

MARIA FERNANDA LUSSICH GARESE

ARCH 593 : MASTERS PROJECT : SPRING 2011

A 20239423 ; PROFESSOR MARTIN FELSEN

**FoodLab**

A REVITALIZATION STRATEGY FOR THE PARI YARD  
SAO PAULO - BRAZIL

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LIKE MANY CITIES, POST-INDUSTRIALIZATION HAD GENERATED LARGE NUMBER OF BLIGHTED AND UNDERUTILIZED AREAS WITHIN CITY OF SÃO PAULO. PARTICULARLY ALONG THE CENTRAL AREAS, THESE RESIDUAL SPACES ARE WASTELANDS DISARTICULATED FROM THE URBAN FABRIC CREATING BARRIERS WHICH PREVENT AN INTEGRATED AND MORE HARMONIOUS CITY DEVELOPMENT. IN ADDITION, THE CITY'S LACK OF GREEN AREAS AND ITS ISSUES INVOLVING WATER INFRASTRUCTURE - URBAN DRAINAGE, AND FLOODS - LEAD THE CITY INTO CHAOS DURING THE WET SEASON.

THIS PROJECT AIMS TO DEVELOP A NEW DESIGN STRATEGY TO REDEVELOP THE PARI YARDS AND RECLAIM THE ADJACENT TAMANDUATEI RIVER BY TURNING IT INTO AN OPERATIVE LANDSCAPE. A HOLISTIC SYSTEM TO HARVEST, CLEAN AND REUSE THE ABUNDANT SUMMER RAINFALL WAS CREATED IN ORDER TO ENABLE A HIGHLY SUSTAINABLE URBAN REDEVELOPMENT.

# SAO PAULO VS. CHICAGO

CITY AREA

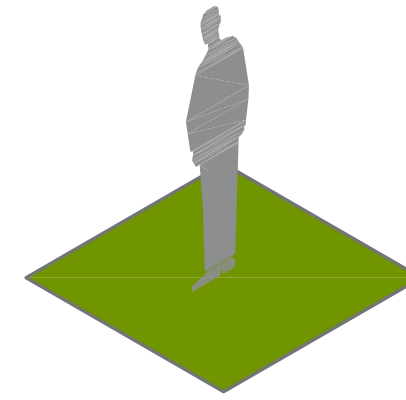
SP DIAGRAM



AERIAL VIEW

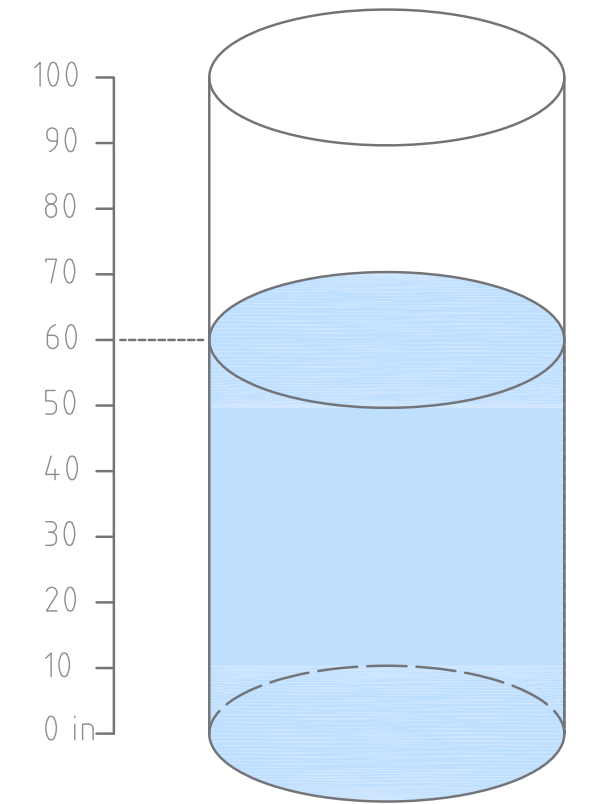


PERMEABLE AREA

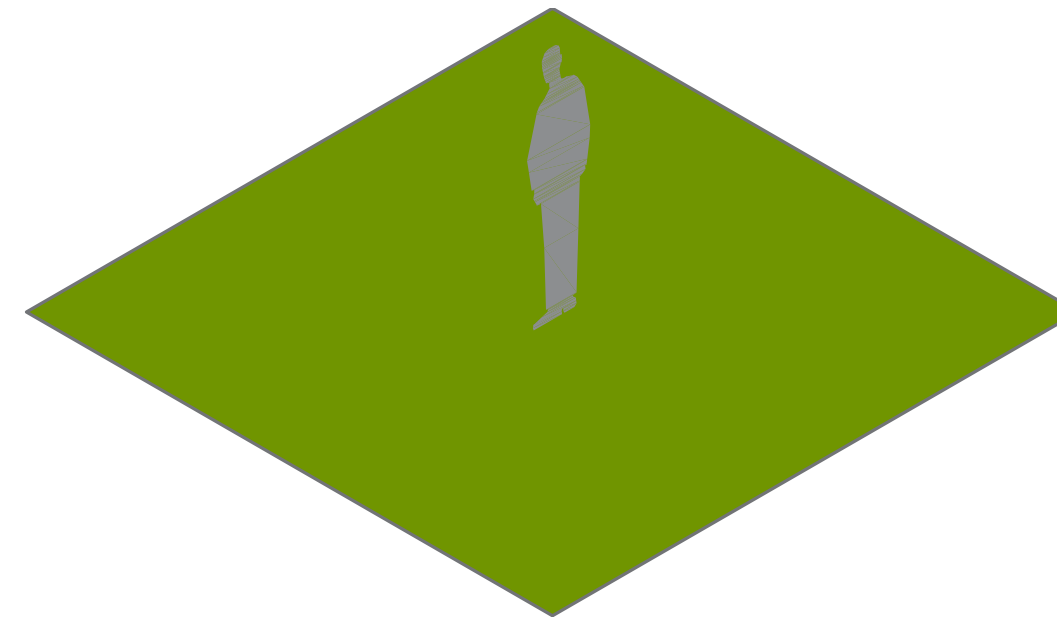
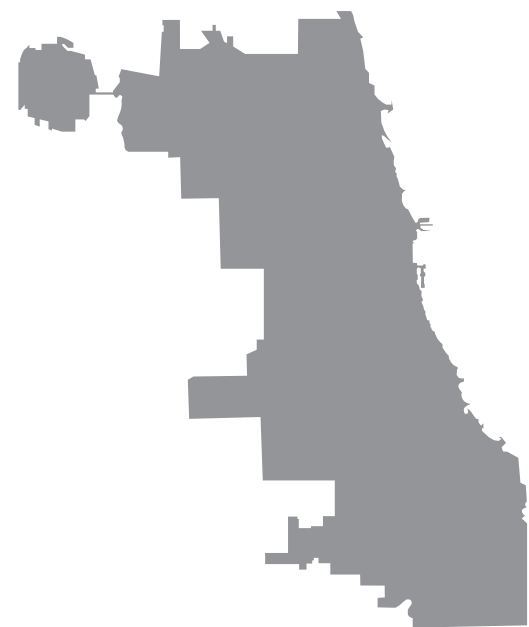


0.9 ACRES/1000 INHAB

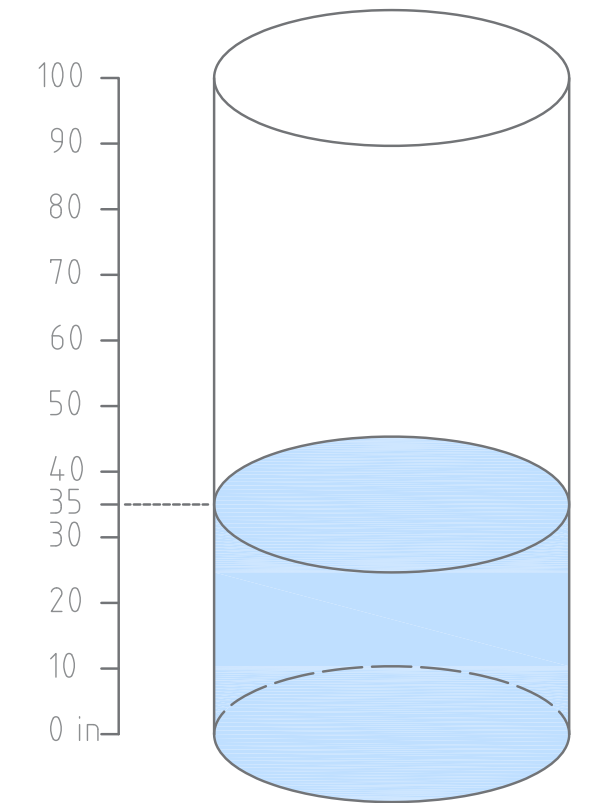
RAIN WATER FALL



CHICAGO DIAGRAM



4.2 ACRES/1000 INHAB



BRAZIL'S TERRITORY

STATE OF SÃO PAULO

SÃO PAULO'S  
METROPOLITAN AREA

CITY OF SÃO PAULO

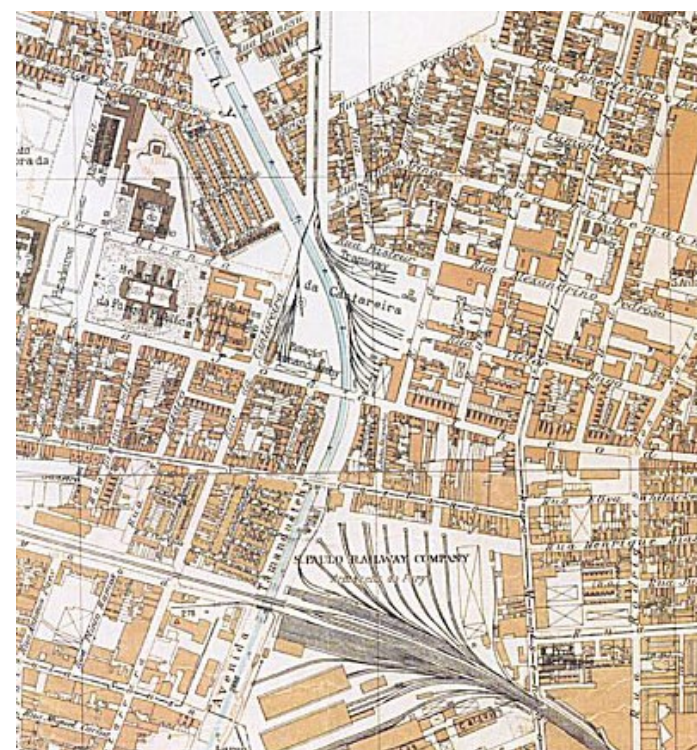


DEINDUSTRIALIZATION GENERATED THE EMPTINESS OF ENTIRE URBAN AREAS. THE METROPOLITAN TERRITORY BECAME, SUDDENLY, DEPOSITORY OF ENORMOUS TRANSFORMATIONS AND URBAN ABANDONMENT AND WASTELANDS HAD BECOME PARTICULARLY EVIDENT ON THE CONTEMPORARY URBAN FABRIC: UNDERUTILIZED INDUSTRIAL ZONES, NON-USED INDUSTRIAL WAREHOUSES AND DEPOSITS, ABANDONED BUILDINGS ON THE INNER CITY AND DEACTIVATED RAIL YARDS [WASTELANDS, BROWNFIELDS AND TERRAIN VAGUE\*].

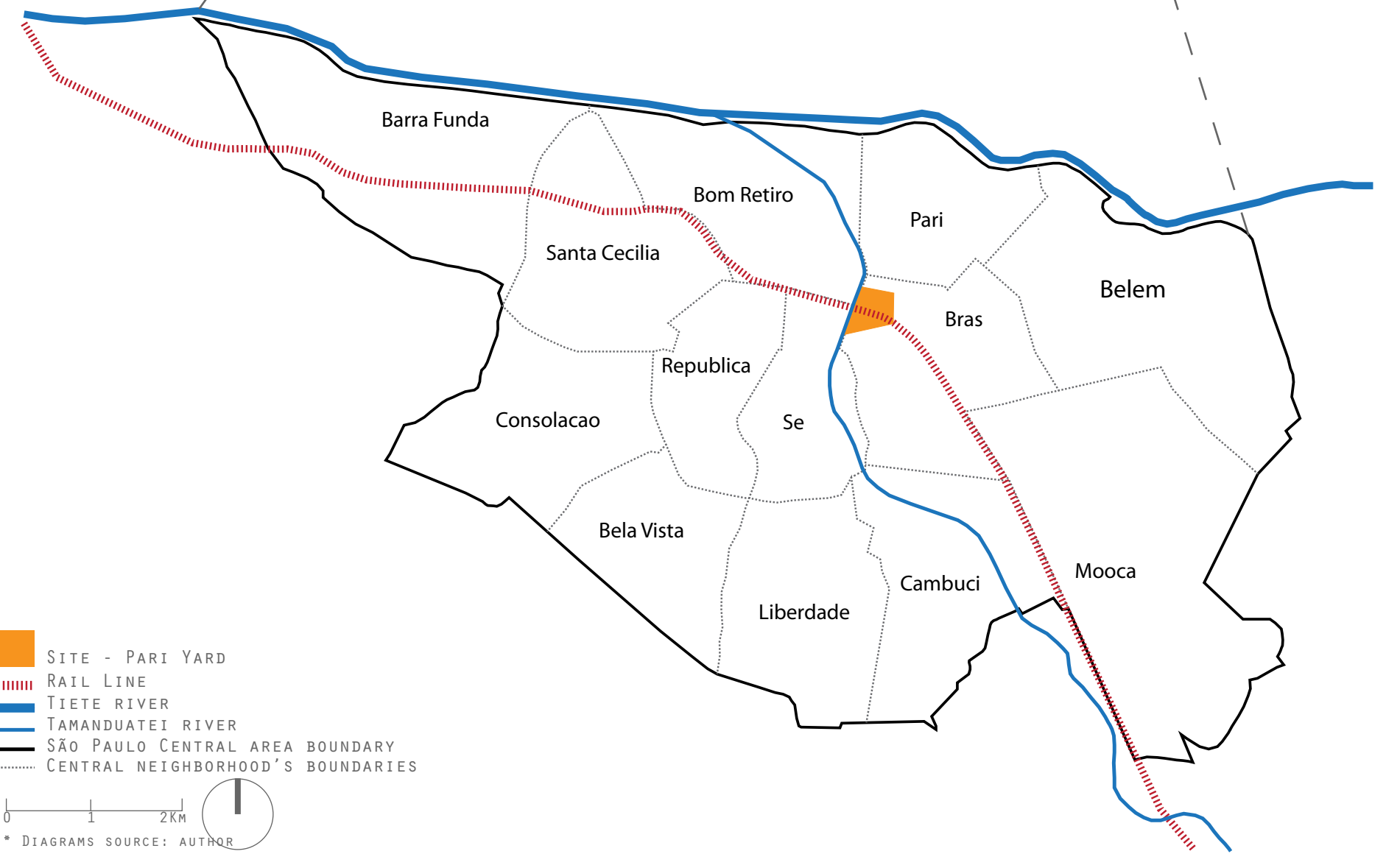
\* ESSAY "TERRAIN VAGUE" - IGNASI DE SOLA-MORALES



PARI YARD IN THE 1950'.



MAP FROM 1930.

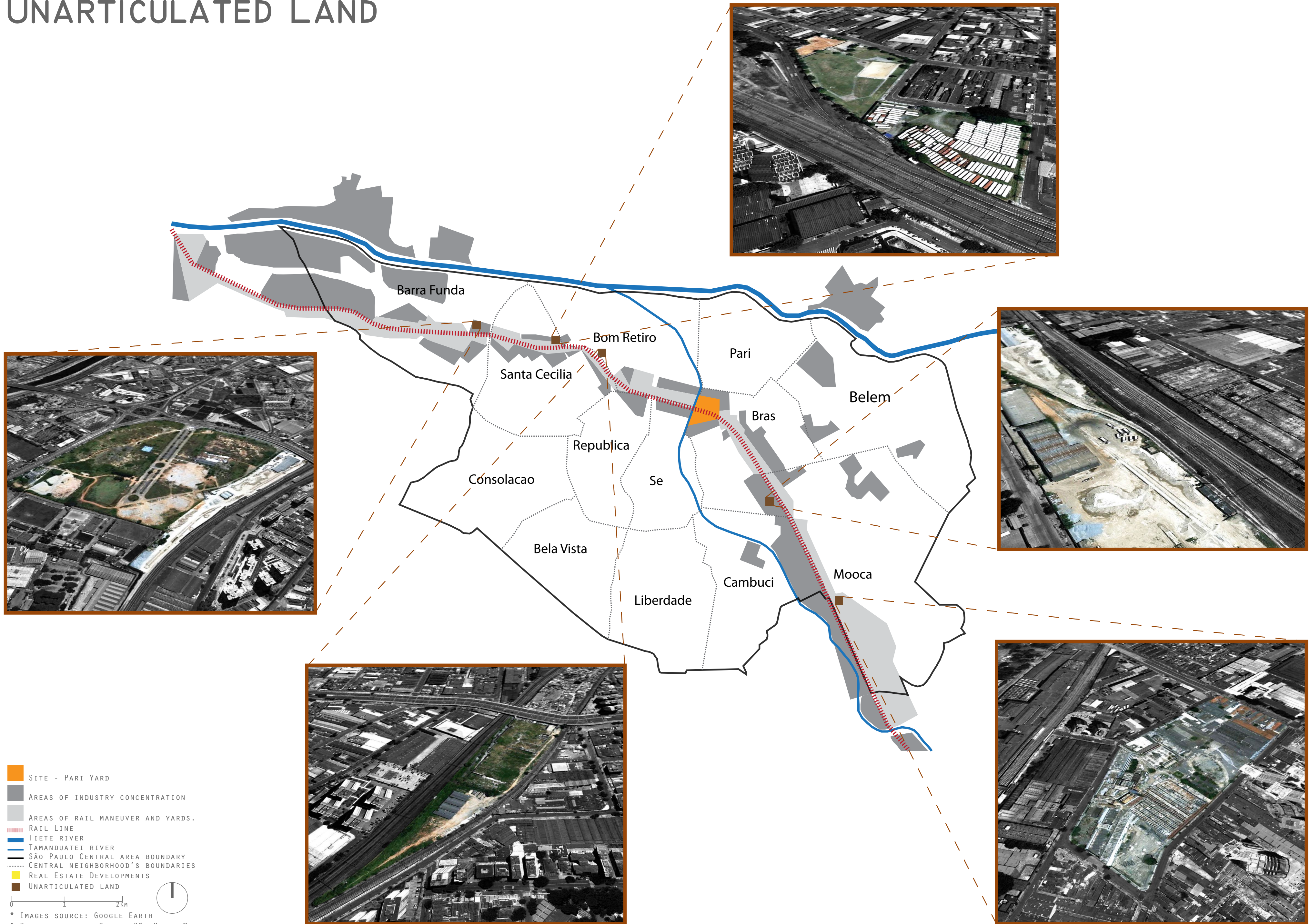


- SITE - PARI YARD
- RAIL LINE
- TIETE RIVER
- TAMANDUATEÍ RIVER
- SÃO PAULO CENTRAL AREA BOUNDARY
- CENTRAL NEIGHBORHOOD'S BOUNDARIES

0 1 2KM

\* DIAGRAMS SOURCE: AUTHOR

OPPORTUNITY  
UNARTICULATED LAND



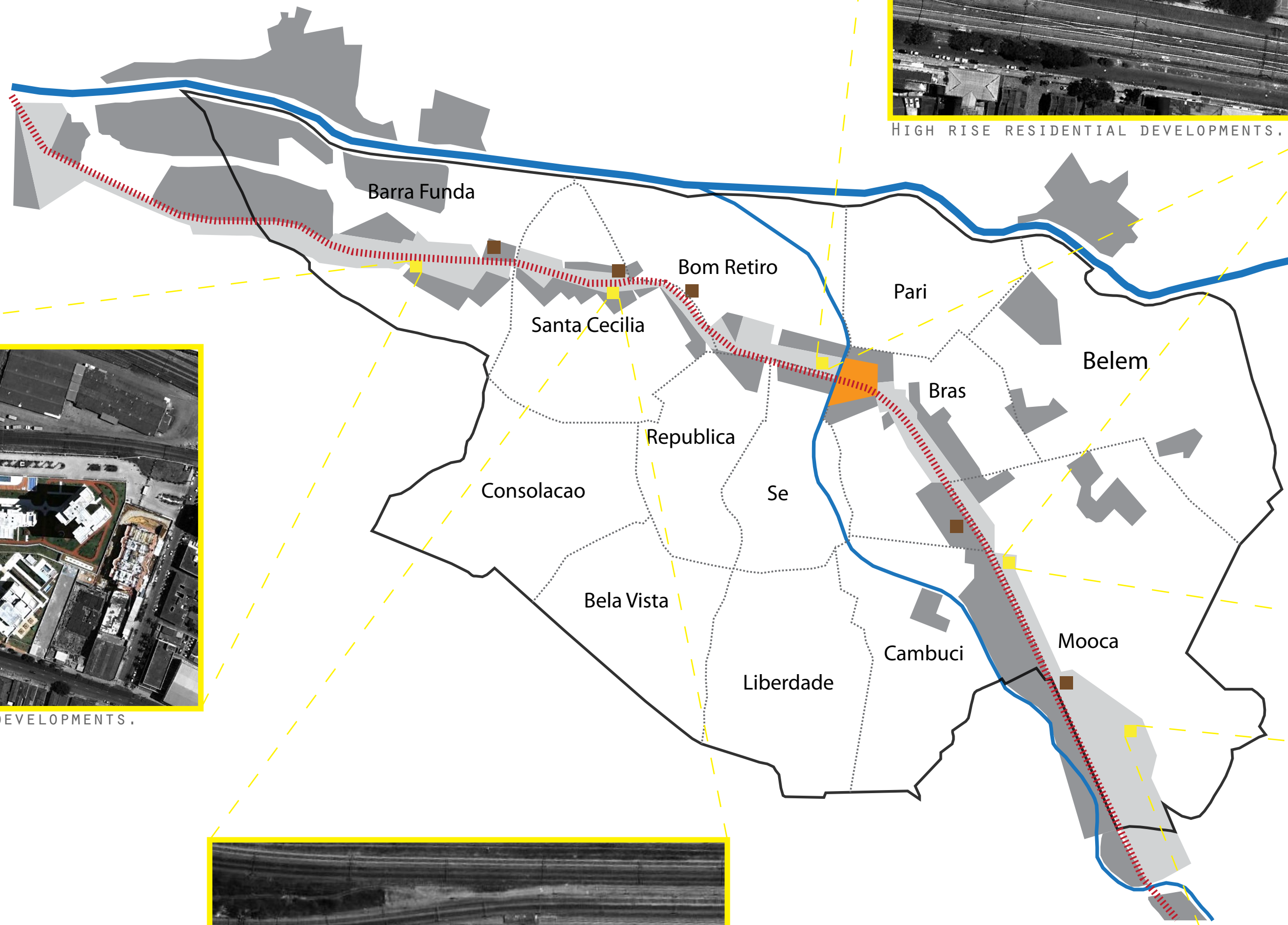
- SITE - PARI YARD
- AREAS OF INDUSTRY CONCENTRATION
- AREAS OF RAIL MANEUVER AND YARDS.
- RAIL LINE
- TIETE RIVER
- TAMANDUATEI RIVER
- SÃO PAULO CENTRAL AREA BOUNDARY
- CENTRAL NEIGHBORHOOD'S BOUNDARIES
- REAL ESTATE DEVELOPMENTS
- UNARTICULATED LAND

0 1 2 KM

\* IMAGES SOURCE: GOOGLE EARTH  
\* DIAGRAM SOURCE: BOOK - SÃO PAULO METROPOLE

TREND  
REAL ESTATE DEVELOPMENTS

PHYSICAL FACTS



HIGH RISE RESIDENTIAL DEVELOPMENTS.



HIGH RISE RESIDENTIAL DEVELOPMENTS.



HIGH RISE RESIDENTIAL DEVELOPMENTS.



CORPORATE DEVELOPMENT.



HIGH RISE RESIDENTIAL DEVELOPMENTS.

- SITE - PARI YARD
  - AREAS OF INDUSTRY CONCENTRATION
  - AREAS OF RAIL MANEUVER AND YARDS.
  - RAIL LINE
  - TIETE RIVER
  - TAMANDUATEI RIVER
  - SÃO PAULO CENTRAL AREA BOUNDARY
  - CENTRAL NEIGHBORHOOD'S BOUNDARIES
  - REAL ESTATE DEVELOPMENTS
  - UNARTICULATED LAND
- 0 1 2 KM
- IMAGES SOURCE: GOOGLE EARTH  
DIAGRAM SOURCE: BOOK - SÃO PAULO METROPOLE

DISASTER  
**WET SEASON**

ENVIRONMENTAL FACTS

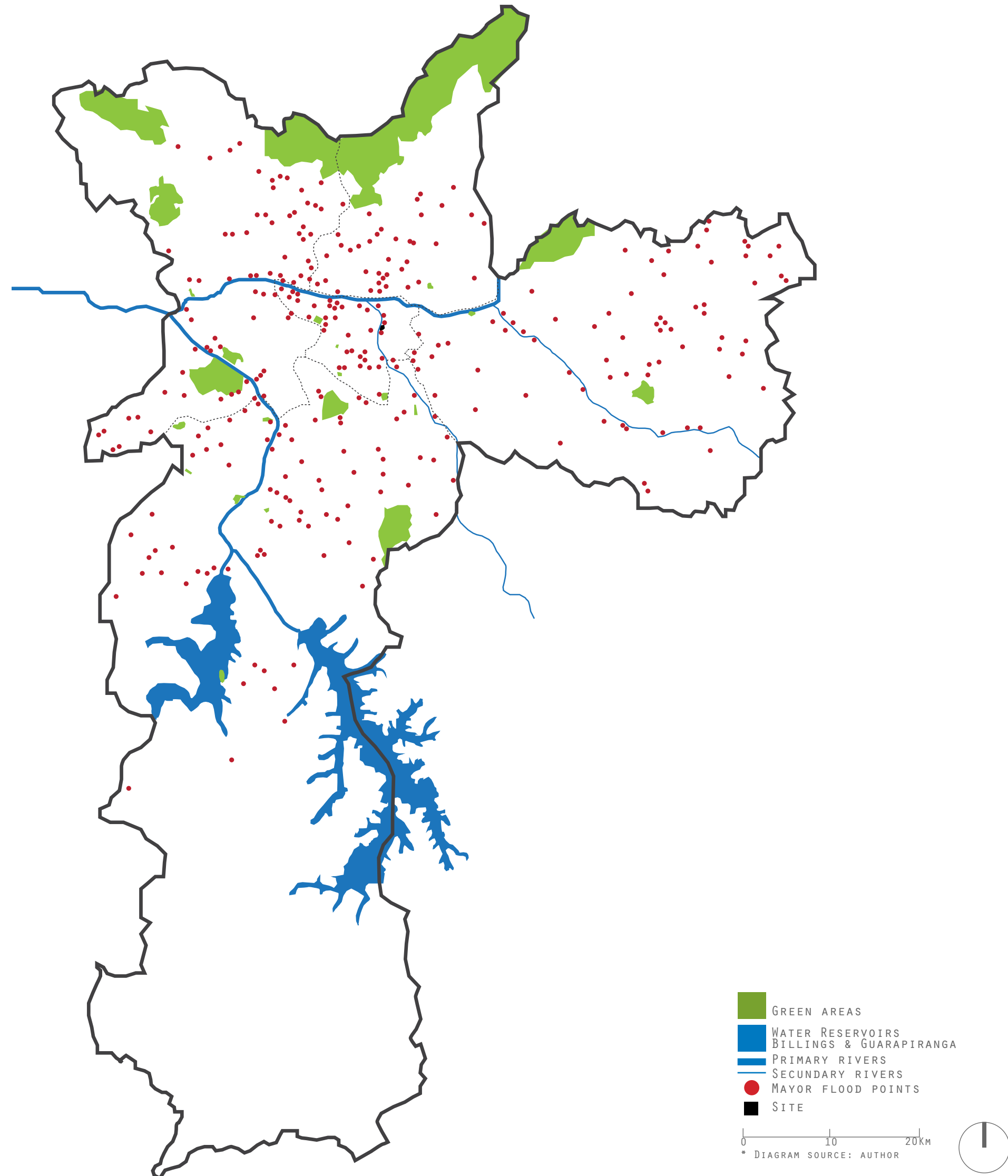
ON THE VERGE OF SUMMER, WHEN PLUVIOMETRIC RATES IN SÃO PAULO ARE AT THEIR HIGHEST, THE CHRONIC PROBLEM OF FLOODING RESUMES. WITH THE INTENSE PROCESS OF DISORDERLY URBANIZATION, THE SOIL HAS BECOME EXCESSIVELY IMPERMEABLE. THE TRANSFORMATION AND OCCUPATION OF SÃO PAULO BASIN RIVERBANKS AND PLUVIAL PLAINS, WHICH USED TO CONTROL WATER FLOWS, JUST WORSEN THE PROBLEM.





