PORTFOLIO // YINING LAI

# PORTF



# How to Imagine

## the Unknown

ARCHITECTURE SPACE STRUCTURE FACADE FORM MATERIALITY LANDSCAPE PROGRAM SUSTAINABILITY ENVIRONMENT CITY **SUBURBS** PRESERVATION SOCIETY COMMUNITY LIFESTYLE ACCESSIBILITY JUSTICE IMPACT DIMENSION **AESTHETICS TECHNOLOGY** PERCEPTION FEELING FUTURE

1. DECAYING 2. SENIOR STREET 3. L.A.T

DECAYING
 SENIOR STREE
 L.A.T

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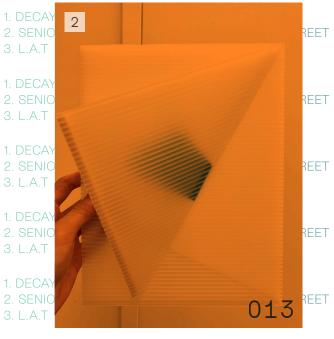
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1. DECAYING 2. SENIOR STREET

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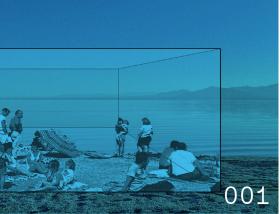
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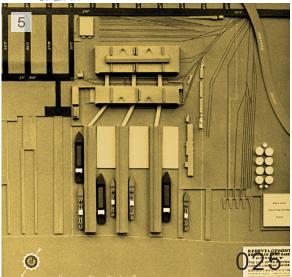


DECAYING
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# DECAYING

Salton Sea Research Center

#### YEAR/ **2022** LOCATION/ **SALTON SEA, CALIFORNIA** CRITIC/ **GARY BATES**

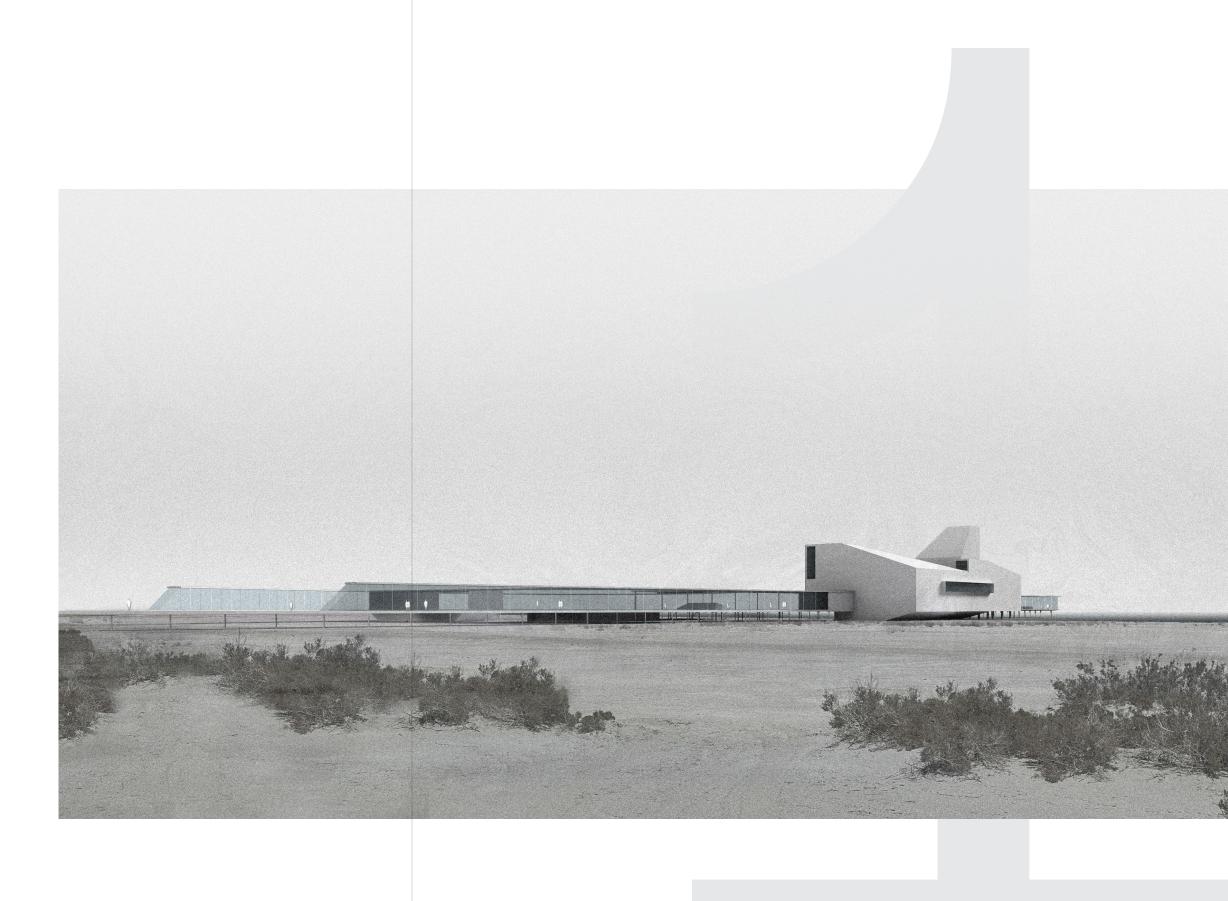
Salton Sea is decaying. It was one of the most popular water resort in California as known as "the miracle in the desert". However, by the 1970s, rising salinity, shoreline flooding, and fertilizer runoff turn this place into a ghost town. Also, the evaporation of the Salton Sea causes the shrinking and accumulation of chemistry. Nowadays, the toxic air and water is killing the living things around the place, and keep away the people approaching to the water.

Architecture is a media able to create boundary between human and nature. In this condition, what can a decay environment bring to human? If tourism usually offers suitable place to make people comfortable, the tourism of dystopia can bring people awareness.

