gunkspace

gunk

a viscous substance; dirt or grime;

the stuff that accrues in the interstice

prolog

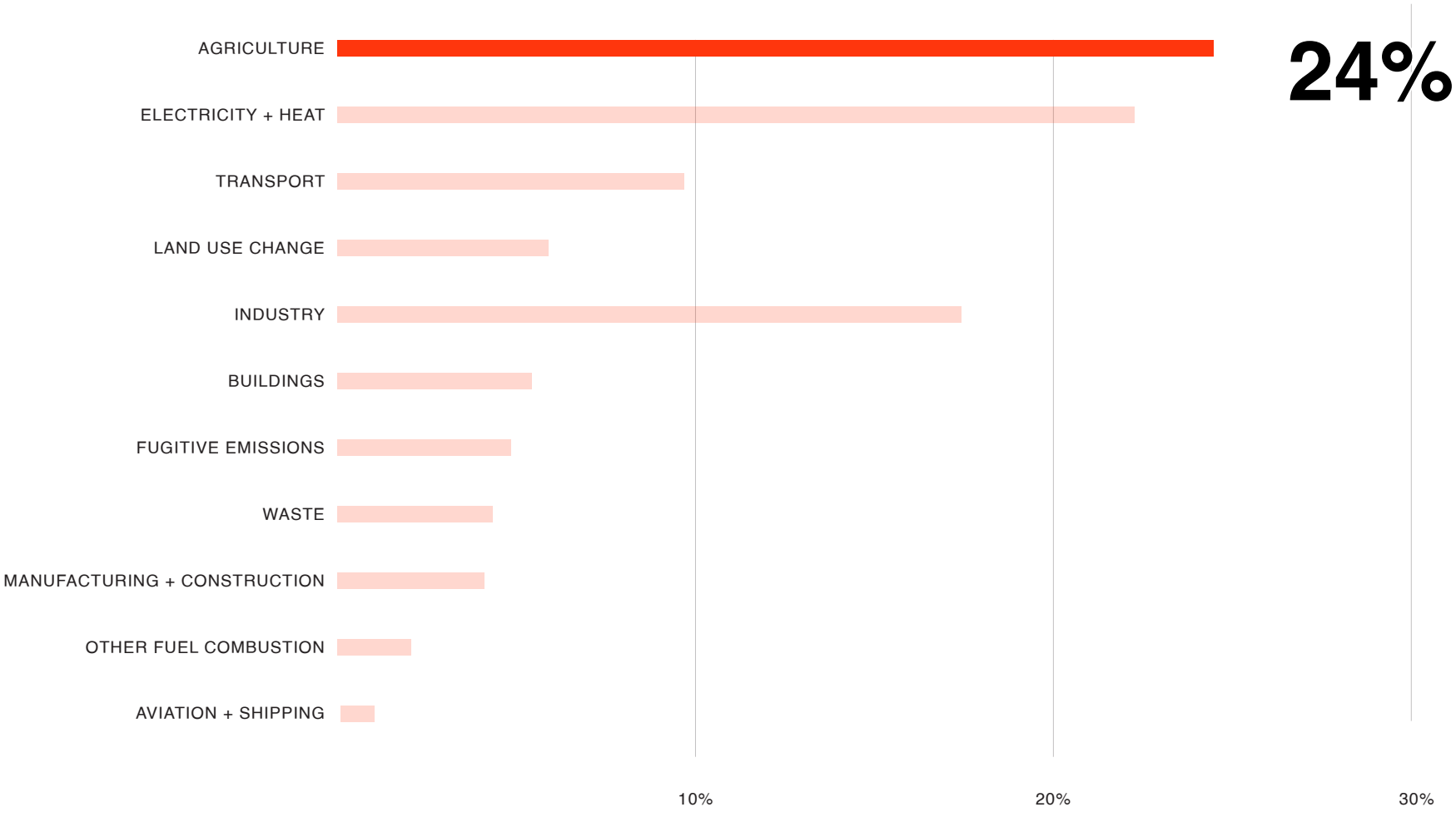
anthrome mosaic

The two most prevalent land use ecologies within the basin, and throughout the region, are agriculture and urbanization.

urbanization

agriculture

TOTAL GHG EMISSIONS BY SECTOR 2020 (OWID, 2021)

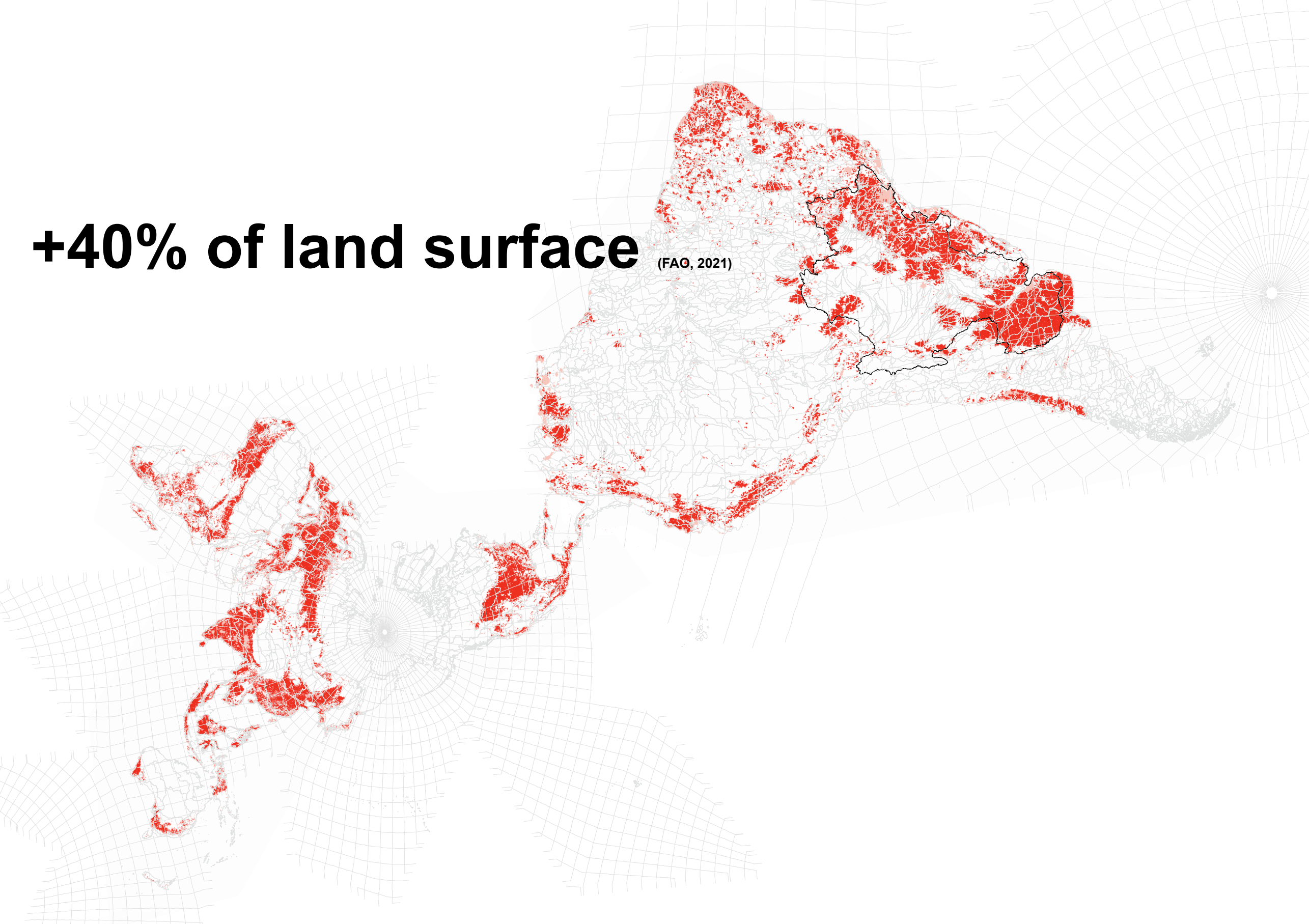


Cyanobacteria blooms caused by agricultural runoff in 2017

SHUTTERSTOCK

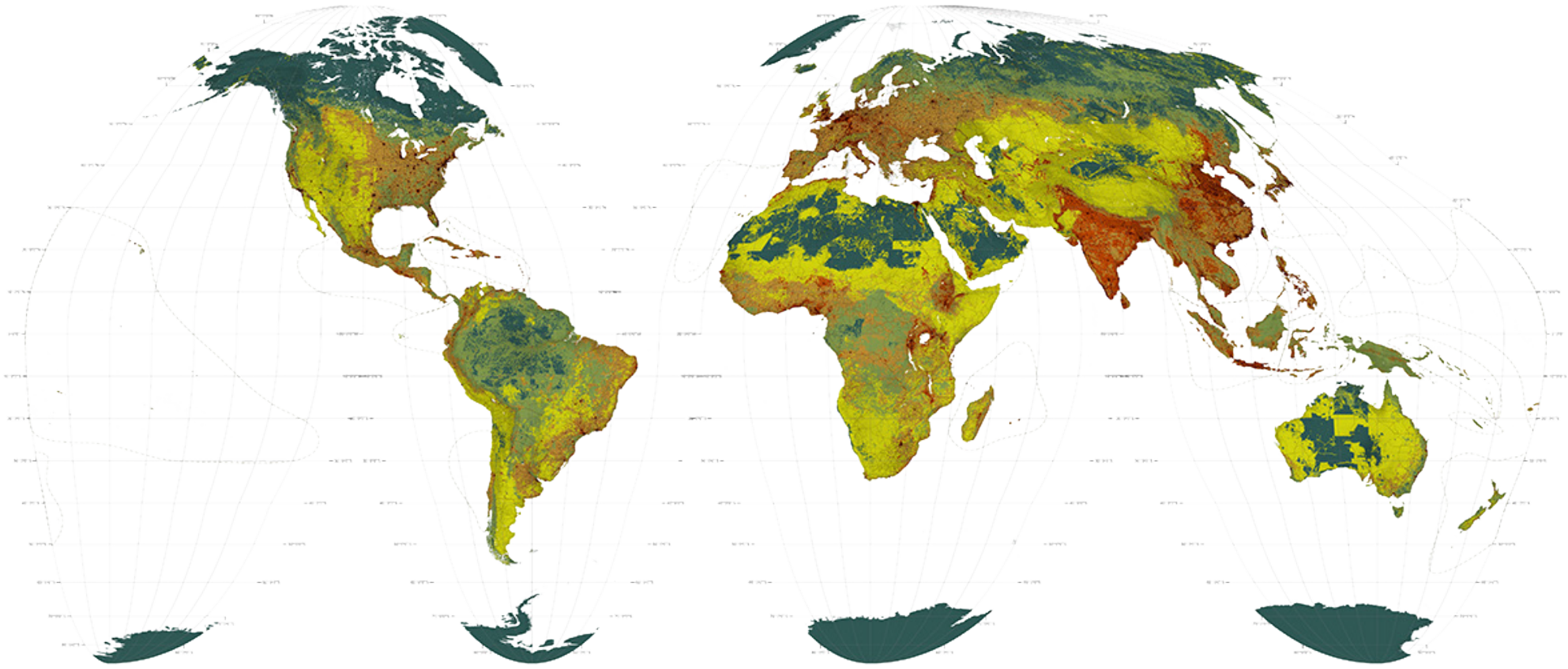
Food waste

+40% of land surface (FAO, 2021)



GEORGE HENRY DURRIE, 1862

Agrilogistics



DENSE SETTLEMENTS
urban
dense settlements

VILLAGES
cropped and pastoral villages
pastoral villages
rainfed mosaic villages

AGRICULTURAL SETTLEMENTS
residential irrigated cropland
residential rainfed mosaic
populated rainfed croplands
remote croplands

RANGELAND SETTLEMENTS
residential rangelands
populated rangelands
remote rangelands

FORESTED
populated forests
remote forests

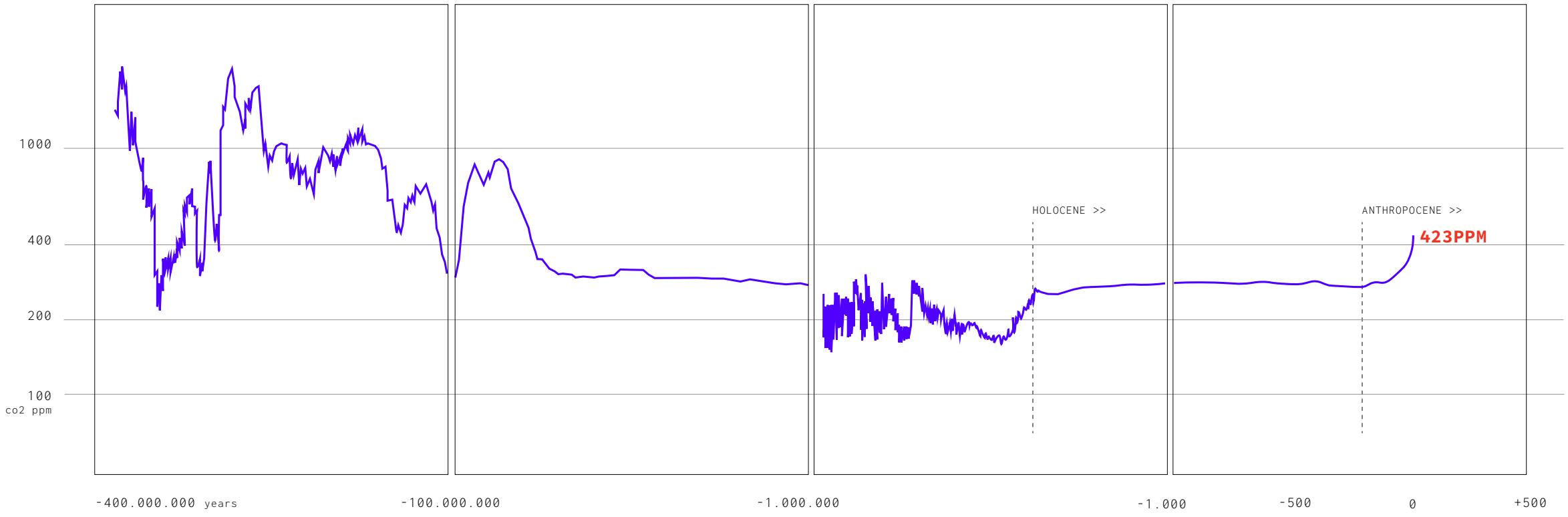
WILDLANDS
wild forests
sparse trees
barren

E. C. Ellis & N. Ramankutty, "Putting People in the Map: Anthropogenic Biomes of the World," Frontiers in Ecology and the Environment 6, no. 8 (2008): 439-447. Dataset: Anthropogenic Biomes of the World, v1 (2001-2006), developed by E. C. Ellis & N. Ramankutty, distributed by the NASA Socioeconomic Data and Applications Center (SEDAC) of the Center for International Earth Science Information Network (CIESIN) / Columbia University, http://sedac.ciesin.columbia.edu/data/set/anthromes-anthropogenic-biomes-world-v1 (accessed November 20, 2014). NB The color scheme used was created by grouping dataset categories together based on generalized types of human occupation

Global anthromes

GOOGLE EARTH, 2023

Anthromes are mosaics



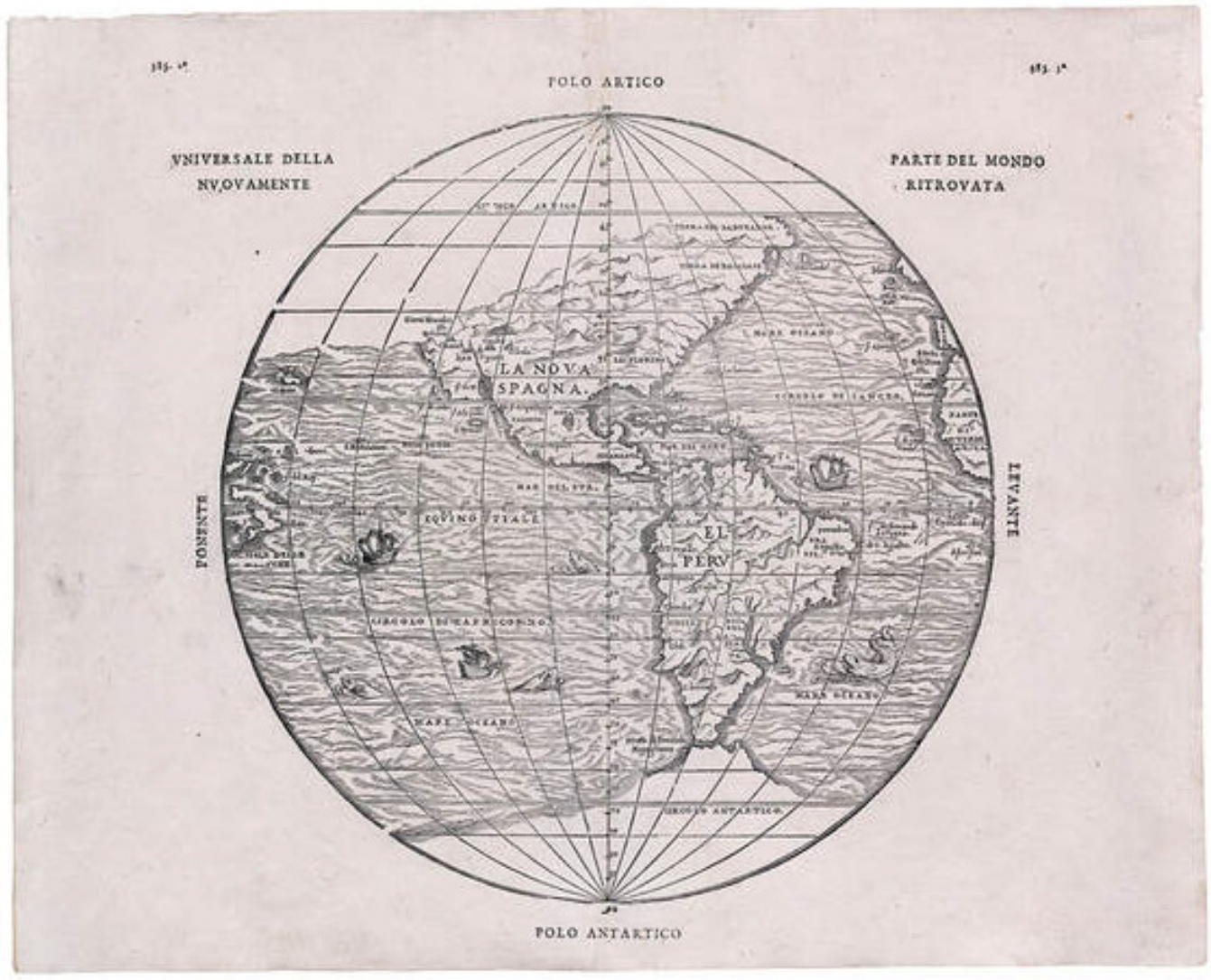
Atmospheric CO_2 concentration (PPM) over the past 400 million years
(Foster et al., 2021)

ABDELLAH AZIZI

Food forest

1

la ciudad de buen ayre



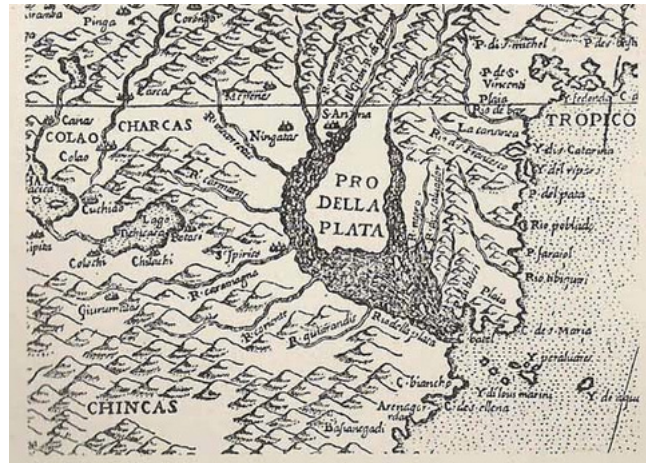
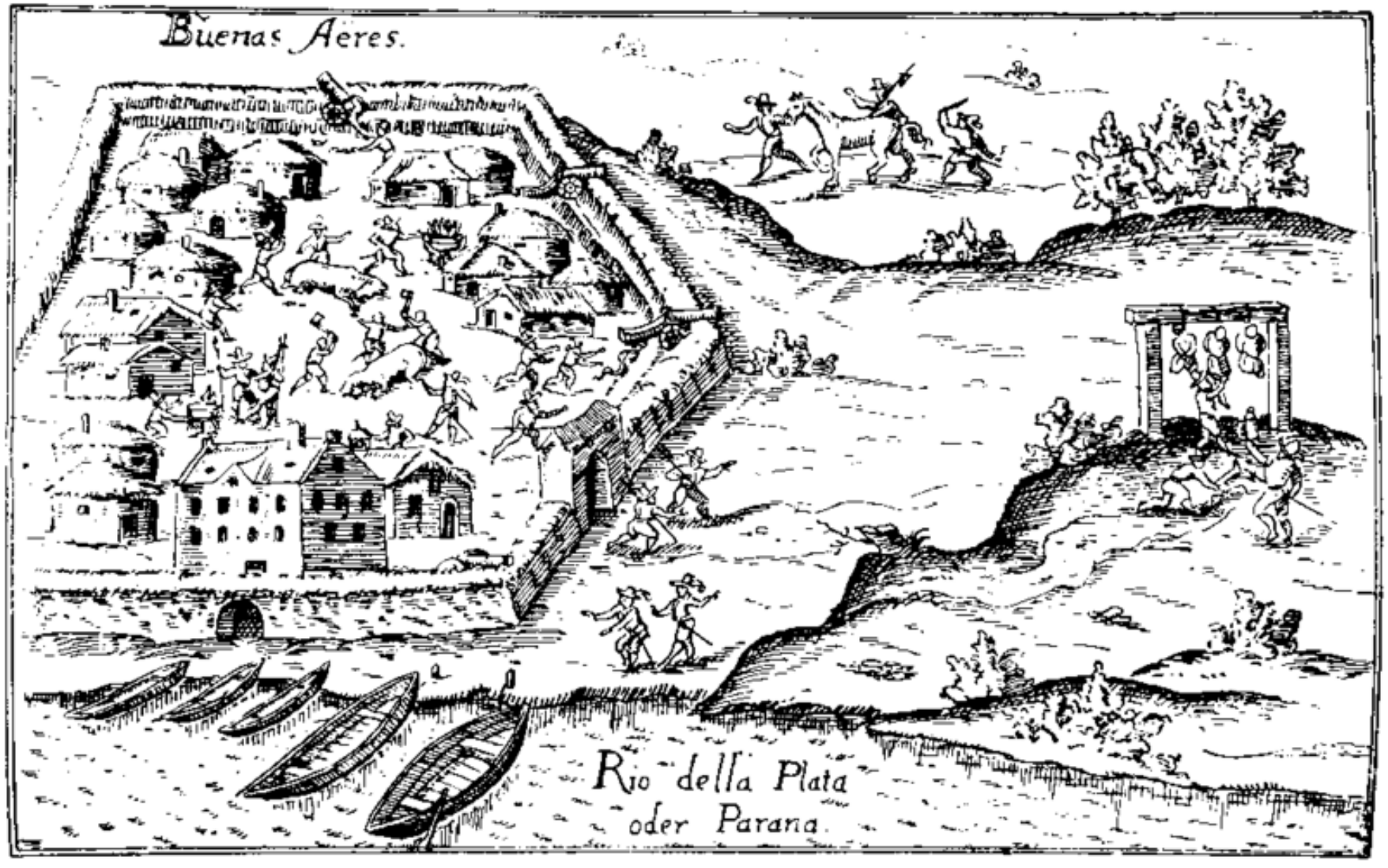


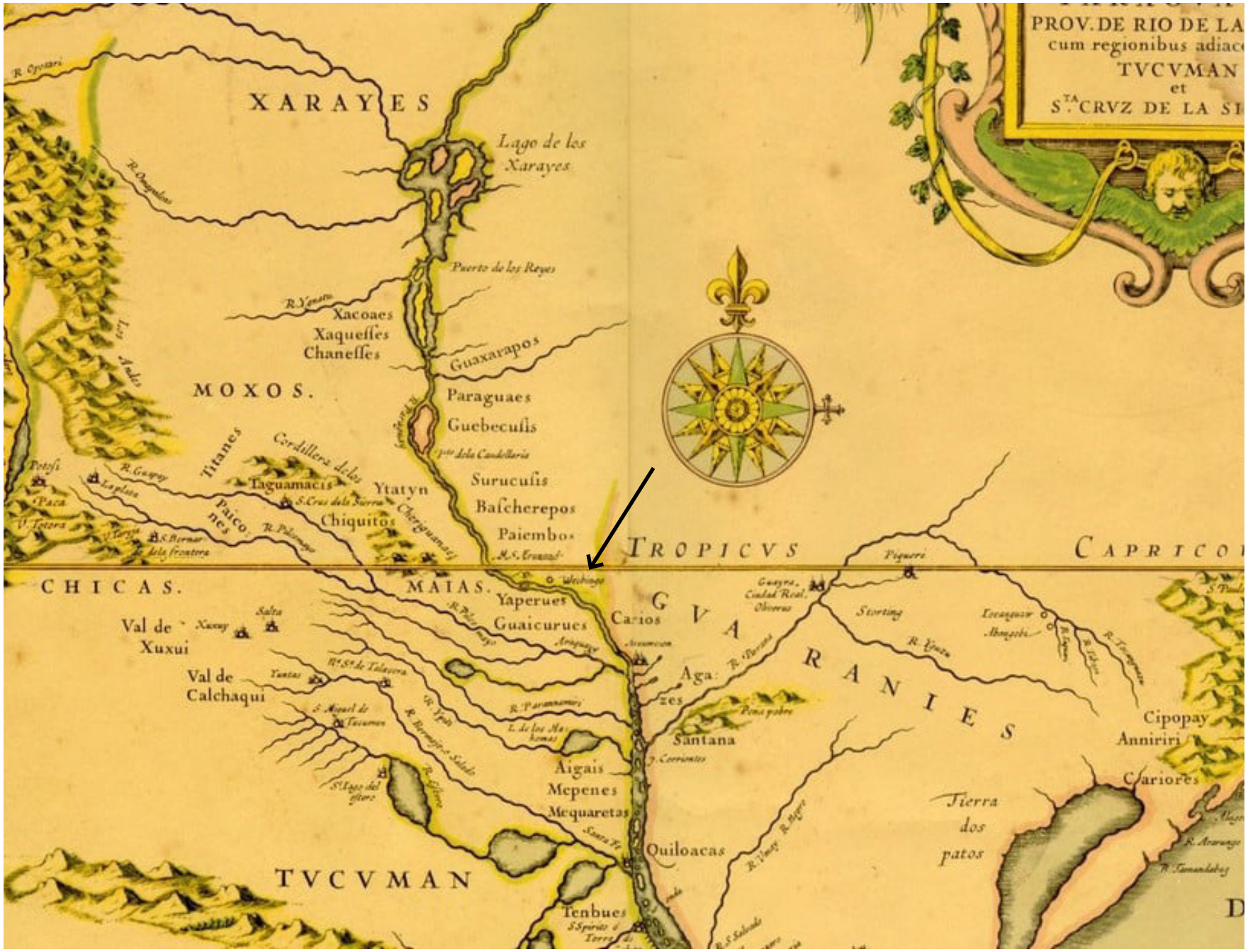
Fig. 10. — Fragmento de la carta de Forlani (1560-1570)

Las Americas y el Rio de la Plata

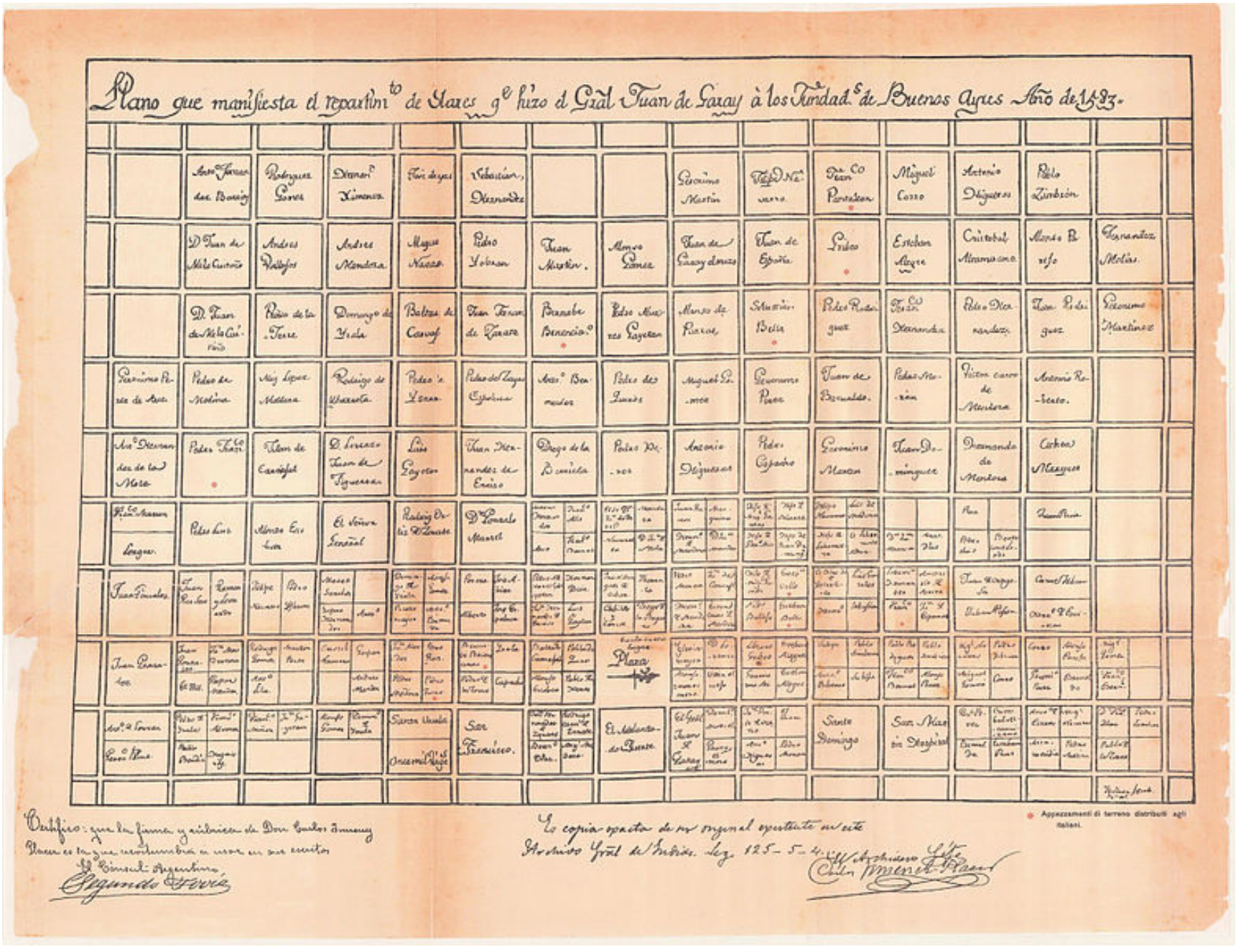


ULRICO SCHMIDEL, 1567

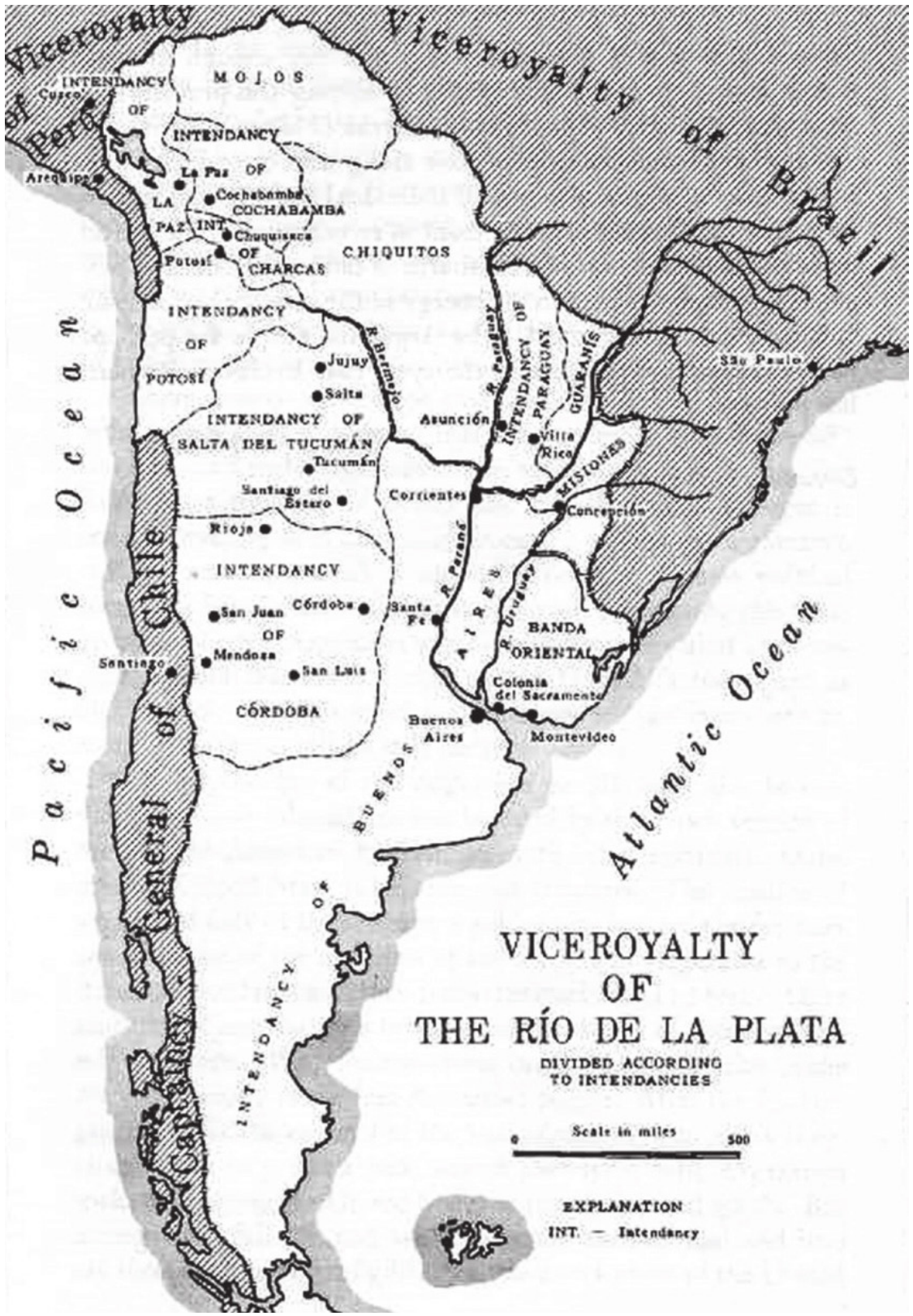
The first colony, 1536



Asuncion



The urban grid crica 1580 by Juan de Garay


Viceroyalty of Peru
Viceroyalty of Brazil
Pacific Ocean
Atlantic Ocean
Chile
Captaincy General of Chile
INTENDANCY OF Cuzco
MOJOS
INTENDANCY OF La Paz
Arequipa
Cochabamba
LA PAZ INT.
COCHABAMBA
Chuquisaca
Potosí
OF CHARCAS
CHIQUITOS
INTENDANCY OF POTOSÍ
Jujuy
Salta
R. Bermejo
INTENDANCY OF SALTA DEL TUCUMÁN
Tucumán
Santiago del Estero
Rioja
INTENDANCY OF
San Juan
Córdoba
OF
Mendoza
San Luis
Santiago
CÓRDOBA
R. Paraguay
INTENDANCY OF PARAGUAY
GUARANIS
São Paulo
Asunción
Villa Rica
MISIONES
Corrientes
Concepción
R. Paraná
Santa Fe
BUENOS AIRES
R. Uruguay
BANDA ORIENTAL
Colonia del Sacramento
Buenos Aires
Montevideo
INTENDANCY OF BUENOS AIRES
VICEROYALTY OF THE RÍO DE LA PLATA
DIVIDED ACCORDING TO INTENDANCIES
Scale in miles
0
500
EXPLANATION
INT. — Intendancy