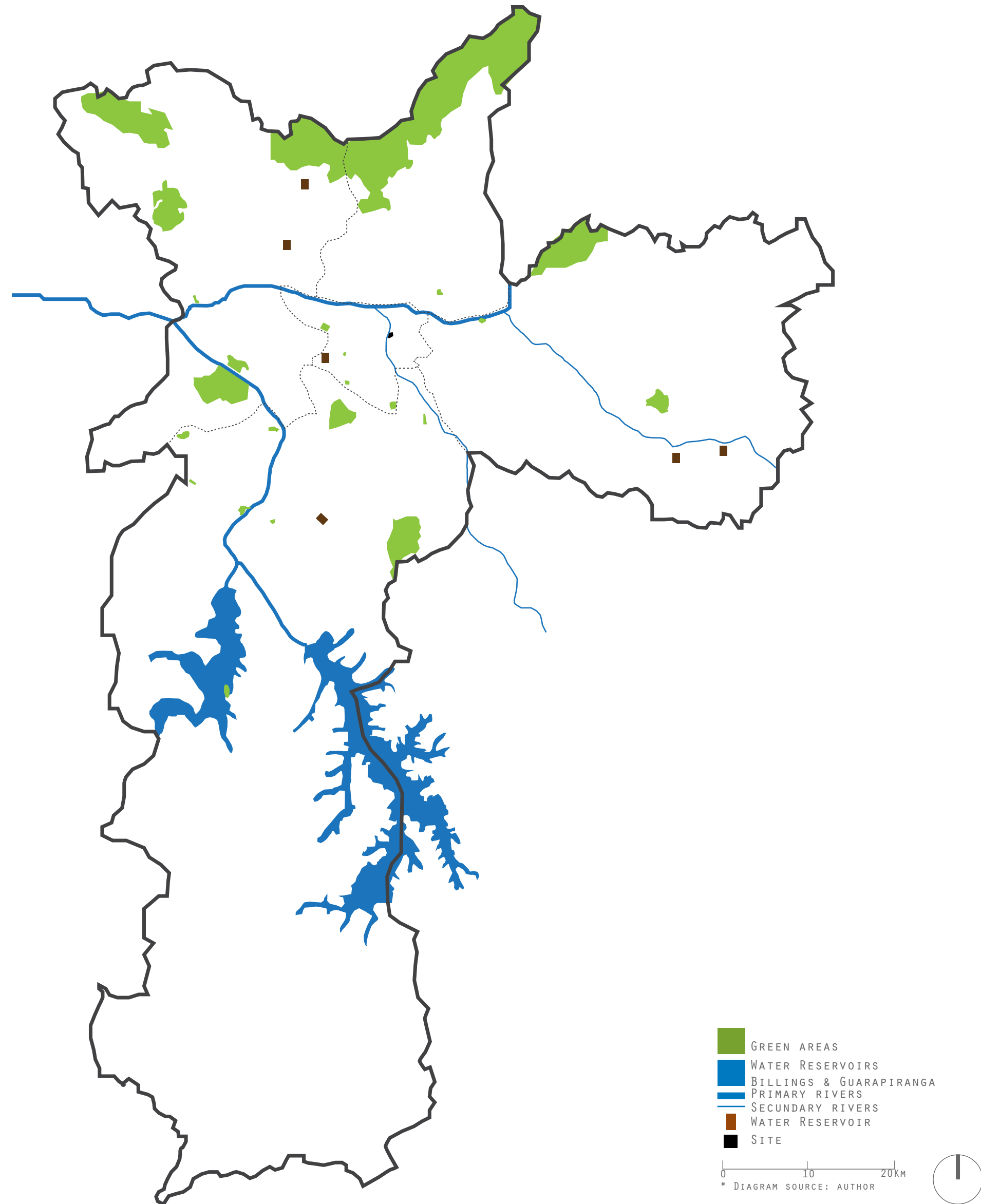
RESULT  
FLOODS

THE ENTIRE POPULATION IS HIT BY THE FLOODING. UNDERPRIVILEGED POPULATIONS WHO LIVE CLOSE TO WATER FLOWS IN HISTORICALLY DEPRECIATED AREAS ARE DIRECTLY AFFECTED IN THEIR OWN DWELLINGS. THE RISK SITUATION OF THESE POPULATIONS REPRESENTS FOR EVERY PUBLIC ADMINISTRATION A REASON FOR CONCERN, WHICH MIGHT BE EITHER OF LOWER OR HIGHER LEVEL, ACCORDING TO THEIR SOCIAL COMMITMENT. THIS ISSUE HAS NEVER BEEN TACKLED IN AN EFFECTIVE MANNER, AND SUFFERS WITH CONTINUAL GOVERNMENT CHANGES AND DISCONTINUITY



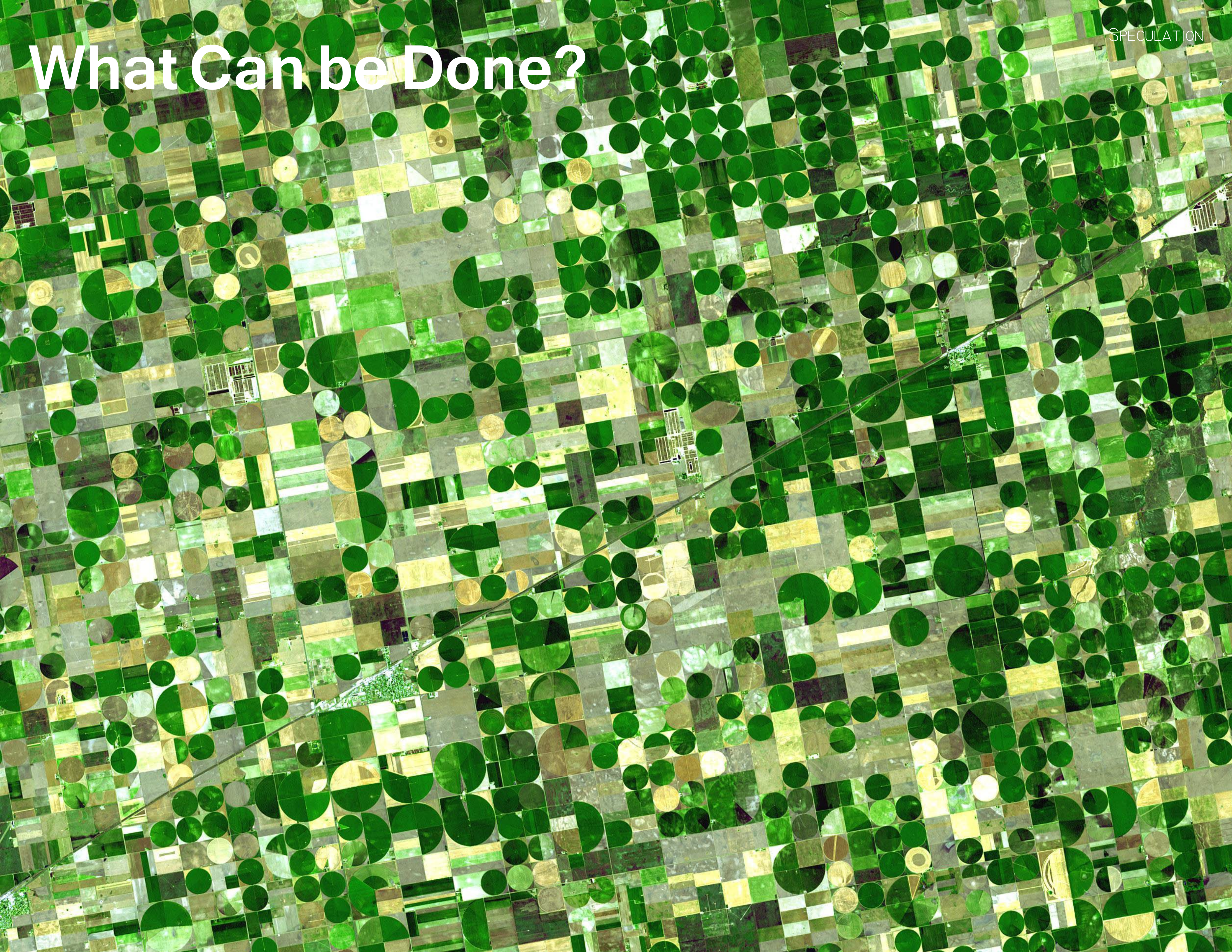
# LARGE RESERVOIRS

ONE OF THE SOLUTIONS PROPOSED FOR CITY FLOODING IS THE CONSTRUCTION OF A SET OF LARGE RESERVOIRS, PISCINÕES, TO RETAIN AND CONTROL RAIN WATER, HOLDING IT BACK FROM CITY RIVERS AND STREAMS, REDUCING ANY OVERFLOW. IN SHORT, THE PISCINÃO REPLACES THE ORIGINAL REGULATING FUNCTION OF THE FLUVIAL PLAINS, NOW OCCUPIED AND FULLY IMPERMEABLE.



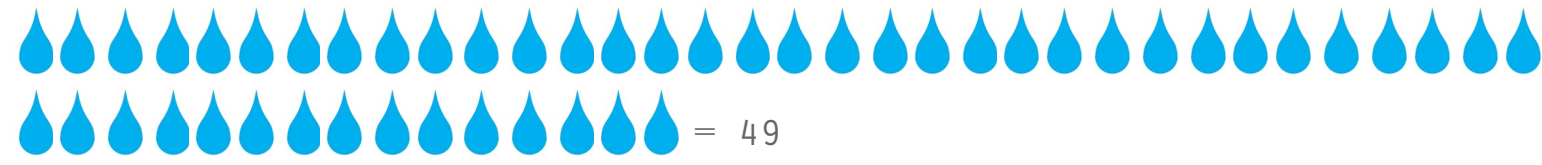
# What Can be Done?

SPECULATION



# HOW MANY

GALLONS OF WATER DO YOU NEED TO PRODUCE A POUND OF ?



SOURCE: FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATION = 1 GALLON

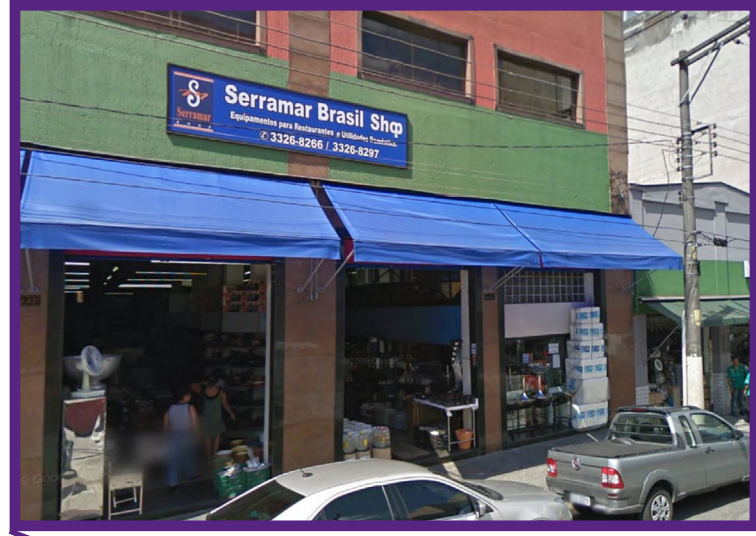
# HOW MANY

POUNDS OF FOOD CAN BE PRODUCED PER ACRE?

# 35

thousand pounds  
of food / acre

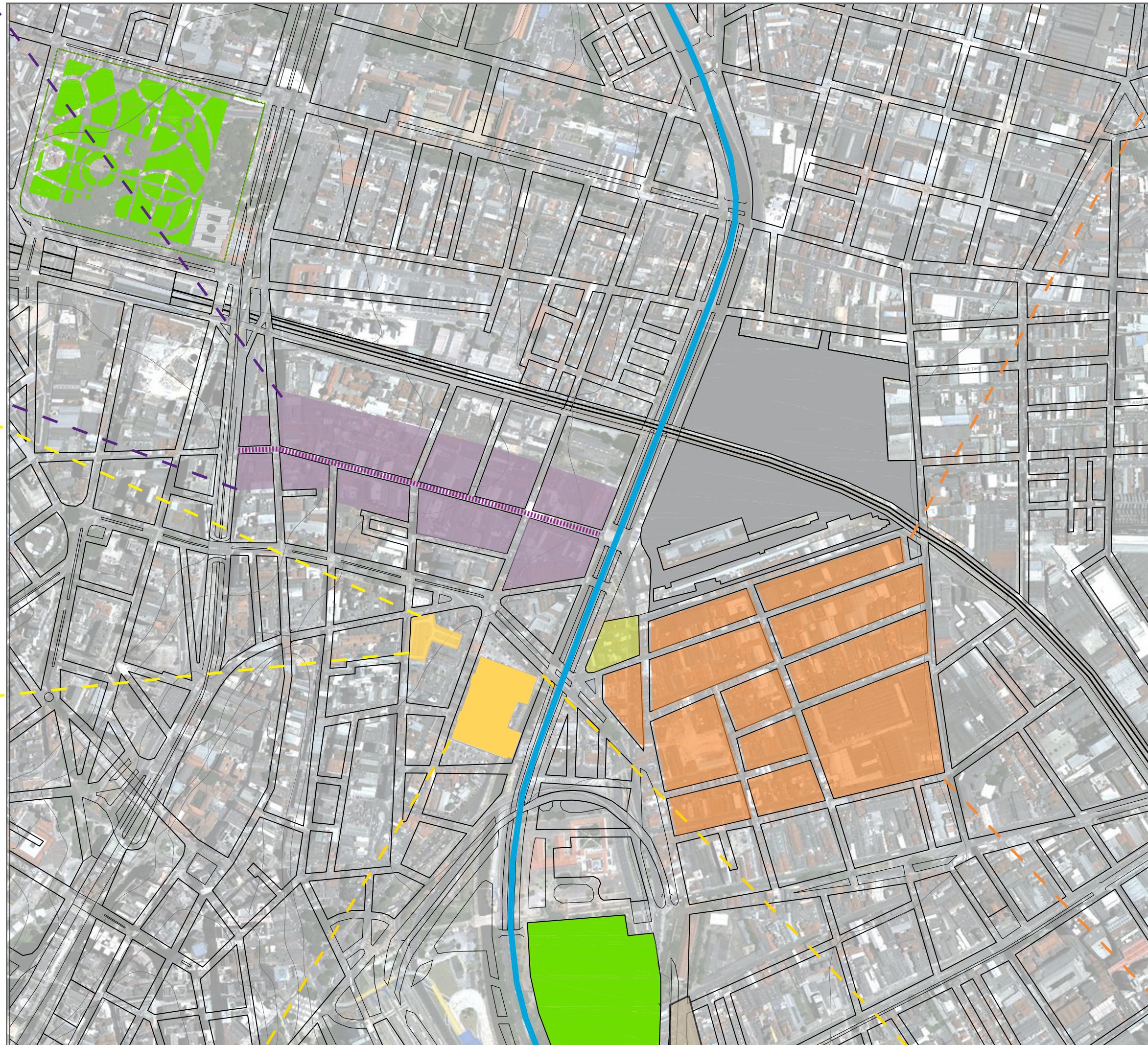
# EXISTING SPECIALIST RETAIL



RESTAURANT SUPPLY STORE AT PAULA SOUZA STREET



MUNICIPAL MARKET KINJO YAMATO



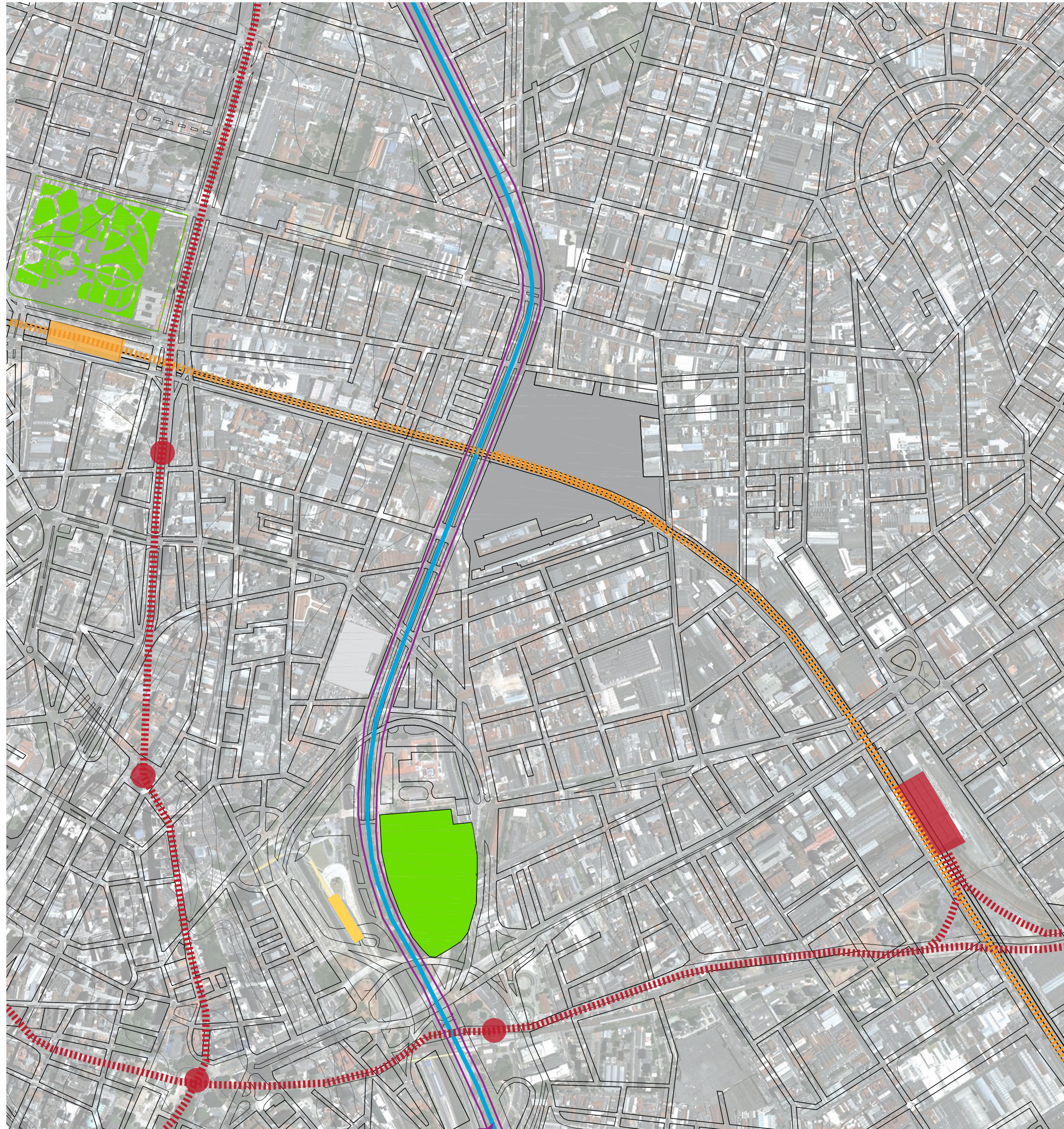
SPECIALIZED GRAIN STORES

- RESTAURANT RELATED RETAIL
- PAULA DE SOUZA STREET
- GRAIN SPECIALIZED RETAIL AND WAREHOUSE AREA
- SAO PAULO MUNICIPAL MARKET
- MUNICIPAL MARKET KINJO YAMATO



THE MUNICIPAL MARKET OF SÃO PAULO RECEIVES MORE THAN 600,000 VISITORS PER MONTH AND 3,000 EMPLOYEES READY TO SERVE THEM. IN THE WHOLESALE SECTION, ABOUT 300 TONS OF FOOD ARE BOUGHT EVERY DAY BY FREE MARKET TRADERS, GREENGROCCERS AND RENOWNED RESTAURATEURS IN THE COUNTRY.



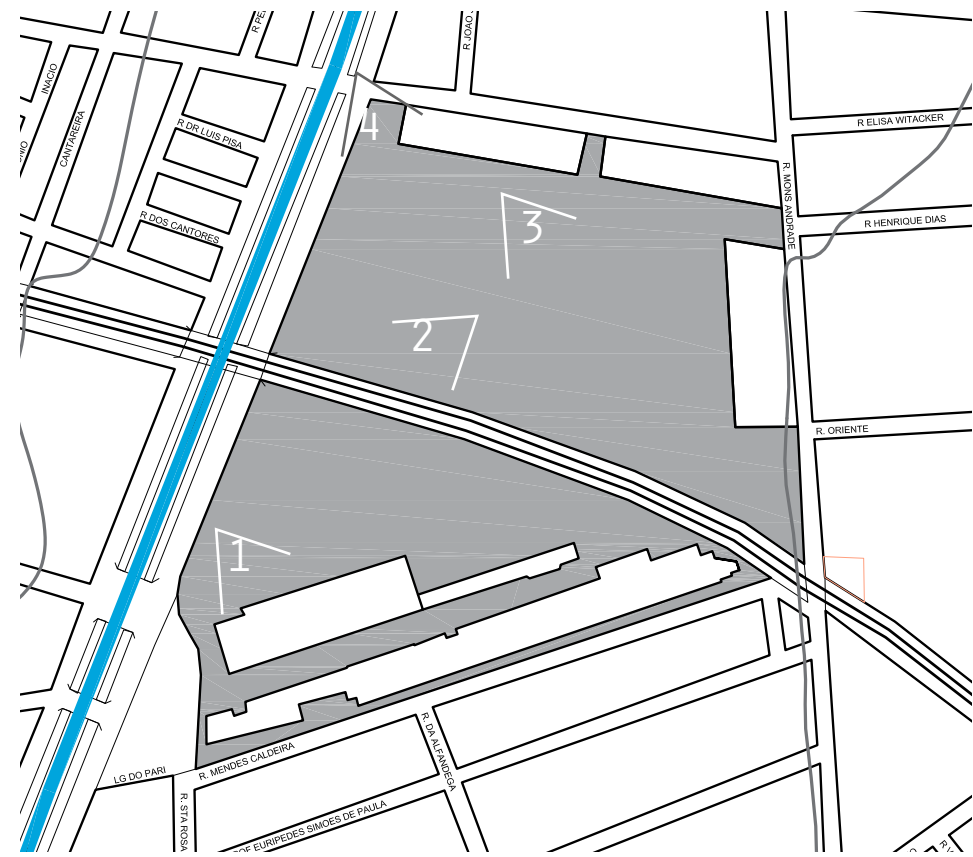


DIFFICULTY FACED BY PEDESTRIAN WHEN ATTEMPTING TO WALK THROUGH ESTADO AVENUE.

- METRO STATION - UNDERGROUND RAIL SYSTEM.
- METRO LINES. LINE 01 - NORTH/SOUTH. LINE 03 - EAST/WEST
- CPTM LINES
- CPTM STATION - SUBURBAN RAIL SYSTEM.
- DOM PEDRO II - BUS TERMINAL
- ESTADO AVE. - VERY HIGH TRAFFIC ARTERY.
- TAMANDUATEI RIVER
- PARI YARD.



EXISTING  
**PARI YARD CURRENT CONDITION**



FORMER RAIL YARD OFFICE BUILDING



A VIEW FROM THE YARD LOOKING AT THE RAIL



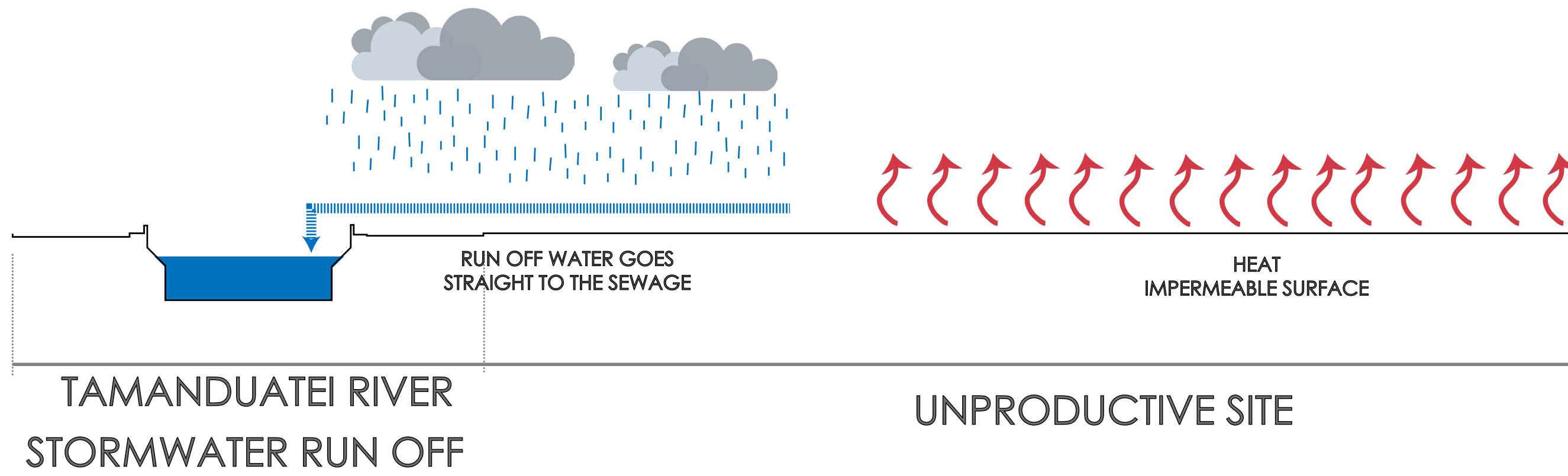
THE SITE CURRENTLY IS BEEN UNDER USED AS A BUS PARKING LOT.



VIEW FROM ESTADO AVE AND SÃO CAETANO STREET

EXISTING  
CURRENT CONDITION

SUMMER

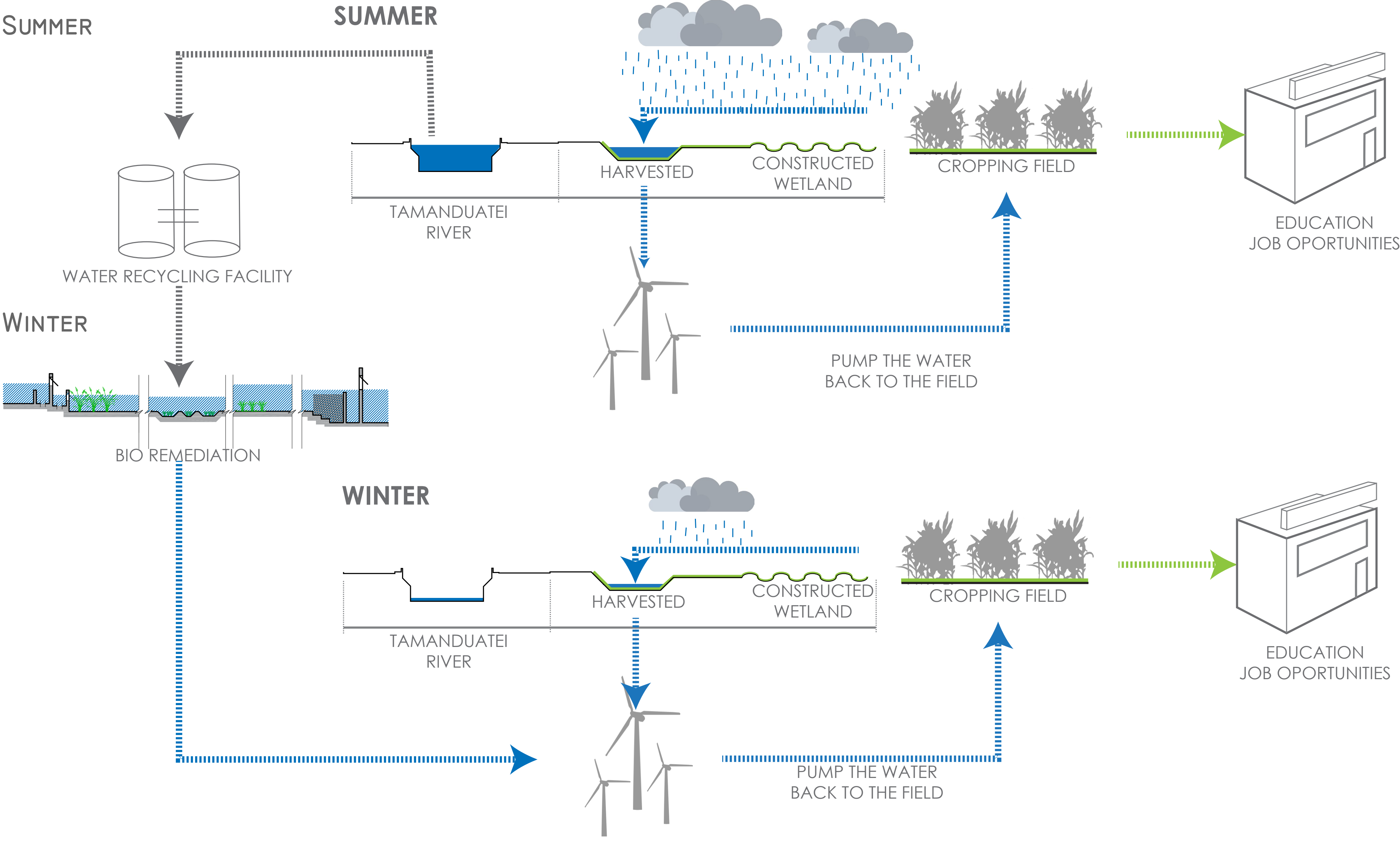


WINTER



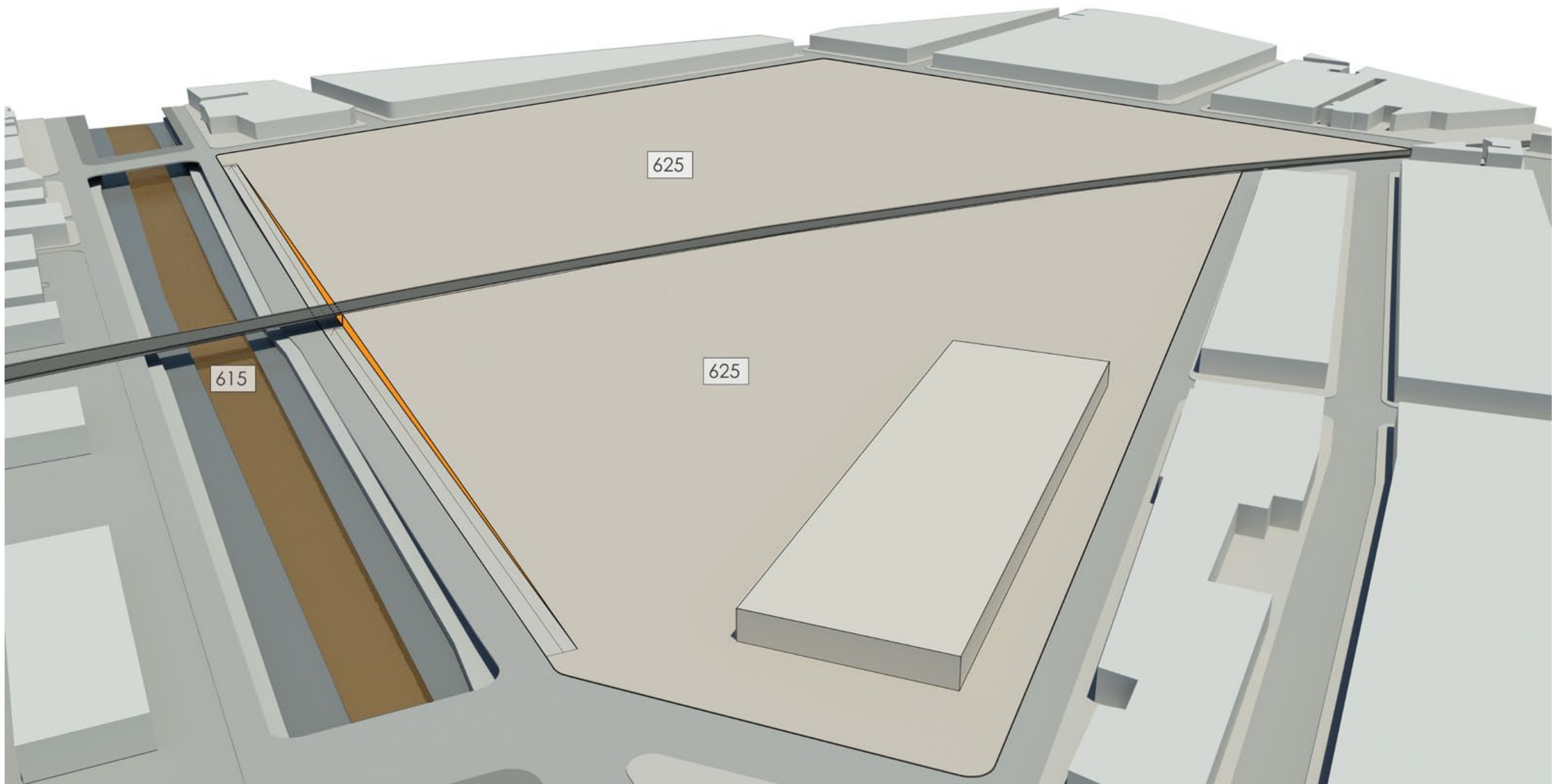
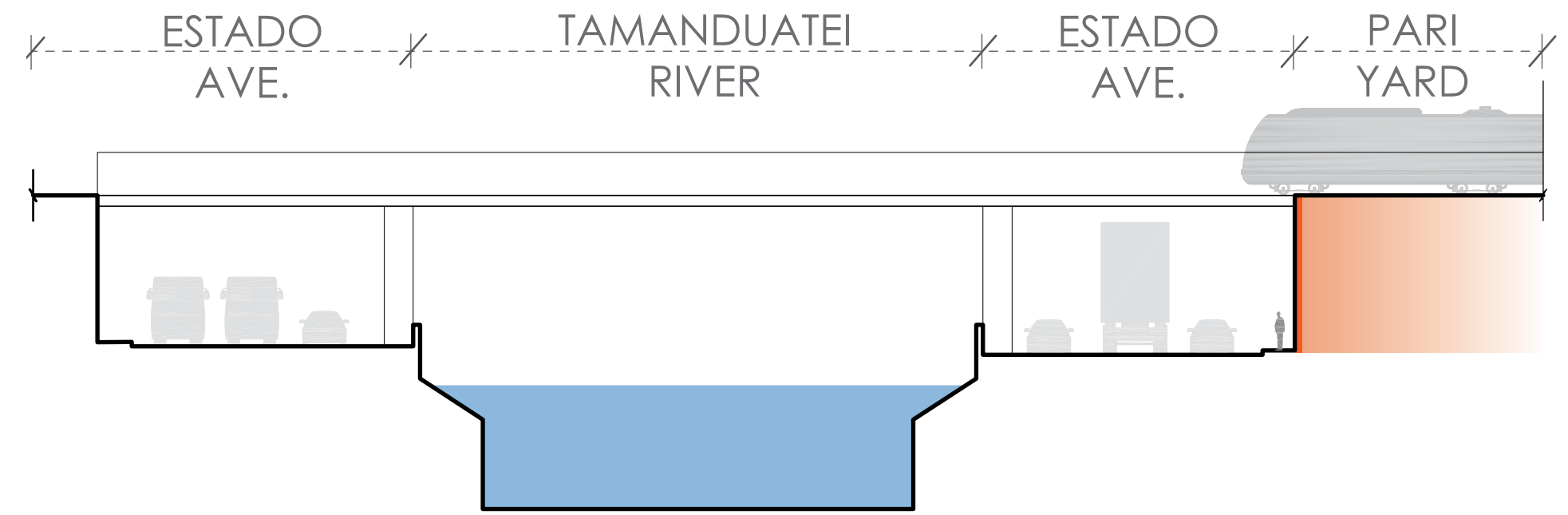


