PRAHA 7

TEJIDO GROUP

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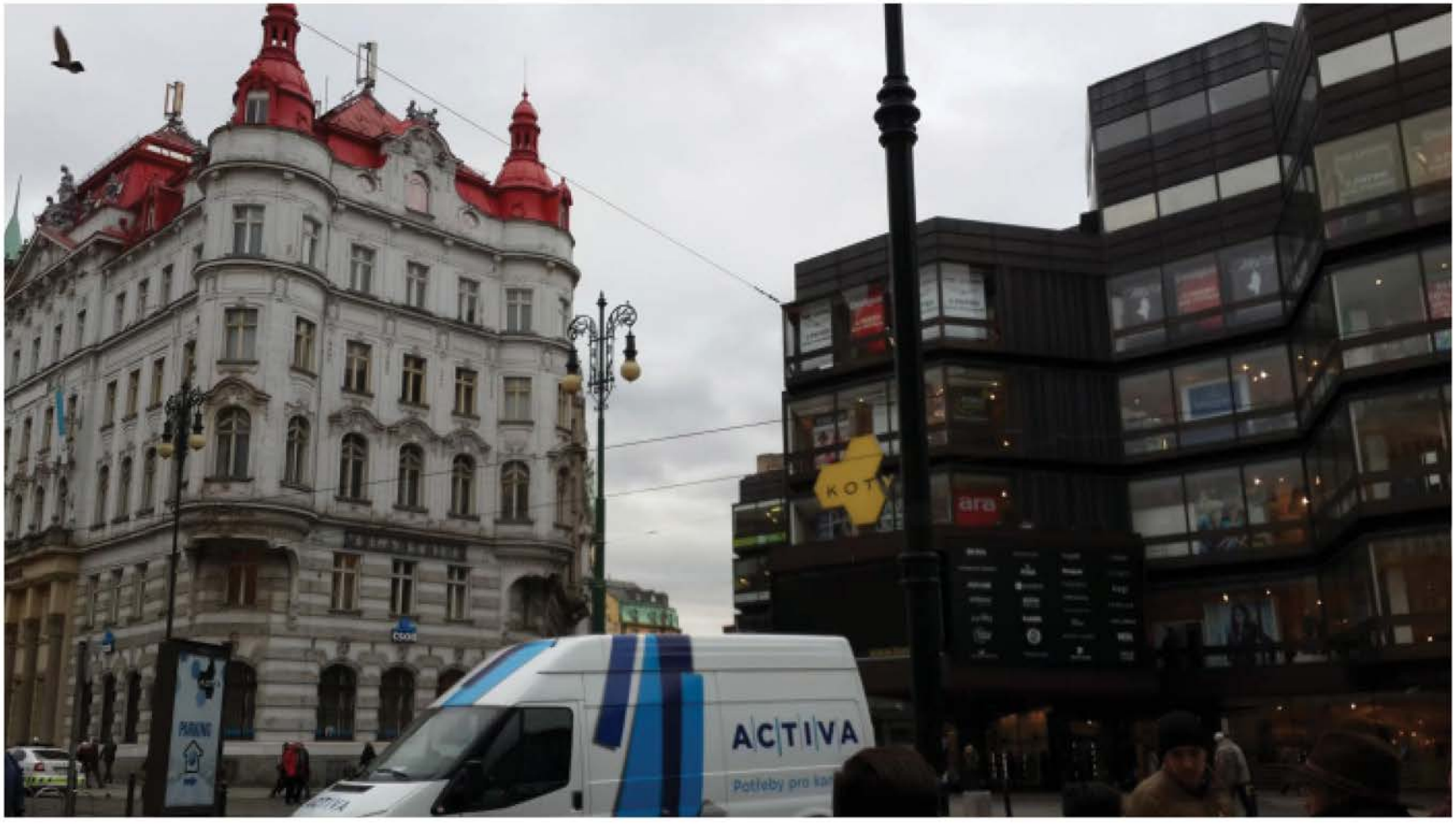
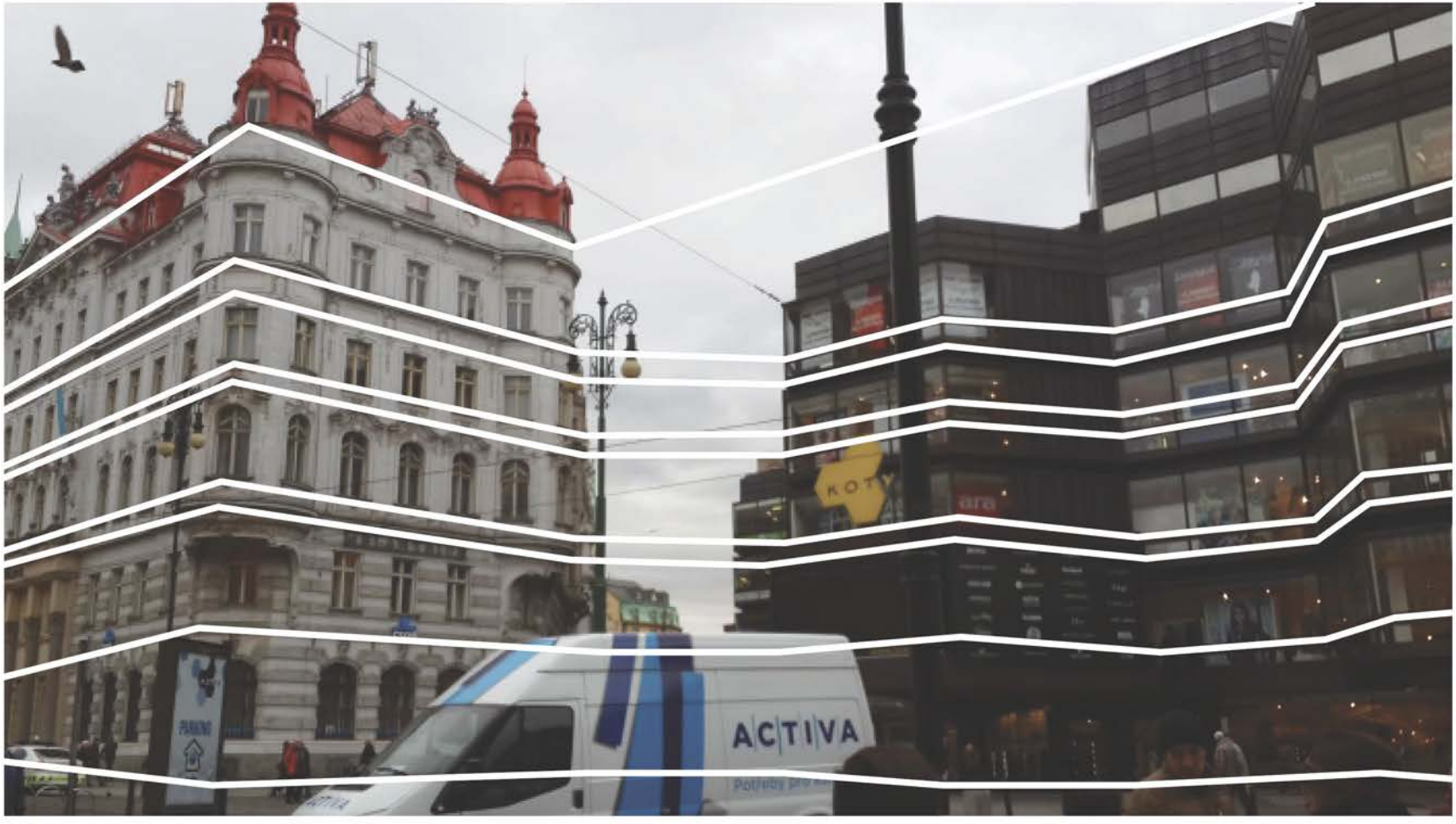
treasure hunt
hledání pokladu

Old vs. New



Old Town

Old vs. New



Old Town

Connection of Facade Proportions

Old Town

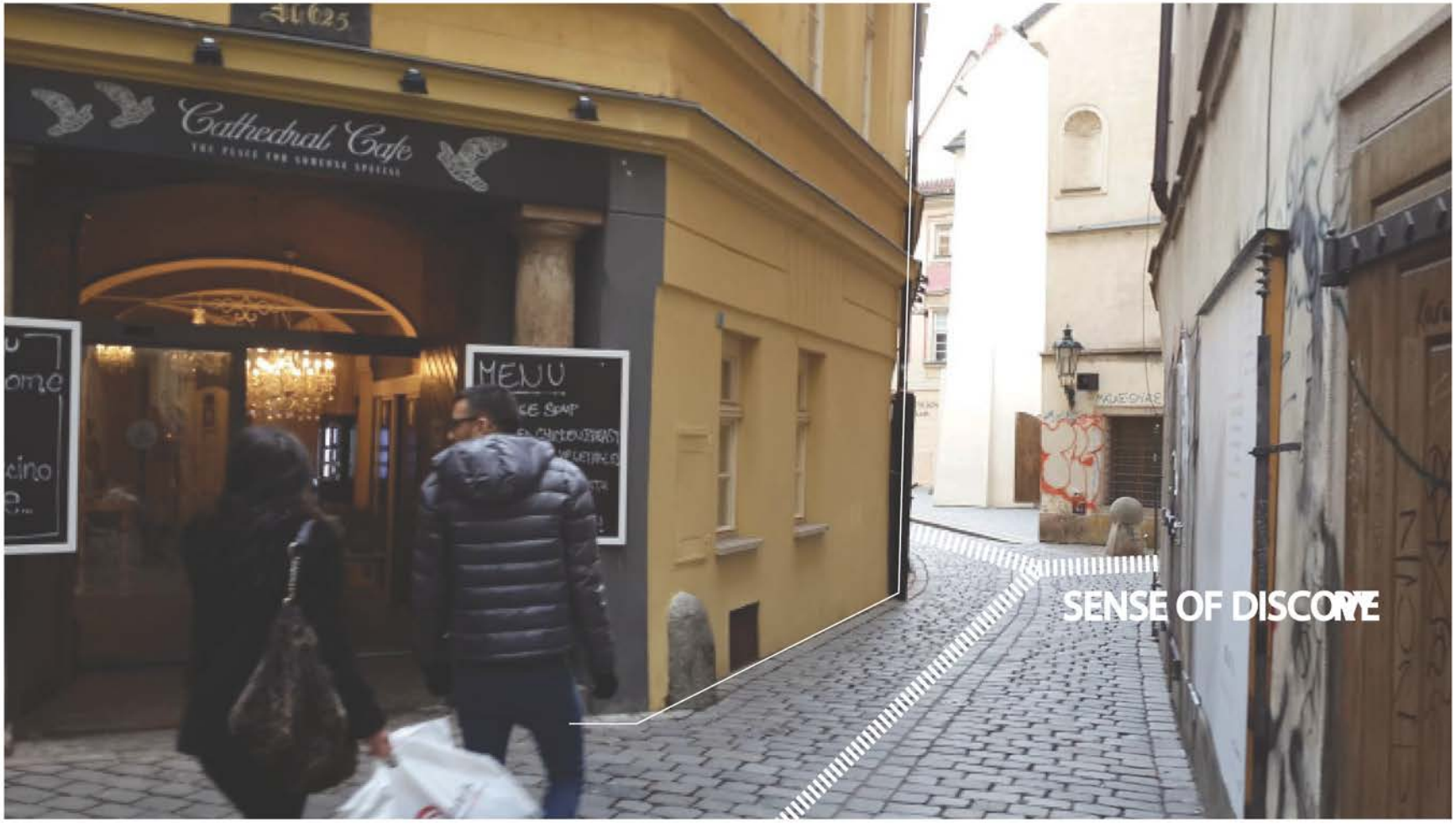
Connection of Facade Proportions

Old Town

Moments of Discovery

Old Town

Moments of Discovery

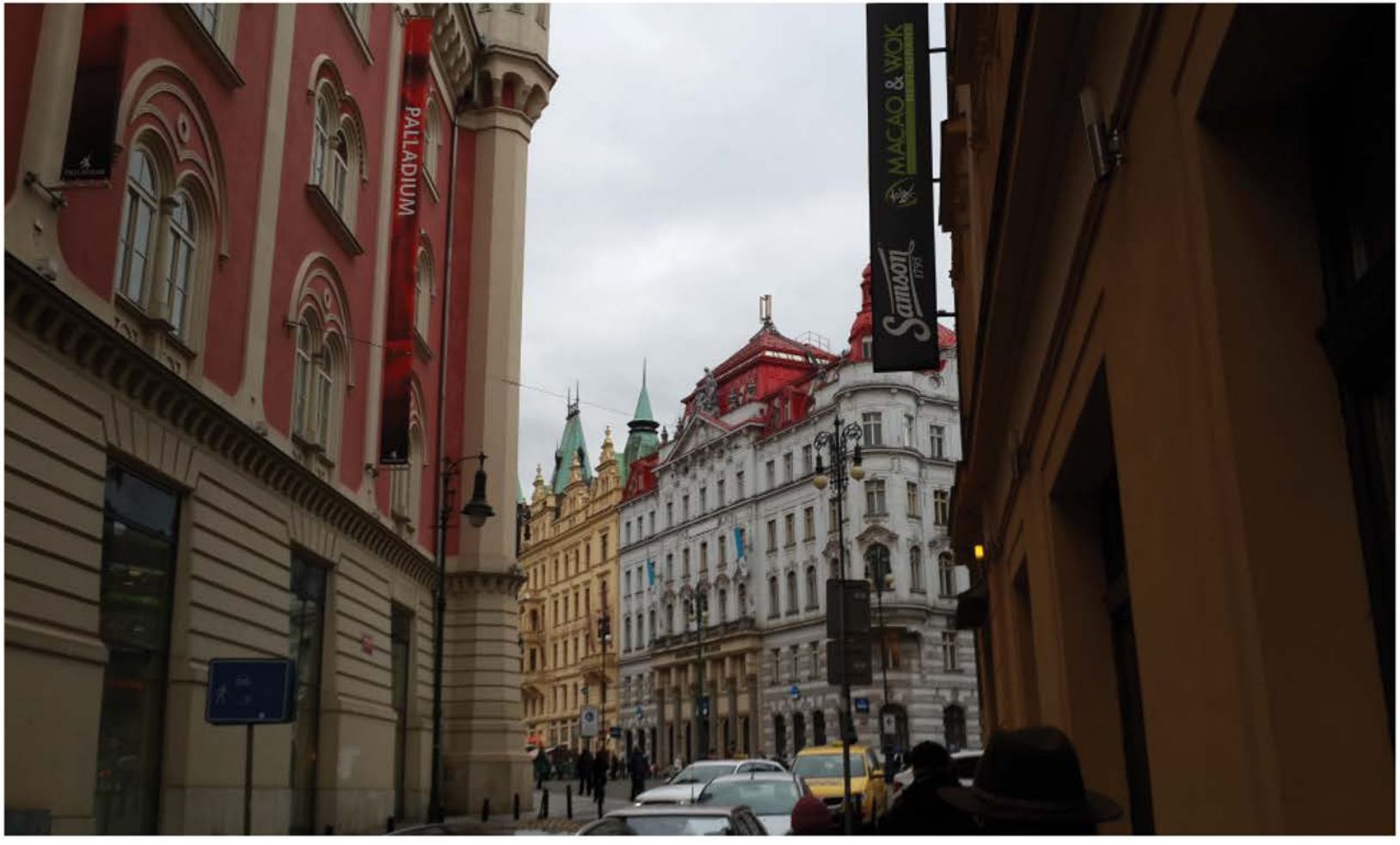


Old Town

Existing Color Palettes

Old Town

Existing Color Palettes

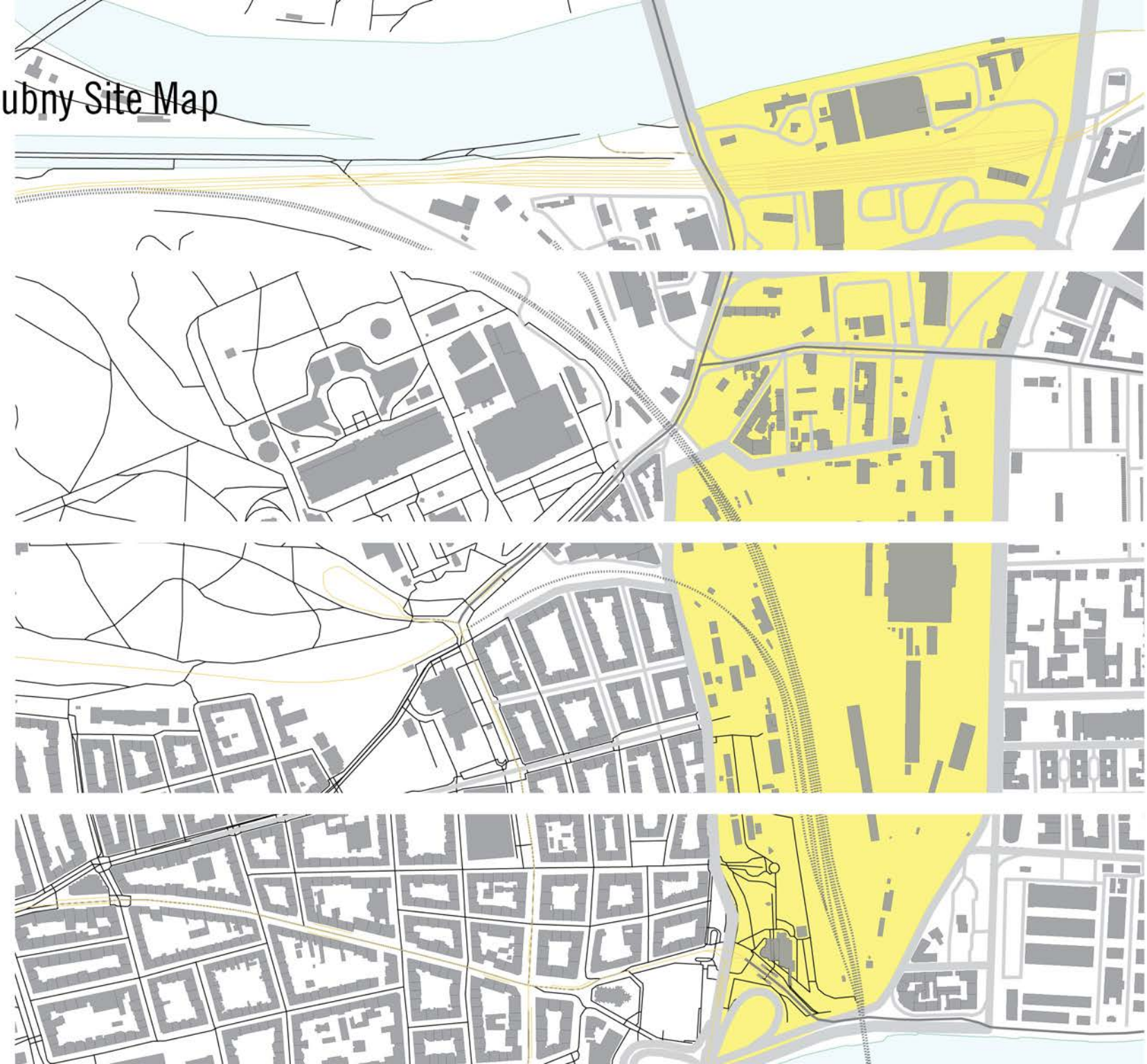


Old Town

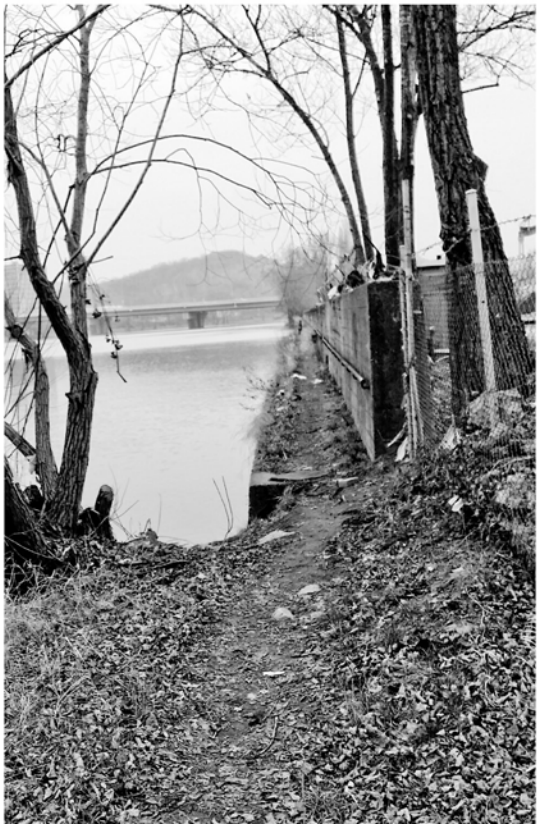
Existing Color Palettes

Old Town

Bubny Site Map



North Riverfront




North Central
Promat
STK
19.–22. 3. 2015


Praha - Holešovice zastávka


South Central
PRAHA BUBNY

South Riverfront

Site Analysis

EXISTING BUILDING CONDITIONS

Keep, Renovate, or Whack

The existing urban fabric of Prague 7 already has a sense of identity and infrastructure. Within the Bubny site, however, the urban fabric comes to a stop.

GOOD CONDITION (KEEP)

The built environment typically consists of blocks of mixed use buildings, with both residential and commercial. These types of buildings create a dense urban fabric to the east and the west, and almost all of them are in good condition and being used consistently.

SALVAGEABLE

Within our site, there are abandoned buildings that were previously used for train maintenance. Now, they provide existing built structure ready to take advantage of for repurposing.

POOR CONDITION (ELIMINATE)

A number of small structure on our site are in poor condition, partially or fully abandoned, and do not provide the infrastructure to be repurposed. We are proposing to get rid of these buildings to better the urban fabric.

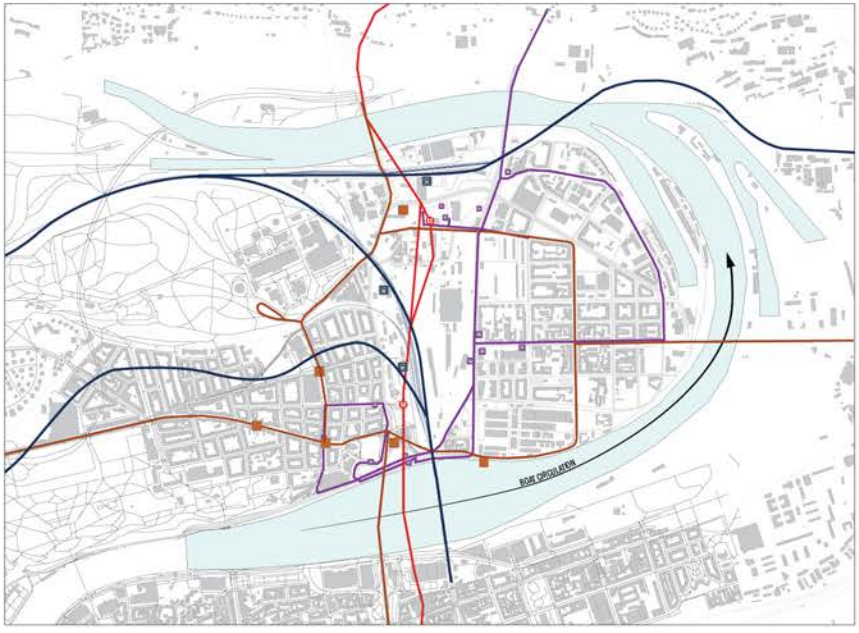
SALVAGEABLE **GOOD CONDITION** **WHACKABLE**

TRANSPORTATION INFRASTRUCTURE

Trains, Trams, Metros, and Buses

The city of Prague exists as an urban fabric with strongly established transit infrastructure clearly in place. The majority of Prague citizens utilize the public transit of the city to get back and forth to work, to get to bars and restaurants, and to get to different parts of the city on the outskirts of Prague. The public transit is so prominent that the average citizen doesn't feel the need to own a car. The tram, bus, and metro system allow for ease of transportation within and in between the districts of Prague, and long distance passenger trains even make it easy to access other parts of Europe without having to fly.

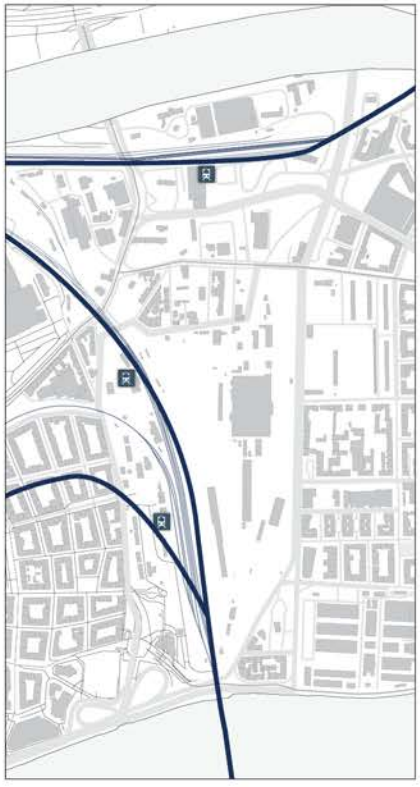
DESIGN CONCLUSIONS
The existing infrastructure of public transit around the site in Prague 7, as well as in Prague as a whole, provides ease of access for pedestrians around most of Prague. Within our site, however, there is a dearth of public transit lines, specifically the tram. This presents opportunities to not only implement lines of transit into the site, but to create a transit hub to house all modes of transportation.



Trains, Trams, Metros, and Buses

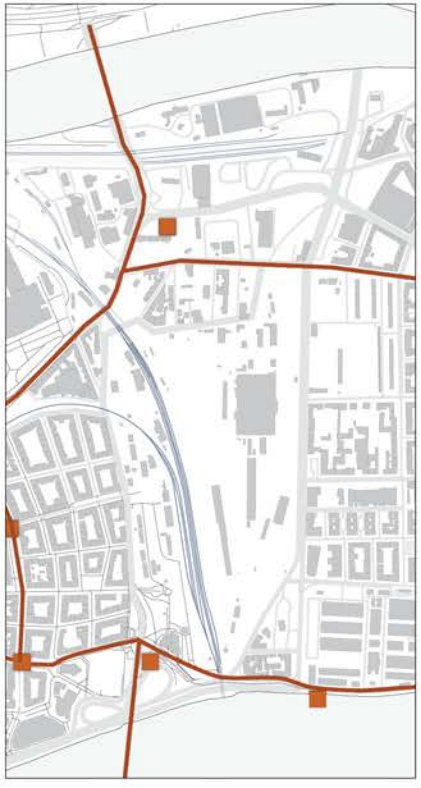
The infrastructure within Prague 7, similar to the majority of Prague, provides many options for people to get aorund without the use of a car. Boat circulation even exists around Prague 7, going north to south, alowing for delivery of goods, as well as the moving of people. However, within our Bubny site, the infrastructure stops. The circulation goes around the site, causing even greater separation between the east and west districts of Prague 7.

TRAIN SYSTEM



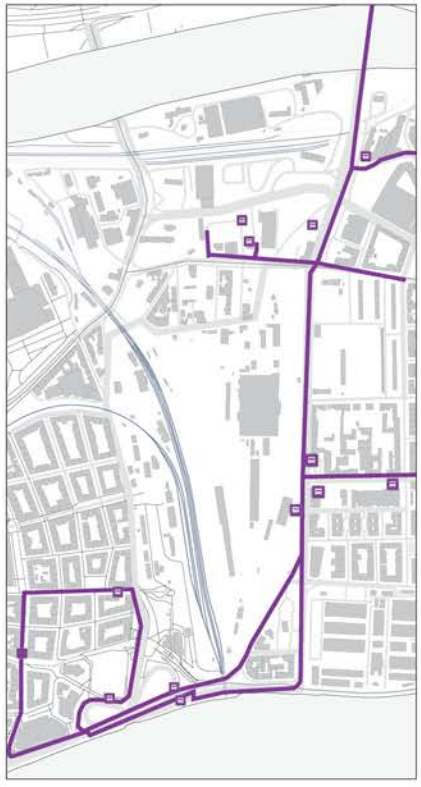
A railroad system provides a prominent feature within the site. An existing railroad runs north-south in the site, and both freight trains and passenger trains utilize the infrastructure.

TRAM SYSTEM



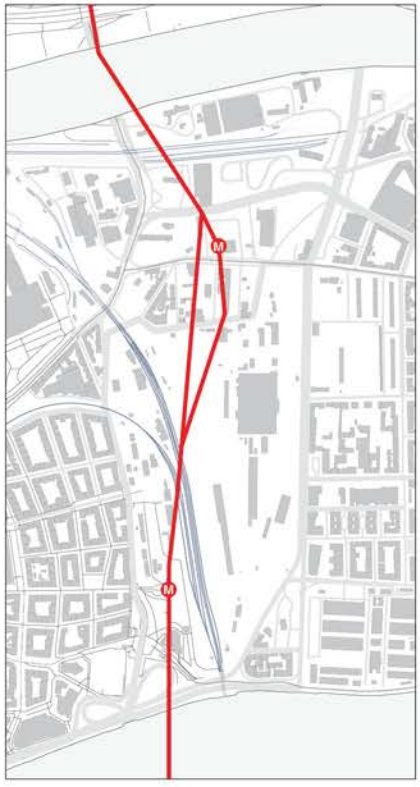
The tram system in Prague is mainly used for short distance ground travel within districts, rather than across Prague. Around our site, there are trams running mainly East - West, bordering our site to the north and the south. The tram lines, however, don't go through the brownfield, which makes up a large part of our site, creating an east-west division and a lack of transit north south within our site.

BUS SYSTEM



The prague city bus system mainly serves the outskirts of Prague, and is therefore used mostly by locals, and not tourists. Because our site is located outside of the tourist heavy area of Prague, it is surrounded by bus lanes and bus stops, particularly dense to the east and southwest of the site. The bus lines predominately run in areas that are not serviced by the metro or the tram. The bus system runs from 4:30 am to 12 midnight in 6-8 minute intervals during peak hours, in 10-20 min intervals in the off hours, and 15-30 mins on weekends.

METRO SYSTEM



The prague metro system consists of 3 main lines: the GREEN LINE A, the YELLOW LINE B, and the RED LINE C. The RED LINE is the line that goes directly through our site, with the VLTAVSKA stop towards the south of our site. The RED LINE runs North-South in Prague , and crosses many districts. The YELLOW LINE runs East-West, and stops along many tourist attractions. The Green Line runs East-West as well. Neither the Green or Yellow lines cross through our site. HOURS OF OPERATION: 5am-Midnight.

OPEN SPACE ANALYSIS

Recreational Activities and Open Space

Due to the popularity of outdoor activities; open space and green areas for recreational or sustainable purposes are essential. These spaces allow for the community to interact and connect to nature within a heavily paved city.

Based on a study made by the Cultural Research Institution, Praguians prefer their public spaces to serve as relaxation areas that allow for human interaction, sports and transportation. Therefore, existing recreational areas are preserved or redeveloped to allow for a more active participation between the users. As seen in the diagram on the top right, the site is placed in proximity to several recreational areas such as soccer fields, tennis fields, a hockey stadium, a skating park and a golf course.

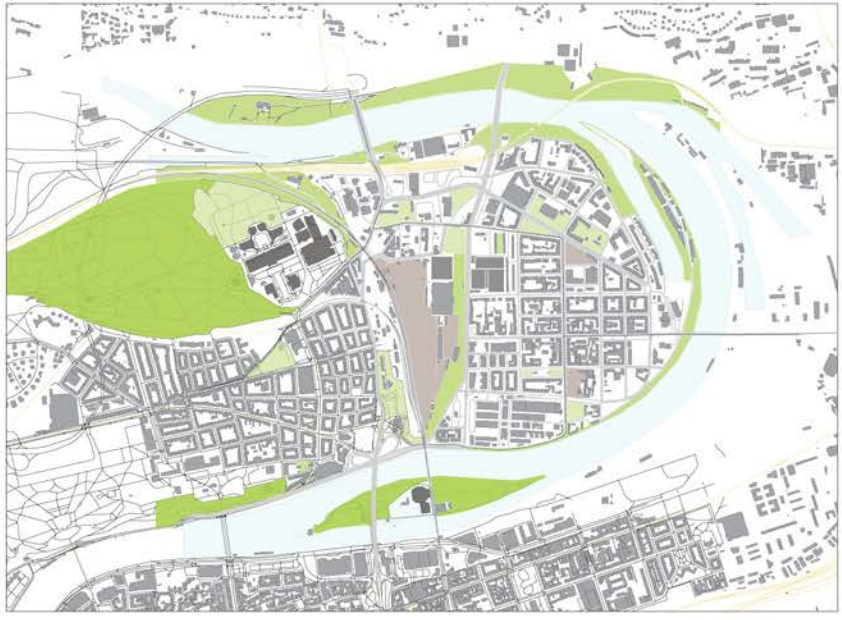
Additionally, when analyzing other more utilized areas in Prague, the composition and sinfony of spaces is easy to compare. Prague 7 is designed in a very open manner, where there are no clear definitions for space or activities (see images on the top). On the other hand, Prague 1, one of the most visited and active districts in Prague, is designed through a coreography of open and contracted spaces, these flow of contraction and expansion allows the user to circulate through small corridors while interacting with different commercial opportunities, and then arriving into open green areas or plazas that allow for more communal activities, such as street vendors, public entertainment and sitting areas.

PURPOSE

Through the development of greenways and green open spaces, the bubny area is connected in a safe manner. Allowing for a more pedestrian friendly circulation and increasing growth opportunities.

MATERIAL

Through the analysis of Praguian open areas and spaces of activity. The material palette utilizes paved areas and green areas equally. This strategy is applied because of type of activities held in public spaces.



Redevelopment of Existing Open Space

The insufficient spectrum of activities in certain segments of Prague 7 allows for homeless people, drug dealers, drug users and garbage to take place in open areas. There is a general lack of maintenance and a presence of dark, extremely shaded areas that not only invite crime but feel unsecure and are unapealing to the eye.
In order to minimize the presence of crime, open spaces will be designed as highly programmed areas that allow for users to interact and create social awareness.

Additionally, open areas will vary in scale, allowing for plazas, pocket parks, neighborhood parks, and regional parks. This system of open spaces will then be connected through a system of green, pedestran friendly corridors and green fingers. Allowing the user quantity to increase and the crime to decrease.