FRANCISCO FORTUNY

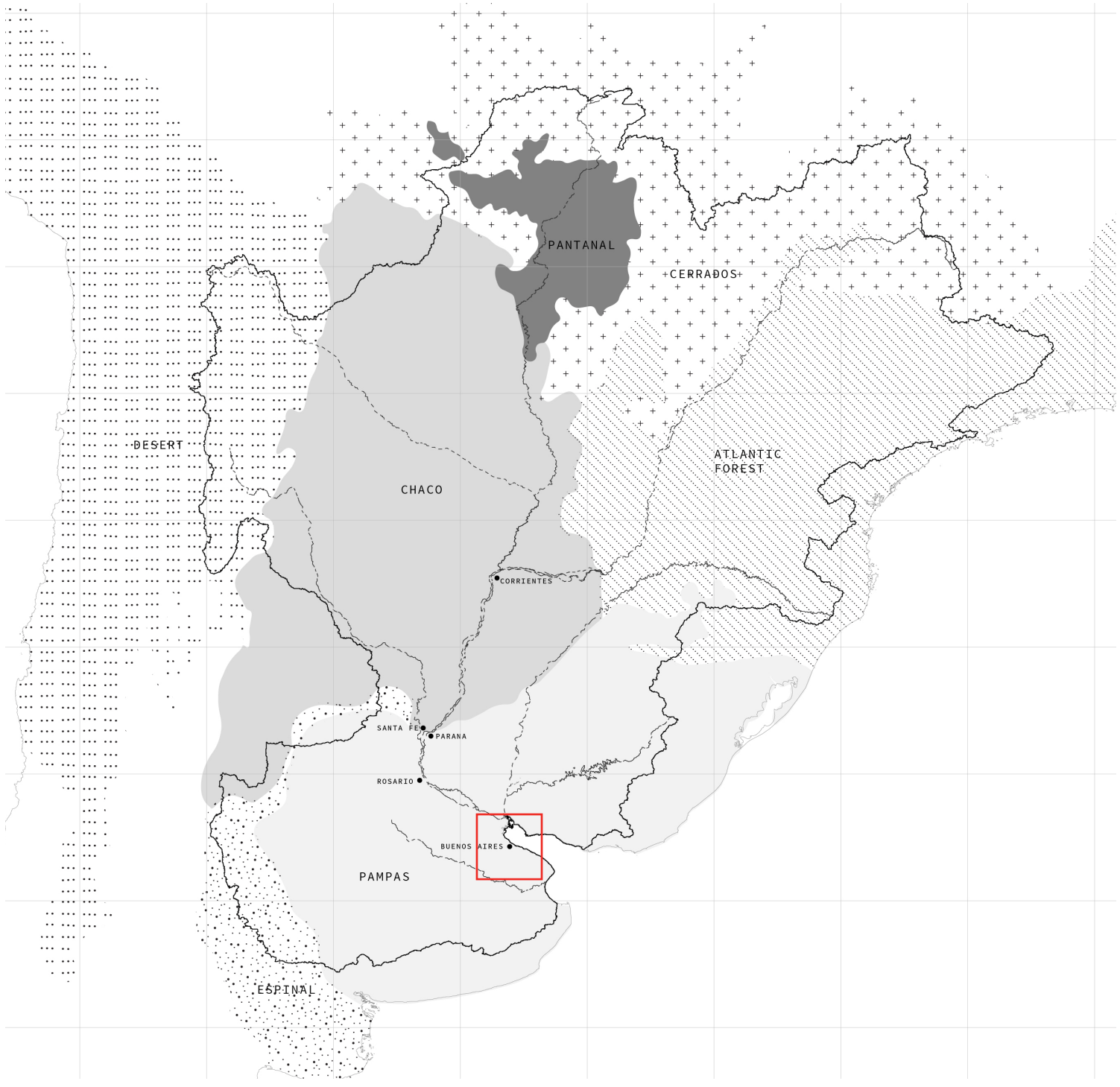
La Independencia, 1816

ARCHIVOS NACIONAL ARGENTINA

European immigrants arrive in Puerto Madero, 1904

biome

Biomes of the Rio de la Plata Basin. Buenos Aires is located within the Pampas, a region of native grasslands and seasonal wetlands. Intensive agriculture, mostly in the form of soybean monocultures and cattle farming, has displaced much of the native biodiversity in this ecosystem.

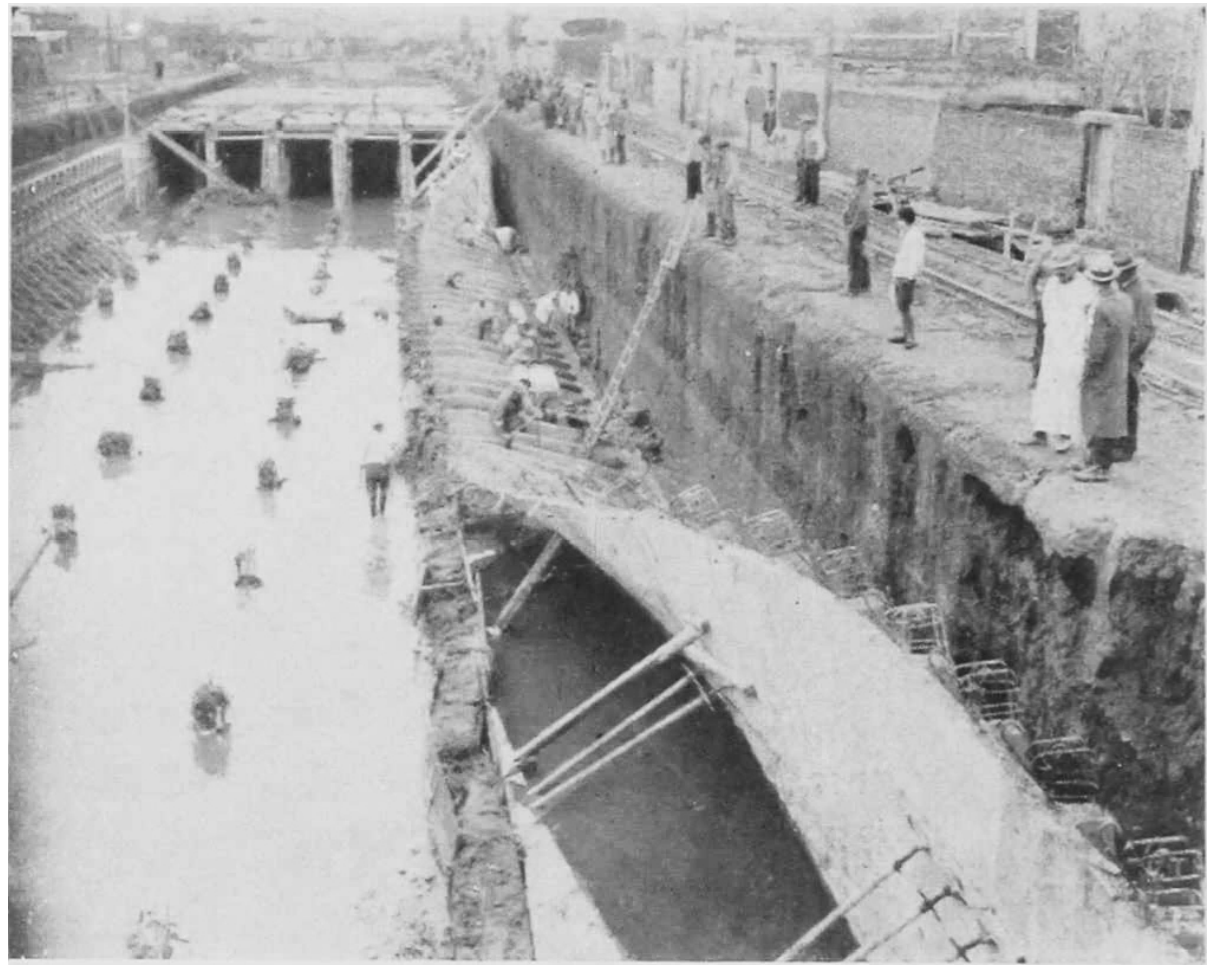


Buenos Aires, 1895

ARCHIVOS NACIONAL ARGENTINA

ACUMAR ARCHIVES

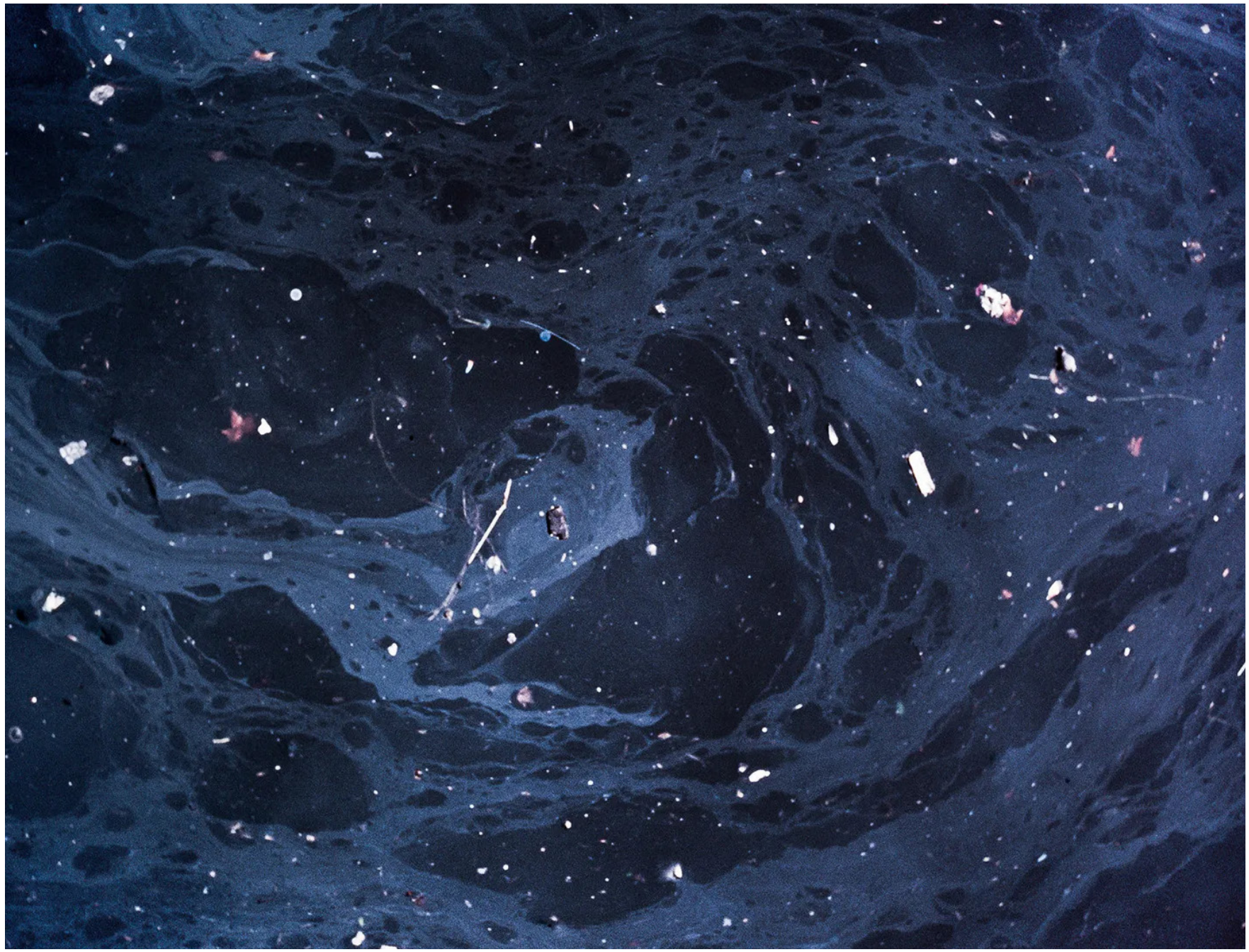
"Rectification"



ACUMAR ARCHIVES

Un arroyo entubado

Tributaries of the Matanza-Riachuelo flow in underground storm drains



ALEJANDRO KIRCHUK

Fetid waters

VUELTA AL RIO

Oil refinery in Villa Inflamable

VUELTA AL RIO

A resident of the Villa Inflamable slum

“Green” space

BLOOMBERG

Monocultures in the upper basin

Warehouse

Silos

Limbs

QUINTO CUERPO

HAY BENEFICIOS DE LITIGAR SIN GASTOS

Letra M **Nº** 1569 **Legajo** XL

2004

CORTE SUPREMA DE JUSTICIA DE LA NACION

JUICIOS ORIGINARIOS

MENDOZA BEATRIZ SILVIA Y OTROS

CONTRA

ESTADO NACIONAL Y OTROS

SOBRE

DAÑOS Y PERJUICIOS (DAÑOS DERIVADOS DE LA CONTAMINACION AMBIENTAL DEL RIO MATANZA-RIACHUELO)

Plan Integral de Saneamiento Ambiental
Actualización PISA 2016

Hacia una Visión Compartida de la Cuenca

acumar
Autoridad de Cuenca Matanza Riachuelo

a trash collection boat

there’s still much to be done

>1km2

A new wasterwater treatment plant in Lanus

>5km2

Norte III landfill

infrastructure mimics agroforestry principles

stratification

diversity

synergism

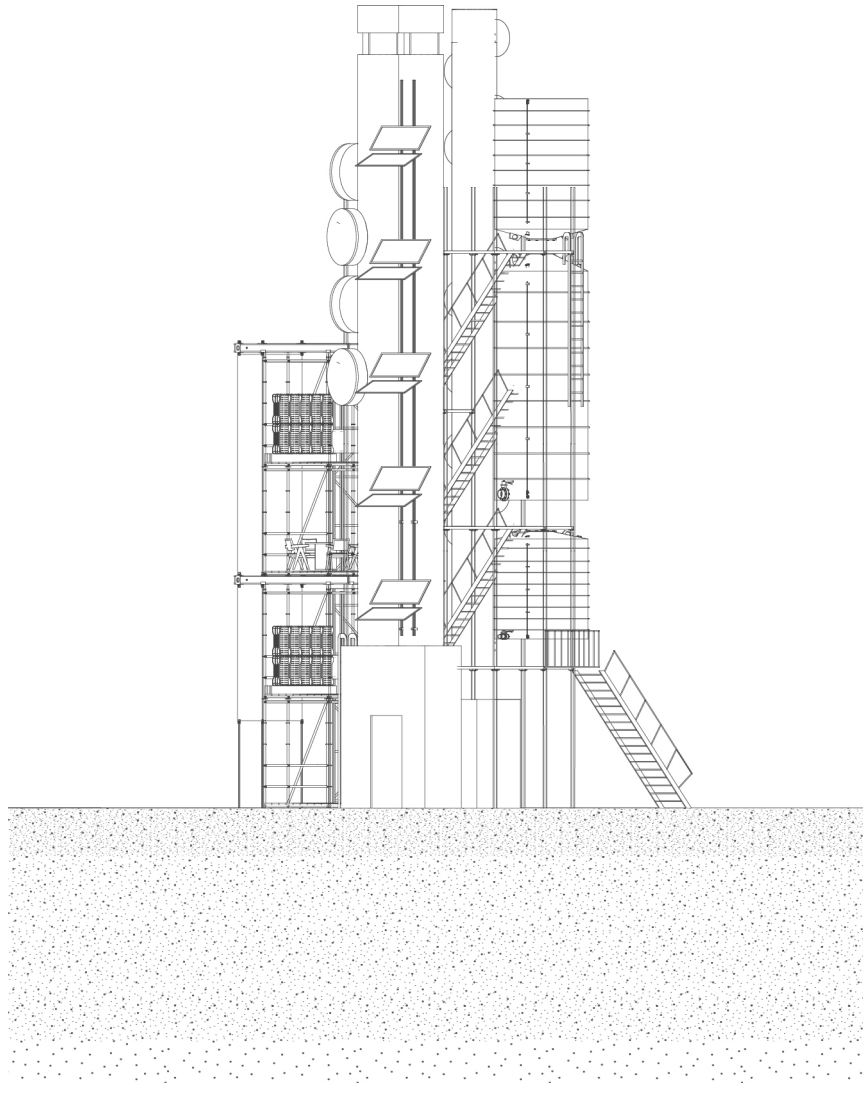
compactness

holistic

low-input

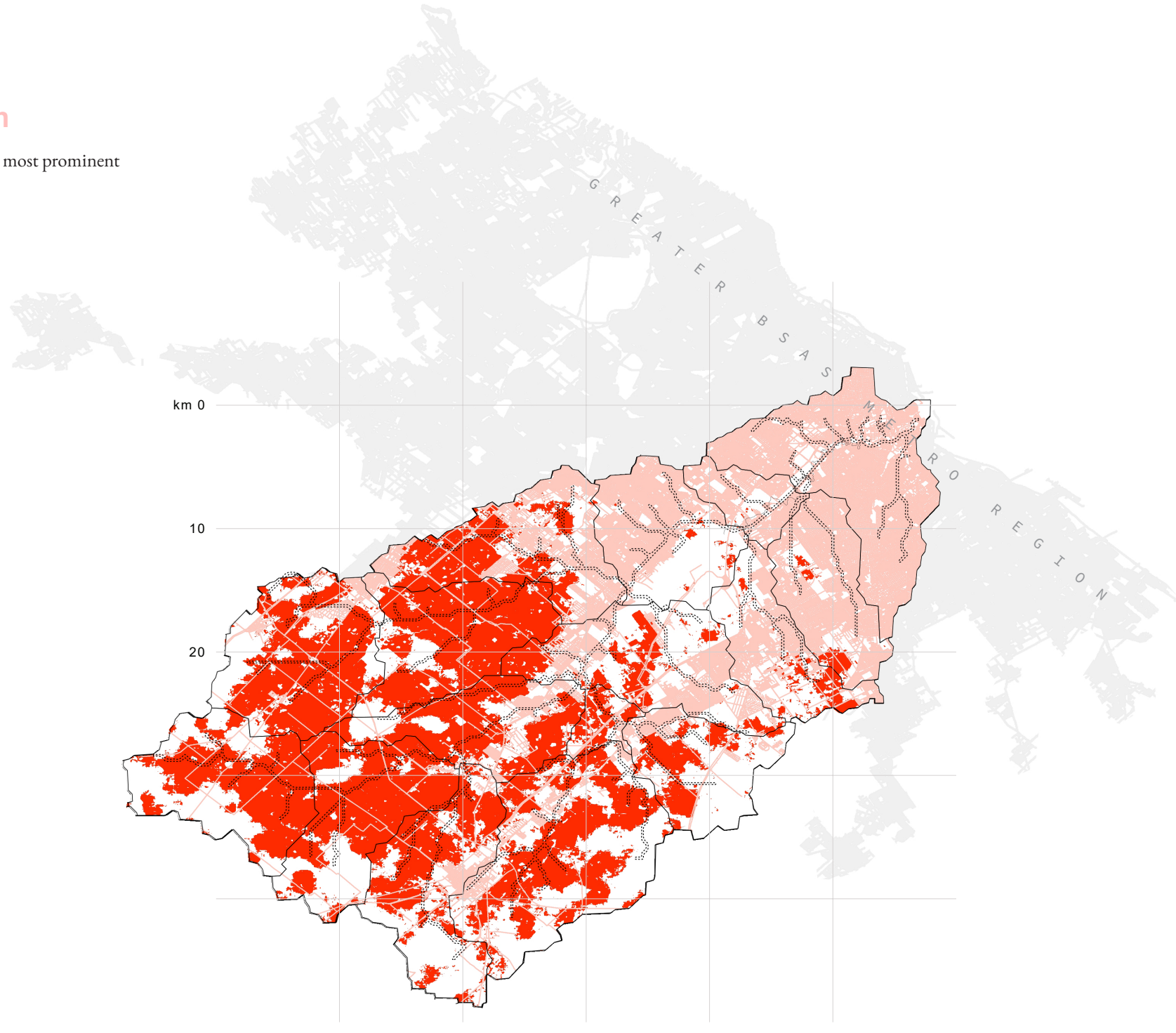
closed-loop

multifunctional



agricultural + urban

Agricultural and urban areas are the two most prominent land uses in the basin.



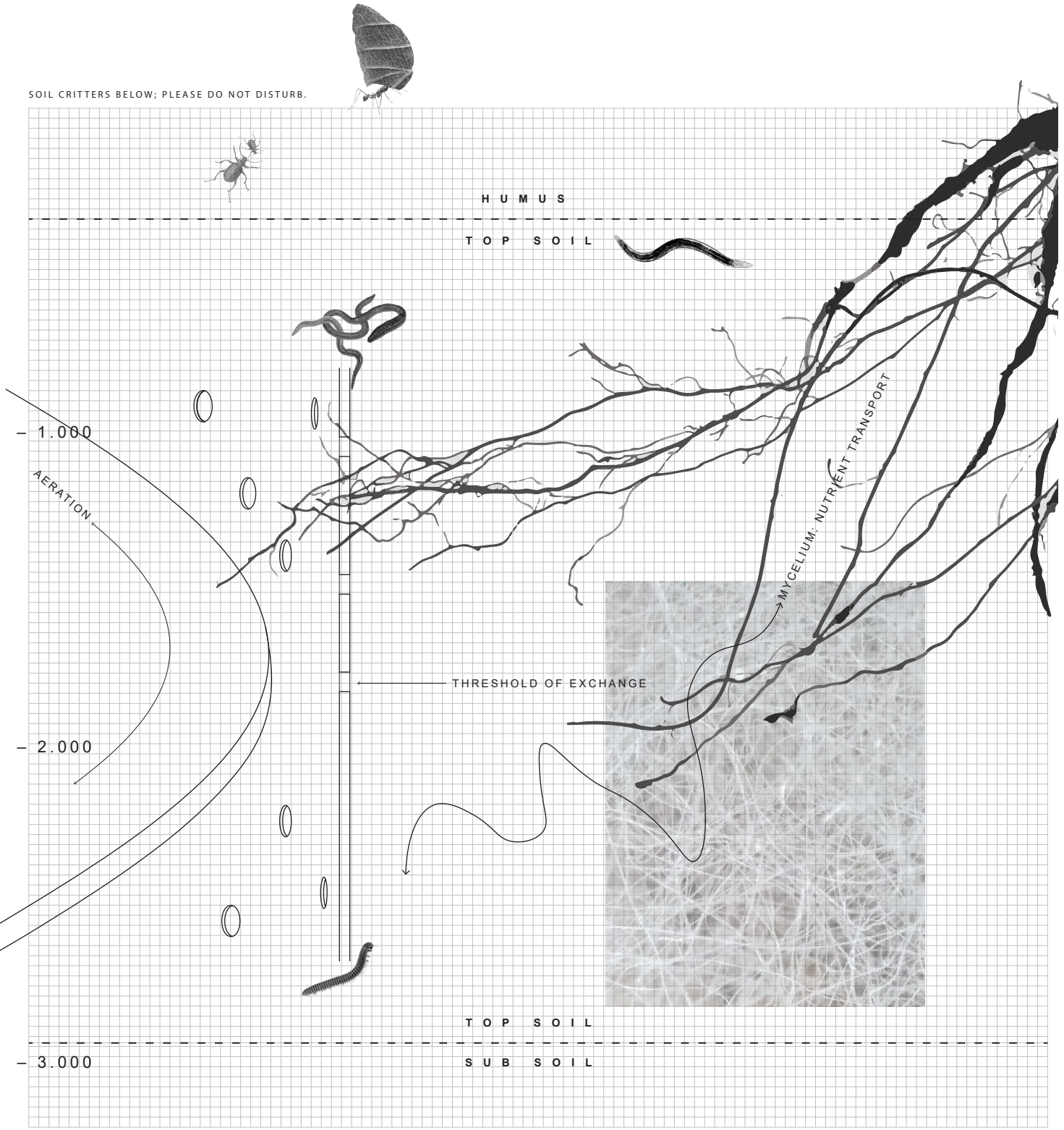
2

instituto
nacional del suelo

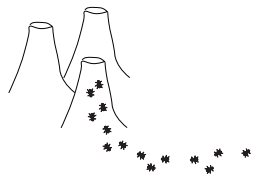
Delina Rocabado, UTT

There is already agroecology being practiced in the basin, but only on the occasional small, family-owned farm, not at any meaningful scale.

SOIL CRITTERS BELOW; PLEASE DO NOT DISTURB.



algae



ants

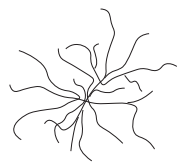
earthworms

vegetation

butterflies

bacteria

humans



mycelium

mushrooms

nematodes

Soil actors

Soil Building *through* Decentralized Modes *of* Care

Abstract
Anthropic activity within urban and agricultural land use patterns generates high quantities of greenhouse gas (GHG) emissions and depletes ecosystems including those underground. Soil is a key site of carbon sequestration, however current land use practices disrupt this process. At the same time, urban organic waste is a problem for most major cities, which typically send such waste to landfill or incineration plants, releasing further emissions and neglecting to harness the full potential of this resource. Rather, composting at a local level can reduce the burden on a city's monofunctional waste management while regenerating urban and agricultural soils. A case study is conducted in Buenos Aires to determine the viability of such a scheme in dense urban environments. An alternative urban model is then proposed.