OPERATIVE LANDSCAPE  
PROPOSAL



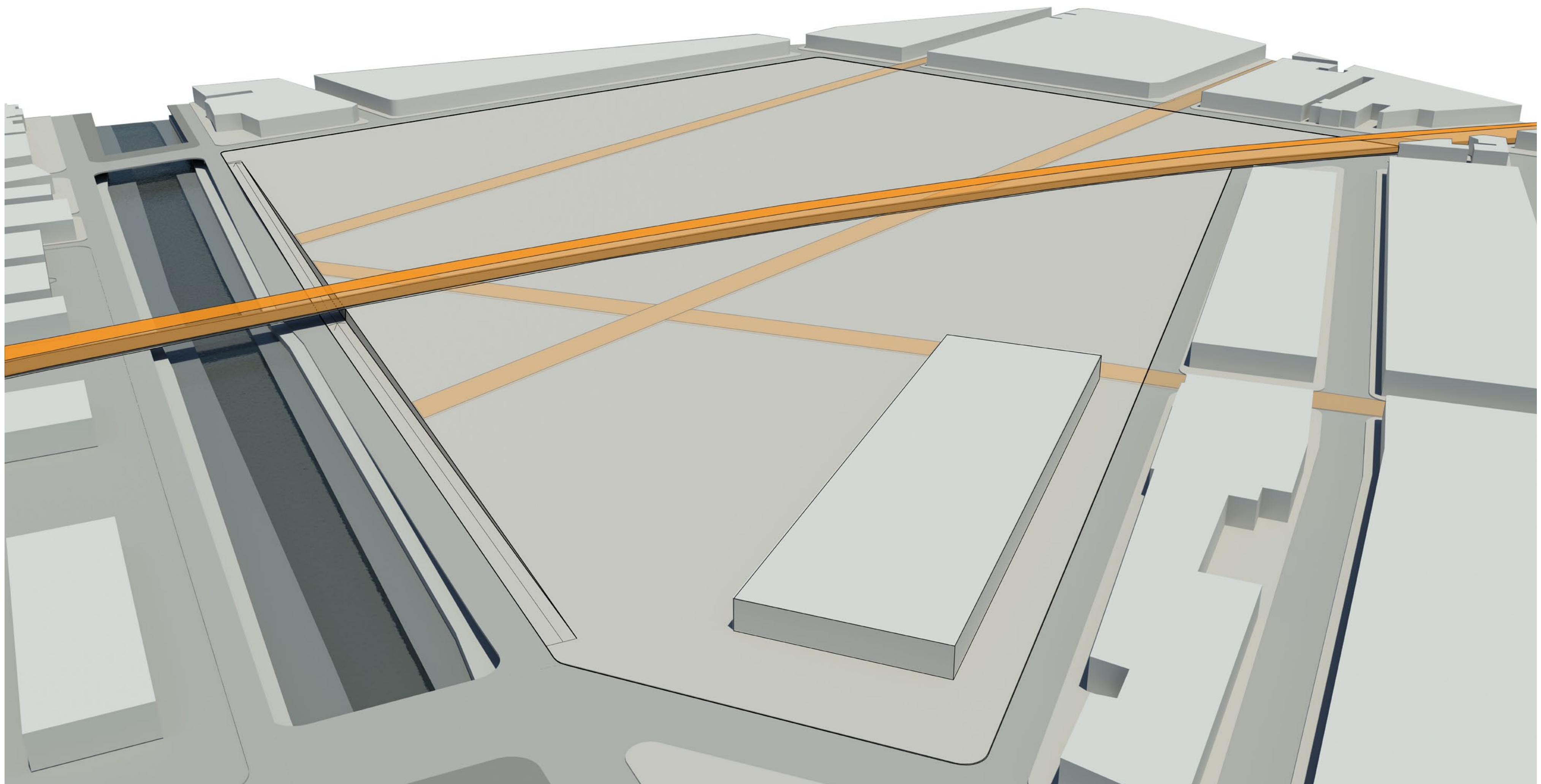
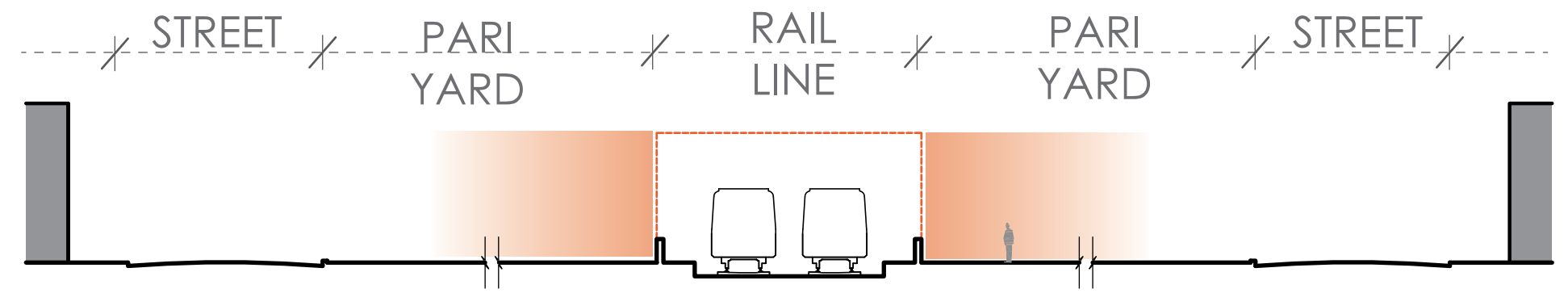
# CURRENT CONDITION

THE ESTADO AVE OVER COMES THE TRAIN RAIL BARRIER BY GOING UNDER IT. THIS SITUATION CREATES A SHARP EDGE CONDITION MAKING IT IMPOSSIBLE TO ACCESS THE SITE.



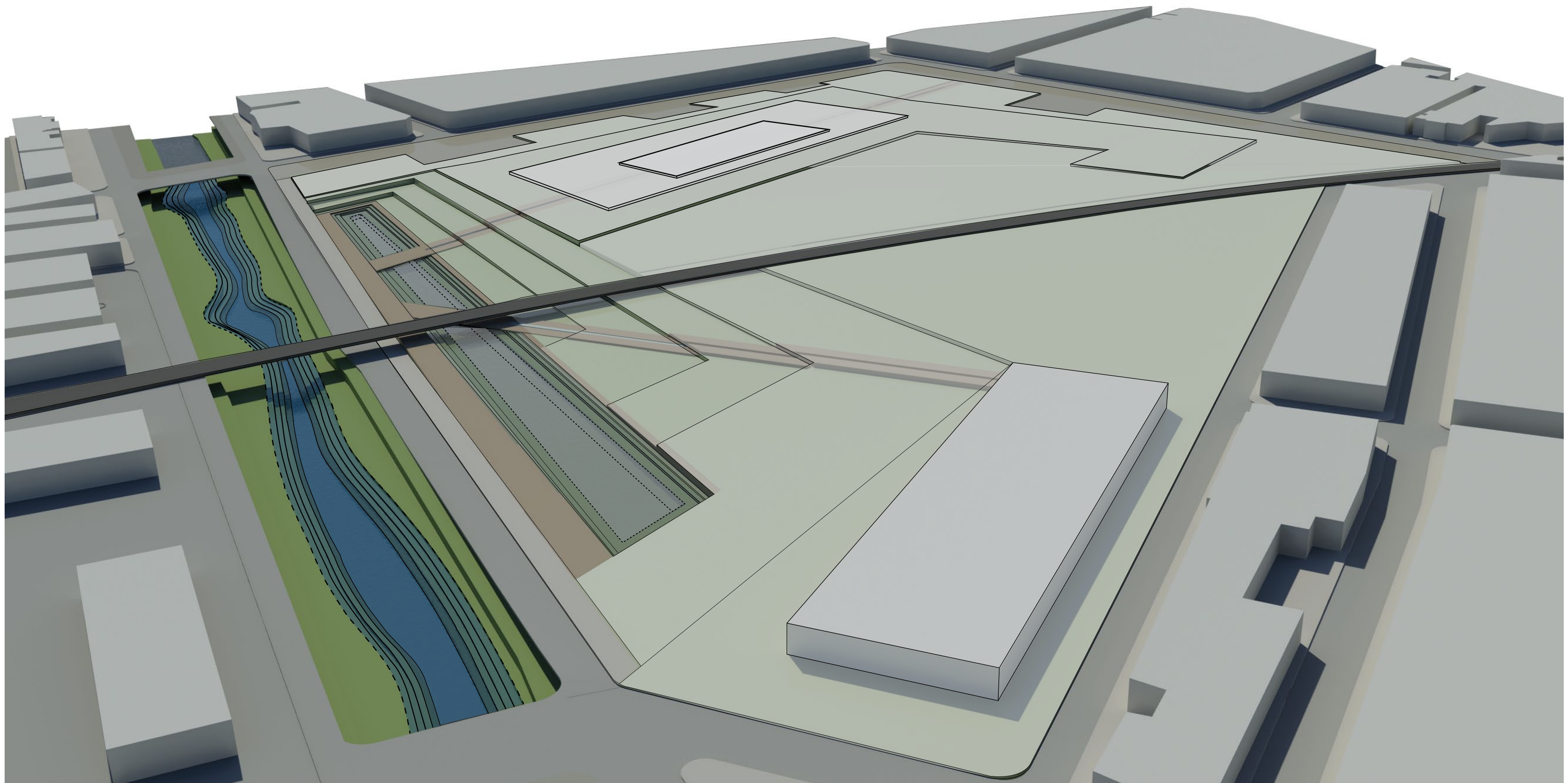
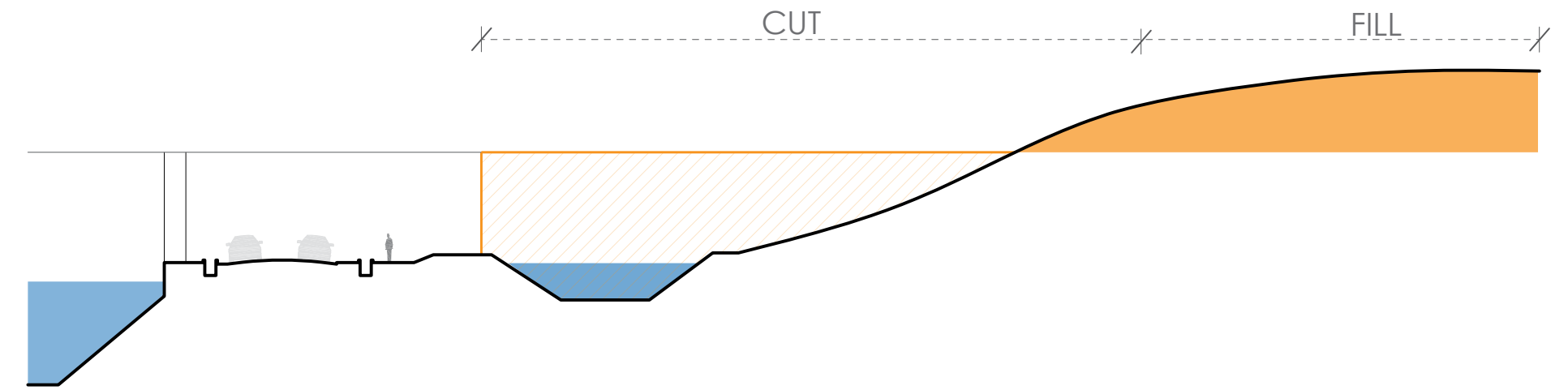
# CURRENT CONDITION

THE RAIL CREATES A PHYSICAL BARRIER PREVENTING THE PEDESTRIAN TO ACCESS THE SITE.



OPERATION  
**CUT & FILL**

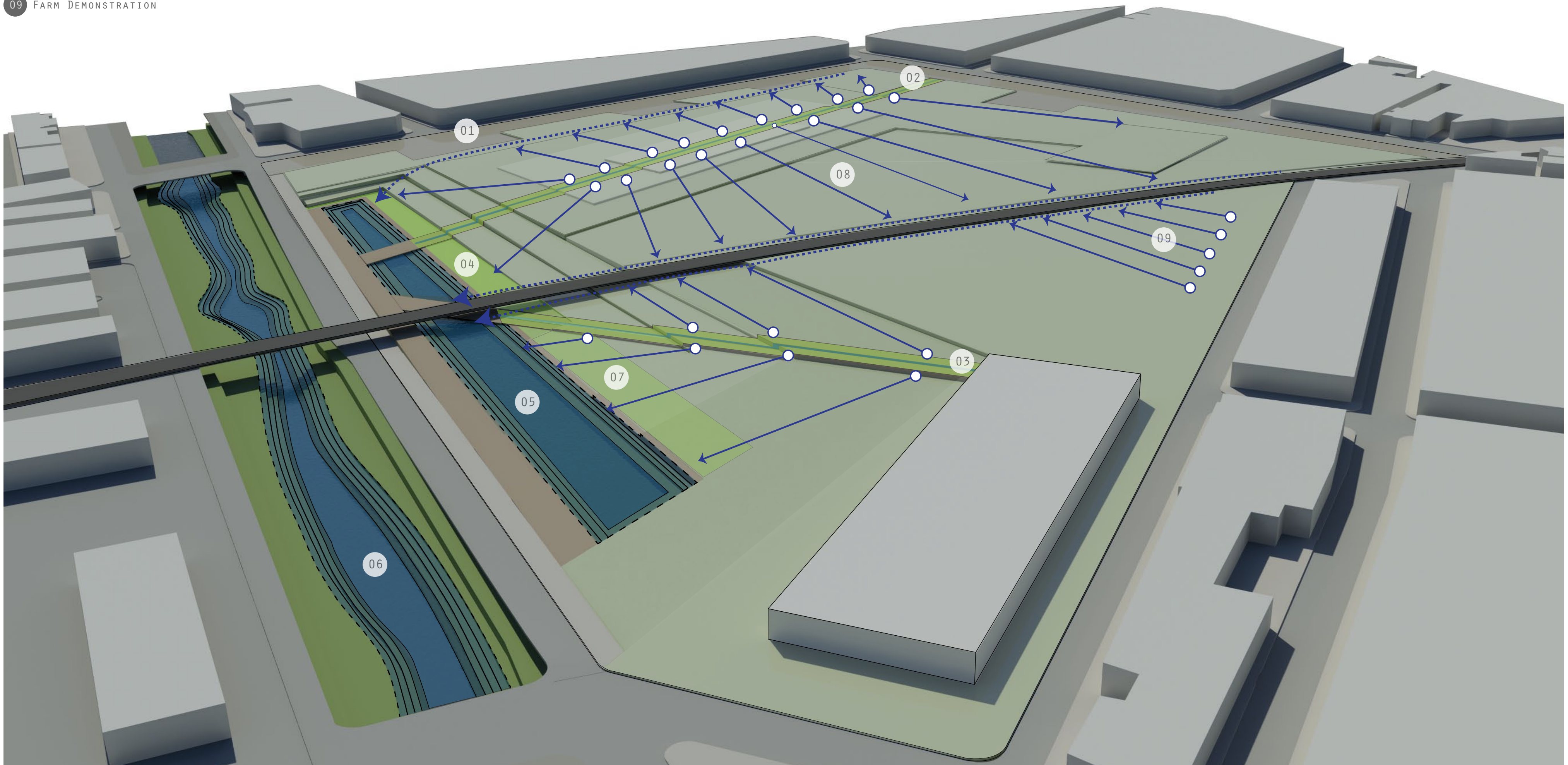
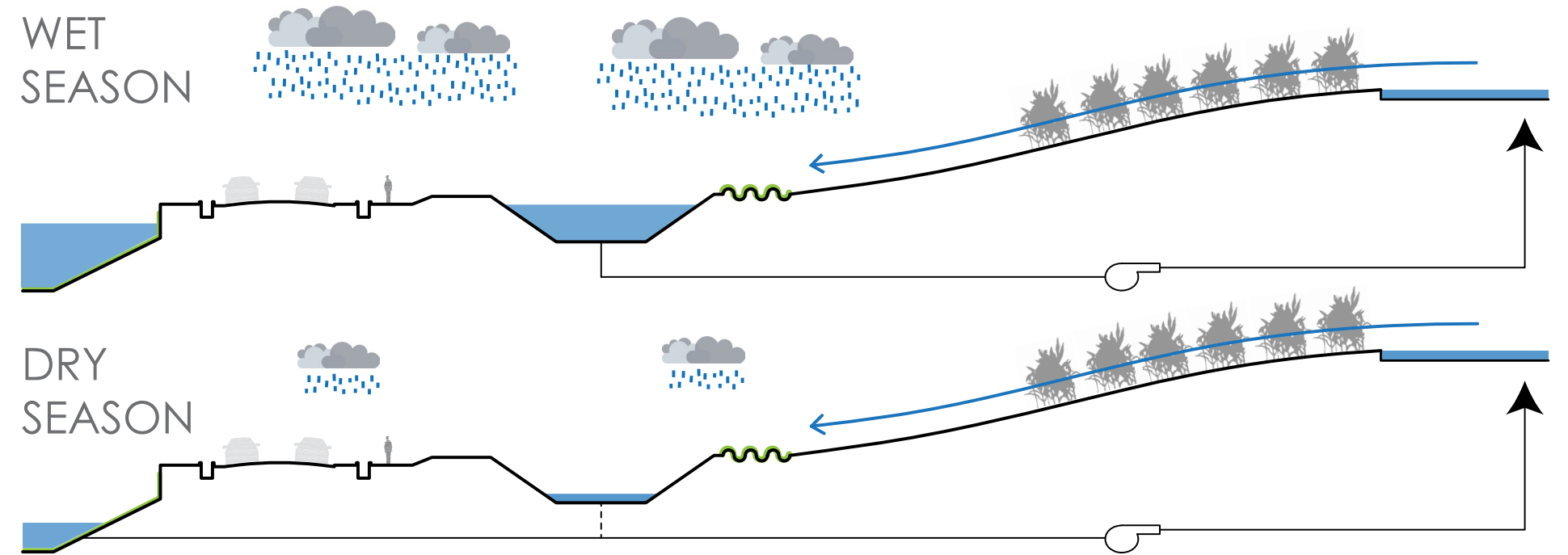
RESERVOIR AND WETLAND CREATION. MOUNT WAS CREATED WITH EXCAVATED FILL IN ORDER TO LOWLY MOVING AND CLEANING THE STORM WATER RUN OFF BACK TO THE RESERVOIR.



# WATER INFRASTRUCTURE AND FLOW

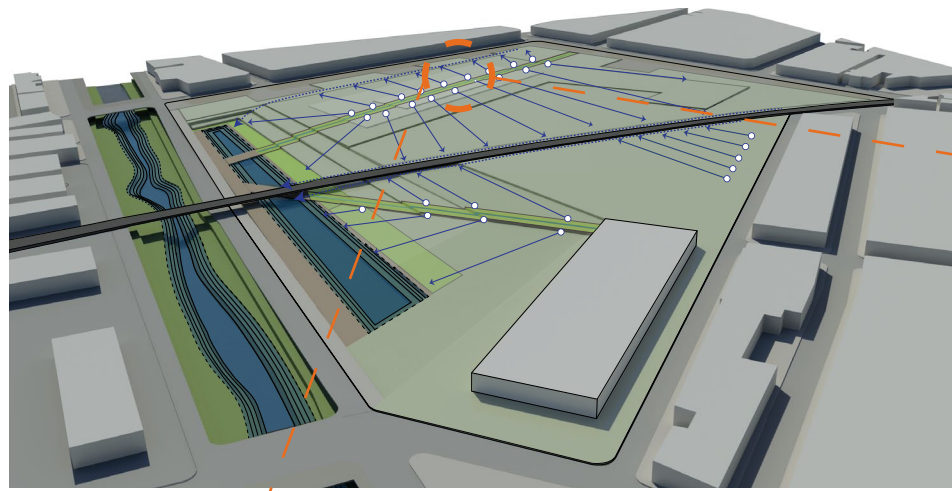
BIOSWALES AND CONSTRUCTED WETLANDS, FILTER AND CLEAN THE RUNOFF WATER, IMPROVING THE WATER QUALITY.

- 01 PERMEABLE PAVER PARKING LOT WITH BIOSWALES
- 02 PRIMARY BIOSWALE
- 03 SECONDARY BIOSWALE
- 04 CONSTRUCTED WETLAND
- 05 RESERVOIR
- 06 TAMANDUATEI RIVER
- 07 WIND FARM AND WATER PUMP
- 08 FARM FIELD
- 09 FARM DEMONSTRATION



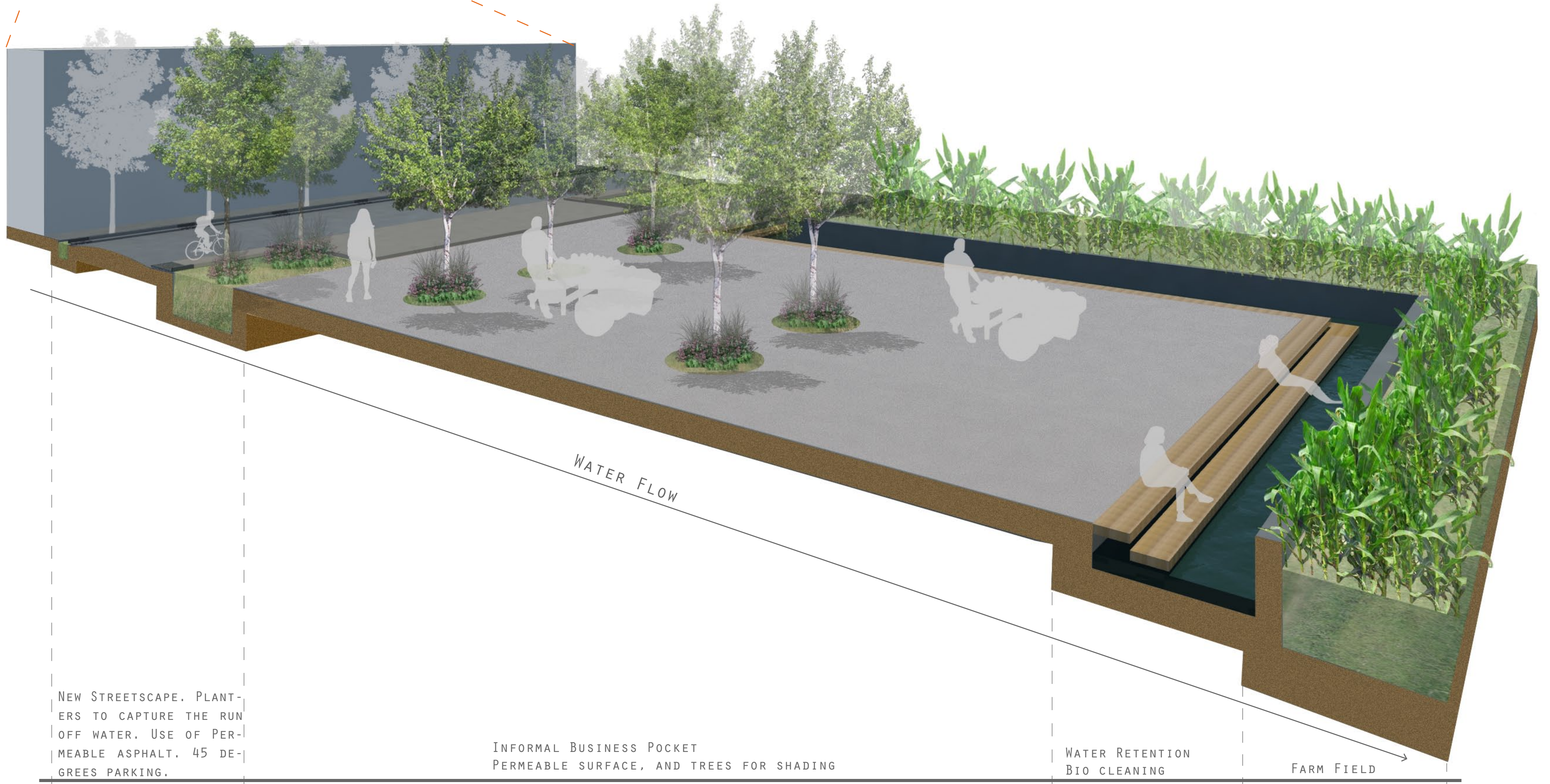
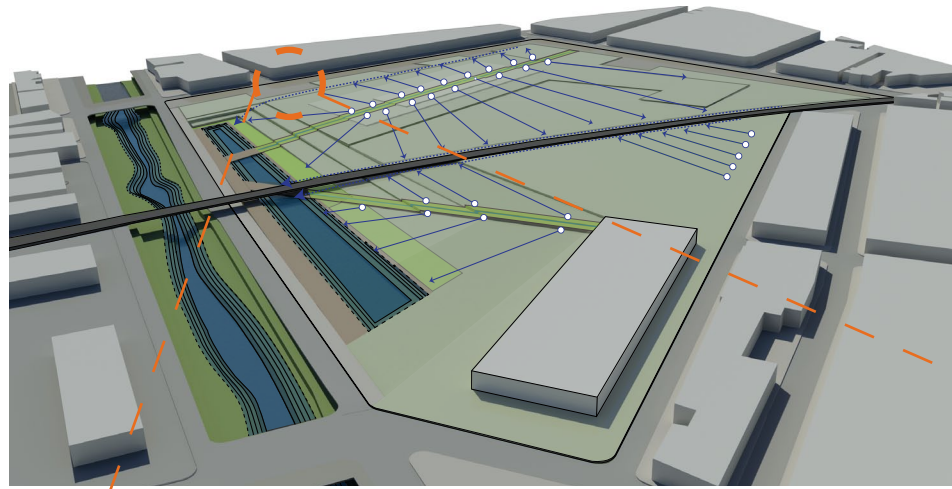
# WATER INFRASTRUCTURE AND FLOW

SECTIONAL MODEL ACROSS PRIMARY BIOSWALE



# WATER INFRASTRUCTURE AND FLOW

SECTIONAL MODEL ACROSS THE INFORMAL BUSINESS POCKETS



NEW STREETScape. PLANTERS TO CAPTURE THE RUN OFF WATER. USE OF PERMEABLE ASPHALT. 45 DEGREES PARKING.