LAND USE ANALYSIS

COMERCIAL

The ground floor is essential for commercial activity in Prague. Most of the existing commercial buisnesses are of small scale and low impact. This characteristic allows local buisnesses to sell products or food along the street edges. The majority of buildings are mixed use, with a dynamic ground floor that is constantly interacting with the pedestrian flow of the daily user.

RESIDENTIAL

Residential areas are located on the upper floors of the existing buildings in Prague. Due to the amount of required housing for the area, verticality is a prominent characteristic of Prague 7.

Mixed use buildings are essential for the economy of Prague 7, because they allow residents to live and work within the same area. This strategy targets key issues such as trasportation for locals.

INDUSTRIAL

The industrial area is positioned north of the site. Where transportation services such as bus and train stations are located. Additionally, a sports arena is located north-west of the site, connecting the user with one of Prague's most importante recreational park.

Additionally, the east extreme of the site is seen as a positble industrial area due to its proximity to the water.

GREEN AREAS

The existing green areas around the site are extremely underutilized due too lack of connectivity and security.

BROWNFIELDS

Existing brownfields are potential targets for the design and development of pocket and neighborhood parks.

LAND USE ANALYSIS

The diagram above shows the type of land uses that surround the site and exist on site. Commercial development mainly happens along or in proximity to the water's edge. Residential development is highly concentrated on the south-west of the site, while some residential areas are mixed within commeral and mix-use buildings on the east of the site.

Hydrology & Noise Analysis

Flood Planes

Prague has experienced severe flooding in 2002 that has since impacted design decisions in a dramatic way. Topography levels vary throughout the site and create severe flood planes that will continue to be susceptible to future floods unless an innovative design solution is reached.

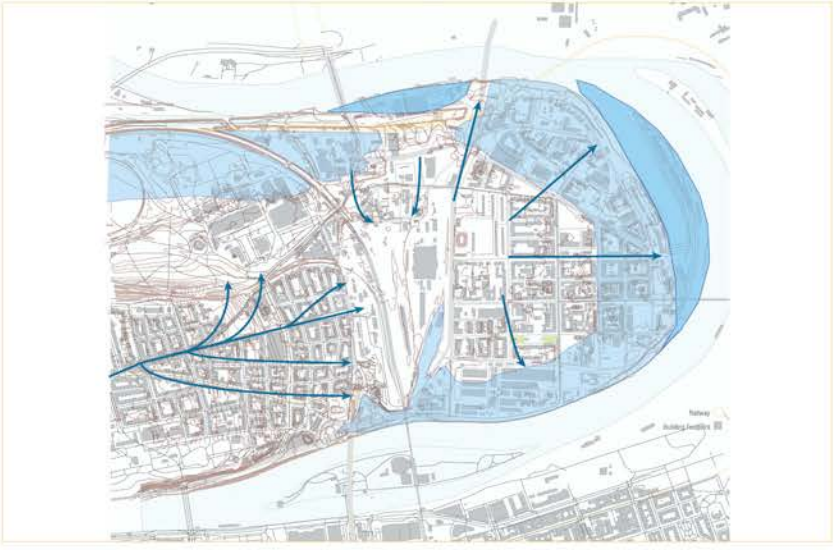
The flooding in 2002 led to thousands of people being evacuated and numerous historical landmarks being submerged in water. For future designs, flood prevention and containment devices need to be utilized so czech culture and way of life is kept intact. The community cannot rely primarily on temporary barricades that may not even be fully set up by the time a flood hits. Prague needs an innovative and permenant design solution that works with the land and current budgets.

Upper Left Image

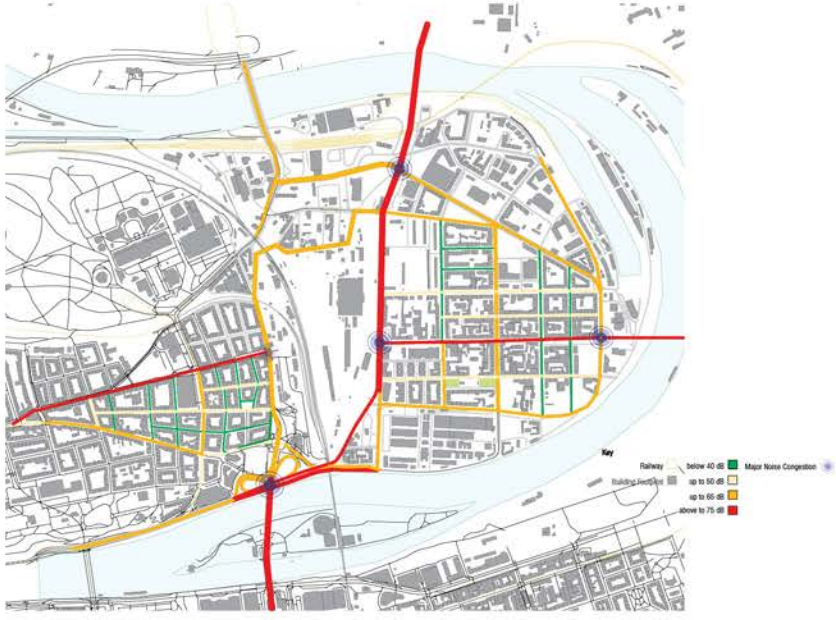
The water levels almost over took the bridges in 2002. The Charles Bridge, second from the front, is luckily the most elevated in the area.

Upper Right Image

Countless businesses and landmarks were destroyed from water damage that was uncontainable on such short notice.



The map above shows how the far east section and northern strip between the two bridges are at the highest flood risk. If another large flood should occur, areas to the east and northwest are in danger. The southern portion of the Bubny site also warrants concern. Drainage primarily runs west to east, with some northern water drainage into the site near the main transit hubs. Hydrology analysis informs us that having potential green strips run up the east and west edges of our site would remain watered and could help mitigate flooding. Having water basins and bio swells are also viable options on the east and west where water tends to flow to.



Nosie Analysis

Adding new residential and commercial realestate along busy arterial roads and rail lines requires a lot of thoughtful design intentions to mitigate the noise that new residents will live next to. The rail lines currently have a train pass by approximately every hour. The future however, will be busier. Bother commercial and passenger trains are going to run more frequently and on fewer lines.

The current rail lines are in need of some aesthetic updating as well as more places for residents and visitors to wait for the increased amount of passenger trains that will come through Bubny.

The roads are in good condition, but cobblestone creates more road noise then pavement. Keeping cobblestone is important since it is a local material choice, therefore road locations and landscape become crucial.

Importance

Different road surfaces generate various amounts of road noise. This should be under consideration when designing main roads.

The above diagram shows which roads are more active as well as heavily trafficated intersections. The north-south road on the east and west side of the site remain busy throughout the day and night. These roads would benifit by dealing with a lessened load of vehicular traffic but an increased amount of pedestrian traffic.

By having easily accessible roads for pedestrians more people would opt to walk. It would also be benificial to increase public transportaion since a strong tram system exists. Adding a new road that connects west to east is another option that can ease use on the main roads that run north to south.

Importance

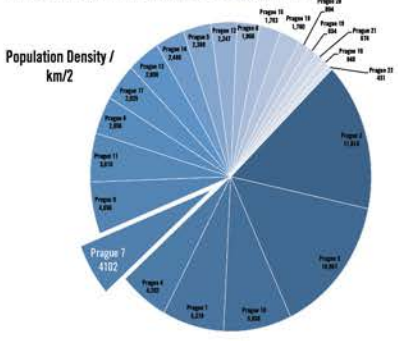
By looking at road usage, there is a clear need to remove, repurpose, and add roads to the site to decrease the overall nosie generated around the site.

Demographics

Prague is divided into 22 unique self-governing districts. Each district is respectively known as Prague one through twenty-two. Each district has over time developed its own unique urban fabric, some districts are suburban while others are quite urban. The Bubny site is located in the heart of Prague 7 one of the more urban districts.

According to the 2013 statistics compiled by the Czech Statistical Office, Prague 7 makes up 2.1% of the total land area comprising a total of 1046 hectares of the 49,615 total land area of the City. Fig. Likewise, it is also on of the most densest districts. Fig.

Between the years of 2004-2013 from which the latest statistics are available the population level has remained relatively constant. Though a slight decline is seen between the years of 2010-2011 this slight downturn can mostly likely be attributed to the world financial crisis of 2007-2008 caused by the bursting of the housing bubble in the

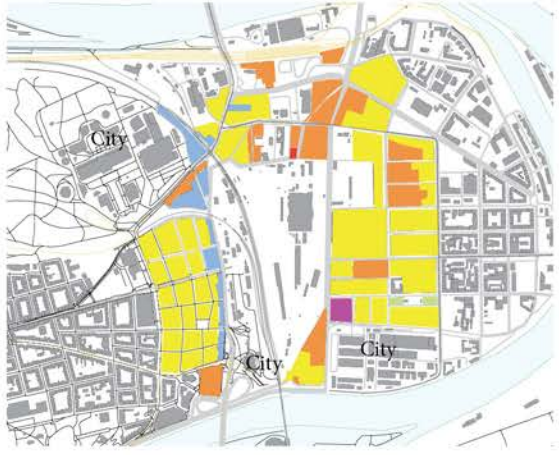


Of the total poputlation, which as of 2013 is 42,909 people, 6526 or 15.25% are not Czech. Fig.

Country	Amount	Proportion
Ukraine	1402	21.42
Slovakia	968	14.79
Russia	777	11.87
Vietnam	457	6.98
United States	374	5.71
Germany	190	2.90
Bulgaria	109	1.67
Moldova	66	1.01
Poland	64	0.98
Mongolia	7	0.11
Other Countries (not reported)	2132	32.57
Total	6546	100.00

Surrounding Land Values

Though the Bubny site has certainly had quite a colorful history with regards to its previous uses, one of its chief functions over the last century was as a railroad switching and repair facility. As a result of its former land use, the site can be labeled a "brownfield". Brownfields are usually old industrial sites, but can be commercial areas as well. They are basically sites that have been abandoned and or are underused, that no longer support their previous uses. Unfortunately, these types of sites are difficult develop, and often remained vacant until a public/private partnership can be developed to the point where it becomes economically feasible for a developer to purchase the land, clean it up, and subsequently redevelop the site.



Due to the under utilization of the existing road network fronting the properties, alnd the western edge of the site, land values have suffered. Conversely, the properties along the other edges of the site and their corresponding land values have benefited from their proximity to major roads and highways. Fig.

The Bubny brownfield has indeed had an impact on properties value. This is evident along the Western of the edge of the site, because the site is underused the surrounding properties to the west have suffered from depreciated land valuation.

4.

3.

2.

Heritage

Though the Bubny site's archeological and historical heritage run's deep, stretching all the way back to the stone age. The site's most prominent historical underpinning is related to its industrial heritage, specifically its relationship with Czech Republic's rail industry. This history can still be seen today, as many of its inustrial architectural remnants are still standing to this today.

2014

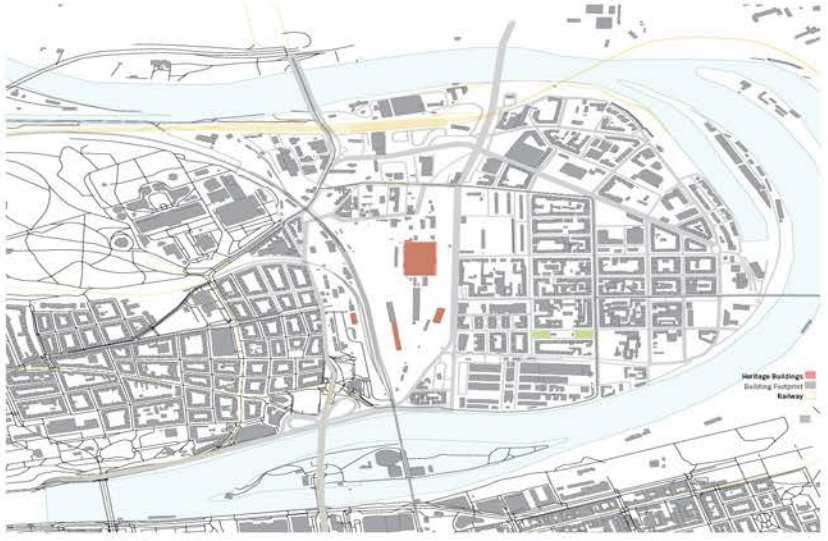
1975

1953

1840

1908

1938



In 2004, the unique shop compound was designated a cultural monument by The National Heritage Institute. However, it was removed again 2006 as a result of developer pressure.

The Bubny Train station though currently considered an insignificant stop was once the setting of one of the Czech Republics darkest chapters in its history. In the 1940's it was used as staging point for Czech Jews to be sent to concentration camps including Theresienstadt, or Terezín. Most were subsequently sent to Auschwitz, one of the

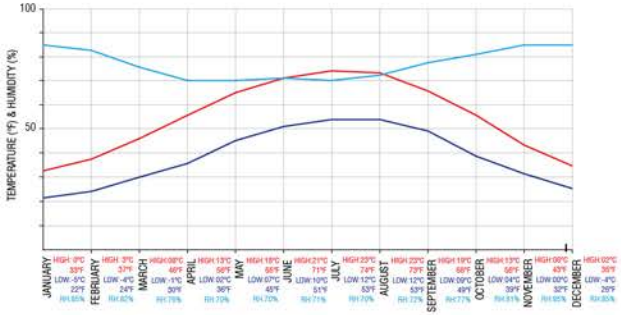
Industrial

Industrial

Bubny Train

CLIMATE ANALYSIS OF PRAGUE, CZECH REPUBLIC - 50°6'N, 14°15'E, 1199 ft

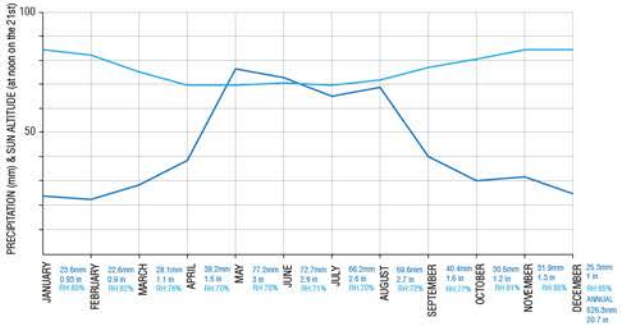
The city of Prague lies between oceanic climate and humid continental climate (Köppen Cfb). The winters are relatively cold with average temperatures at about freezing point, and with very little sunshine. Snow cover can be common between mid-November to late March although snow accumulations of more than 20 cm (8 in) are infrequent. There are also a few periods of mild temperatures in winter. Summers usually bring plenty of sunshine and the average high temperature of 24 °C (75 °F). Nights can be quite cool even in summer, though. Precipitation in Prague (and most of the Bohemian lowland) is rather low since it is located in the rain shadow of the Sudetes and other mountain ranges. The driest season is usually winter while the summers can bring quite heavy rain especially in form of violent storms and showers. Temperature inversions are relatively common between mid-October and mid-March bringing foggy, cold days and sometimes moderate air pollution. Prague is also a windy city with common sustained western winds and an average wind speed of 16 kph (10 mph) that often help break temperature inversions and clear the air in cold months.



DESIGN IMPLICATIONS:

Relative Humidity is at its highest percentage during the winters.

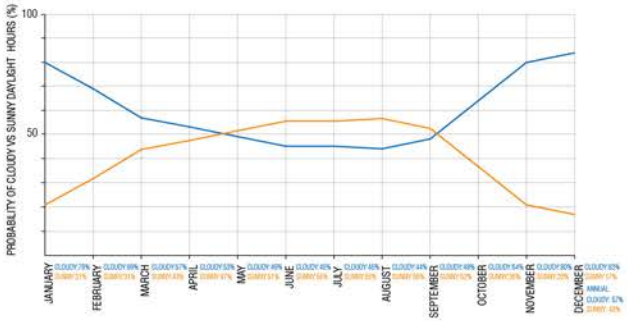
Due to the low temperature in the winters, cross ventilation has to be limited to small openings



DESIGN IMPLICATIONS:

Precipitation at its highest during the summer season.

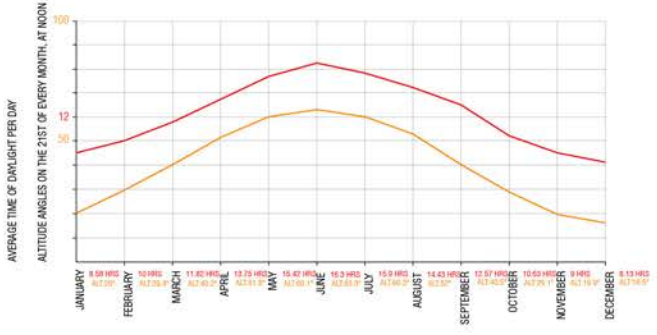
Which indicates that the likely-hood of a flood occurring is at its highest during the monthly span of April through September.



DESIGN IMPLICATIONS:

There is a 17% probability of the forecast being sunny in the month of December.

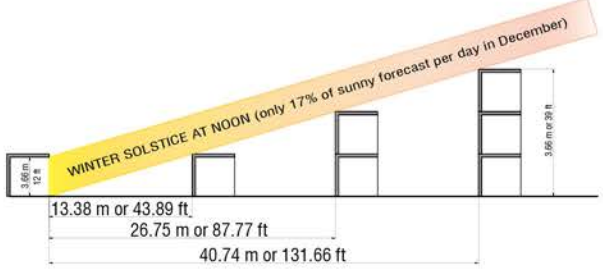
Therefore it is very difficult to achieve Passive heating in the winter when there is little solar exposure.



DESIGN IMPLICATIONS:

Higher Altitude angles provides more hours of daylight during the day.

Therefore it is very difficult to achieve Passive Heating in the winter when there is the least amount of daylight during the year.



DESIGN IMPLICATIONS:

During the Winter Solstice, each southern facade needs to be minimum 13.38 m away from each other, to gain full solar exposure.

Design will have to rely on internal heat sources and insulation to achieve thermal comfort.

Literature Reviews and Case Studies

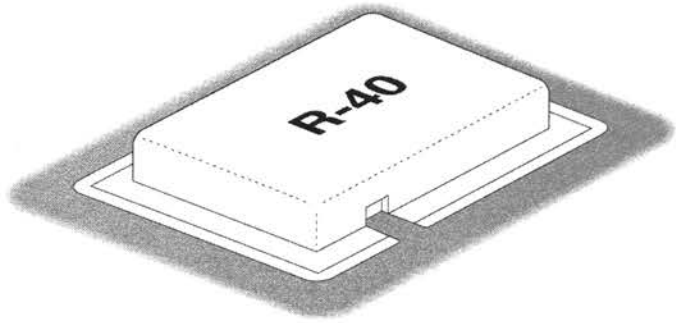
Smart Growth

Smart Growth includes or can include:

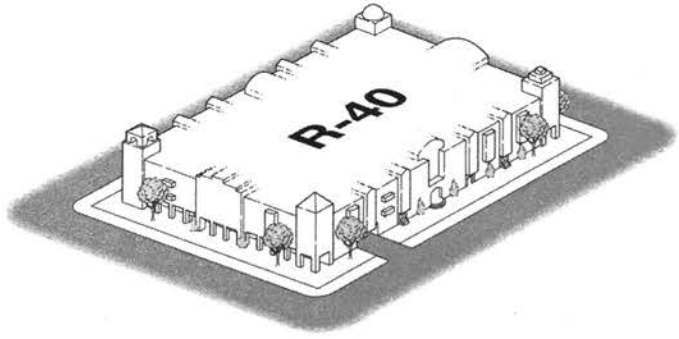
- High density - Mixed Use
- Open Space
- Sustainable water management
- LEED Neighborhoods
- 2030 Challenge buildings
- Defined neighborhoods and Districts
- Complete Streets
- Car sharing
- Food production
- Mass transit systems
- Biodiversity corridors

Smart Code

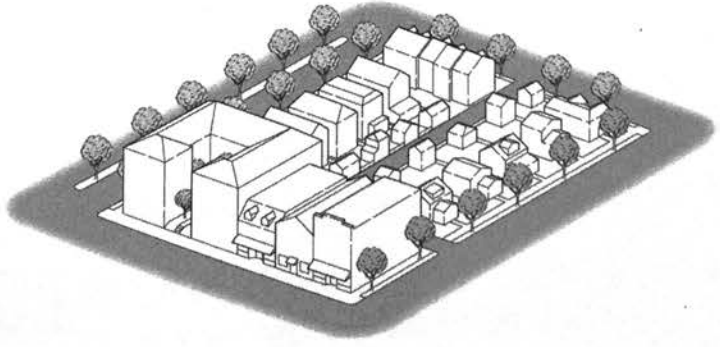
CONVENTIONAL ZONING



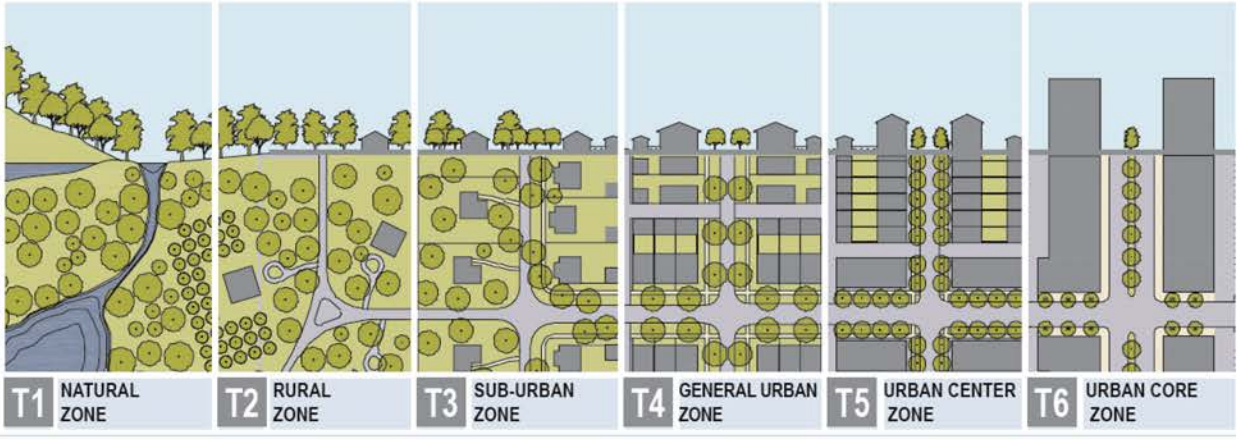
DESIGN GUIDELINES

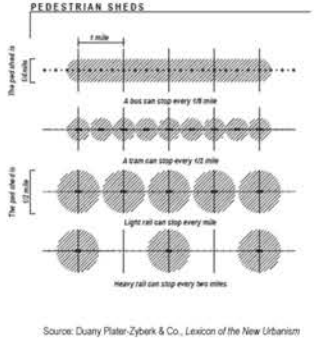


FORM-BASED CODE

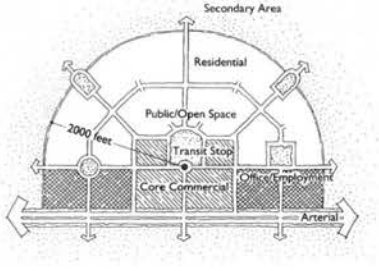


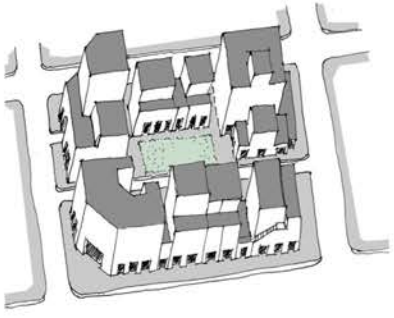
New Urbanism





Source: Duany Plater-Zyberk & Co., *Lexicon of the New Urbanism*





WALK-ABILITY

NEIGHBORHOOD STRUCTURE

INTEGRATION OF SPACES

Landscape Urbanism

COMMUNITY OPEN SPACES

LANDSCAPES FOR RECREATION, SOCIAL LIFE, AND SMALL-SCALE FOOD CULTIVATION

- PLAYGROUNDS
- NEIGHBORHOOD PARKS
- SPORTS FIELDS
- REGIONAL PARKS
- PLAZAS
- RECREATION CENTERS
- TRAILS / GREENWAYS
- URBAN GARDENS
- FARMERS MARKETS
- CEMETERIES (EXISTING)

ECOLOGICAL LANDSCAPES

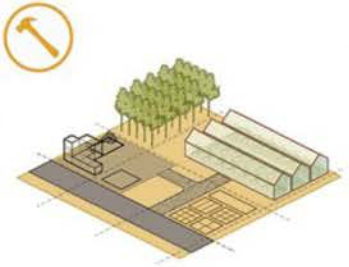
MEADOWS AND FORESTS THAT PROVIDE HABITAT AND OTHER ENVIRONMENTAL BENEFITS

- NATURE PARKS
- INDUSTRIAL NATURE PARKS
- RAPID REFORESTATION
- SUCCESSIONAL ROAD
- ROADS TO RIVERS

BLUE+GREEN INFRASTRUCTURES

LANDSCAPES THAT CAPTURE STORMWATER AND CLEAN AIR

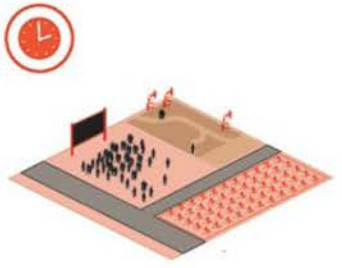
- LARGE LAKE
- SMALLER RETENTION POND
- INFILTRATION PARK
- SWALES + INFILTRATION MEDIANS
- ROAD-SIDE POND (ALONG WIDE ROADS)
- GREEN INDUSTRY BUFFER
- CARBON FOREST



WORKING+ PRODUCTIVE LANDSCAPES

LANDSCAPES THAT GENERATE NEW KNOWLEDGE, GROW ENERGY AND FOOD, AND CREATE NEW URBAN EXPERIENCES

- RESEARCH LANDSCAPE
- URBAN FARM
- AQUACULTURE AND HYDROPONICS
- ALGAE-CULTURE
- ENERGY FIELD OR FOREST
- HOMESTEADS
- CAMPGROUNDS



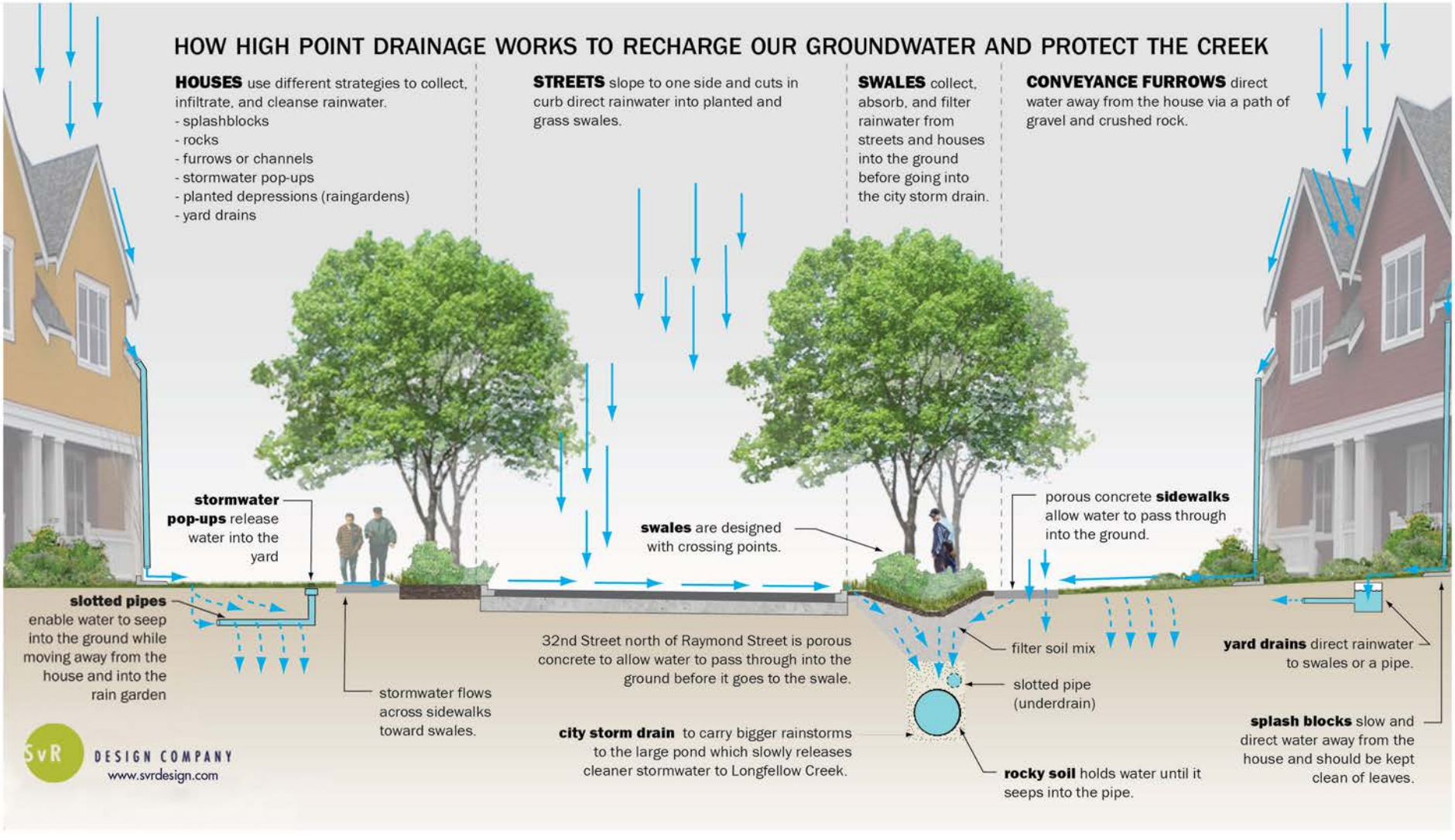
TRANSITIONAL LANDSCAPES

TEMPORARY LANDSCAPES THAT CLEAN SOIL AND ENABLE NEW FORMS OF SOCIAL LIFE AND CREATIVE DISPLAYS

- EVENT LANDSCAPES
- REMEDIATION FIELDS OR FORESTS
- ART-SCAPES
- URBAN MEADOWS

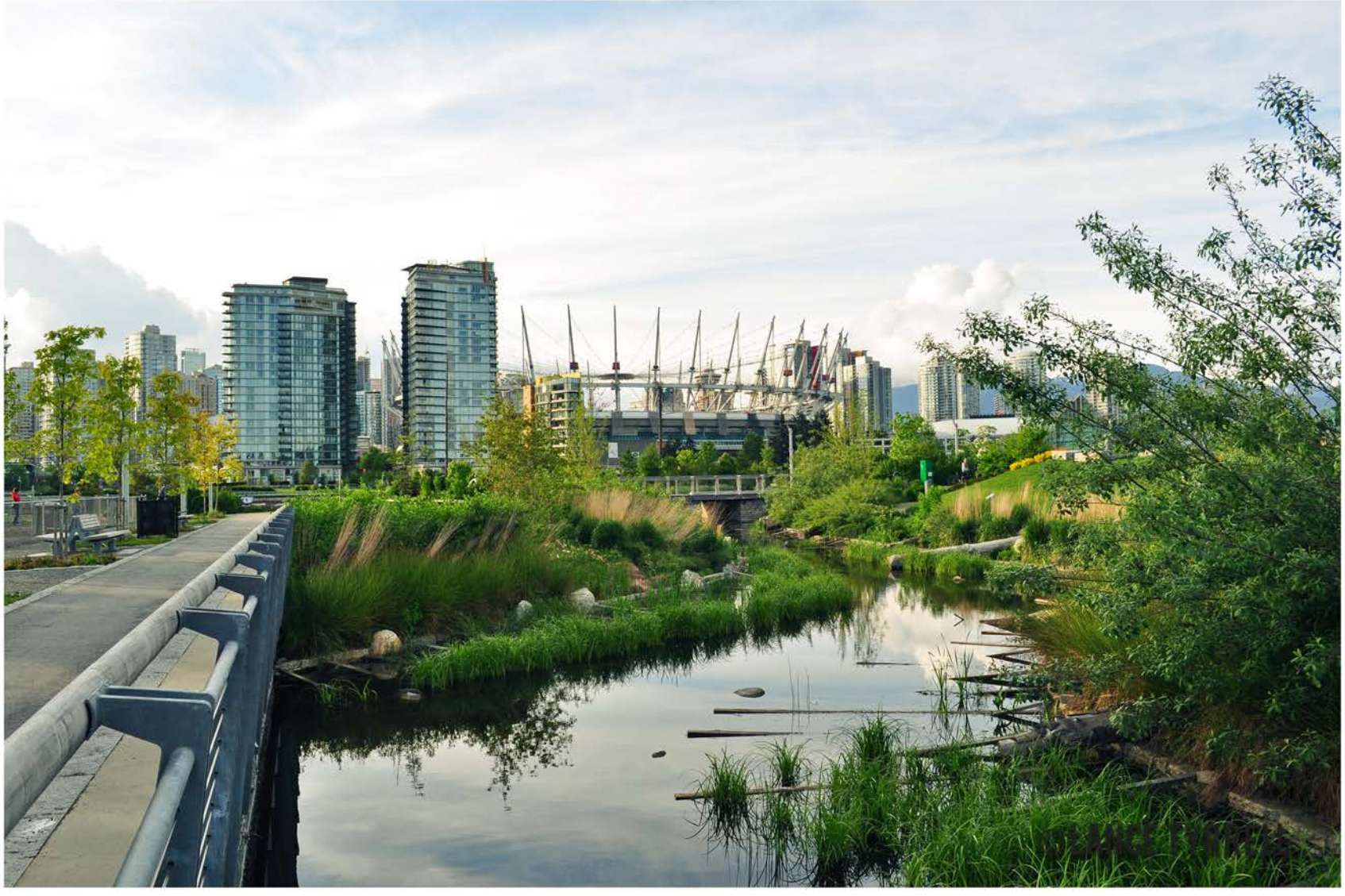
STOSS

Healthy Streets

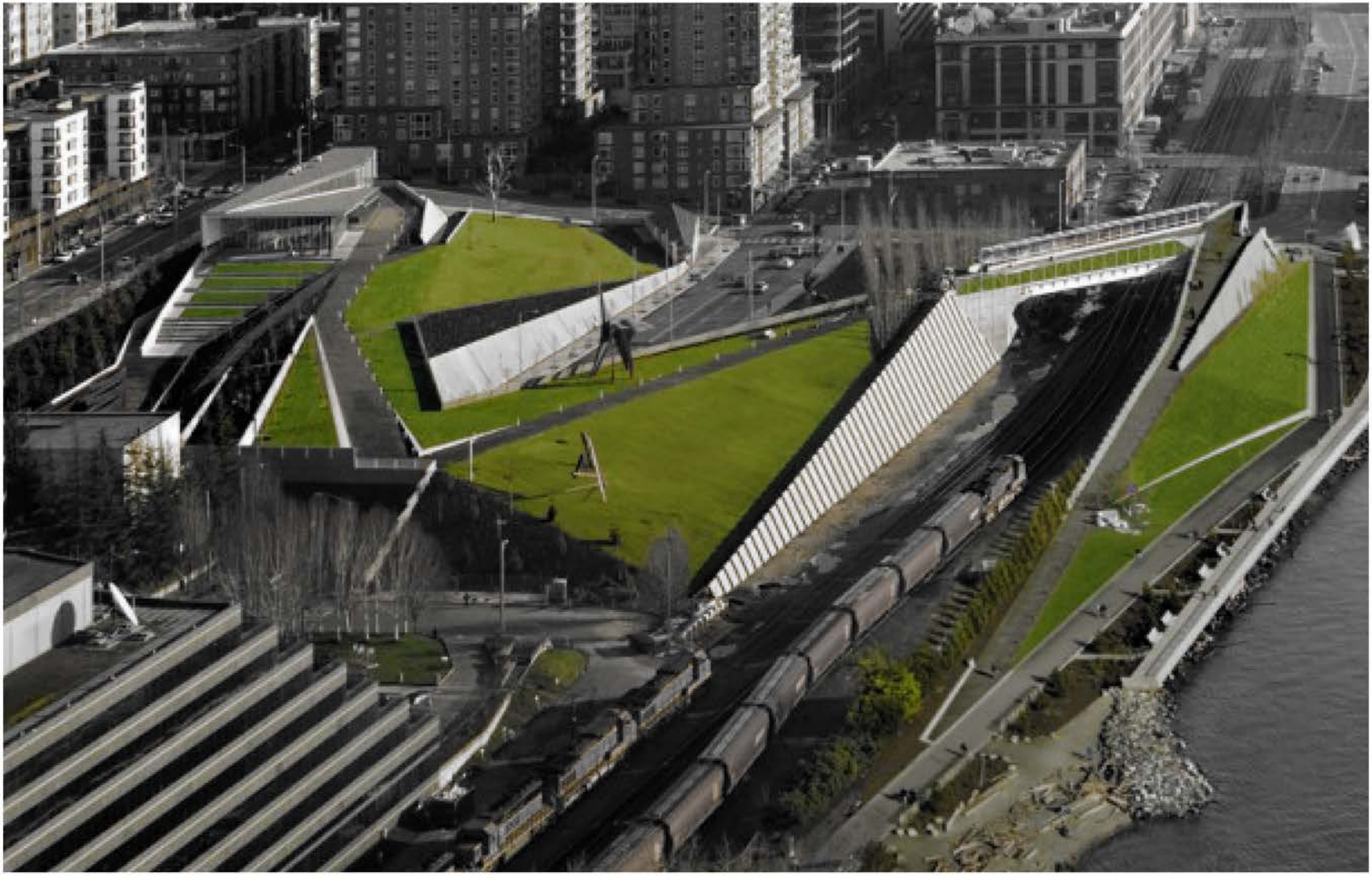


Case Review: Vauban (Friedburg, Germany)

