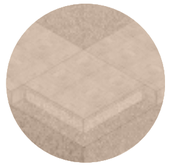
PORTFOLIO

COLUMBIA GSAPP

MASTER OF SCIENCE IN ADVANCED ARCHITECTURAL DESIGN

EUGENIA LOPEZ VALDES

These works reflect how our practice can be more ethical, ecological, and conscious. Throughout this year, I have been analyzing how, as an architect, I can be more accountable for the designs I choose, beginning with the materials and the people and environments affected by their extraction. My personal reflection has led me to avoid building with materials that require exhaustive and harmful extraction processes. At the same time, I have been reflecting on how we have already transformed the earth through the creation and extraction of new materials, and that perhaps we should focus on reusing what has already been transformed rather than continuing to extract more. Therefore, the main concept here is that the earth already gives, and we borrow from it as material, with the understanding that it eventually can and will return to the earth. As architects, we should approach this responsibility with greater awareness and care.

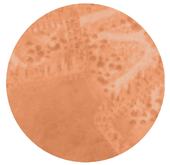


01 Weaving Field and Built Practices

summer 2025

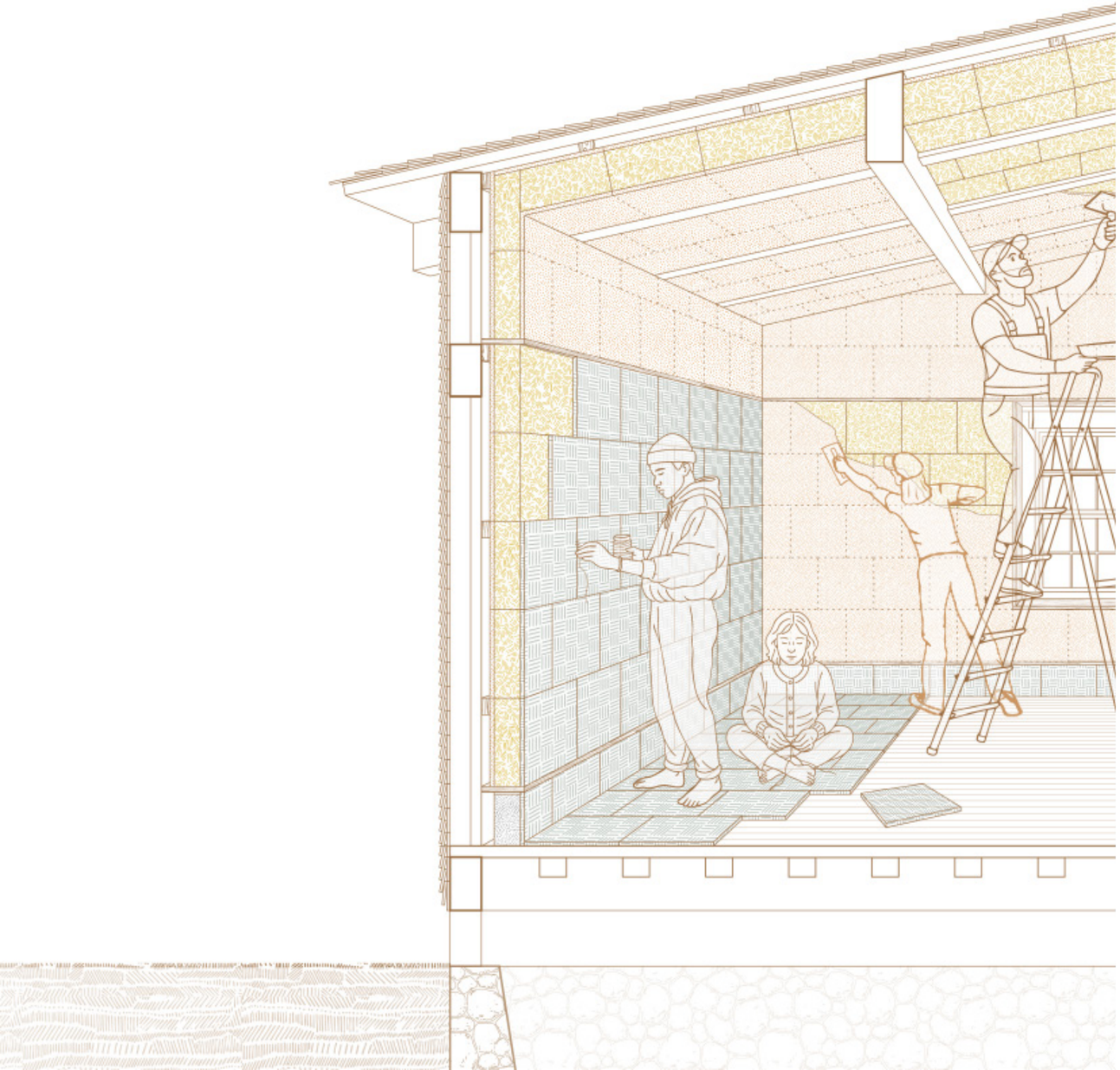
02 Repairing Perceptions of Once-Sacred Waters in the Basin of Mexico