Decaying is a project with the educational program of research center and Salton Sea museum. It extend out from the ground into the water spaning three different topography. The promenades create a fully interior space keeping the toxic gas out.

The Salton Sea research center and museum are connected together. The research center provides assistance to the museum to help tourists having deeper understand of enviornmental problems and getting involved in the transformation of current environment situation.

The Salton Sea museum is about the history and future of Salton Sea region. However, unlike traditional museum, the form of architecture itself, which exaggerate the contrast between dystopia nature and suitable architecture space, provokes educational idea as well.



# 1995 2001 2021 2025 2035 C C

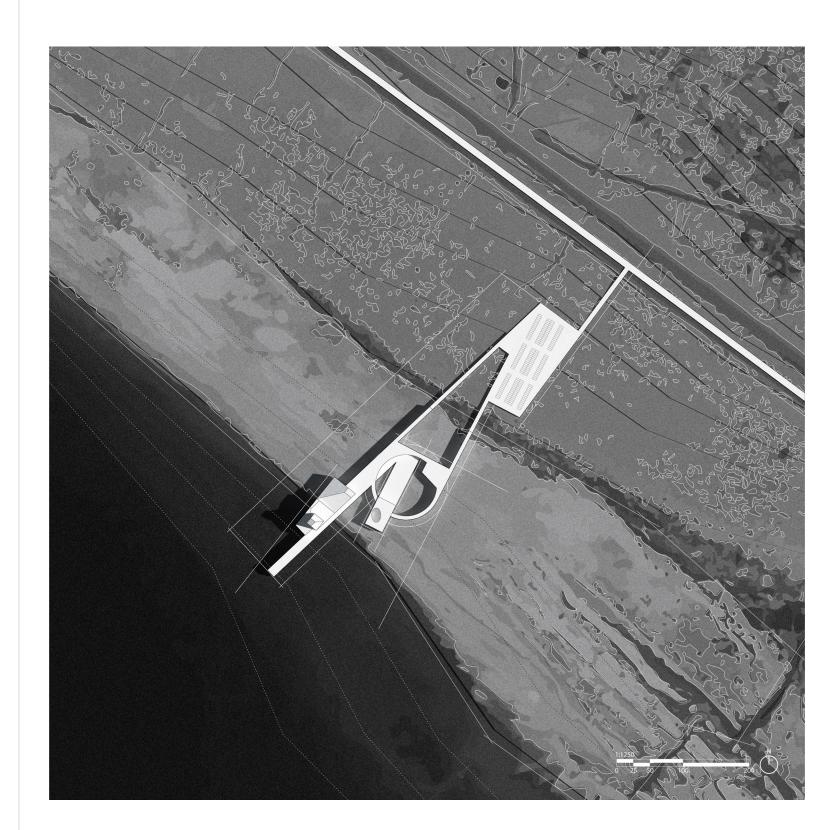




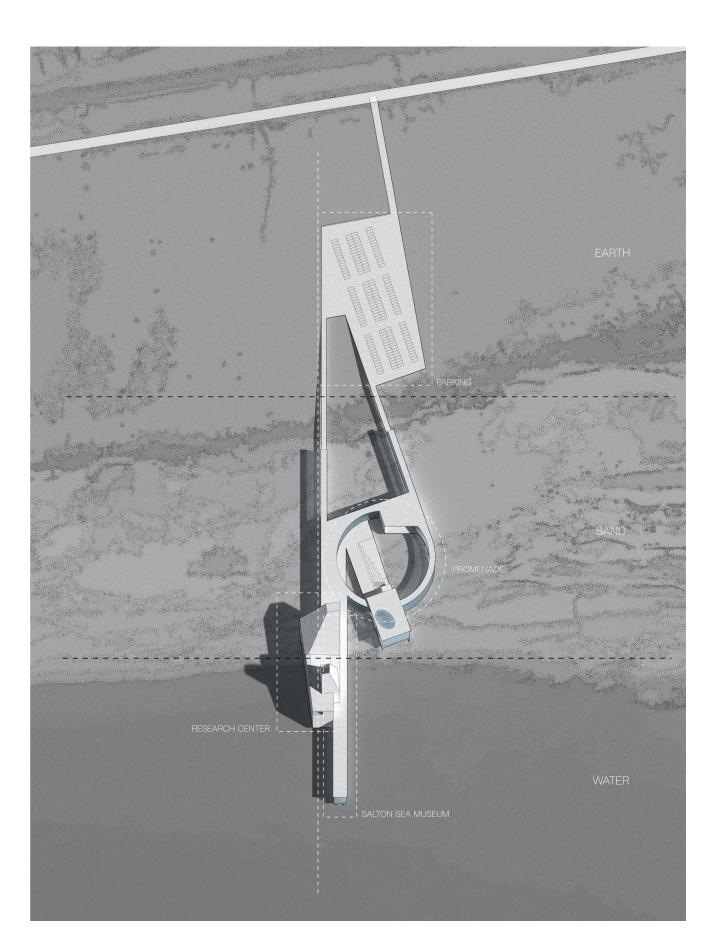


(right) SITE PLAN (top left) SHRINKING OF SALTON SEA (bottom left) SALTON SEA PHOTOS