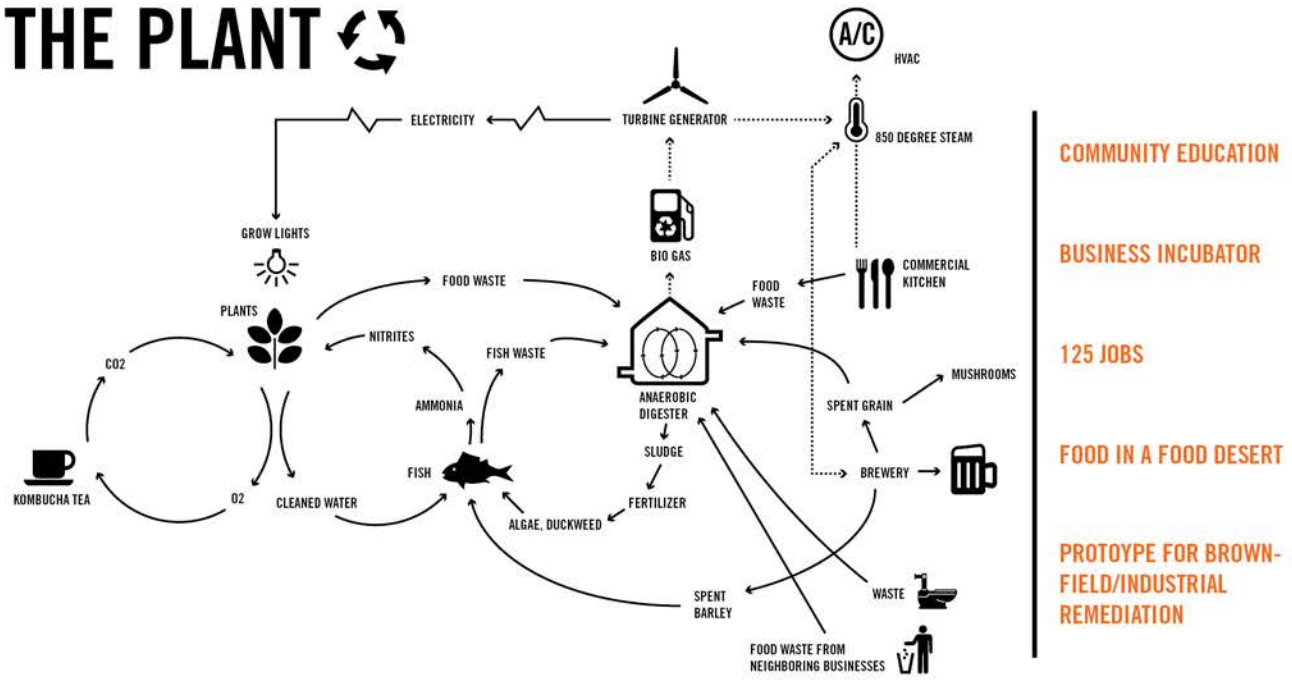
Case Review: Southeast False Creek (Vancouver)



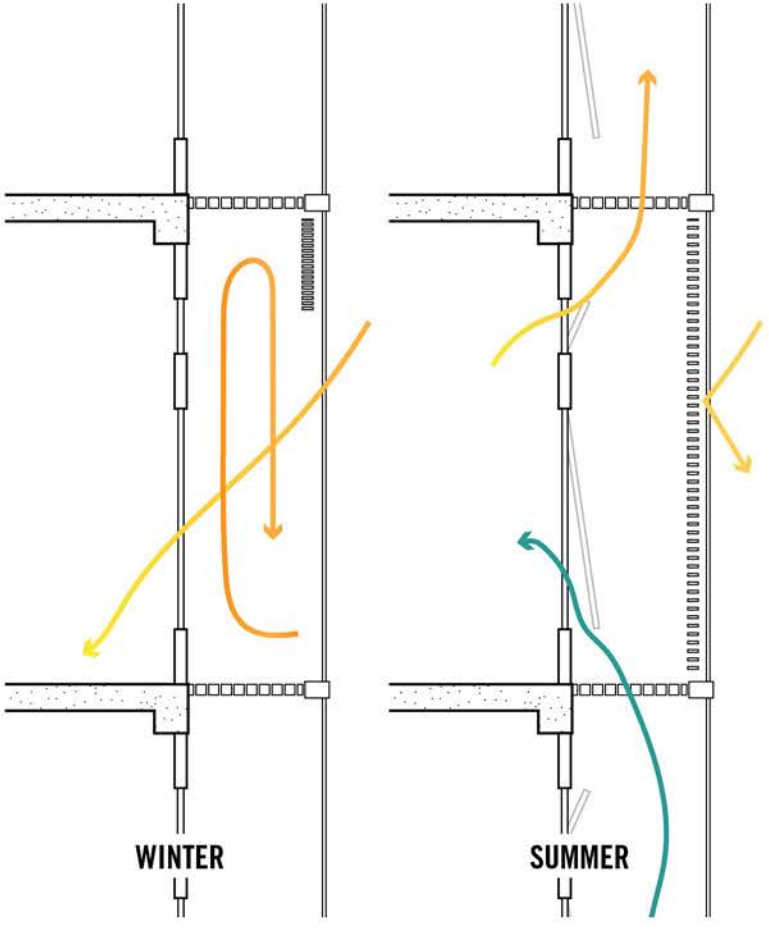
Case Review: Olympic Sculpture Park (Seattle)



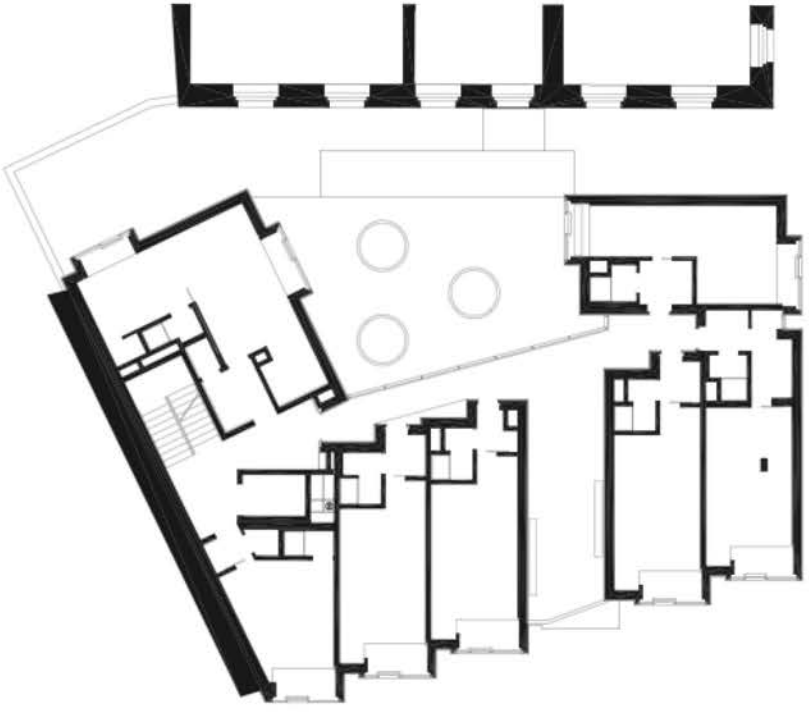
Case Review: The Plant (Chicago)



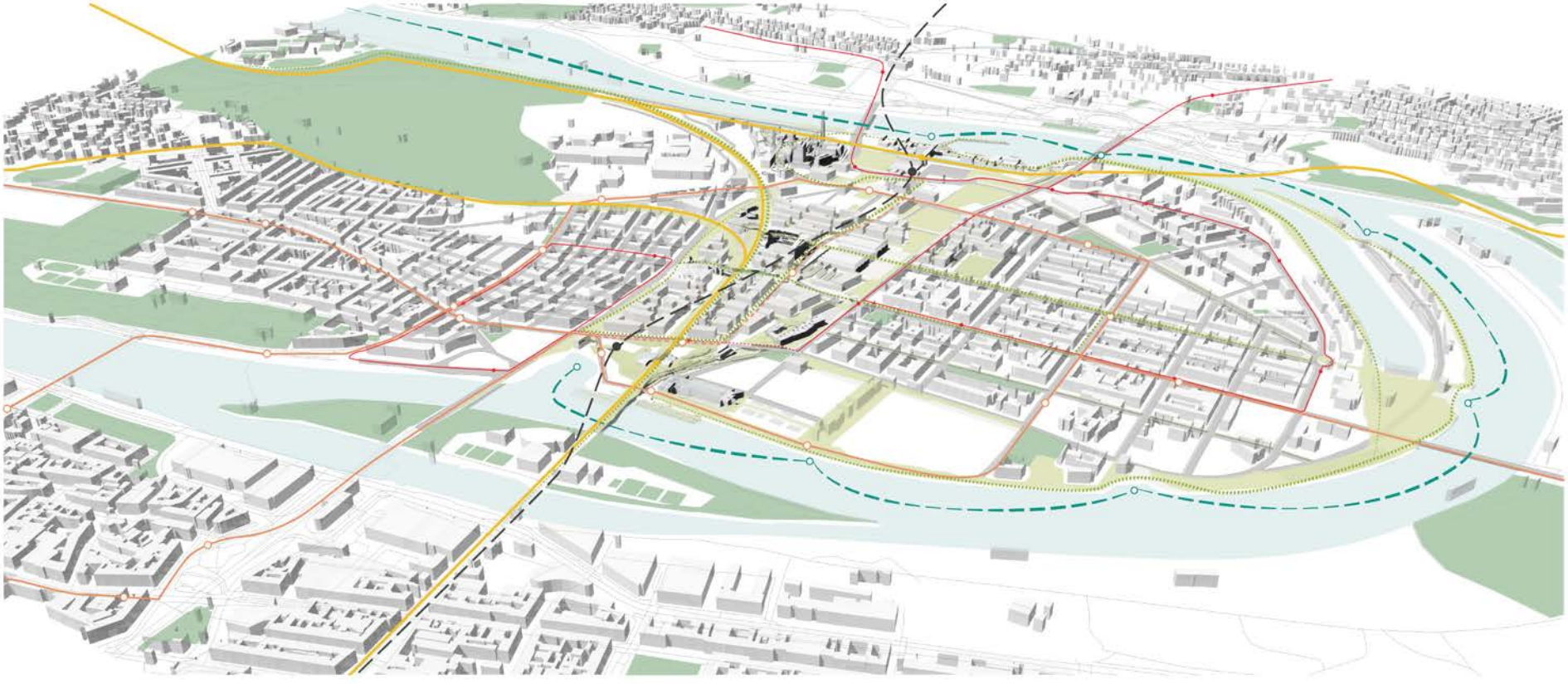
Case Review: Terrence Donnelly Centre for Cellular and Bimolecular Research (Toronto)

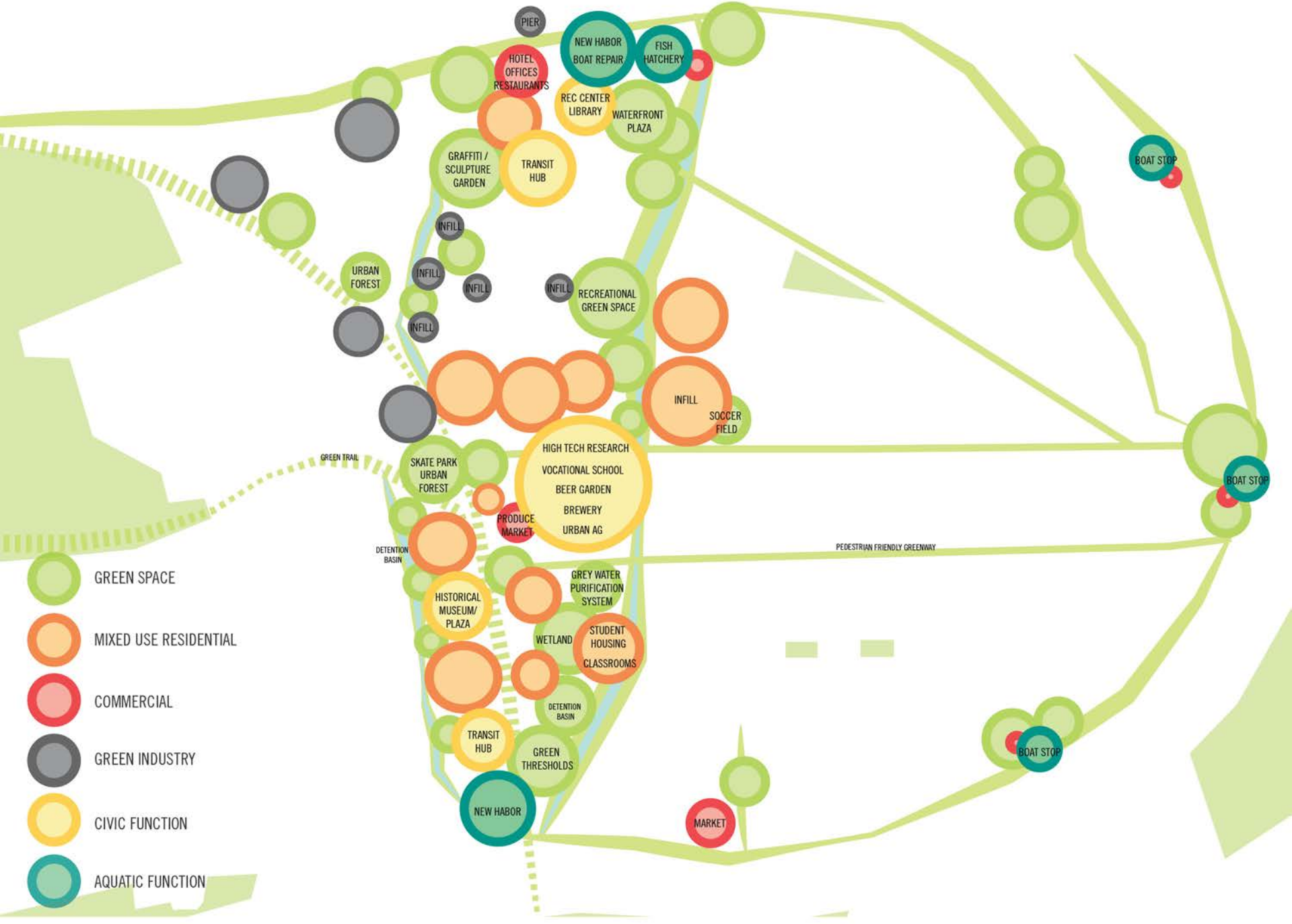


Case Review: Tenement House (Prague)



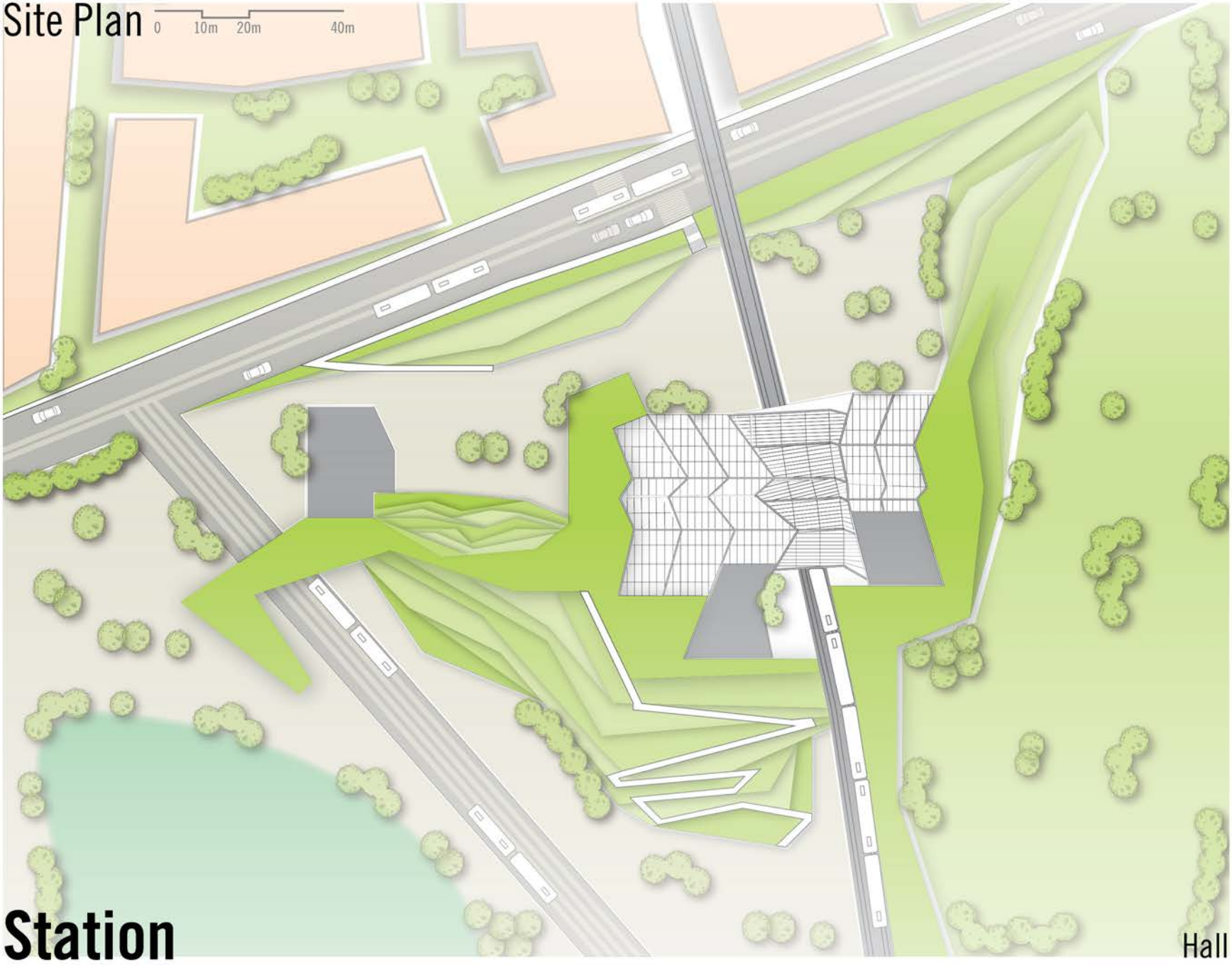
Master Plan



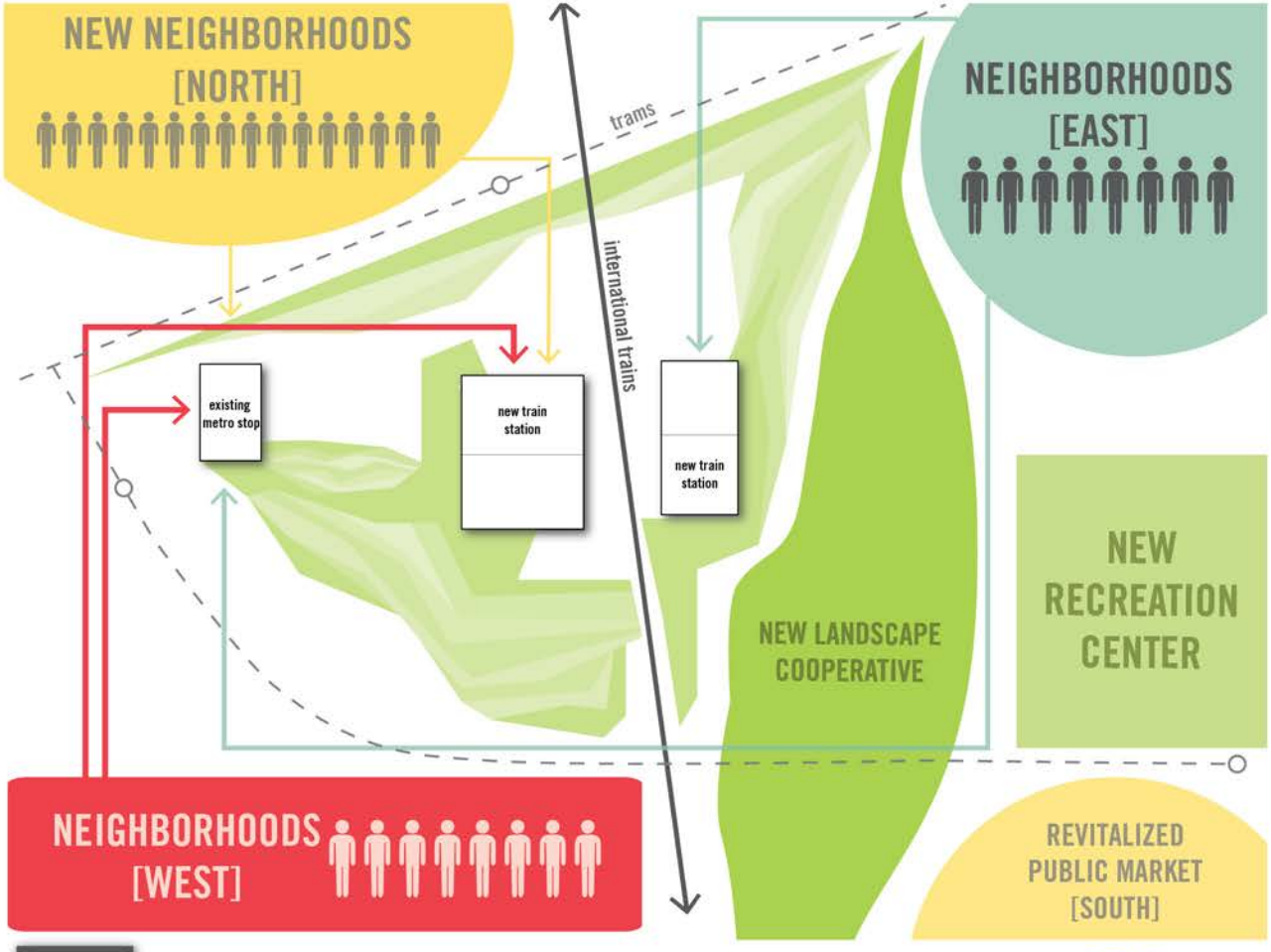

PIER
NEW HABOR BOAT REPAIR
FISH HATCHERY
HOTEL OFFICES RESTAURANTS
REC CENTER LIBRARY
WATERFRONT PLAZA
GRAFFITI / SCULPTURE GARDEN
TRANSIT HUB
BOAT STOP
INFILL
URBAN FOREST
INFILL
INFILL
INFILL
INFILL
RECREATIONAL GREEN SPACE
INFILL
SOCCER FIELD
GREEN TRAIL
SKATE PARK URBAN FOREST
HIGH TECH RESEARCH
VOCATIONAL SCHOOL
BEER GARDEN
BREWERY
URBAN AG
BOAT STOP
PRODUCE MARKET
DETENTION BASIN
PEDESTRIAN FRIENDLY GREENWAY
GREY WATER PURIFICATION SYSTEM
HISTORICAL MUSEUM/ PLAZA
WETLAND
STUDENT HOUSING
CLASSROOMS
DETENTION BASIN
TRANSIT HUB
GREEN THRESHOLDS
BOAT STOP
NEW HABOR
MARKET
GREEN SPACE
MIXED USE RESIDENTIAL
COMMERCIAL
GREEN INDUSTRY
CIVIC FUNCTION
AQUATIC FUNCTION

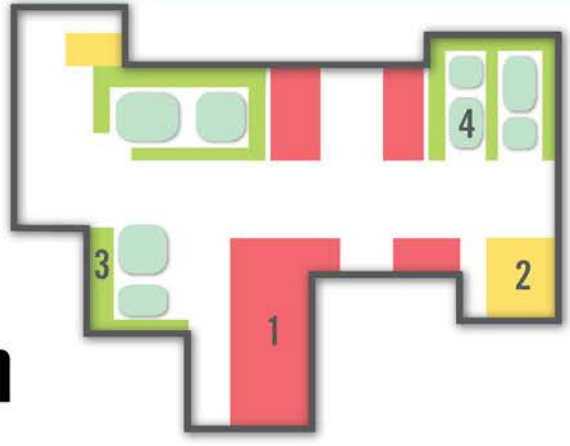
Focus Areas


Station
Hall


Site Plan
0
10m
20m
40m
Station
Hall

Diagrams



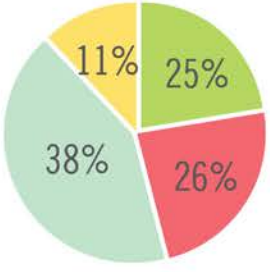


1 COMMERCIAL SPACE : **434 m²**

2 TRAIN ADMINISTRATION : **157 m²**

3 GARDENS / AGRICULTURE : **422 m²**

4 TEMPORARY MARKET SPACE : **637 m²**



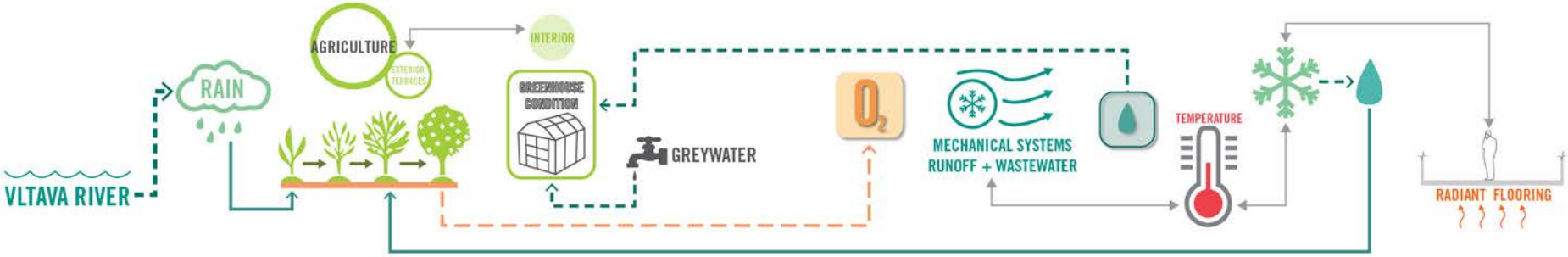
GROSS TOTAL AREA : **4099 m²**
NET TOTAL AREA : **1650 m²**

TARE TOTAL AREA : **2449 m²**
[CIRCULATION + SERVICES]