fall 2026



03 Nido Ambroz: Nested in Water

spring 2026



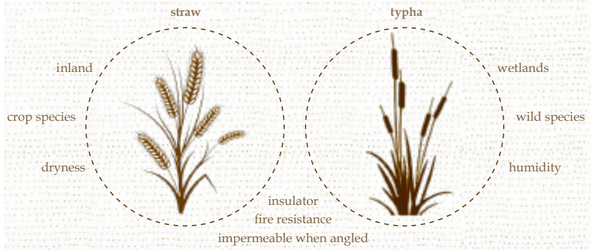
Assessing Endogenous Building Practices
Nicolas Rondet + Nzinga B. Mboup

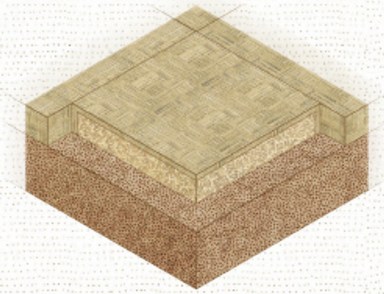
01 Weaving Field and Built Practices

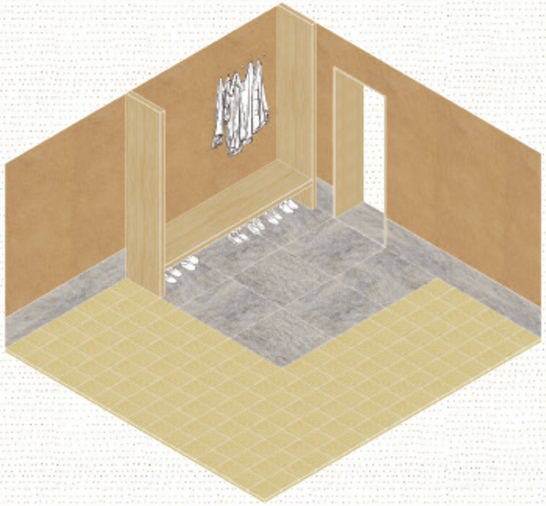
summer 2025

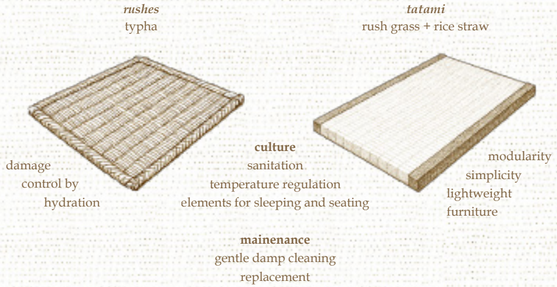
This project explored how natural fibers native to New York State could be adapted to the local climate and integrated into existing regional systems of knowledge, labor, and construction. Drawing from vernacular precedents such as Japanese tatami and woven rush flooring in the UK, I designed a flooring and insulation tile composed of compressed straw and woven cattail (typha), paired with clay to regulate humidity and thermal performance in New York's humid summers and cold winters. Through extensive material experimentation, I fabricated hand-compressed straw tiles finished with woven typha mats, testing the structural, tactile, and environmental potential of the system while confronting the labor-intensive realities of production. The second phase of the project reassessed the design within the context of a traditional Connected Farmhouse in Upstate New York, mapping the local networks of farmers, contractors, textile artisans, and weaving schools whose existing knowledge could support the project's fabrication, maintenance, and decomposition. By adapting the construction process to rely on familiar regional practices, such as cutting tiles from existing straw bales and integrating local basketry techniques, the project evolved from a material experiment into a collaborative architectural system that positioned the farmhouse as a hub for knowledge exchange, craft, and ecological building practices.