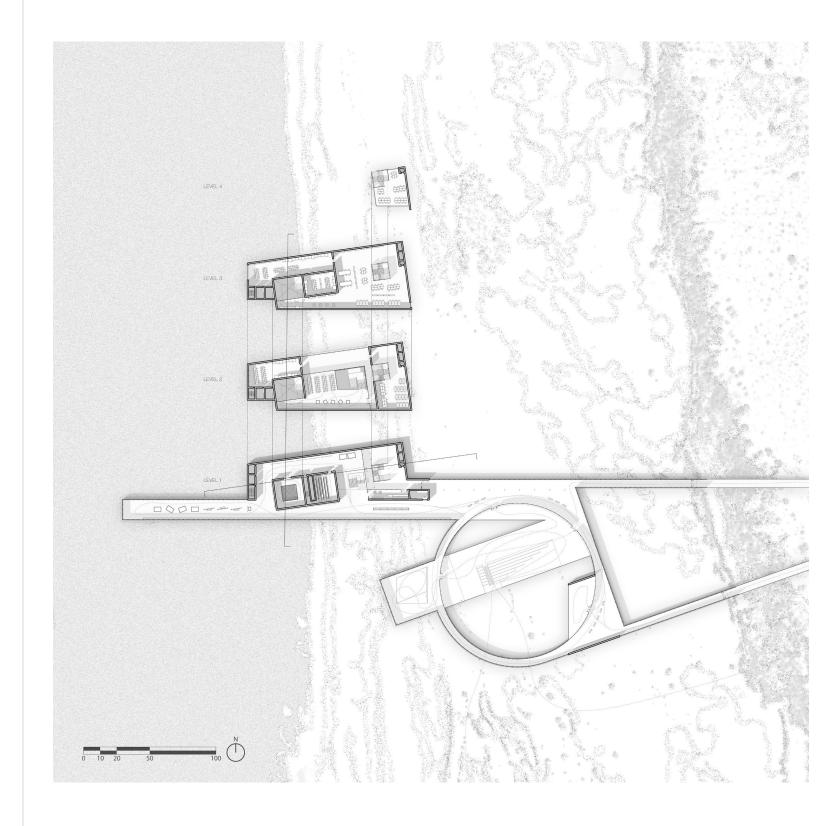
### Decaying



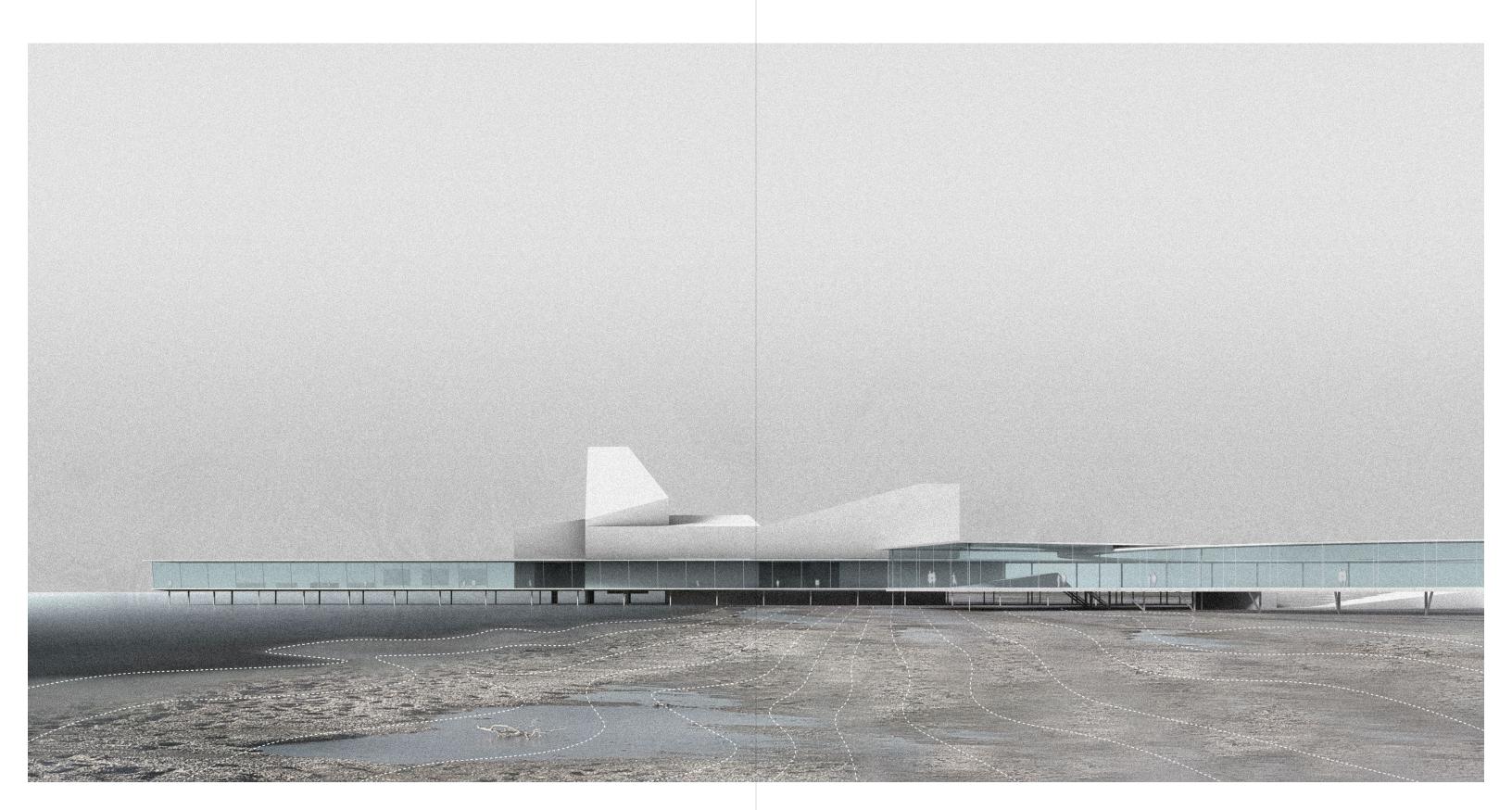
#### Decaying



(right) PLAN (left) PLAN DIAGRAM