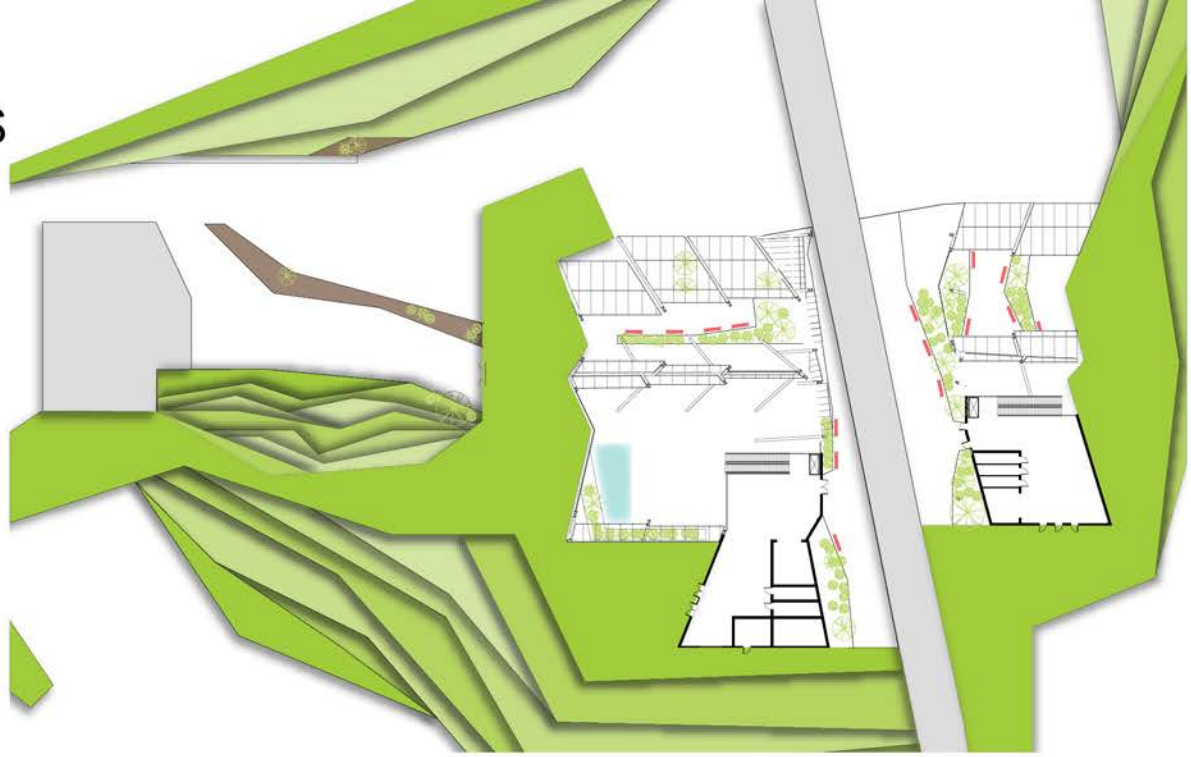
Station

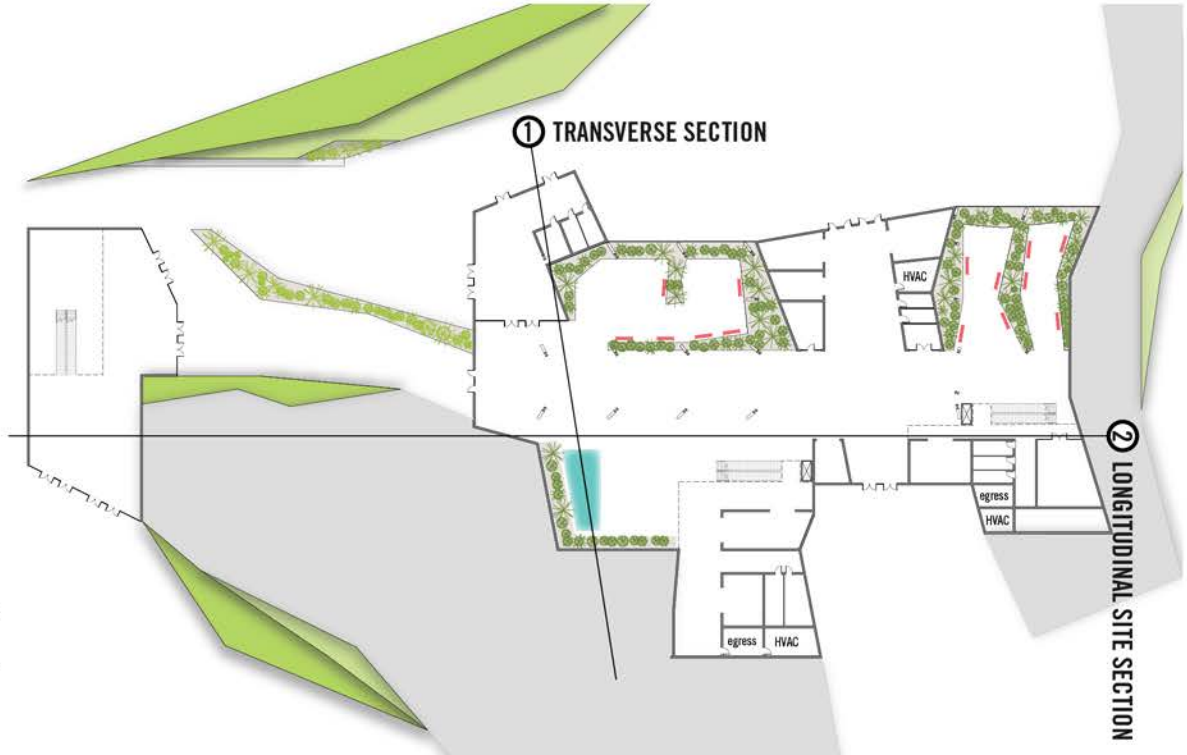
Hall

Water Systems Diagram



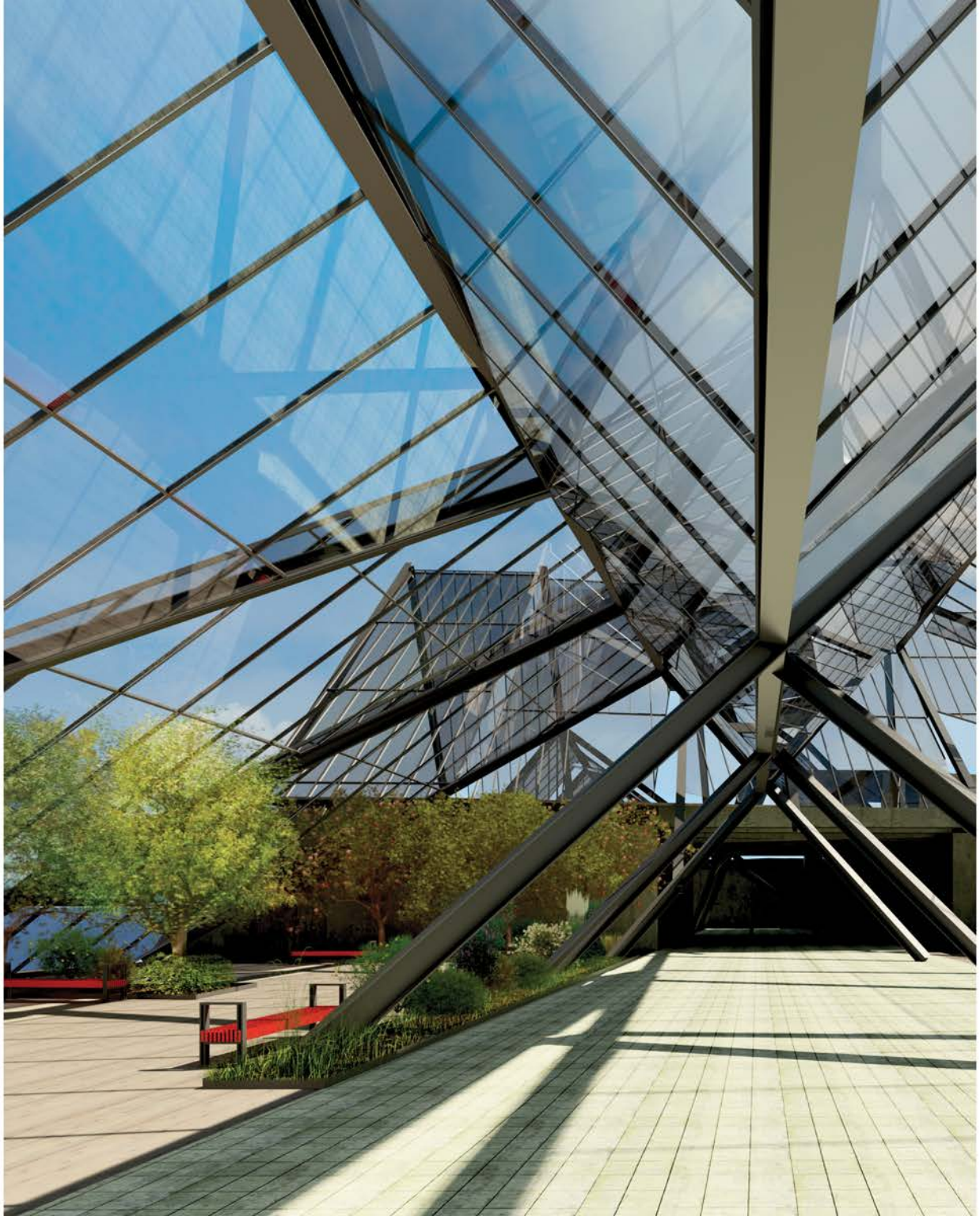
Floor Plans



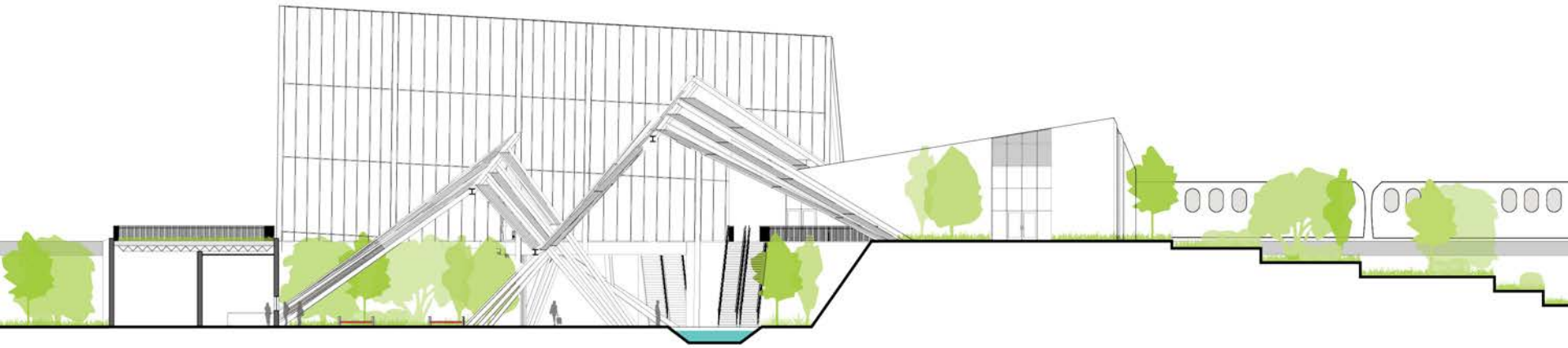


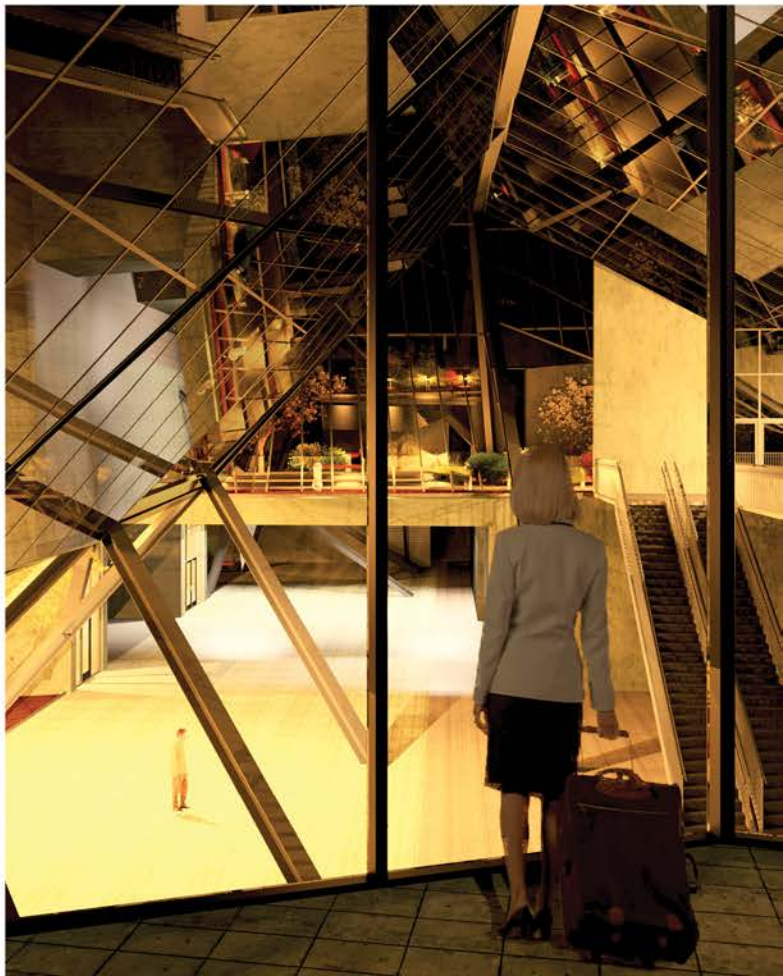
Station

Hall



Station Hall



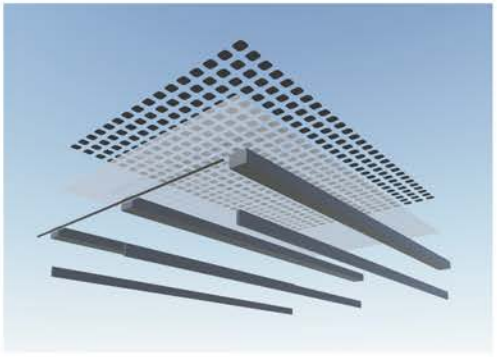



RED
Station
Hall

Zabava Sports Center

Orderique

PHOTOVOLTAIC PANELS



The building was designed around transparency to allow for visual interaction between the outdoor shaded interactive areas and the sport areas. Additionally, to allow for natural light, the buildings roof is a space frame system that holds glass panels with photovoltaic panels added.

INTERIOR COURTS

SOUTHWEST APPROACH

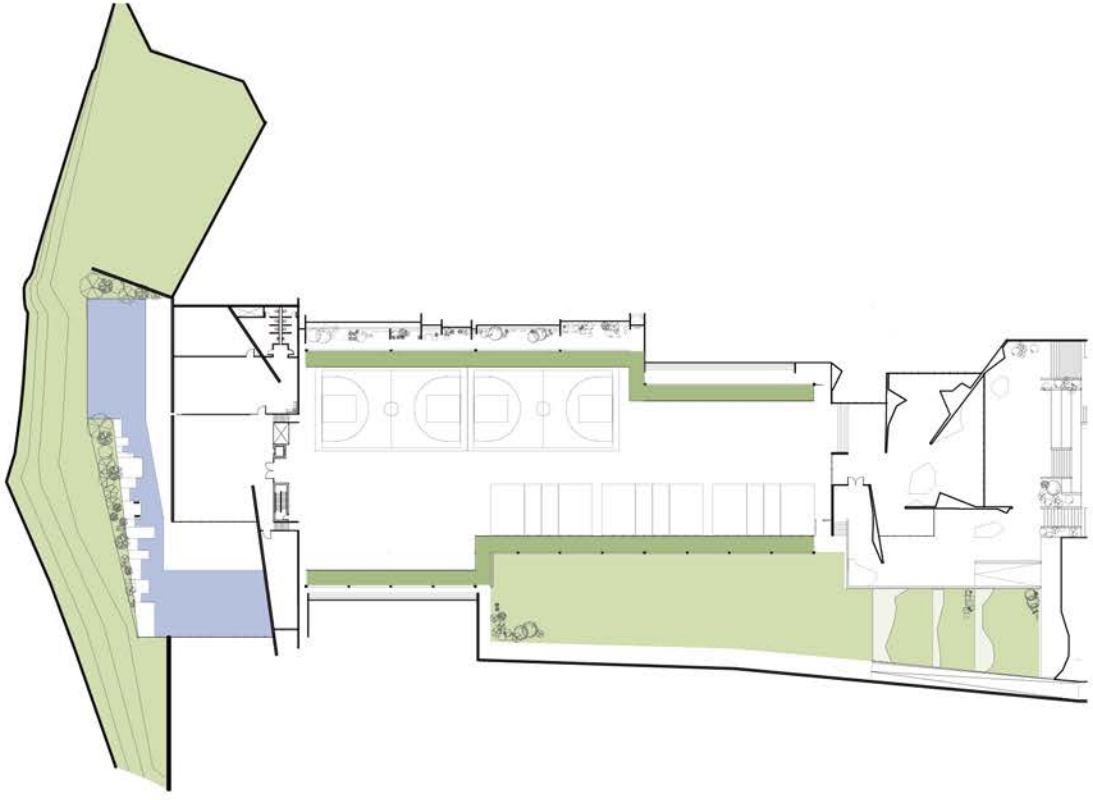
Zabava Sports Center

Orderique

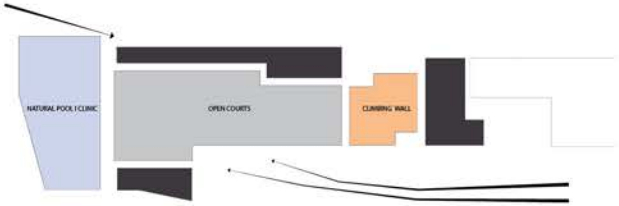
Zabava Sports Center

Orderique

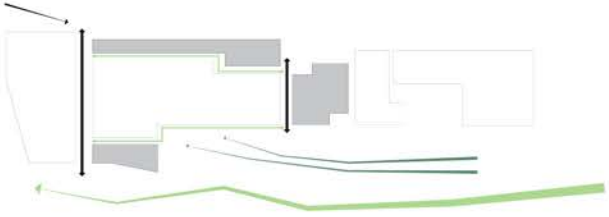
Ground Floor



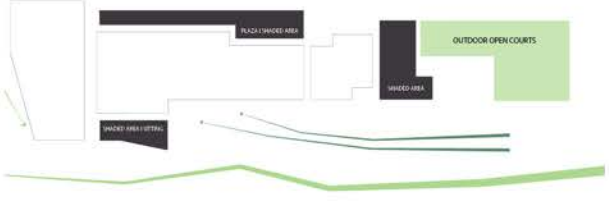
PROGRAM DIAGRAM



GREEN SYSTEMS



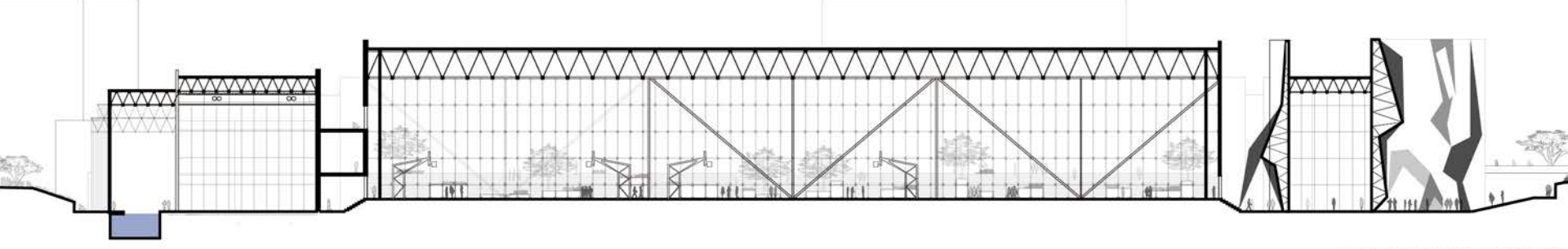
CIRCULATION DIAGRAM



Zabava Sports Center

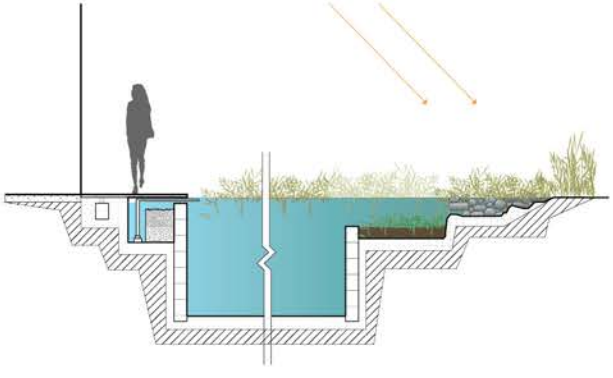
Orderique

NORTHEAST APPROACH

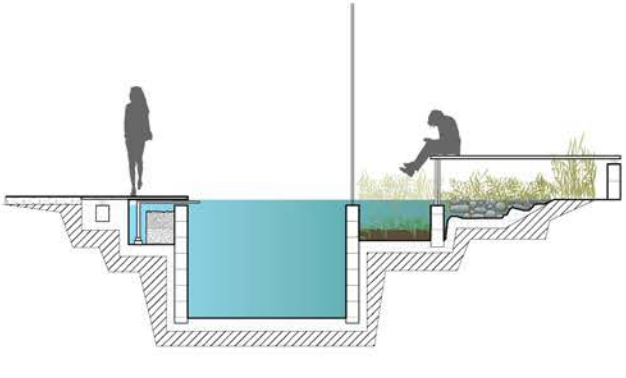


LONGITUDINAL SECTION

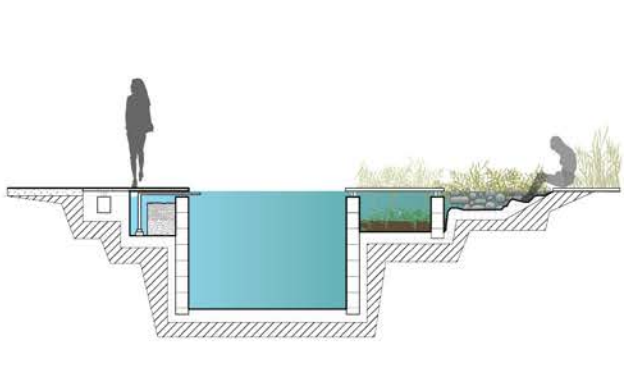
NATURAL POOL - HEALTH CLINIC



FILTRATION ZONE MEETING NATURAL POOL

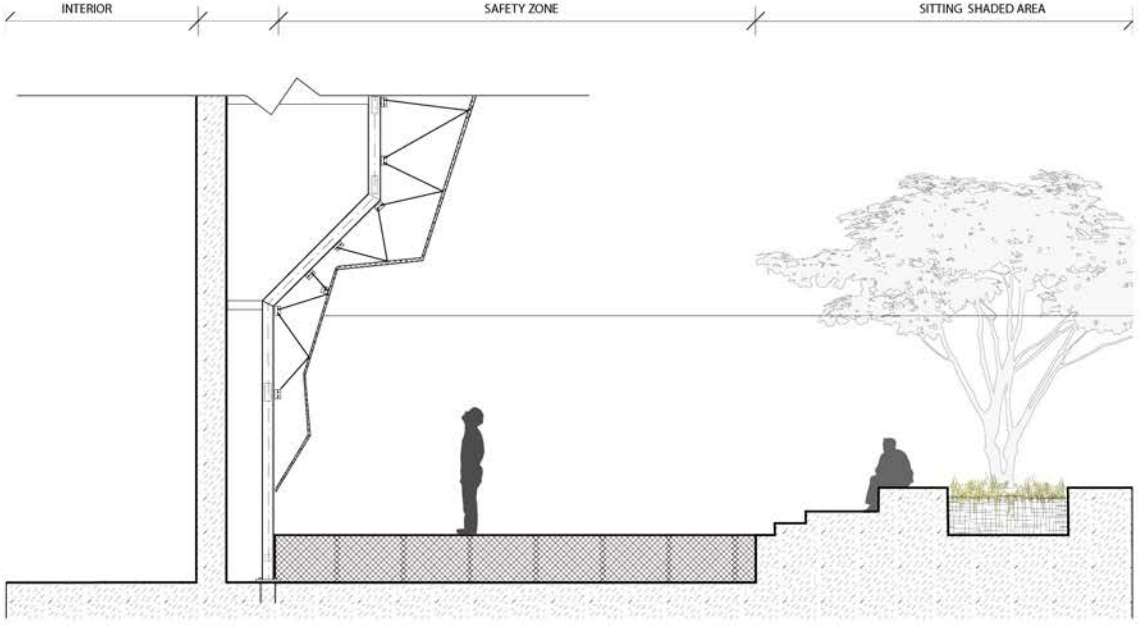


SITTING AREA MEETING NATURAL POOL



SITTING AREA MEETING INDOOR POOL

EAST APPROACH



SECTION DETAIL

West Entrance

Zabava Sports Center

Orderique


Landscape Cooperative
Furcini

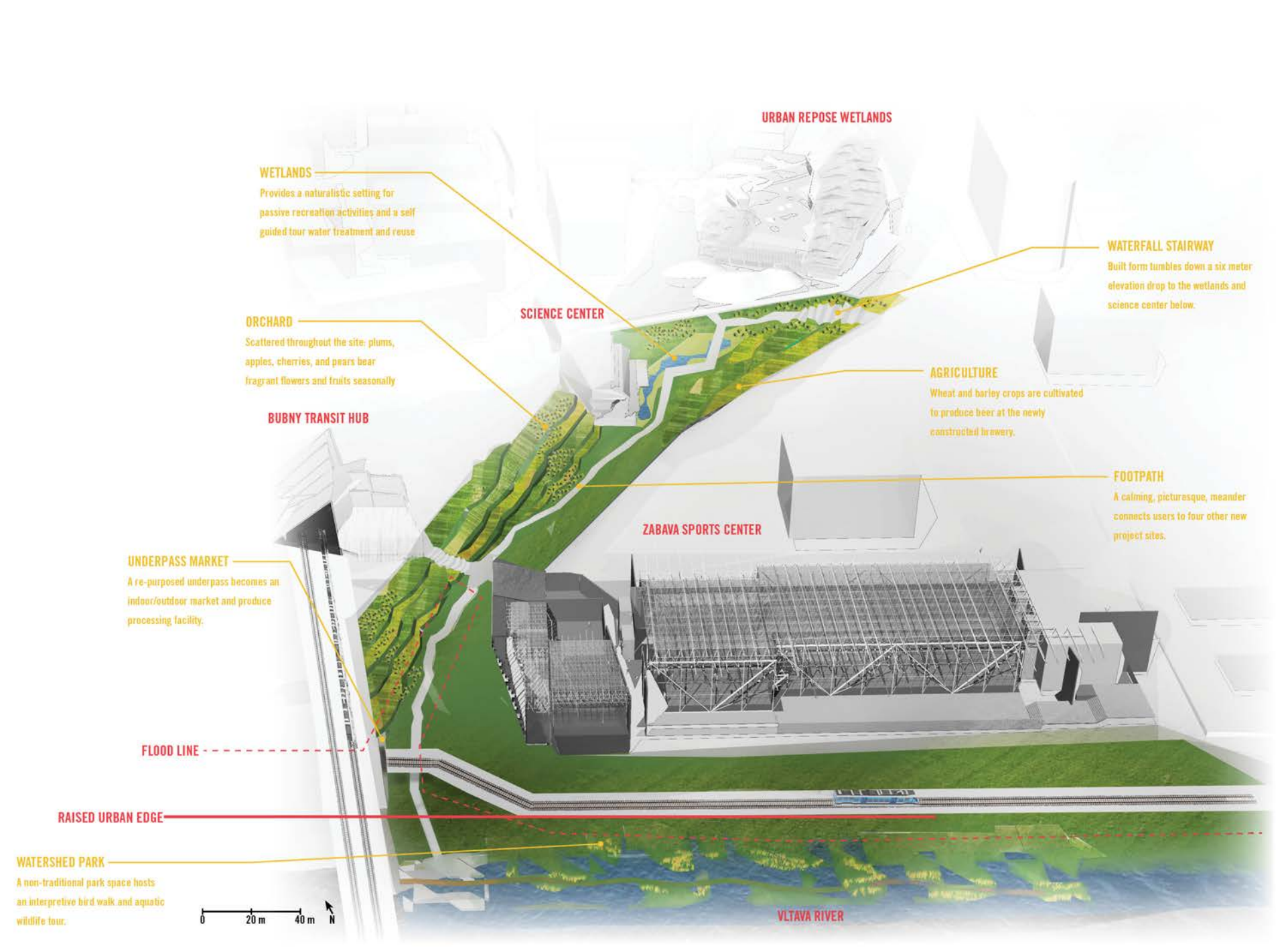
Landscape Cooperative

Furcini

Watershed Park

Landscape Cooperative

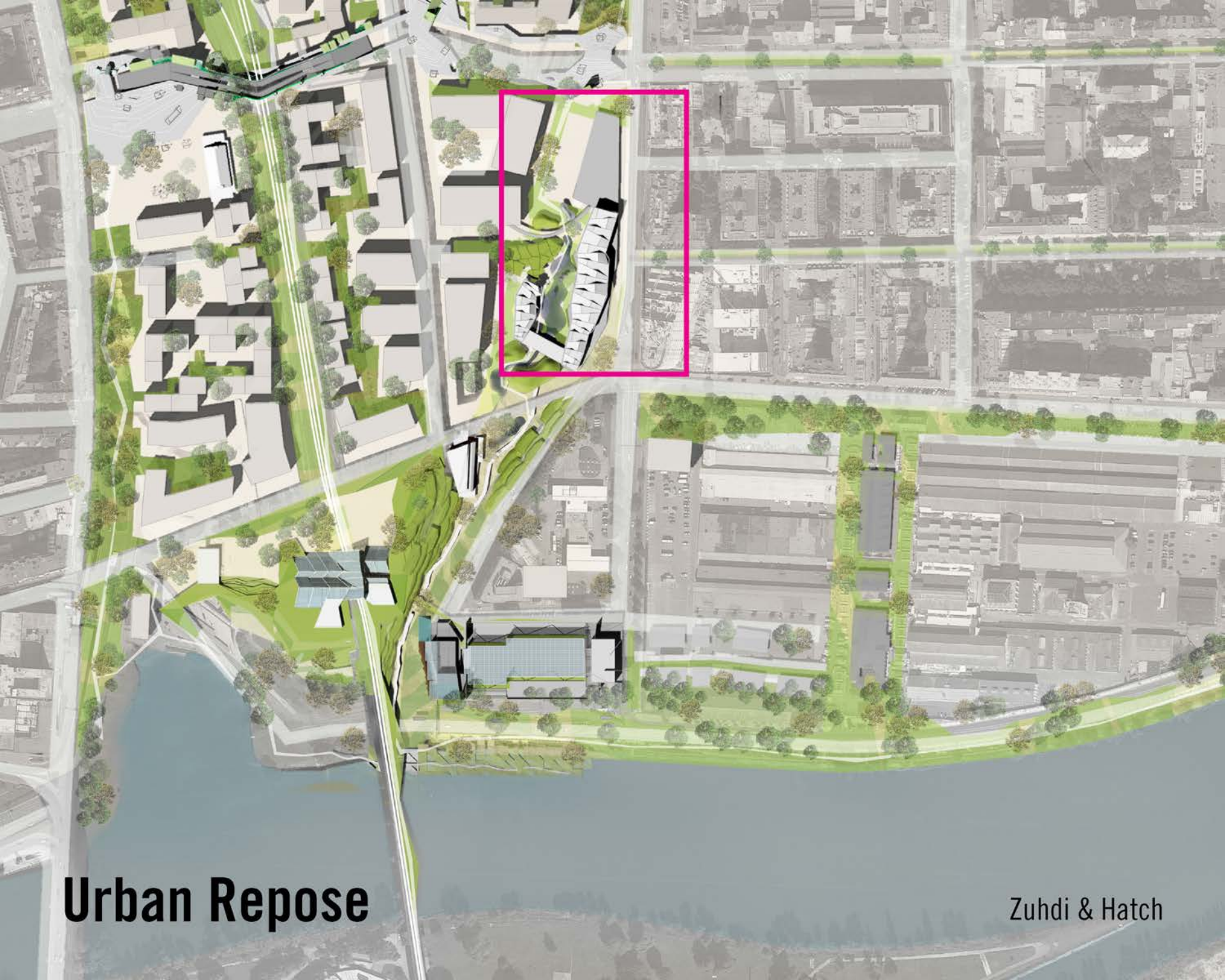
Furcini


URBAN REPOSE WETLANDS
WETLANDS
Provides a naturalistic setting for passive recreation activities and a self guided tour water treatment and reuse
WATERFALL STAIRWAY
Built form tumbles down a six meter elevation drop to the wetlands and science center below.
SCIENCE CENTER
ORCHARD
Scattered throughout the site: plums, apples, cherries, and pears bear fragrant flowers and fruits seasonally
AGRICULTURE
Wheat and barley crops are cultivated to produce beer at the newly constructed brewery.
BUBNY TRANSIT HUB
FOOTPATH
A calming, picturesque, meander connects users to four other new project sites.
ZABAVA SPORTS CENTER
UNDERPASS MARKET
A re-purposed underpass becomes an indoor/outdoor market and produce processing facility.
FLOOD LINE
RAISED URBAN EDGE
WATERSHED PARK
A non-traditional park space hosts an interpretive bird walk and aquatic wildlife tour.
0
20 m
40 m
N
VLTAVA RIVER

Wetlands + Science Center

Landscape Cooperative

Furcini


Urban Repose
Zuhdi & Hatch

Diagrams & Site Plan

Urban runnoff is directed toward the newly constructed wetlands. As a result, this collection of water creates the potential for a desirable place for people & wildlife.

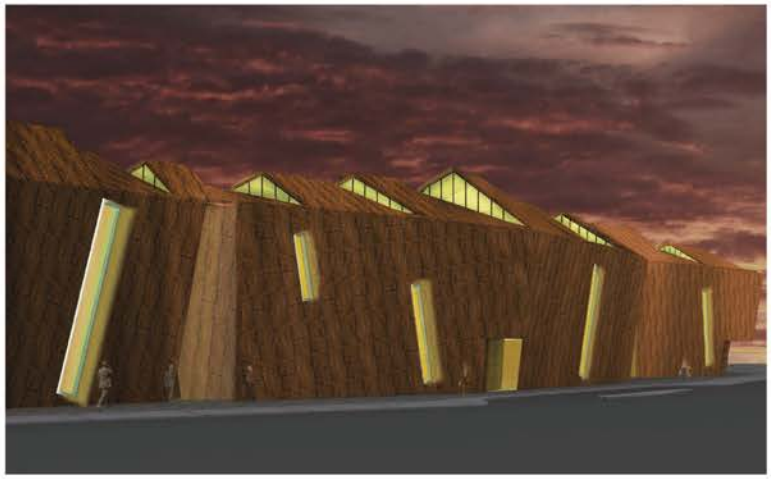
Traffic noise will invade the space, making it less desirable for people to stay. It's been proven that vegation is not an effective noise abatement strategy.

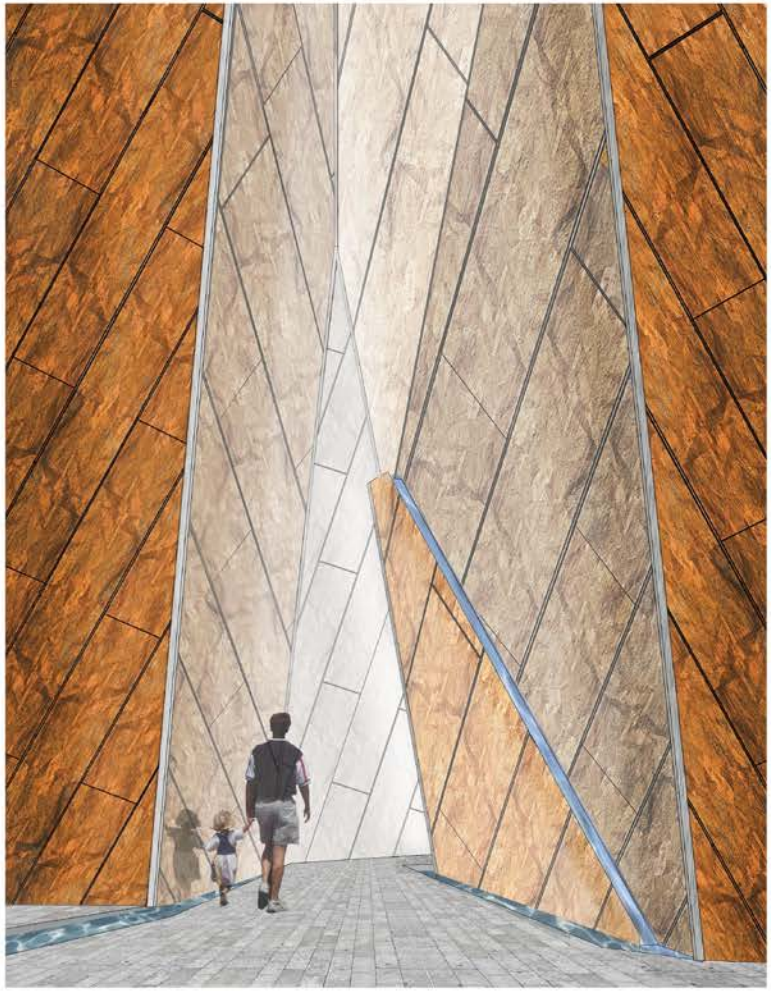
In order to pereserve the wetlands, Architecture was proposed to mitgigate noise. An introverted attitude was introduced towards the street edge, to then bring further focus to the wetlands.

The profile of the Architecture was then influenced by the direction of water, creating multiple thresholds and edge conditions for people to interact with.