Project Development:
Eugenia Lopez Valdes
*Connected Farm Site Analysis: Eugenia Lopez Valdes + Nicole Kertznus

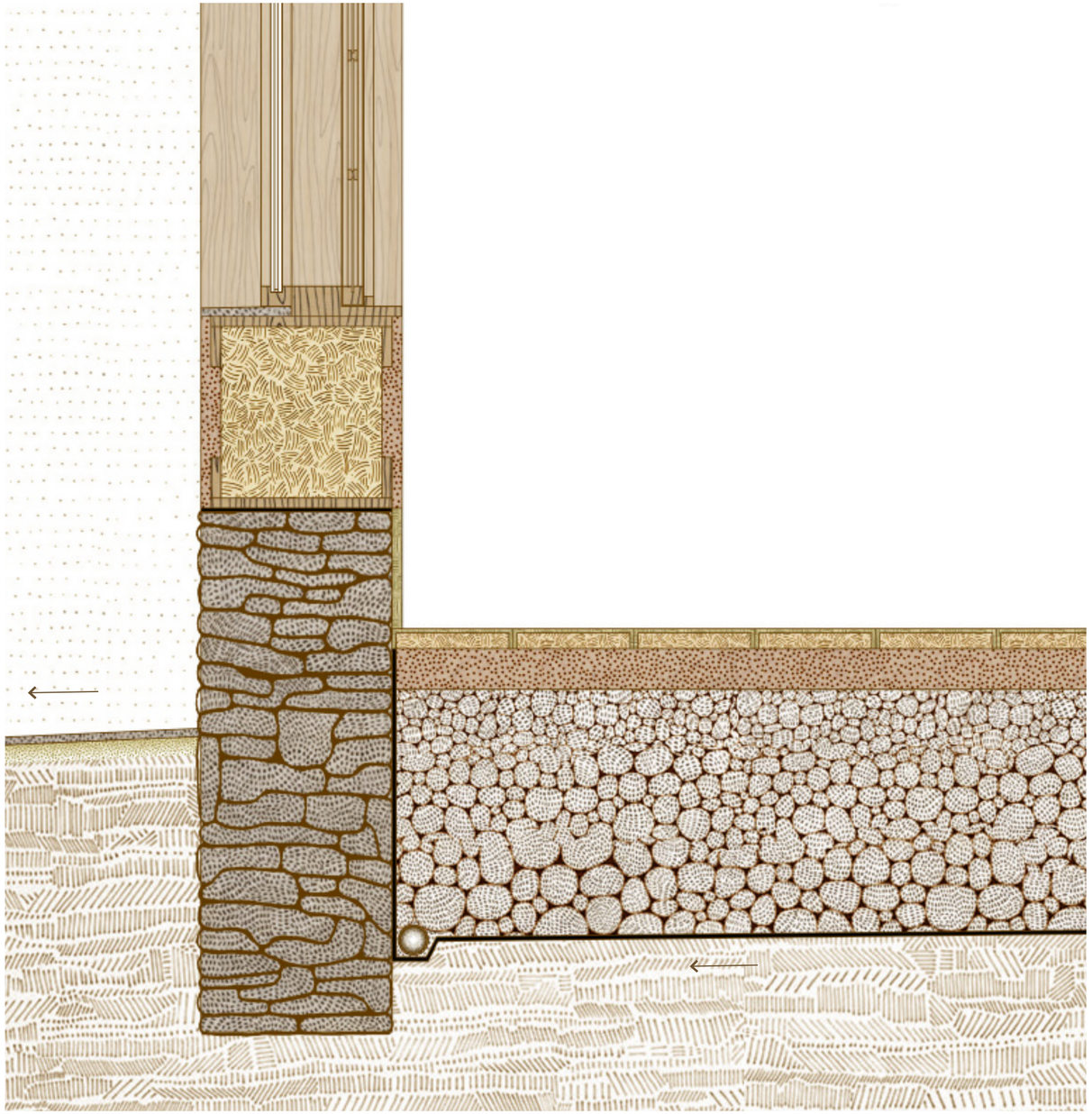

straw
inland
crop species
dryness
typha
wetlands
wild species
humidity
insulator
fire resistance
impermeable when angled