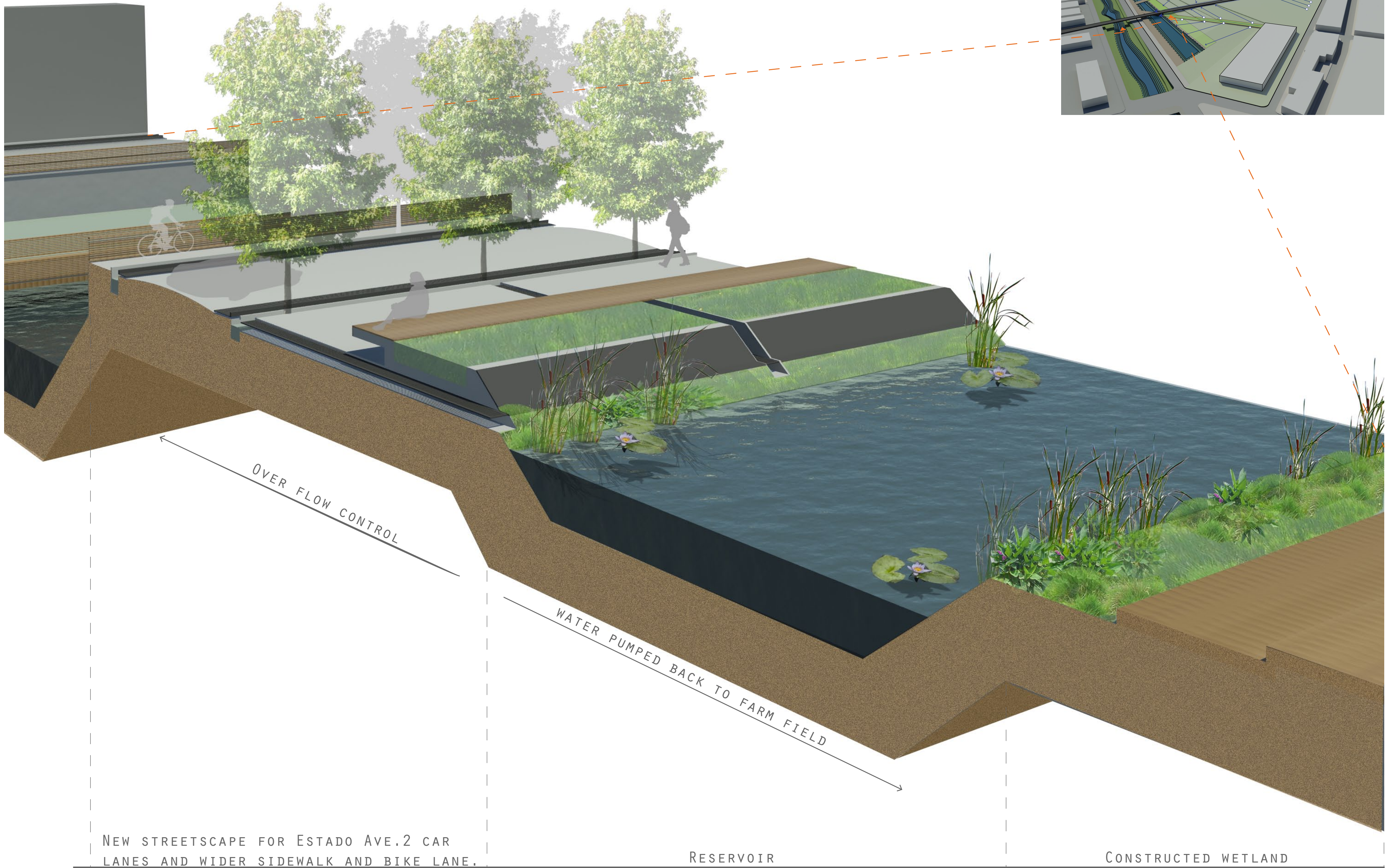
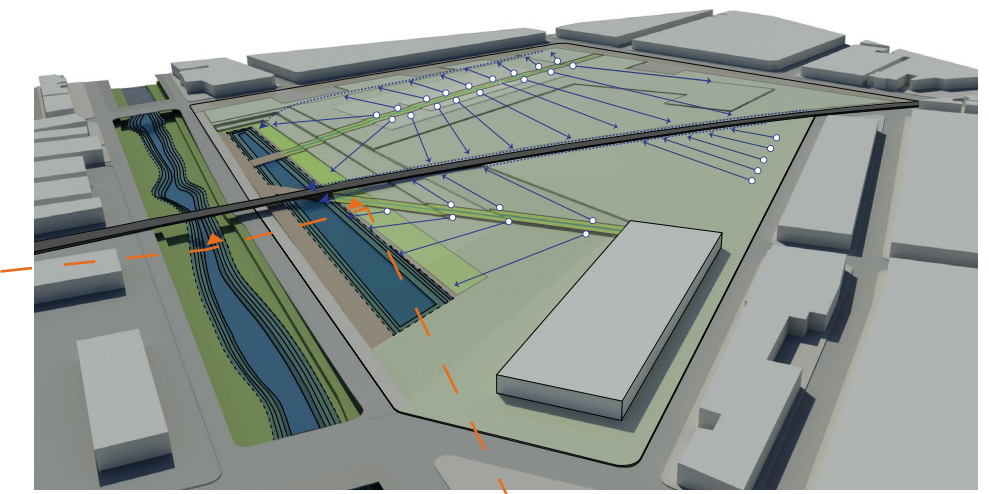
INFORMAL BUSINESS POCKET PERMEABLE SURFACE, AND TREES FOR SHADING

WATER RETENTION BIO CLEANING

FARM FIELD

SYSTEM  
WATER INFRASTRUCTURE AND FLOW

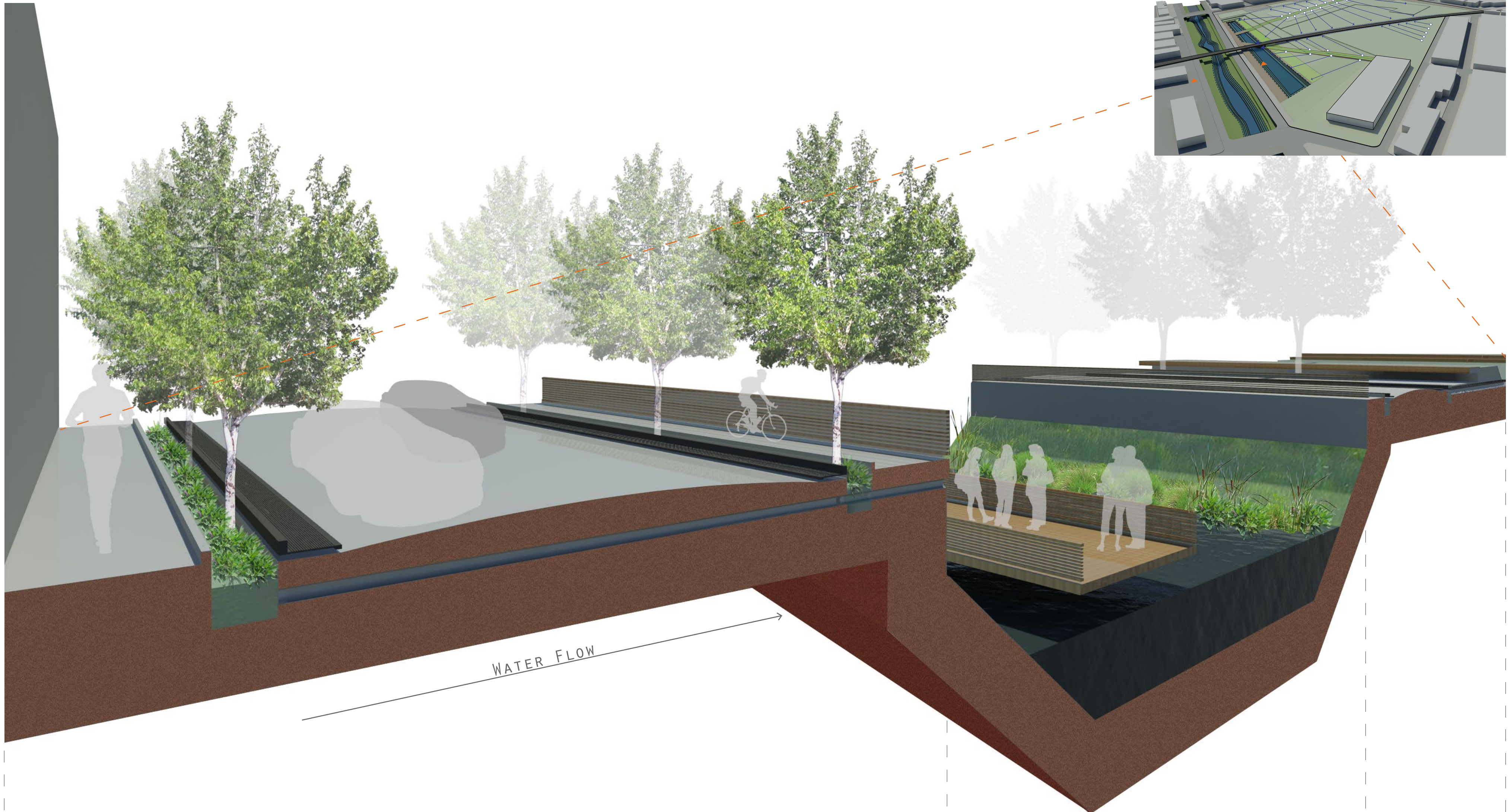
SECTIONAL MODEL ACROSS THE RESER-  
VOIR AND ESTADO AVE.





# WATER INFRASTRUCTURE AND FLOW

SECTIONAL MODEL ACROSS ESTADO AVE  
AND TAMANDUATEI RIVER

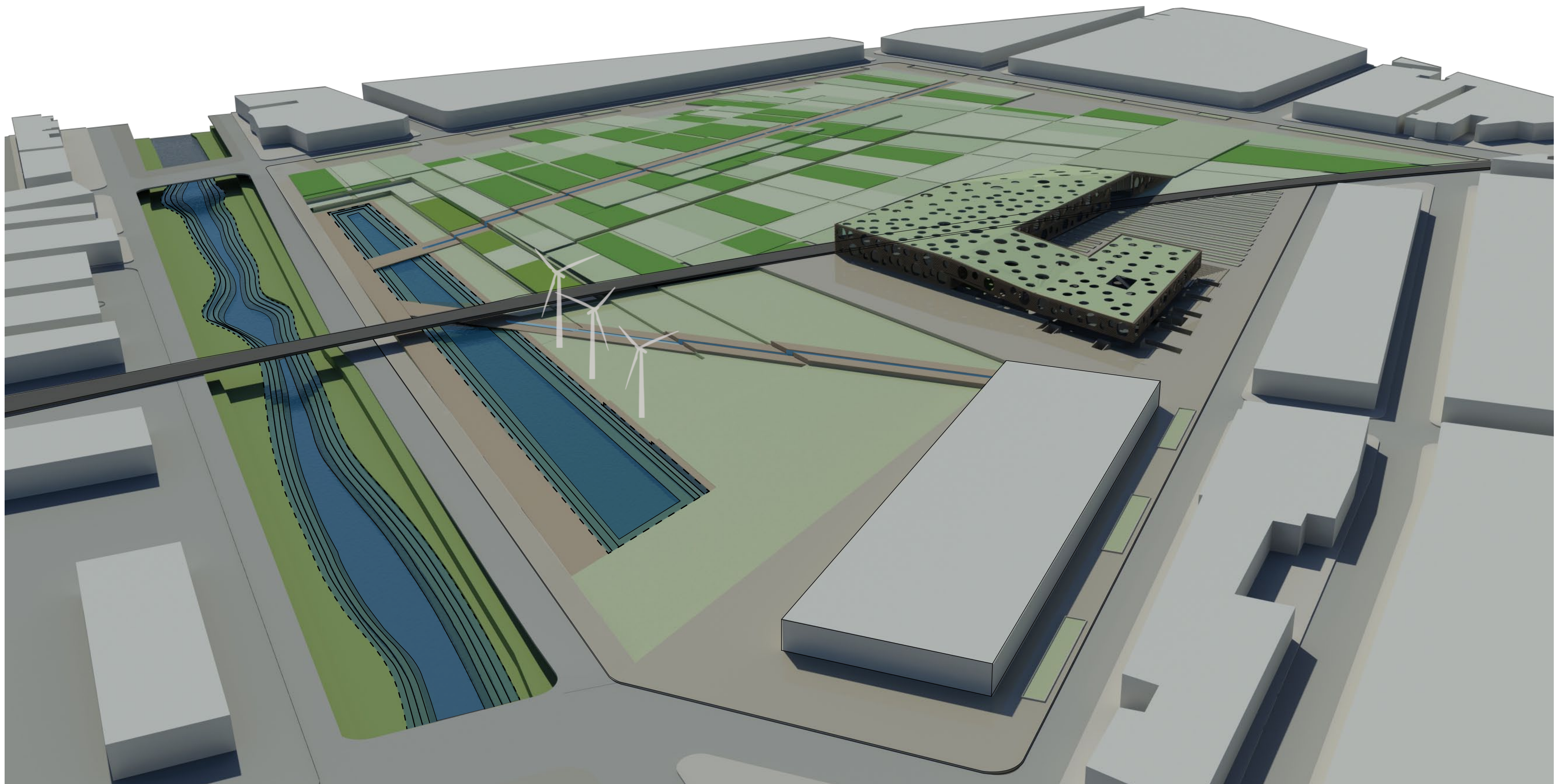
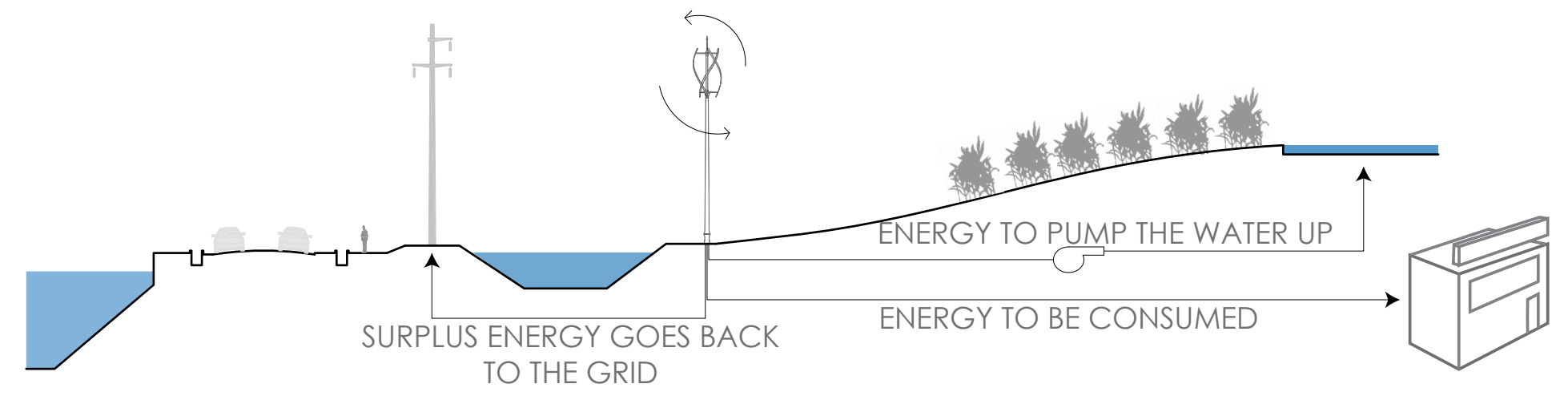


SIDEWALK WITH PLANTER  
RUN OFF WATER RETENTION AND CLEANING

TAMANDUATEI RIVER - BIOMACHINE | ESTADO AVE.

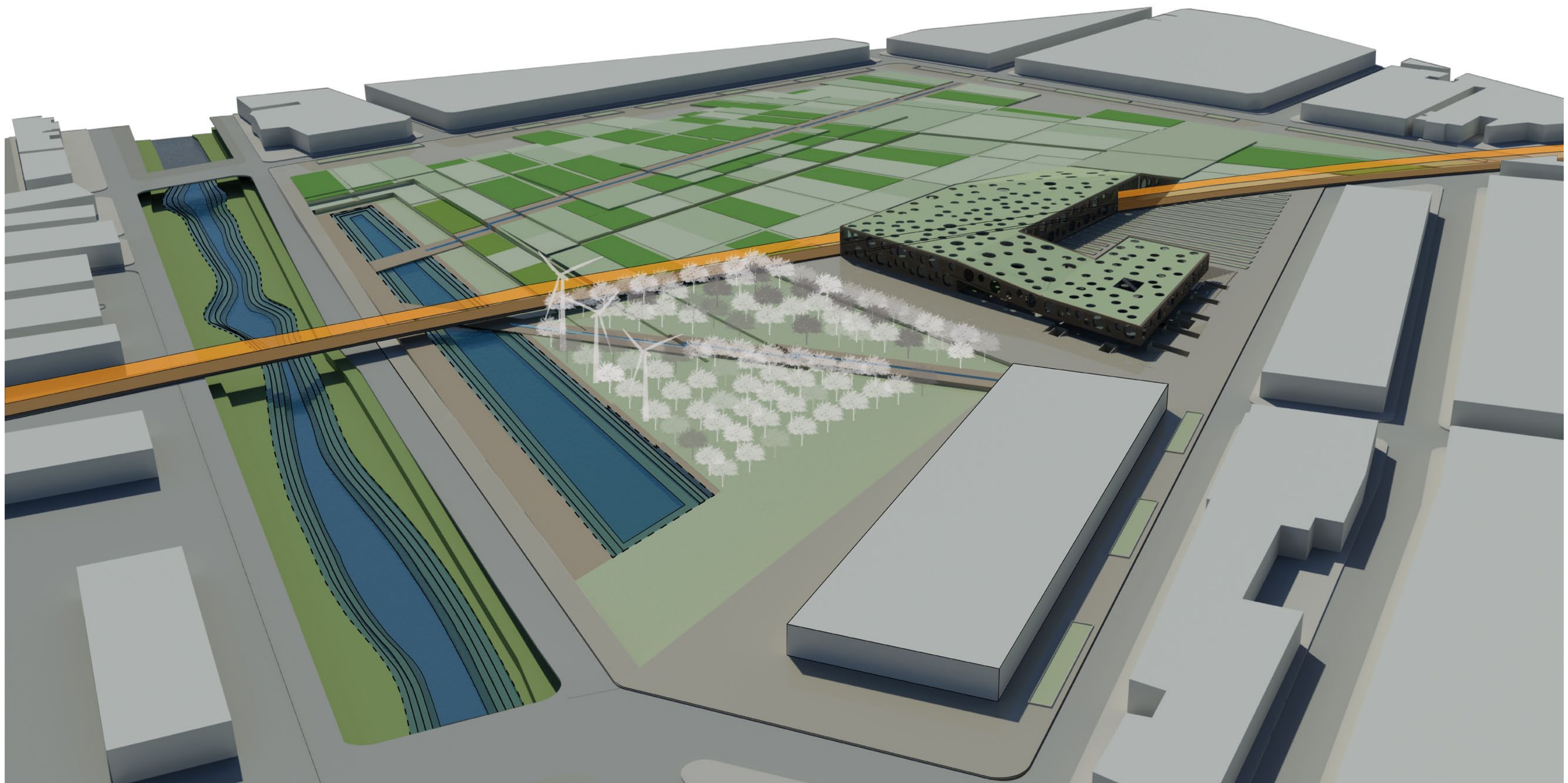
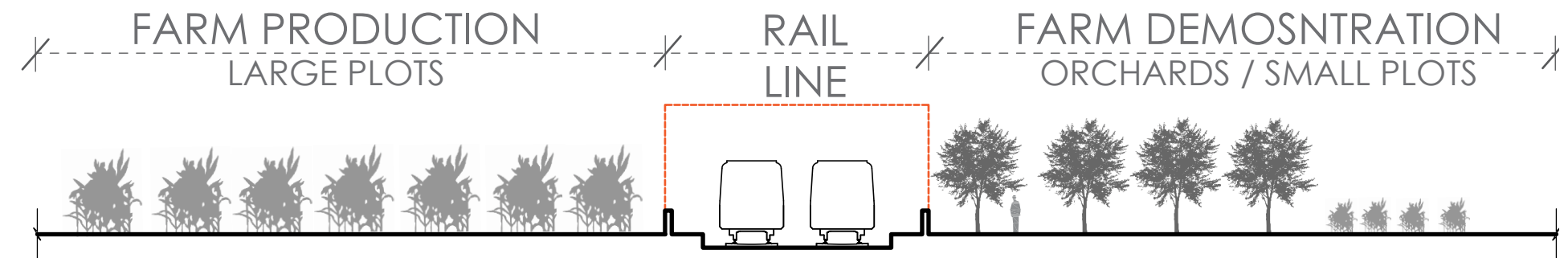
SYSTEM  
**CLEAN ENERGY**

A WIND FARM IS PROPOSED TO GENERATE ENERGY TO BE USED IN THE WATER PUMP, THE CULINARY ARTS SCHOOL AND NUTRITION CENTER.

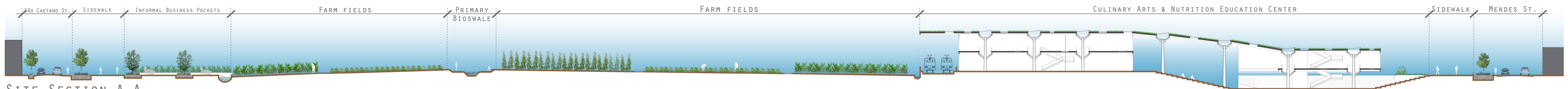
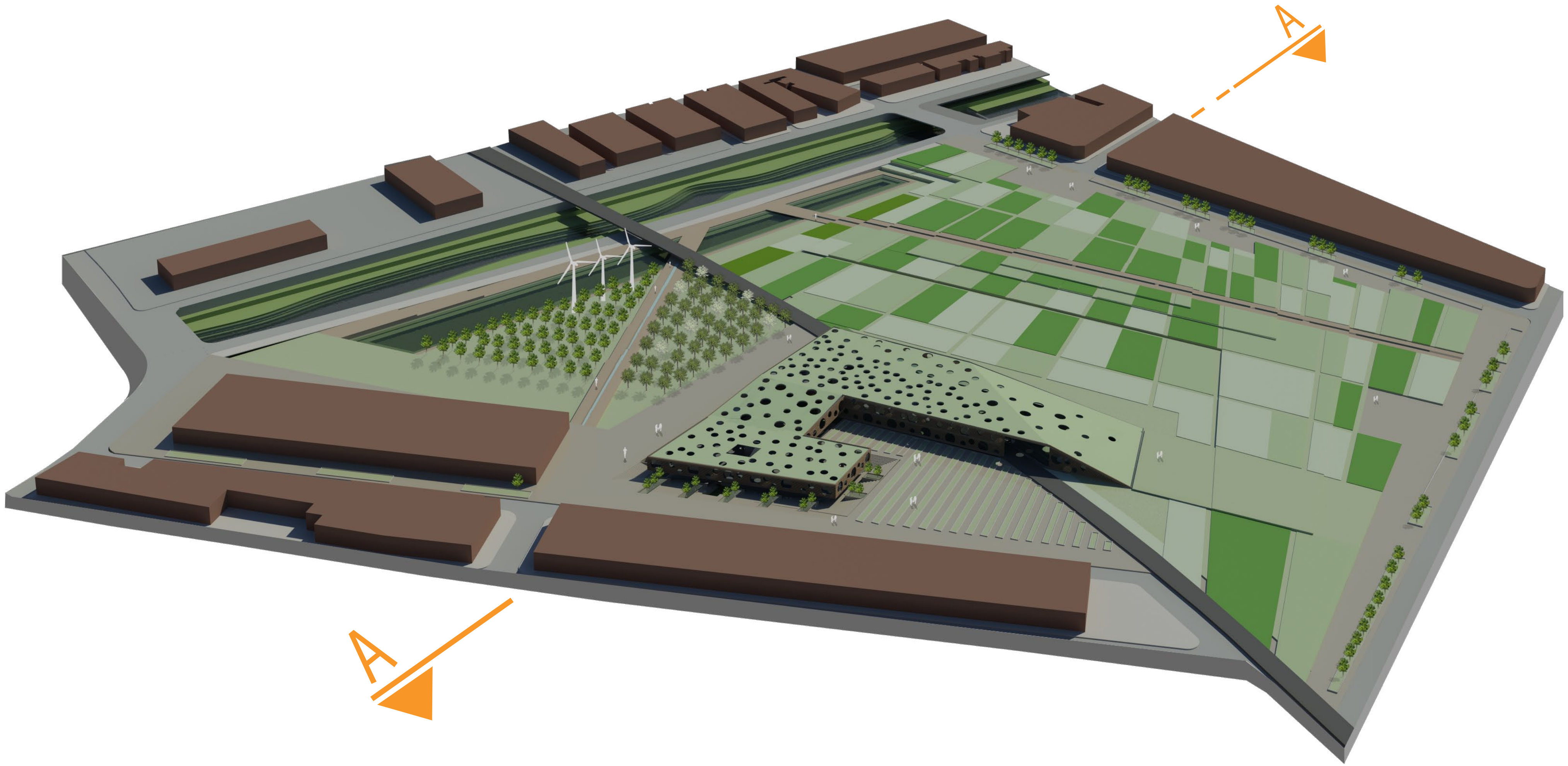


SYSTEM  
**FOOD PRODUCTION**

URBAN AGRICULTURE HAS A HIGH POTENTIAL FOR IMPROVING THE URBAN ENVIRONMENT, BY IMPROVING THE MICRO CLIMATE, AND BY PREVENTING EROSION AND FLOODING THROUGH PLANTING. IN ADDITION, IT PROVIDES JOBS AND ACCESS TO FRESH AND NUTRITIOUS FOOD TO THE LOCAL COMMUNITY. TO ENHANCE THE FOOD CULTURE A CULINARY ARTS SCHOOL AND A NUTRITIOUS CENTER IS GOING TO BE PART OF THE PROGRAM PROVIDING SUPPORT AND TRAINING.



PROPOSAL  
SITE MODEL



SITE SECTION A-A  
0' 10' 40' 70' FT

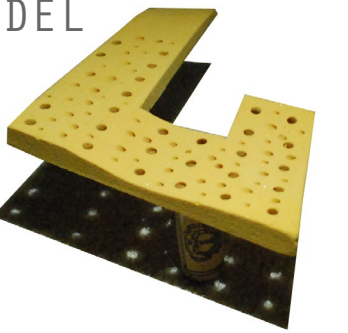
# SYSTEM EDUCATION

EDUCATION IS A KEY POINT WHILE DEVELOPING A SUSTAINABLE ENVIRONMENT. TO ENHANCE THE FOOD CULTURE A CULINARY ARTS SCHOOL AND A NUTRITIOUS CENTER IS GOING TO BE PART OF THE PROGRAM PROVIDING SUPPORT AND TRAINING.

PROPOSAL

CONCEPTUAL MODEL

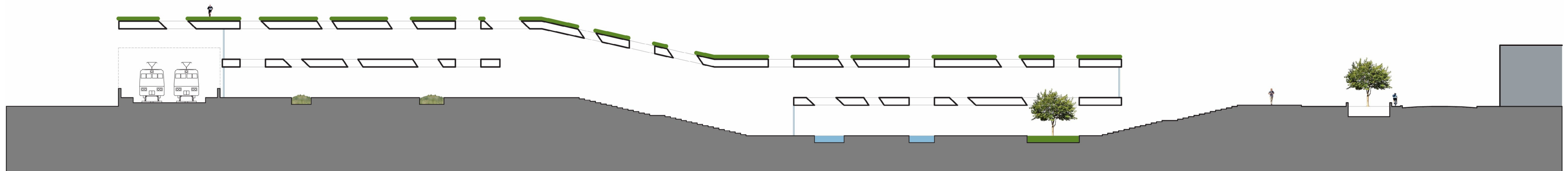
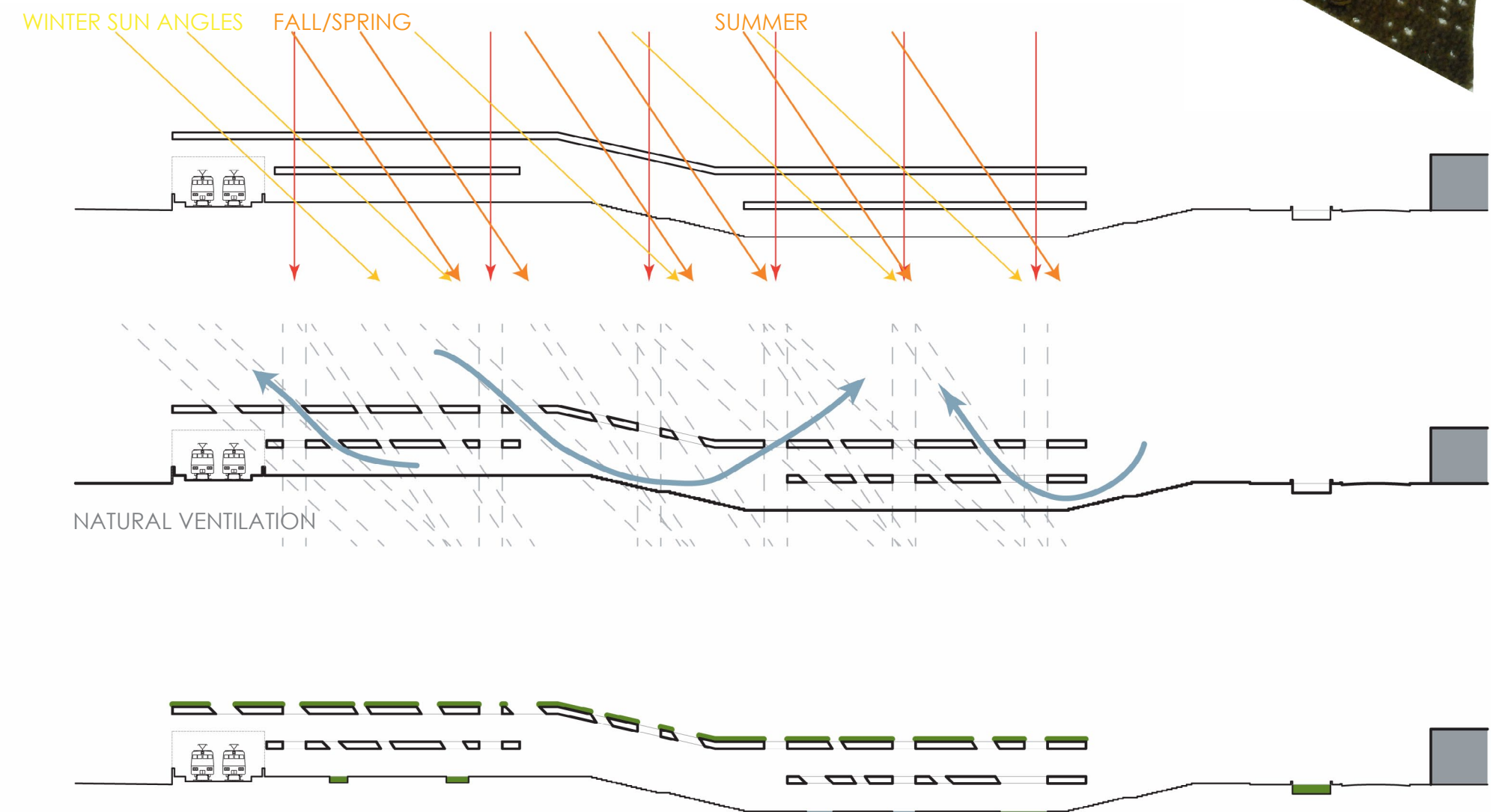
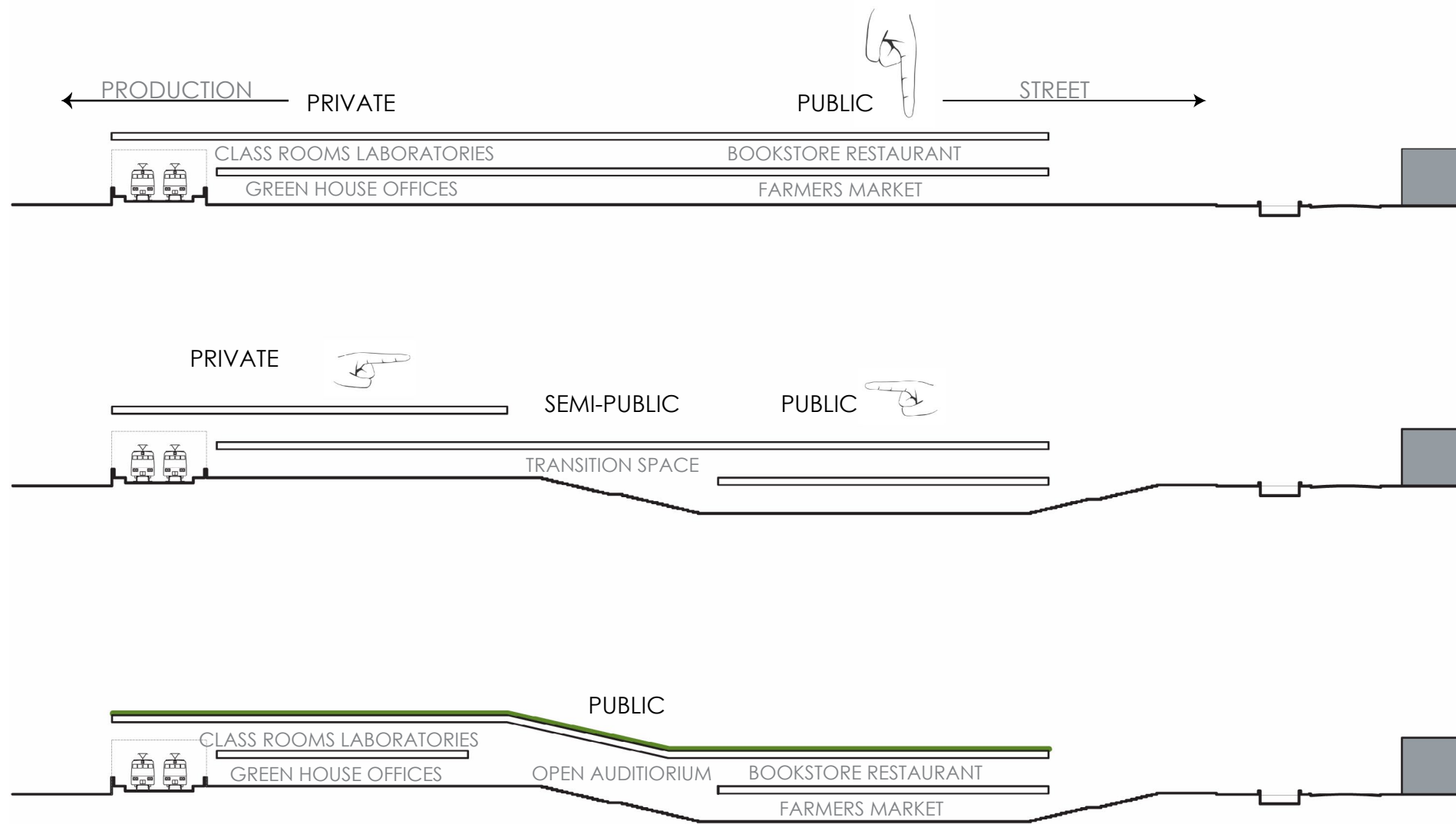
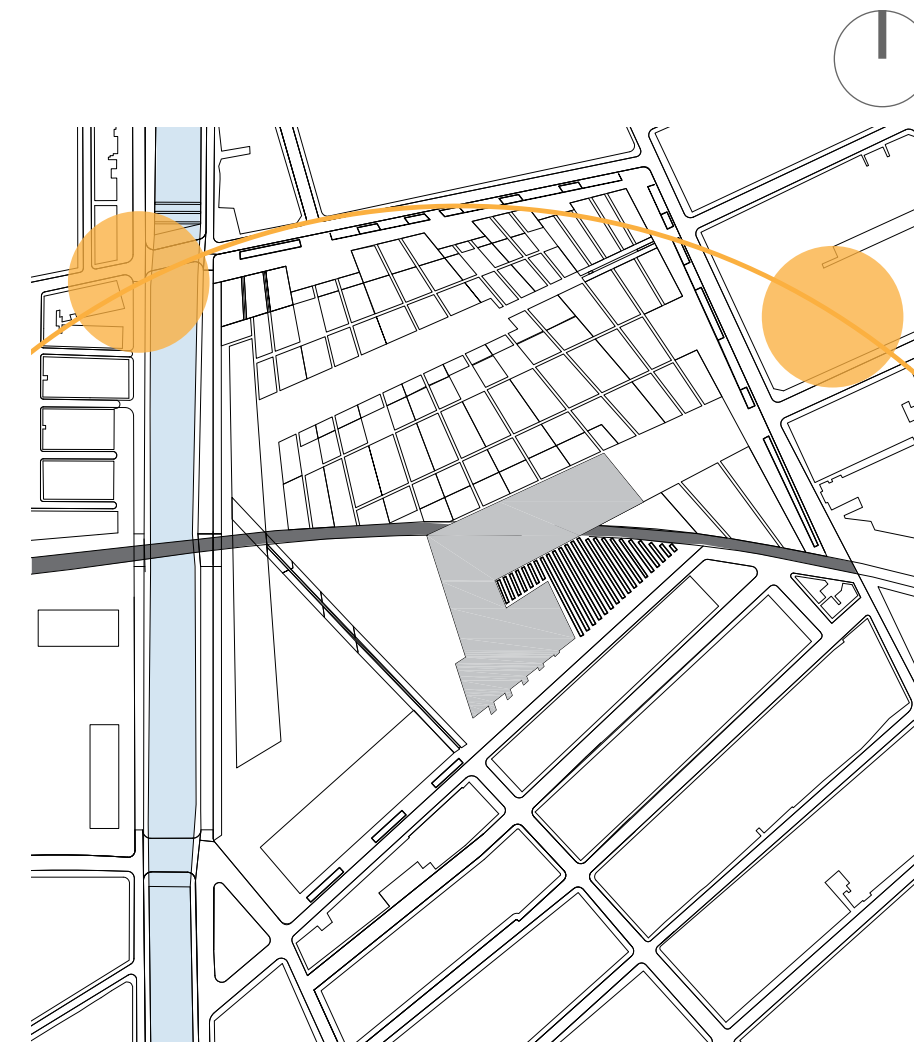
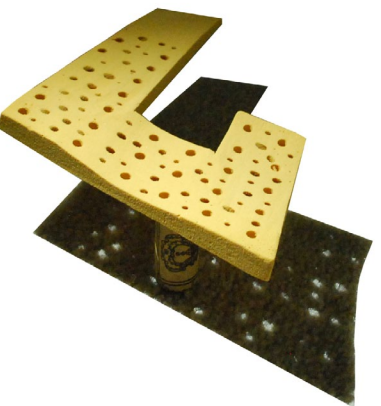
SUMMER