Ground Level Program:

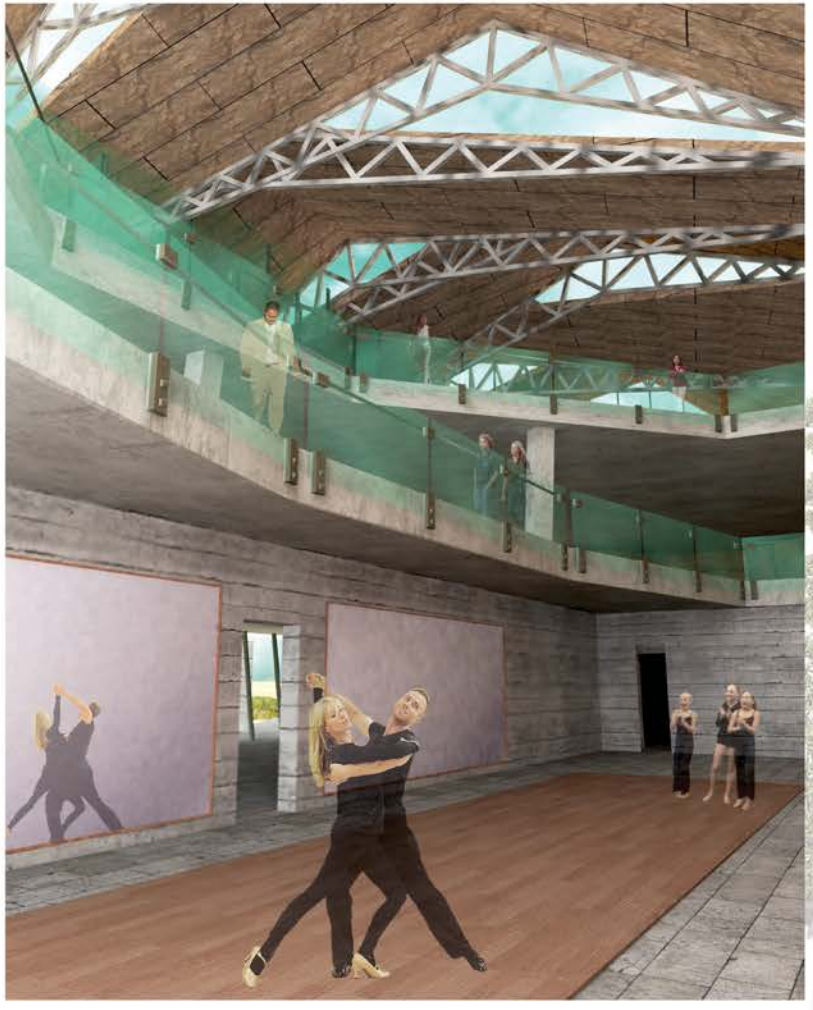
1. Dance Studio
2. Music Studio
3. Recording Studio
4. Dining Hall
5. Kitchen
6. Super Market
7. Poetry Center
8. Conference Room
9. Cafe
10. Indoor Cafe Seating
11. Outdoor Cafe Seating
12. Outdoor Terrace Garden
13. Viewing Mound
14. Viewing Steps
15. Wetland Filter System
16. Performance Stage
17. Restrooms
18. Storage





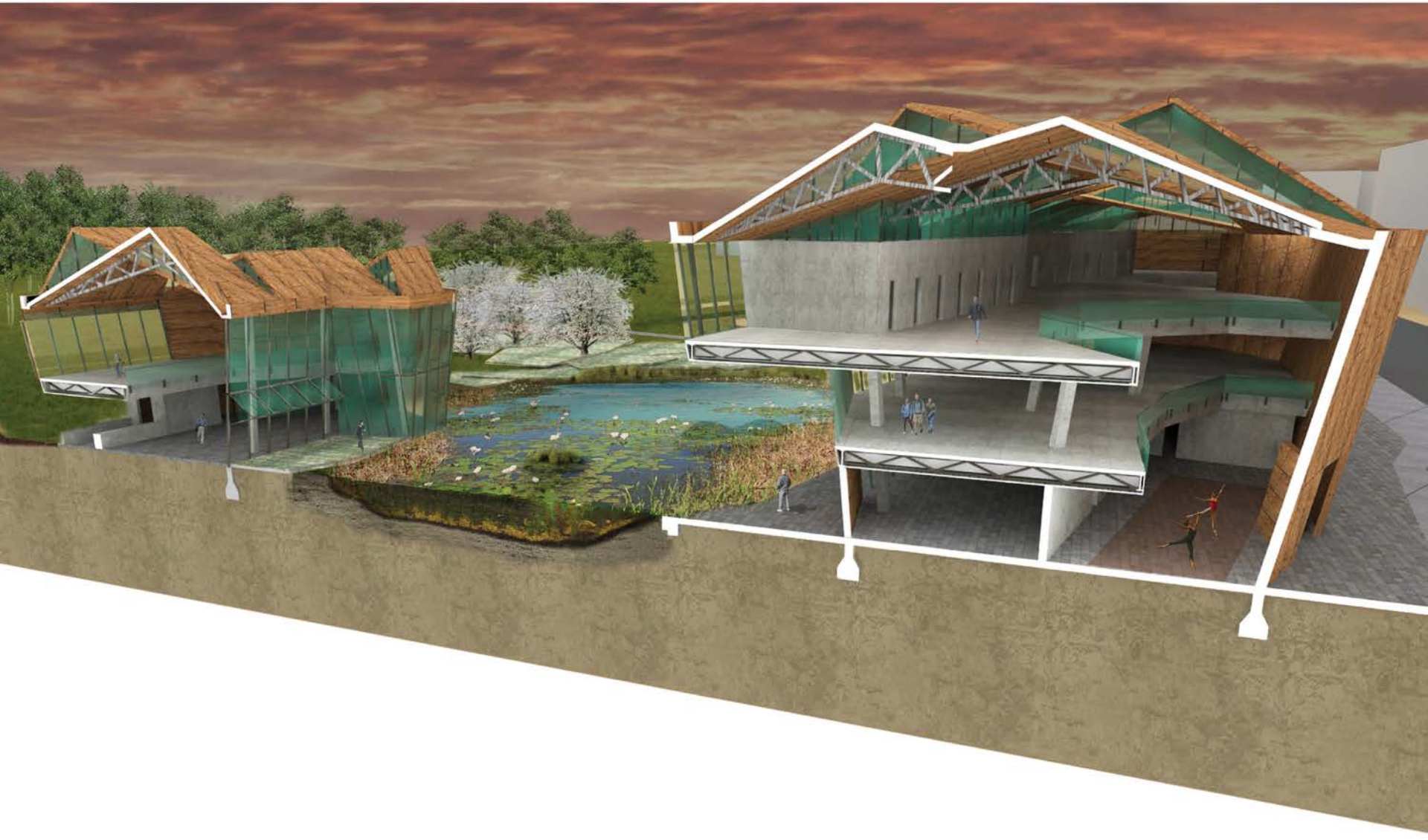
Level 2 Program:

1. Culinary Class Rooms
2. Art Studio
3. Faculty Office
4. Digital Resource Center
5. Restruant
6. Kitchen
7. Poetry Library
8. Conference Room
9. Restrooms
10. Storage



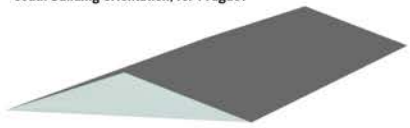
Level 3 Program:

1. Dorm Room
2. Recreation/ Leasuire Space
3. Laundry Room
4. Storage

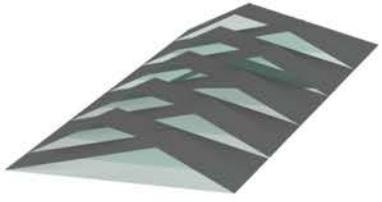


Roof Concept & Development

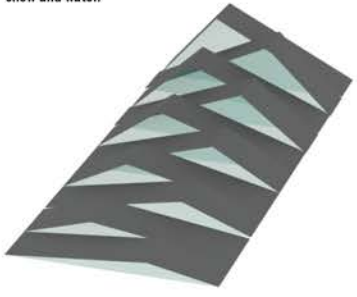
How do you gain Direct Natural Daylight in a North - South Building Orientation, for Prague?



North of the Wetland, a single pitch warehouse roof relies on glazing from the east and west facade to daylight the interior



However, in response to Prague's climate, it is more efficient to have direct solar exposure dedicated to the southern facade. Therefore, the single pitch roof becomes fragmented to receive southern light, and still maintain its pitch to direct snow and water.



In response to direct light being more valuable than ambient light (in Prague), certain pitches of roofs were raised to have direct solar exposure. Pitches were then selected in response to program and the level of light required for them

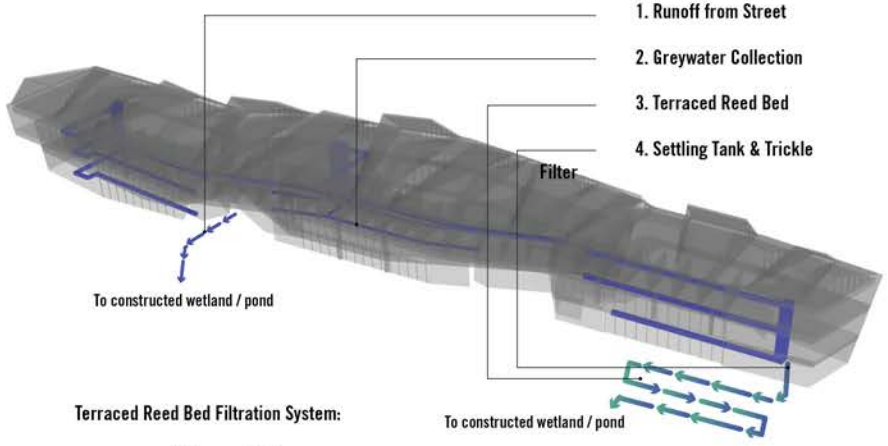
Roof Materials & Assemblage Proposal:

Roof Objectives & Goals:

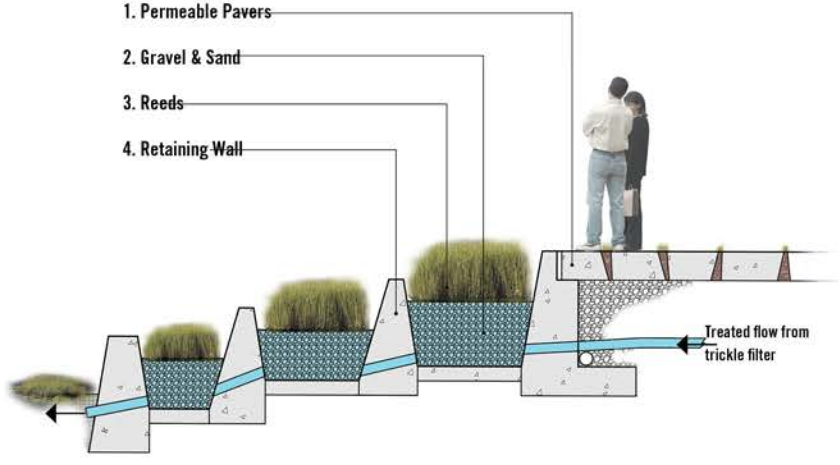
- Receive Natural Daylight from the South Facade
- Create a response to snow and water shed
- Possess insulation requirement for Prague
- Light weight structural system

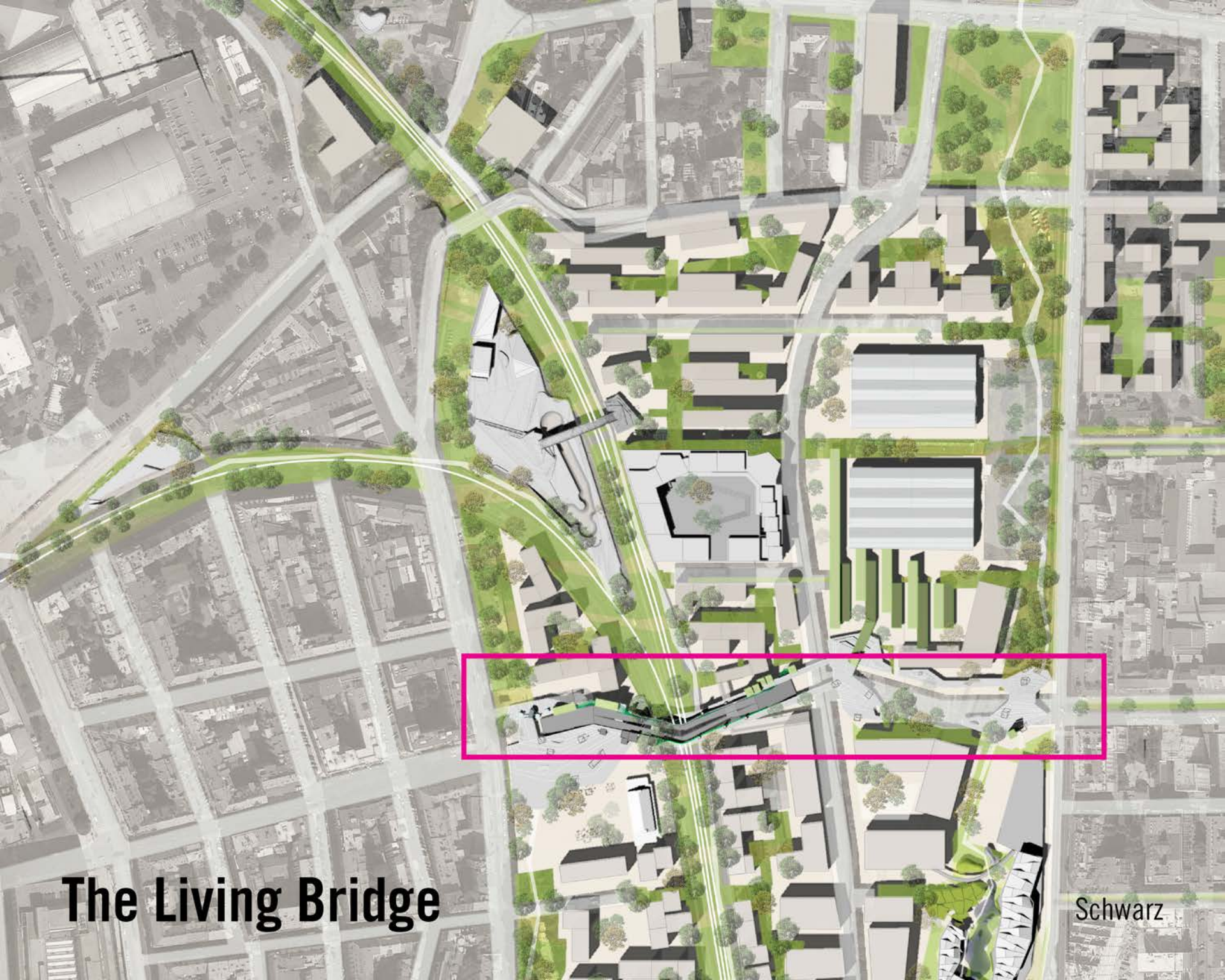
Wastewater Treatment System

How is urban runoff and building greywater treated on-site?



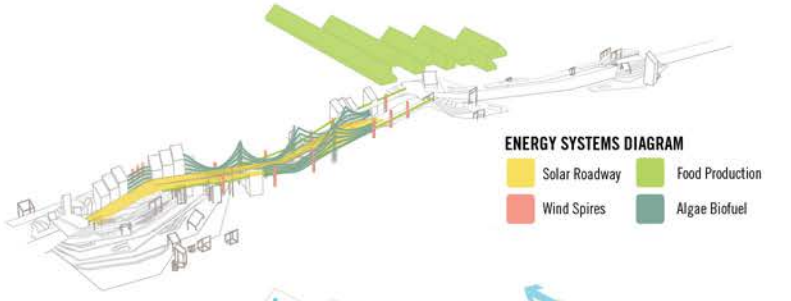
Terraced Reed Bed Filtration System:




The Living Bridge
Schwarz

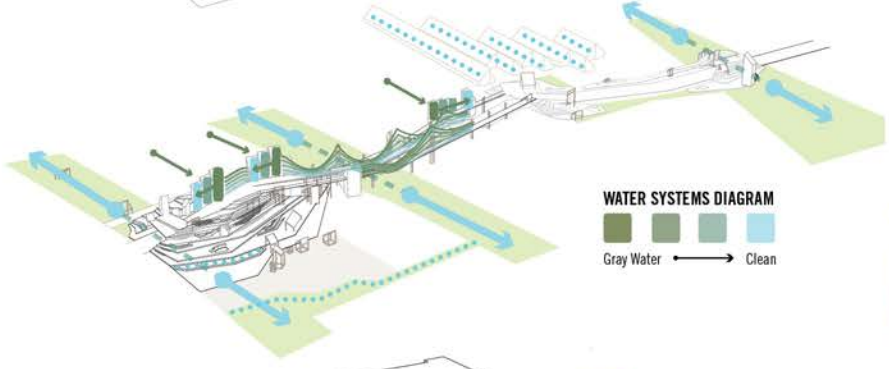
The Living Bridge

Schwarz



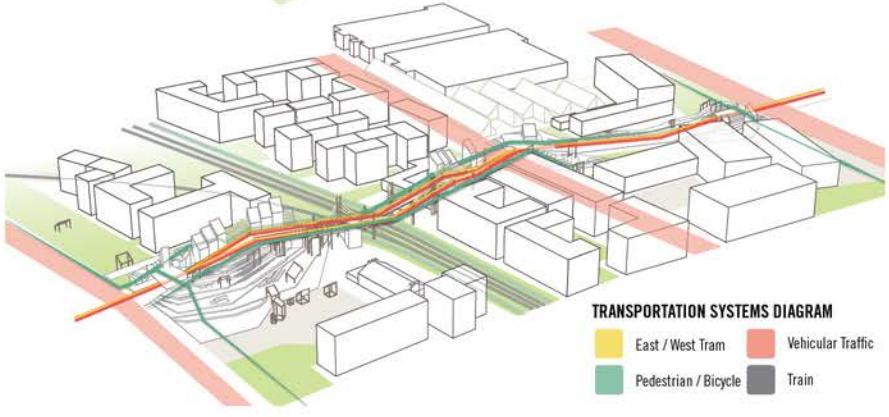
ENERGY SYSTEMS DIAGRAM

Solar Roadway
Food Production
Wind Spires
Algae Biofuel



WATER SYSTEMS DIAGRAM

Gray Water → Clean

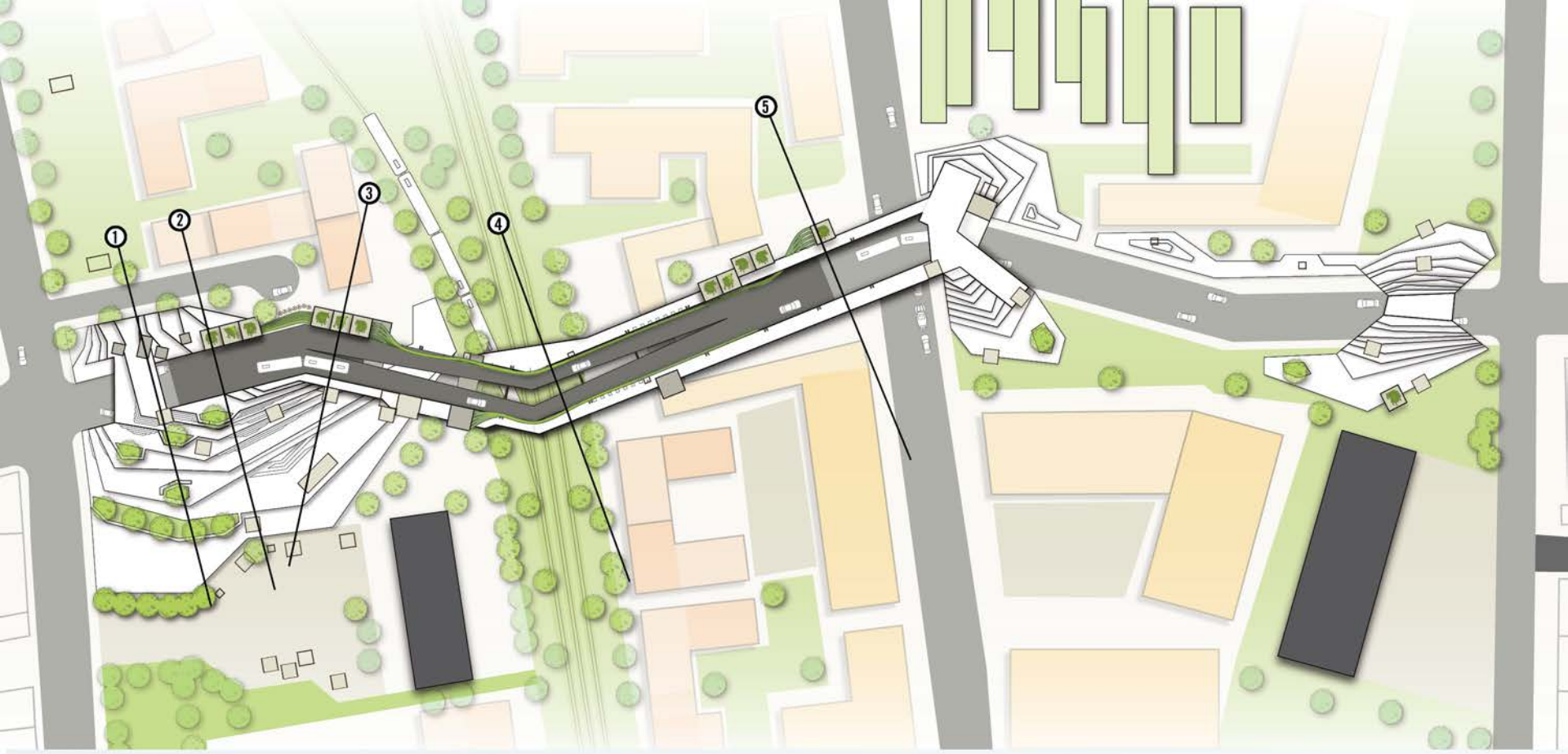


TRANSPORTATION SYSTEMS DIAGRAM

East / West Tram
Vehicular Traffic
Pedestrian / Bicycle
Train

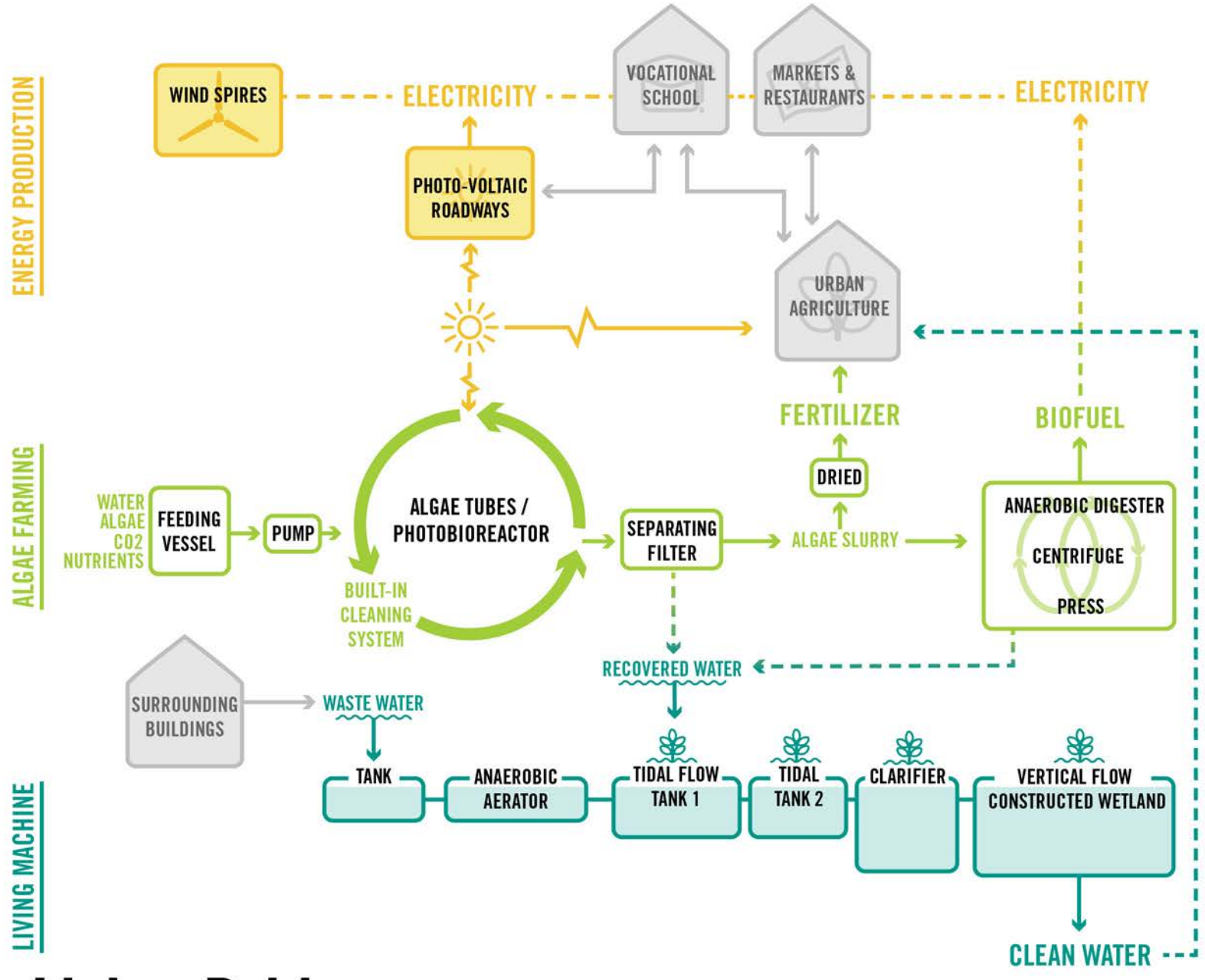
The Living Bridge

Schwarz



The Living Bridge

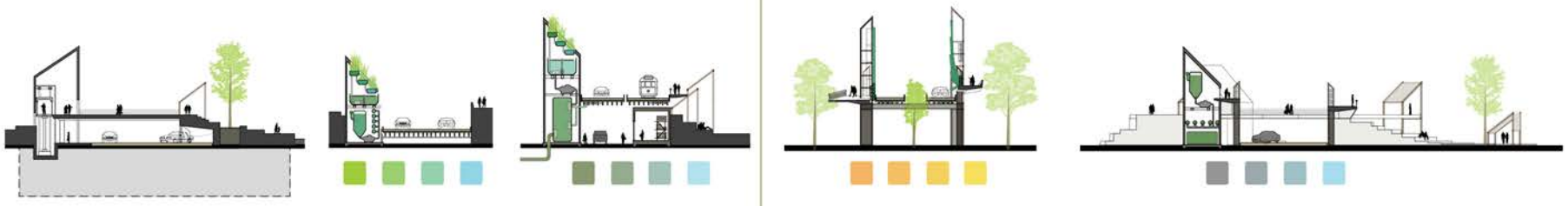
Schwarz



The Living Bridge

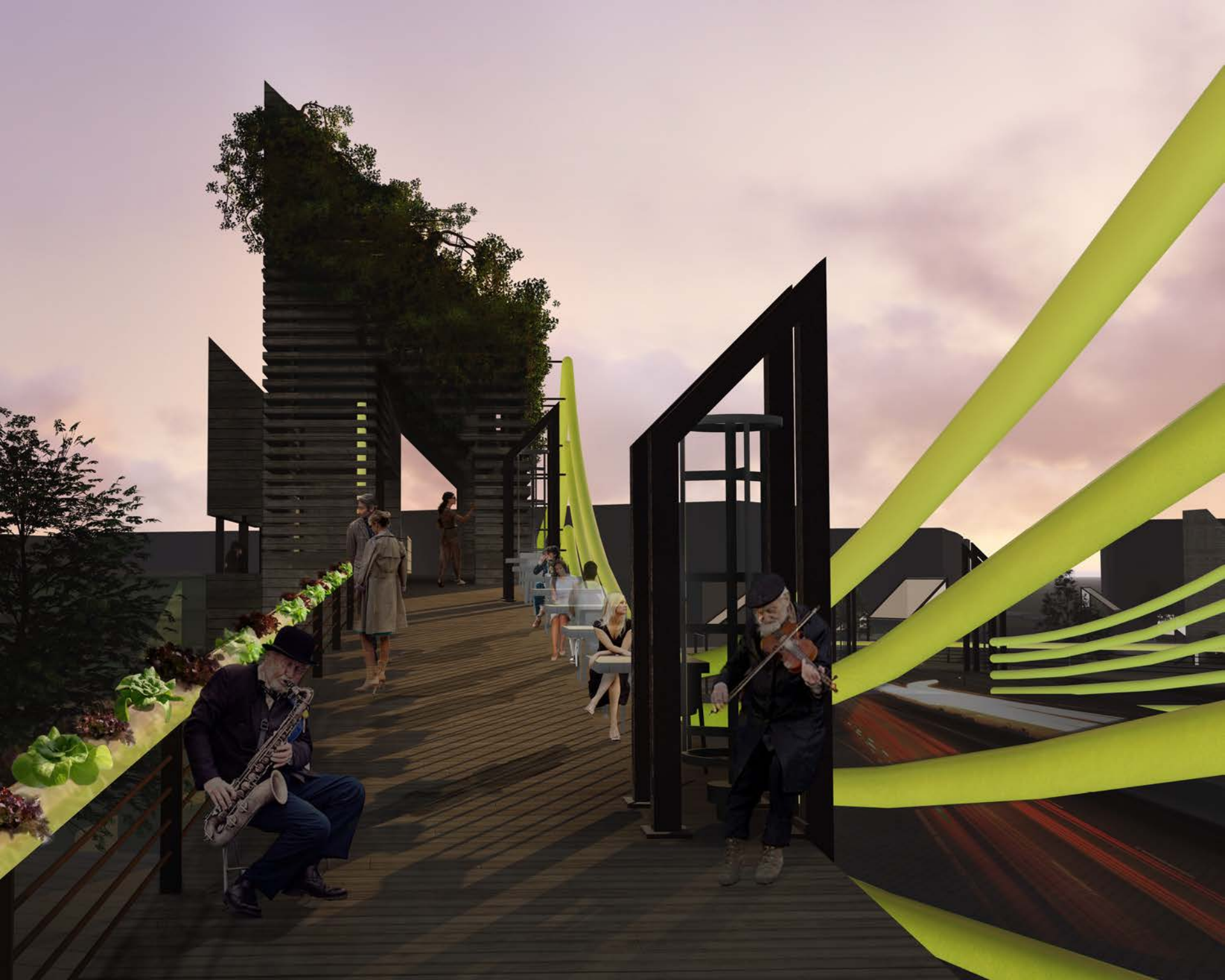
Schwarz

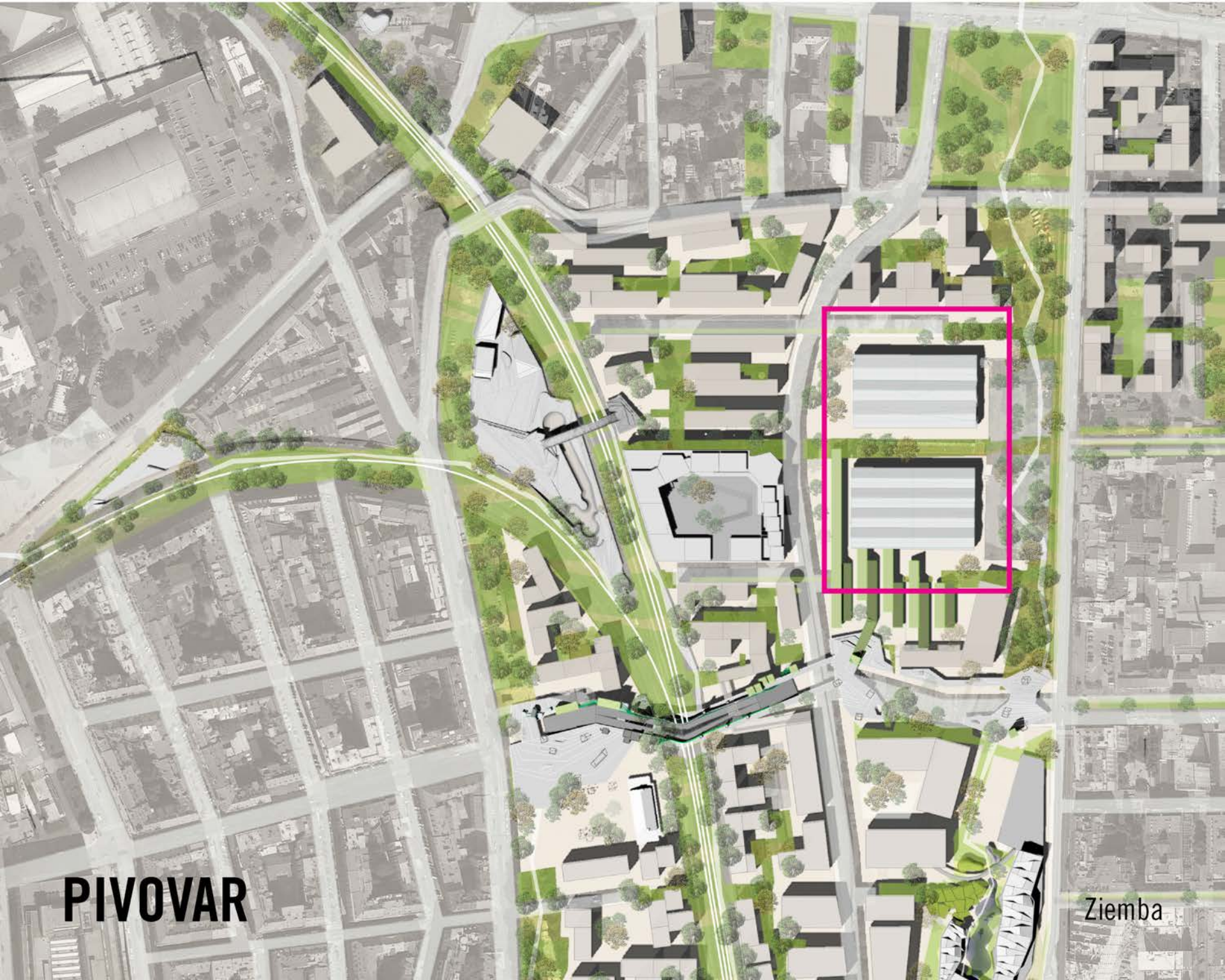
Transverse Sections

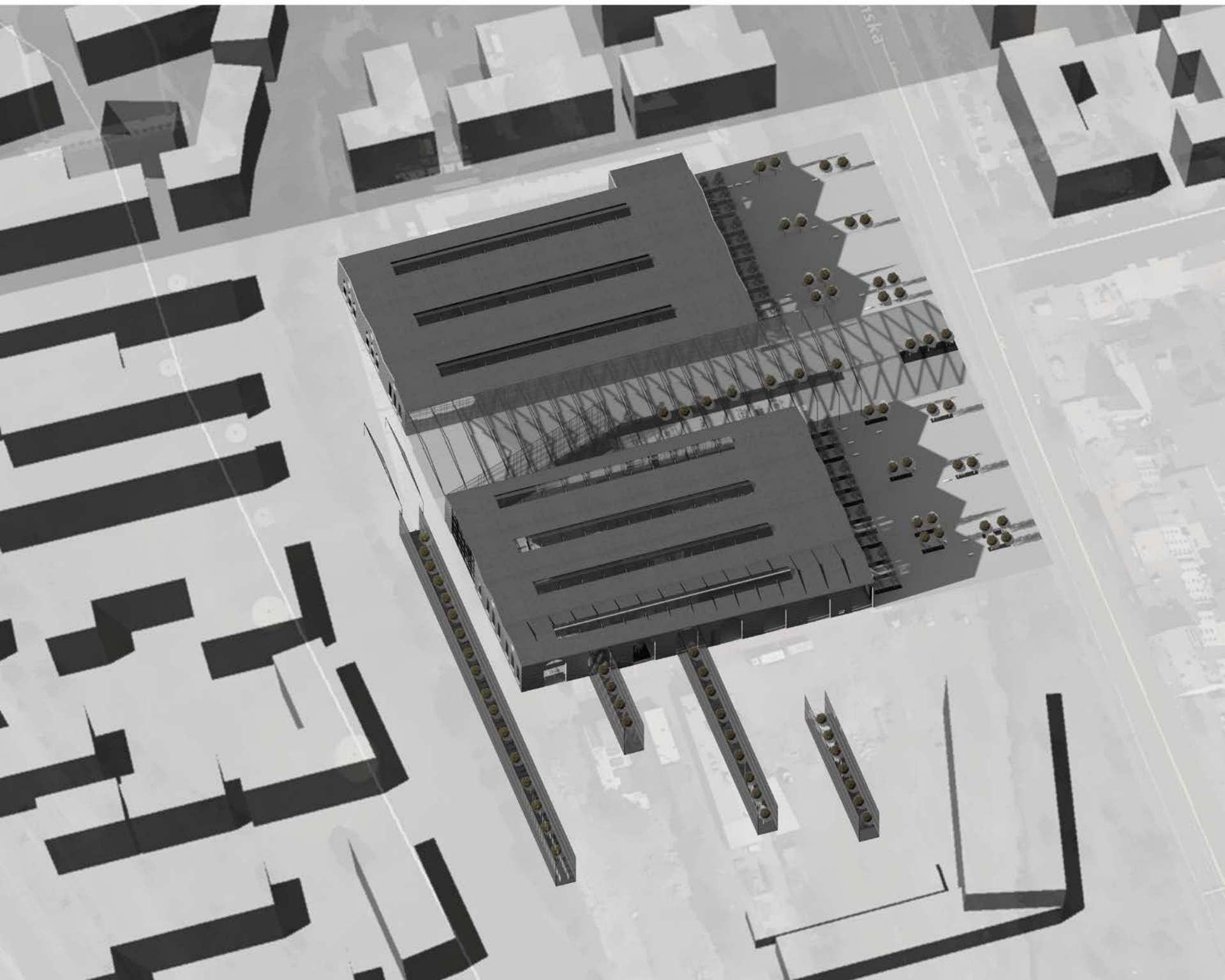


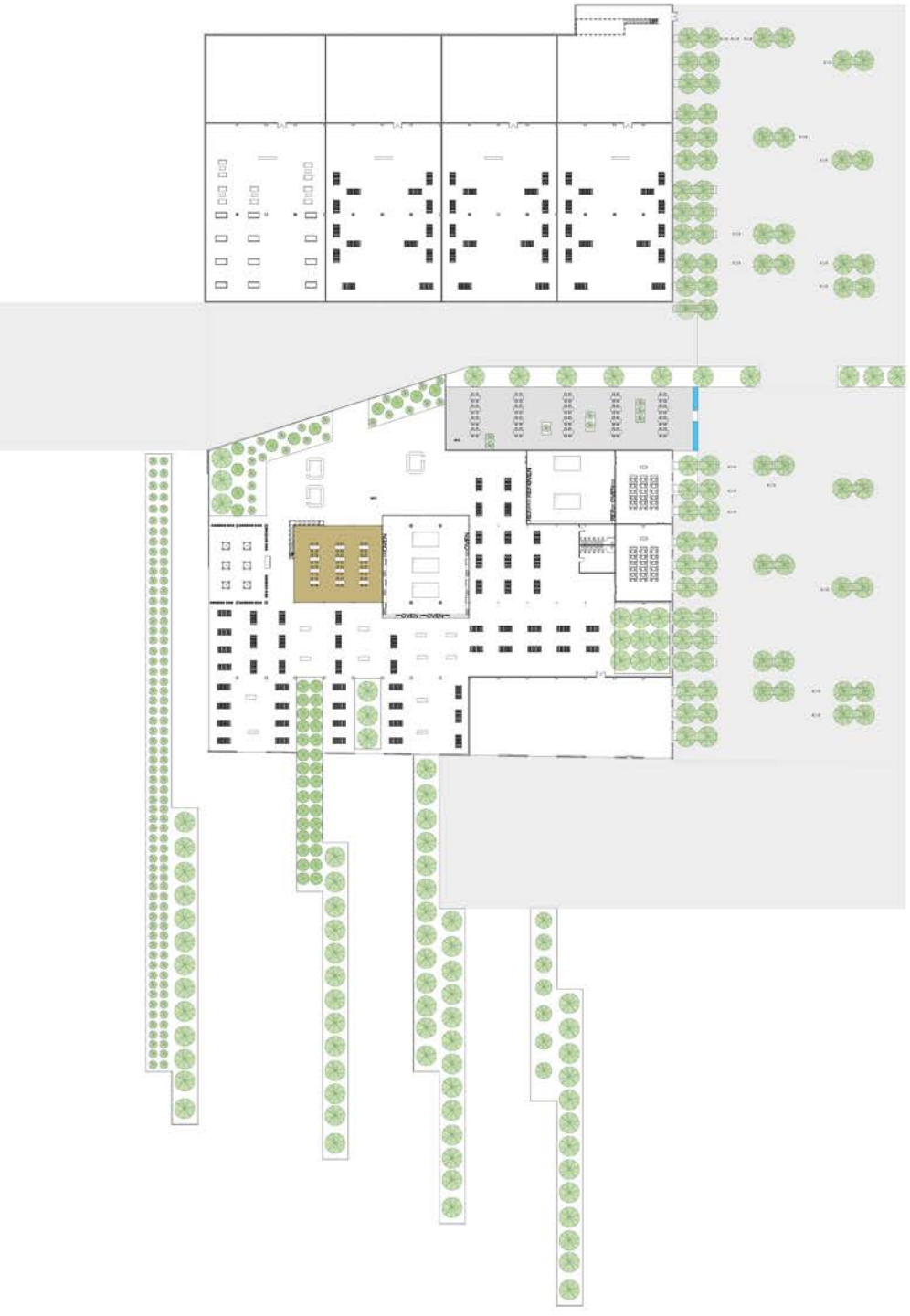
The Living Bridge

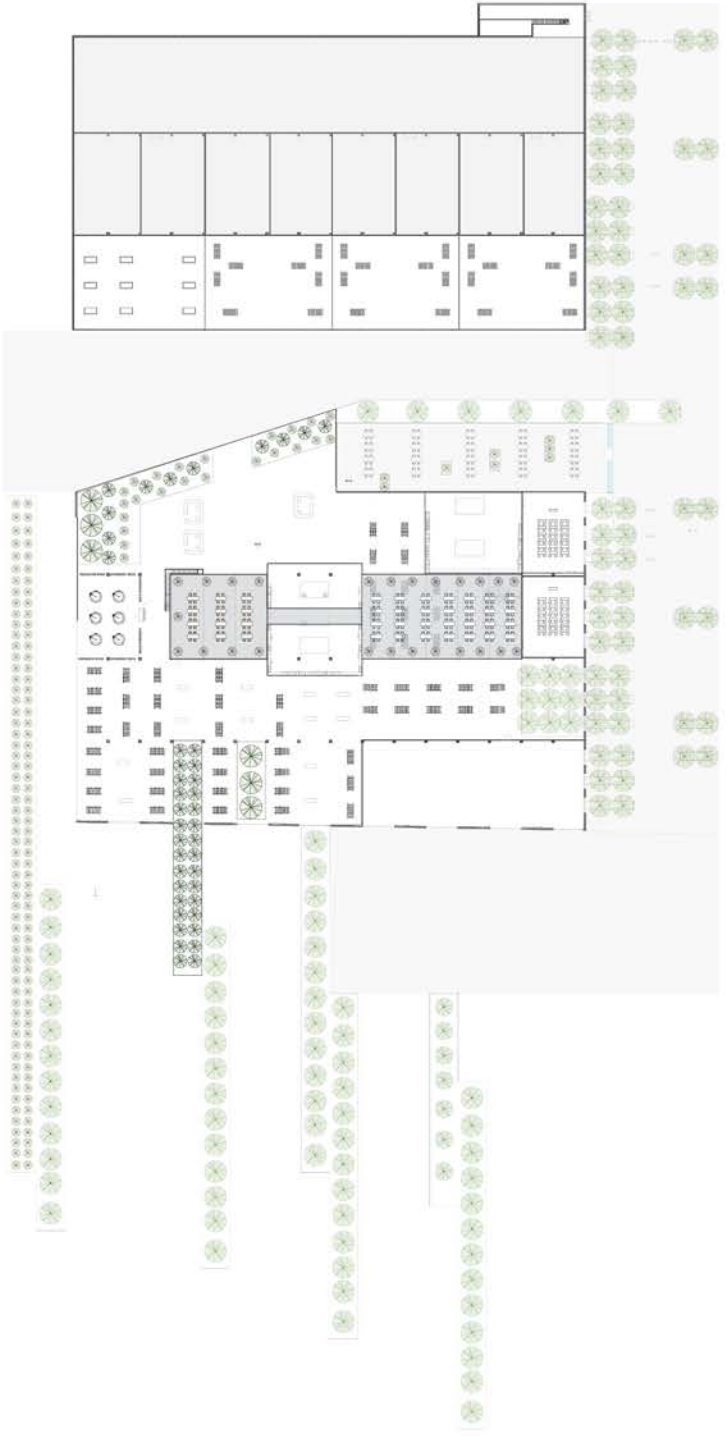
Schwarz

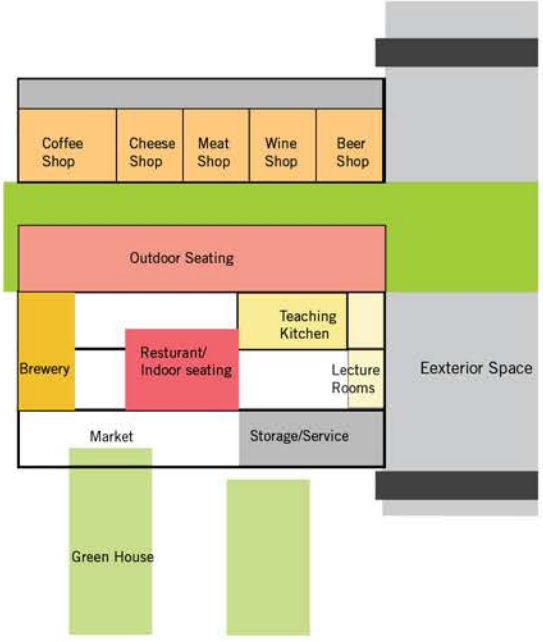



PIVOVAR
Ziemba

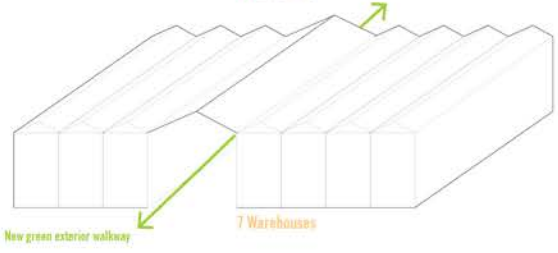


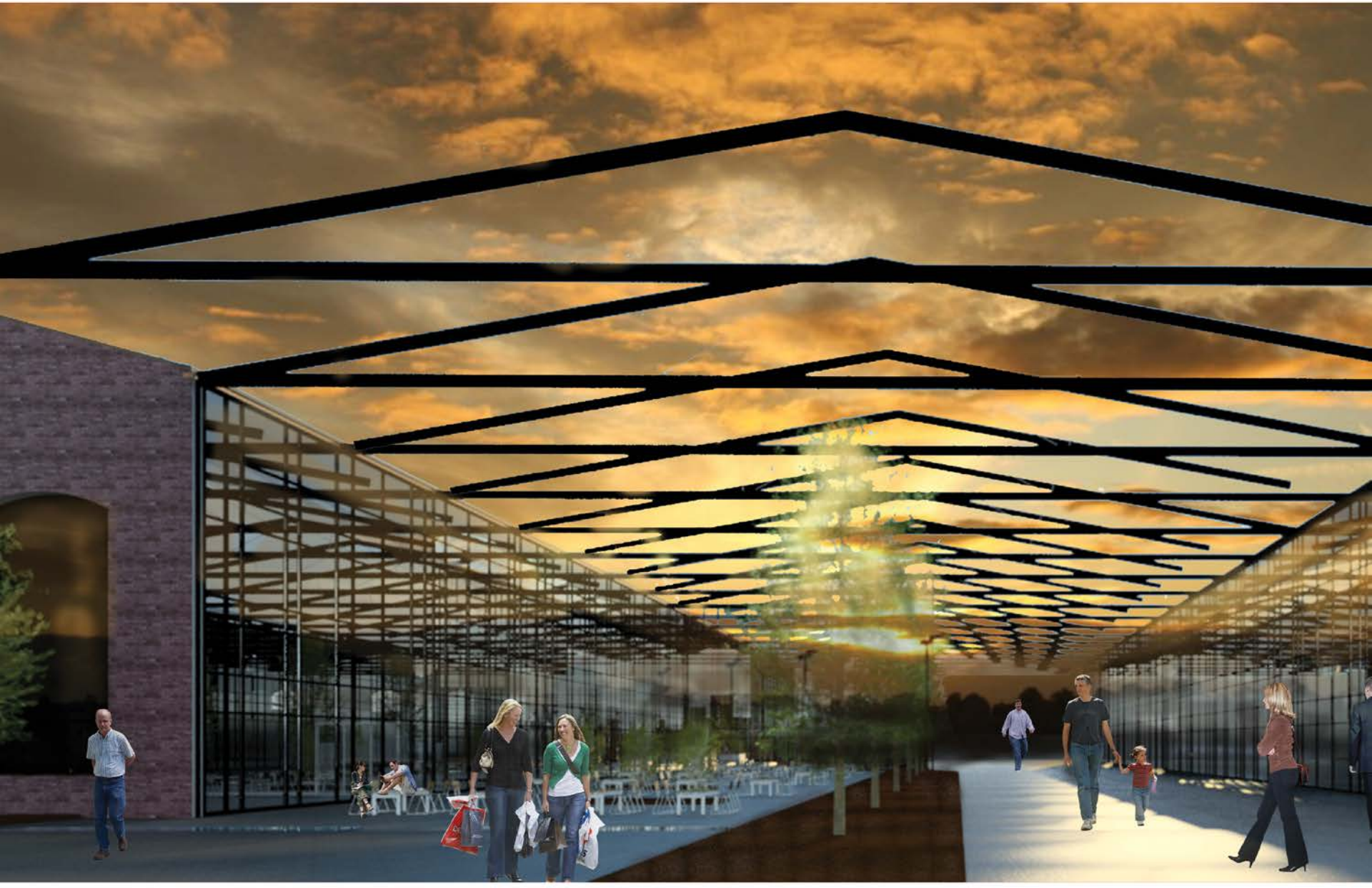





Coffee Shop
Cheese Shop
Meat Shop
Wine Shop
Beer Shop
Outdoor Seating
Teaching Kitchen
Brewery
Resturant/ Indoor seating
Lecture Rooms
Eexterior Space
Market
Storage/Service
Green House


9 Warehouses


7 Warehouses
New green exterior walkway



Green House

Produces

Fruit, Hops & Vegetables

Sells

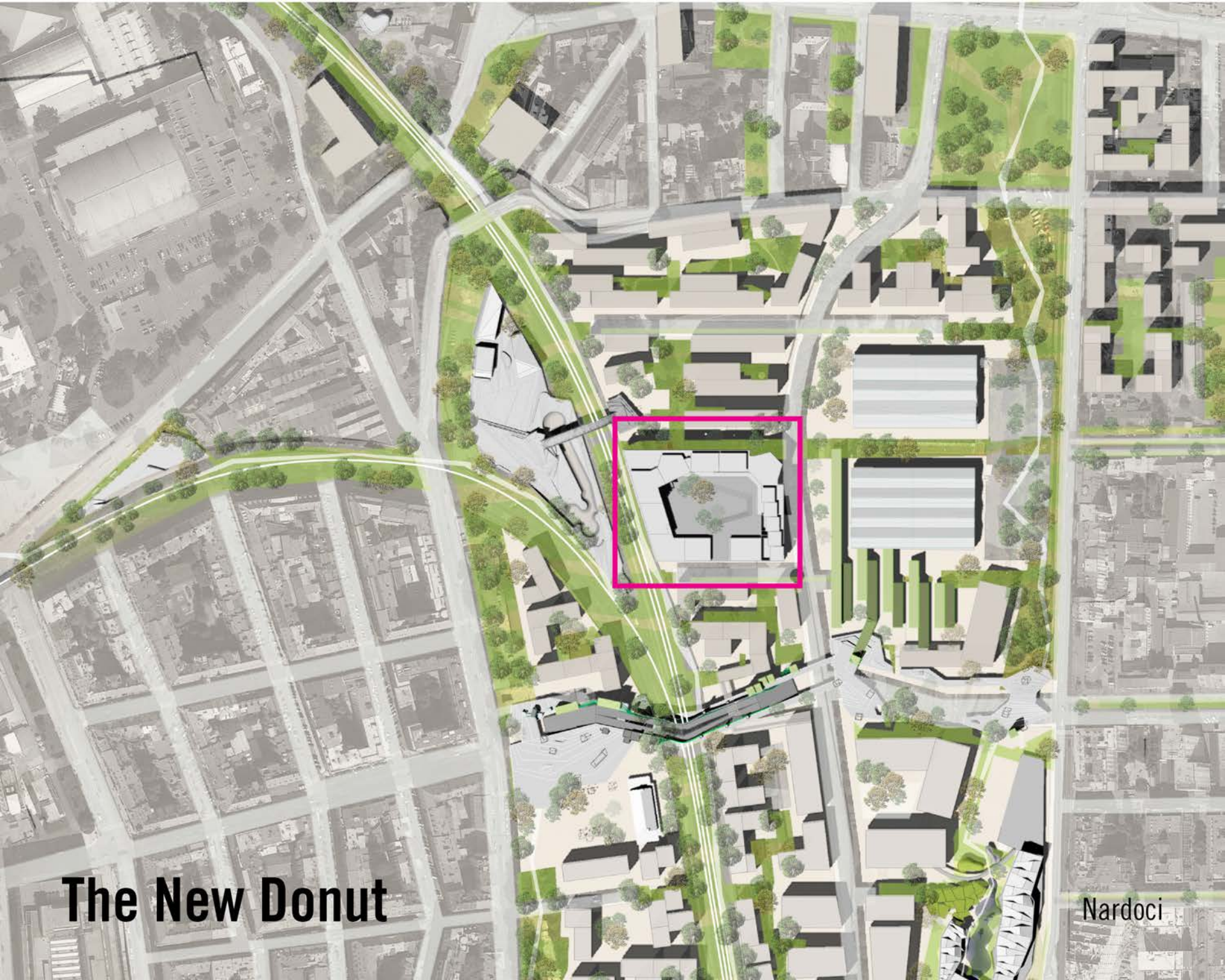
Market

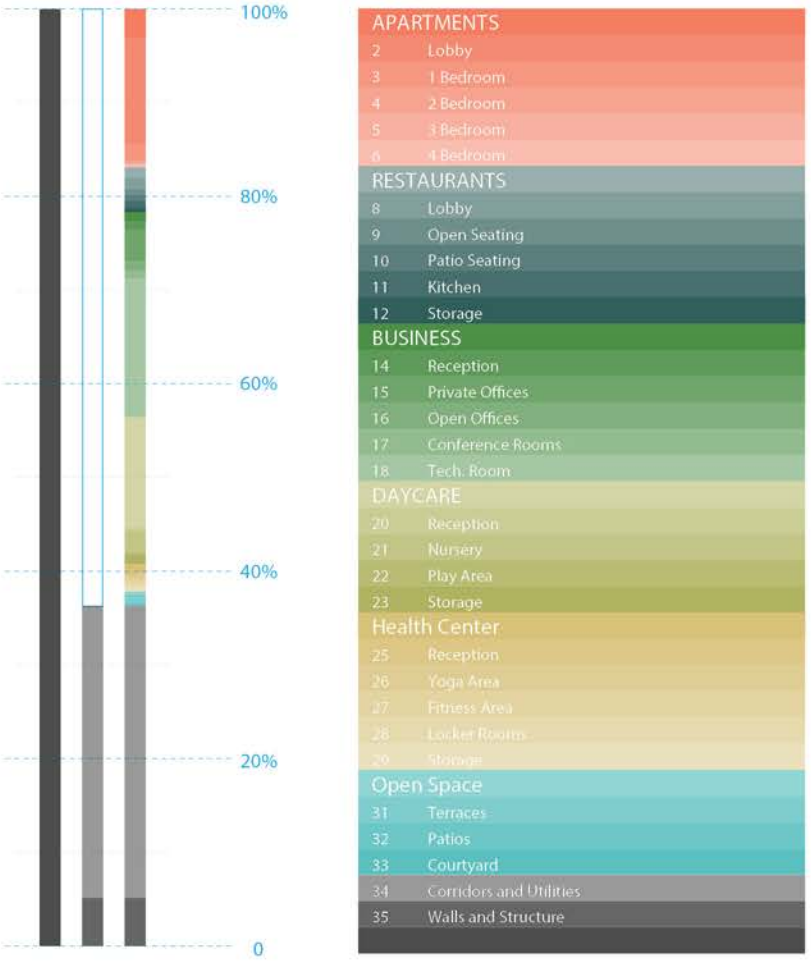
&

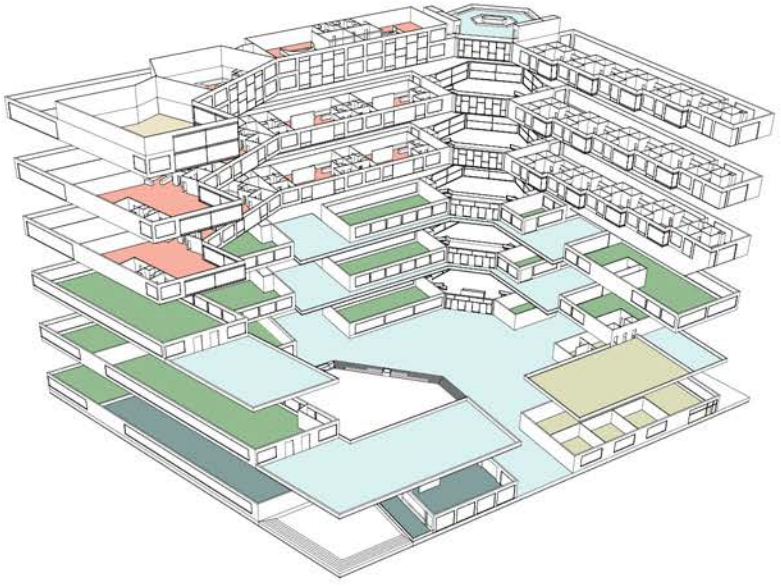
Restaurant

&

Brewery


The New Donut
Nardoci





The New Donut

Nardoci

Form Analysis

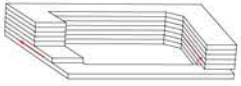
Building Progression

The project takes into account both sun, circulation, wind, and site use into account for the final form. Unlike the typical donut, this one lets in southern light into both the open amphitheater and park as well as the many residences and businesses that overlook the central space. A tiered system is then implementated to break up the block like form and provide green roof spaces above the urban life around the project.

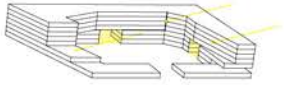
Typical Donut Form

Allow Southern Light + Views

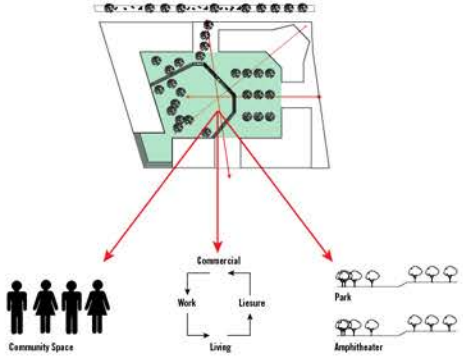
Create Green Roofs

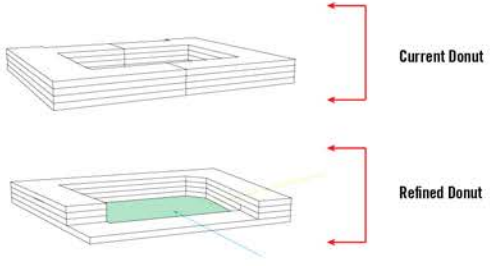


Adjust to let Wind + Light in



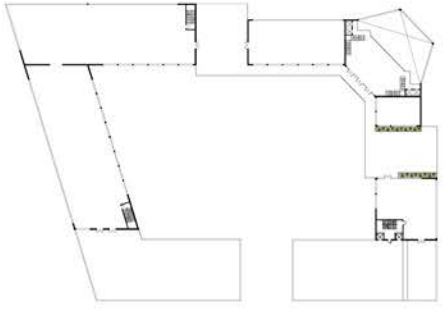
Building Gifts





The New Donut

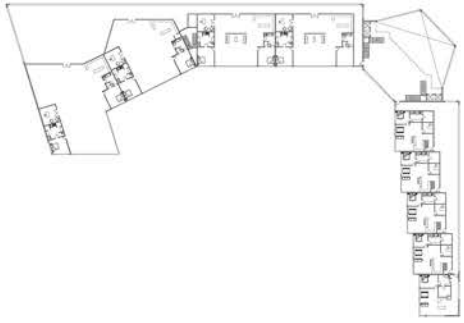
Nardoci



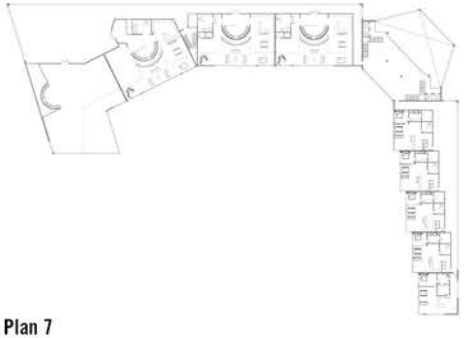
The New Donut

Nardoci

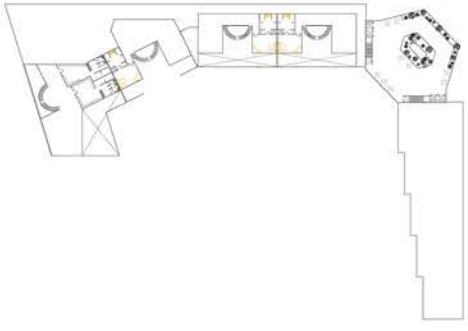
Floor Plans 4-5



Floor Plan 6



Floor Plan 7

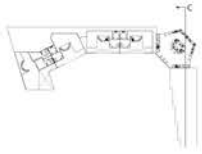


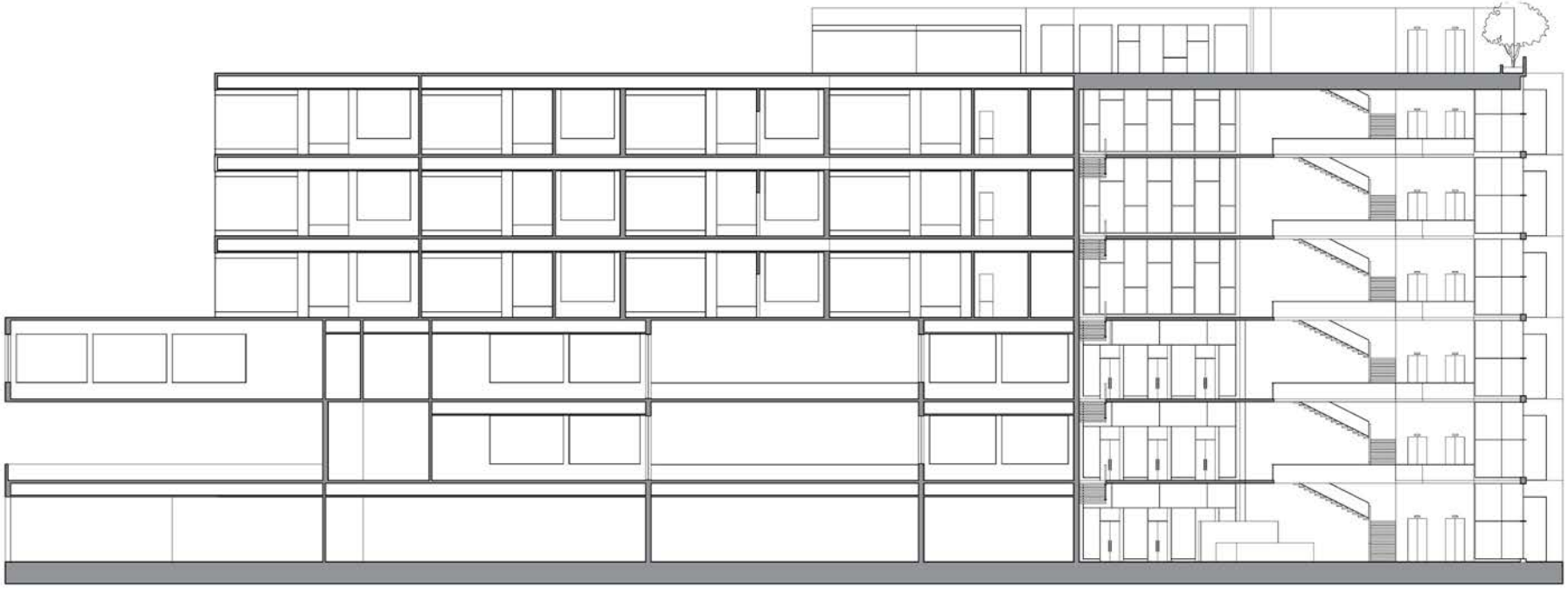
The New Donut

Nardoci

The New Donut

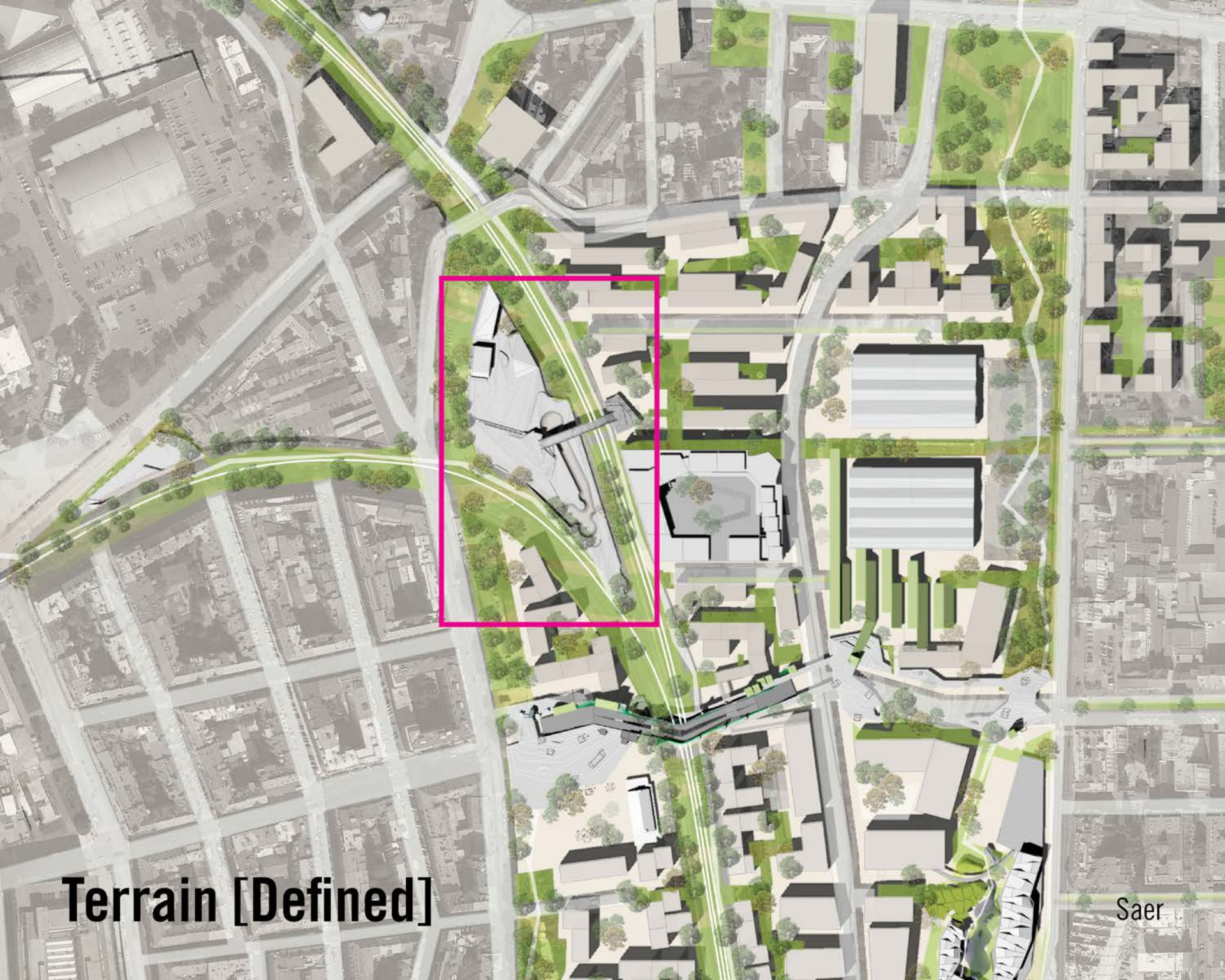
Nardoci





The New Donut

Nardoci


Terrain [Defined]
Saer

Skate Park

Terrain Defined

Saer

Skate Park

Terrain Defined

Saer

Terrain Defined

Saer

Site Plan

Terrain Defined

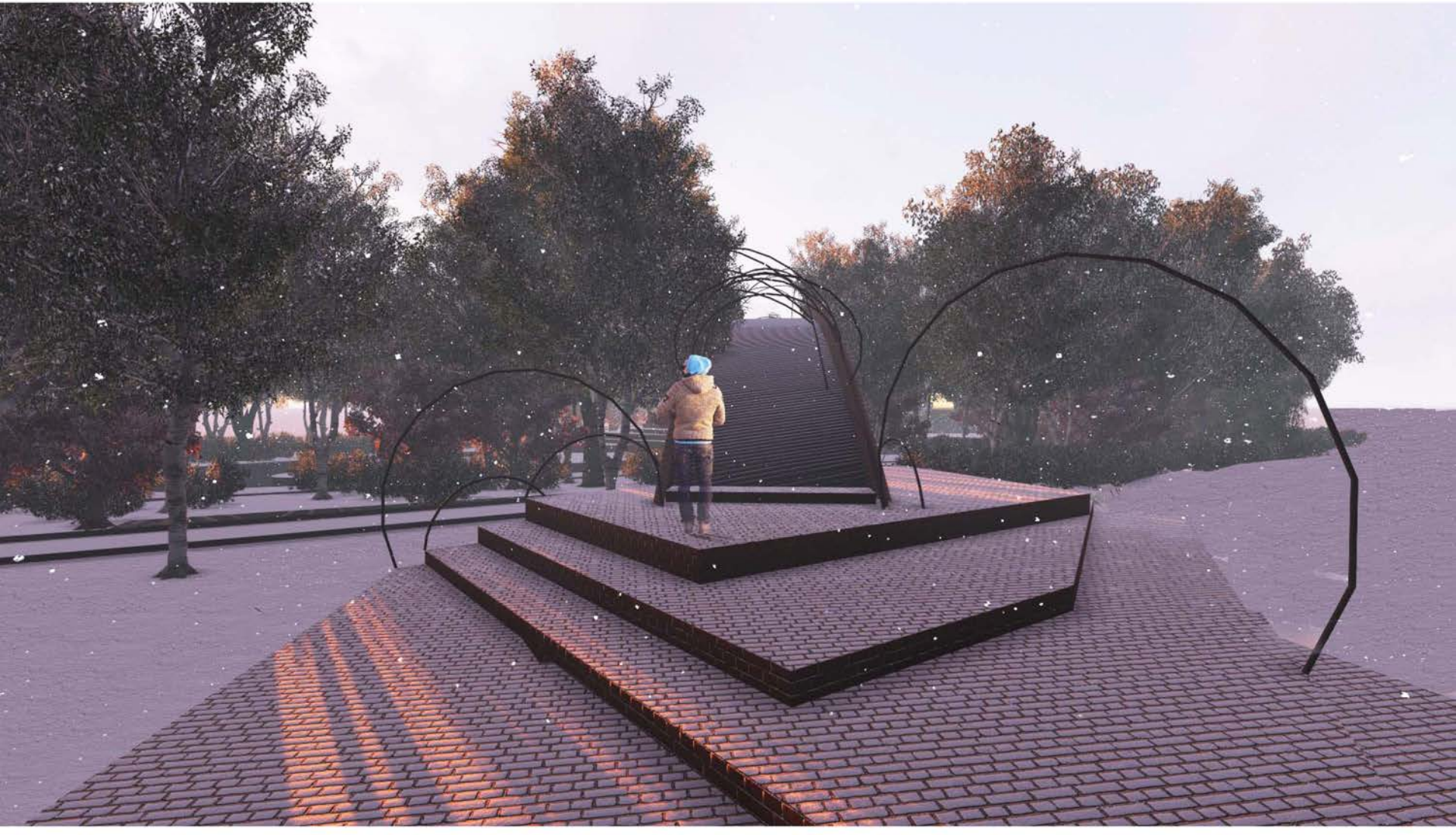
Saer

Plaza + Pedestrian Bridge

Terrain Defined

Saer

Pedestrian Bridge



Terrain Defined

Saer

Industrial [PARK]