OUR WILD GARDEN

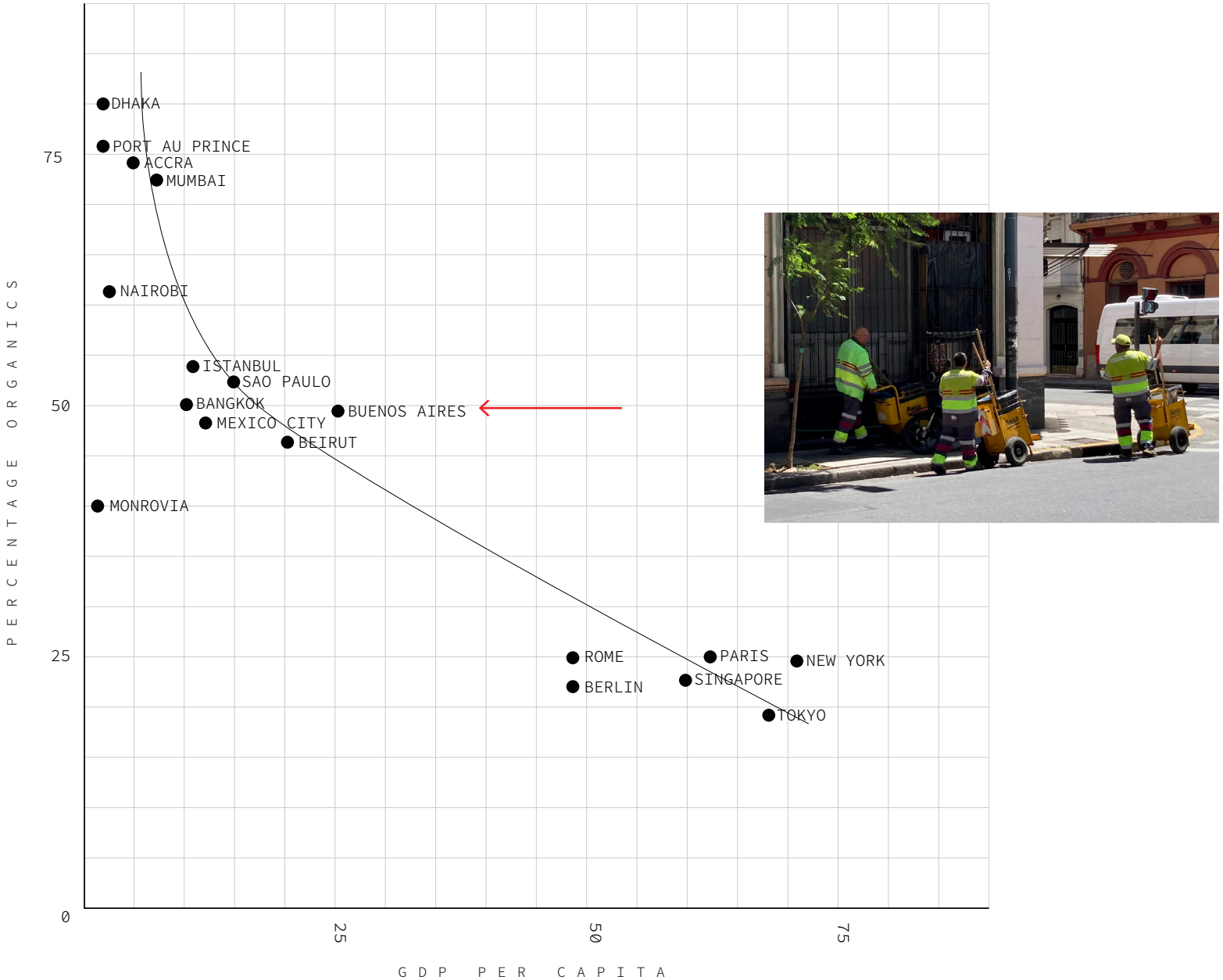
Diverse, stratified plantings

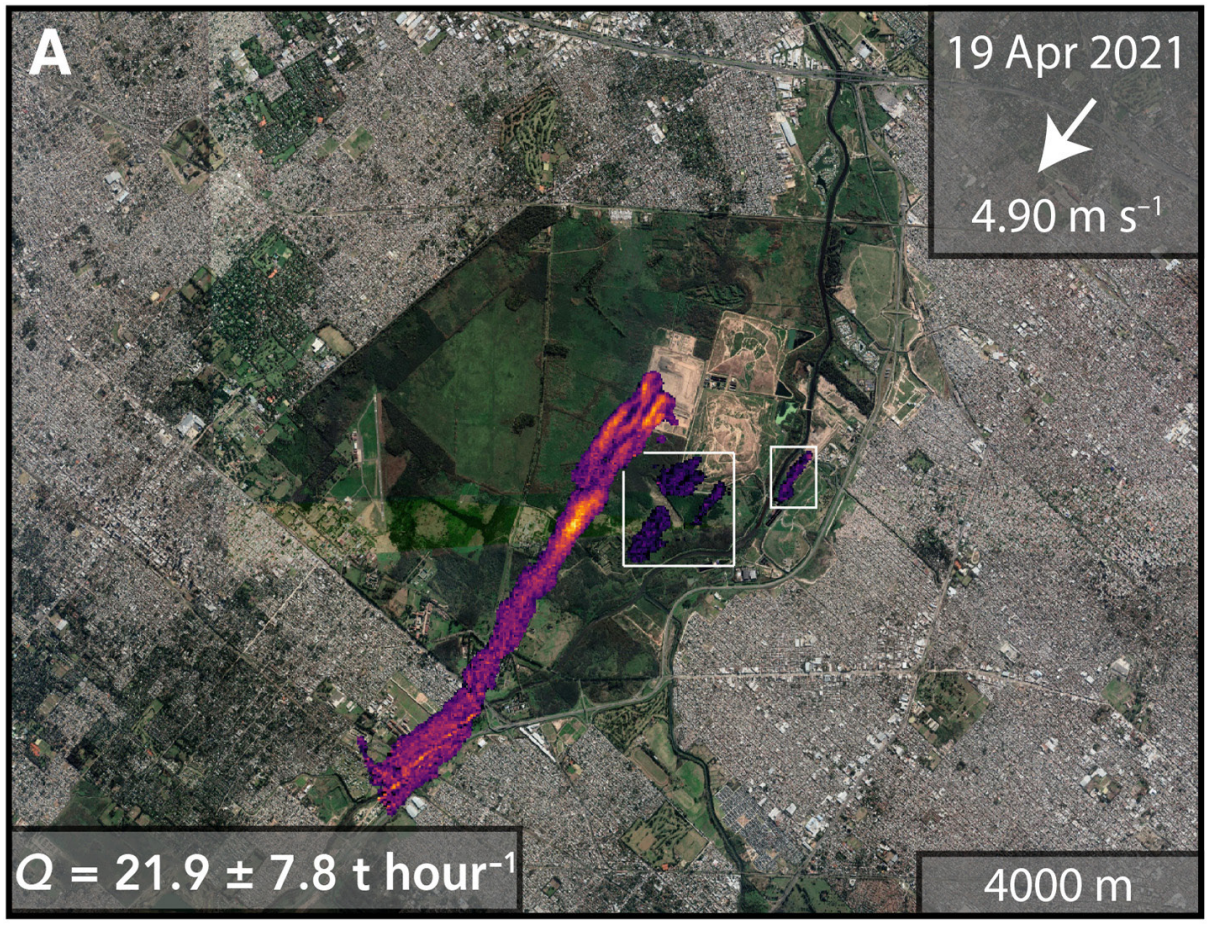
CHARLOTTE LUKES

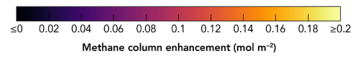
mycelium

improve soil health by increasing the organic matter within it

ORGANIC WASTE AS PERCENTAGE OF TOTAL MUNICIPAL WASTE BY CITY
CORRELATED WITH GDP PER CAPITA







Norte III landfill receives 14,000 tons of garbage a day, 50% of which is organic (NEA, 2021); contributes to 50% of Buenos Aires CH_4 emissions (Maasakkers et al., 2022)

96% of total waste in Buenos Aires, which represents 40% of total waste in the country. It is the largest landfill in South America.
(NEA, 2021)

The current (centralized) management of waste involves a complex choreography of various actors.

cartoneros

compostala!

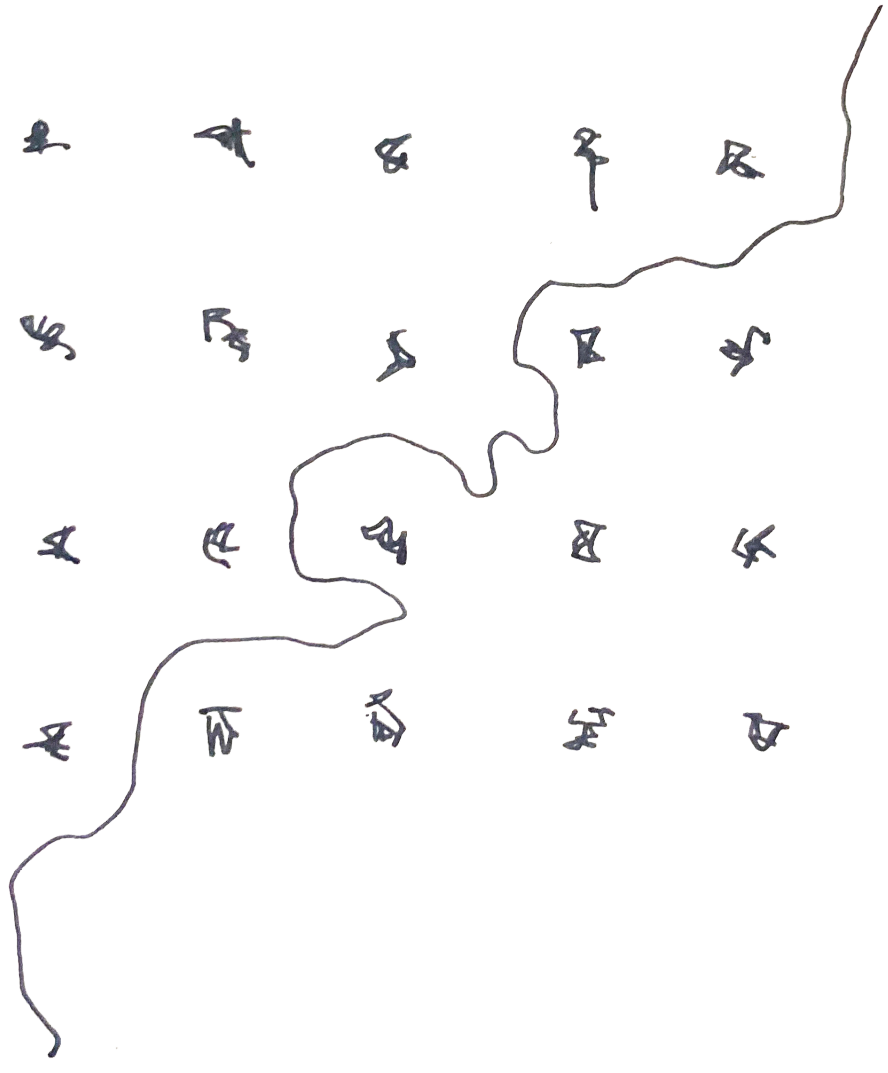
The application of compost has been shown to improve soil composition, increase soil organic matter, reestablish connective sinews and facilitate rhizomatic exchange between organisms. (Pagliai et al., 2004)

NUFRAME

sympoiesis, or, *becoming with*

instituto nacional del suelo

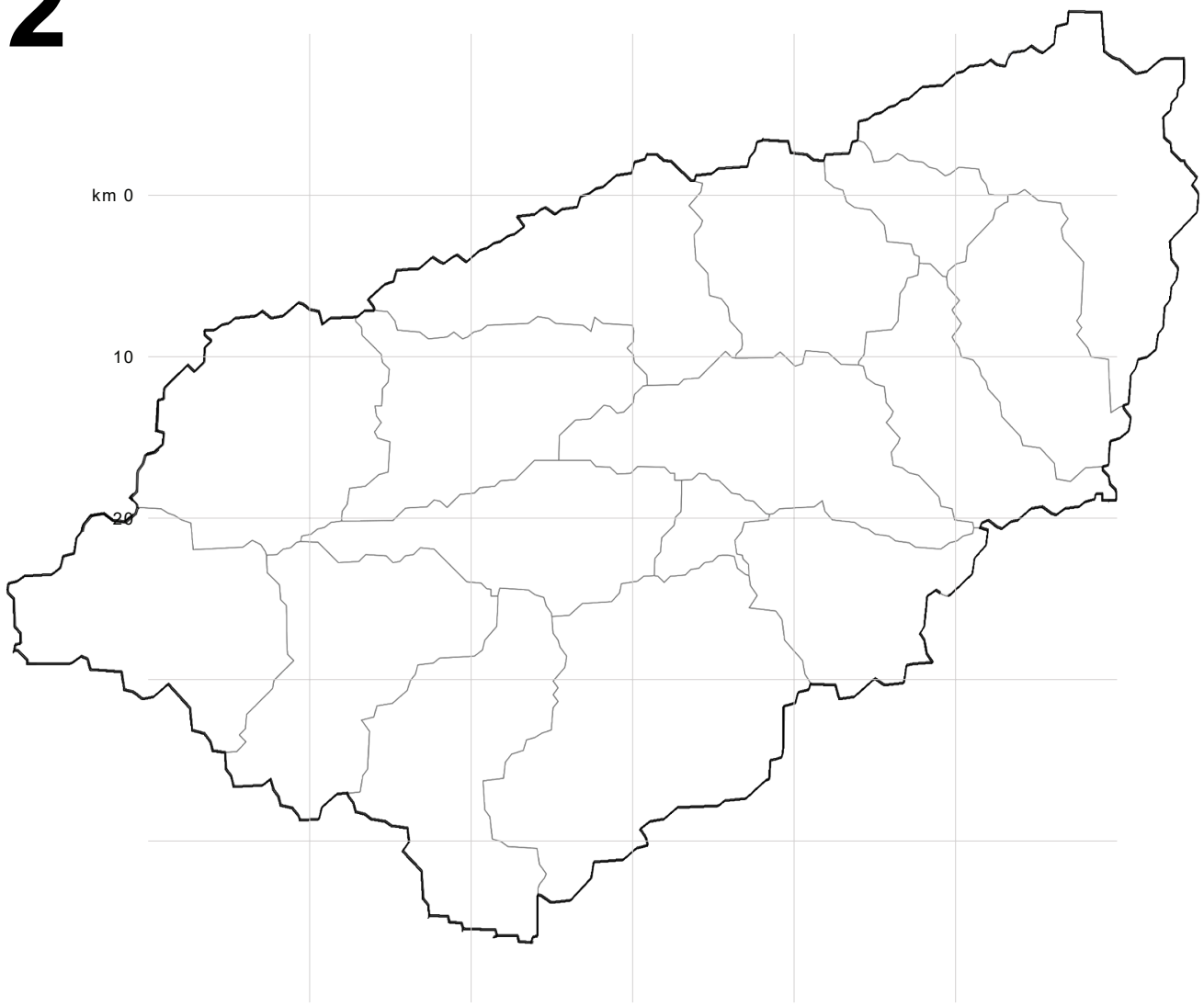
A decentralized network of composting nodes assist the remediation of urban and agricultural soils



3

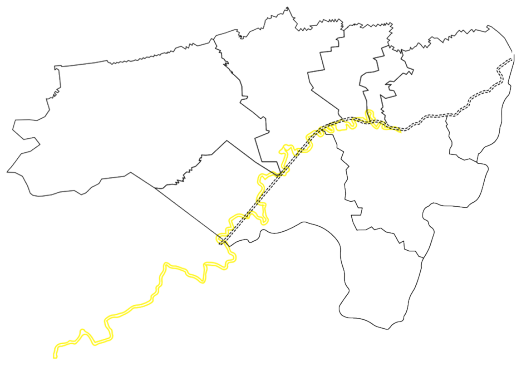
the three ecologies

2,000km2

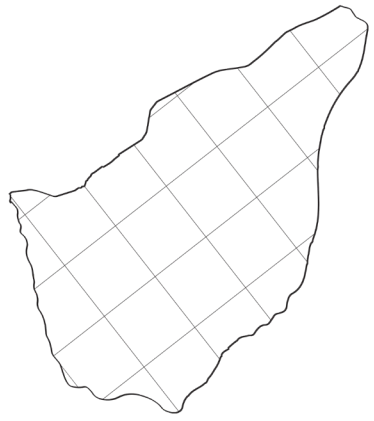


SCALES

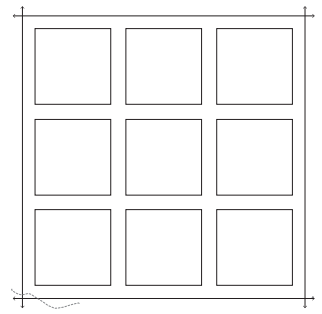
BASIN



SUBBASIN

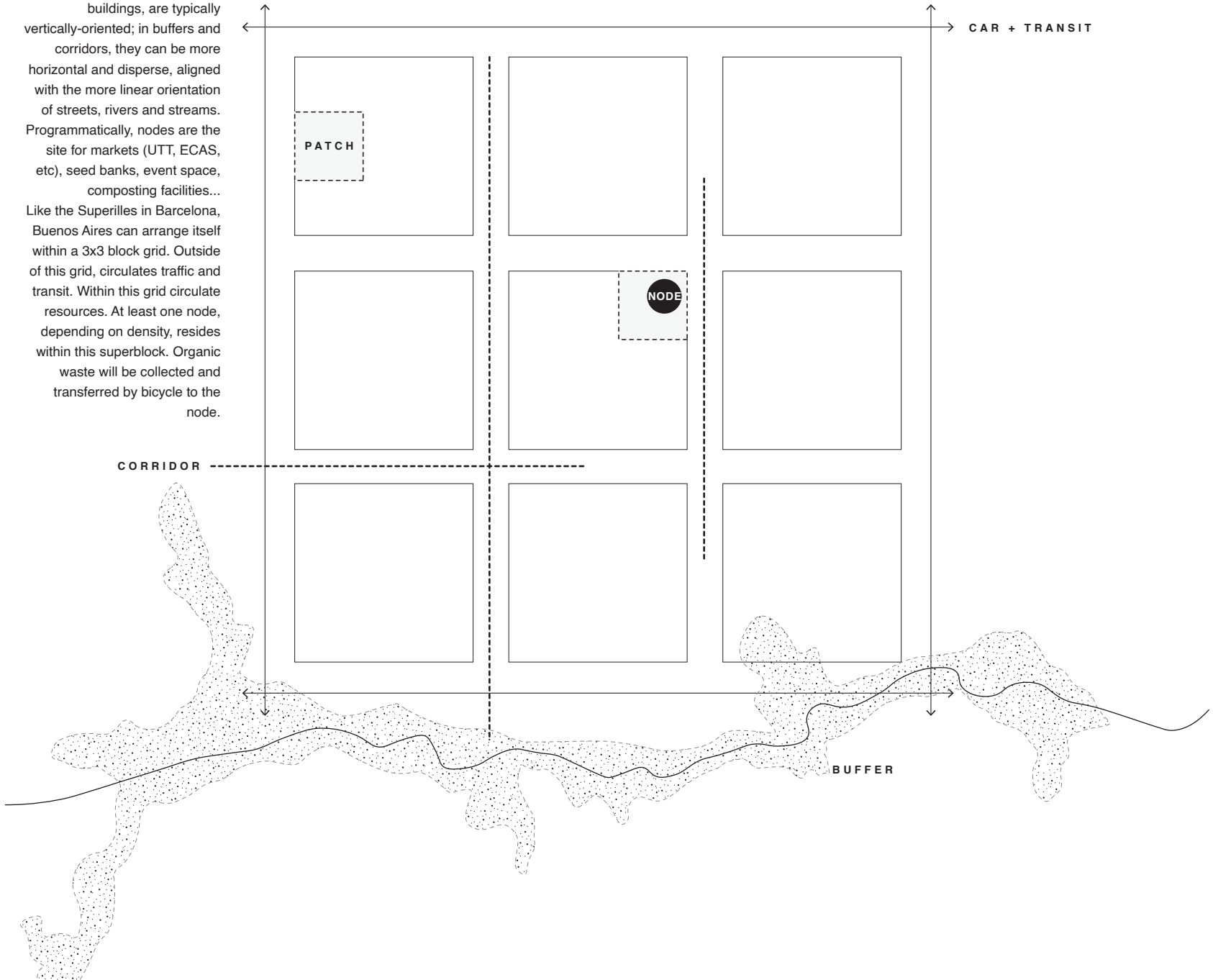


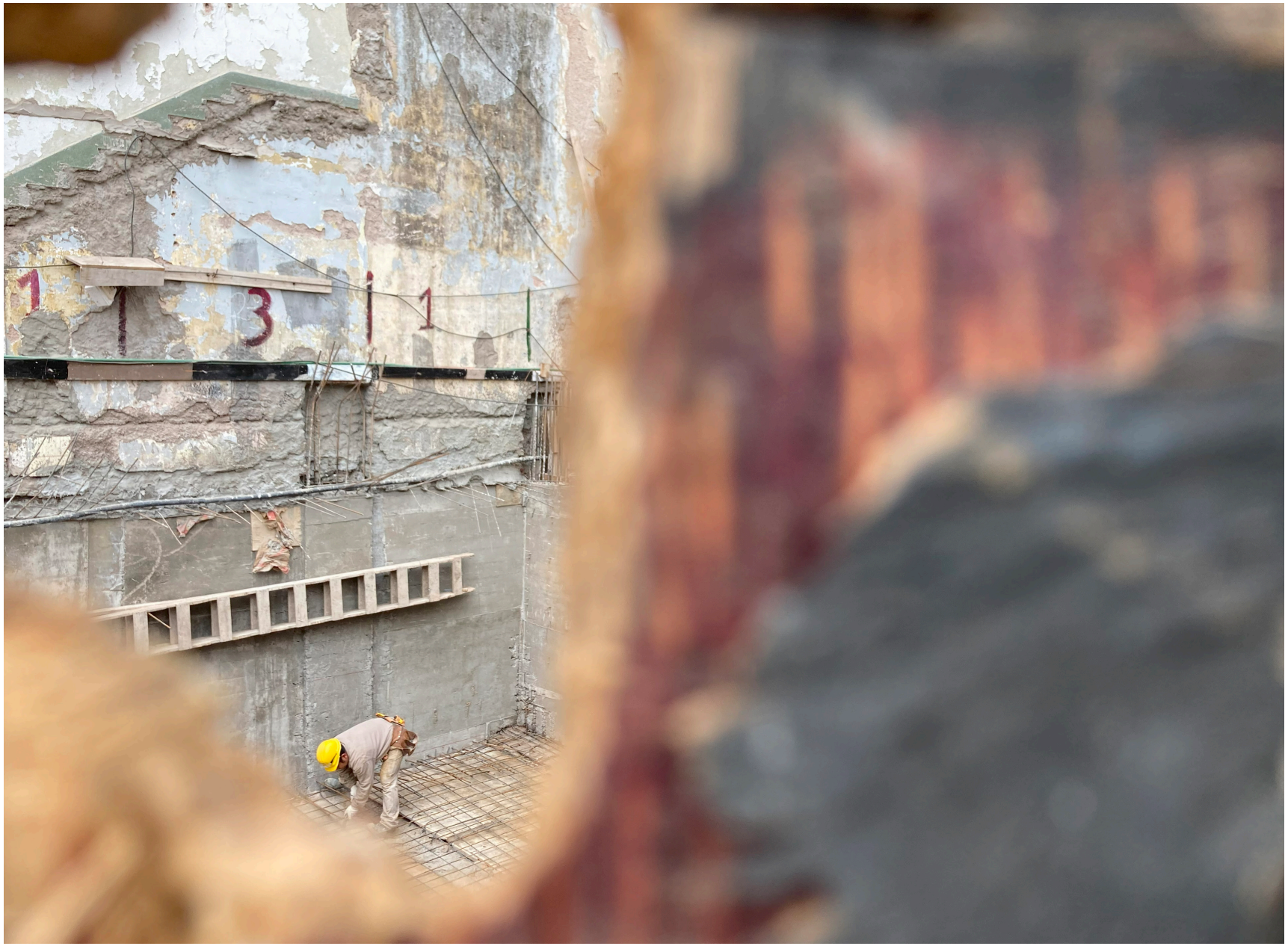
MICROBASIN



SUPERBLOCK

Nodes inhabit corridors, patches and buffers, three interstitial typologies that form mesh. Architectural configurations of nodes correspond each typology. Nodes within patches, mostly gaps and open lots between buildings, are typically vertically-oriented; in buffers and corridors, they can be more horizontal and disperse, aligned with the more linear orientation of streets, rivers and streams. Programmatically, nodes are the site for markets (UTT, ECAS, etc), seed banks, event space, composting facilities... Like the Superilles in Barcelona, Buenos Aires can arrange itself within a 3x3 block grid. Outside of this grid, circulates traffic and transit. Within this grid circulate resources. At least one node, depending on density, resides within this superblock. Organic waste will be collected and transferred by bicycle to the node.





Incessant processes of transformation

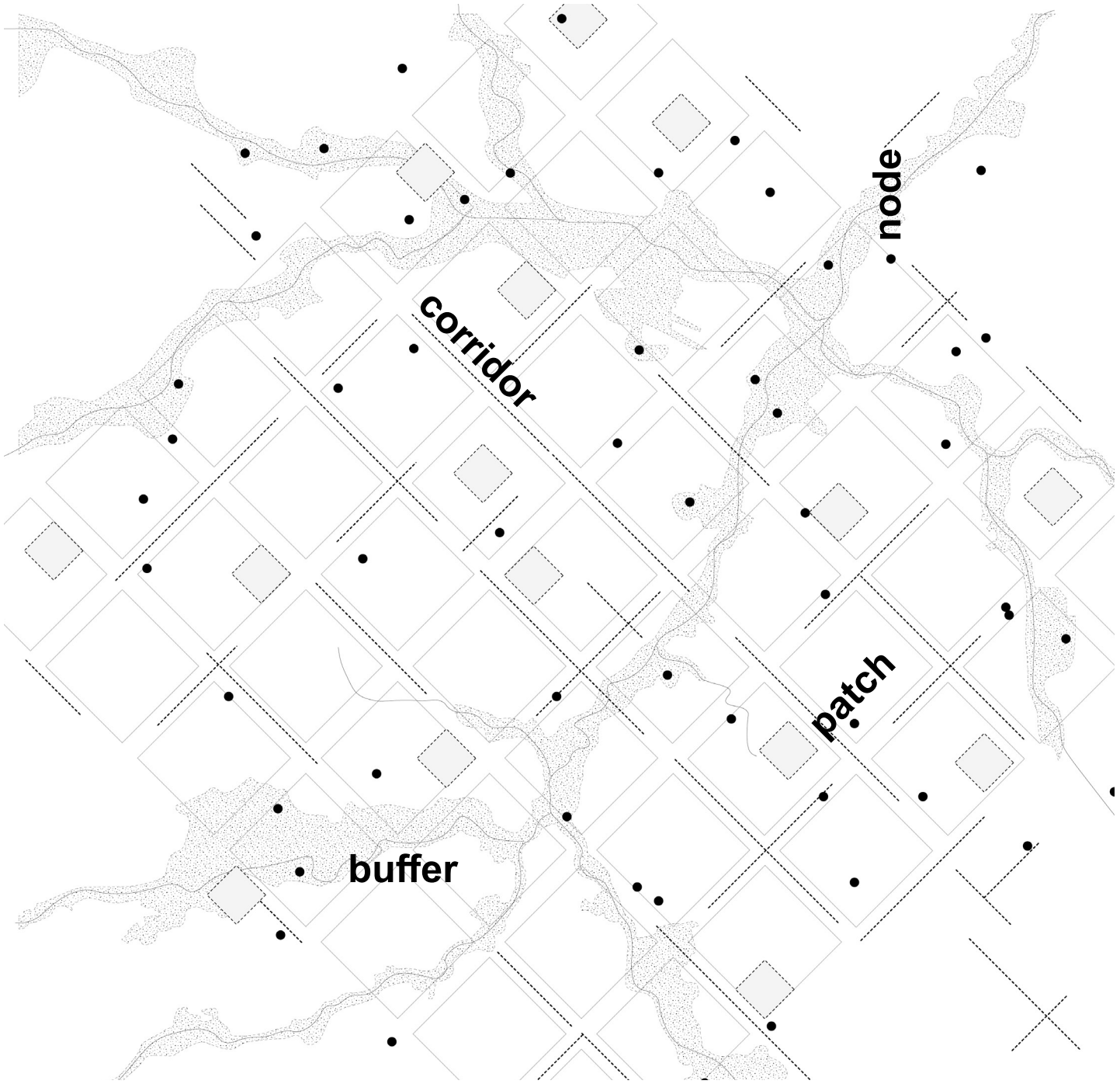
Demolition: recent

and less recent

concrete along the river's edge

Neglected corridors in the city center

Small glimpses



the three ecologies

1
(riparian) buffer

"Riparian zones provide many ecological functions and services as biological corridors and buffer zones to retain pollutants that may enter from urban runoff while mitigating flooding"
(Gomez et al., 2020).

USDA NATIONAL AGROFORESTRY CENTER

<u>structural components</u>
food forest
terraqueous vegetation
agricultural cultivars

<u>dimensions</u>
>15 meters

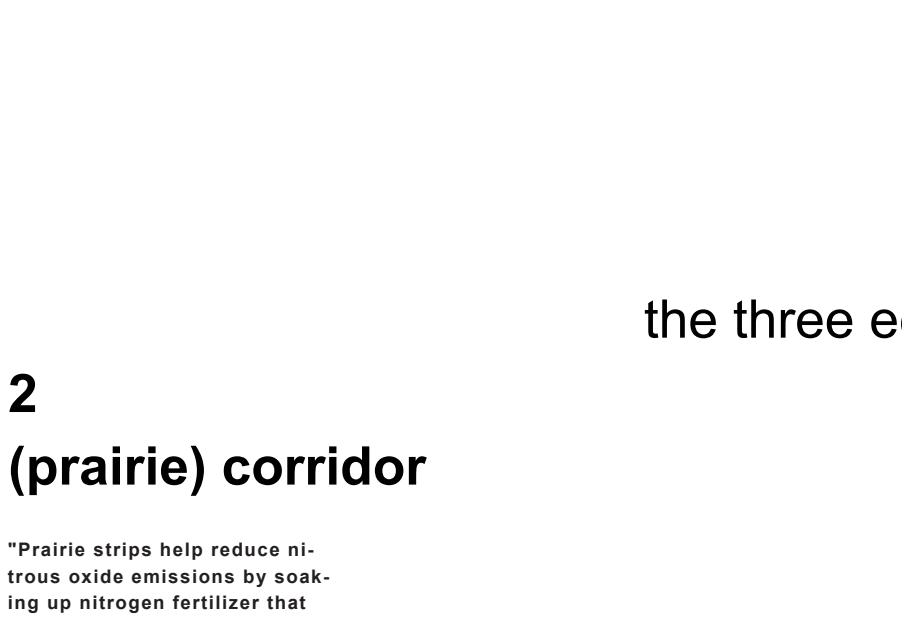
<u>vegetal usage</u>
phytoremediation
agroforestry
bio-materials

<u>species</u>
alopecurus pratensis
salix calodendron
sagittaria montevidensis
linum usitatissimum
cornus amomum
cannabis sativa ssp. sativa
platanus acerifolia
alnus glutinosa

<u>schedule</u>
10 years to crown closure

2
(prairie) corridor

"Prairie strips help reduce nitrous oxide emissions by soaking up nitrogen fertilizer that runs off of adjacent cropland. They also can store carbon in soil... and reduce erosion and nutrient loss from soil and support birds and insects. Prairie strips are among the least expensive conservation practices available to farmers"
(Moore, 2021).