SPRING / FALL

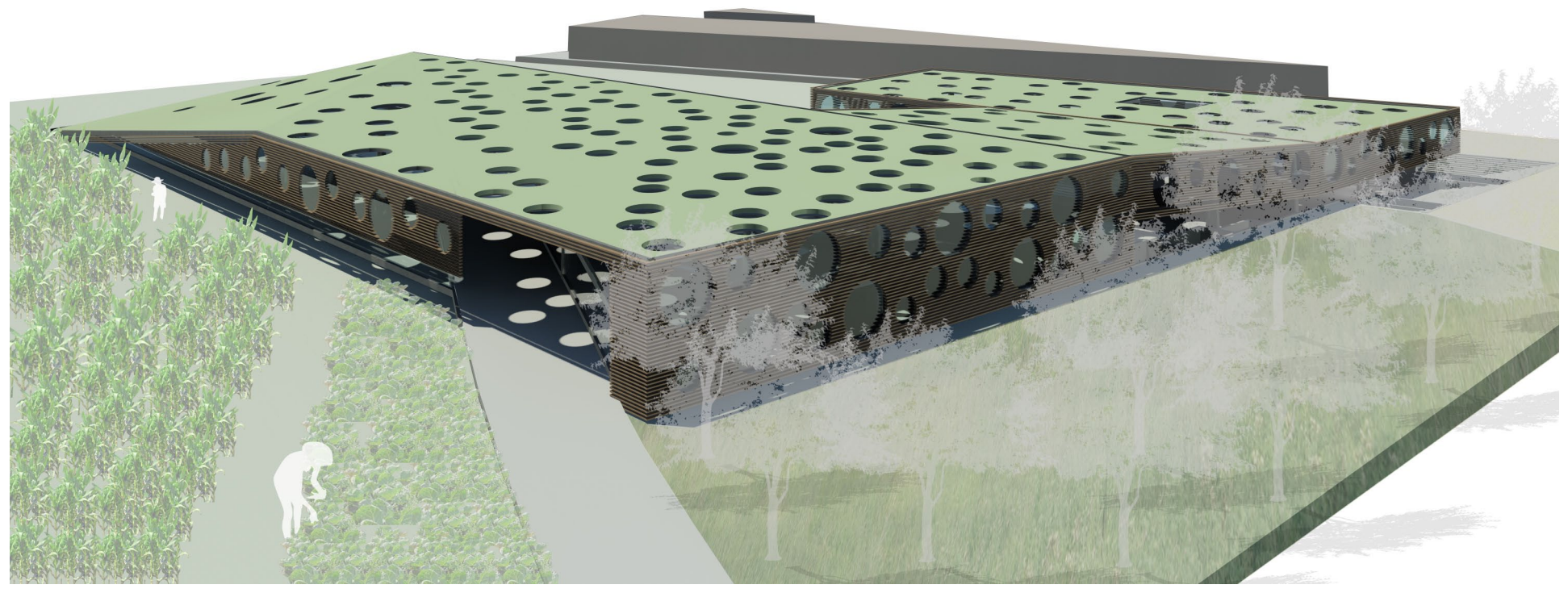


WINTER

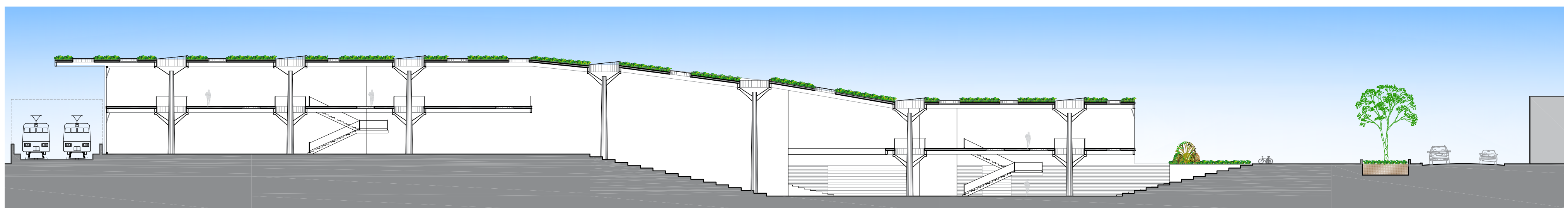




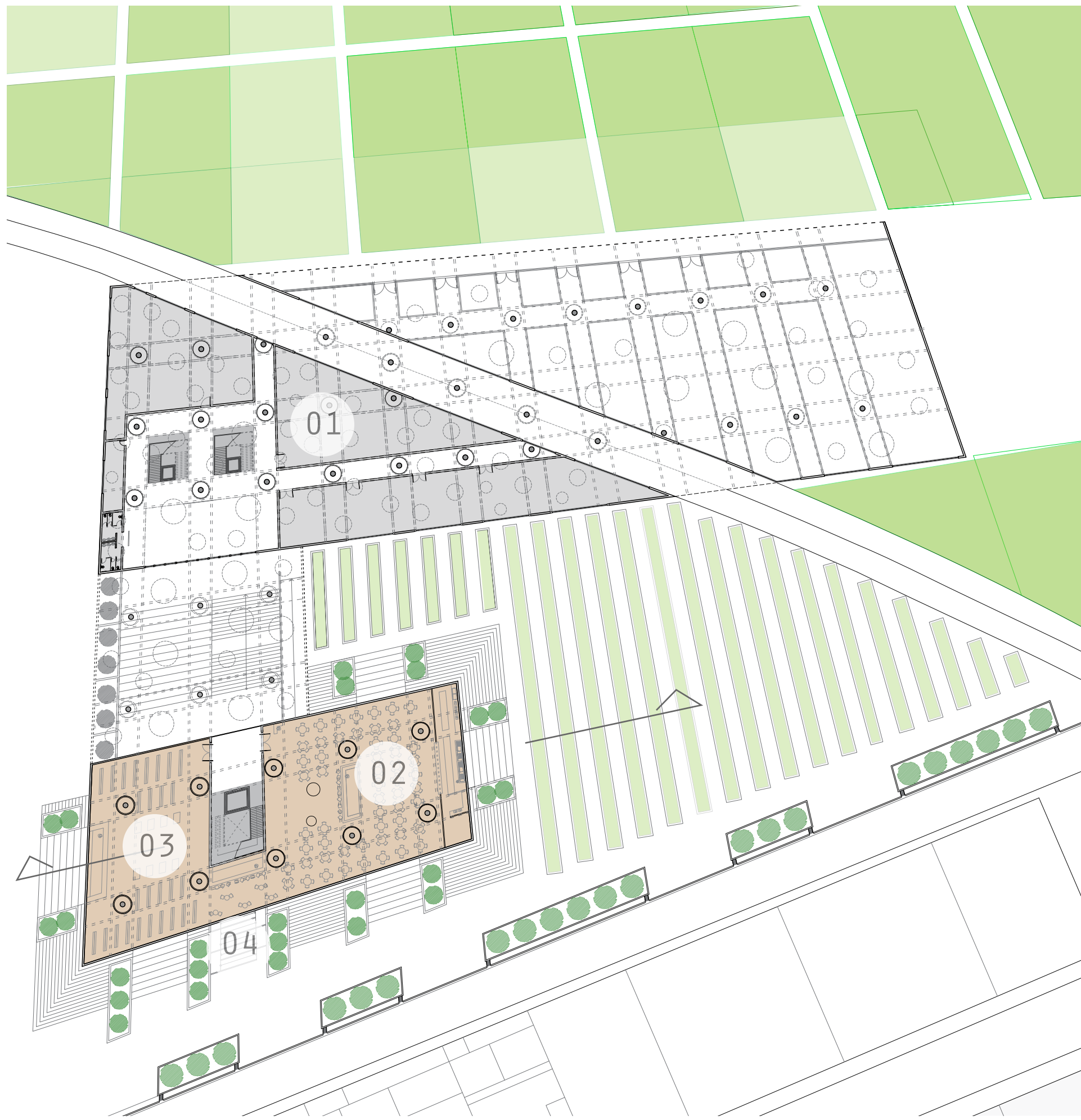
- 01 URBAN FARMING FACILITY. NURSERY, SEEDING, GREEN HOUSE.
- 02 NUTRITION AND CULINARY ARTS SCHOOL
- 03 OUTSIDE SEATING
- 04 FARMERS MARKET PLAZA



FIRST FLOOR PLAN  
0 10 30 100FT



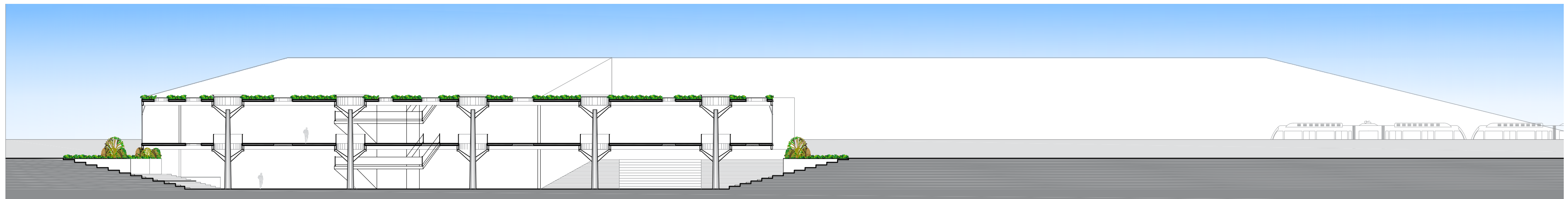
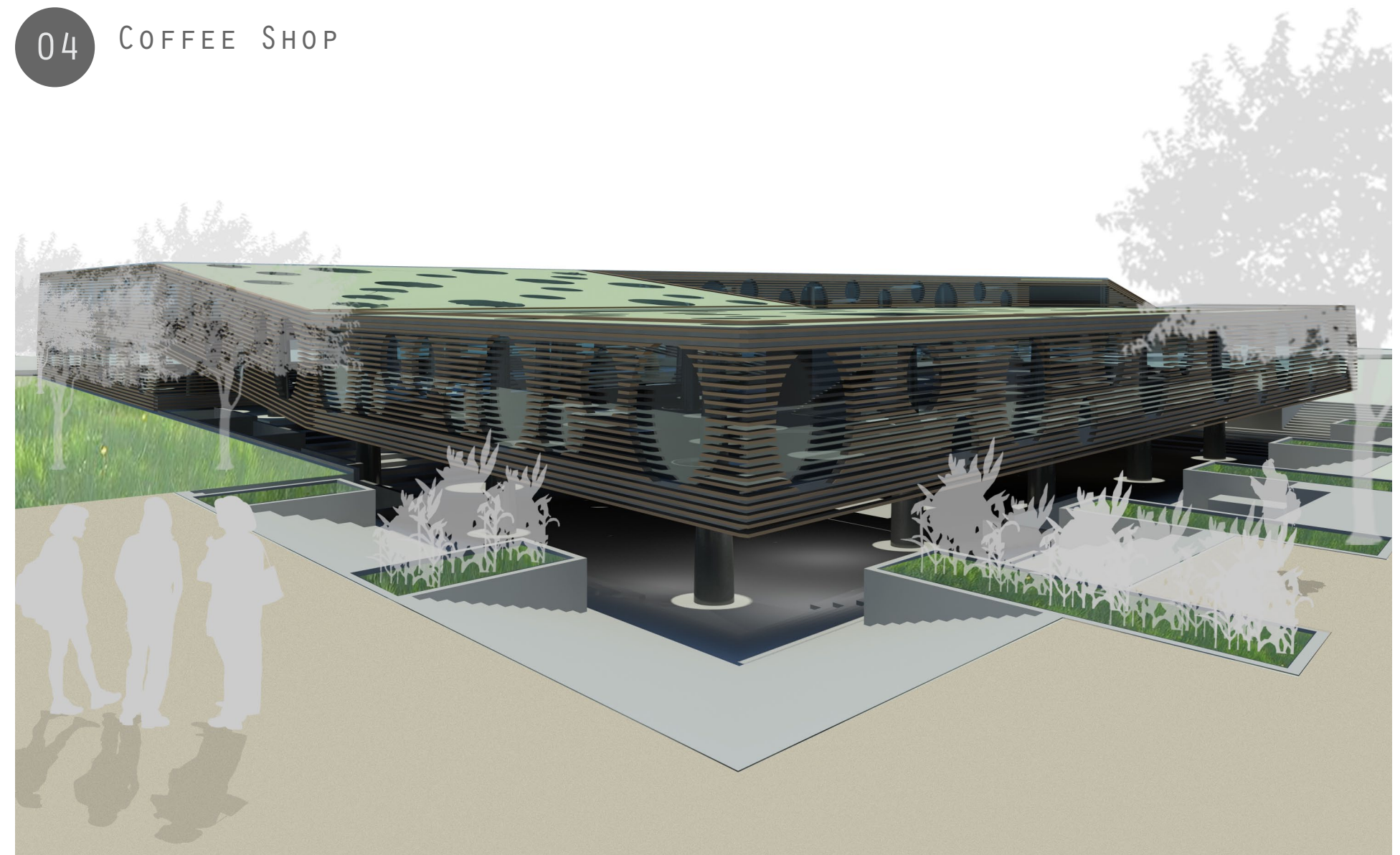
SECTION A-A



SECOND FLOOR PLAN

0 10 30 100FT

- 01 NUTRITION AND CULINARY ARTS SCHOOL
- 02 SCHOOL RESTAURANT
- 03 BOOKSTORE
- 04 COFFEE SHOP



SECTION B-B

# PROJECT DESCRIPTION

## ELEVATOR STATEMENT

THE PROJECT AIMS TO REVITALIZE THIS FORMER RAILWAY PARKING INFRASTRUCTURE LOCATED DOWNTOWN SÃO PAULO, CALLED PATIO DO PARI (PARI YARD) BY INTRODUCING A NEW ALTERNATIVE FOR SOCIAL INCLUSION THROUGH THE DEVELOPMENT OF A PROGRAM THAT WOULD: GROW FOOD, BY ACTIVATING THE LANDSCAPE; GROW MIND, BY PROVIDING EDUCATION THROUGH THE IMPLEMENTATION OF A COMMUNITY CENTER DEVOTED TO NUTRITION EDUCATION AND CULINARY ARTS; AND GROW COMMUNITY, BY REVITALIZING THE AREA AND BRING IT BACK TO THE COMMUNITY AS A EXAMPLE OF RECREATIONAL SPACE.

## CASE STATEMENT

SÃO PAULO IS THE BIGGEST CITY IN SOUTHERN HEMISPHERE, WITH NEARLY 20 MILLION HABITANTS IN THE METROPOLITAN AREA. IT IS A BOOMING, ENERGETIC CROWDED, POLLUTED, CONGESTED, INDUSTRIAL AND SPRAWLING CITY WITH VERY FEW GREEN AREAS. THE SITE IS LOCATED IN THE NEIGHBORHOOD CALLED PARI IN DOWNTOWN SÃO PAULO ALONG RAILWAY AXIS. LIKE MOST OF POSTINDUSTRIAL AREAS, PARI HAS SUFFERED WITH DISINTEREST AND DISINVESTMENT. THE PATIO DO PARI IS ADJACENT TO THE TAMANDUATEI RIVER, THE MERCADO MUNICIPAL PAULISTANO, AND TO THE TRANSPORT HUB DOM PEDRO II, THREE OF THE MOST IMPORTANT INFRASTRUCTURES IN CENTRAL SÃO PAULO, AND ONE OF THE MOST IMPORTANT AREAS OF OPPORTUNITY IN THE CITY.

THE PATIO DO PARI WAS BUILT IN 1891. THE YARD WAS NOT ONLY THE BIGGEST PARKING RAIL OF THE CITY OF SÃO PAULO, BUT ALSO A STRATEGIC POINT OF LOAD AND UNLOAD AND STORAGE OF THE COMMODITIES. THE SWITCH OF FREIGHT TRANSPORTATION TO THE SANTOS HARBOR FROM RAILROAD TO HIGHWAY LED TO THE UNDER USED OF THE YARD THAT FOR MANY WORKED AS PARKING SPACE FOR ABANDONED WAGONS. NOWADAYS, THE AREA OF APPROXIMATELY 42 ACRES, HAS BECOME A LEFTOVER PIECE OF LAND IN THE CITY, WHICH WORKS AS A BUS PARKING LOCATION AND HOUSE THE AMBULANT MARKET CALLED “FEIRA DA MADRUGADA” (DAWN MARKET) WHICH NAME CAME FROM THE WORKING HOURS OF THE MARKET, FROM 3:00 TO 10:00AM.

LATELY THE PATIO DO PARI AREA HAS BEEN TOPIC OF A LOT OF DISCUSSION AMONG THE ARCHITECTURE AND POLITICAL COMMUNITY WHAT THAT AREA COULD BECOME. SOME WOULD ARGUE THAT THE BEST DIRECTION WOULD BE INCREASE THE DENSITY OF THE AREA DEVELOPING A LOW-INCOME HOUSING PROJECT. ON THE OTHER HAND, SOME WOULD ARGUE DUE TO THE CITY LACK OF GREEN SPACE THAT THE AREA SHOULD BECOME A PARK.

THE STRATEGY TAKEN FROM ME IN ORDER TO REVITALIZE THIS CHALLENGE SITE IS TO USE THE LANDSCAPE AS THE FRAME-WORK FOR THE PROJECT. THEREFORE HAVING THE FOOD-LAB COMMUNITY CENTER INTEGRATED INTO THE LANDSCAPE. THE FOODLAB CENTER PROGRAM AIMS TO INTRODUCE A NEW ALTERNATIVE FOR SOCIAL INCLUSION, IN DOWNTOWN SÃO PAULO, THROUGH THE DEVELOPMENT OF HOLISTIC PROGRAM INTENT HAVING THE FOOD ACTING AS THE CONNECTING THREAD THAT TIES THE COMMUNITY TOGETHER. THE URBAN FARM IS DESIGNED AS PART OF THE LANDSCAPE IN ORDER TO REVITALIZE THE URBAN ENVIRONMENT AND ALSO MINIMIZE FOOD AND NUTRITIONAL INSECURITY TO THE SOCIAL VULNERABLE COMMUNITY LIVING IN DOWNTOWN SÃO PAULO. THE COMMUNITY CENTER IS GOING TO BE DEVOTED TO NUTRITION EDUCATION AND CULINARY ARTS PROVIDING PROFESSIONAL AND CERTIFICATES TRAINING AND ALSO PROVIDING JOB OPPORTUNITIES.

## GOALS AND GUIDING PRINCIPLES

RECONNECT THE SITE TO THE URBAN FABRIC.

- THE DEVELOPMENT OF SÃO PAULO HAS INDUCED A GROWTH PROCESS THAT GENERATED A LARGE NUMBER OF BLIGHTED AND UNDERUTILIZED AREAS ALONG THE RAILROAD AXES, PARTICULARLY ALONG THE CENTRAL AREAS, THESE RESIDUAL AREAS ARE WASTELANDS THAT DISARTICULATED THE URBAN TISSUE, ARE IMPEDIMENTS FOR MOVEMENTS, AND PREVENT AND INTEGRATED AND MORE HARMONIOUS CITY DEVELOPMENT. ON THE OTHER HAND, IF TACKED WITH A COMPREHENSIVE STRATEGY TO REVITALIZE AND RECONNECT THOSE ABANDONED AND UNDERUTILIZED AREAS TO THE EXISTING URBAN FABRIC CAN BE A SOURCE OF ECONOMIC GROWTH, COMMUNITY HEALTH AND ENVIRONMENTAL SUSTAINABLE

PROMOTE A HEALTH AND ENVIRONMENTAL FRIENDLY ENVIRONMENT.

- THE LANDSCAPE AS A DEVICE TO DEVELOP A HEALTHY URBAN ENVIRONMENT, WHERE ACCESS TO LOCAL PRODUCTION AND PREPARATION OF FOOD PROVIDE TO THE LOCAL COMMUNITY WITH HEALTHY NUTRITION, ACTIVITIES AND ENVIRONMENT. IN ADDITION, THE LANDSCAPE CAN BE AN ACTIVE PARTICIPANT IN THE STEWARDSHIP OF THE ENVIRONMENT BY PRODUCING CLEAN ENERGY ALTERNATIVES.

CULINARY ARTS AND NUTRITION EDUCATION.

- THE SCHOOL AIMS TO PROVIDE TO THEIR STUDENTS WITH AN AUTHENTIC LEARNING EXPERIENCE DURING THE WHOLE PROCESS OF CULTIVATING, LEARNING AND CONSUMING HEALTHY FOOD, AND THE CITY WITH A UNUSUAL DINING DESTINATION.

DEVELOP A PARTNERSHIP BETWEEN PRIVATE, PUBLIC AND NON-PROFIT ORGANIZATIONS.

- SUSTAINABLE COMMUNITIES ARE ENABLED BY PARTICIPATION AT ALL LEVELS. PARTNERSHIPS AMONG A VARIETY OF URBAN ENTITIES CAN STRENGTHEN THE COMMUNITY AND PROVIDE MUTUALLY BENEFICIAL SUPPORTS.

## DESIGN INTENT

RECONNECT THE SITE TO THE URBAN FABRIC.

- THROUGH AN INTERDISCIPLINARY DESIGN APPROACH THAT RELIES ON ALL FACETS OF SUSTAINABILITY: ENVIRONMENTAL, ECONOMIC, SOCIAL, CULTURAL, POLITICAL AND TECHNOLOGICAL.
- THROUGH THE URBAN ANALYSIS DEFINE THE POTENTIAL USERS OF THE AREA, FOR INSTANCE, THE PRINCIPAL ANCHORS AND SPECIALIZED COMMERCE DISTRICT IN ITS SURROUNDING. IN ADDITION, ANALYZE THE QUESTION OF ACCESSIBILITY IN MACRO AND MICRO-SCALE. SET URBAN GUIDELINES IN ORDER TO RECONNECT THE SITE BACK TO THE URBAN DYNAMICS AND ITS POTENTIAL USERS.

PROMOTE A HEALTH AND ENVIRONMENTAL FRIENDLY ENVIRONMENT.

- IN THIS PROJECT THE LANDSCAPE IS GOING TO WORK AS AN ORGANIZATIONAL DEVICE HELPING TO MERGE THE PROGRAM TO ITSELF. “OPERATIVE LANDSCAPE” RATHER THAN “HOST LANDSCAPE”. DEVELOP THE LANDSCAPE AS A WORKING SPACE FIRST, LOOKING AT QUESTIONS OF SOLAR (SOLAR FARM - ENERGY PRODUCTION), WATER (WATER HARVESTING AND RE-USE), SOIL (CUT AND FILL, DRAINAGE) AND WIND (ANOTHER ENERGY PRODUCTION ALTERNATIVE). STUDY HOW URBAN AGRICULTURE WORKS IN THE CONTEXT OF THE CITY, AND HOW IT CAN BE APPLIED.
- MAXIMIZE EFFICIENCY. STUDY STRATEGIES IN ORDER TO MINIMIZE THE PROJECT CARBON FOOT PRINT. TAKE MAXIMUM ADVANTAGE OF PASSIVE AND VERNACULAR STRATEGIES MAXIMIZING DAY LIGHTING AND NATURAL VENTILATION IN ORDER TO ACHIEVE A LOW OPERATIONAL COST.

CULINARY ARTS AND NUTRITION EDUCATION.

- PERSONALIZED LABORATORIES FOR EACH FIELD FOR EACH CLASS SUCH AS KITCHENLAB (EXPERIMENTAL KITCHENS), MIXOLOGYLAB FOR AN INTERACTIVE HAND-ON EXPERIENCE FOR BAR TENDING TRAINING AND DININGLAB RESTAURANT, SPACE DESIGN NOT ONLY TO GIVE THE STUDENTS FULL PREPARATION ON A REAL RESTAURANT BEFORE HEADING TO THE JOB MARKET, BUT ALSO PROVIDING THE DINNERS WITH AN UNUSUAL EXPERIENCE IN TASTING LOCALLY GROW FOOD ELABORATED FOR THE STUDENTS.

- CONNECTIONS BETWEEN ALL PARTS OF THE PROGRAM AND ALSO ITS USERS SHOULD PROMOTE NOT ONLY ACTIVENESS DURING THE WHOLE PROCESS OF CULTIVATING, LEARNING AND CONSUMING HEALTHY FOOD, BUT ALSO INTERACTION AMONG ALL USERS.

DEVELOP A PARTNERSHIP BETWEEN PRIVATE, PUBLIC AND NON-PROFIT ORGANIZATIONS.

- PROMOTE VISIBILITY OF BOTH ENTITIES, PRIVATE AND NON-PROFIT BY SHOWING THEIR WORK AND EXPOSING THEIR STUDENTS AND VOLUNTEERS TO WORK TOGETHER.