Schmahl

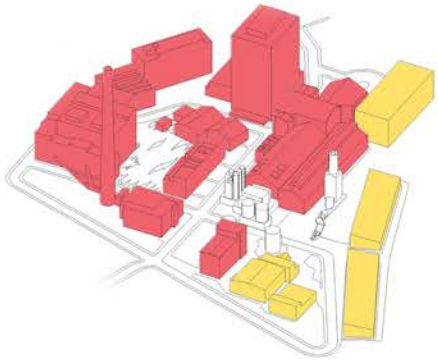
Industrial [PARK]

Erik Schmahl

Master Plan

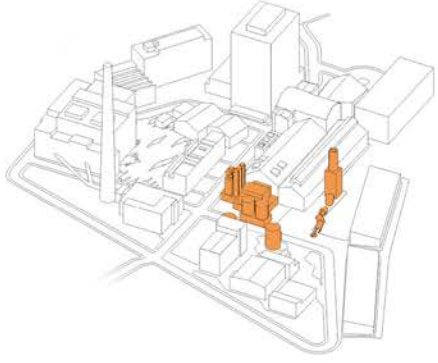
Industrial [PARK]

Erik Schmahl



OLD + NEW STRUCTURES

existing urban fabric is re-utilized while new structures are added to increase the density of the industrial complex.

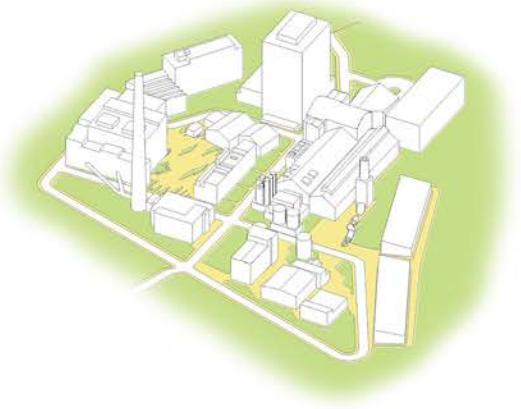


POST-INDUSTRIAL FOLLIES

existing features of indusrty such as smokestacks and silos are deconstructed but left on site to remind visitors of the site's history.

LANDSCAPE + HARDSCAPE

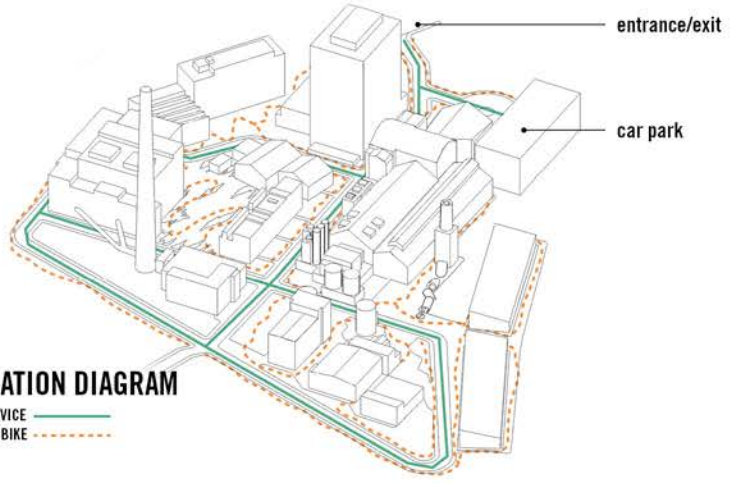
the surrounding landscape is connected to the interior green spaces via walkways and plazas, creating a large industrial park punctuated by built structures.



Industrial [PARK]

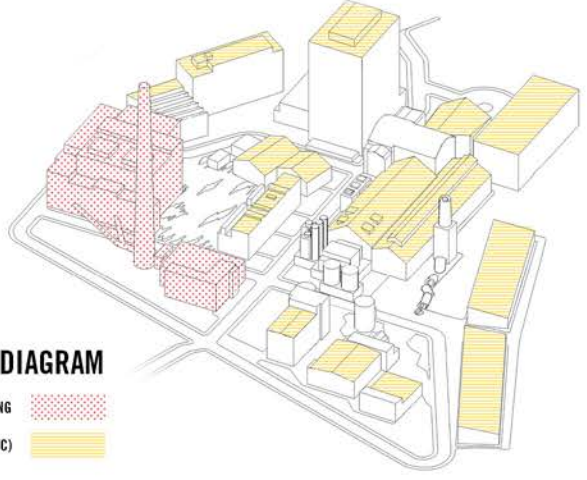
Erik Schmahl

Conceptual Garden Installation



CIRCULATION DIAGRAM

VEHICLE + SERVICE
PEDESTRIAN + BIKE



ENERGY DIAGRAM

DISTRICT HEATING
SOLAR CELLS (PVC)

Industrial [PARK]

Erik Schmahl

Industrial [PARK]

Erik Schmahl

Industrial [PARK]

Erik Schmahl

Industrial [PARK]

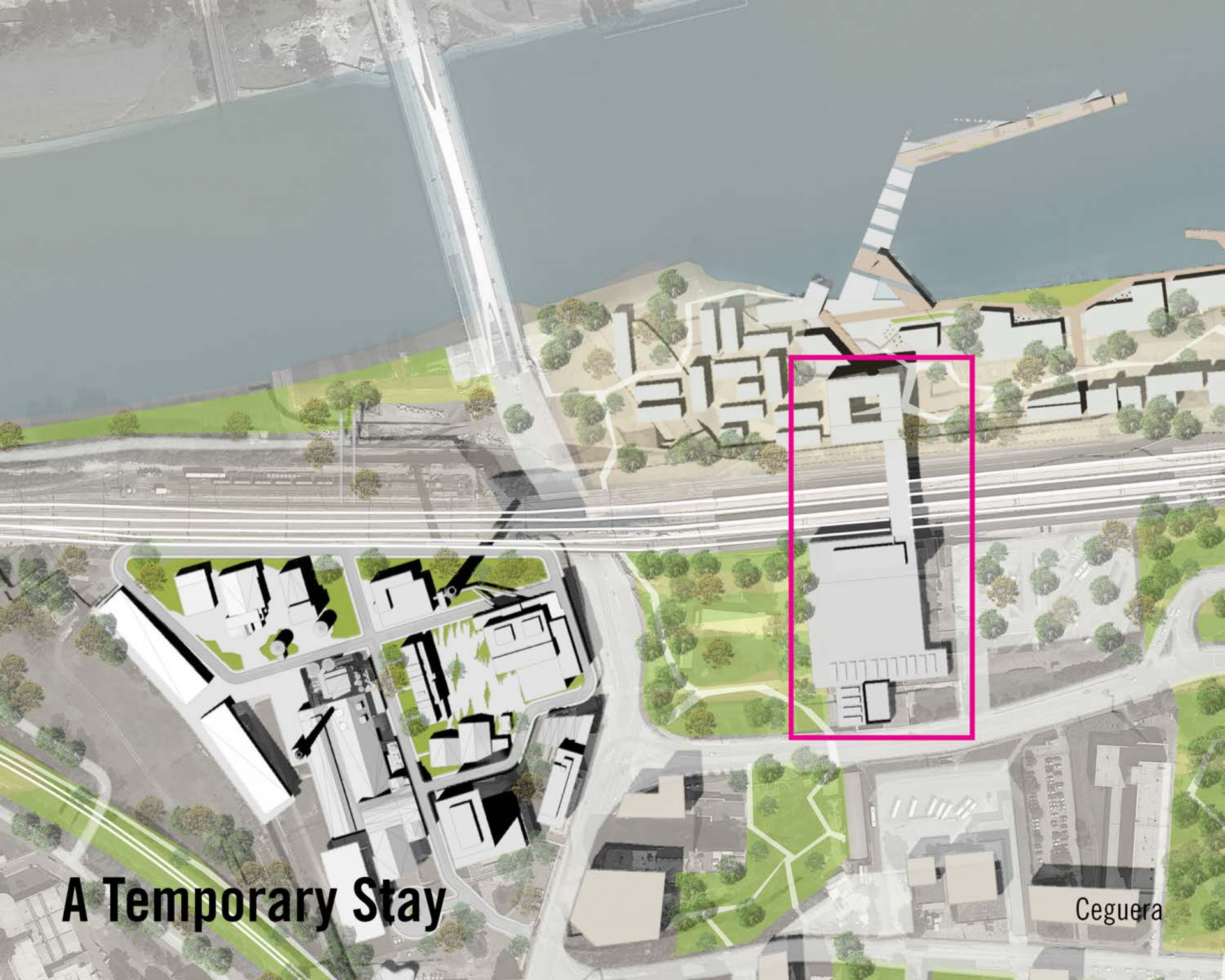
Erik Schmahl

Industrial [PARK]

Erik Schmahl

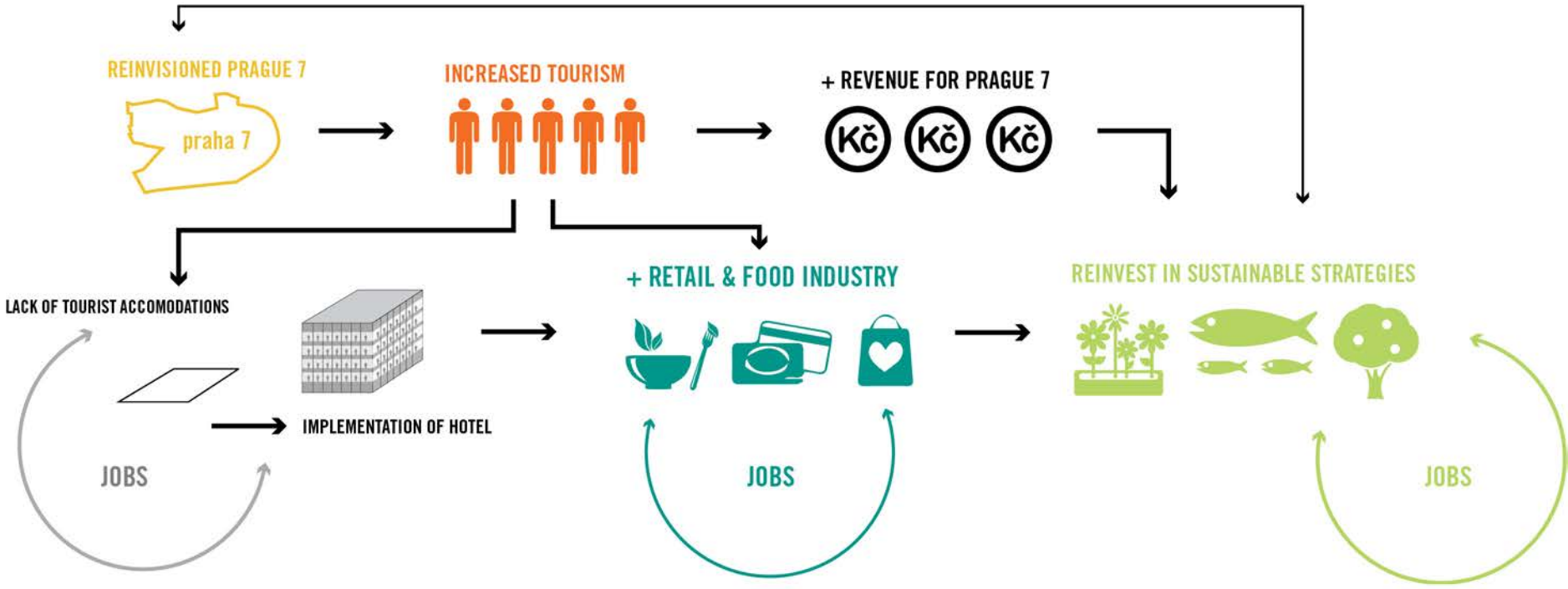
Industrial [PARK]