STRIPS, IOWA STATE

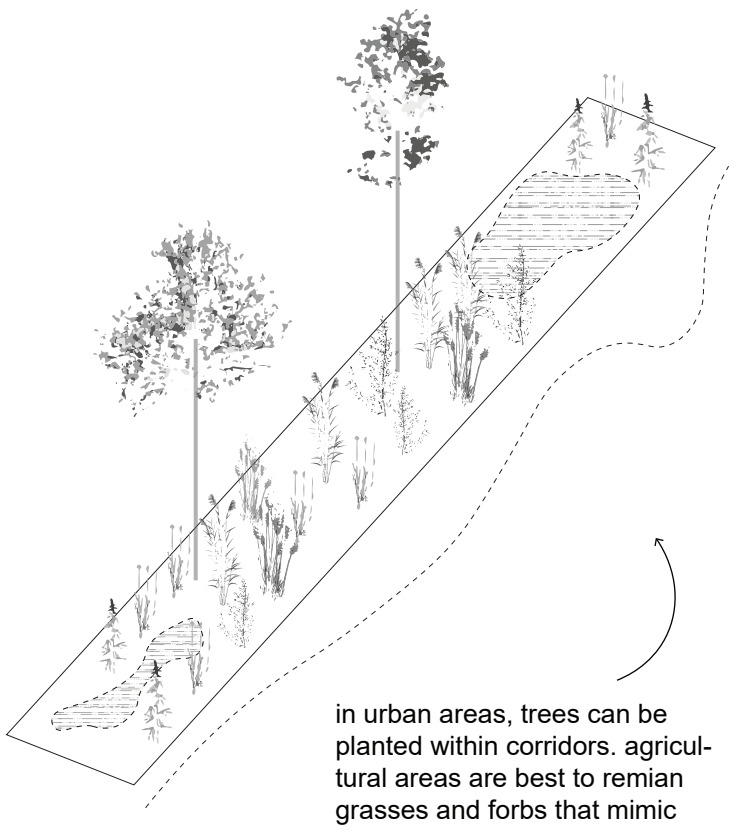
<u>structural components</u>
prairie grasses
bioswale
ephemeral wetlands

<u>dimensions</u>
5-10 meter width,
10% of total cropland

<u>vegetal usage</u>
phytoremediation
agroforestry

<u>species</u>
cortaderia selloana
artemisia tridentata
asclepias syriaca
phragmites australis
cannabis sativa ssp. sativa
linum usitatissimum

<u>schedule</u>
7 years to self-sustaining
(STRIPS Program, Iowa State University).



in urban areas, trees can be planted within corridors. agricultural areas are best to remian grasses and forbs that mimic the natural pampean landscape

structural components

compact micro ecologies

park/open space

food gardens

dimensions

varies by lot

vegetal usage

phytoremediation

agroforestry

species

spinacia oleracea

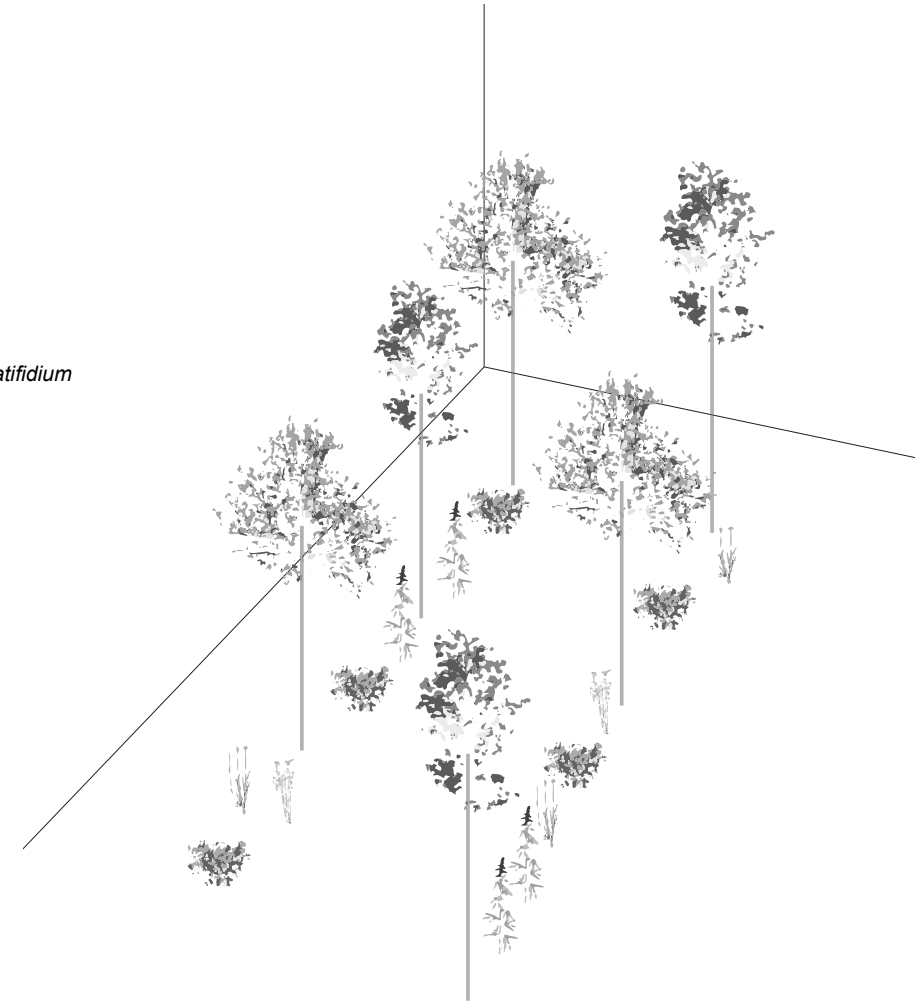
pastinaca sativa

philodendron bipinnatifidium

maytenus boaria

schedule

varies by application

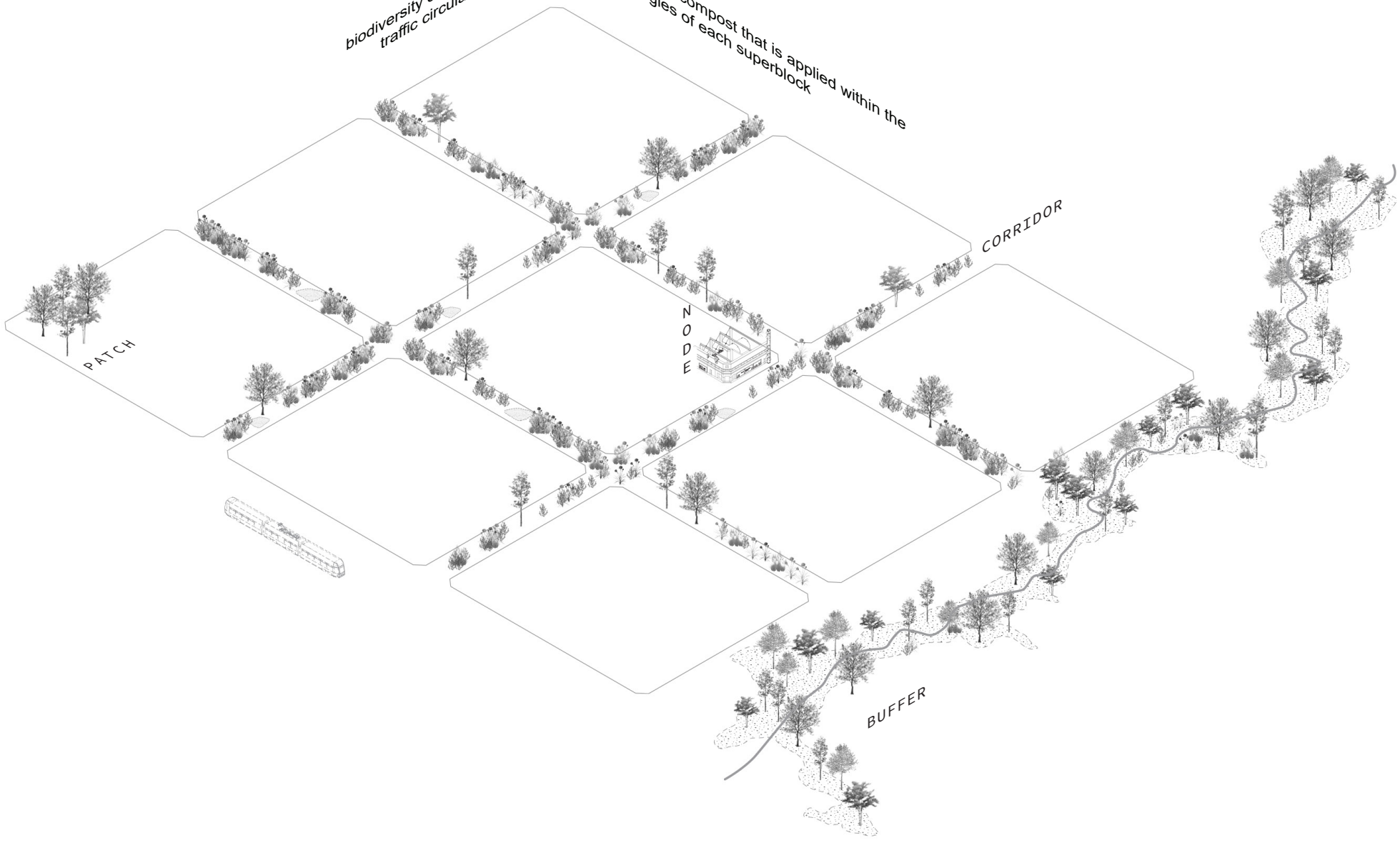


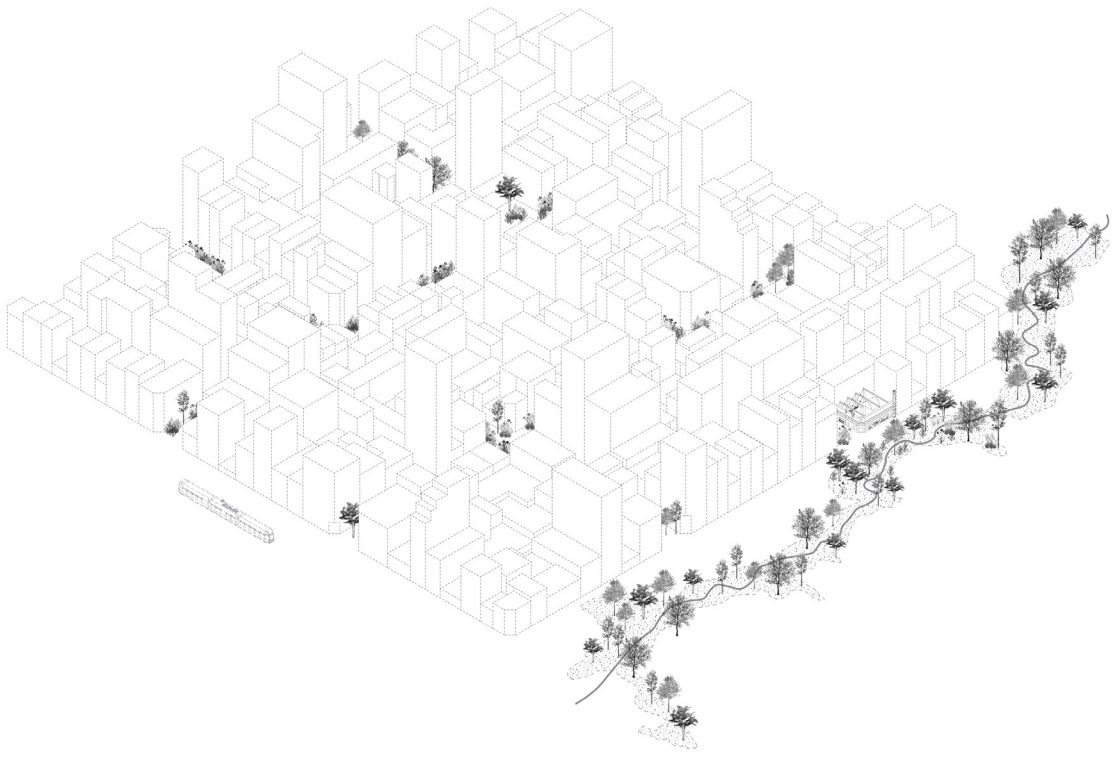
3
(community) patch

provide open space in city centers which serve as opportunities for education, recreation and local food sovereignty

biodiversity circulates within;
traffic circulates without

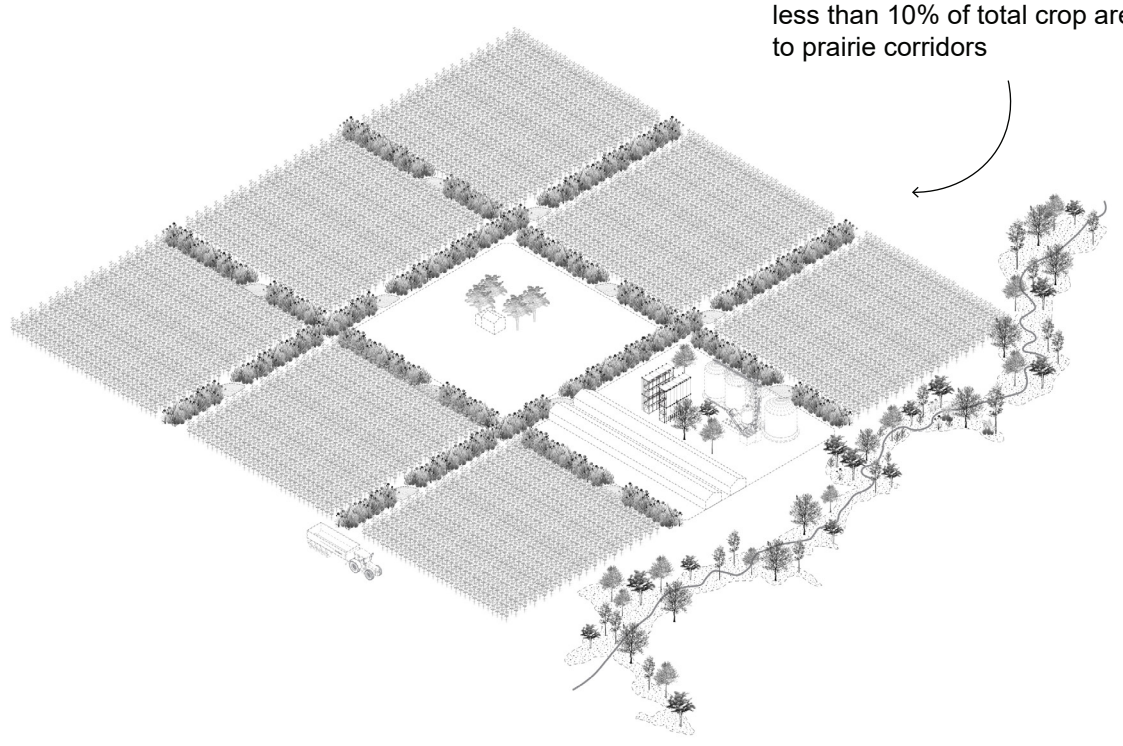
nodes produce compost that is applied within the three ecologies of each superblock





urban

agricultural areas can devote
less than 10% of total crop area
to prairie corridors



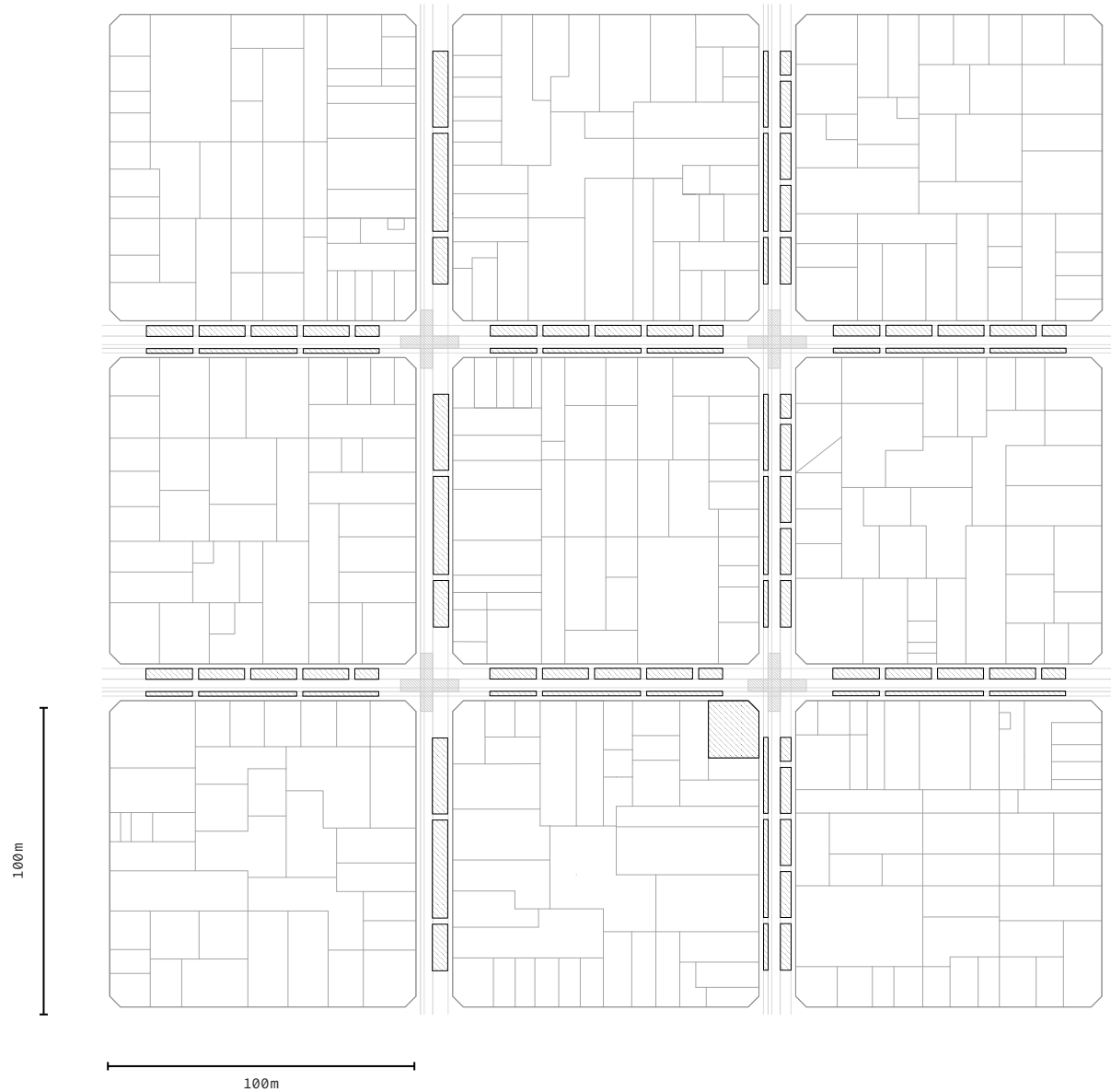
agricultural

4

soil machine

or, how junk becomes gunk

(TYPICAL) URBAN SUPERBLOCK =
100,000m2

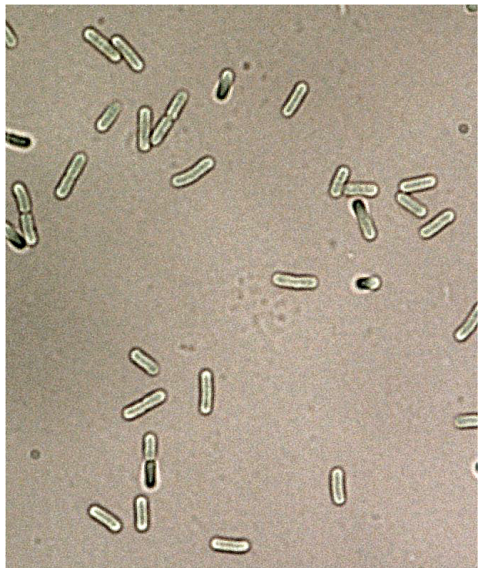


≥ 5.000m2

minimum area newly available for compost application through the implementation of three ecologies in a typical urban superblock

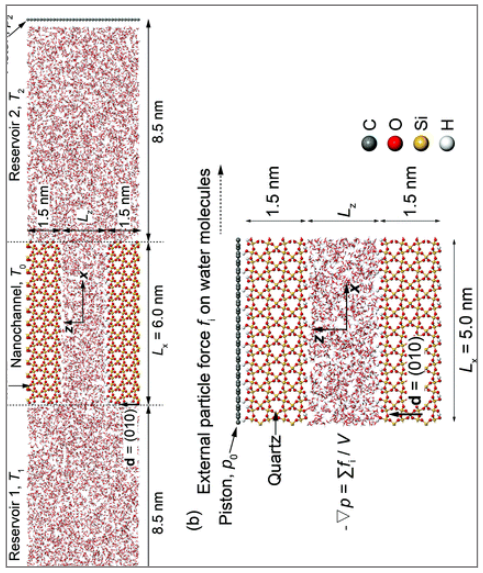
compost methods

LIAO FUKUSAKI



fermentation

CHEN, IOGO & JIVKOV, 2021

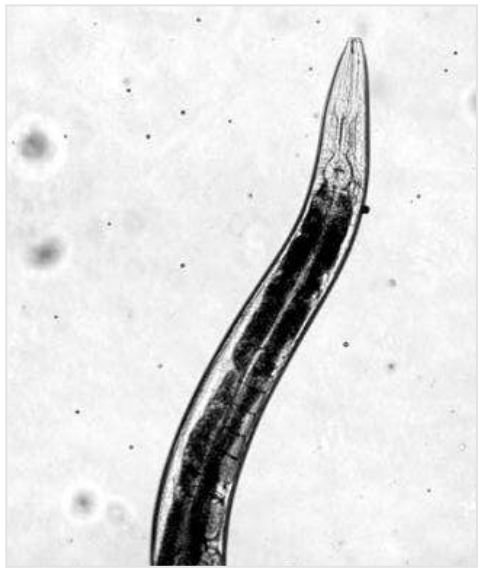


biomeiler

NOVID

in-vessel

WEIWEI ZHONG



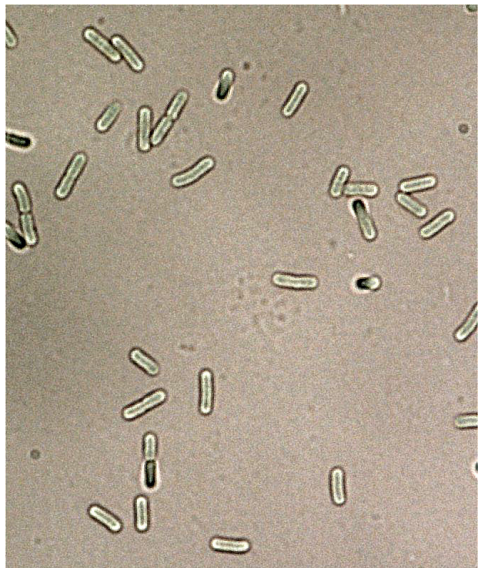
vermicompost

CHRISTINE MATTHEWS

turn pile

compost methods

LIAO FUKUSAKI



fermentation

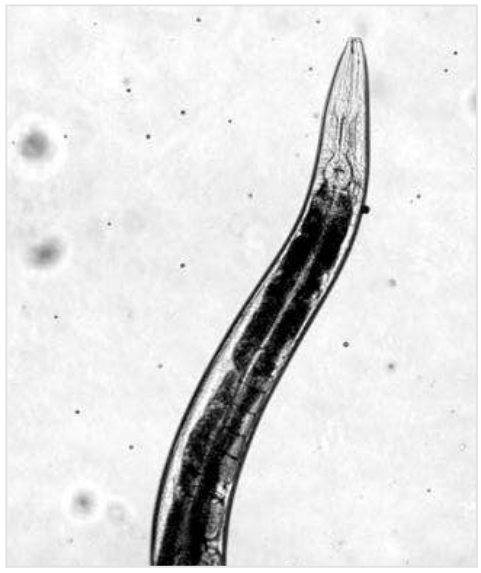
CHEN, JOGO & JIVKOV, 2021

biomeiler

NOVID

in-vessel

WEIWEI ZHONG

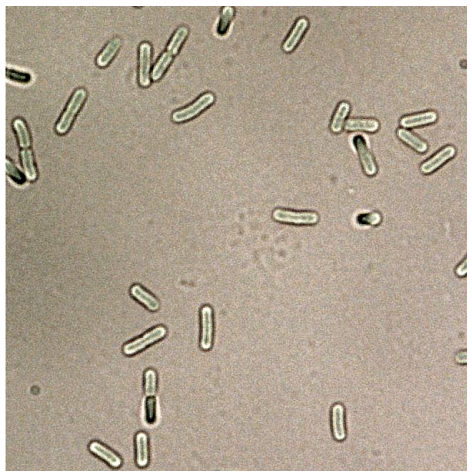


vermicompost

CHRISTINE MATTHEWS

turn pile

LIAO FUKUSAKI



1
Home collection, fermented mix applied

How to make the fermentation mixture (FM)

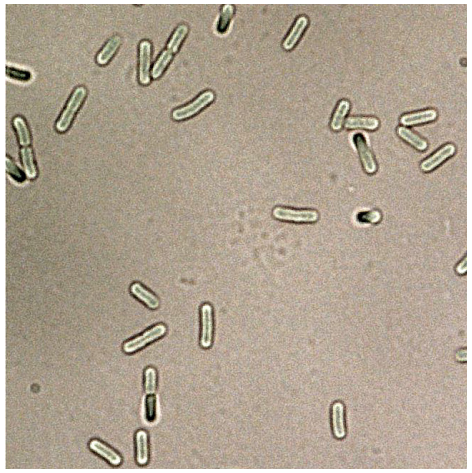
05% fungal+plant matter

05% molasses

90% hot water

1. Mycelium is harvested from riparian forest
2. Half of water volume added to container
3. Add molasses
4. Add mother culture
5. Add remaining water
6. Stir gently
7. IMO percolates in an airtight container for 2 - 4 weeks

LIAO FUKUSAKI

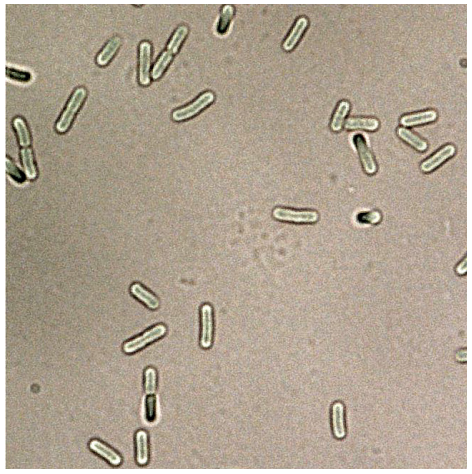


1
Home collection, fermented mix applied

2
Deposit at node, collect new container and fermented mix

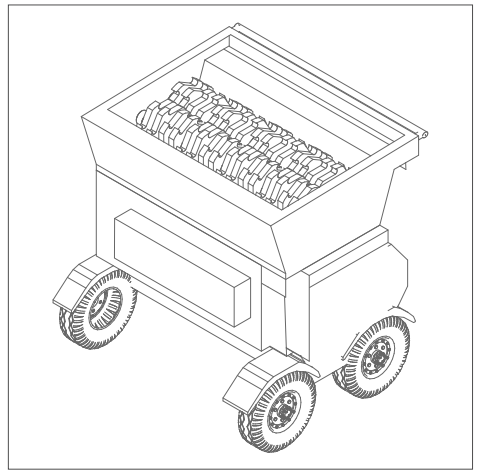
When residents deposit food waste at their local composting node, they are able to retrieve a freshly-cleaned container and a new bag of FM. Composting nodes will be multifunctional spaces that can include food markets, park space, apothecaries...

LIAO FUKUSAKI



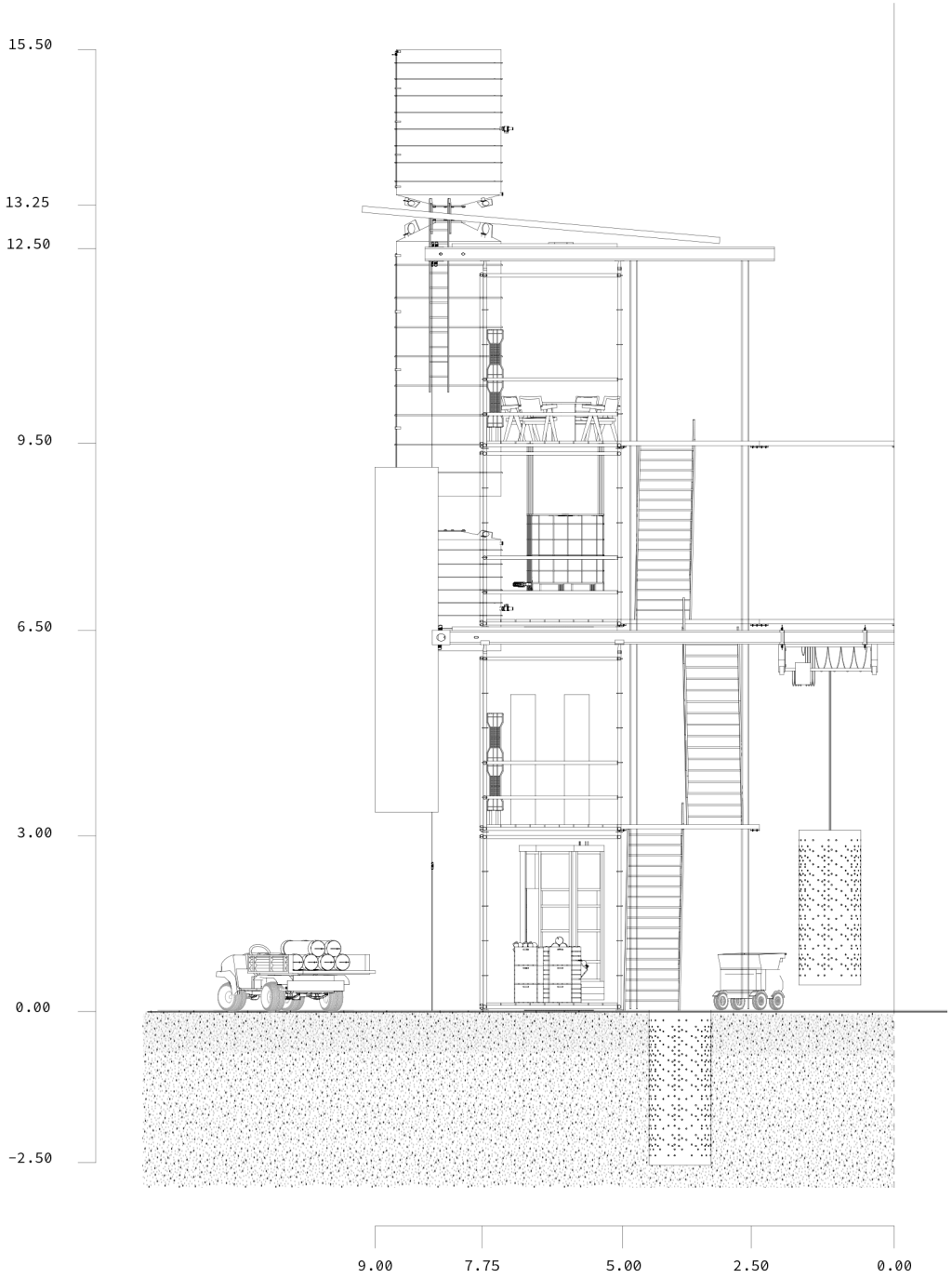
1
Home collection, fermented mix applied

2
Deposit at node, collect new container and fermented mix



3
Maceration

Reduces particle size and increases surface area, accelerating decomposition



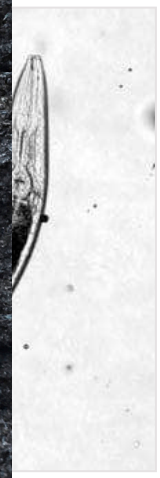
Vermicompost (sub)towers typically convert macerated, fermented food waste to compost within 10 days

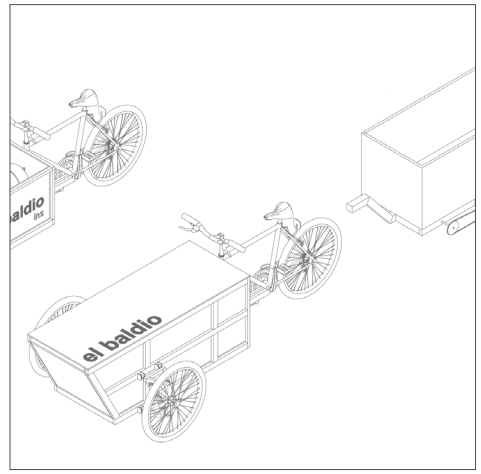
WEIWEI ZHONG

4
Vermicompost

1
Home collection, ferm

WEIWEI ZHONG





5
Finished compost is applied to three ecologies

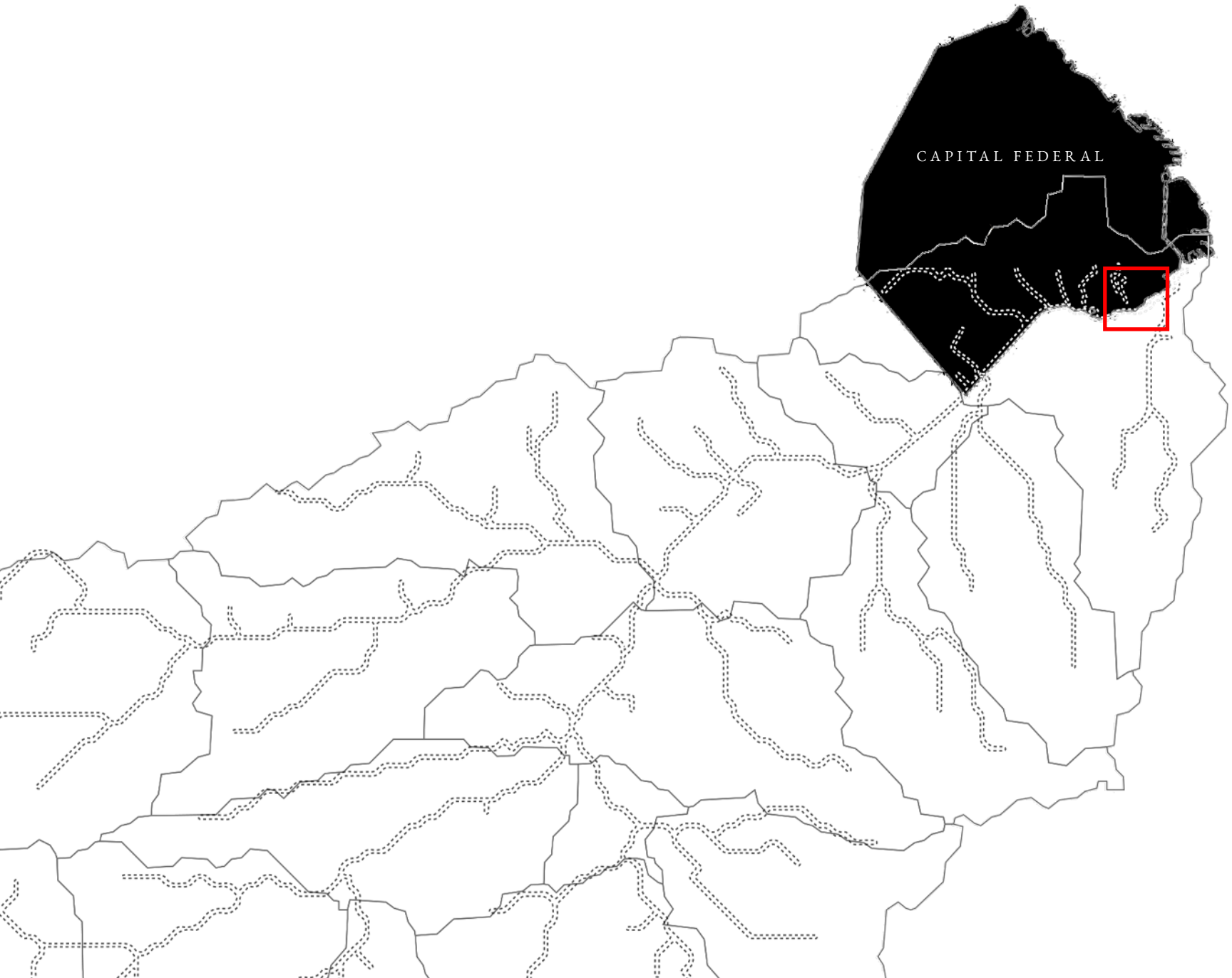
5

(proto)node

<u>selection criteria</u>

located in the lower basin
highly visible
iconic and historically significant
generate intrigue amongst the population


ah que rico el suelo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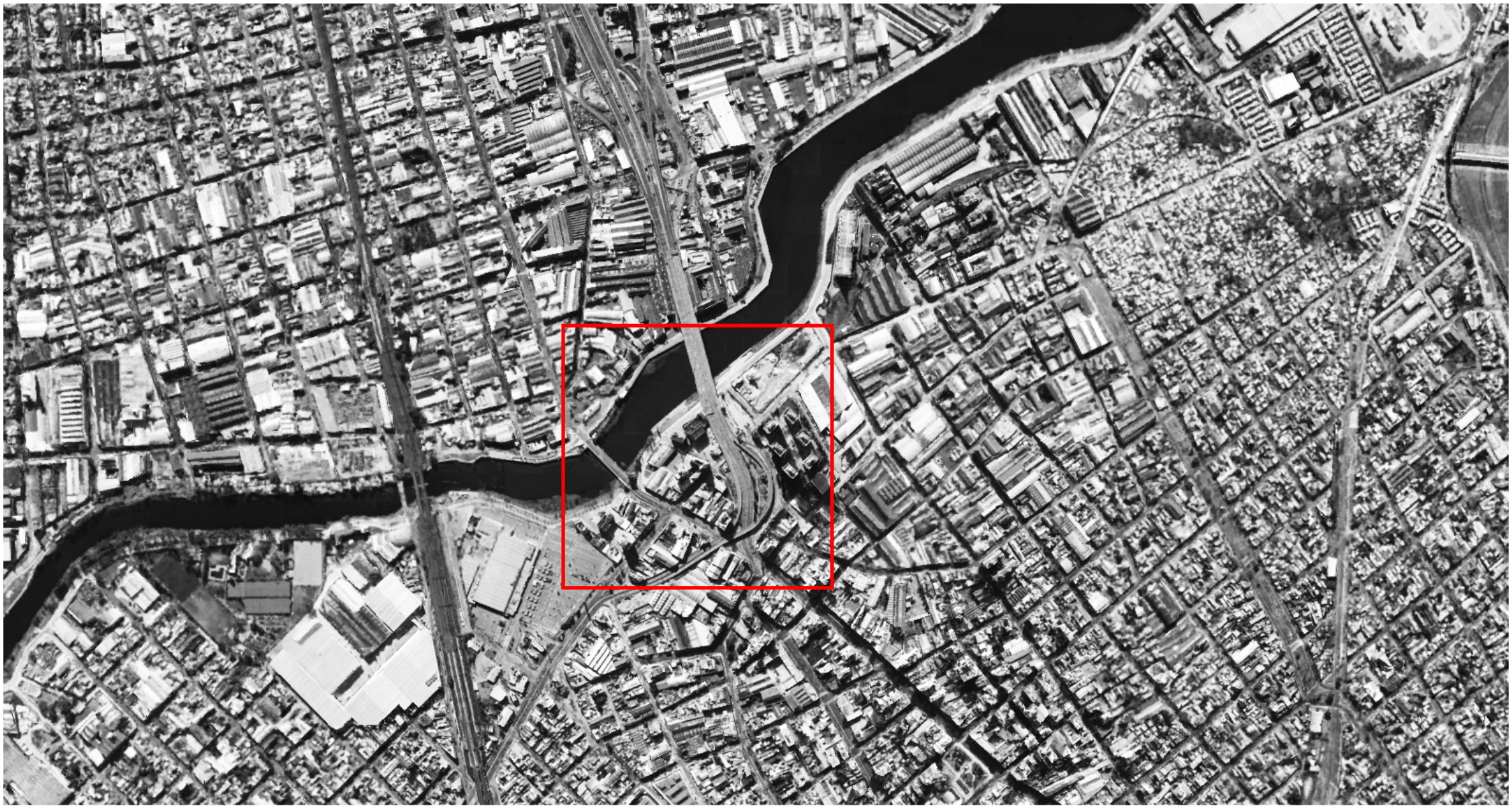