# PROGRAM DEVELOPMENT

## PROGRAM

### Culinary Arts & Nutrition Education Center

	Number	Sq Footage	Total
Hall	1	700	700
Front desk	1	250	250
Auditorium	1	1000	1000
Show room	1	800	800
Book&Utensils Store	1	800	800
Restrooms	2	160	320
KitchenLab	2	2000	4000
MixologyLab	1	1500	1500
WineLab	1	1000	1000
ProduceLab	1	1500	1500
Pastry&BakeryLab	1	2000	2000
Walk-in Cold chamber	1	400	400
Pantry	1	600	600
Storage	2	500	1000
Restroom	4	200	800
Locker Room	1	800	800
Smart Classroom	6	600	3600
ComputerLab	1	900	900
Library	1	4000	4000
Janitorial room	2	150	300
Administration reception	1	300	300
Front desk	1	100	100
Open office	10	55	550
Coorderator office	2	150	300
Meeting room	2	350	700
Teachers lounge	1	500	500
Restroom	2	160	320
DiningLab			
Hall	1	300	300
Dining room	1	2000	2000
Private dining room	1	400	400
Wine cellar	1	200	200
Bar	1	300	300
Kitchen	1	1500	1500
Cold Chamber	1	200	200
Pantry	1	200	200
Locker room	2	300	600
restroom	2	160	320
Mechanical room	1	800	800
Eletricalroom	1	500	500
Employee locker room	2	450	900
Employee break room	1	300	300
Freight elevator	1	150	150

### Non-profit Organization Urban Farming

	Number	Sq Footage	Total
Hoop house	2	2500	5000
Nursery room	1	2000	2000
Seed station	1	2000	2000
ResearchLab	1	800	800
Classroom (shared facility with the School)			
Outdoor crop	1	20000	20000
Compost area	1	2000	2000
Processing and storage	1	800	800
Market	1	500	500
Open office	10	55	550
Meeting room (shared facility with the School)			33650

### Landscape's infrastructure & Articulation

- Clean Energy
- Solar Farm
- Wind Mill
- Rain water harvesting
- Soil drainage
- Natural pond
- Orchard
- Recreational area
- Walking path
- Cycling path
- Bike parking
- Public restrooms

**NET AREA TOTAL sf 71360**  
**GROSS AREA ESTIMATE sf (1.25) 89200**

## DIAGRAMS

### LEVELS OF PERMEABILITY

LANDSCAPE

URBAN FARMING

SCHOOL / RESTAURANT

PUBLIC VS. PRIVATE

SCHOOL AND NON-PROFIT ADMINISTRATION  
PRIVATE

SCHOOL CLASSROOMS  
PRIVATE

SCHOOL LOBBY  
SEMI-PUBLIC

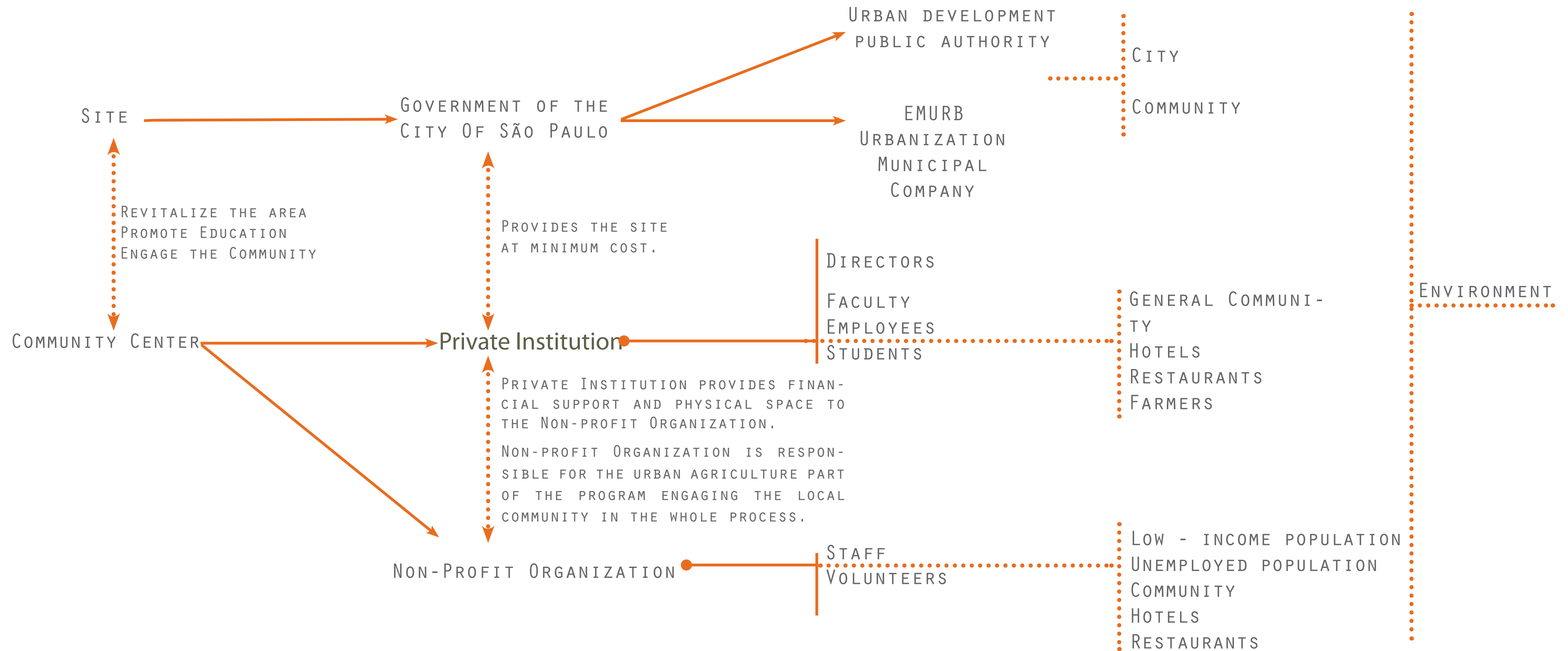
DININGLAB RESTAURANT  
SEMI-PUBLIC

URBAN FARMING  
PUBLIC



# STAKEHOLDER DIAGRAM

PARTNERSHIP RELATIONSHIPS



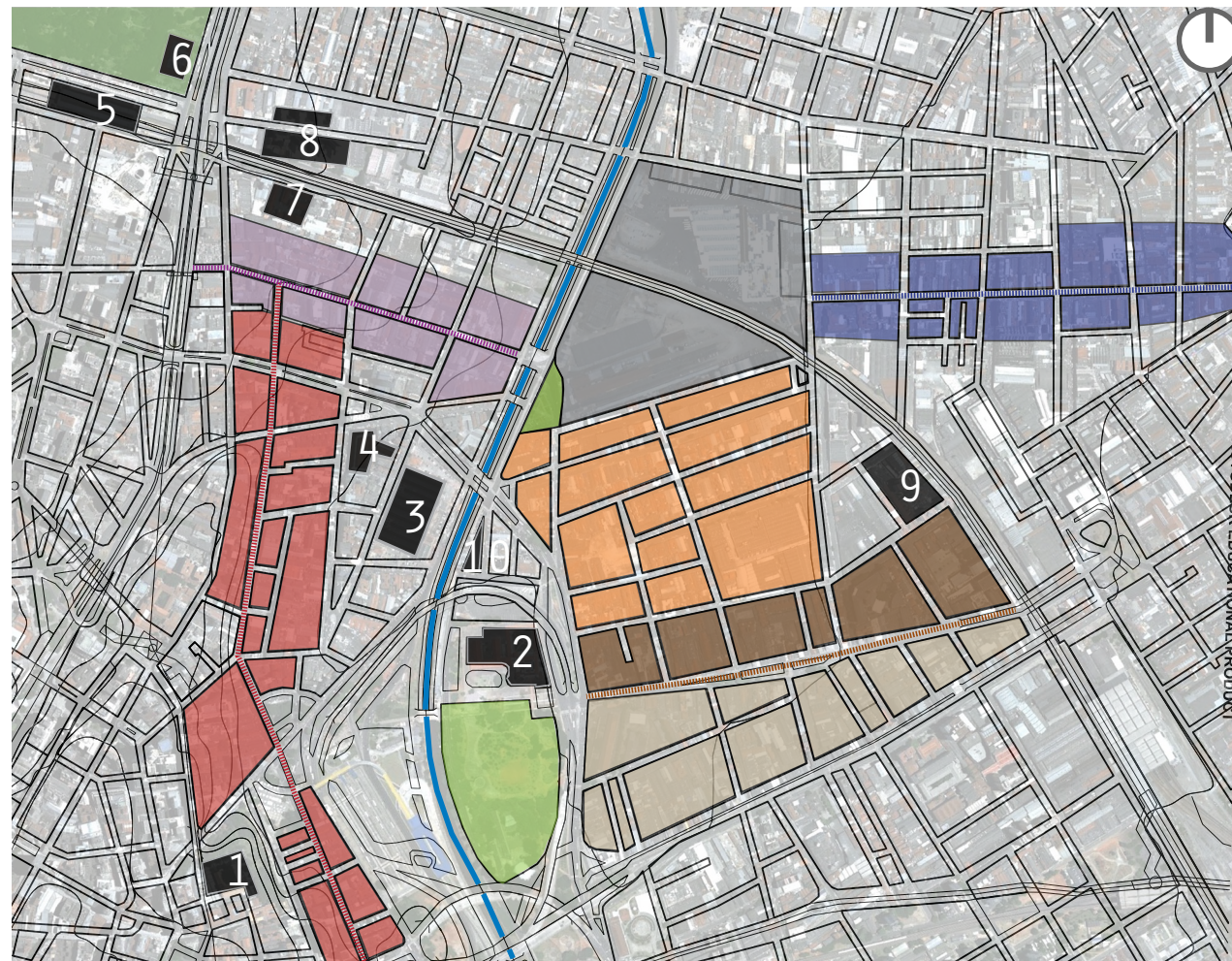
# PROCESS SCHEDULE

PROJECT'S DEVELOPMENT SCHEDULE

	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY
WEEK 01	1 - 9 GOALS/GUIDING PRINCIPLES CASE STUDIES RESEARCH BIBLIOGRAPHY	31 - 6 PROGRAM DEVELOPMENT SITE ANALYSIS DIAGRAMS	28 - 4 FINAL REVIEW WEEK	2 - 8 CONCEPT DEVELOPMENT SITE MODEL - URBAN SCALE	30 - 5 DESIGN DEVELOPMENT	27 - 5 DESIGN DEVELOPMENT	27 - 2 DESIGN DEVELOPMENT EXAM WEEK
WEEK 02	10 - 16 GOALS/GUIDING PRINCIPLES CASE STUDIES RESEARCH BIBLIOGRAPHY	7 - 13 PROGRAM DEVELOPMENT SITE ANALYSIS DIAGRAMS CONCEPT DEVELOPMENT	5 - 11 EXAM WEEK	9 - 15 CONCEPT DEVELOPMENT SITE MODEL - URBAN SCALE	6 - 12 DESIGN DEVELOPMENT	6 - 12 SPRING BREAK DESIGN DEVELOPMENT	3 - 9 DESIGN DEVELOPMENT GRADUATION
WEEK 03	17 - 23 GOALS/GUIDING PRINCIPLES CASE STUDIES RESEARCH BIBLIOGRAPHY	14 - 20 DIAGRAMS CONCEPT DEVELOPMENT	12 - 18 FURTHER SITE ANALYSIS	16 - 22 CONCEPT REFINEMENT URBAN INTERVENTION GUIDELINES	13 - 19 DESIGN DEVELOPMENT	13 - 19 DESIGN DEVELOPMENT	10 - 16 FINAL DRAWINGS FINAL MODEL FINAL RENDERINGS
WEEK 04	17 - 23 GOALS/GUIDING PRINCIPLES CASE STUDIES RESEARCH BIBLIOGRAPHY	21 - 27 DOCUMENT DUE	19 - 25 FURTHER SITE ANALYSIS	23 - 29 URBAN INTERVENTION GUIDELINES	20 - 26 MIDREVIEW WEEK	20 - 26 DESIGN DEVELOPMENT	17 - 23 FINAL DRAWINGS FINAL MODEL FINAL RENDERINGS
WEEK 05	24 - 30 GOALS/GUIDING PRINCIPLES PROGRAM DEVELOPMENT SITE ANALYSIS	28 - 4 FINAL REVIEW WEEK	26 - 1 CONCEPT DEVELOPMENT	30 - 31 DESIGN DEVELOPMENT SYSTEMS RESEARCH	27 - 5 DESIGN DEVELOPMENT	27 - 2 DESIGN DEVELOPMENT	24 - 30 FINAL REVIEW WEEK

# PARI YARDS CONTEXT

# ENVIRONMENTAL ANALYSIS



07. ENGLISH VILLAGE. HOUSES FROM THE EARLY XX CENTURY. NATIONAL LANDMARK. NOWADAYS IIT HOUSES ARCHITECTURE OFFICES AND RESTAURANTS.



08. NEW HIGH RISE DEVELOPMENTS.



09. PUBLIC HOUSING DEVELOPMENTS.



01. PATIO DO COLEGIO. (SCHOOL YARD) ORIGIN OF SÃO PAULO.



04. MUNICIPAL MARKET KINJO YAMATO.



02. FORMER INDUSTRY PALACE(1920), TODAY MUSEUM OF SCIENCE.



05. THE STATION IS PART OF THE METROPOLITAN RAIL SYSTEM RAN BY THE CPTM. THE STATION IS MOSTLY NOTABLE FOR HOUSING THE MUSEUM OF THE PORTUGUESE LANGUAGE



03. THE MUNICIPAL MARKET OF SÃO PAULO RECEIVES MORE THAN 600,000 VISITORS PER MONTH AND 3,000 EMPLOYEES READY TO SERVE THEM. IN THE WHOLESALE SECTION, ABOUT 300 TONS OF FOOD ARE BOUGHT EVERY DAY BY FREE MARKET TRADERS, GREENGROCERS AND RENOWNED RESTAURATEURS IN THE COUNTRY.

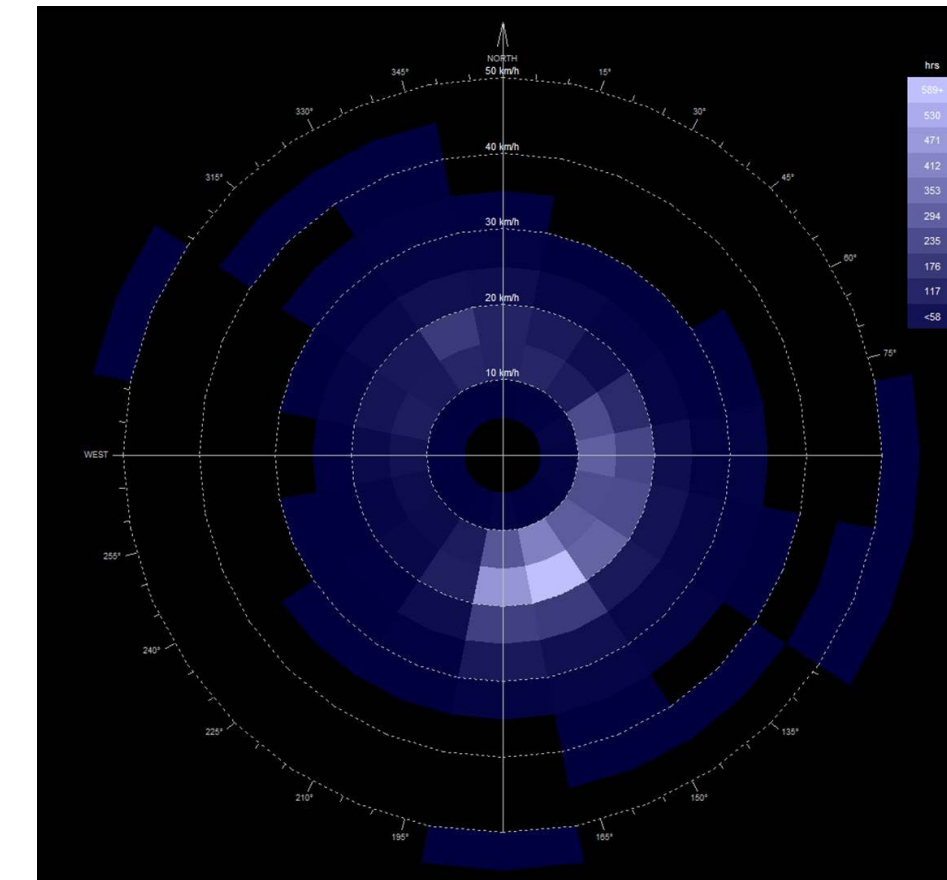


06. THE PINACOTECA DO ESTADO DE SÃO PAULO (PORTUGUESE FOR "PINACOTHECA OF THE STATE OF SÃO PAULO") IS ONE OF THE MOST IMPORTANT ART MUSEUMS IN BRAZIL

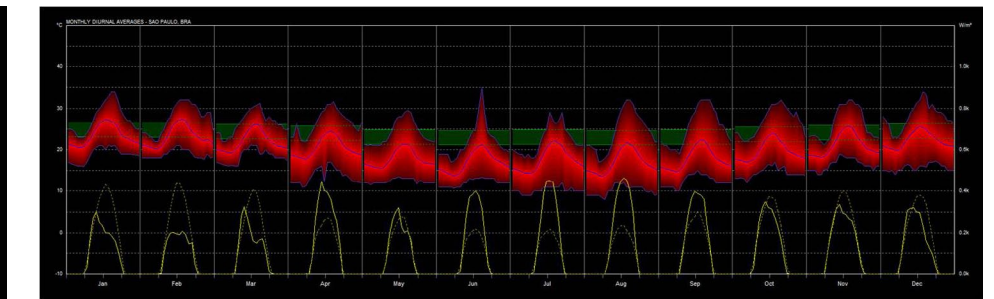


10. SÃO VITO BUILDING. IS A 28 STORY BUILDING BUILT IN 1959. NOWADAYS THIS BUILDING HAS DETERIORATED AND WAS OCCUPIED BY HOMELESS, UNEMPLOYED OR ENGAGED ON INFORMAL ACTIVITIES.

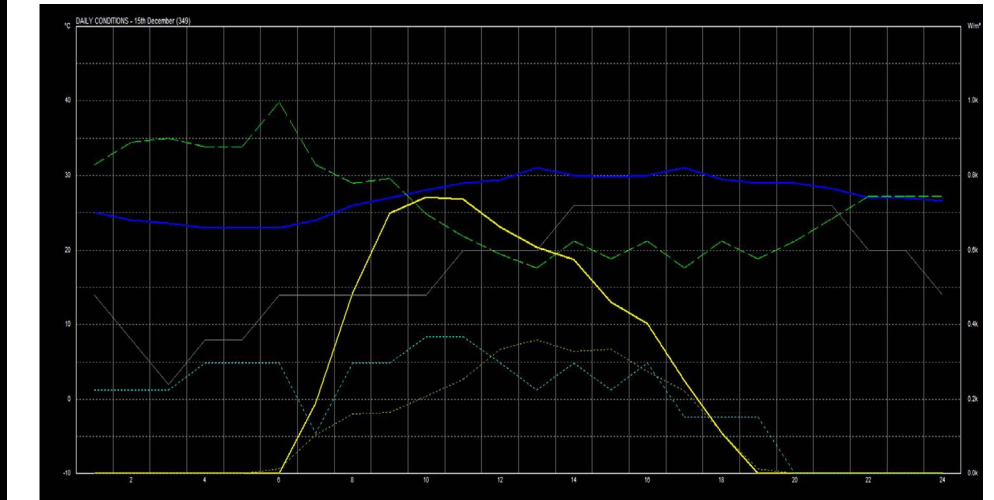
## PREVAILING WINDS



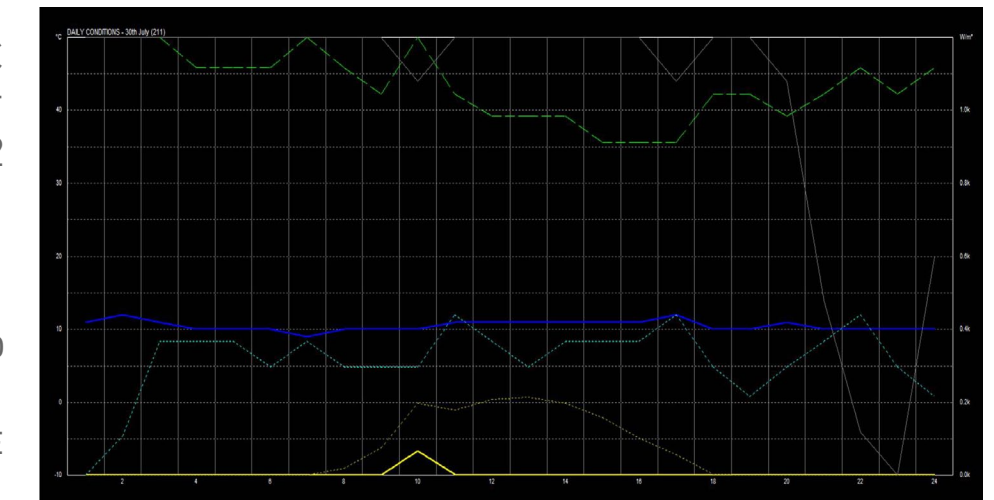
## ANNUAL AVERAGE TEMPERATURE



## HOTTEST DAY

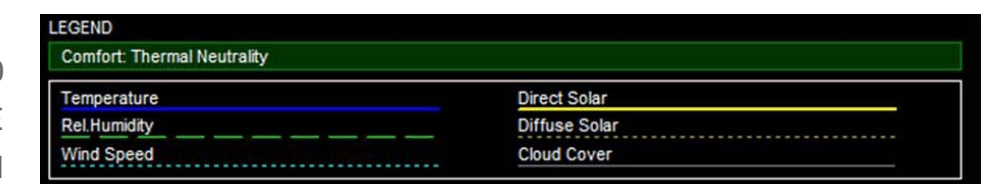


## COLDEST DAY



SÃO PAULO HAS A MONSOON-INFLUENCED HUMID SUBTROPICAL CLIMATE. IN SUMMER, TEMPERATURES ARE BETWEEN 17 °C (63 °F) AND 28 °C (82 °F), AND 32 °C (90 °F) ON THE HOTTEST DAYS. IN WINTER, ARE BETWEEN 11 °C (52 °F) AND 23 °C (73 °F), AND 6 °C (43 °F). ON THE COLDEST DAYS. THE HIGHEST TEMPERATURE RECORDED WAS 35.3 °C (95.5 °F) NOVEMBER 15, 1985, AND THE LOWEST RECORDED WAS -2 °C (28.4 °F) IN AUGUST 2, 1955. THE AVERAGE TEMPERATURES THROUGHOUT THE YEAR ARE SIMILAR TO THOSE OF LOS ANGELES. THE TROPIC OF CAPRICORN, AT ABOUT 23°27' S, PASSES THROUGH NORTH OF SÃO PAULO AND ROUGHLY MARKS THE BOUNDARY BETWEEN THE TROPICAL AND TEMPERATE AREAS OF SOUTH AMERICA.

RAINFALL IS ABUNDANT. IT IS ESPECIALLY COMMON IN THE WARMER MONTHS AVERAGE OF 219 MILLIMETERS (8.6 IN), AND DECREASE IN WINTER, AVERAGE OF 47 MILLIMETERS (1.9 IN). DURING LATE WINTER, ESPECIALLY AUGUST, THE CITY EXPERIENCES THE PHENOMENON KNOWN AS "VERANICO" (LITTLE SUMMER), WHICH CONSISTS OF A BOUT OF UNUSUALLY HOT AND DRY WEATHER, SOMETIMES REACHING TEMPERATURES WELL ABOVE 28 °C (82 °F). ON THE OTHER HAND, RELATIVELY COOL DAYS DURING SUMMER ARE FAIRLY COMMON WHEN PERSISTENT WINDS BLOW FROM THE OCEAN. ON SUCH OCCASIONS DAILY HIGH TEMPERATURES MAY NOT SURPASS 20 °C (68 °F), ACCOMPANIED BY LOWS OFTEN BELOW 15 °C



LATITUDE: -23.6  
 LONGITUDE: -46.7  
 WINTER SUN ANGLE: 43.4  
 SUMMER SUN ANGLE: 89.3  
 FALL / SPRING SUN ANGLE: 56

RAINWATER FALL (MM)	
JANUARY	235
FEBRUARY	245
MARCH	185
APRIL	80
MAY	85
JUNE	65
JULY	45
AUGUST	35
SEPTEMBER	80
OCTOBER	110
NOVEMBER	130
DECEMBER	205

# VIET VILLAGE URBAN FARM

MOSSOP + MICHAELS  
NEW ORLEANS, LOUISIANA

**PROJECT STATEMENT:** VIET VILLAGE URBAN FARM IS AN URBAN FARMING PROJECT LOCATED IN NEW ORLEANS EAST, AN AREA HARD HIT BY KATRINA. THE DESIGN TEAM ASSISTED THE COMMUNITY WITH THE DESIGN OF THE ENVIRONMENTAL INFRASTRUCTURES SYSTEMS NEEDED TO SUPPORT AN ORGANIC URBAN FARMING OPERATION, THE DESIGN OF A MARKET AREA TO SERVE AS A COMMUNITY RESOURCE AND ECONOMIC CATALYST FOR THE COMMUNITY AND THE DEVELOPMENT OF A FLEXIBLE, STRATEGIC PLAN FOR SEEKING FUNDING FOR THE PROJECT AND INCORPORATING VARIOUS LABOR RESOURCES

**PROJECT NARRATIVE:** VIET VILLAGE IS A THRIVING VIETNAMESE-AMERICAN COMMUNITY LOCATED IN NEW ORLEANS EAST THAT WAS ESTABLISHED IN THE MID-1970'S. ONE OF THE

FIRST ACTIVITIES OF THE EARLY VIETNAMESE IN NEW ORLEANS WAS THE ESTABLISHMENT OF HOME-BASED GARDENS TO GROW THE TRADITIONAL FRUITS AND VEGETABLES THAT WEREN'T AVAILABLE LOCALLY. THESE GARDENS WERE INFORMAL AND WIDELY SCATTERED ACROSS THE COMMUNITY: IN VACANT LOTS, ALONG THE EDGE OF LEVEES, IN BACKYARDS, ANYWHERE THAT HAD DECENT SOIL AND ACCESS TO WATER. BEFORE THE DEVASTATION OF KATRINA, THERE WERE OVER 30 ACRES BEING FARMED THROUGHOUT THE COMMUNITY. THERE WAS ALSO A WELL-ESTABLISHED TRADITION OF INFORMAL MARKETS IN THE COMMUNITY, DEVELOPED AS AN OUTLET TO SELL PRODUCE THE LOCAL GROWERS DID NOT CONSUME IN THEIR HOMES.



# HOUTAN PARK

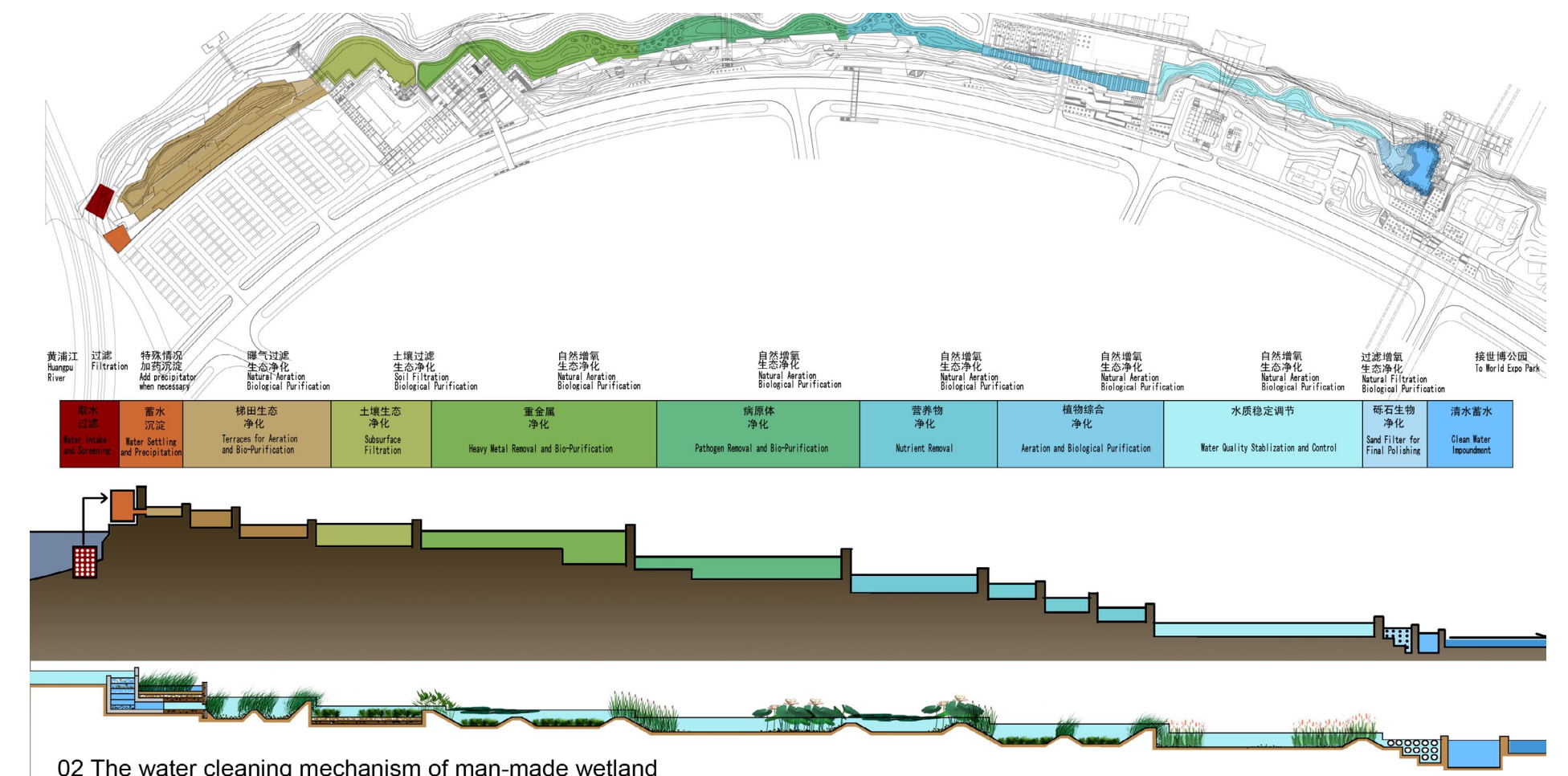
TURENSCAPE  
SHANGHAI, CHINA

BUILT ON A BROWNFIELD OF A FORMER INDUSTRIAL SITE, HOUTAN PARK IS A REGENERATIVE LIVING LANDSCAPE ON SHANGHAI'S HUANGPU RIVERFRONT. THE PARK'S CONSTRUCTED WETLAND, ECOLOGICAL FLOOD CONTROL, RECLAIMED INDUSTRIAL STRUCTURES AND MATERIALS, AND URBAN AGRICULTURE ARE INTEGRAL COMPONENTS OF AN OVERALL RESTORATIVE DESIGN STRATEGY TO TREAT POLLUTED RIVER WATER AND RECOVER THE DEGRADED WATERFRONT IN AN AESTHETICALLY PLEASING WAY.

THE SITE IS A NARROW LINEAR 14-HECTARE (34.6 ACRE) BAND LOCATED ALONG THE HUANGPU RIVER WATERFRONT IN SHANGHAI, CHINA. THIS BROWNFIELD, PREVIOUSLY OWNED BY A STEEL FACTORY AND A SHIPYARD, HAD FEW INDUSTRIAL STRUCTURES REMAINING AND THE SITE WAS LARGELY

USED AS A LANDFILL AND LAY-DOWN YARD FOR INDUSTRIAL MATERIALS.

REGENERATIVE DESIGN STRATEGIES USED TO TRANSFORM THE SITE INTO A LIVING SYSTEM THAT OFFER COMPREHENSIVE ECOLOGICAL SERVICES INCLUDED: FOOD PRODUCTION, FLOOD, WATER TREATMENT, AND HABITAT CREATION COMBINED IN AN EDUCATIONAL AND AESTHETIC FORM. THE SITE IS DESTINED TO BE AN INNOVATIVE DEMONSTRATION OF THE ECOLOGICAL CULTURE FOR THE 2010 EXPO.