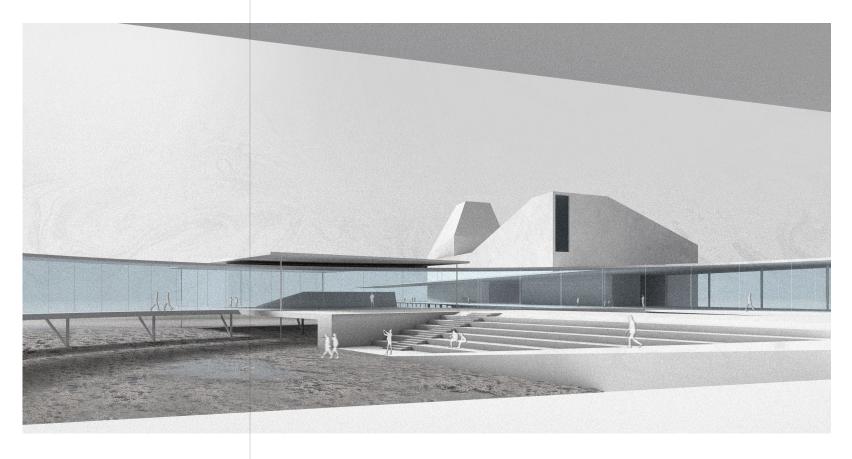


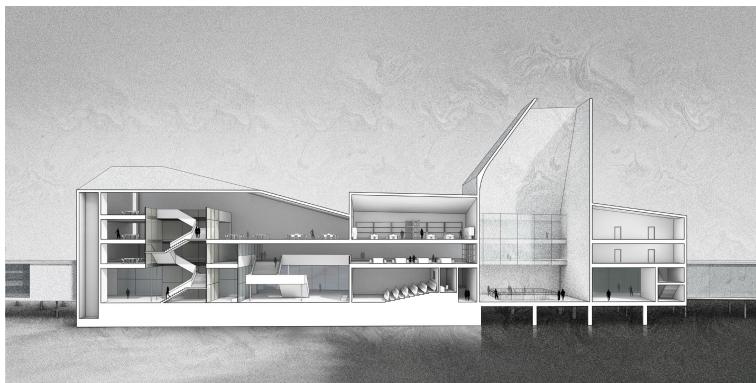
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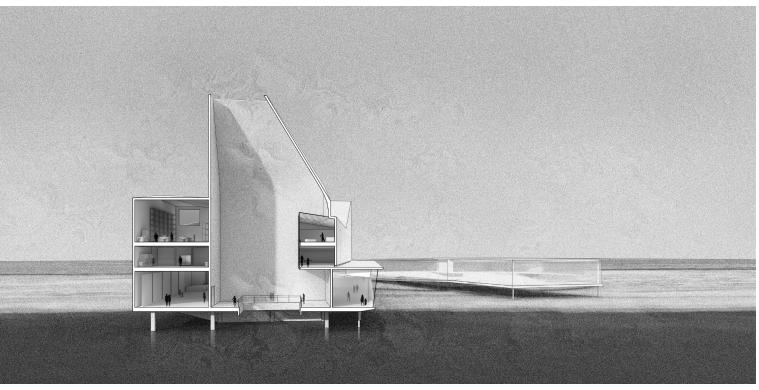