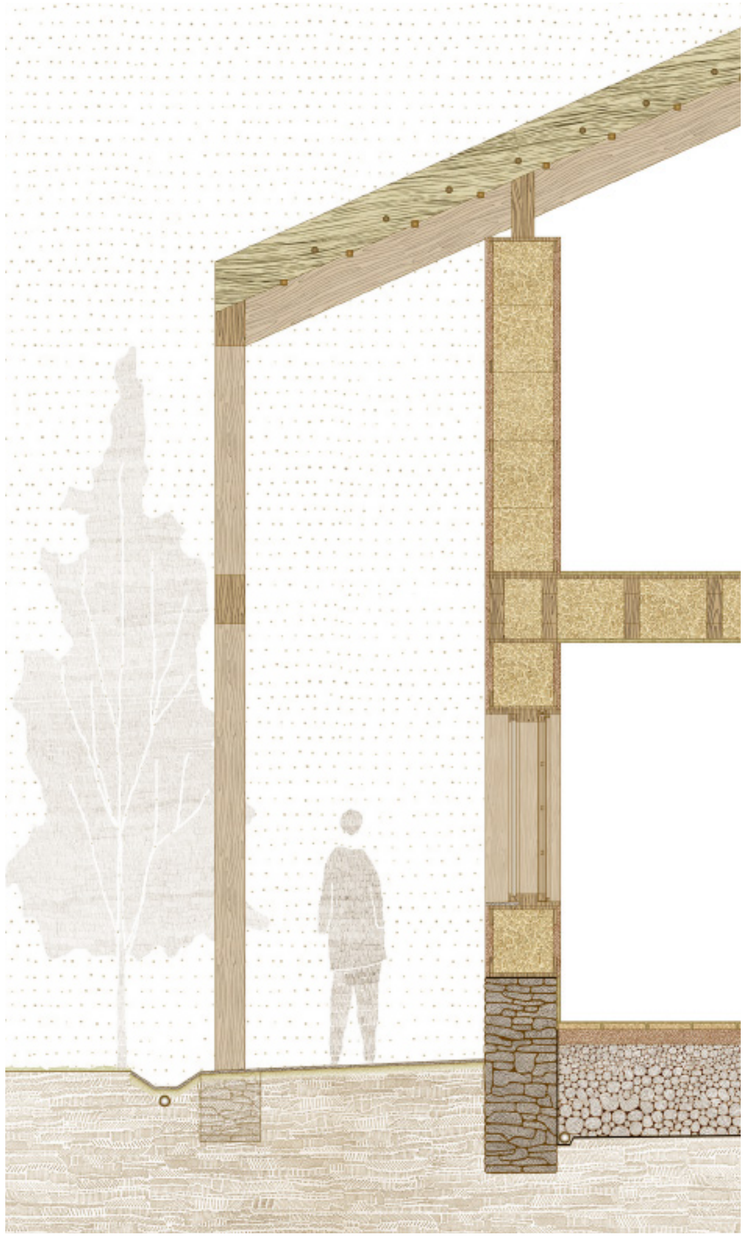


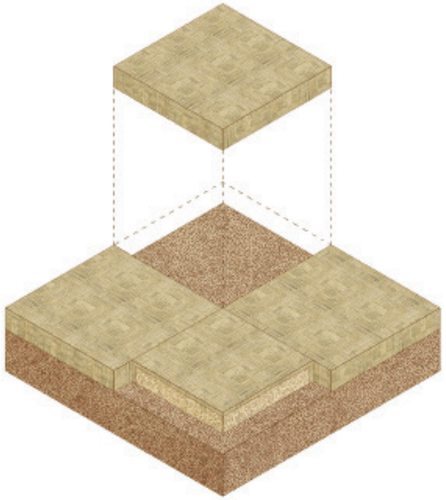


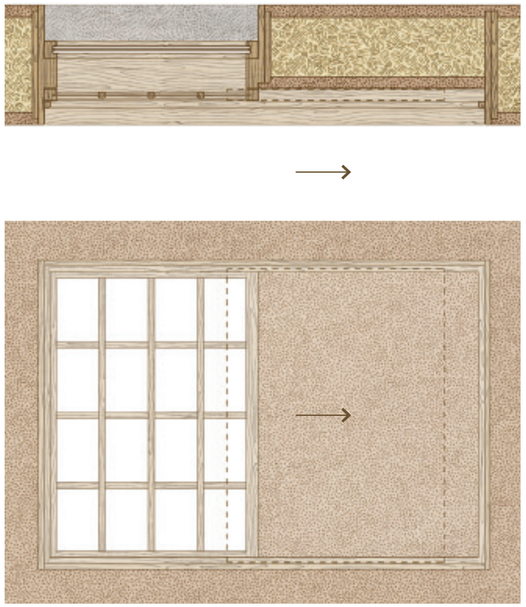

rushes
typha
tatami
rush grass + rice straw
damage
control by
hydration
culture
sanitation
temperature regulation
elements for sleeping and seating
modularity
simplicity
lightweight
furniture
mainenance
gentle damp cleaning
replacement