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Circulation Route 1

Circulation Route 2

Circulation Route 3

ACTORS

Researchers
Ecologist
Microbiologist
Entomologist
Fermentation expert
Landscape architect
Farmer
Pedologist
Food system coordinator

Admin
Liaison with Acumar
Maintenance
Pick-up/drop-off coordinator
Cafe/market staff
Outreach/PR
Print room supervisor
Events coordinator

Trainees
Open, varies

Nonhumans
Open, varies

Public
Open, varies

SPACES

- Soil testing labs
- IMO labs

Gardens ← INTERSECTIONS

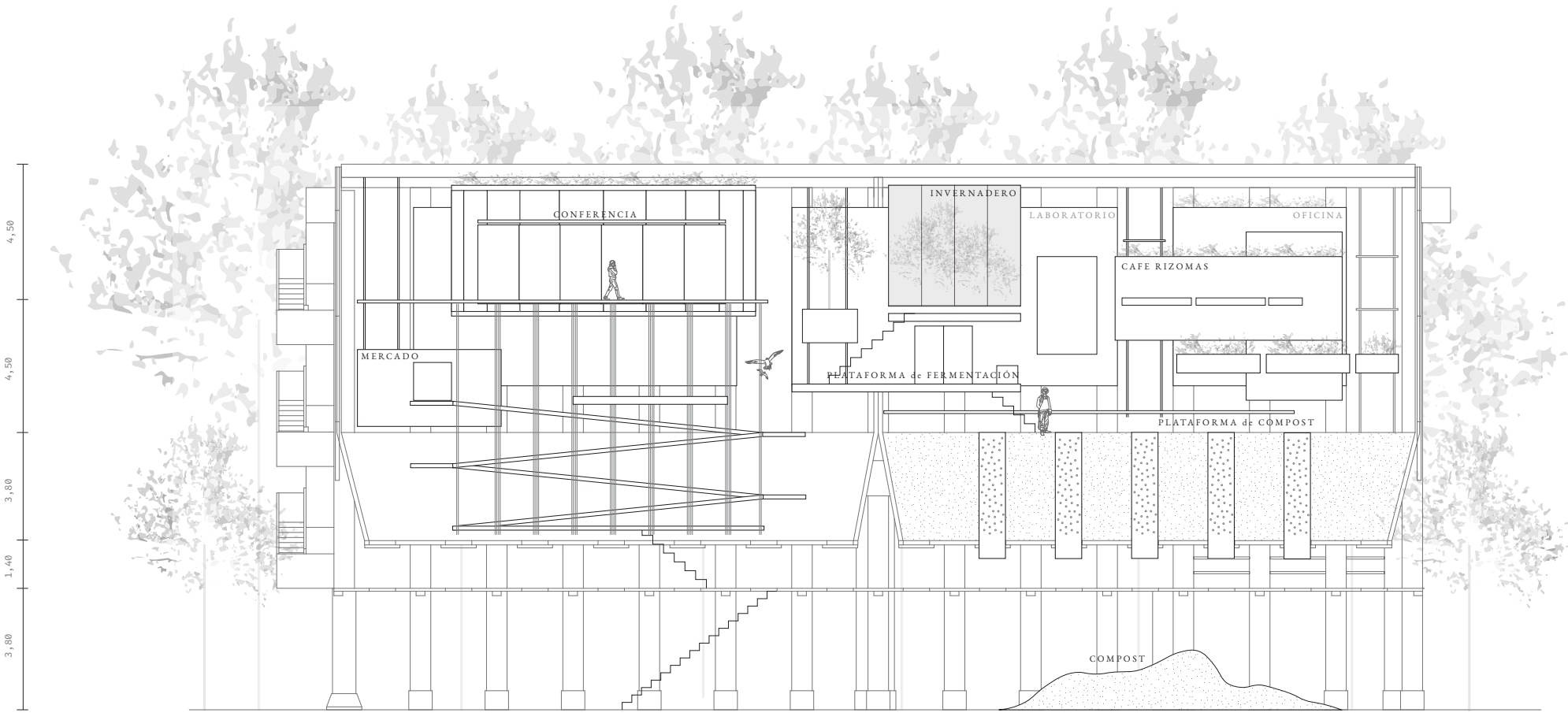
Cinema
Offices (x15)

- Plant nursery

Lecture hall

- Tool shed
- Dirtroom/laundry
- Classrooms

IMO pick-up station
Carbon drop-off station
WCs
Conference room
Seed/agroecology library
Canteen/kitchen/cafe
Food market
Apartments
Print room
Storage (equipment + maintenance)
Water fountains
Shower booths
Information desk
Exhibition hall
Locker room
Materials garage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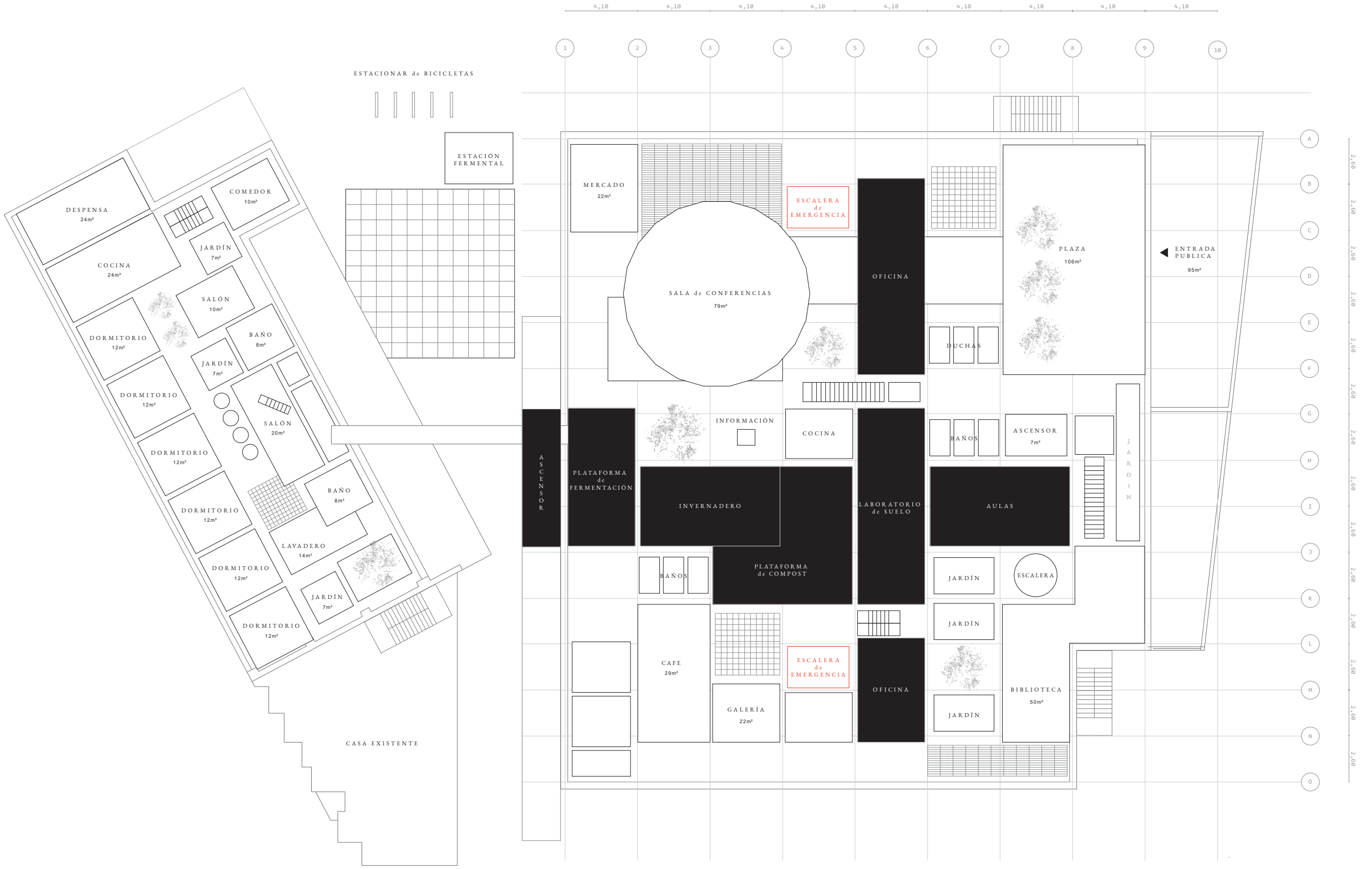
CONFERENCIA
INVERNADERO
LABORATORIO
OFICINA
CAFE RIZOMAS
MERCADO
PLATAFORMA de FERMENTACIÓN
PLATAFORMA de COMPOST
COMPOST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2,60
ESTACIONAR de BICICLETAS
ESTACIÓN FERMENTAL
DESPENSA 24m²
COMEDOR 10m²
COCINA 24m²
JARDÍN 7m²
SALÓN 10m²
DORMITORIO 12m²
BAÑO 8m²
JARDÍN 7m²
DORMITORIO 12m²
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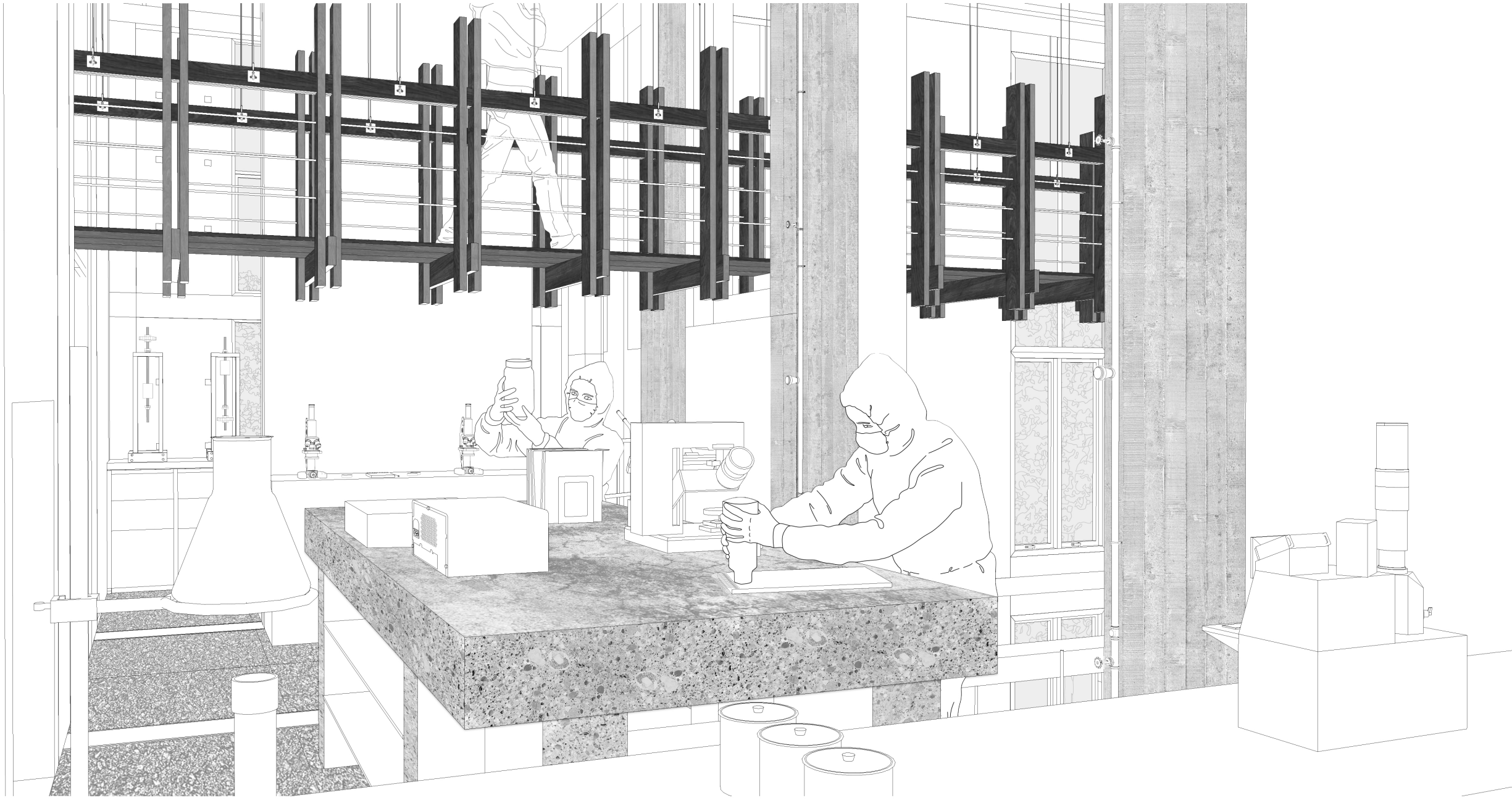
BAÑO 8m²
LAVADERO 14m²
DORMITORIO 12m²
JARDÍN 7m²
DORMITORIO 12m²
CASA EXISTENTE
MERCADO 22m²
ESCALERA de EMERGENCIA
SALA de CONFERENCIAS 79m²
OFICINA
PLAZA 106m²
ENTRADA PUBLICA 95m²
DUCHAS
ASCENSOR
PLATAFORMA de FERMENTACIÓN
INFORMACIÓN
COCINA
BAÑOS
ASCENSOR 7m²
JARDIN
INVERNADERO
LABORATORIO de SUELO
AULAS
BAÑOS
PLATAFORMA de COMPOST
JARDÍN
ESCALERA
JARDÍN
CAFE 29m²
ESCALERA de EMERGENCIA
GALERÍA 22m²
OFICINA
BIBLIOTECA 50m²
JARDÍN



Report Number: C19115-10056

To:

Instituto Nacional del Suelo

carlos pellegini 180, avellaneda

ins.gob.ar

C19115-10058

INS

INFORME DE ANALISIS DE SUELO

Reported Date: **Printed Date:** **Page:** 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Phosphorus - P ppm Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer	CEC meq/100g	Percent Base Saturations % K	% Mg	% Ca	% H	% Na
RB0619		6	21271	5.4	15 M	23 M	304 H	1074 VH	4530 M	7.9		32.7	2.4	27.4	69.4		1.2
RB61216		12	21272	4.0	5 L	7 VL	169 M	1458 VH	5110 M	7.8		38.9	1.1	31.2	65.7		2.3

Sample Number	Sulfur S ppm	Sulfur S lbs/ac	Nitrate Nitrogen NO3-N ppm	Nitrate Nitrogen NO3-N lbs/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
RB0619	77 M	139	6 L	11	4.9 M	79 VH	72 VH	4.2 VH	0.9 M		14 H	220	0.0 G	0.09	67		91 H
RB61216	272 VH	490	9 L	16	3.4 M	34 H	88 VH	4.4 VH	0.5 L		1 VL	121	0.0 G	0.04	52		209 VH

W VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

Sample ID:

Lime Recommendations

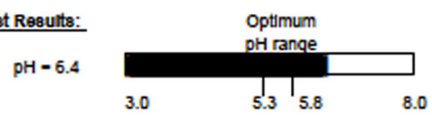
0.0 lb per 1,000 sq ft

Crop 1- Lawn, centipede

Crop 2-

Lime History:

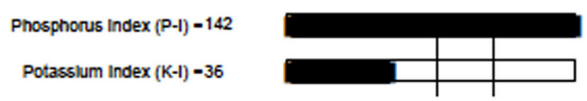
Test Results:



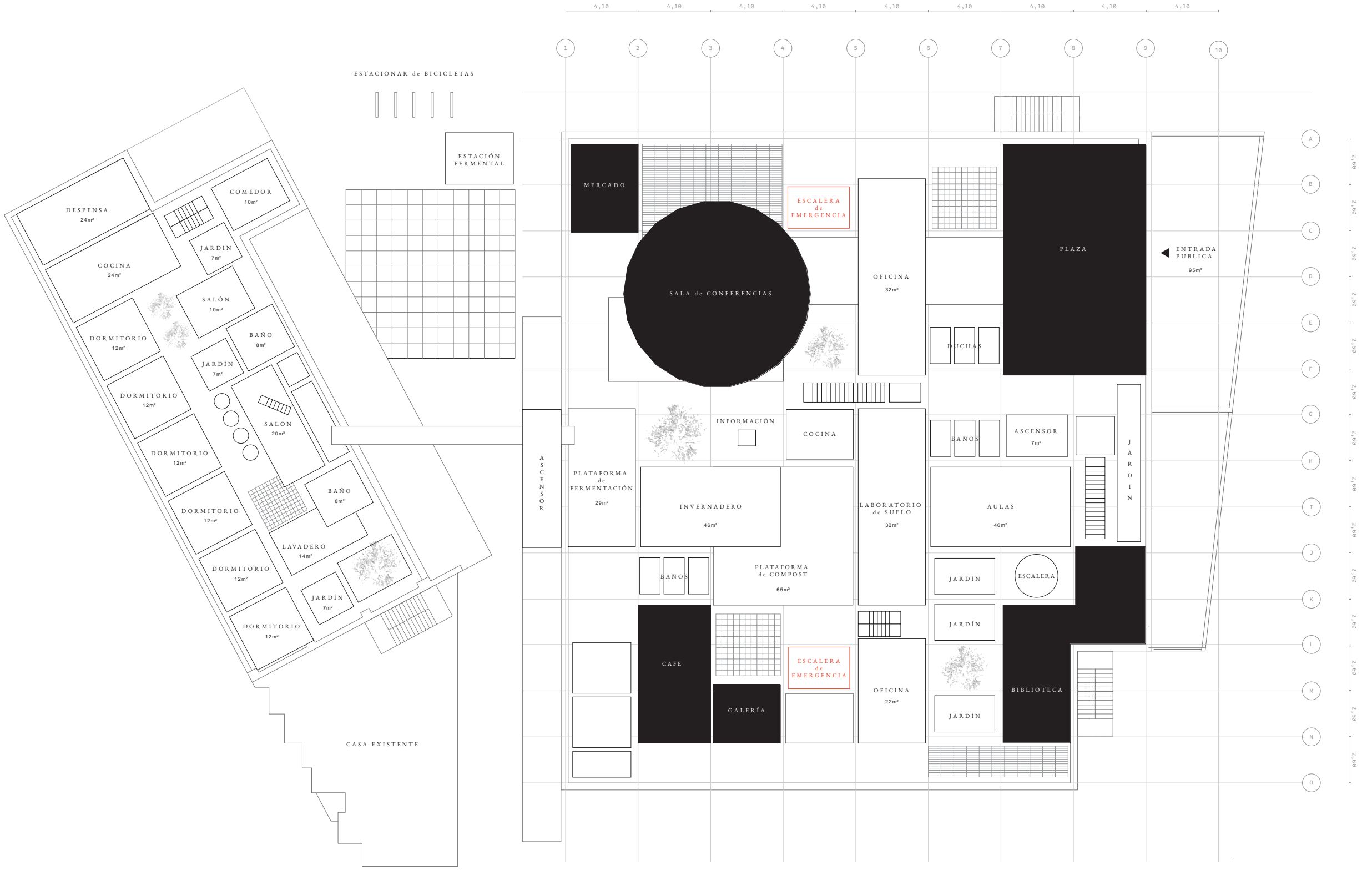
Additional Test Results:	HM%	W/V g/cm³	CEC meq/100 cm³	Mn-I	Zn-I	Cu-I	S-I
	0.97	1.19	10.0	30	136	88	44

N-P-K Fertilizer Recommendations *

3 lbs per 1,000 sq ft 15-0-14 Group C



Farmers/urban residents can bring soil sample to closest node to be sent to proto-node for testing. Results provided, and remediation toolkit returned for pick up at local node.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ESTACIONAR de BICICLETAS
ESTACIÓN FERMENTAL
MERCADO
ESCALERA de EMERGENCIA
SALA de CONFERENCIAS
OFICINA 32m²
PLAZA
ENTRADA PUBLICA 95m²
DUCHAS
INFORMACIÓN
COCINA
BAÑOS
ASCENSOR 7m²
JARDIN
ASCENSOR
PLATAFORMA de FERMENTACIÓN 29m²
INVERNADERO 46m²
LABORATORIO de SUELO 32m²
AULAS 46m²
BAÑOS
PLATAFORMA de COMPOST 65m²
JARDÍN
ESCALERA
JARDÍN
CAFE
ESCALERA de EMERGENCIA
BIBLIOTECA
GALERÍA
OFICINA 22m²
JARDÍN
DESPENSA 24m²
COMEDOR 10m²
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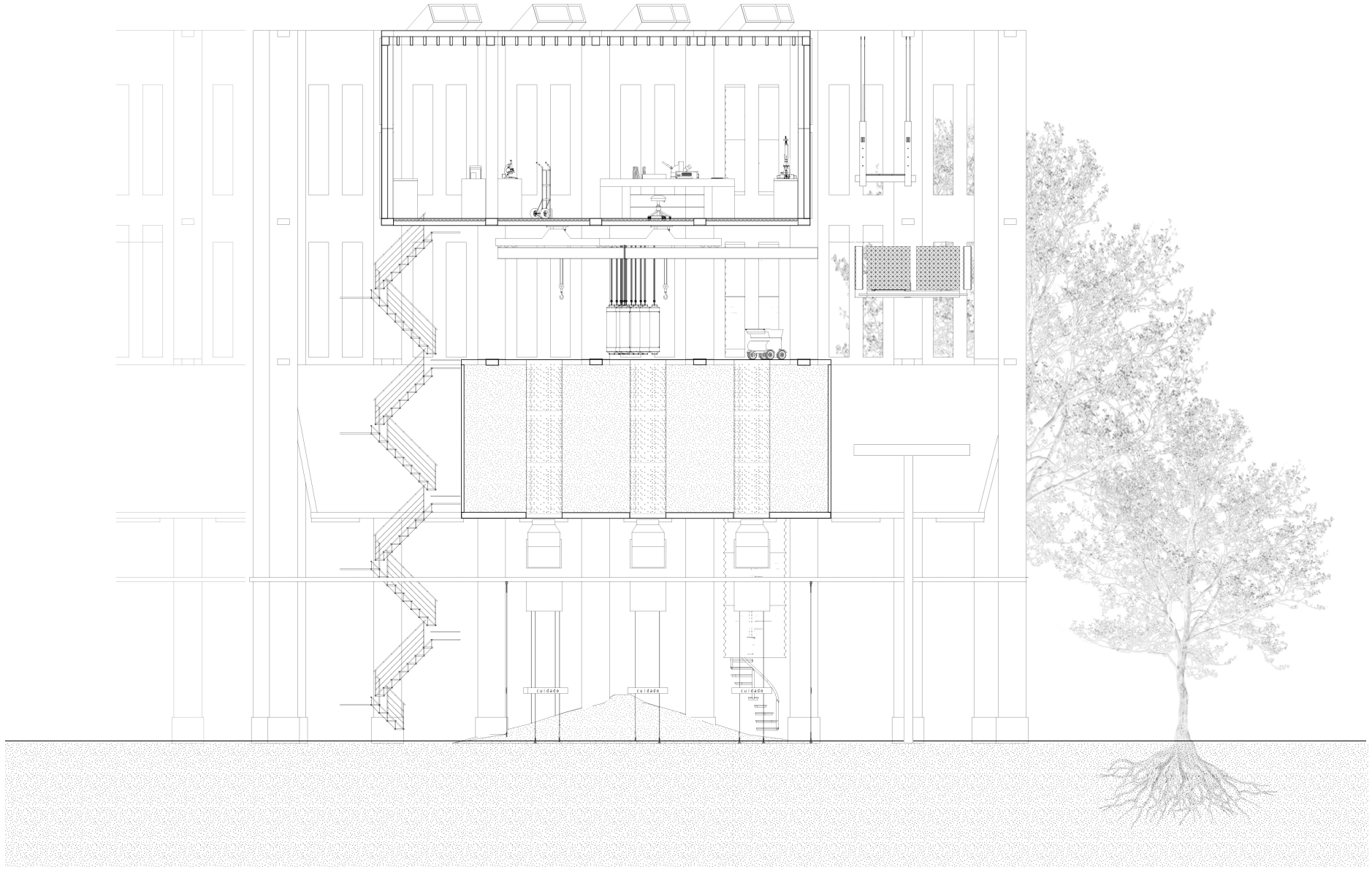
CASA EXISTENTE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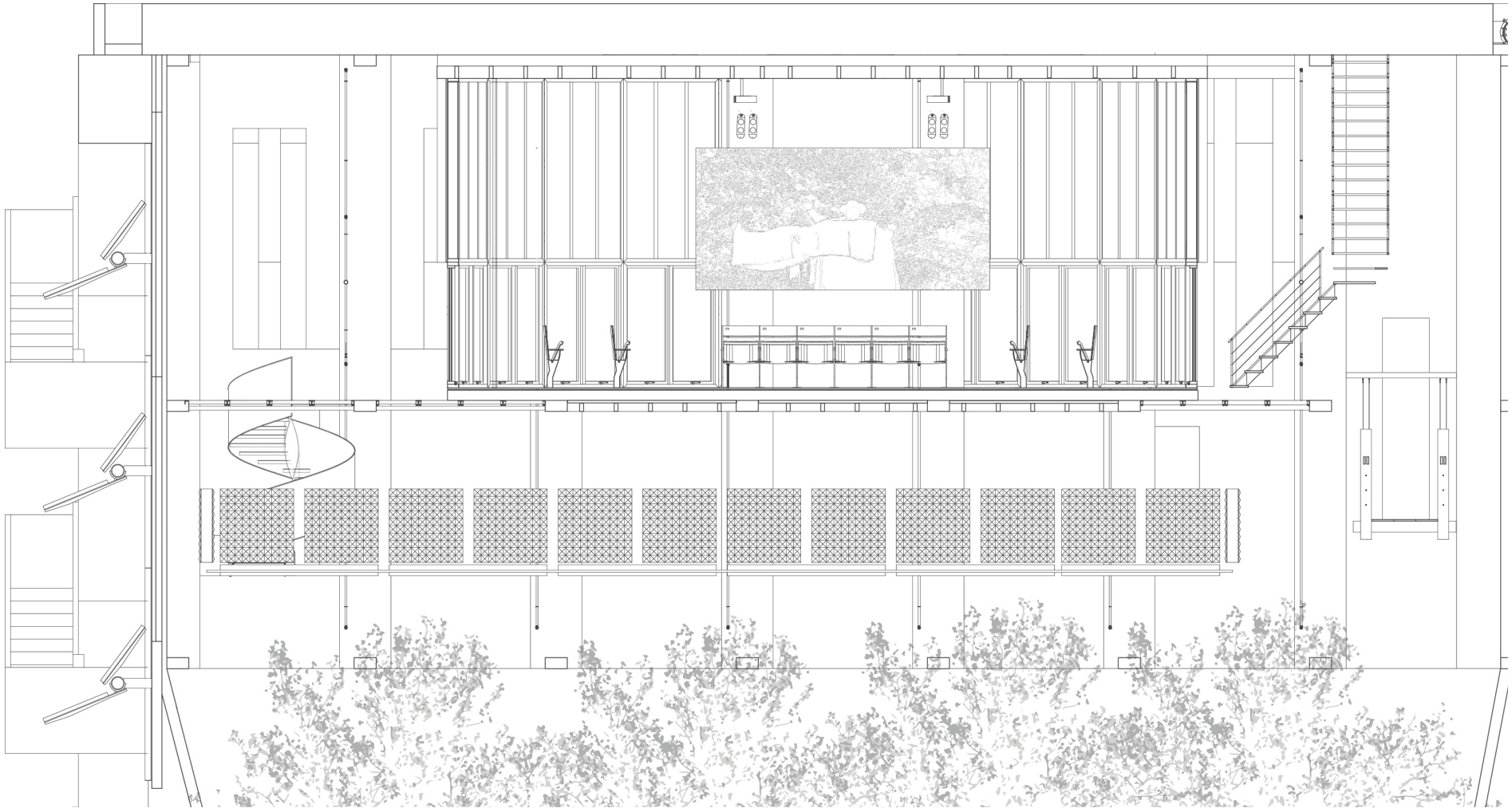