(left) SECTION
(middle) PERSPECTIVE DRAWING
(right) SECTION

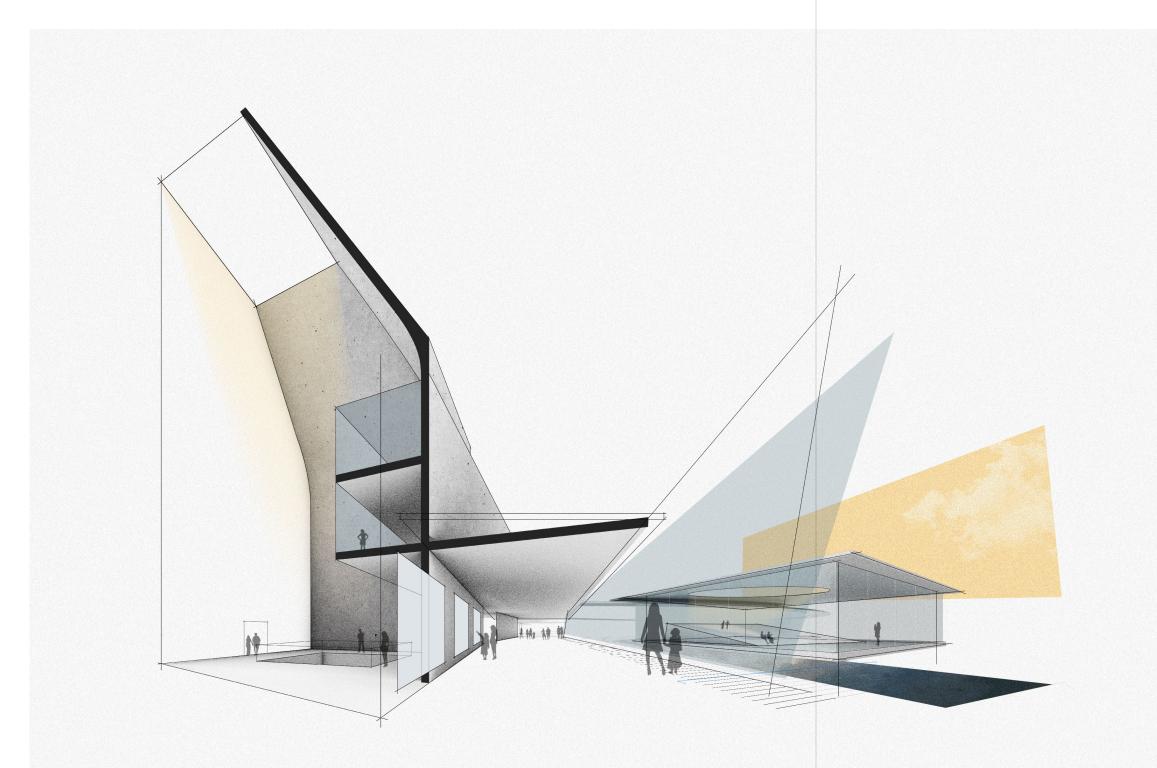
#### Decaying







### Decaying



#### **SENIOR** STREET

#### NEW YORK CITY STREET PROJECT

YEAR/ **2021** LOCATION/ **NEW YORK CITY, NEW YORK** CRITIC/ **BROYNY ROBER**TS

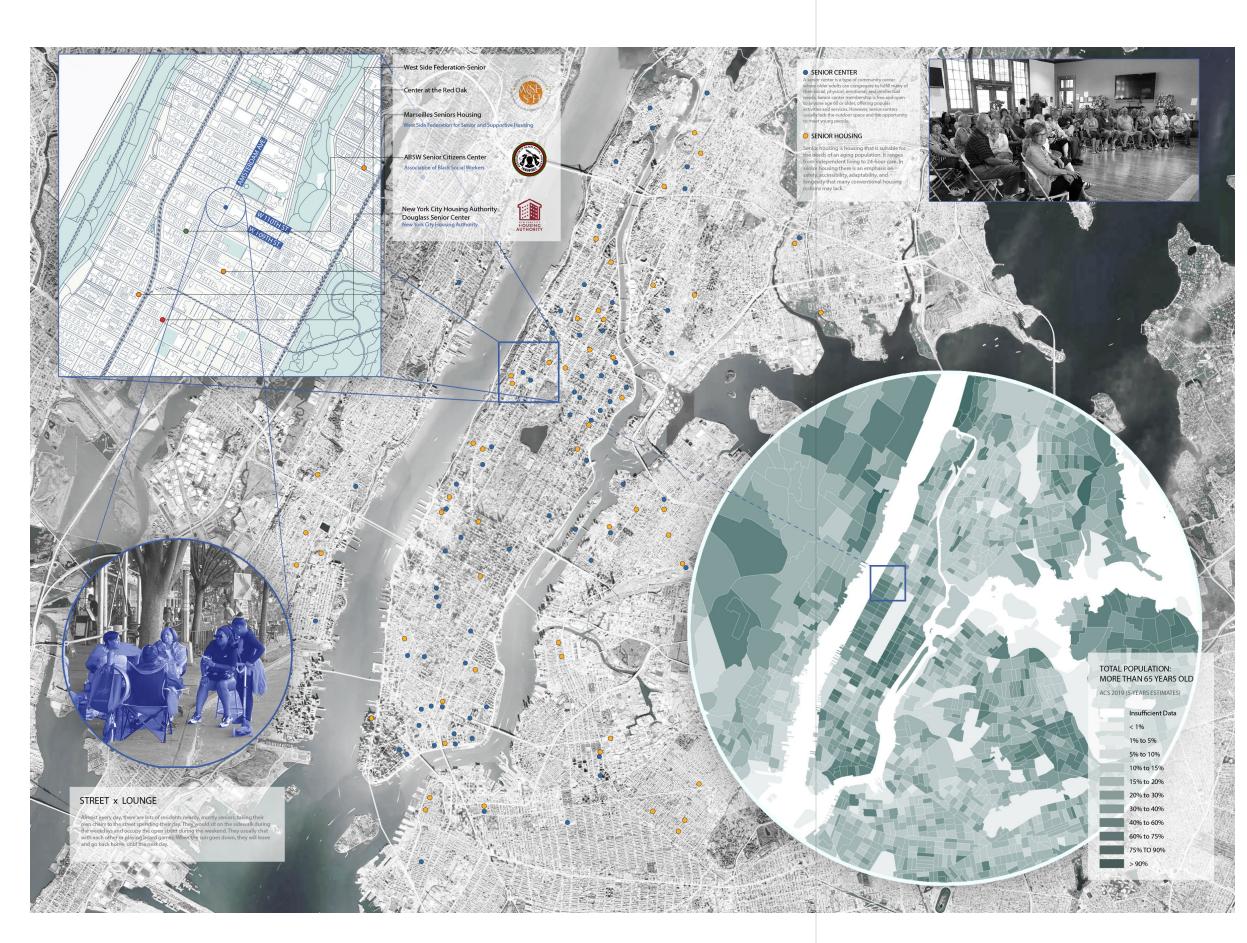
The aging crisis is a serious problem in the United States. While senior centers are scattered across New York City, they still lack creative outdoor activities and interaction with other age groups. Through observation of community life, there are many elderly people who will bring their chairs to the street during the day, using the street as their own space, and spending the day on the street. However, there is no specific place for the, so it will take up space on the sidewalk, and people and traffic will cause them discomfort and danger. The Senior Street project is to renovate one of the areas with this problem, specifically designing a canopy structure.

This project mainly divides the program into 3 areas, namely the seating area, the exercise area, and the game area. The three areas meet the needs of the elderly for rest, activities and entertainment. The structure of the canopy extends to the ground, creating a space around it to isolate road traffic noise. At the same time, the game area is also equipped with a toilet that collects water supply by a canopy, so that the elderly can stay here for a long time.

The design uses the materiality of translucency and color to sitimulate the sensory activity. The translucent solar panel will map colors of different clarity by different distances from the colored fabrics in it. The change of its color can stimulate the senses of the elderly to some extent, and effectively prevent a series of diseases of the elderly such as Alzheimer's disease.