# HUNTINGTON URBAN FARM

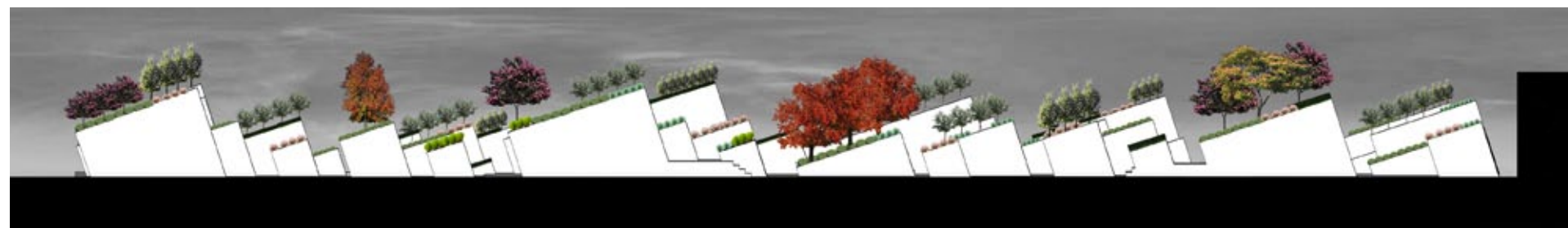
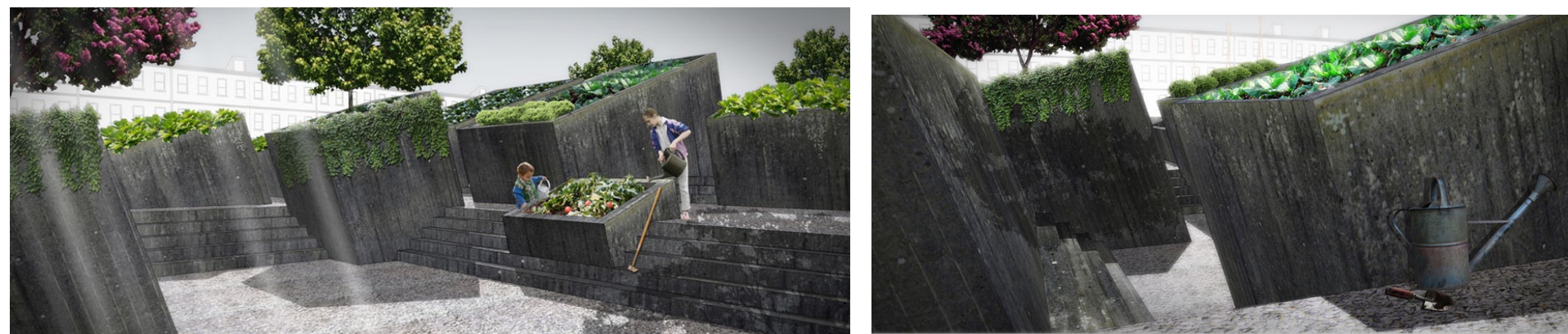
ARCHITECT TIM STEPHENS  
NEW ZEALAND

THE FARM RESPONDS TO THE LACK OF SUPPORT FOR THE SUSTAINABLE PRACTICE OF GROWING AND CULTIVATING ONE'S OWN FOOD SOURCE, AN IMPORTANT ISSUE STEPHENS SEES AS BECOMING MORE PREVALENT AS OUR POPULATION INCREASES. THE FARM PROVIDES CONVENIENT ACCESS TO INDIVIDUALIZED PLOTS OF LAND WHERE USERS CAN PRODUCE THEIR OWN FOOD RIGHT IN THE MIDDLE OF THE TOWN.

LOCATED CLOSE TO THE TOWN'S PUBLIC LIBRARY, CHURCH AND NURSERY, THE URBAN FARM PROJECT IS COMPRISED OF FARMABLE PLOTS OF DIFFERENT SIZES TO SUIT INDIVIDUAL USERS/SMALL FAMILIES. "IN PROVIDING THESE FARMING PLOTS FOR THE COMMUNITY TO USE, THE PRECINCT WILL BECOME A HUB FOR SOCIAL ACTIVITY AND INTERACTION, SOMETHING SORELY MISSING IN MANY EXISTING COMMUNITIES," EXPLAINED STEPHENS.

THIS FARM IS VIEWED AS A MODEL THAT CAN BE INTEGRATED INTO EXISTING COMMUNITIES ON OTHER SITES IN DIFFERENT LONG ISLAND TOWNSHIPS. WITHIN THIS PARTICULAR DESIGN, THE FARM INCLUDES WINDING PATHS AND CHANGING LEVELS TO PROVIDE A "SENSE OF ADVENTURE AND DISCOVERY AS ONE MOVES THROUGH THE PRECINCT." STEPHENS SEES THE DESIGN AS PROMOTING SOCIAL INTERACTION, ESPECIALLY WITH ITS CONVERGING PATHS WHICH CAN LEAD USERS TO HAPPEN UPON ONE ANOTHER WHILE WALKING THROUGH THE GARDEN.

"THE HUNTINGTON URBAN FARM IS TO PAVE THE WAY FOR FRESH THINKING IN TERMS OF HOW COMMUNITIES INTERACT WITH EACH OTHER AND HOW A COMMON, PRODUCTIVE BOND CAN BE ACHIEVED THROUGH SUSTAINABLE PRACTICES," ADDED STEPHENS



# CO-OP CANYON

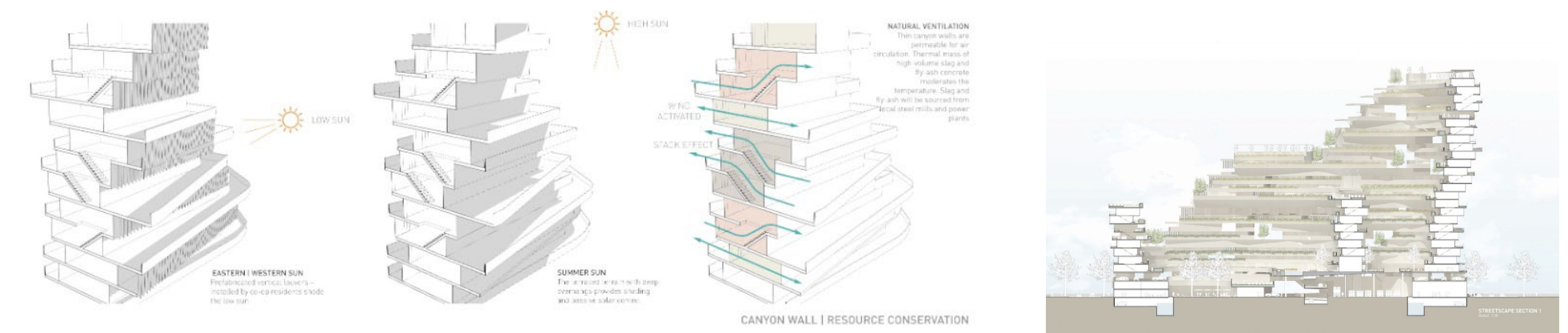
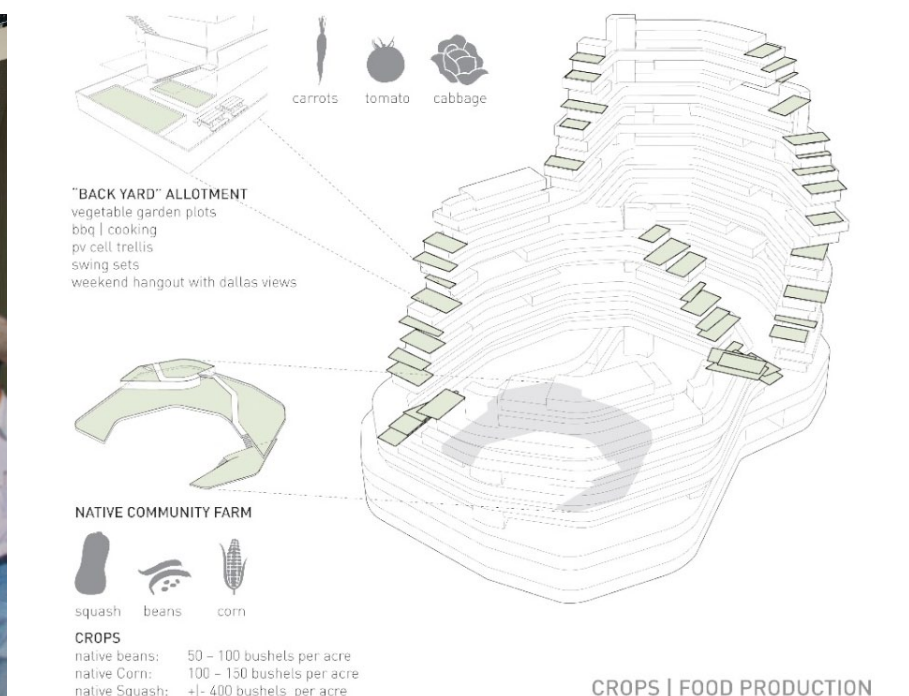
STANDARD ARCHITECTURE  
RE:VISION DALLAS COMPETITION

STANDARD ARCHITECTURE'S CONCEPTUAL DESIGN, CO-OP CANYON, HAS RECENTLY RECEIVED AN HONORABLE MENTION FOR THE RE:VISION DALLAS COMPETITION. THE COMPETITION PROVIDED PARTICIPANTS WITH THE OPPORTUNITY TO CREATE AN INNOVATIVE AND SUSTAINABLE PROTOTYPE FOR AN URBAN COMMUNITY. STANDARD'S RADICAL APPROACH FOCUSED ON HOW THE RESIDENTS COULD POTENTIALLY GAIN EQUITY THROUGH PARTICIPATION IN CONSTRUCTION, AGRICULTURAL, MAINTENANCE, EDUCATION AND CONSERVATION PROGRAMS CENTRAL TO THE SUSTENANCE OF THE COMMUNITY.

CO-OP CANYON CREATES A SUSTAINABLE, ZERO CARBON SPACE FIT FOR 1,000 USERS. INSPIRED BY THE CLIFF DWELLINGS OF THE ANASAZI INDIANS, THE CO-OP FEATURES TERRACED URBAN CONDITIONS WHICH OVERLOOK A LUSH URBAN CANYON.

THE DWELLING TERRACES ARE LINED WITH FRONT YARD GARDENS THAT HOST NATIVE PLANTS VARYING IN COLOR AND TEXTURE, WHILE BACKYARD GARDENS EMPHASIZE THE ENDS OF THE TERRACES. THE GARDEN ALLOTMENTS, IN ADDITION TO COMMUNAL FARMS, ARE DISPERSED THROUGHOUT THE TERRACES ALLOWING RESIDENTS TO GROW, EXCHANGE, AND SHARE CANYON-GROWN PRODUCE.

THE CANYON WALLS ARE RELATIVELY THIN WHICH ALLOWS AMPLE NATURAL LIGHT AND AIR CIRCULATION WITHIN THE DWELLINGS. AT THE STREET LEVEL, THE POROUS WALLS FORM THE THRESHOLD BETWEEN THE COMMUNITY AND THE URBAN CONTEXT, LINKING THE TERRACED CANYON FLOOR TO THE STREETS OF DALLAS.



# GARY COMER YOUTH CENTER

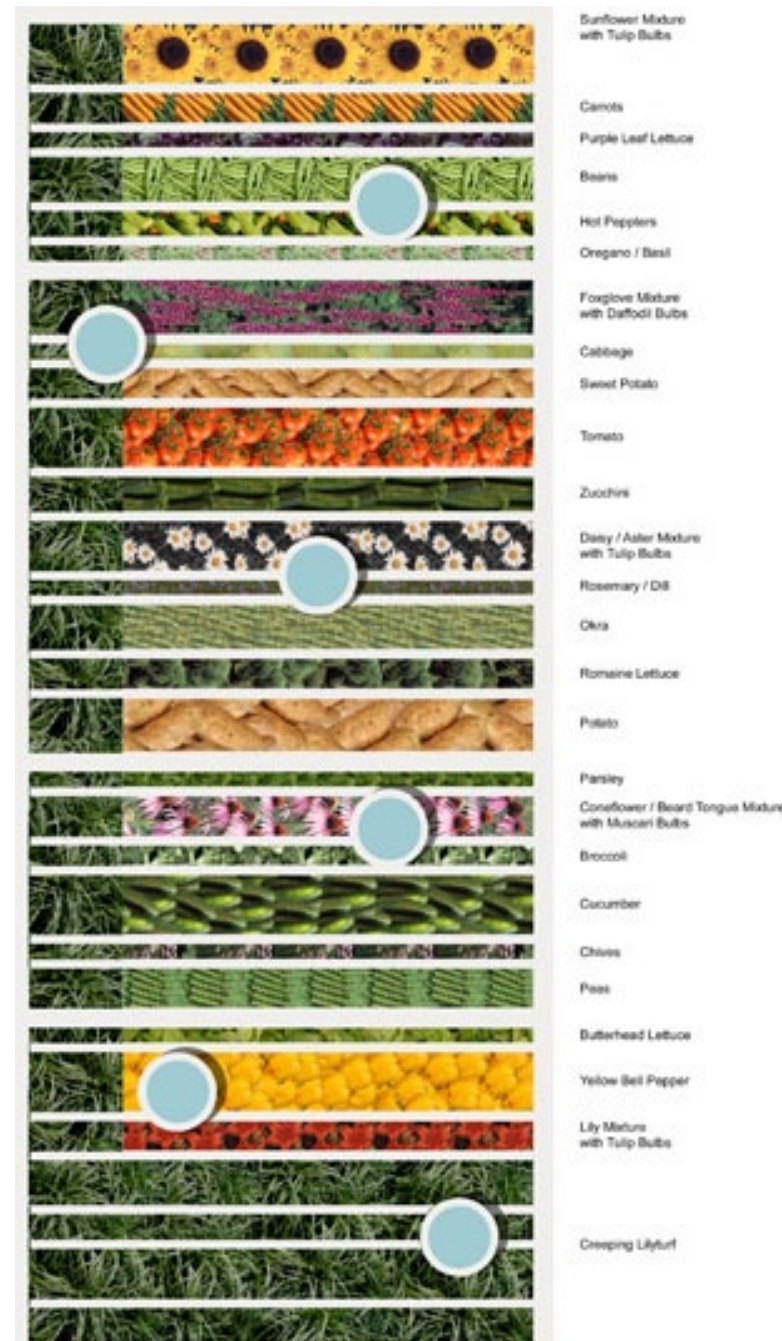
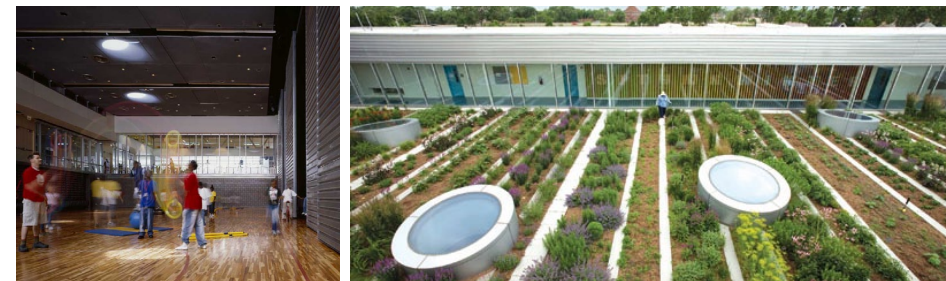
JOHN RONAN ARCHITECTS  
CHICAGO

THIS 74,000 SQUARE FOOT YOUTH CENTER, LOCATED IN ONE OF CHICAGO'S POOREST NEIGHBORHOODS, DEMONSTRATES A COMMITMENT TO SOCIAL PROGRESS IN PROVIDING A CONSTRUCTIVE ENVIRONMENT FOR AREA YOUTHS TO SPEND THEIR AFTER-SCHOOL HOURS. THE CENTER PROVIDES SUPPORT FOR THE PROGRAMS OF A 300-MEMBER DRILL TEAM/PERFORMANCE GROUP FOR CHILDREN AGED EIGHT TO EIGHTEEN, WHICH PROVIDES SPACE FOR VARIOUS YOUTH EDUCATIONAL AND RECREATIONAL PROGRAMS FOR DISADVANTAGED CHILDREN TO BETTER THEIR CHANCES OF SUCCESS IN LIFE.

## PROGRAMMATIC SUSTAINABILITY

THE BUILDING'S MAIN SPACE IS A PROGRAMMATICALLY ADAPT-ABLE GYMNASIUM THAT CONVERTS TO A 600-SEAT PERFORMANCE THEATER. THE SPACE SERVES DAILY AS A PRACTICE SPACE FOR THE DRILL TEAM, AND CONVERTS TO THEATER USE VIA A MOTORIZED TELESCOPING SEATING SYSTEM. MOTORIZED CURTAINS AND CEILING PANELS SERVE TO DARKEN THE SPACE AND REVEAL STAGE LIGHTING, AND MOTORIZED DOORS OPEN TO REVEAL THE STAGE. THIS SPACE, TOGETHER WITH THE ADJACENT CAFETERIA THAT OVERLOOKS THE GYMNASIUM, COMPRISES THE CENTER OF ENERGY FOR THE COMPLEX. WRAPPING AROUND THIS MAIN SPACE ARE PROGRAMMATICALLY ADAPTABLE BARS THAT SUPPORT A VARIETY OF EDUCATIONAL AND RECREATIONAL PROGRAMS, INCLUDING AN ART ROOM, COMPUTER LAB, DANCE ROOM, RECORDING STUDIO, BAND ROOM, MUSIC ROOM, COSTUME SHOP, STAGE SHOP, TUTORING SPACES, CLASSROOMS, OFFICES AND EXHIBITION SPACES. THESE BARS CONTAIN FLEXIBLE SPACE THAT CAN BE MODIFIED OVER TIME AS PROGRAMS IN THE YOUTH CENTER CHANGE.

CLASSROOMS, OFFICES AND EXHIBITION SPACES ON THE THIRD FLOOR OVERLOOK A LARGE PLANTED ROOF GARDEN ABOVE THE GYMNASIUM/THEATER AND CAFETERIA. THE ROOF GARDEN SERVES AS OUTDOOR CLASSROOM TO SUPPORT YOUTH HORTICULTURAL PROGRAMS AND ENVIRONMENTAL AWARENESS. WITH A 24" DEPTH OF SOIL, CHILDREN CAN PLANT AND HARVEST VEGETABLES, FLOWERS, HERBS, GRASSES, AND CAN BE USED AS A NURSERY FOR NEIGHBORHOOD GARDEN CLUBS. SKYLIGHTS DOT THIS GARDEN LANDSCAPE TO BRING NATURAL DAYLIGHT INTO THE GYM AND CAFETERIA BELOW. THE GARDEN COLLECTS AND RECYCLES RAINWATER, AND SERVES TO REDUCE THE URBAN HEAT ISLAND EFFECT IN A WAY THAT SIMULTANEOUSLY REINFORCES THE EDUCATIONAL MISSION OF THE YOUTH CENTER. THE SITE SURFACE EMPLOYS POROUS PAVING SURFACES TO REDUCE THE PRESSURE ON STORM WATER MANAGEMENT SYSTEMS, WHILE THE PARKING LOT DOUBLES AS A PRACTICE PARADE GROUND, SURROUNDED BY A PERFORATED METAL SCREEN FENCE TO PROVIDE FOR A SECURE OUTDOOR PRACTICE ENVIRONMENT BUT ALLOW VISUAL ACCESS TO THE PERFORMERS INSIDE FROM THE STREET. RAISED PLANTERS AT THE HEAVILY-TRAFFICED STREET PROVIDE AN EXTRA SAFETY PRECAUTION TO PROTECT YOUTHS AS THEY COME TO AND FROM THE CENTER.



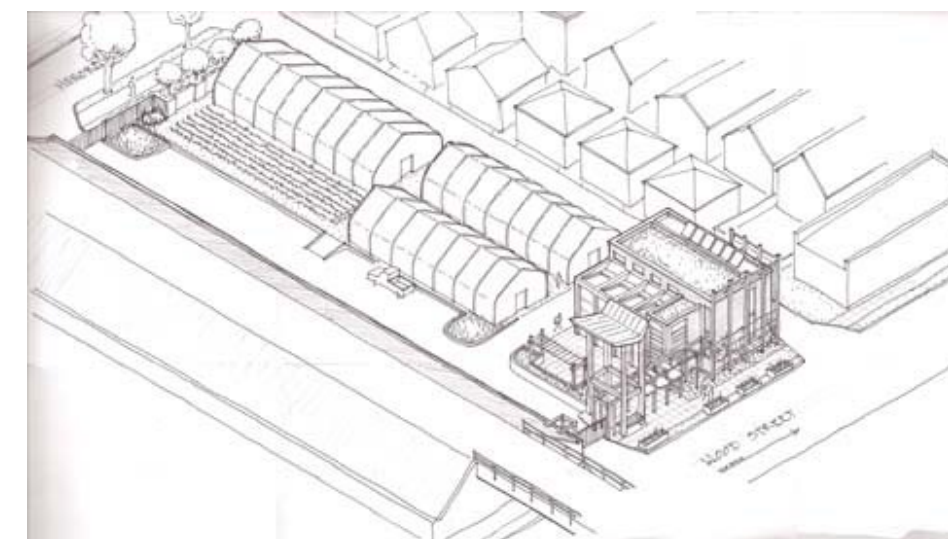
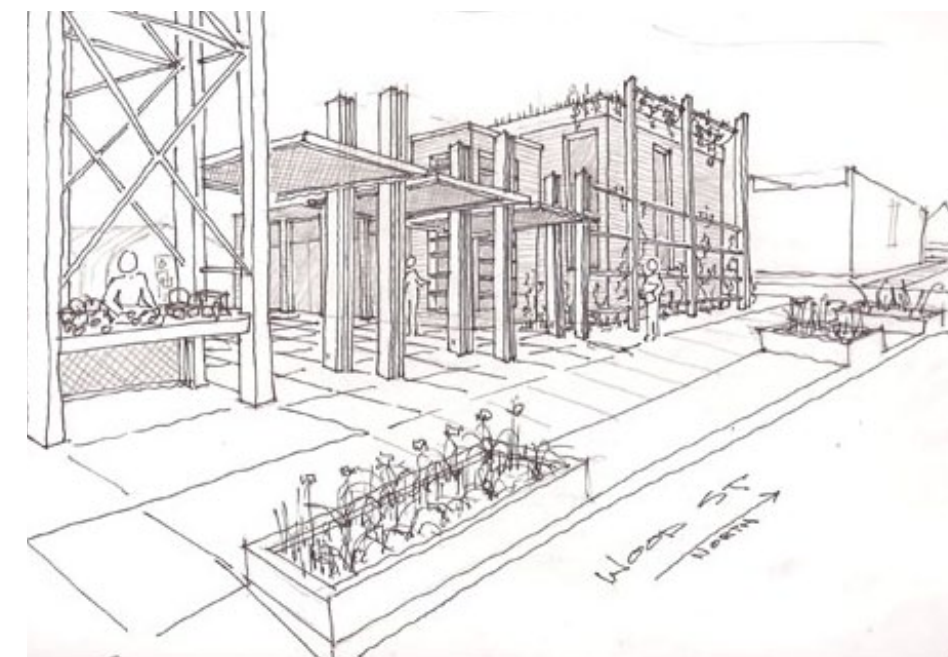
# GROWING HOME

SHED STUDIO  
CHICAGO

GROWING HOME IS A NON-PROFIT ORGANIZATION THAT PROVIDES JOB TRAINING AND EMPLOYMENT OPPORTUNITIES FOR HOMELESS AND LOW-INCOME PEOPLE WITHIN THE CONTEXT OF AN ORGANIC AGRICULTURE BUSINESS. THE DESIGN AND MASTER PLAN OF THE NEW GROWING HOME URBAN CAMPUS AT 58TH AND WOOD, IN THE ENGLEWOOD NEIGHBORHOOD IN CHICAGO, IS A SMALL BUT PACKED SITE OF GROWING FIELDS, HOOP HOUSES, GREENHOUSES, CLASSROOMS AND ADMINISTRATIVE SPACES, AS WELL AS COMMUNITY AMENITIES SUCH AS FARM STANDS AND CSA DROP-OFFS. DESIGN INCLUDES ALTERNATIVE ENERGY SOURCES AND ELEMENTS FOR PARTICIPATION BY THE COMMUNITY AND OVERALL FLEXIBILITY.

WHILE THE SITE IS SMALL - ONLY ABOUT 2/3 OF AN ACRE - THEY ARE ABLE TO GROW A GREAT DEAL OF PRODUCE. IN 2008 THEY PRODUCED APPROXIMATELY 5,000 LBS OF PRODUCE; IN 2009 THEY GROWED AND HARVEST OVER 10,000 LBS.

AT THE WOOD STREET URBAN FARM, THEY GROW SPINACH, SALAD MIX, ARUGULA, AND SWISS CHARD, WHICH ALL LIKE TO GROW IN THE WARM, MOIST HOOPHOUSE CLIMATE, AS WELL AS TOMATOES, ZUCCHINI, BEETS, TURNIPS, KALE, MUSTARD GREENS, AND COLLARDS.



# THE HIGH LINE

FIELD OPERATIONS  
NEW YORK

FIELD OPERATIONS WON THE 2004 INTERNATIONAL COMPETITION FOR THE DESIGN OF THE HIGH LINE, A 1.9 KILO METRO-LONG, ABANDONED ELEVATED RAILWAY IN NEW YORK CITY. THE PROJECTS CHALLENGE THE DESIGNERS TO WORK WITH AN EXISTING STRUCTURE, ARTEFACT EXISTING ELEMENTS OF THE ABANDONED RAIL, THEREFORE GIVING THE HIGH LINE A COMPELLING NEW LIFE AND FUTURE AS A ONE-OF-A-KIND RECREATIONAL AMENITY AND PUBLIC PROMENADE. THE DESIGN HAD TO BE ESPECIALLY INNOVATIVE AND CREATIVE IN ITS PHYSICALITY AND DIMENSIONS; PROMOTION OF GREEN MATERIALS AND PRACTICES; PHASED IMPLEMENTATION, SHORT AND LONG TERM PLANNING; AND CONSIDERATION OF FUTURE MAINTENANCE AND OPERATION.

JAMES CORNER'S FIELD OPERATIONS DESIGN CONCEPT EVOLVES FROM THE RESPECT OF THE INNATE CHARACTER OF THE HIGH LINE ITSELF: ITS SINGULARITY AND LINEARITY AND ITS EMERGENT PROPERTIES WITH WILD PLANT-LIFE-MEADOWS, THICKETS, VINES, MOSSES, FLOWERS - INTERMIXED WITH BALLAST, STEEL TRACKS, RAILINGS, AND CONCRETE. THEIR IDEA WAS TO PROPOSE SOMETHING NEW FROM SOMETHING OLD.

THE HIGH LINE AS A PRECEDENT URBAN PARK PROMOTES TIMELY AND RELEVANT PRINCIPLES OF ECOLOGICAL SUSTAIN

ABILITY, URBAN REGENERATION AND RE-USE AND CONSERVATION OVER NEW CONSTRUCTION. THE PROJECT ESTABLISHES AN URBAN CORRIDOR FOR HABITAT, WILD LIFE AND PEOPLE AND PROVIDES OPPORTUNITY FOR FUTURE LINKS BETWEEN GREEN WAYS AND PARKWAYS ALONG THE HUDSON RIVER.

IN THE DESIGN PROCESS, MUCH OF THE ORIGINAL STRUCTURE AS POSSIBLE WAS RE-USE, IMPLEMENTING THE LOCALIZED RESTORATION AND REPAIR OF CONCRETE AND STEEL ON AN AS-NEEDED BASIS. A NEW DRAINAGE AND WATERPROOFING LAYER OF WAS DESIGN AND COORDINATED WITH THE LANDSCAPE TO MAXIMIZE SOIL DEPTH AND LOW POINTS IN THE PLANTING BEDS, MINIMIZING FUTURE IRRIGATION REQUIREMENTS.

AS PART OF THE DESIGN WAS DEVELOPED A NEW PAVING SYSTEM, BUILT FROM LINEAR CONCRETE PLANKS WITH OPEN JOINTS, SPECIALLY TAPARED EDGES AND SEAMS THAT PERMIT THE FREE FLOW OF WATER AND THE INTERMINGLING OF ORGANIC PLANTLIFE WITH HARDER MATERIALS. THE PAVING AREAS ARE USED TO ACCOMMODATE A VARIETY OF USES. ALL OF THE PLANTING AREAS ON THE HIGH LINE ARE UNDERLINED WITH GREEN-ROOF OR LIVING ROOF LAYERS INCLUDING A WATER RETENTION, DRAINAGE AND AERATION PANEL, GRAVEL BASE LAYER AND FILTER FABRIC.

# OLYMPIC SCULPTURE PARK

WEISS / MANFREDI ARCHITECTURE  
SEATTLE

IN 2001 SEATTLE ART MUSEUM SELECTED NEW YORK BASED WEISS/ MANFREDI ARCHITECTURE/ LANDSCAPE/ URBANISM FROM AN INTERNACIONAL POOL OF 52 APPLICANTS. THEIR DESIGN VISION EXPRESSED A DYNAMIC INTEGRATION OF LANDSCAPE, ARCHITECTURE AND URBAN DESIGN. THE SAM WANTED TO TURN THE SITE AS MUCH AS POSSIBLE INTO A FUNCTIONING ECOSYSTEM, WHILE PROVIDING A UNIQUE SETTING FOR OUTDOOR SCULPTURE AND PUBLIC RECREATION.

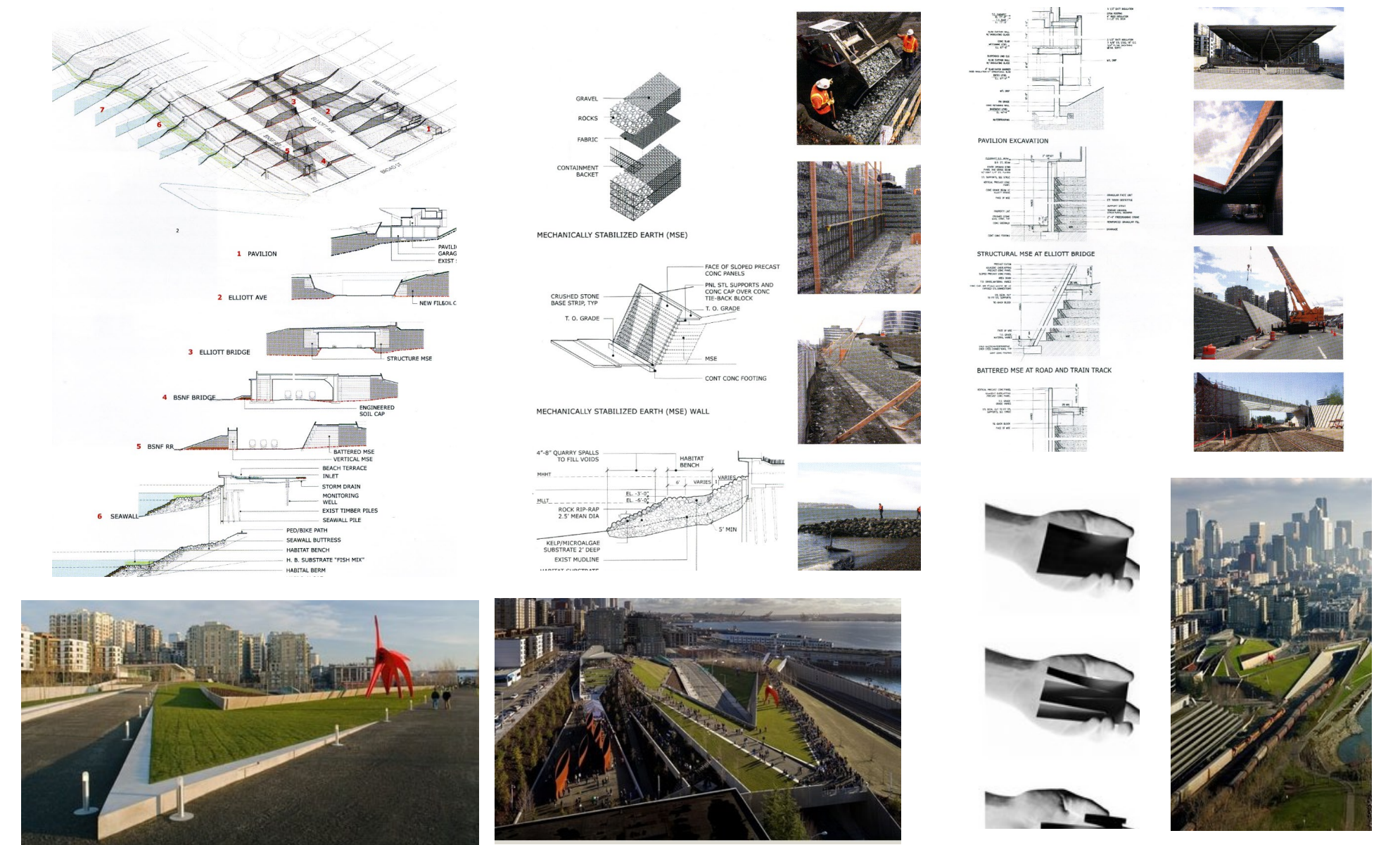
ENVISIONED AS A NEW URBAN MODEL FOR SCULPTURE PARKS, THIS PROJECT IS LOCATED ON SEATTLE'S LAST UNDEVELOPED WATERFRONT PROPERTY - AN INDUSTRIAL BROWN FIELD SITE SLICED BY TRAIN TRACKS AND AN ARTERIAL ROAD. THE DESIGN CONNECTS THREE SEPARATE SITES WITH AN UNINTERRUPTED Z - SHAPED "GREEN" PLATFORM, DESCENDING 40 FEET FROM THE CITY TO THE WATER, CAPITALIZING ON VIEWS OF THE SKYLINE AND ELLIOTT BAY, AND RISING OVER EXISTING INFRASTRUCTURE TO RECONNECT THE URBAN CORE TO THE REVITALIZED WATERFRONT. FORMERLY OWNED BY UNION OIL OF CALIFORNIA (UNOCAL), THE AREA WAS USED AS AN OIL TRANSFER FACILITY. BEFORE CONSTRUCTION OF THE PARK, OVER 120,000 TONS OF CONTAMINATED SOIL WAS REMOVED. THE REMAINING PETROLEUM CONTAMINATED SOIL IS CAPPED BY A NEW LANDFORM WITH OVER 200,000 CUBIC YARDS OF CLEAN FILL, MUCH OF IT EXCAVATED FROM THE SEATTLE ART MUSEUM'S DOWNTOWN EXPANSION PROJECT.