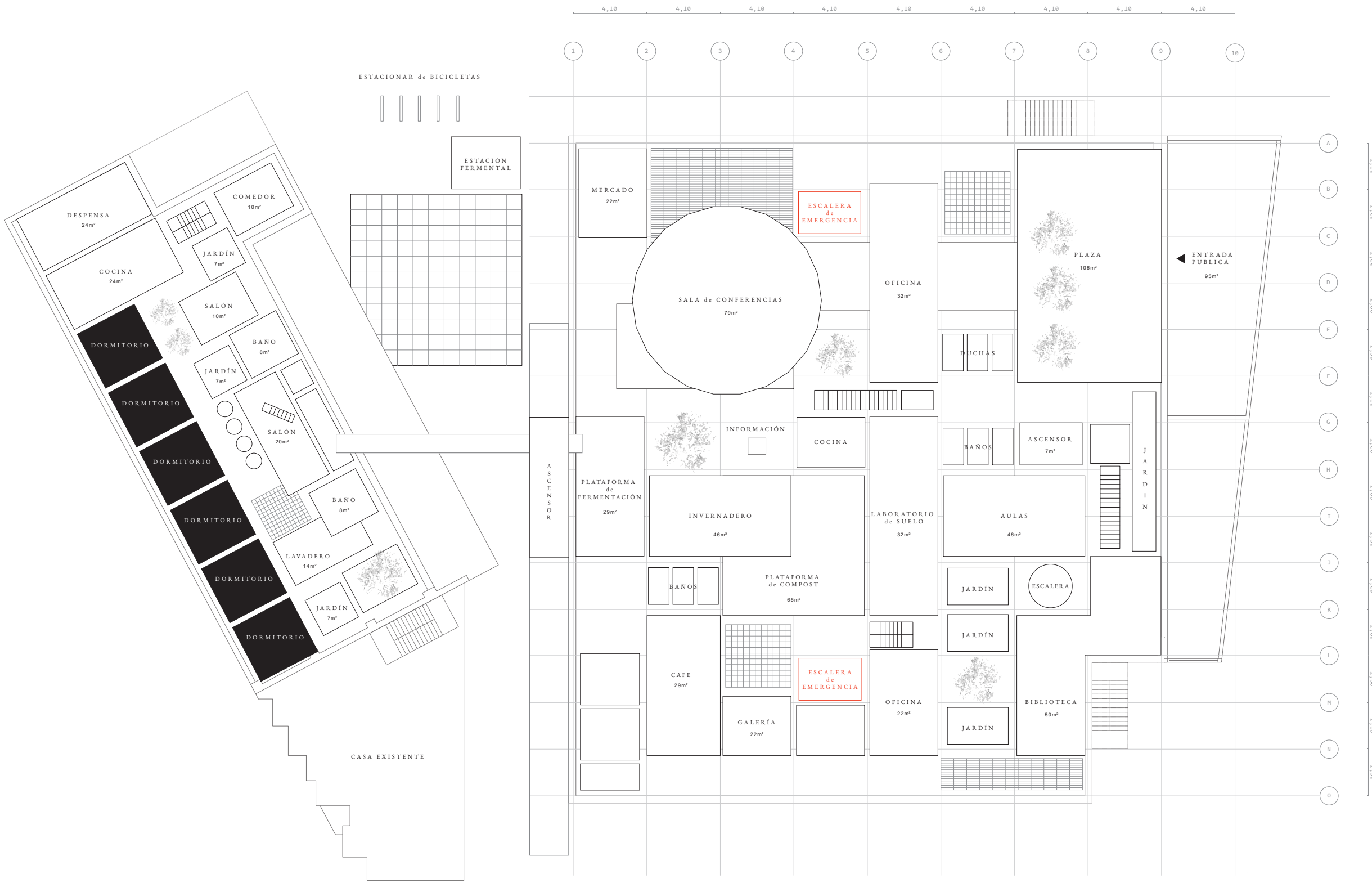
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ESTACIONAR de BICICLETAS
ESTACIÓN FERMENTAL
MERCADO
22m²
ESCALERA de EMERGENCIA
SALA de CONFERENCIAS
79m²
OFICINA
32m²
PLAZA
106m²
ENTRADA PUBLICA
95m²
DUCHAS
DESPENSA
24m²
COMEDOR
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COCINA
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CASA EXISTENTE
ASCENSOR
PLATAFORMA de FERMENTACIÓN
29m²
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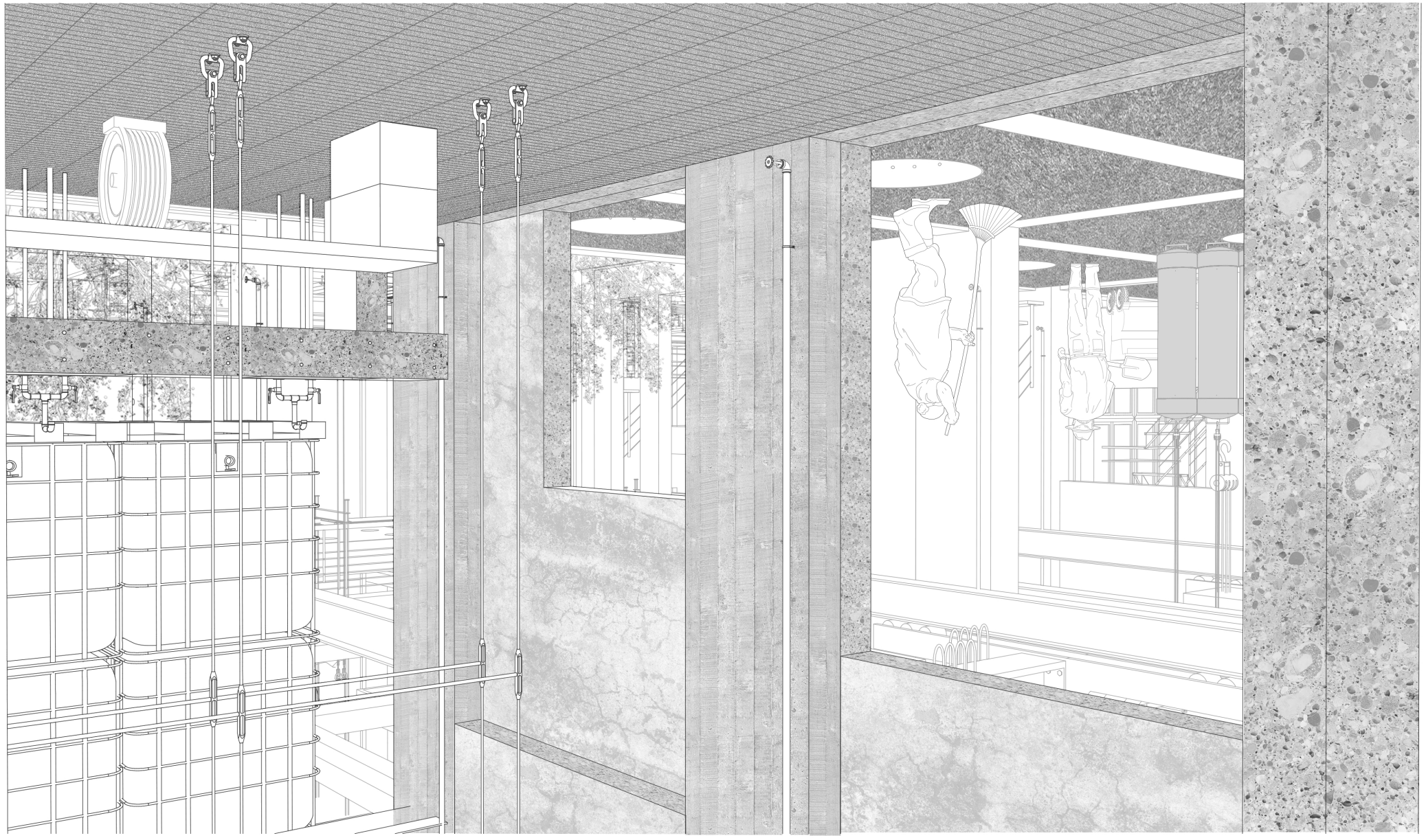


cuidado


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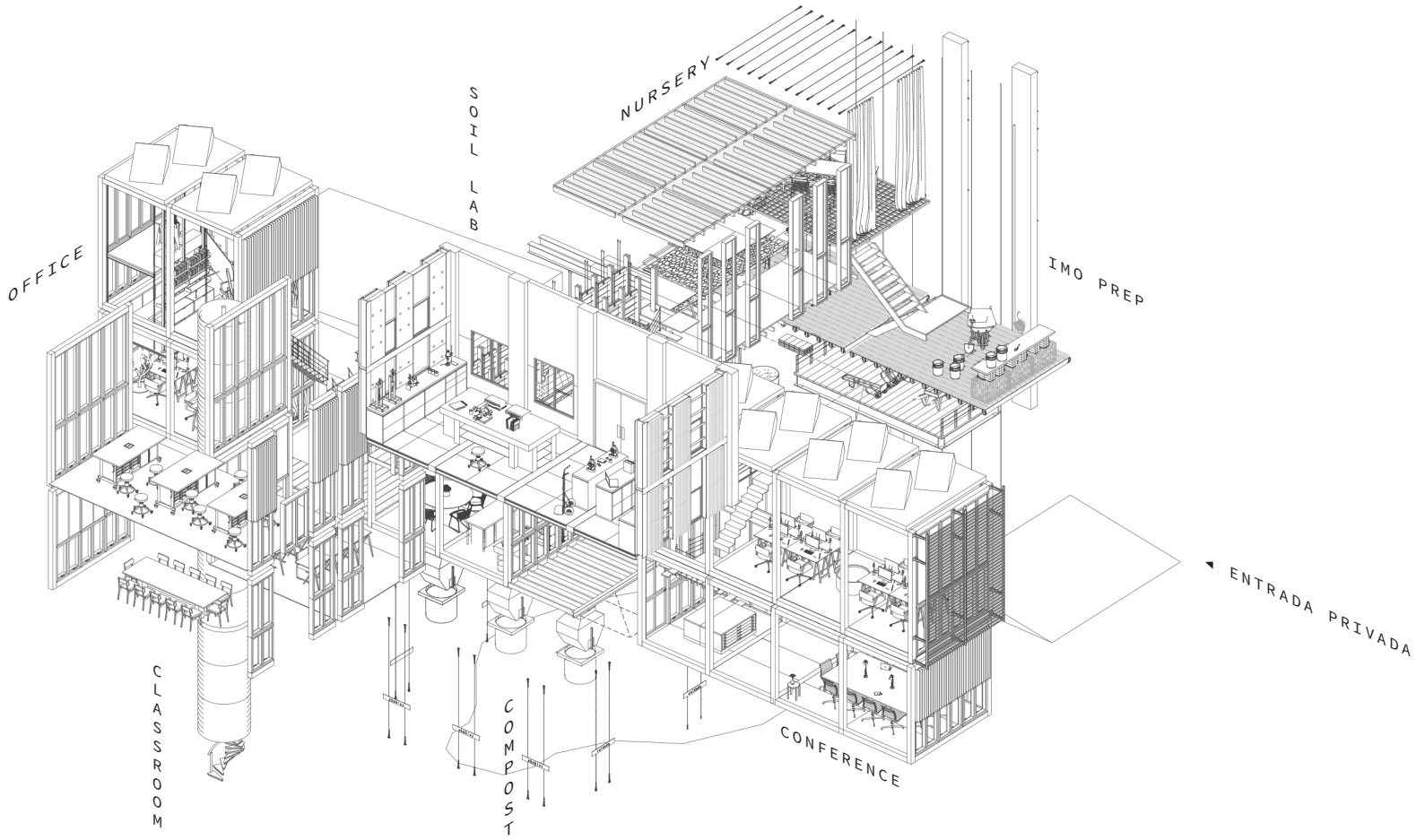
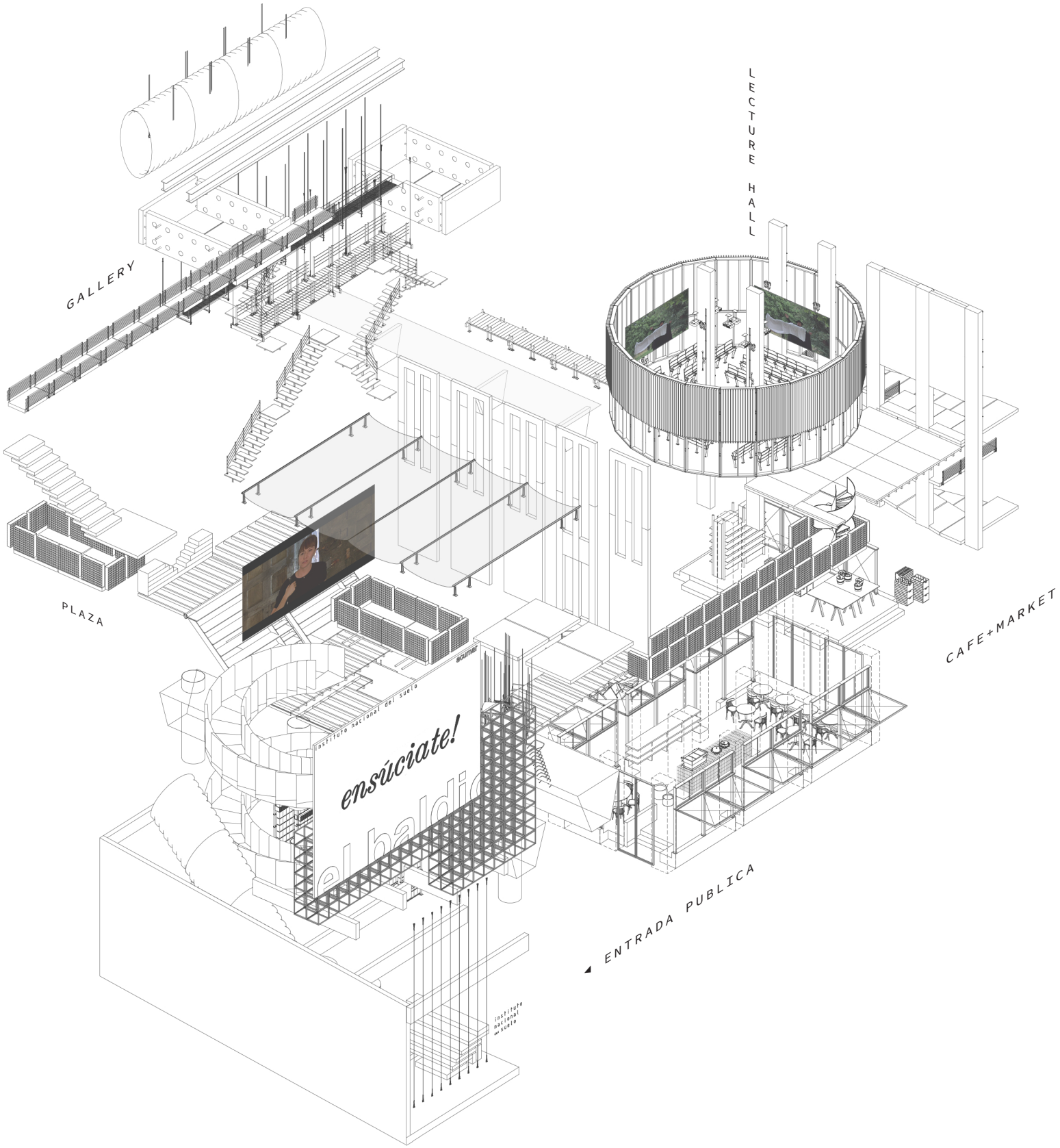
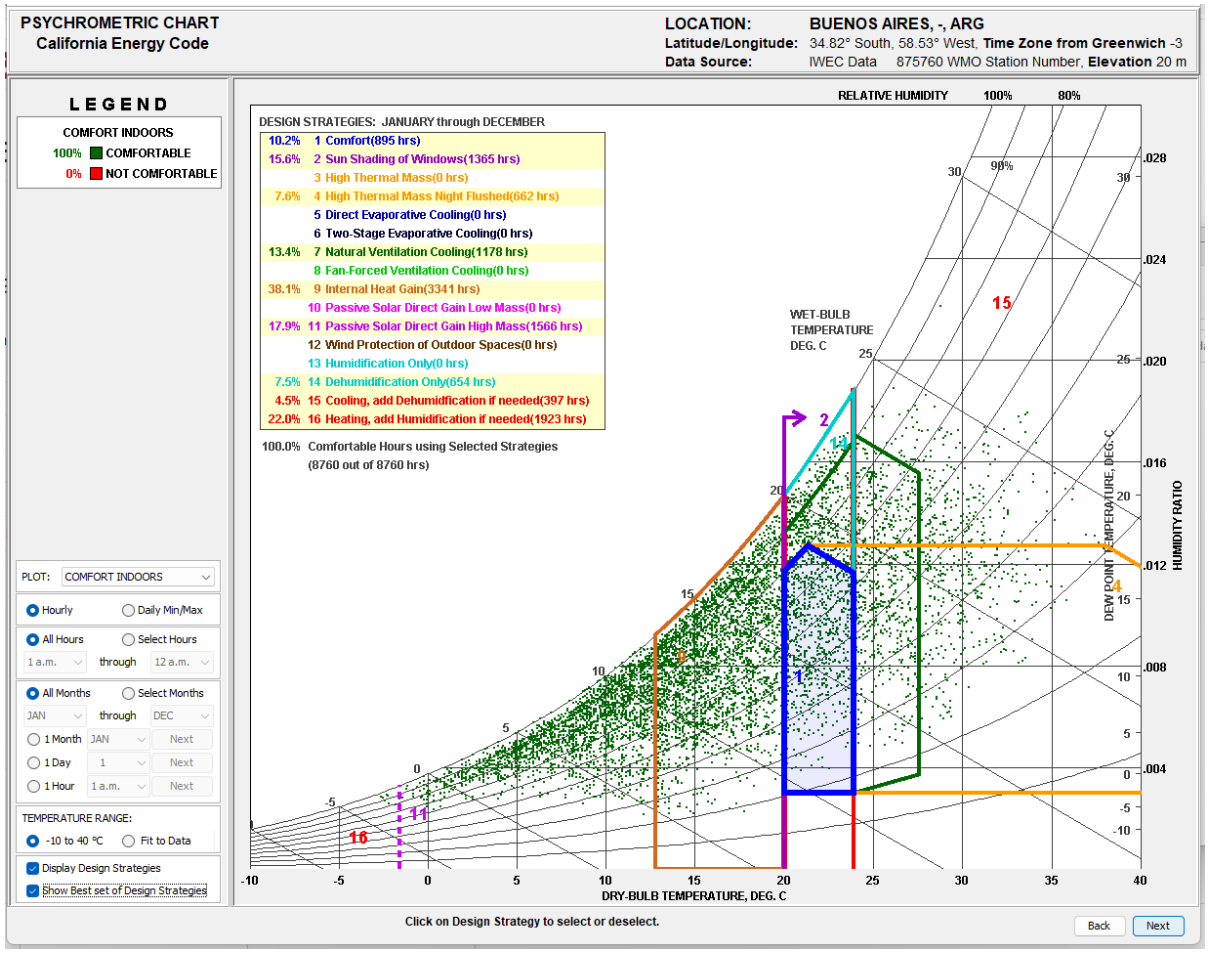
el baldío

Phytoremediation:
Concrete is strategically removed, wild flowers and micro wetlands (re)appear


OFFICE
SOIL LAB
NURSERY
IMO PREP
ENTRADA PRIVADA
CLASSROOM
COMPOST
CONFERENCE


GALLERY
LECTURE HALL
PLAZA
CAFE+MARKET
ENTRADA PUBLICA
ensúciate!
instituto nacional del suelo

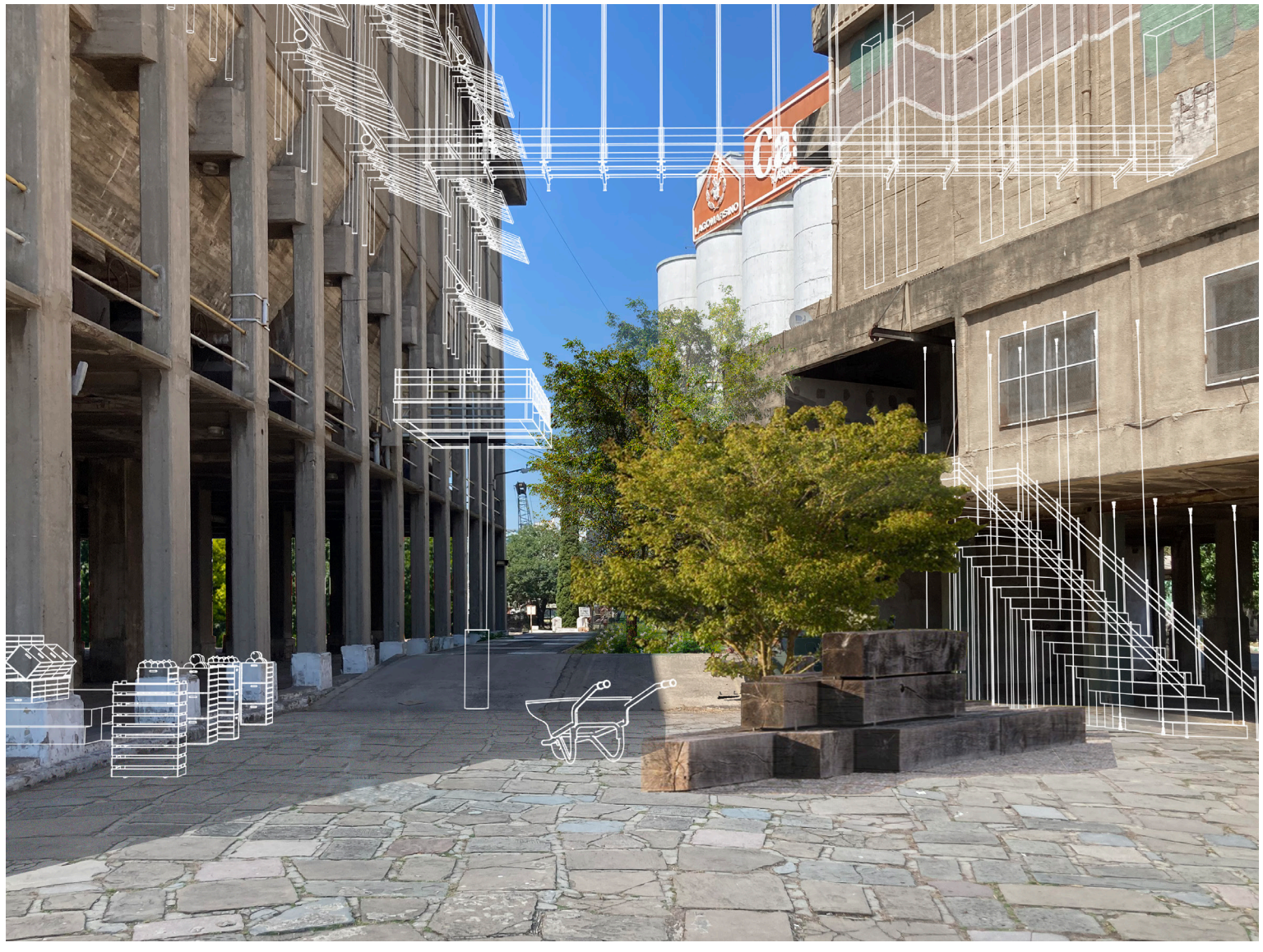


Climate strategies from Climate Consultant 6.0

A roofscape

Sunken garden, public entrance

Open space, flows



Plaza

PT.01.22

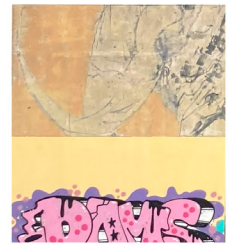
BD.06.32

PT.01.65

MU.76.32

PT.02.11

PT.09.53

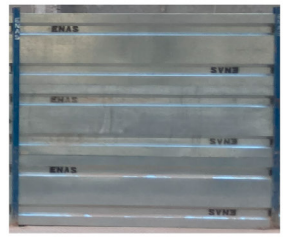


MU.06.08

SL.41.34

PT.45.93

MU.21.11



PT.03.44

VT.23.31

PT.09.12

MU.00.33

nodes are made of
reclaimed components

MU.07.63

VT.03.08

MU.11.64

MU.06.31

PT.21.45

PT.15.98

MU.05.81

MC.31.03

VT.02.58

PT.06.11

MU.05.22

MC.22.51

PT.05.01

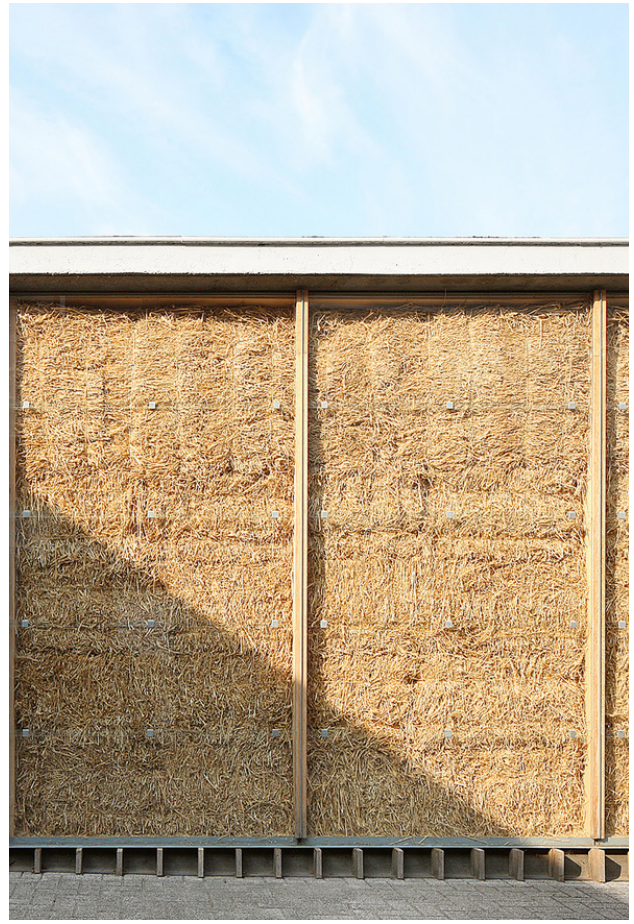
SL.02.71

PT.05.18

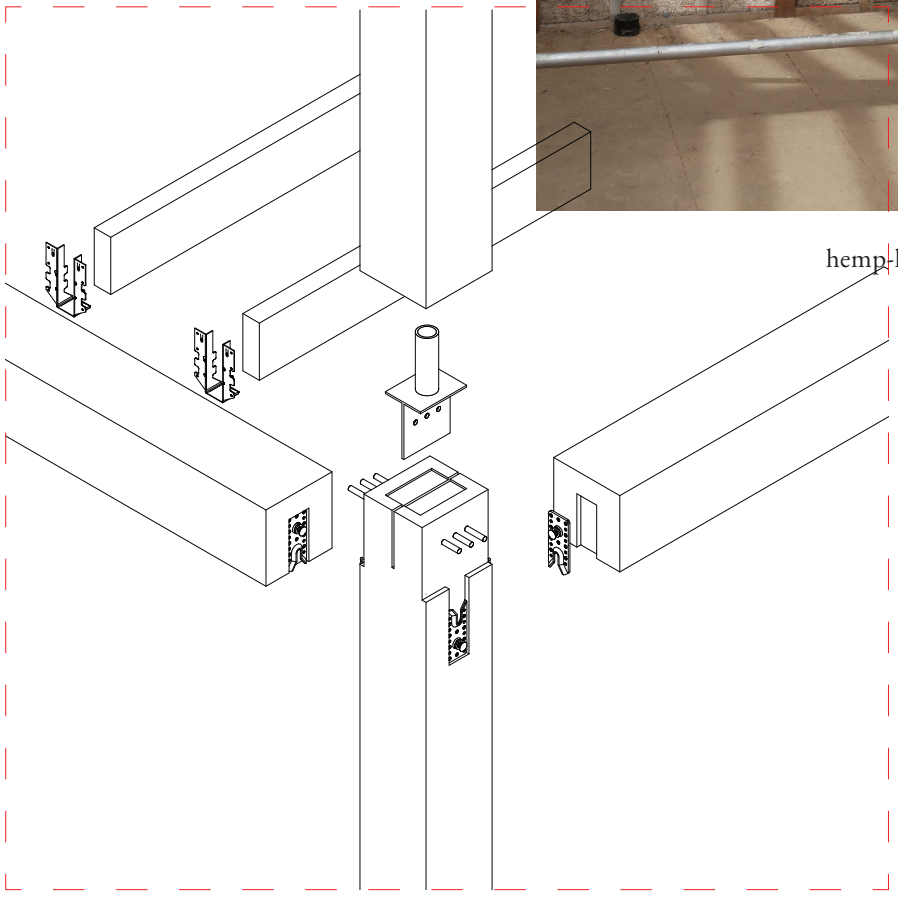
and
grown components

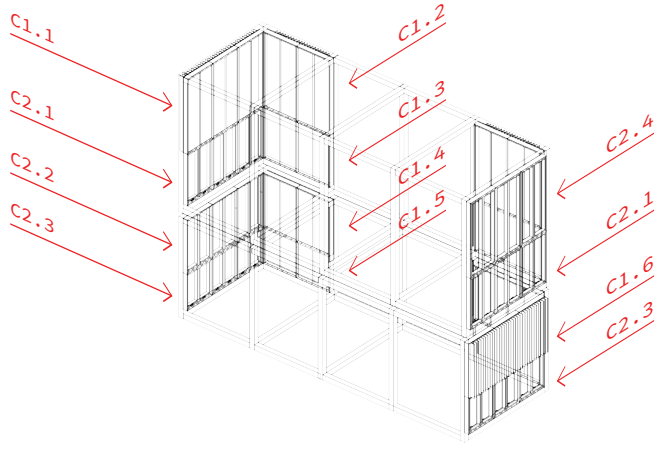
hemp-lime

sand-mud

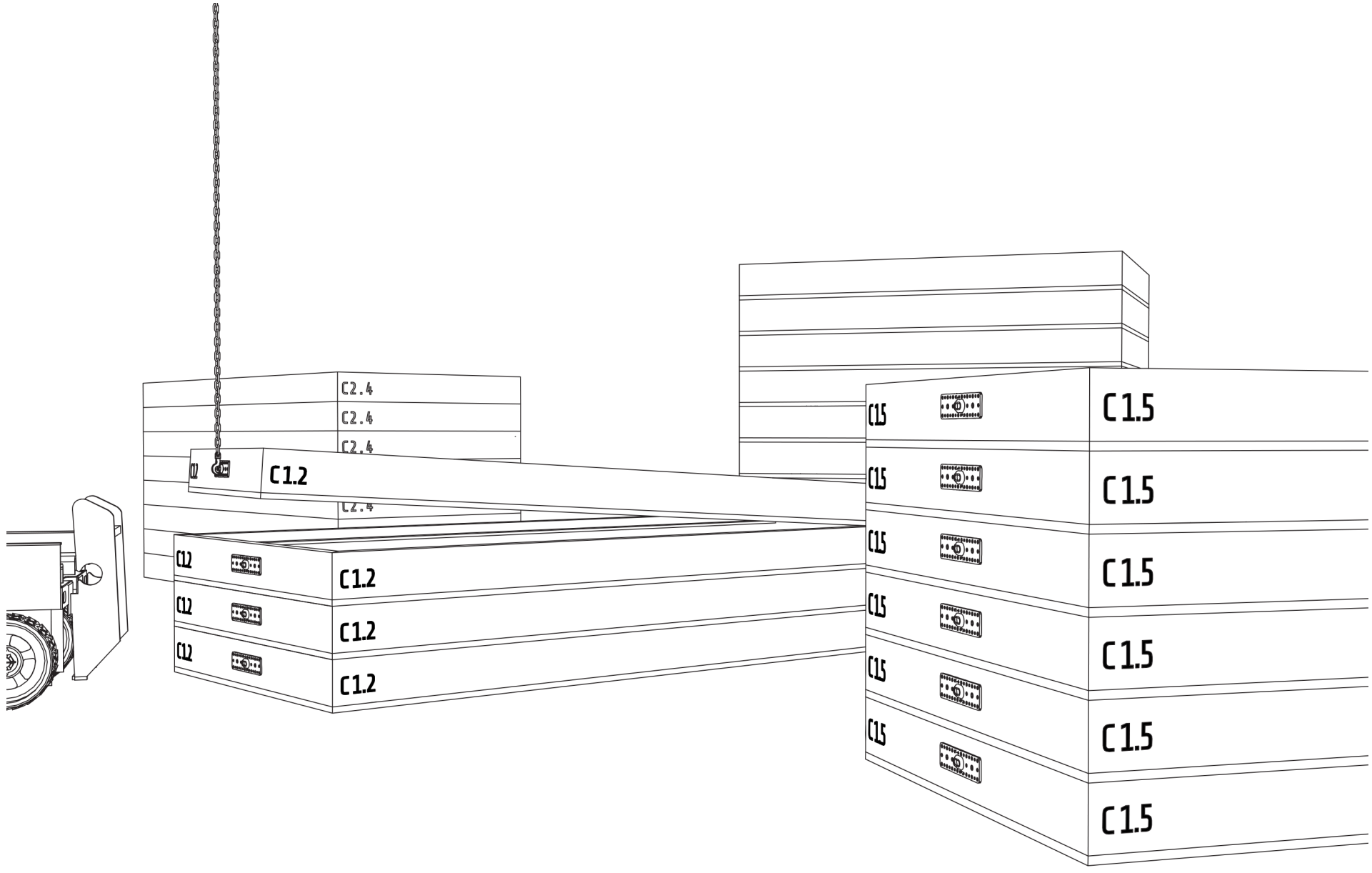


strawbale





Grown components are wood framed cassettes filled in with bio-based insulation grown in the three ecologies. For El Baldio, these cassettes are dimensioned to slot between the existing concrete structure for ease of assembly and demounting.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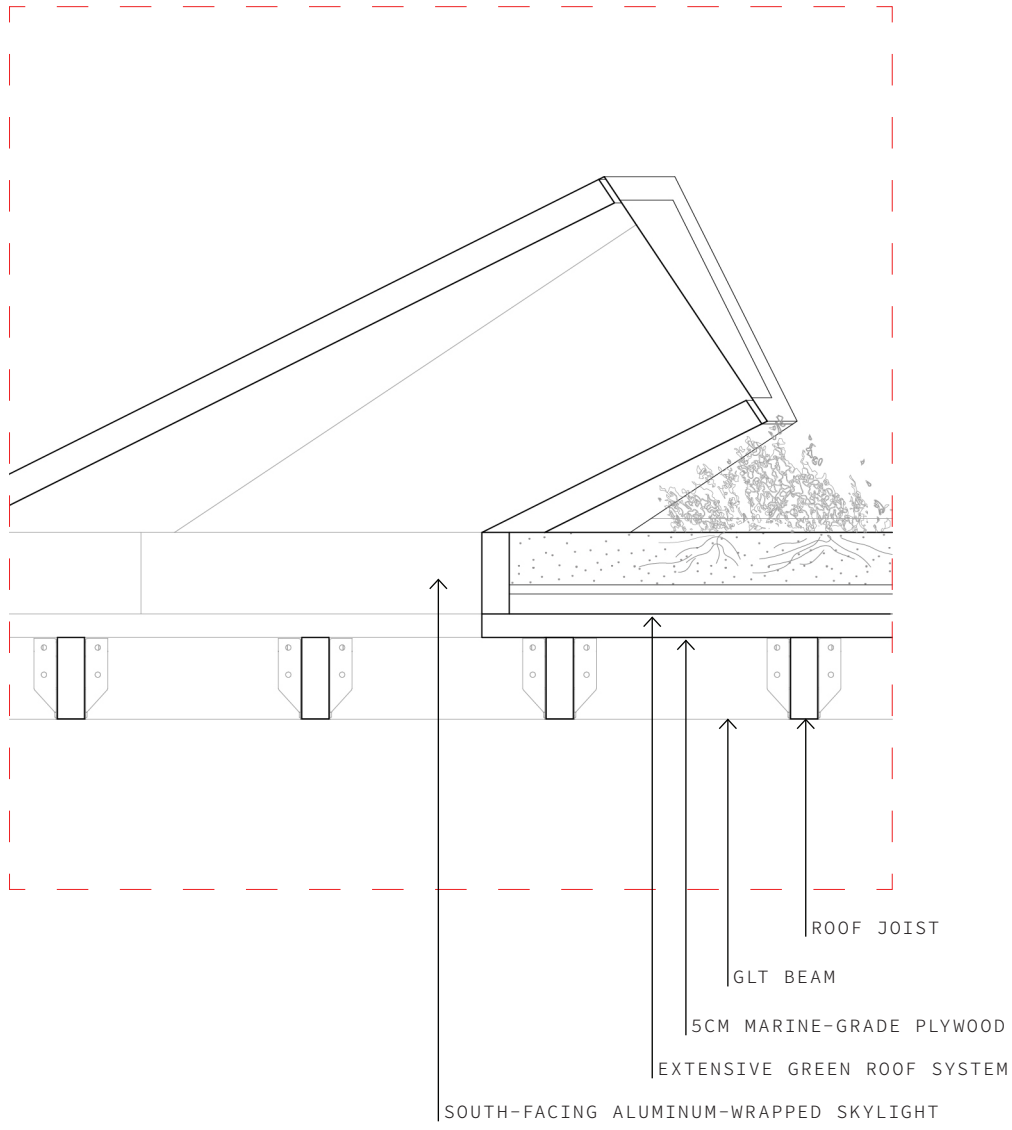
MÉTODOS de CONSTRUCCIÓN
de NODOS