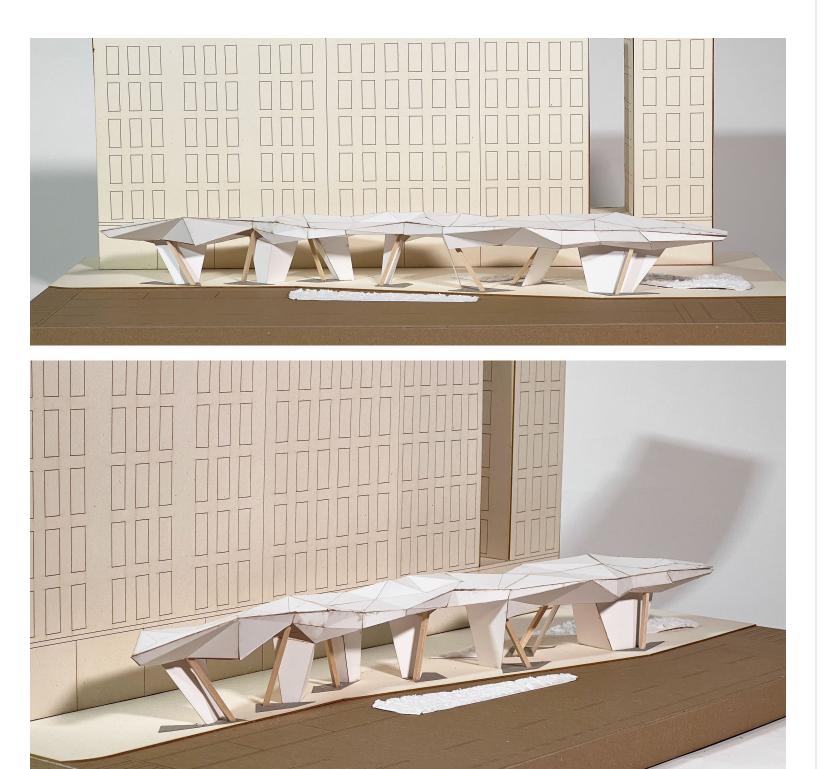
#### Senior Street



#### 016

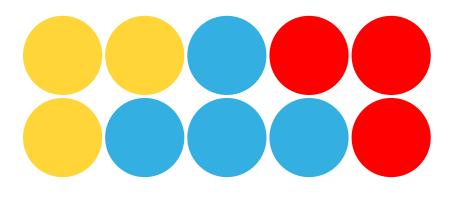
#### Senior Center: lack innovative outdoor activity and interaction with younger generation

Therefore, in the community, many elderly people will bring their seats to the street during the day sitting and chatting to spend the day. However, there is no place for them on the street, so it will take up space on the sidewalk, and the flow of people and traffic will cause them discomfort and danger.



#### Senior Street

MODEL PHOTO



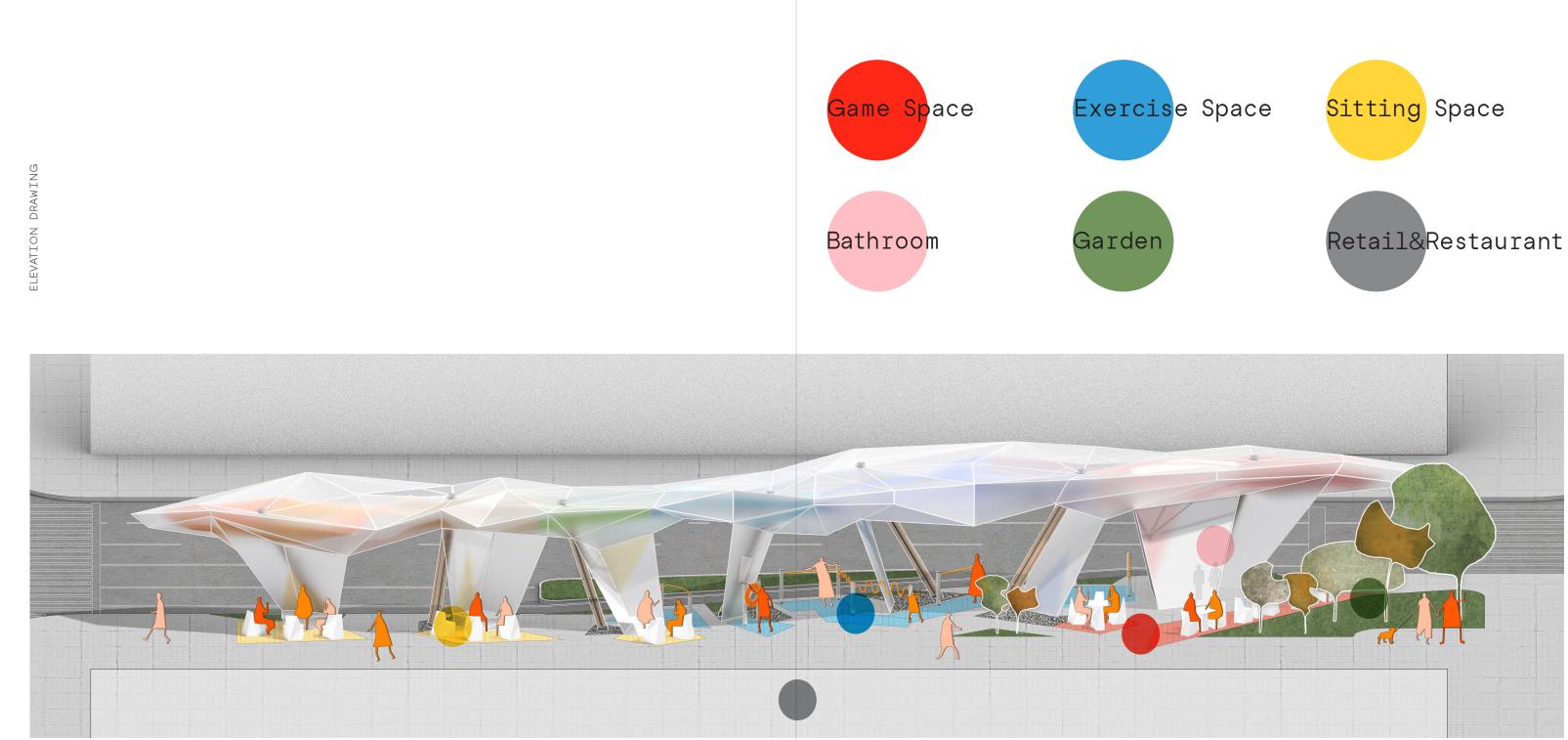
The project is divided into three program

Sitting Space. Exercise Space. Game Space

This project provides seniors with a space to socialize and live. At the same time, this project does not only serve the elderly, the open color space also attracts young people, increasing the vitality of the community, and providing opportunities for cross-age interaction.