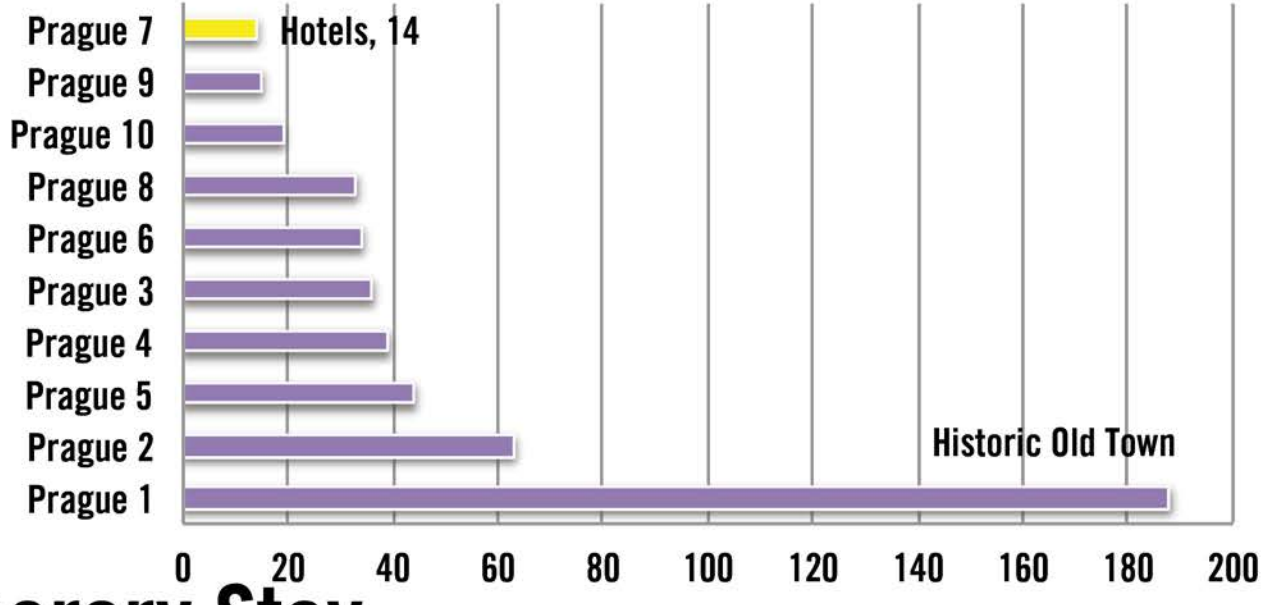
Erik Schmahl


A Temporary Stay
Ceguera

A Temporary Stay

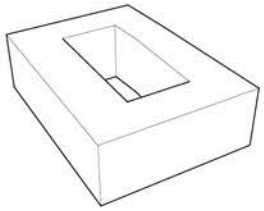
Ceguera



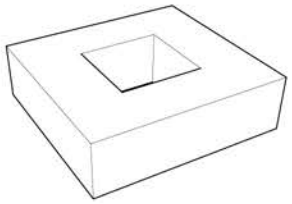


A Temporary Stay

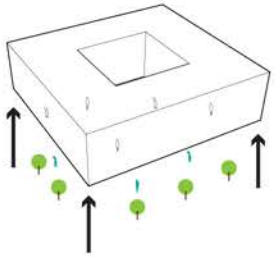
Ceguera



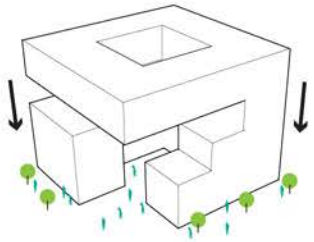
COURTYARD / DONUT TYPOLOGY



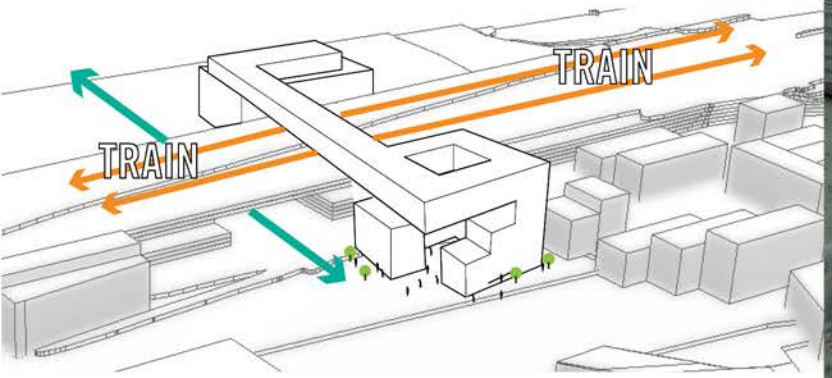
SIMPLIFICATION OF TYPOLOGY



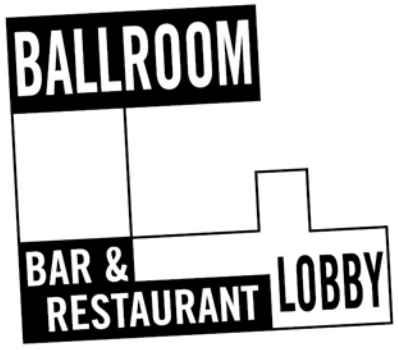
ELEVATE MASS TO CREATE PUBLIC SPACE



PROGRAM REDISTRIBUTION



A Temporary Stay



level **1**

levels **2 & 3**

level **4**

level **5**

level **6**

level **7**

A Temporary Stay

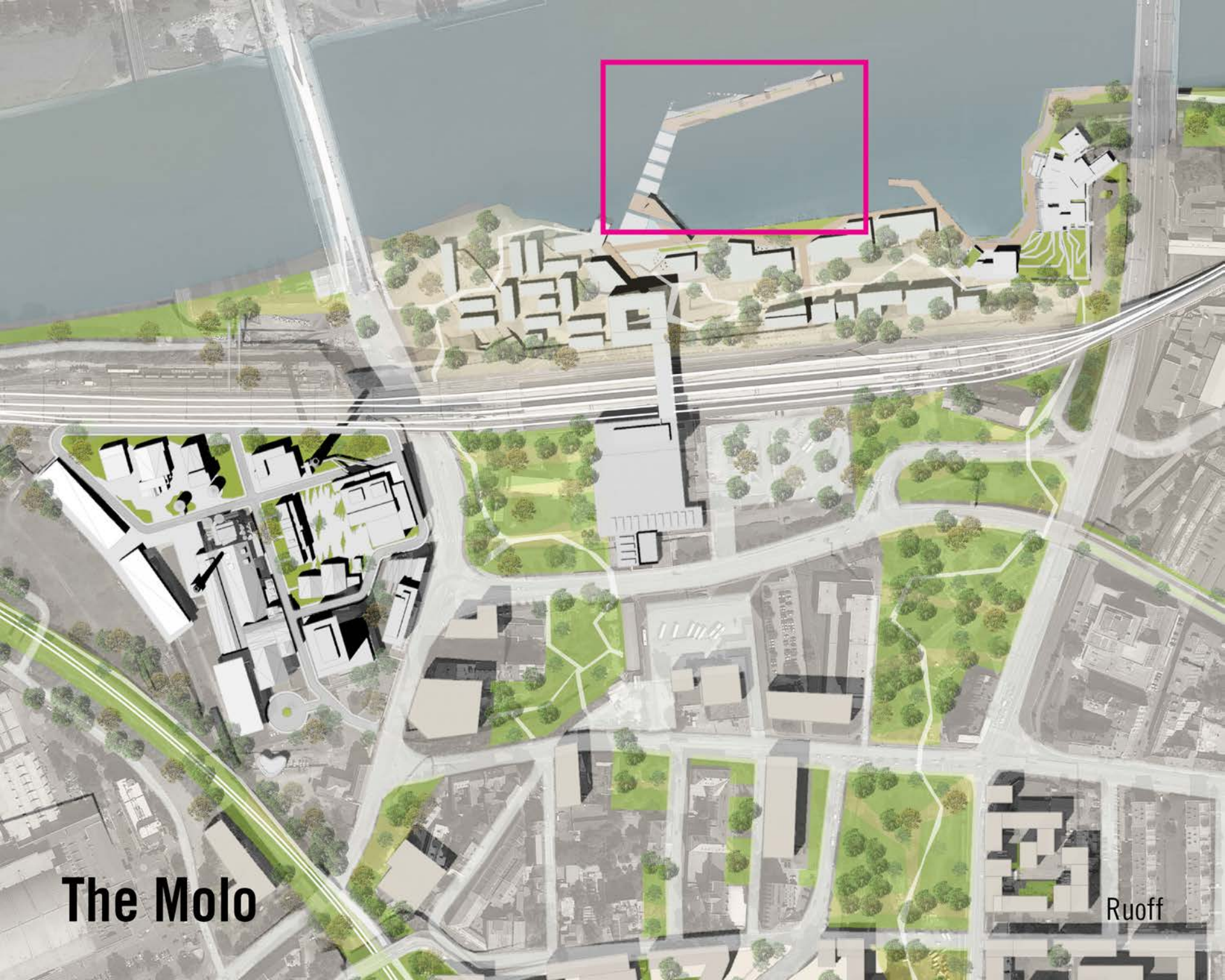
Ceguera

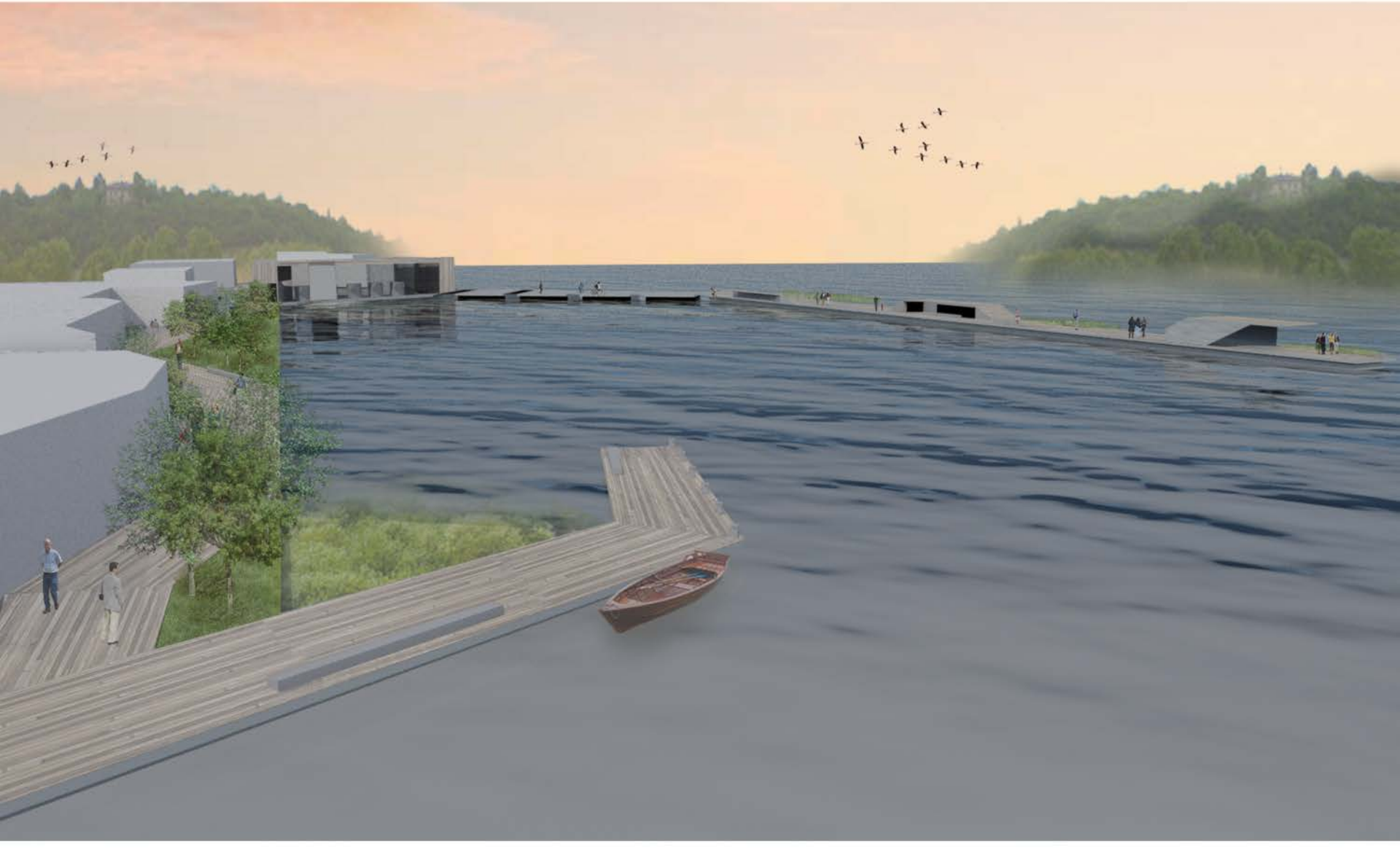
Section Perspective

A Temporary Stay

Ceguera


Text


The Molo
Ruoff

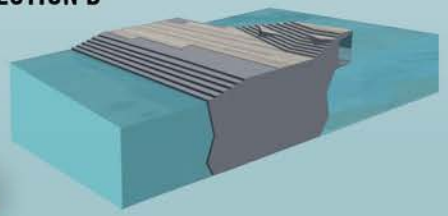


The Molo

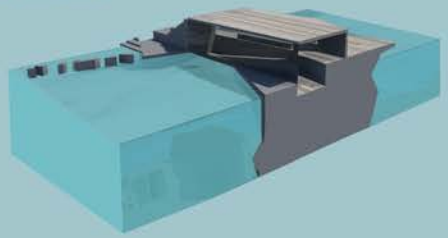
Will Ruoff

SECTION A

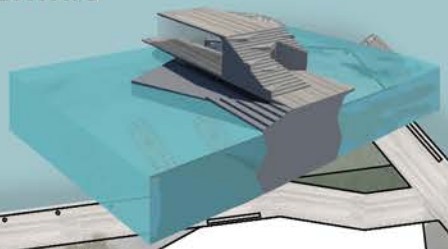
SECTION B

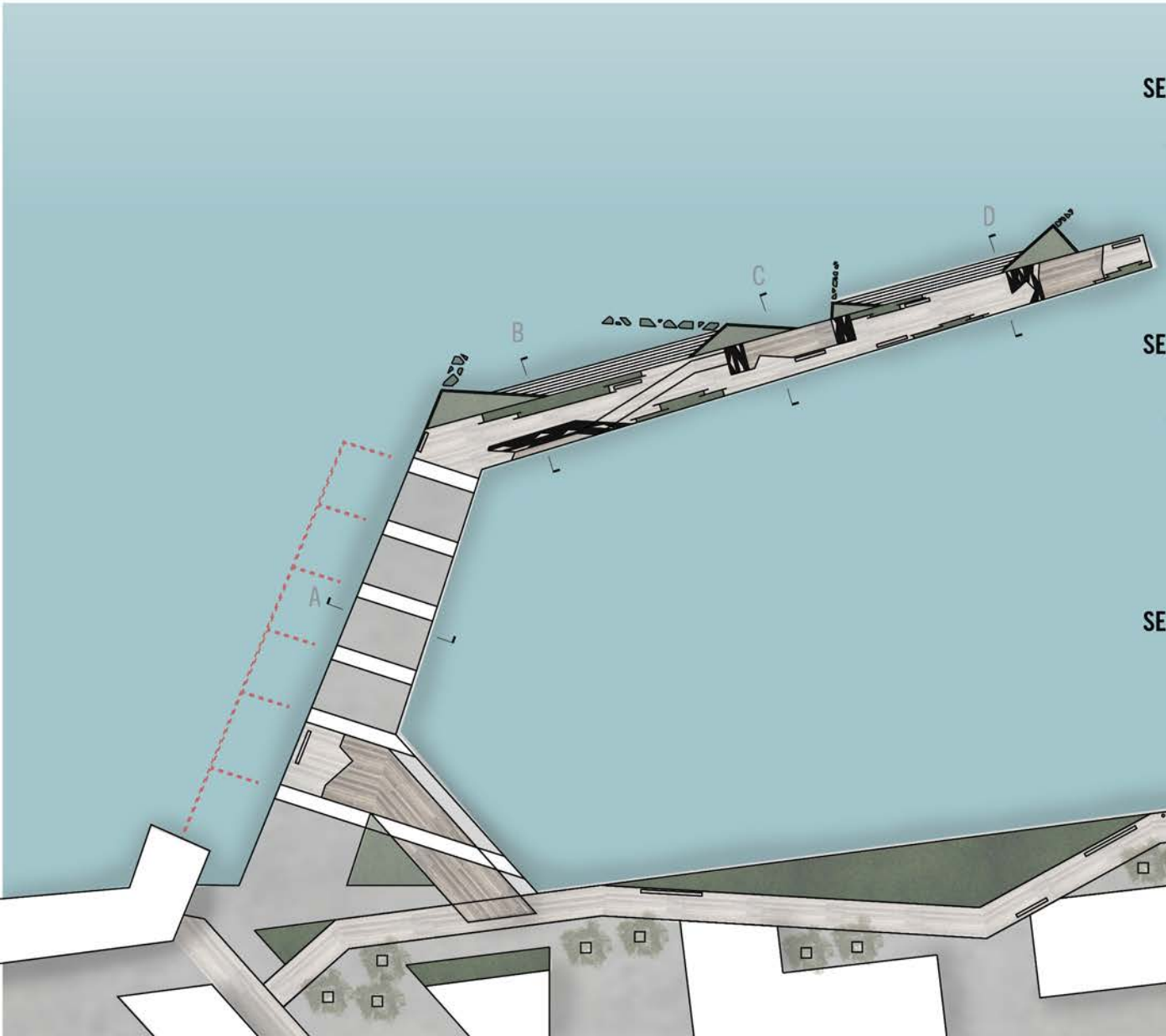


SECTION C



SECTION D

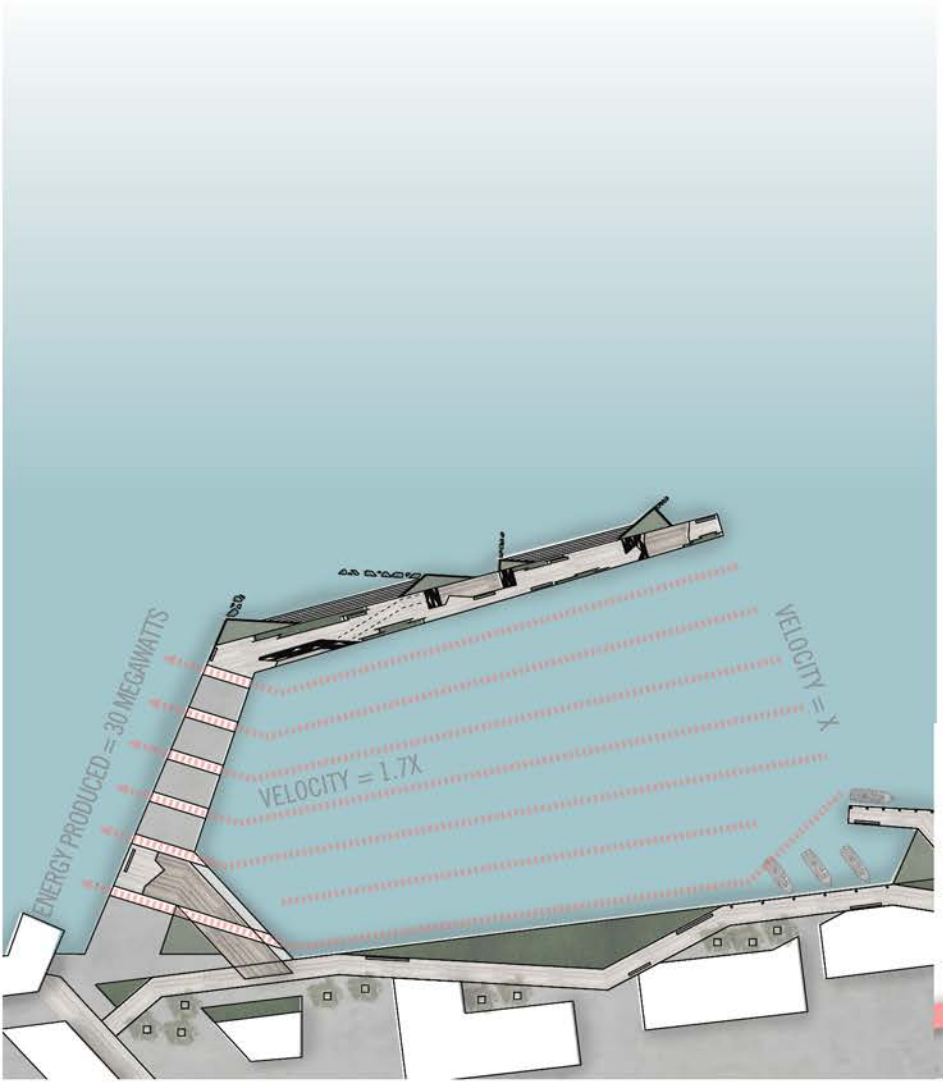


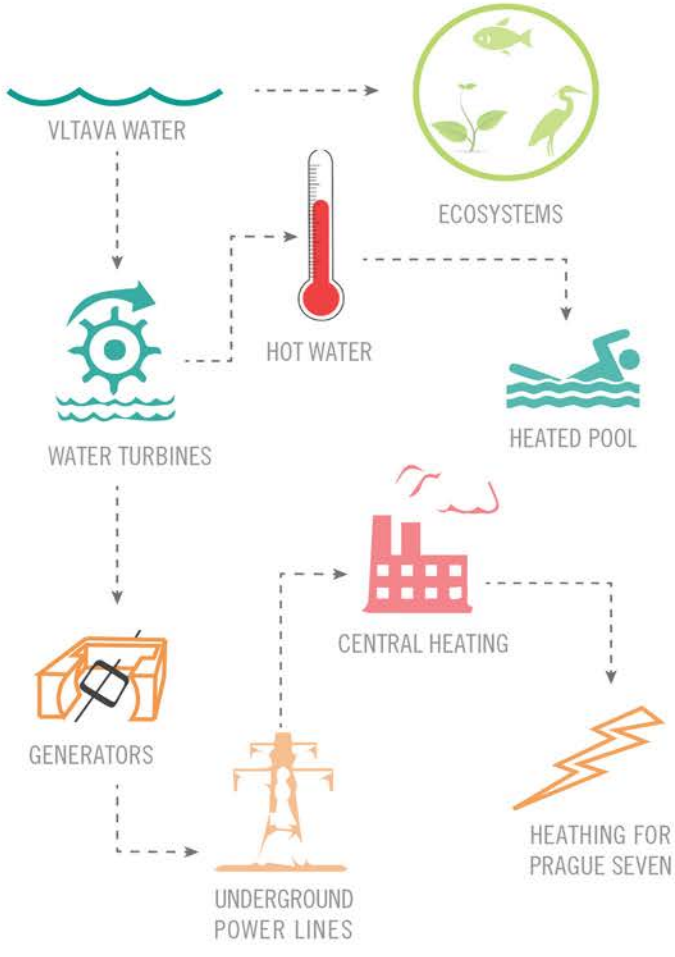


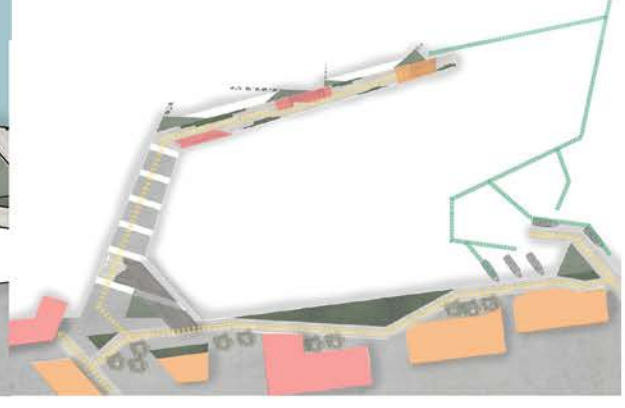
The Molo

Will Ruoff

The Molo ENERGY PRODUCTION







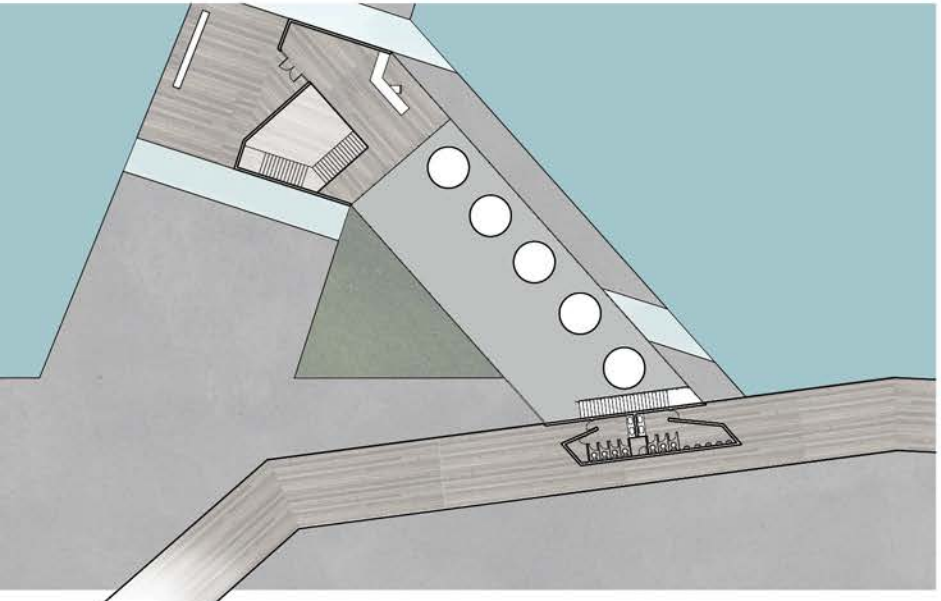
BOAT TRAFFIC

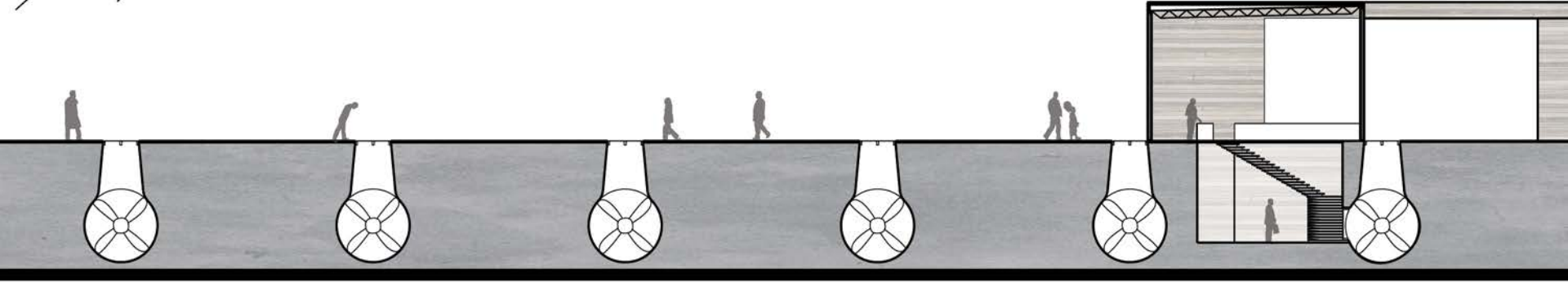
PEDESTRIAN

INDUSTRIAL

COMMERCIAL

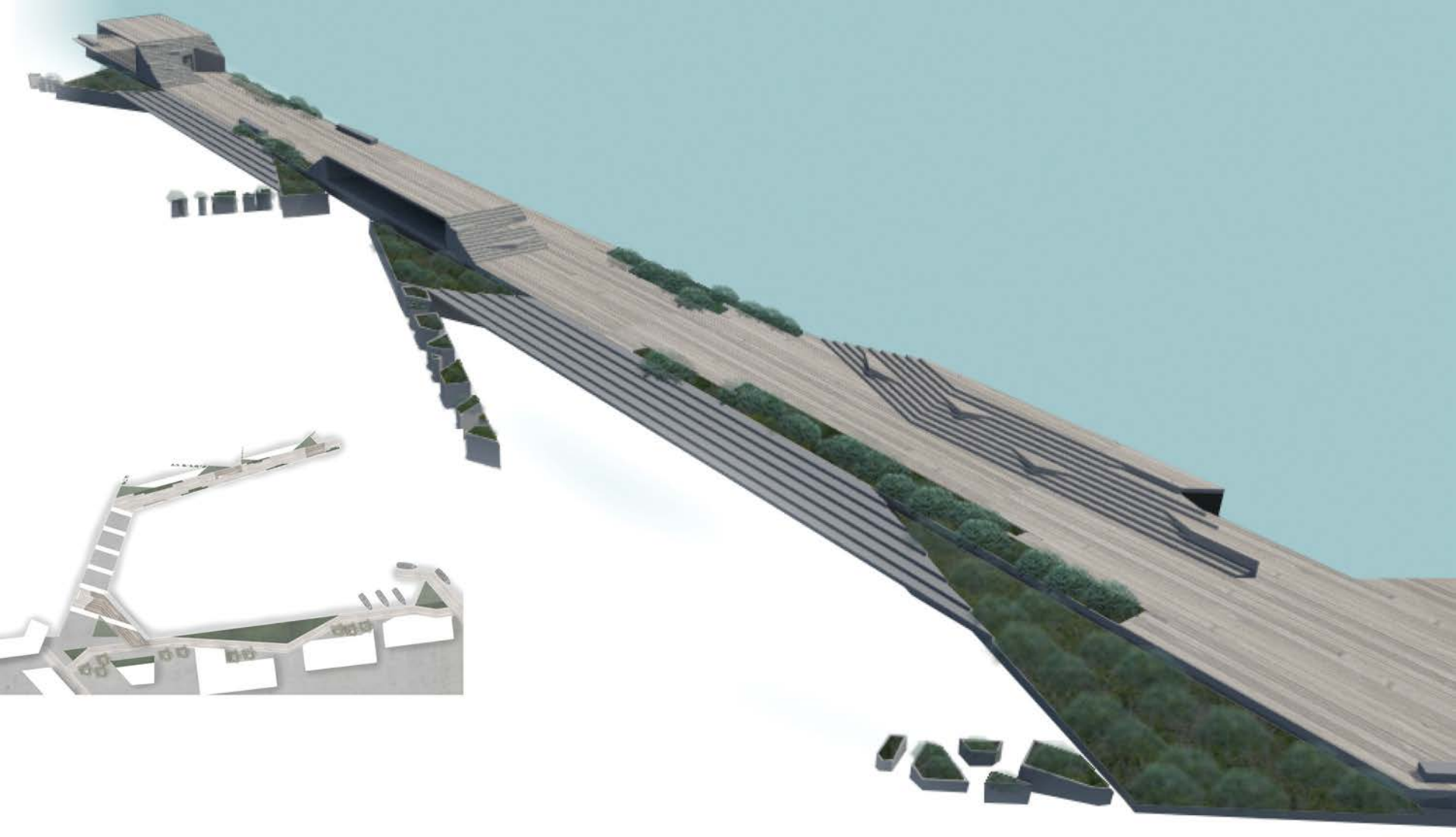
PUBLIC





The Molo

Will Ruoff

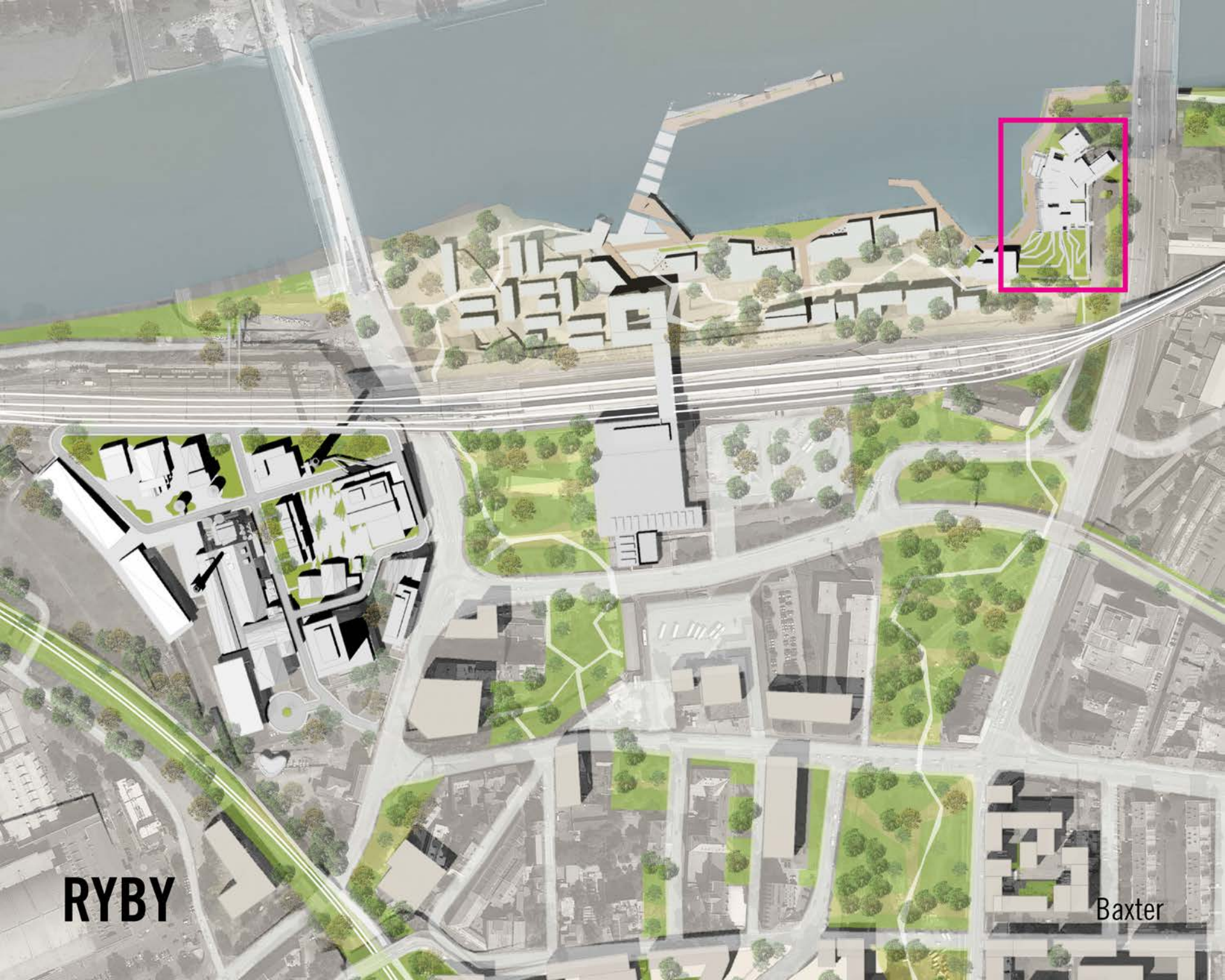


The Molo

Will Ruoff

The Molo

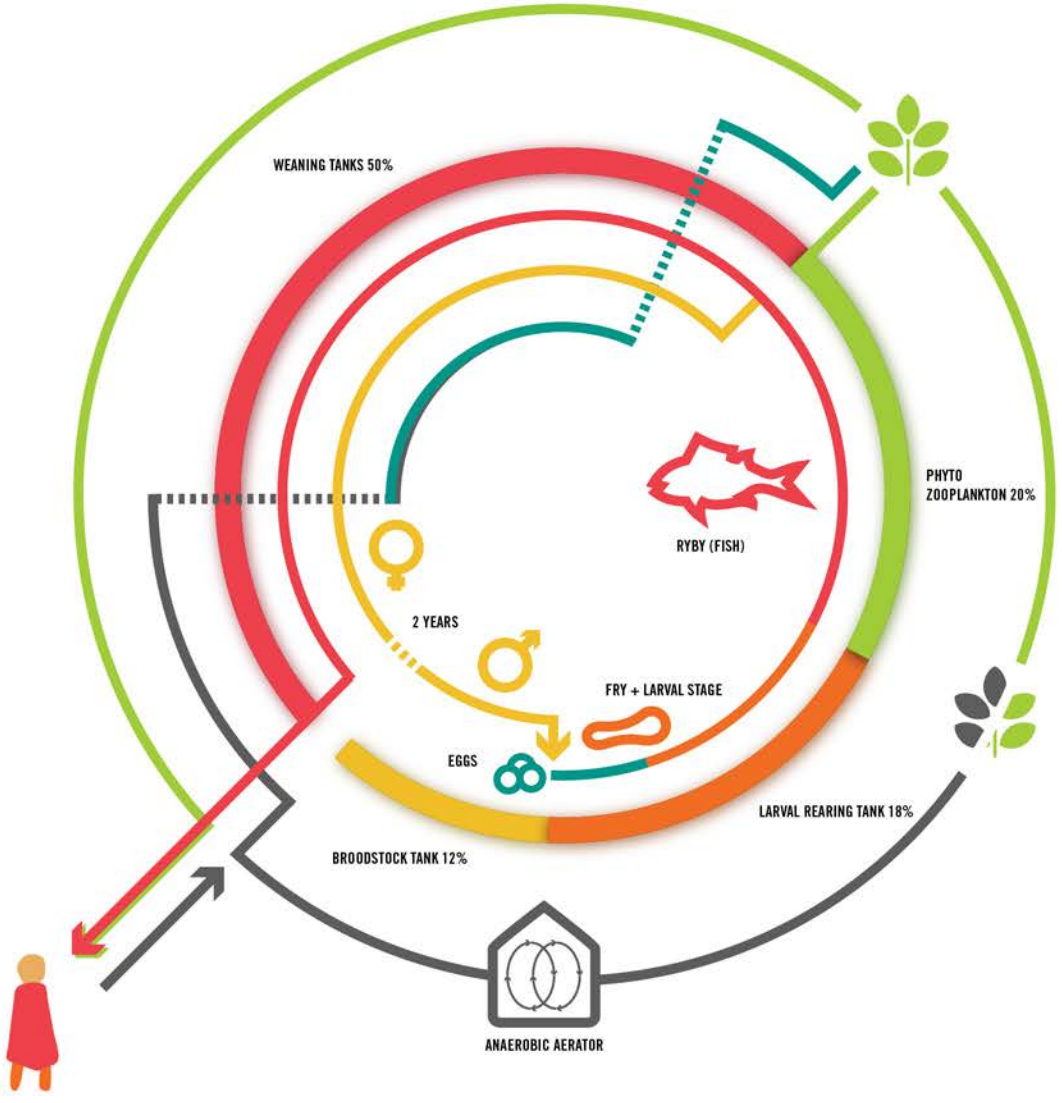
Will Ruoff


RYBY
Baxter

RYBY

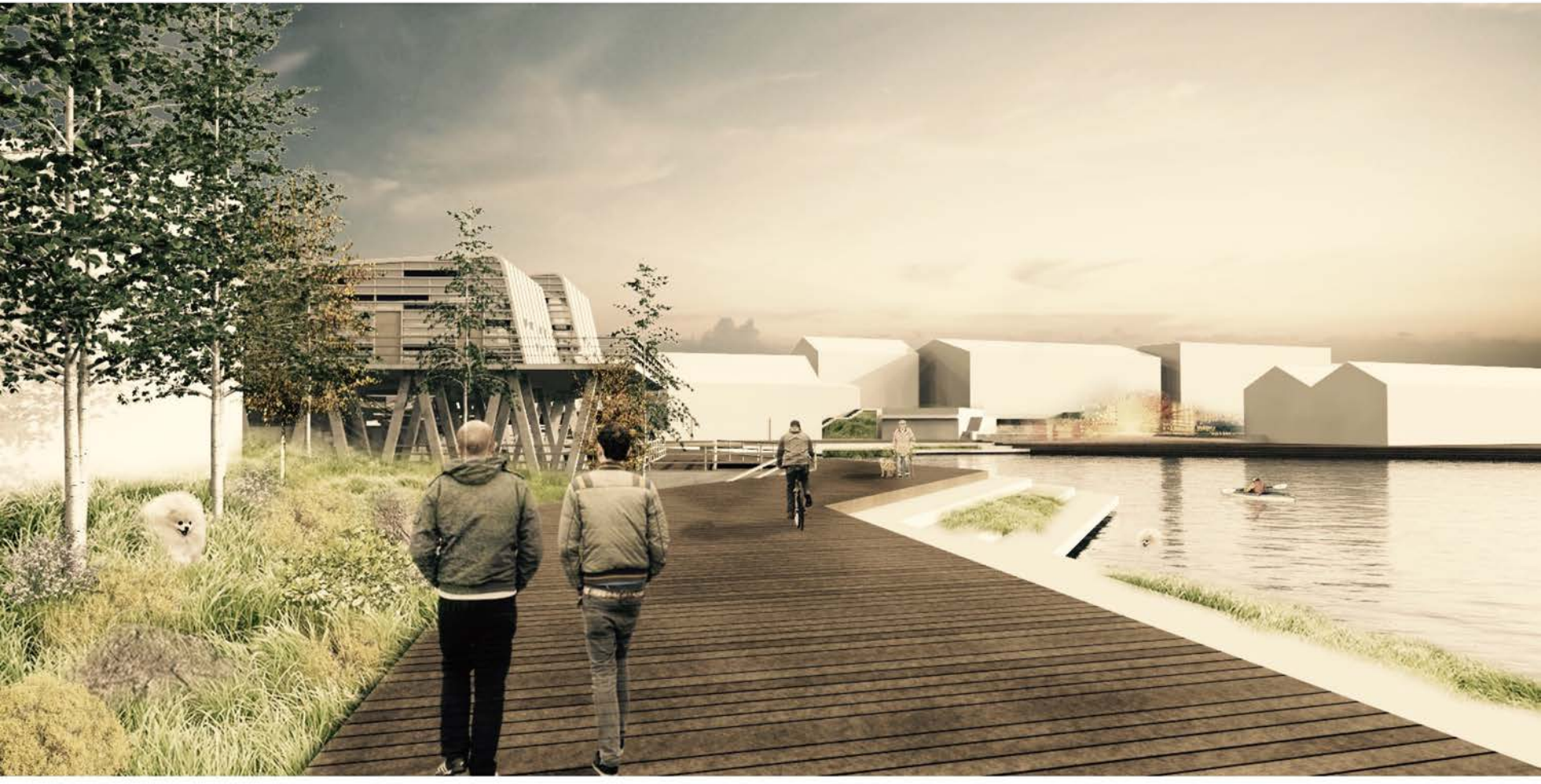
Ryan Baxter


ARGENTINSKÁ
1
2
3
4
5
POD DRÁHOU
A
RYBY
Ryan Baxter



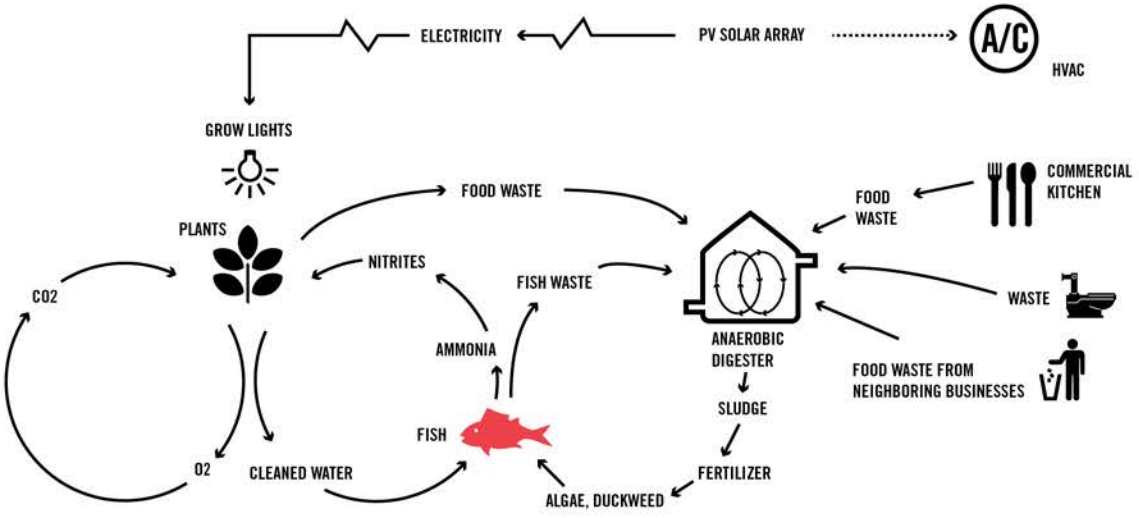
RYBY

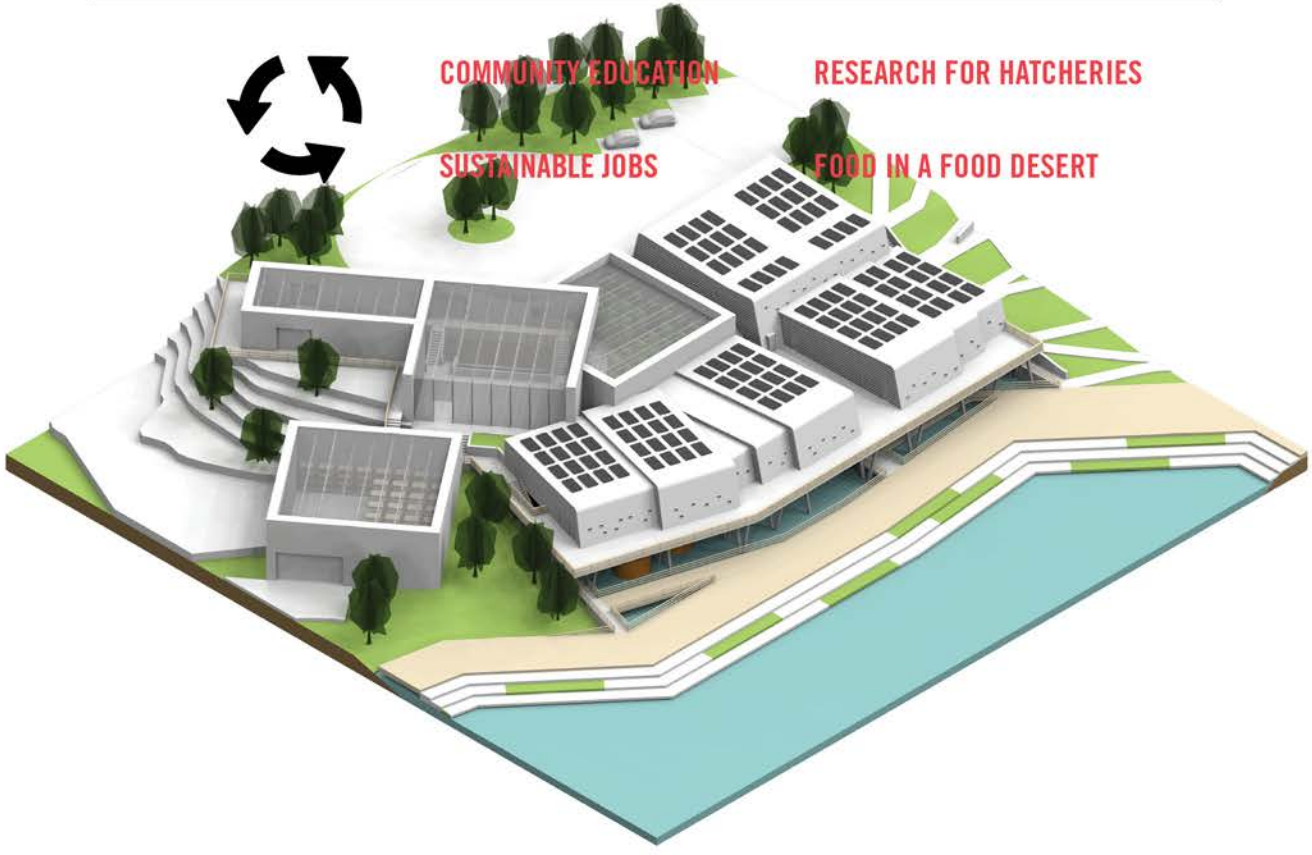
Ryan Baxter



RYBY

Ryan Baxter





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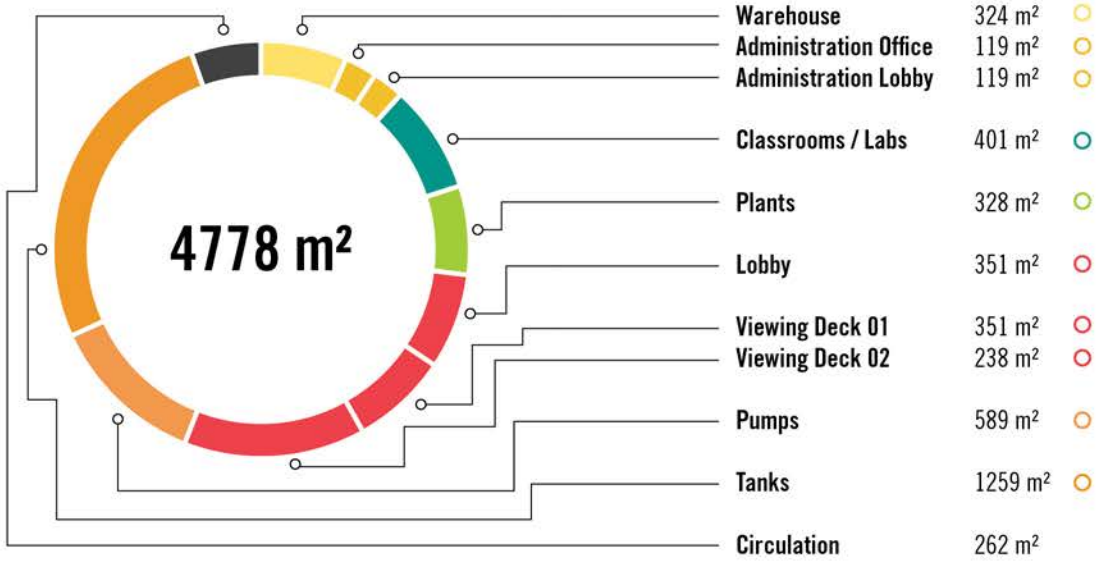

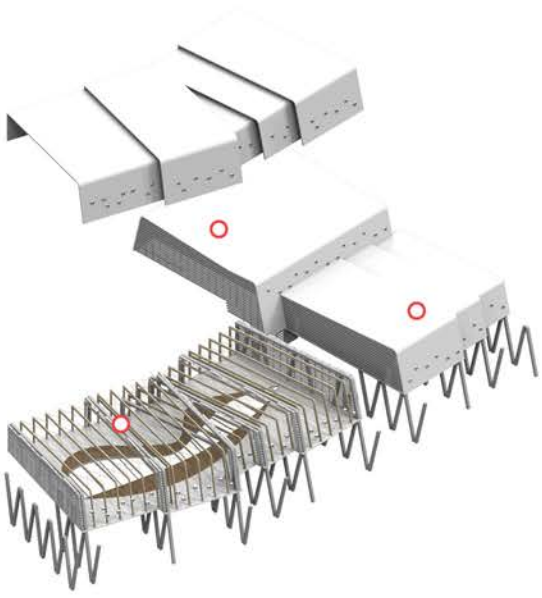

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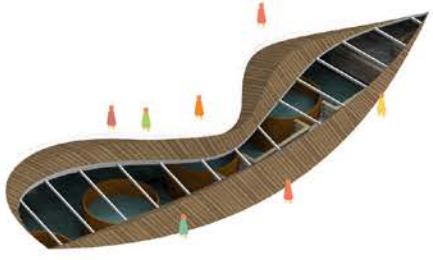
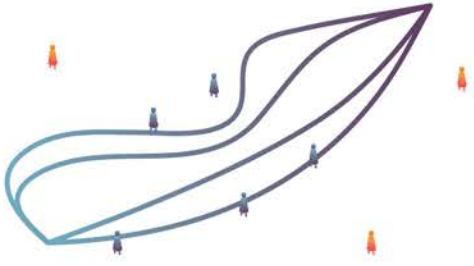


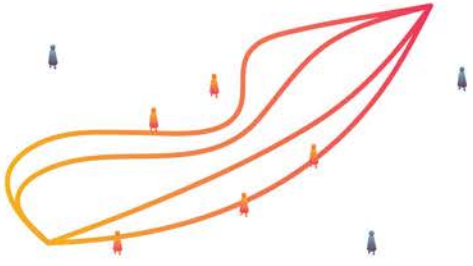
berm provides seating for watching the fish swim below

SUMMER



river water is pumped through, naturally cooling the space

WINTER



heated water from the pv's is pumped through, heating the space

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