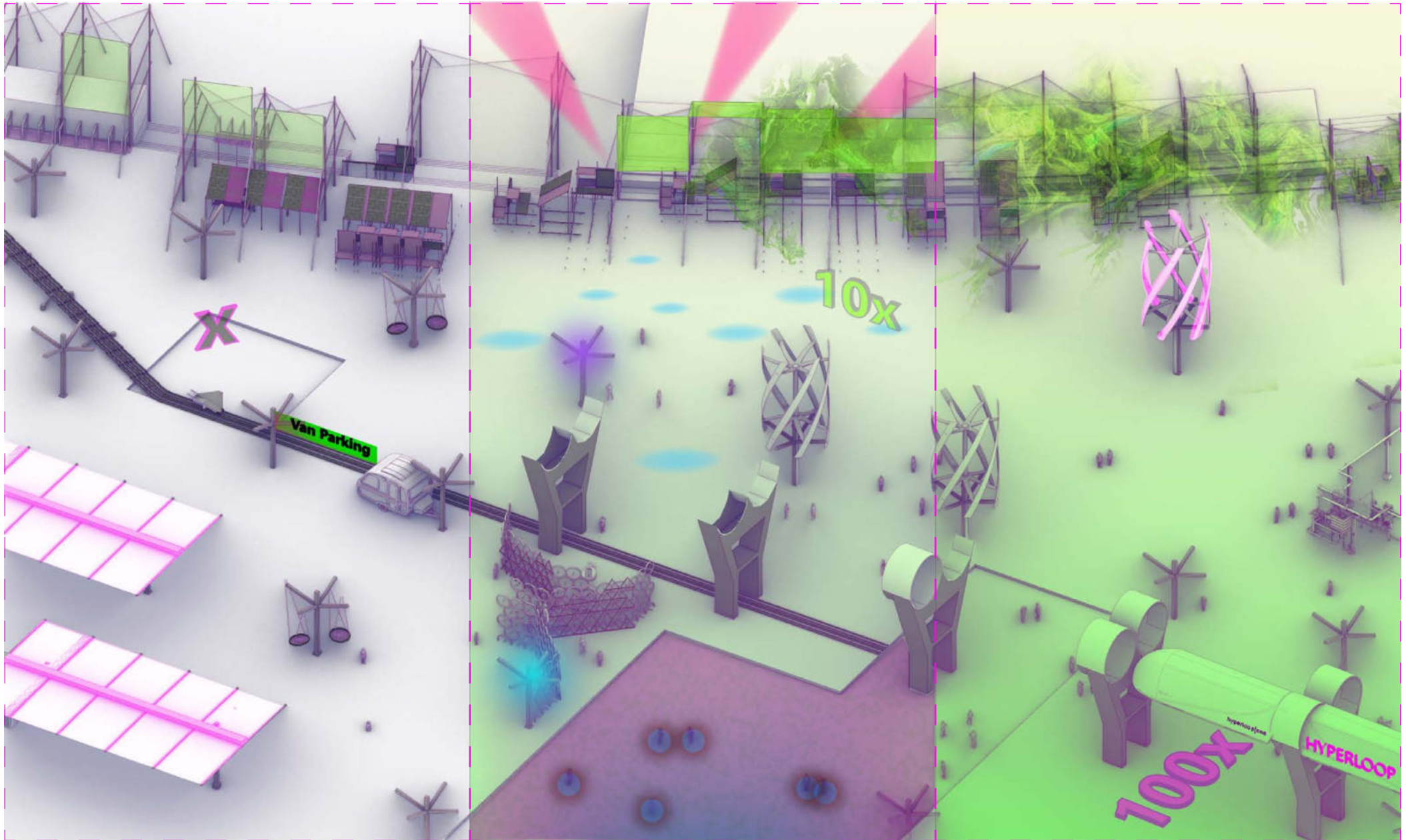












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The logo for 'Upcyclers park' features the word 'Upcyclers' in a bold, pink, sans-serif font. Below it, the word 'park' is written in a white, outlined, sans-serif font. A thick, wavy line in shades of purple, blue, and orange curves under the text. A black crosshair is positioned to the left of the text.

Upcyclers

park

Thanks

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