CUENCA:

MATANZA-RIACHUELO

instituto
nacional
del suelo

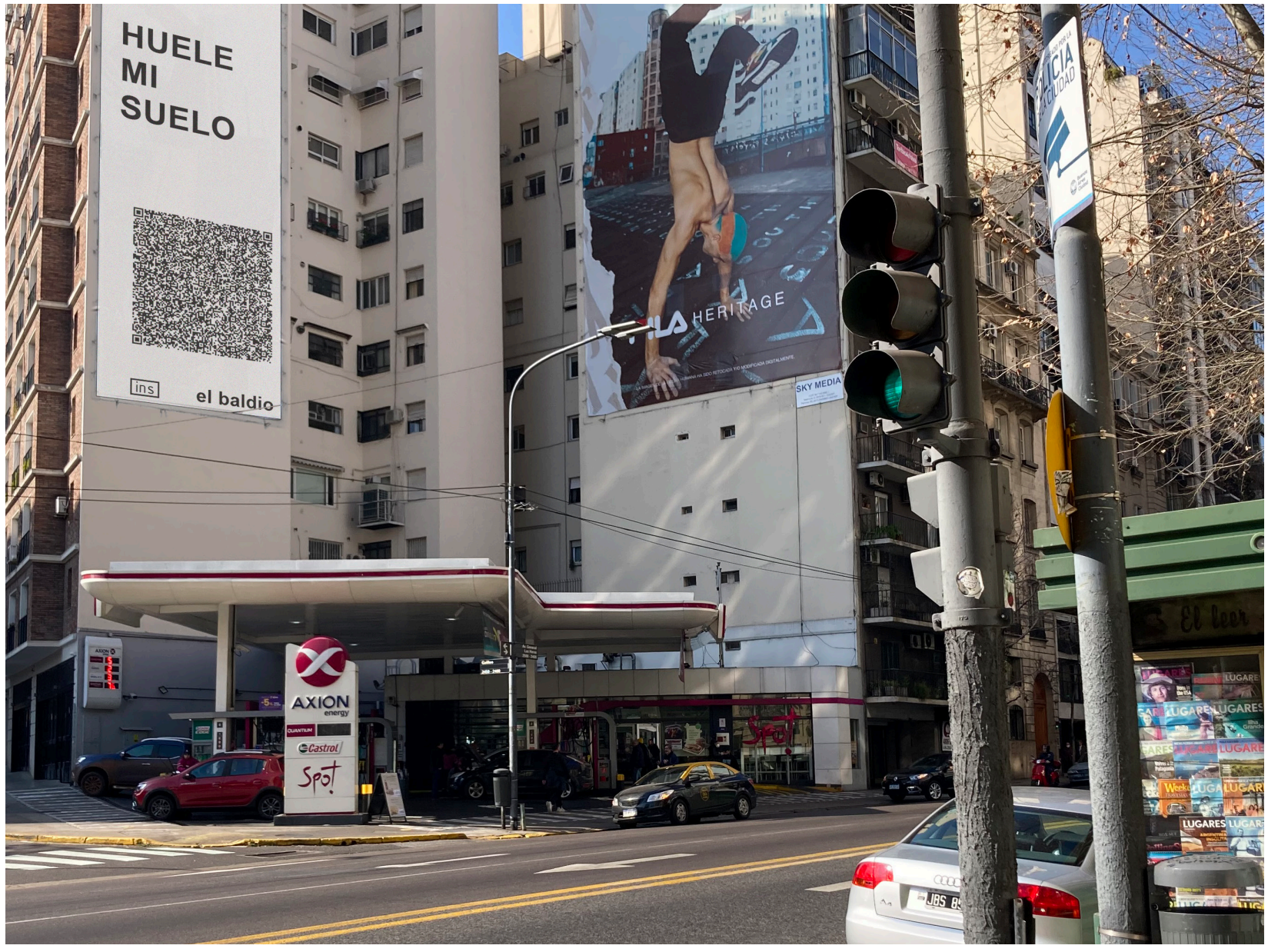


A (riparian) buffer grows along the edge of the Matanza-Riachuelo

6

proliferation

“Your food makes soil. Compost it.”

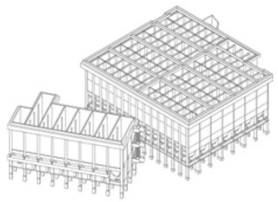


“Sniff my soil”

“You are in the Matanza-Riachuelo basin”

EL CRONISTA

El ministro de Obras Publicas, Gabriel Katopodis, se dirige a la nación



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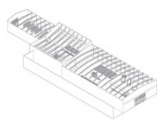
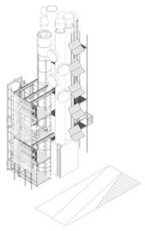


2

3



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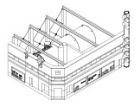

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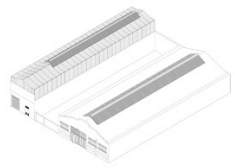

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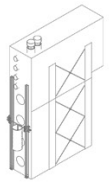

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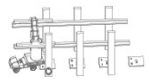

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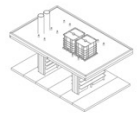

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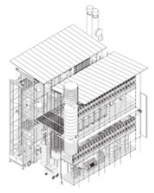
10

11

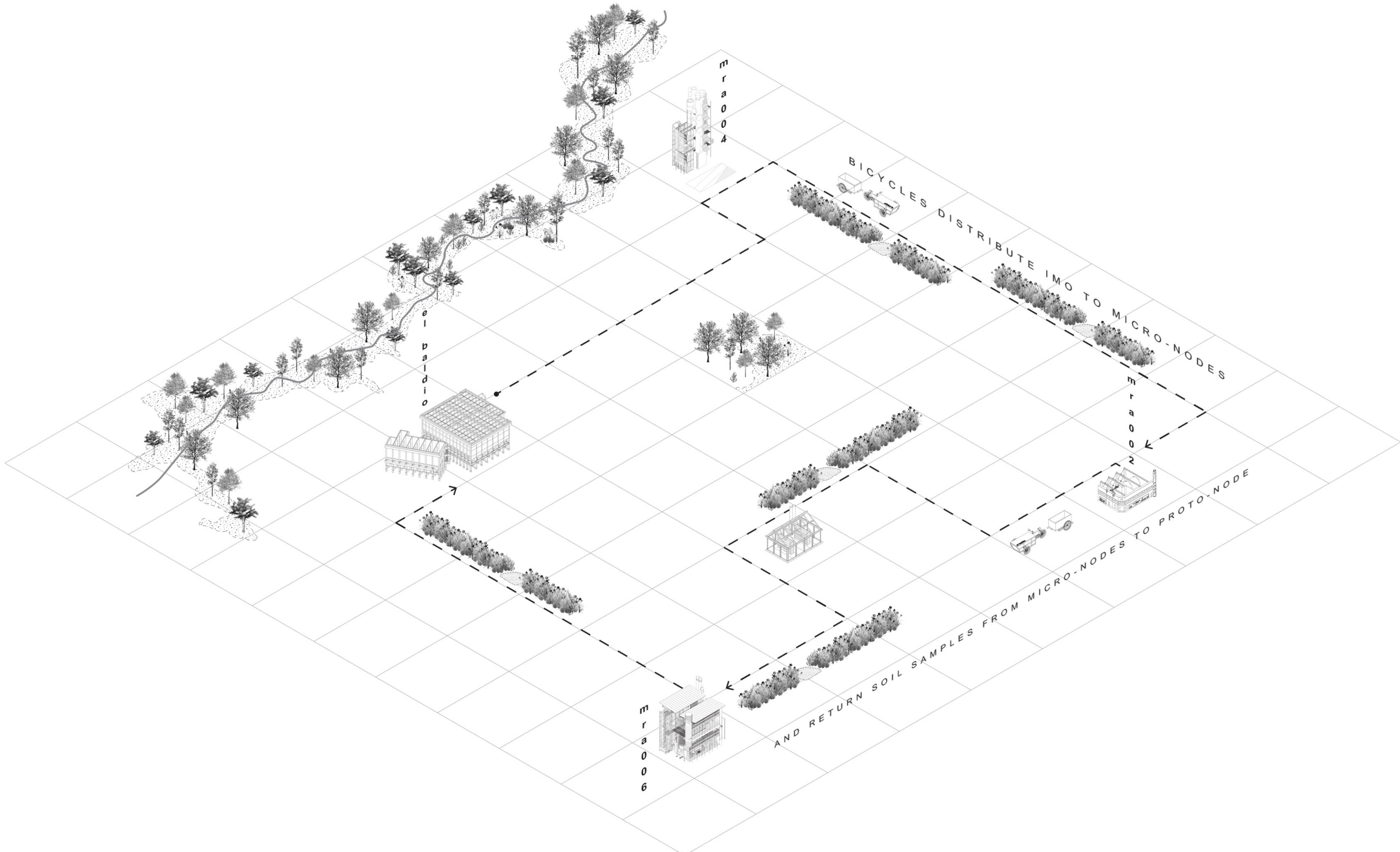


12

AVELLANEDA MICROBASIN NODE NETWORK*

B	SB	MB	NODE	MONIKER	LOCATION
MR	01	A	001	EL BALDIO	CARLOS PELLEGRINI 180
MR	01	A	002		LAMADRID y GUTIÉRREZ
MR	01	A	003		ZEBALLOS y MONTES DE OCA
MR	01	A	004		ESTEVEZ y LOPEZ
MR	01	A	005		MITRE y GRAL. PAZ
MR	01	A	006		BRANDSEN y CROATTO
MR	01	A	007		LOPEZ y FRENCH
MR	01	A	008		BERUTTI y PALAÁ
MR	01	A	009		25 de MAYO y ESTRADA
MR	01	A	010		LAPRIDA y ZEBALLOS
MR	01	A	011		VELEZ y ALSINA
MR	01	A	012		ESPAÑA y ANDREA

*The Avellaneda microbasin has 108 urban blocks. This means there will be 12 superblocks, and thus 12 nodes

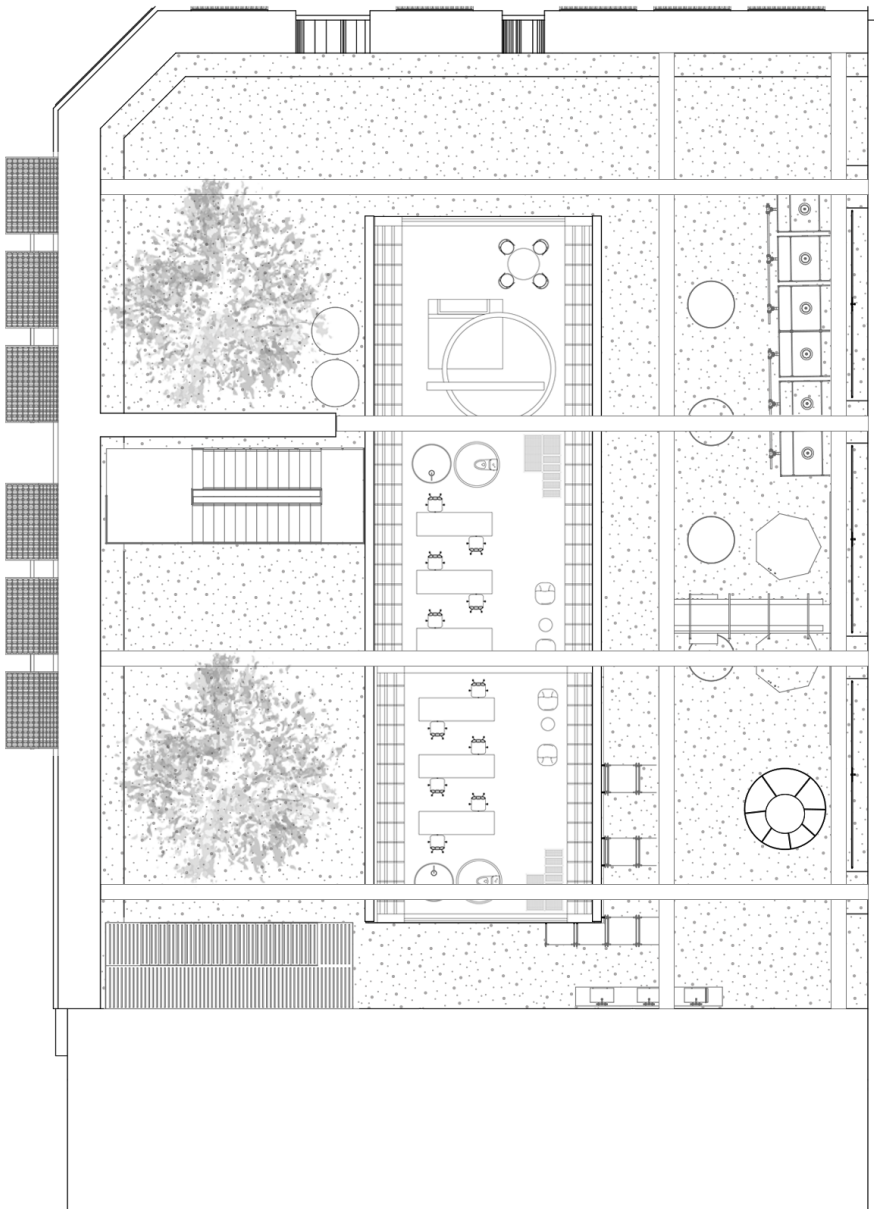

mra004
el baldio
BICYCLES DISTRIBUTE IMO TO MICRO-NODES
mra002
AND RETURN SOIL SAMPLES FROM MICRO-NODES TO PROTO-NODE
mra006

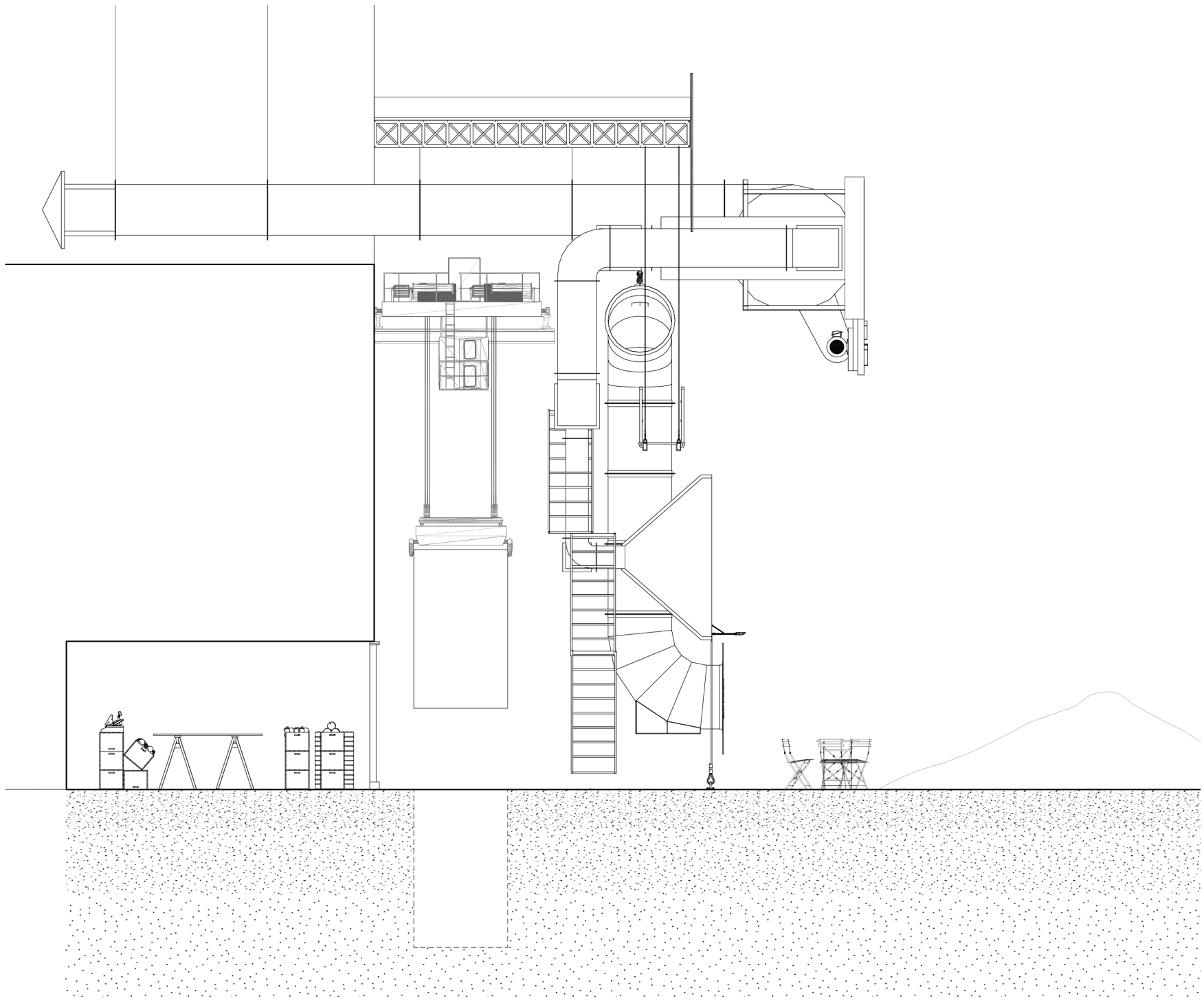

"EL PROGRESO"
MARMOLERIA MECANICA
BRASIL 686
TEL/FAX 4 300-1861
nodo
mr.01.av
011
lunes a sabado
09.00 – 15.00

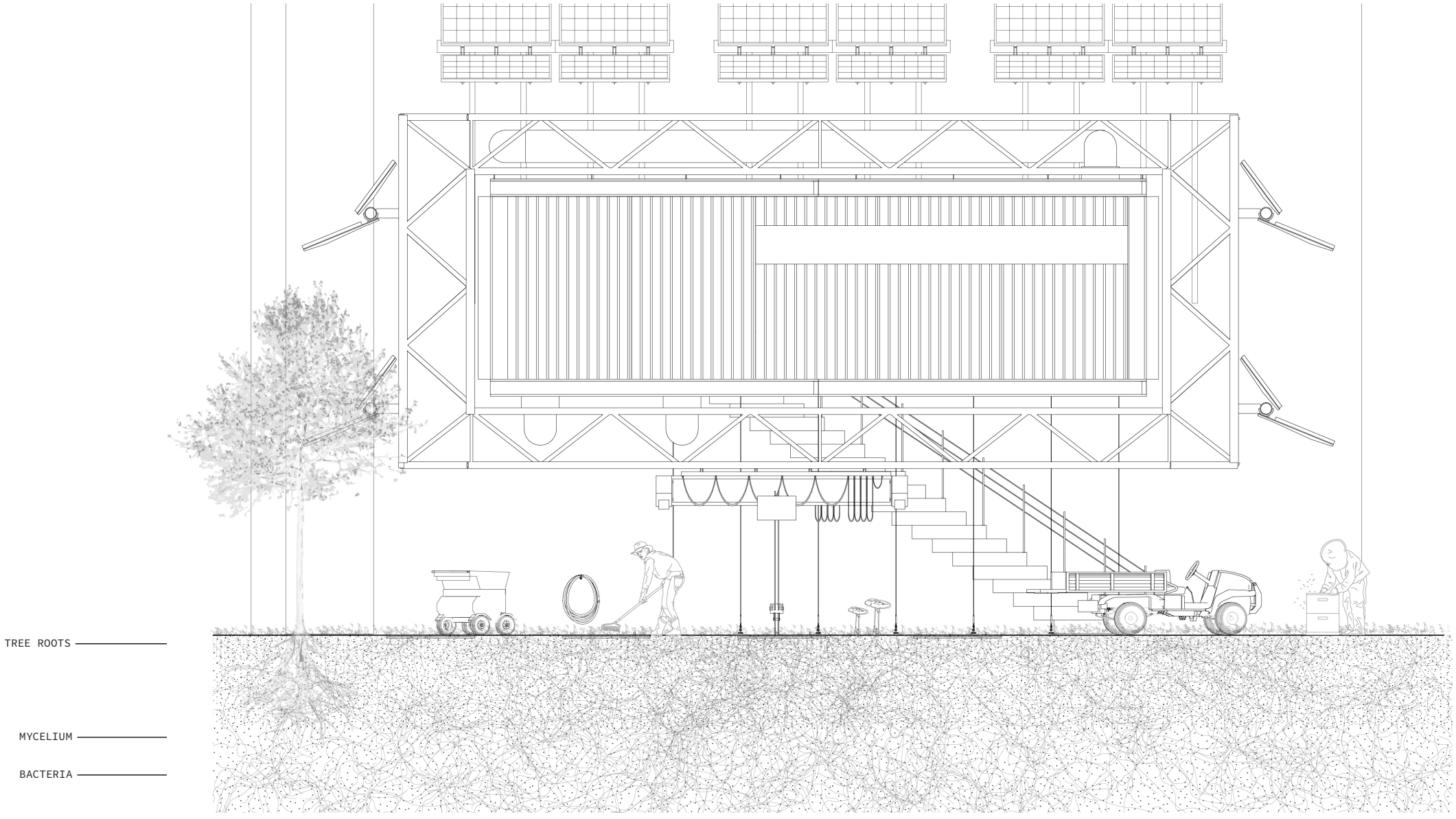

nodo
mr.01.av
005
ins

What used to be occupied by idle cars is now occupied by living soil

Delight in gunk!

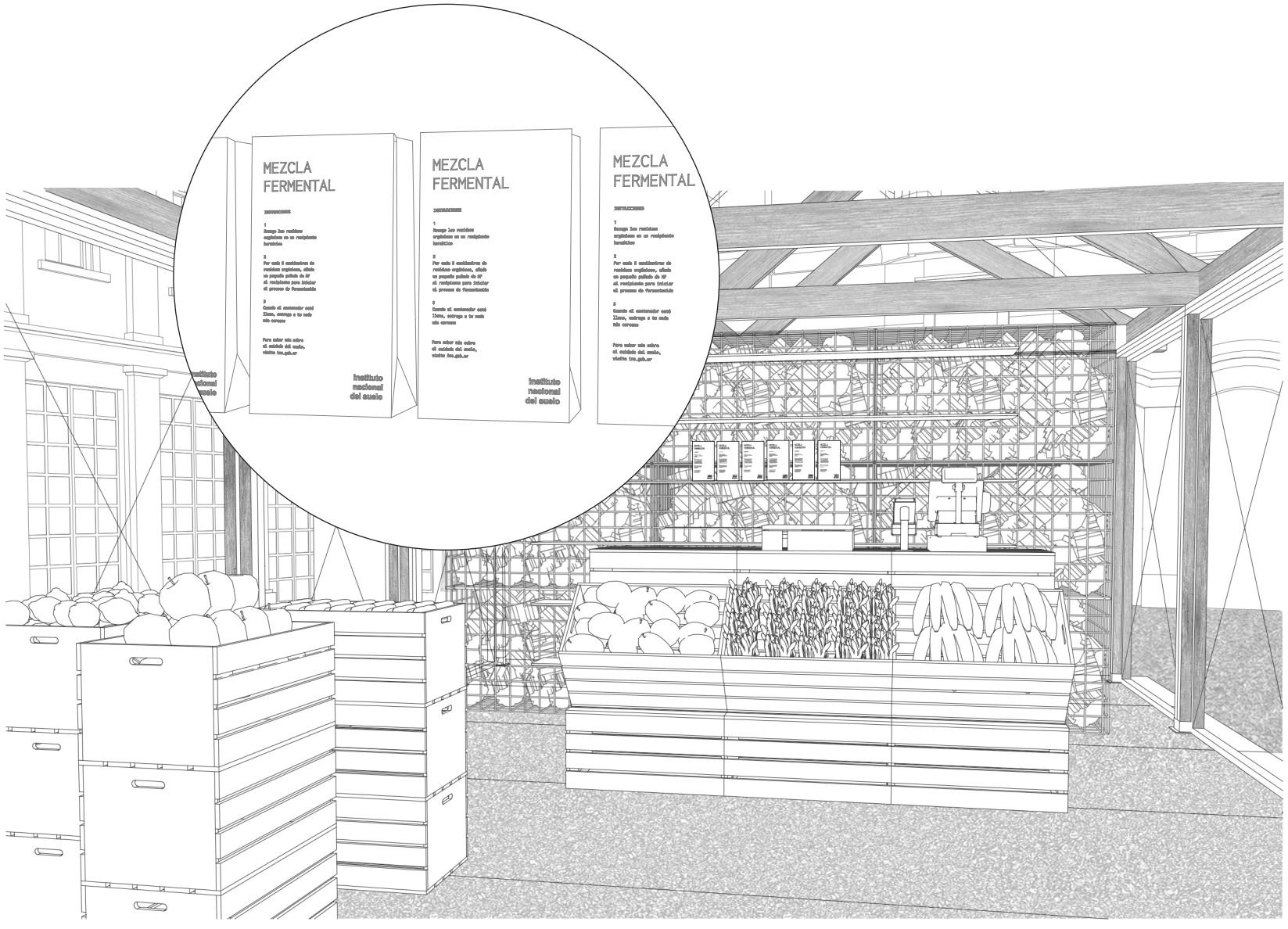






nodes hover above, allowing soil actors free range


trae tu residuo orgánico aquí.
lo compostamos
tituto nacional del suelo
nodo
mr.01.av
006