WEISS AND MANFREDI DEVELOP AN INNOVATIVE Z-SHAPED CONFIGURATION CONNECTING THREE PARCELS INTO A SERIES OF FOUR DISTINCT LANDSCAPE. THE NEW Z-SHAPED ALSO PROVIDES FOR A SERIES OF A NEW DISTINCT SETTINGS AND ENVIRONMENTAL AND PLANTING CHARACTERISTICS. ADDITIONALLY, LANDFORMS AND PLANTING CONTROL, COLLECT AND CLEANSE STORM WATER AS IT MOVES THROUGH THE SITE BEFORE BEING DISCHARGED INTO ELLIOTT BAY. MOREOVER, THE DESIGN NEEDED TO DEAL WITH A WIDE RANGE OF ENVIRONMENTAL RESTORATION PROCESSES, INCLUDING BROWN FIELD REDEVELOPMENT, SALMON HABITAT RESTORATION,

WEISS AND MANFREDI DESIGN FOR THE PARK EMPLOYS A CONSTRUCTED TOPOGRAPHY AS AN ARMATURE. THEIR ZIG-ZAGGING LANDFORM WHICH CROSSES RAIL AND ROAD, UNIFIES THE SITE'S TOPOGRAPHY, PARK PROGRAM, AND EXPERIENCE. TO ACHIEVE A HIGH LEVEL OF PERFORMANCE FROM A SINGULAR STRUCTURE THEY SECTIONED THE LANDFORM, EACH SECTION EXPLAINS HOW THE LANDFORM PERFORMS WITHIN THE PARK MULTIPLE SECTIONAL COMPLEXITIES, WHILE MAINTAINING A UNIFIED FORM AND SURFACE.

IN ORDER TO ACHIEVE THE ADVANCED STRUCTURAL DEMANDS REQUIRED TO NEGOTIATE THE SLOPE AND INFRASTRUCTURE, THE LANDFORM IS CONSTRUCTED WITH A SYSTEM OF MECHANICALLY STABILIZED EARTH (MSE). THE MSE SYSTEM CONSISTS OF STACKED STEEL BASKETS HOLDING ROCK AND GRAVEL IN PLACE AND ANCHORED BY ALTERNATING LAYERS OF ENGINEERED PLASTIC FABRIC SHEETS AND HIGHLY COMPACT SOIL. MECHANICALLY STABILIZED EARTH WAS CONSIDERED TO BE SAFER IN AN EARTHQUAKE THAN CONCRETE WALLS AND IS SIGNIFICANTLY LESS COSTLY THAN REINFORCED CONCRETE RETAINING WALL. THE LANDFORM ALSO PROVIDES OPERATIONAL AND CREATIVE INFRASTRUCTURE. EMBEDDED IN THE PATH IS A SUB-SURFACE SYSTEM OF WATER, POWER AND DATA. THE LAST SERIES OF SECTIONS OCCURS WHERE THE LANDFORM REACHES THE WATER, SERVING AS A TIDAL BEACH TO PROVIDE NEW SALMON HABITAT AND TO SHORE THE DAMAGED SEAWALL.

IN OTHER WORDS, THE SECTIONAL STRUCTURE CONSTITUTE A SERIES OF INTEGRATED RESPONSES TO THE CONSTRAINTS AND OPPORTUNITIES PRESENTED BY THE VARIOUS AND DISCONTINUOUS SITES. TOGETHER, THEY CREATED A REINFORCED LANDFORM THAT NOT ONLY UNITES THE SITE'S TOPOGRAPHY, BUT ALSO BECOMES AN ACTIVE AGENT IN ALL THE PARK OPERATION. THE PARK IN TURN BECOMES A SYNTHETIC ENTITY SUITABLE FOR THE CULTURAL, URBAN AND ECOLOGICAL CONDITIONS IT SERVES.





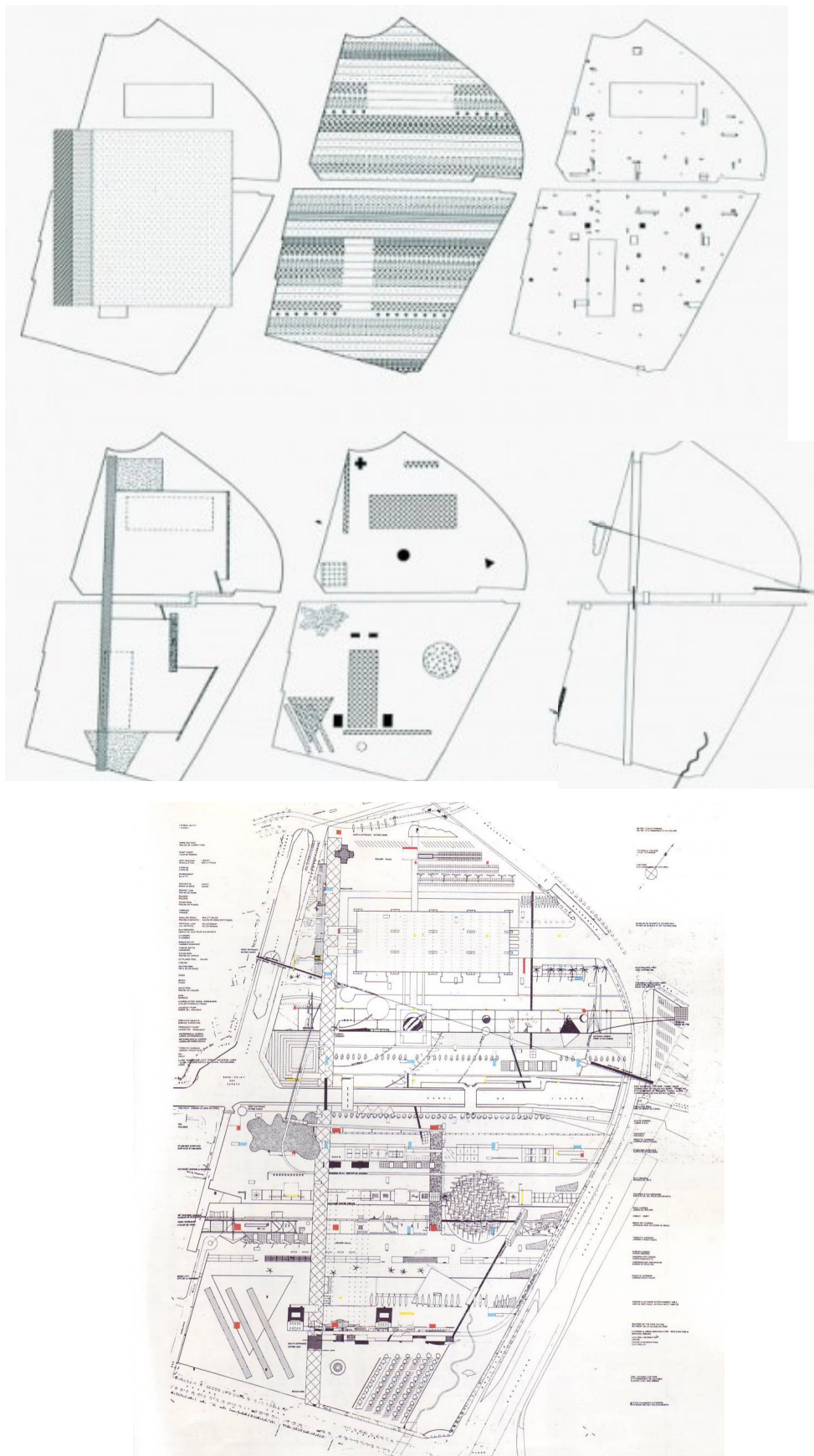
# PARK DE LA VILLETE

REM KOOLHAAS'S PROPOSAL  
PARIS - FRANCE

PARC DE LA VILLETE WAS A COMPETITION HELD IN PARIS IN 1982. DESIGNERS WERE ASKED TO DEVELOP A NEW PUBLIC PARK ON A SITE WHICH HOUSED A FORMER SLAUGHTERHOUSE.

OMA'S PROPOSAL WAS TO RUNNER UP AND BUILT. THEIR APPROACH TO THE PARK SUPERIMPOSED THE IDEA OF THE SKYSCRAPER ONTO THE LANDSCAPE. WHEREAS THE SKYSCRAPER CONSISTS OF MULTIPLE FLOORS, EACH CAPABLE OF HOLDING A UNIQUE PROGRAM ELEMENT, CONNECTED BY THE VERTICAL CIRCULATION, OMA PROPOSED A SERIES OF PARALLEL ZONES ALONG THE PARK. EACH ZONE WOULD BE THE STAGING GROUND FOR A DIFFERENT, UNRELATED PROGRAM.

COMPONENTS:  
SEPARATING POSSIBLE PROGRAMS INTO PARALLEL STRIPED ZONES. IN ONE DIRECTION THE USER REMAINS WITHIN THE GIVEN ZONE, THE USER CAN EXPERIENCE A WIDE VARIETY OF EVENTS WITH A SHORT DISTANCE FROM EACH OTHER. DIFFERENT PROGRAM ELEMENTS CAN EXIST IN CLOSE PROXIMITY ALLOWING FOR UNEXPECTED OVERLAPS AND USER EXPERIENCES. FACILITIES AND MORE PERMANENT PROGRAM ELEMENTS CAN BE DISTRIBUTED OVER A GRID THROUGHOUT THE SITE. NATURAL ELEMENTS, CIRCULATION, AND DISPERSED CULTURAL ELEMENTS CAN BRING A SENSE OF CONNECTEDNESS ACROSS THE SITE.

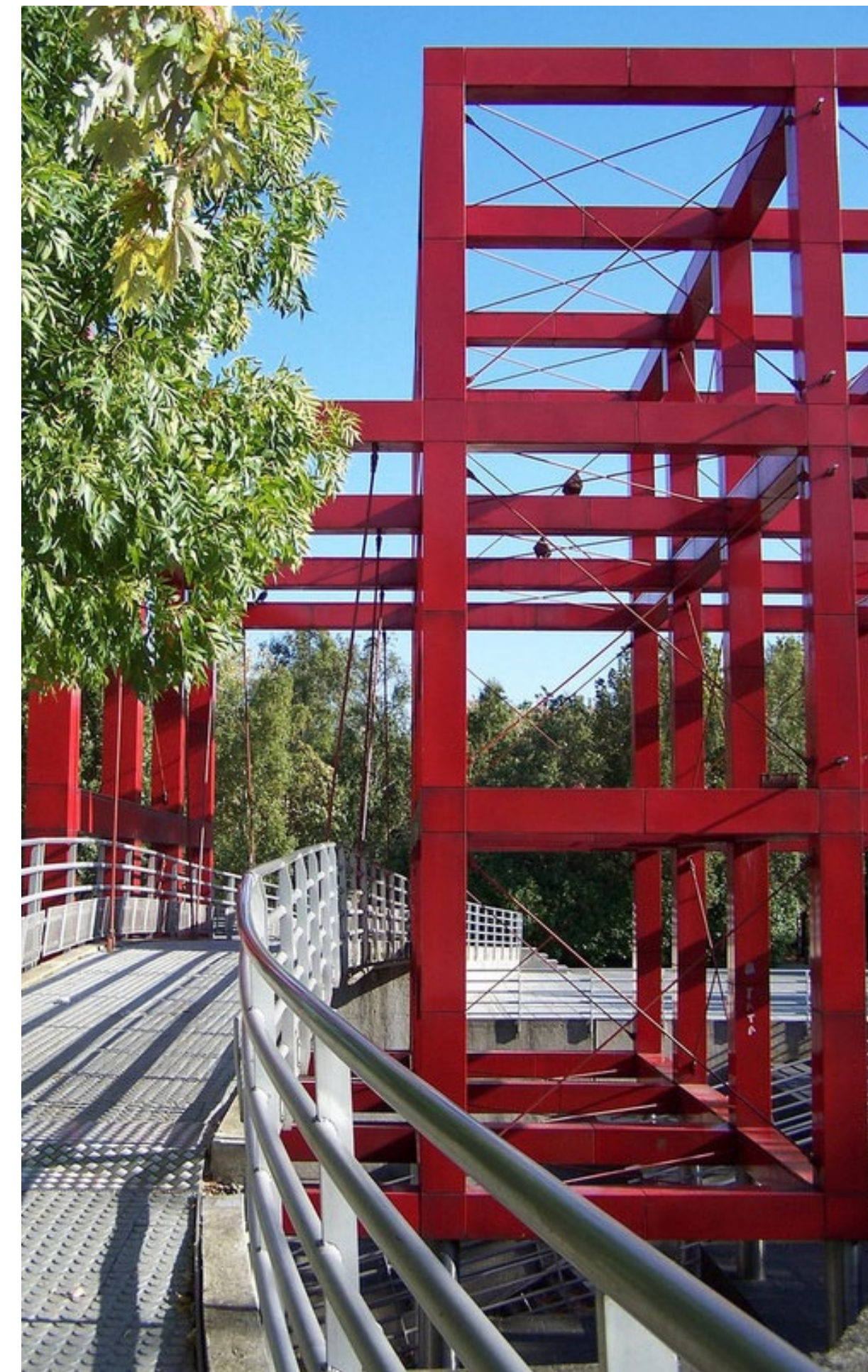


# PARK DE LA VILLETE

BERNARD TSHUMI'S PROPOSAL  
PARIS - FRANCE

BERNARD TSCHUMI'S PROPOSAL WON THE COMPETITION AND HAD HIS PROJECT IMPLEMENTED. TSCHUMI SAW THE SITE AS A MEDIUM FOR CULTURAL ACTIVITIES. A SERIES OF RED BUILDINGS AND PAVILLIONS WERE LAID OUT ON A GRID AND SUPERIMPOSED OVER THE PARK.

COMPONENTS:  
THE GRID SYSTEM SET UP BY THE RED FOLLIES IN THE PARK CREATE AN ORGANIZATIONAL SYSTEM THAT ALLOWS VISITORS TO NAVIGATE THE PARK WHILE STILL ENCOUNTERING VARIANCES THROUGHOUT THE LANDSCAPE. THE FOLLIES HAVE A VARIETY OF USES; SOME ARE RESTAURANTS OR HAVE A SPECIFIC PROGRAM, WHILE OTHERS ARE INDETERMINATE IN USE. THE PARK, WHILE AORGANIZED HAS MANY OPENING TO ALLOW FUTURE PROGRAMS TO DEVELOP. THE LANDSCAPE IS SPECULATIVE AND OPEN.

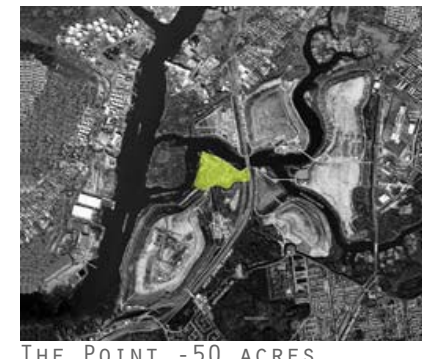


# FRESH KILLS

JAMES CORNER FIELD OPERATIONS  
NEW YORK

THE FRESH KILLS LANDFILL IS AN INACTIVE 2,200 ACRE (890 HECTARES) LANDFILL IN THE NEW YORK CITY BOROUGH OF STATEN ISLAND IN THE UNITED STATES. THE NAME COMES FROM THE LANDFILL'S LOCATION ALONG THE BANKS OF THE FRESH KILLS ESTUARY IN WESTERN STATEN ISLAND. THE LANDFILL WAS OPENED IN 1947 AS A TEMPORARY LANDFILL, BUT EVENTUALLY BECAME NEW YORK CITY'S PRINCIPAL LANDFILL IN THE SECOND HALF OF THE 20TH CENTURY, AND IT WAS ONCE THE LARGEST LANDFILL IN THE WORLD.

IN OCTOBER 2009, RECLAMATION OF THE SITE BEGAN ON A MULTI-PHASE, 30 YEAR, SITE DEVELOPMENT FOR REUSE AS FRESHKILLS PARK.



# STEARNS QUARRY

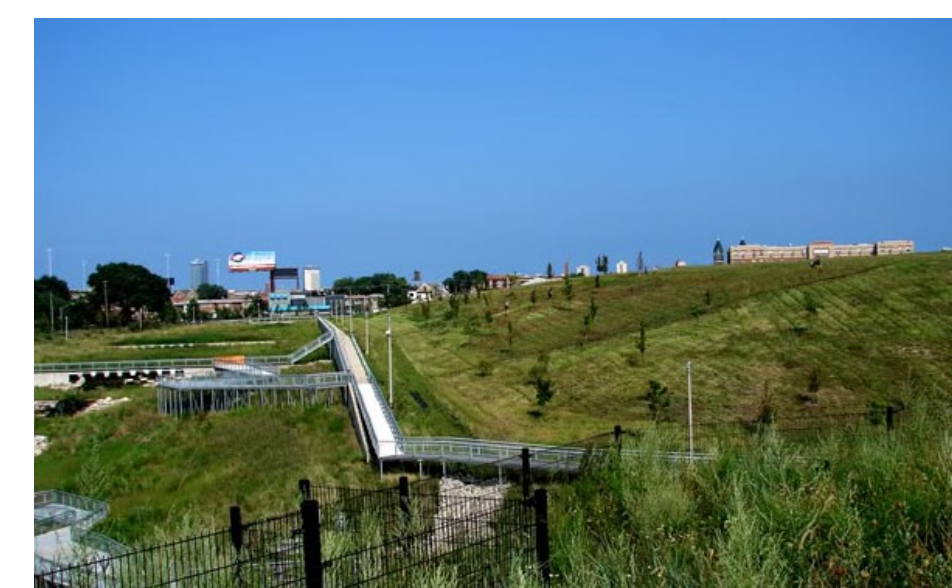
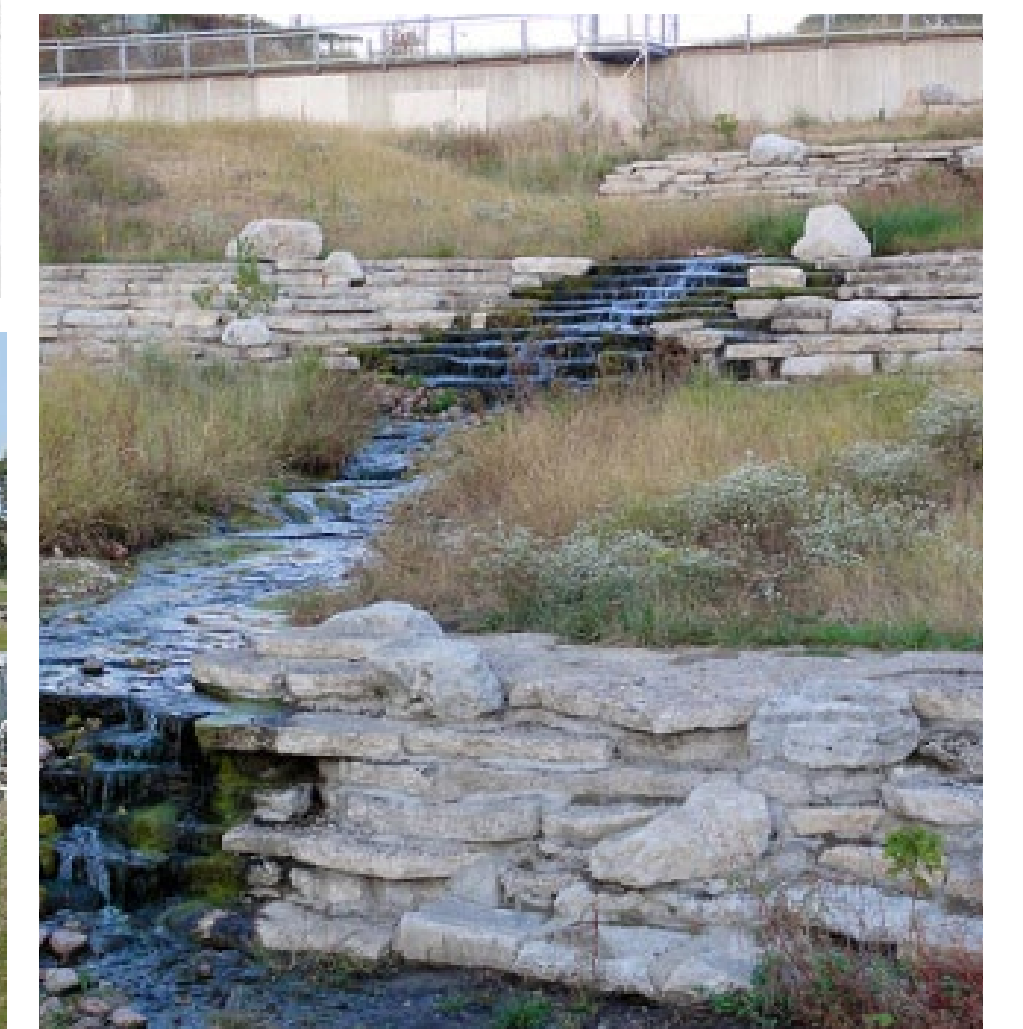
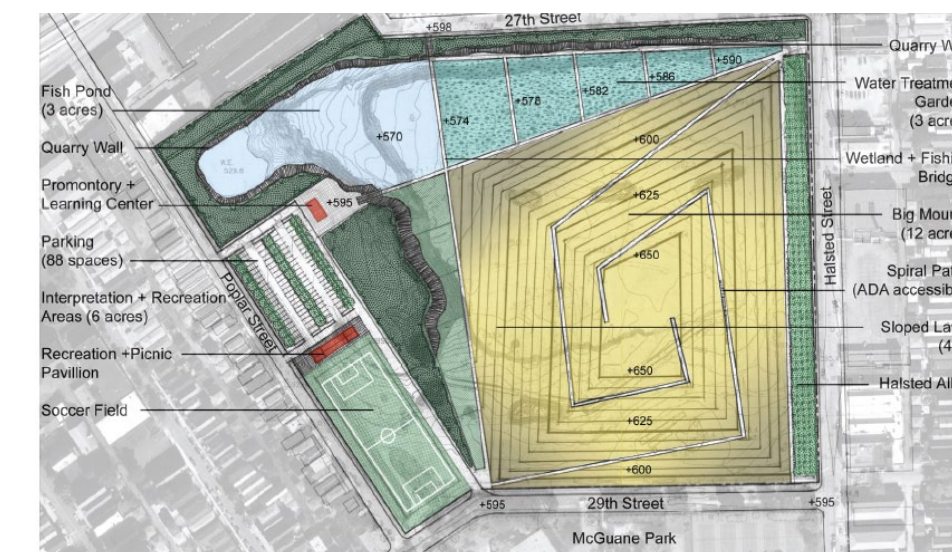
BERNARD TSHUMI'S PROPOSAL  
CHICAGO

BIG MOUND + BIG HOLE: FILL MATERIAL IS PUSHED AND PULLED TO CREATE A UNIQUE URBAN TOPOGRAPHY RECALLING THE FORMER DRAMA OF THE QUARRY DEPTHS, WHILE CREATING NEW LINKS TO THE SURROUNDING COMMUNITY.

THE PARK WAS ORIGINALLY CHICAGO'S FIRST QUARRY, IN OPERATION FROM 1830'S TO 1970. AFTER ITS CLOSURE AS A MINE, THE HOLE WAS THEN USED AS A MUNICIPAL LANDFILL. RECENTLY, D.I.R.T STUDIO HAD RE IMAGINE THE SITE AS A CITY PARK. THE DEPRESSION OF THE QUARRY IS NOW USED AS A FISH POND, THE SURROUNDINGS LANDSCAPE WORKS AS A WATER TREATMENT FOR RAIN RUNOFF. THE HILL HAS BEEN BUILT UP USING THE SOIL FROM THE CUT.

IN A PREDOMINANT FLAT CITY LIKE CHICAGO, TERRAINS CHANGES BECOME A UNIQUE PARK FEATURE AND ATTRACTION. THE SUNKEN POND ALLOWS THE CITYSCAPE TO DISAPPEAR BEHIND THE SURROUNDING TERRAIN. THE HILL BECOMES A FOCAL POINT FOR THE PARK AND NEIGHBORHOOD IN GENERAL CREATING NEW VIEWS OF THE CITY.

THE STEPPED LANDSCAPE COLLECTS AND SLOWS DOWN THE RAINWATER MOVEMENT TOWARDS THE POND AREA. ALONG THE PATH, TREATMENT GARDENS HELP TO CLEAN THE WATER. IN OTHER WORDS, THE LANDSCAPE BENEFITS THE ECOLOGICAL SYSTEM OF THE PARK AND NEIGHBORHOOD.



# THE GEORGE BROWN CULINARY SCHOOL

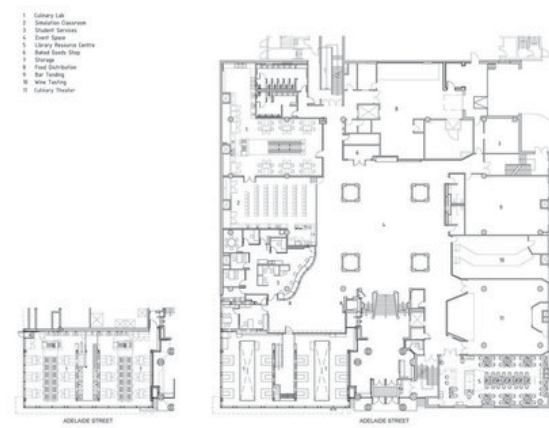
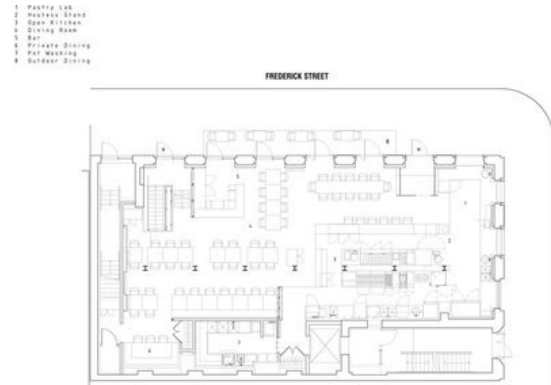
GOW HASTING ARCHITECTS  
TORONTO, CANADA

THE 19,000 SQ.FT, THREE STORY, IN-FILL ADDITION AND 47,000 SQ.FT. INTERIOR RENOVATION OF THE GEORGE BROWN CHEF SCHOOL ON TORONTO'S ADELAIDE STREET EAST DRAMATICALLY OPENS AND TRANSFORMS A 1980'S BUILDING INTO A SHOWCASE FOR INNOVATION IN CULINARY EDUCATION. THE \$18 MILLION PROJECT ENABLES THE COLLEGE TO EXPAND ITS FOOD AND HOSPITALITY PROGRAMS BY AS MUCH AS FIFTY PER CENT, TO ATTRACT AND RETAIN THE BEST FACULTY AND STUDENTS AND TO AUGMENT THE SCHOOL'S PRESENCE WITHIN THE CITY BY INITIATING A RECOGNIZABLE CAMPUS LANDMARK.

NO LONGER CONFINED TO REAR AND BASEMENT KITCHENS, GEORGE BROWN'S STUDENT CHEFS ARE VISIBLE IN A CULINARY PERFORMANCE THROUGH A TWO-STOREY GLASS FAÇADE THAT EXPOSES FOUR KITCHEN "LABS" TO THE STREET. THE STUDENTS' STARCHED WHITE CHEF UNIFORMS AND HATS ARE HIGHLY VISIBLE AGAINST A BACKDROP OF GLEAMING STAINLESS STEEL WORKSTATIONS, RANGES, OVENS, WASHING STATIONS AND RACKS OF POTS AND PANS. THE STAINLESS STEEL IS ACCENTED BY BRIGHTLY-COLOURED FUME HOODS AND WALLS, SPARKLING LIGHTING, LUSH HERB GARDENS AND PLASMA MONITORS THAT ADD A KINETIC AND SPECTACULAR

EFFECT TO THE ARCHITECTURE AS THEY PROJECT CLOSE-UP VIEWS OF FOOD PREPARATION. THESE EXPOSED LABS REFLECT THE CHANGING PROFILE OF THE CULINARY INDUSTRY BY NOT ONLY GLAMORIZING THE PREPARATION OF FOOD, BUT ALSO BY OFFERING STUDENTS A HANDS-ON EXPERIENCE, RATHER THAN LEARNING WITHIN MORE CONVENTIONAL DEMONSTRATION KITCHENS.

THE STREET LEVEL VIEWS INTO THE INTERIORS OF THE KITCHEN LABS PROVIDE THE ULTIMATE BRANDING TOOL FOR THE COLLEGE. EVEN WHEN THE SCHOOL IS CLOSED, HORIZONTAL STRIPS OF COLORED GLASS ENSURE THAT THE FAÇADE PROVIDES AN INTERESTING COUNTERPOINT TO THE AUSTERE VISUAL LANDSCAPE OF PREDOMINANTLY HISTORIC MASONRY BUILDINGS ALONG ADELAIDE STREET. FROM THE INTERIOR, THE GLAZING PROVIDES VIEWS DOWN FREDERICK STREET TOWARDS THE SCHOOL'S NEWLY CREATED LEARNING RESTAURANT, THE CHEFS' HOUSE, VISUALLY CONNECTING THE TWO BUILDINGS. THESE FRESH FACILITIES INCREASE THE DYNAMISM OF GEORGE BROWN'S PRESENCE WITHIN THE NEIGHBORHOOD AND FRAME THE STREET SO THAT THERE ARE CLEAR POSSIBILITIES FOR CREATING AN EXTERNAL CAMPUS IDENTITY.



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