#### Senior Street

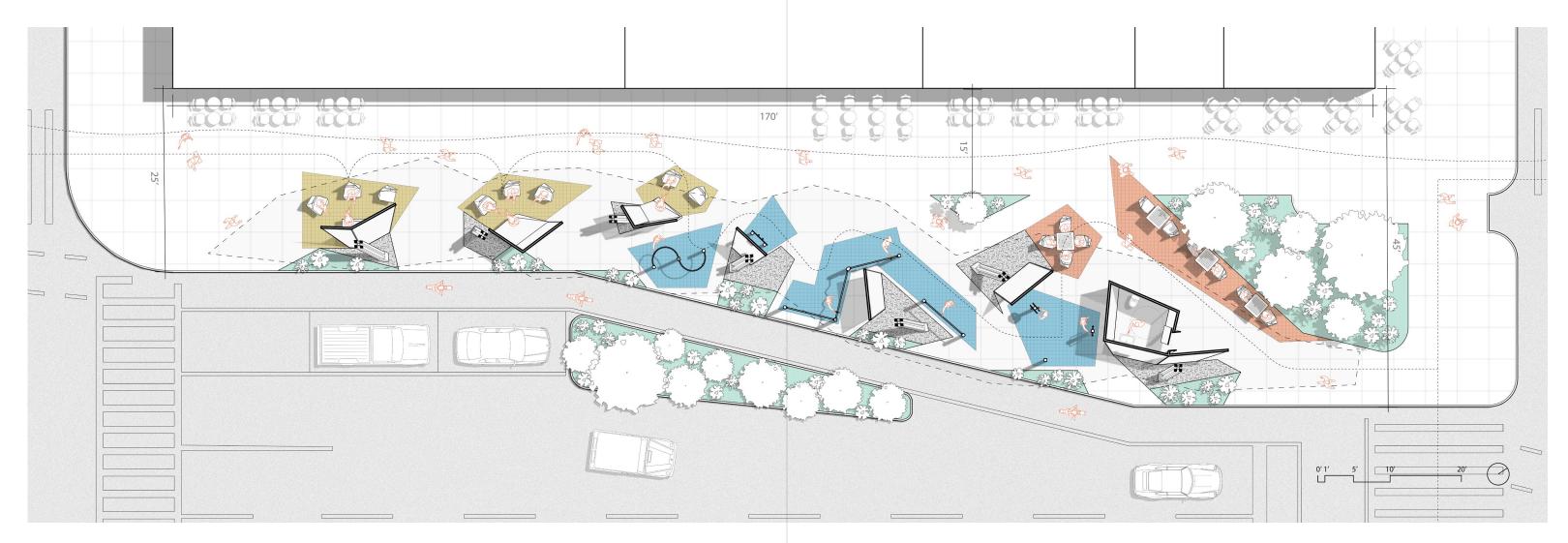








#### Senior Street



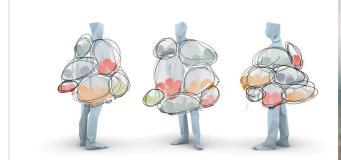
#### Translucency vs. Color

The materiality of design comes from the previous Wearable Protorype:

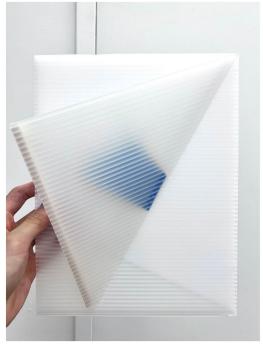
Pack balloons in translucent plastic bags and fashion them into costumes for a sense of safety on the streets of New York City at night.

In this experiment, the light relationship between translucent material and color was found, and further material testing was carried out. (top) GROUND PLAN (bottom left) WEARABLE PROTOTYPE (bottom right) MATERIAL PROTOTYPE



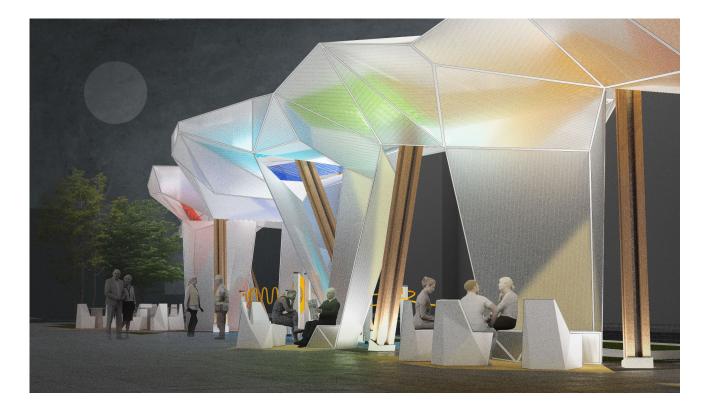






#### Senior Street





#### 024

(left) EXPLOSION DIAGRAM (top) MODEL (right) NIGHTTIME RENDER



#### REFORM OF BROOKLYN ARMY TERMINAL

#### YEAR/ 2021 LOCATION/ BROOKLYN, NEW YORK CRITIC/ LAURA GONZALEZ FIERRO

Brooklyn Army Terminal is located at the riverside of East river. As a military port that once served in World War II, it now has various local manufacturing tenants inside. However, there is still a lot of space left deserted, especially its iconic atrium. B.A.T is located close to a high-density residential area, so the project should serve the surrounding community first as its renovation, and secondly attract the residents of the entire city.

The name of this project is based on the 3 main designconcepts: Ludic, Ability, and Travel. Therefore, L.A.T will be built into a comprehensive project with playground, sports track and other functions. Based on this concept, the transformation of the project mainly focuses on the following three programs: 1. Bridge 2. Balcany 3. Atrium.