MEZCLA
FERMENTAL
INSTRUCCIONES
1
Recoge los residuos
orgánicos en un recipiente
hermético
2
Por cada 5 centímetros de
residuos orgánicos, añade
un pequeño puñado de MF
al recipiente para iniciar
el proceso de fermentación
3
Cuando el contenedor esté
lleno, entrega a tu sede
más cercana
Para saber más sobre
el cuidado del suelo,
visita ins.gob.ar
Instituto
nacional
del suelo
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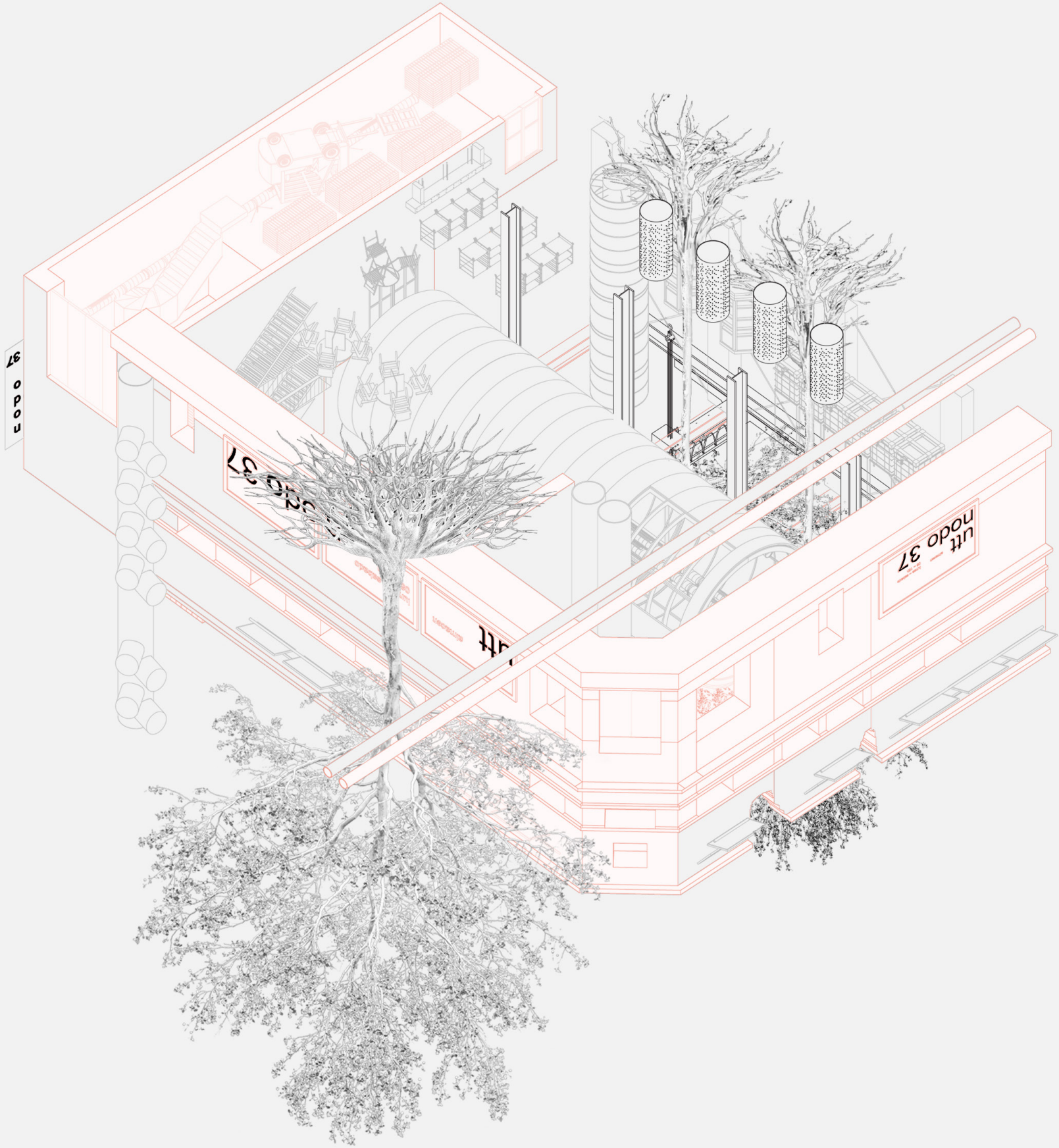
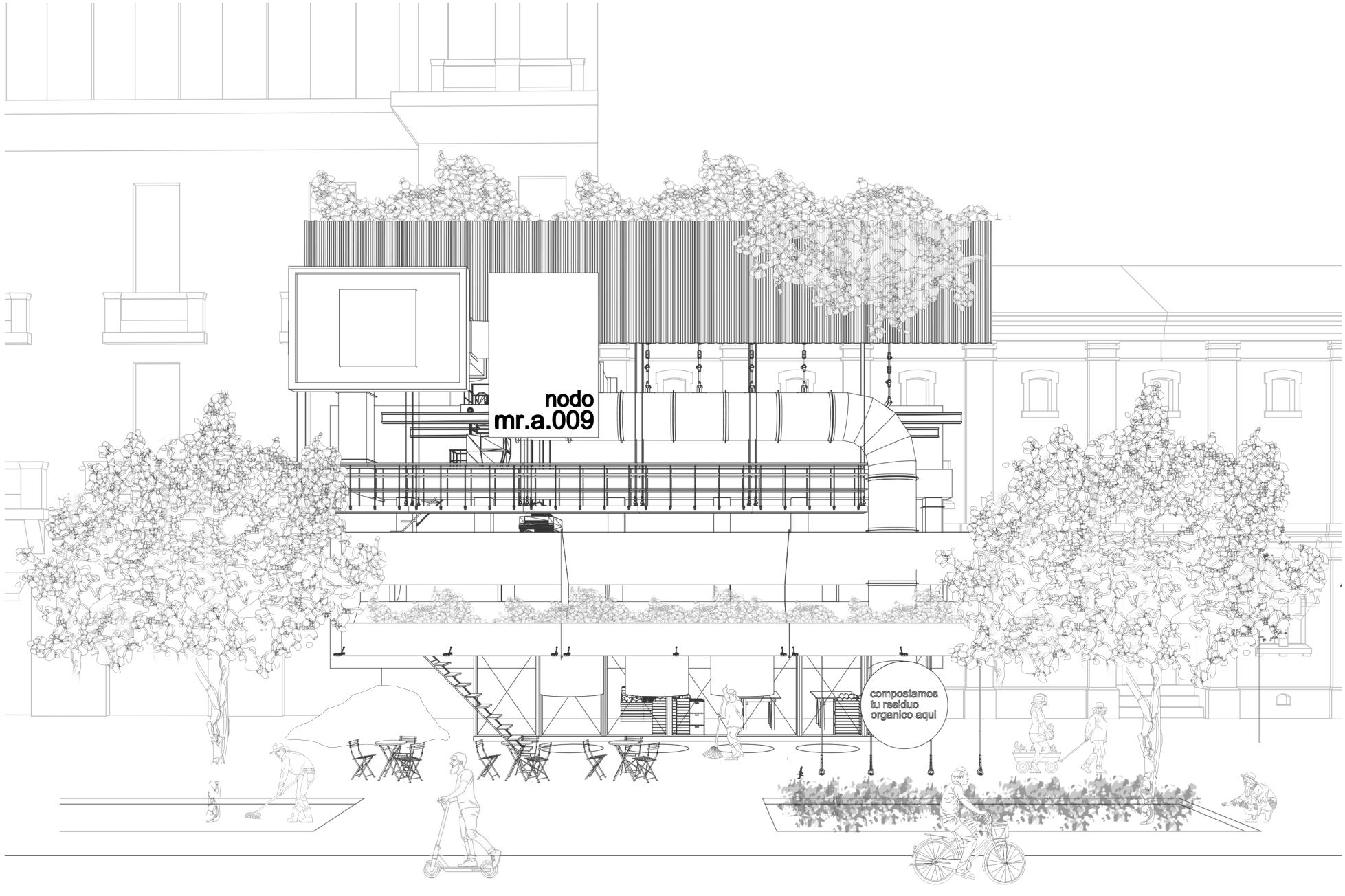
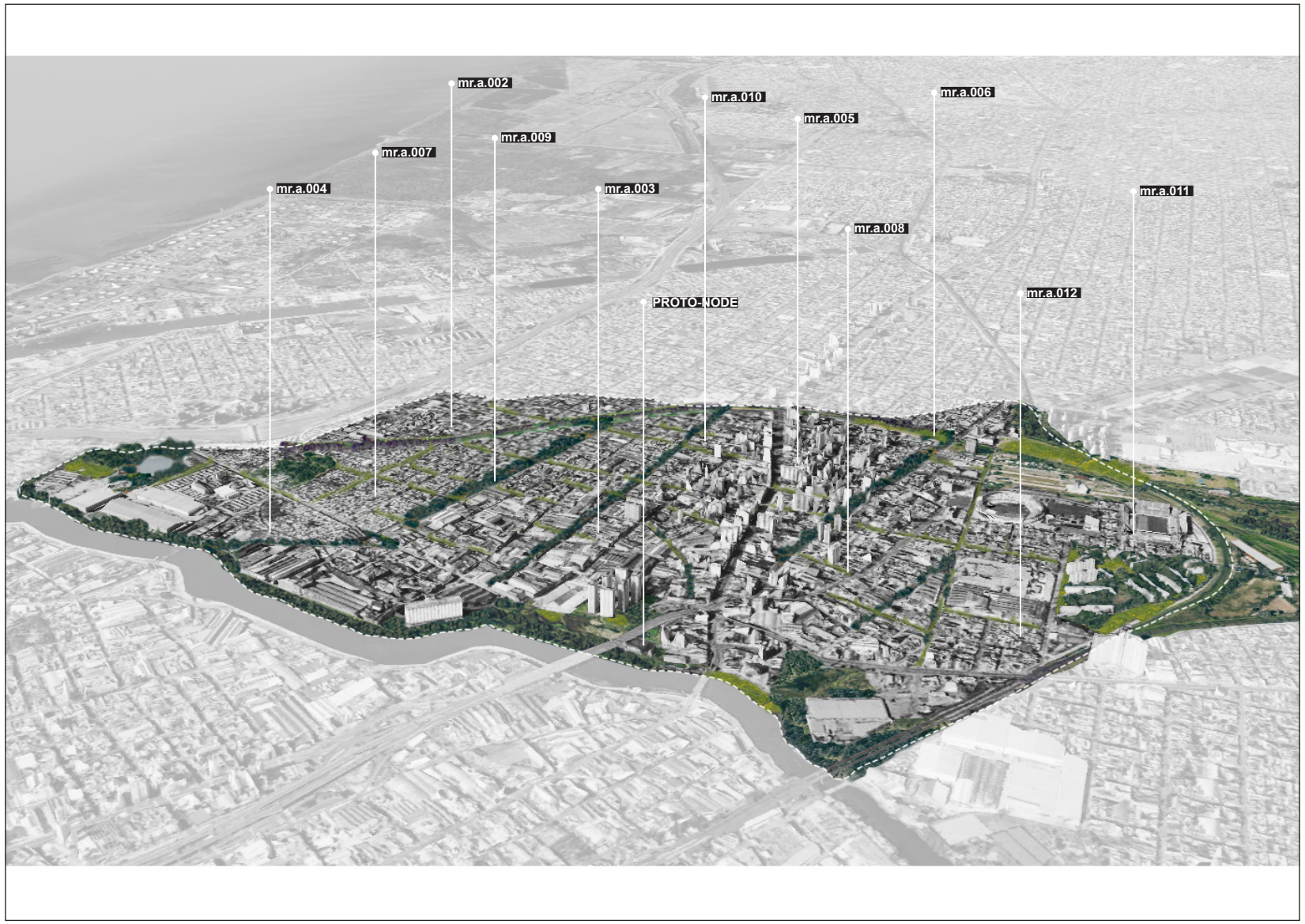

nodo 37
Ut nodo 37


GIROLA
NUEVO
EL POZO
AHORA
ESTÁ MÁS
CERCA
Loto
PLUS
DERECHO
A LA PROTECCIÓN
1.500 PATRULLEROS
NUEVOS

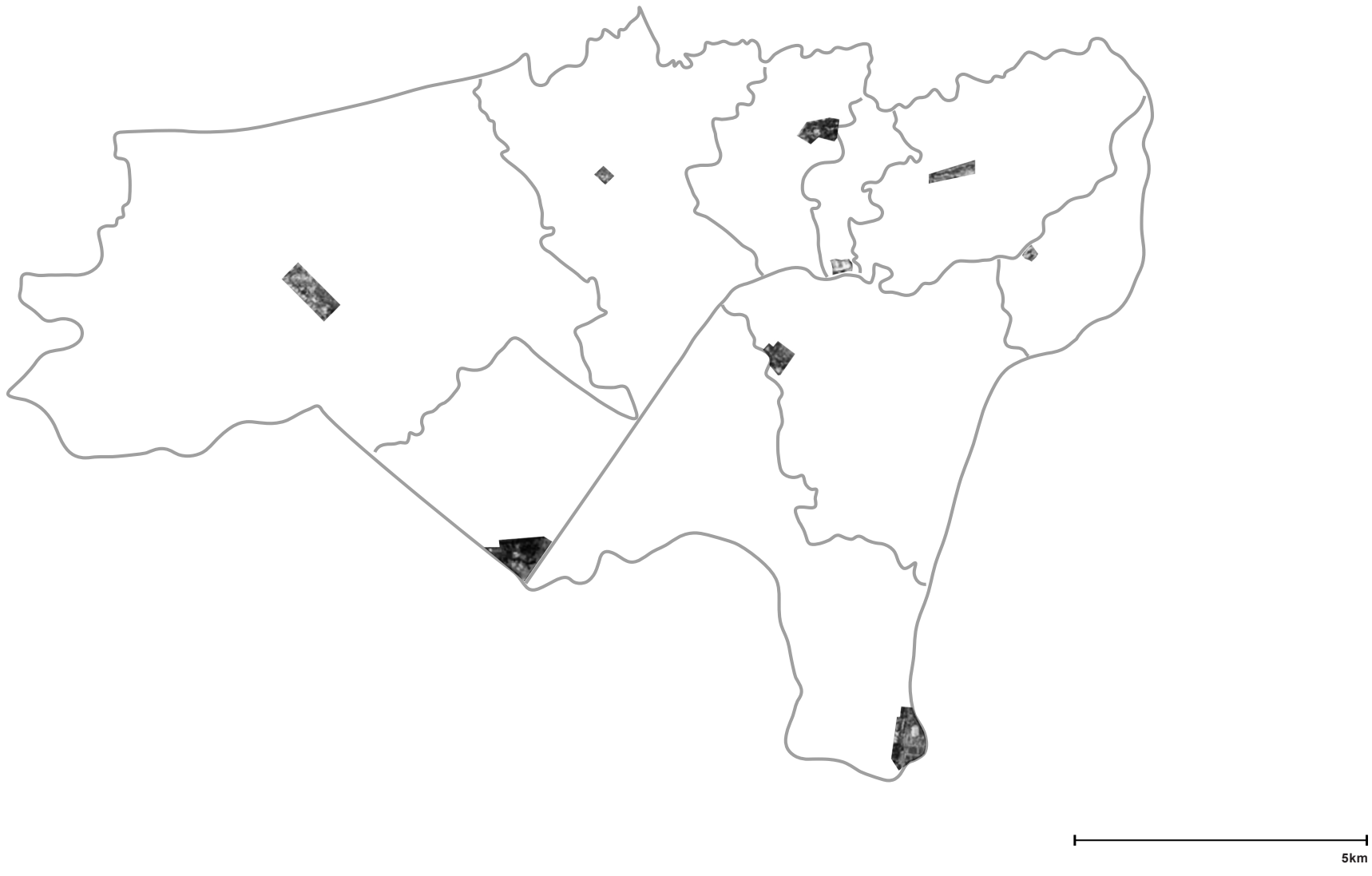

457
*KREMIS
lunes a sábado
08.00 - 16.00
nodo
mr.a.
010
el baldío


nodo
mr.a.009
compostamos
tu residuo
organico aqui

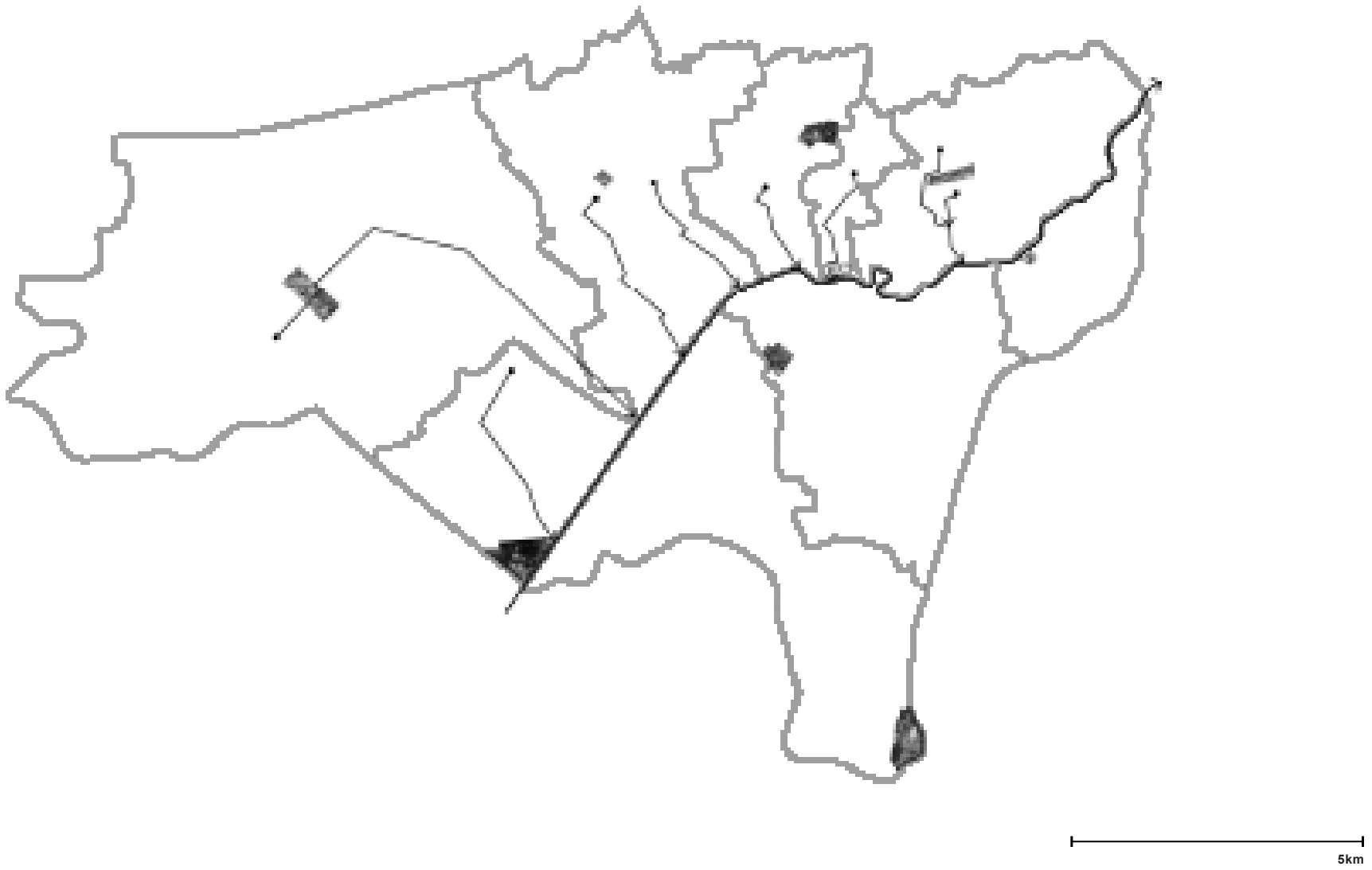


The eco-hydrological network progresses with more connections throughout the Avellaneda microbasin

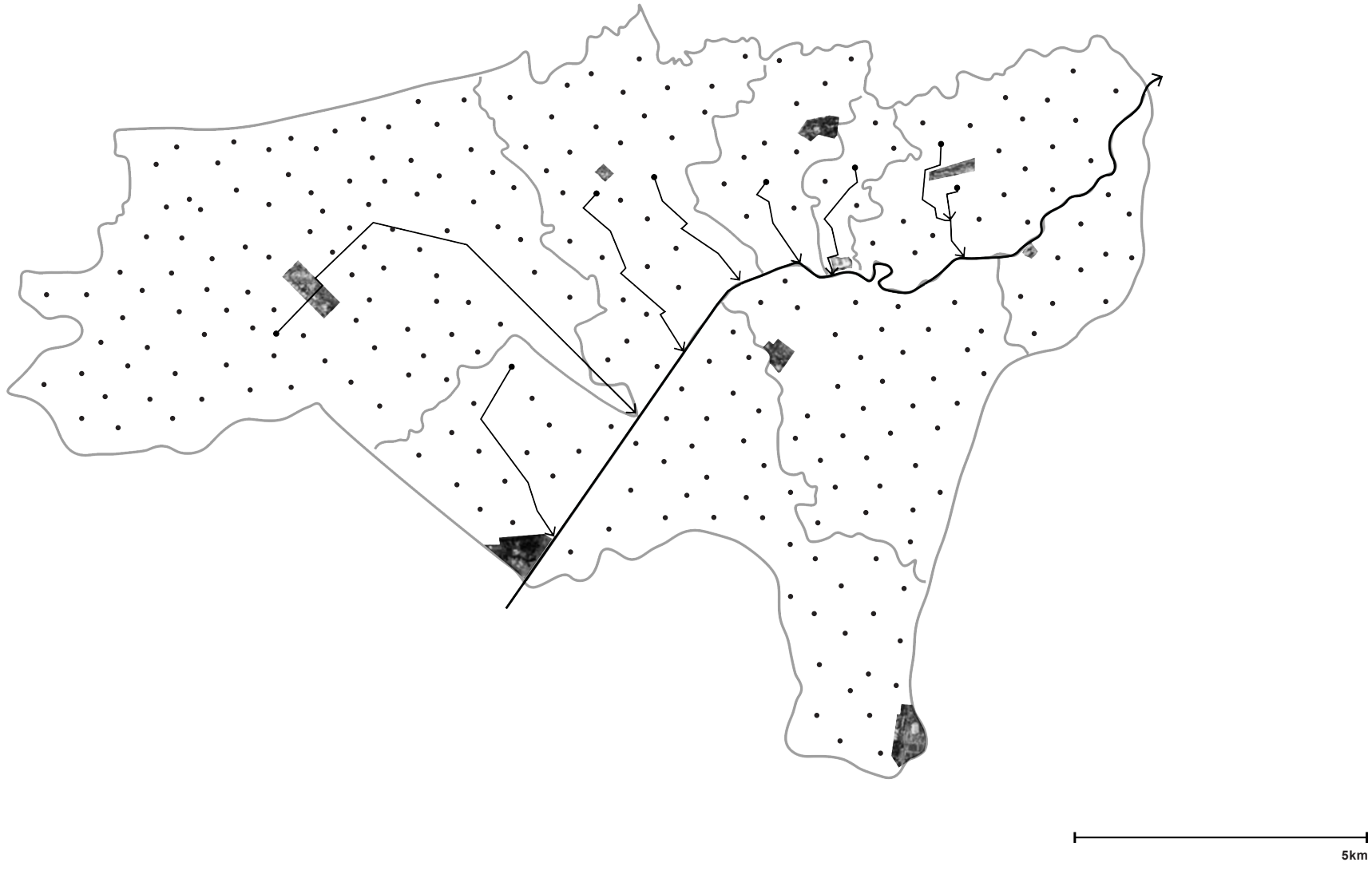
Microbasins of the lower basin



Protonodes are located in historically-significant sites within each microbasin



On the left bank, in the capital federal, protonode sites are along or near buried triburaries



Protonode and micronode network

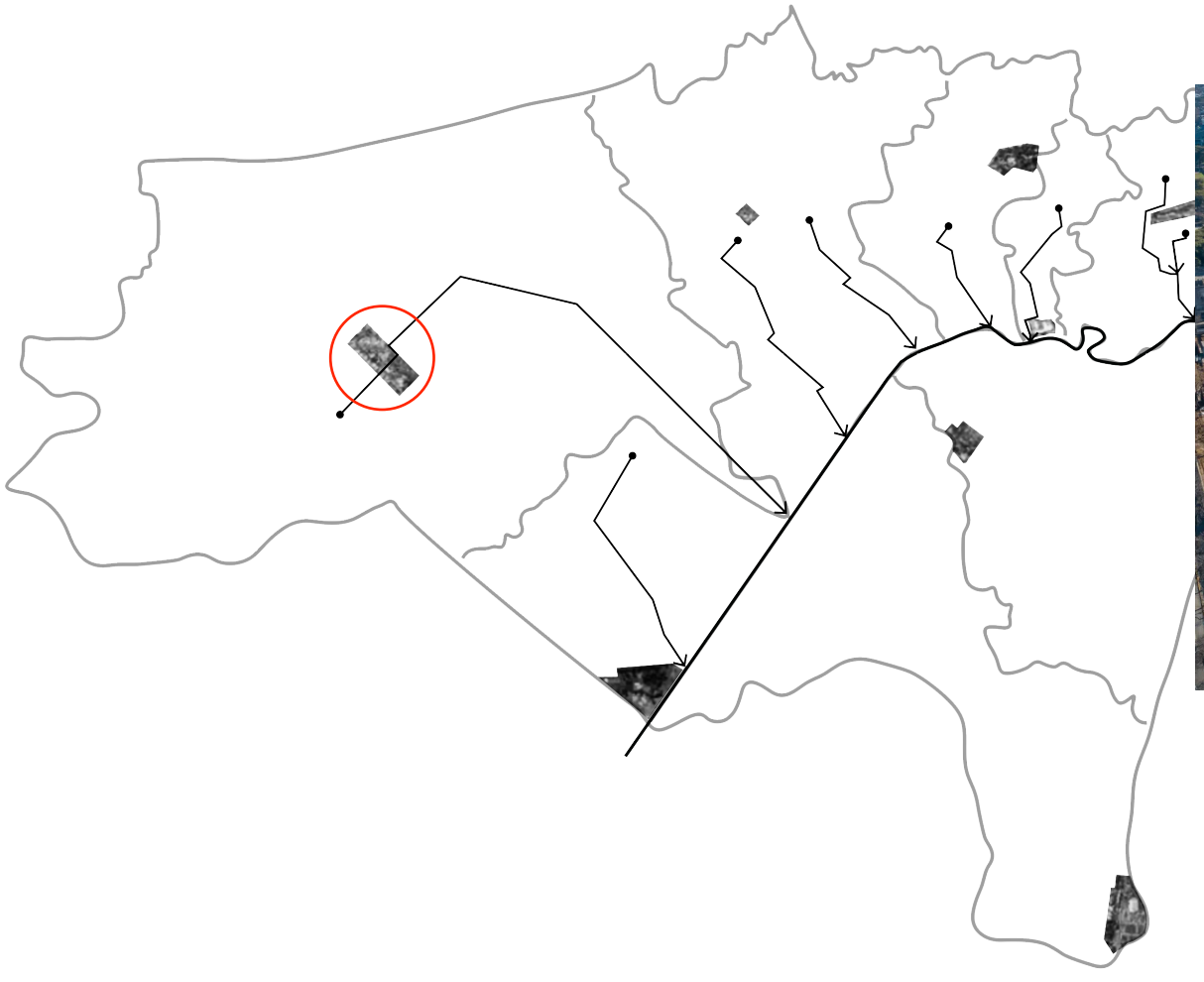
Estacion Sola en Barracas

MR.BB.001
LA BOCA/BARRACAS

Components storage house

MR.CL.001
CILDANEZ

Agroecology
market

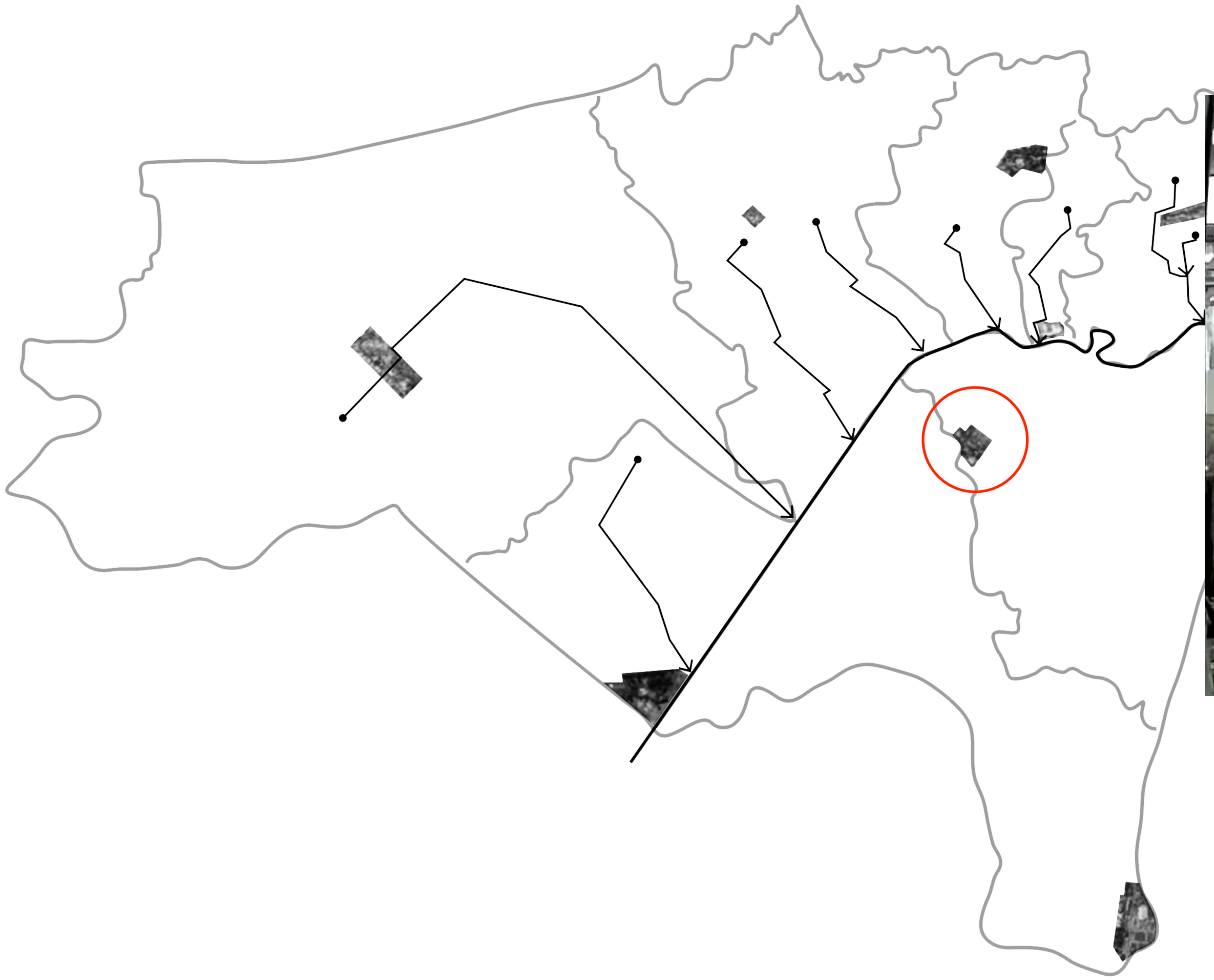


JORGE VIDAL

El Mercado de Hacienda en el barrio de Mataderos.

MR.VA.001
VALENTIN
ALSINA

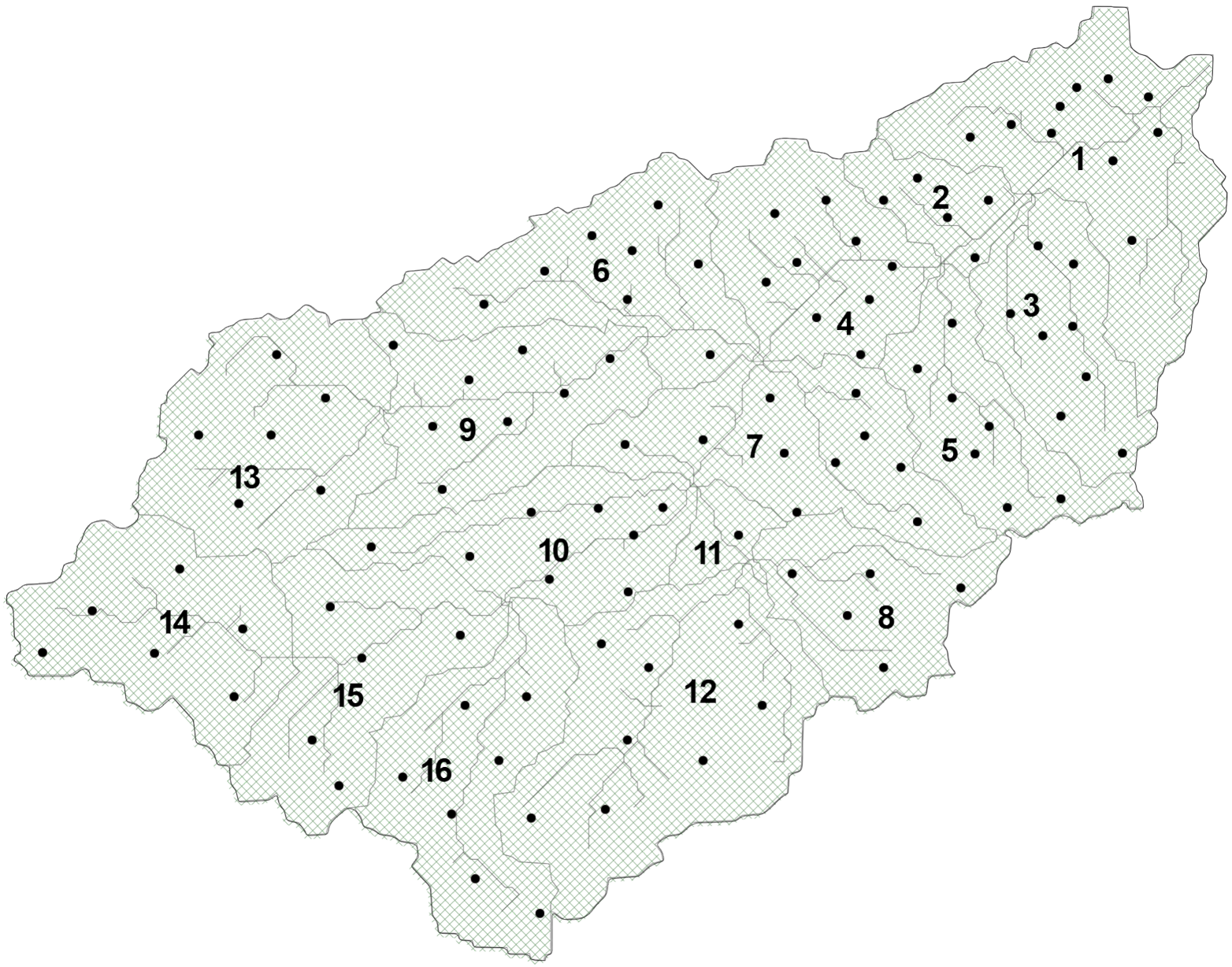
Greenhouse +
plant nursery



La fabrica Campomar en el barrio Valentin Alsina.

Master thesis
Josh Snow
5293197
Tutors
Thomas Offermans
Jos de Krieger

protonode network



CHRISTOPHER VALENTINE

Decomposers decomposing

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