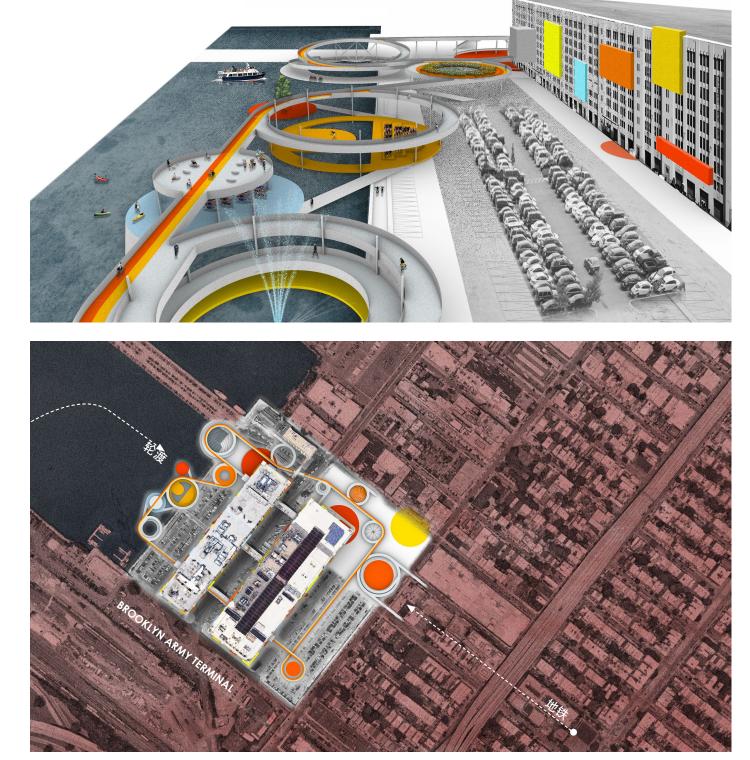
The bridge as the main design element of the site simultaneously divides the different functions and creates a sports track that runs through the entire site. The bridge creates programs such as gardens, playgrounds, kayak clubs, amphitheaters, piers in the form of loops. The track itself is also divided into three zones: walking, running and cycling.

As an extension of the original facade, the balcony provides an additional leisure platform for its own work area. People can enjoy the sun and have fun on the balcony.

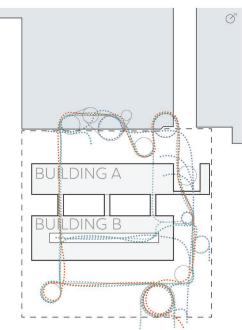
The formerly deserted atrium is now a playground. An elevated platform connects the first and second floors, and there are restaurants and cafes below the platform. The slide in the center runs through the upper and lower spaces. An art installation hangs from the top.



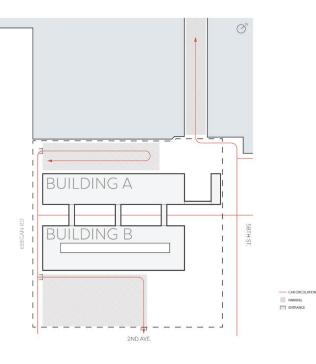
#### L.A.T.

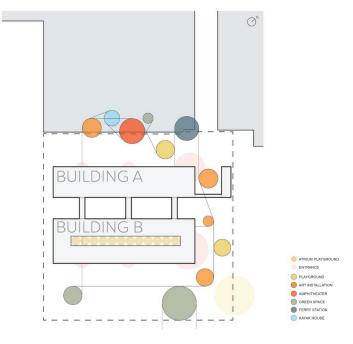


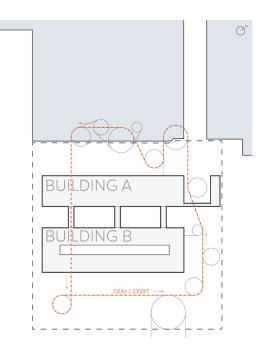












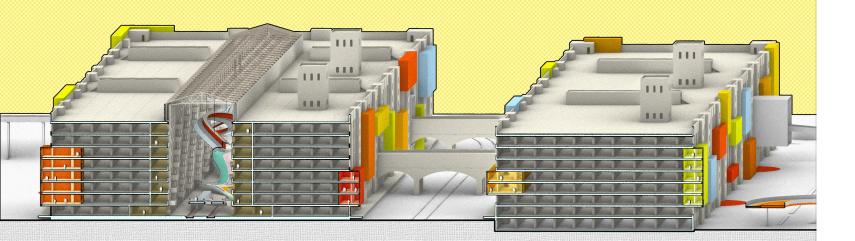
#### Ludic. Ability. Travel

Bridge.

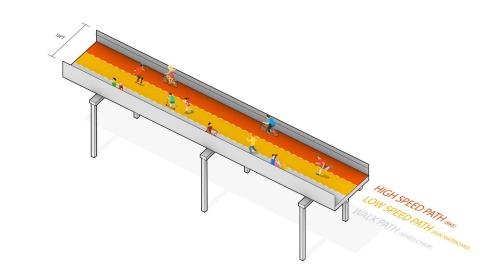
Balcany.

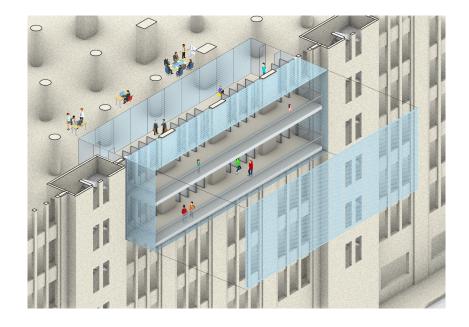
Atrium.

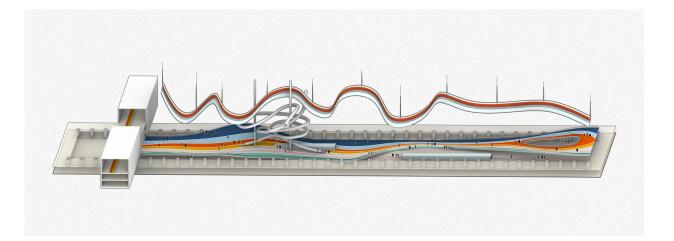
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#### L.A.T.







#### 030

(left)SECTIO (top right)BRIDGE DIAGRA niddle right)BALCANY DIAGRA (bottom right)ATRIUM DIAGRA

#### L.A.T.