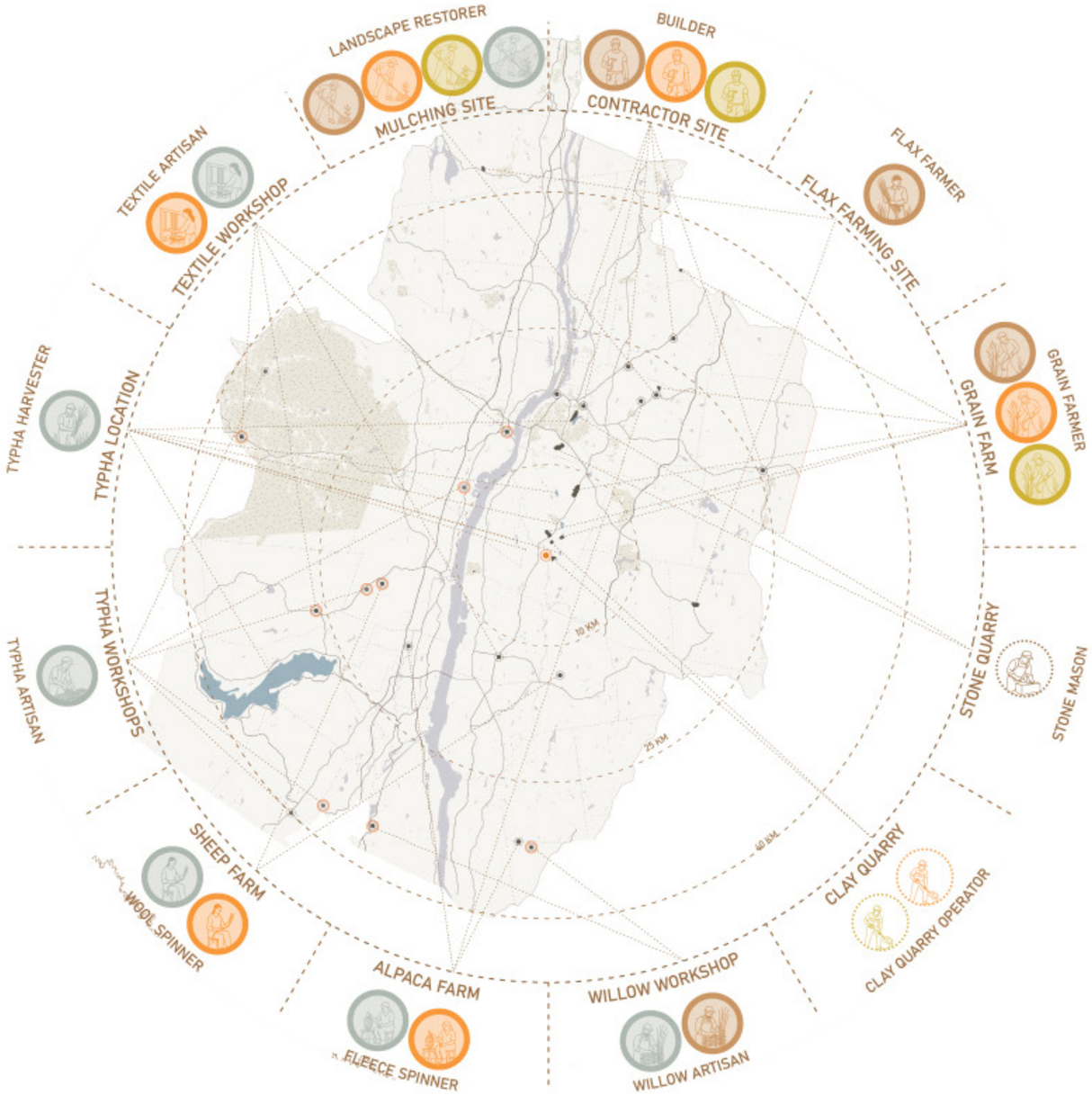
corridor . living room . dining room . corridor . bedroom . corridor . study room . corridor . family and tv room
dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas . dry areas
fibers
storage areas . pantry . linen closet . mud room . bathrooms . kitchen . laundry room
dry areas . dry areas . dry areas . dry areas . dry areas . wet areas . wet areas . wet areas . wet areas . wet areas . wet areas
clay
stone



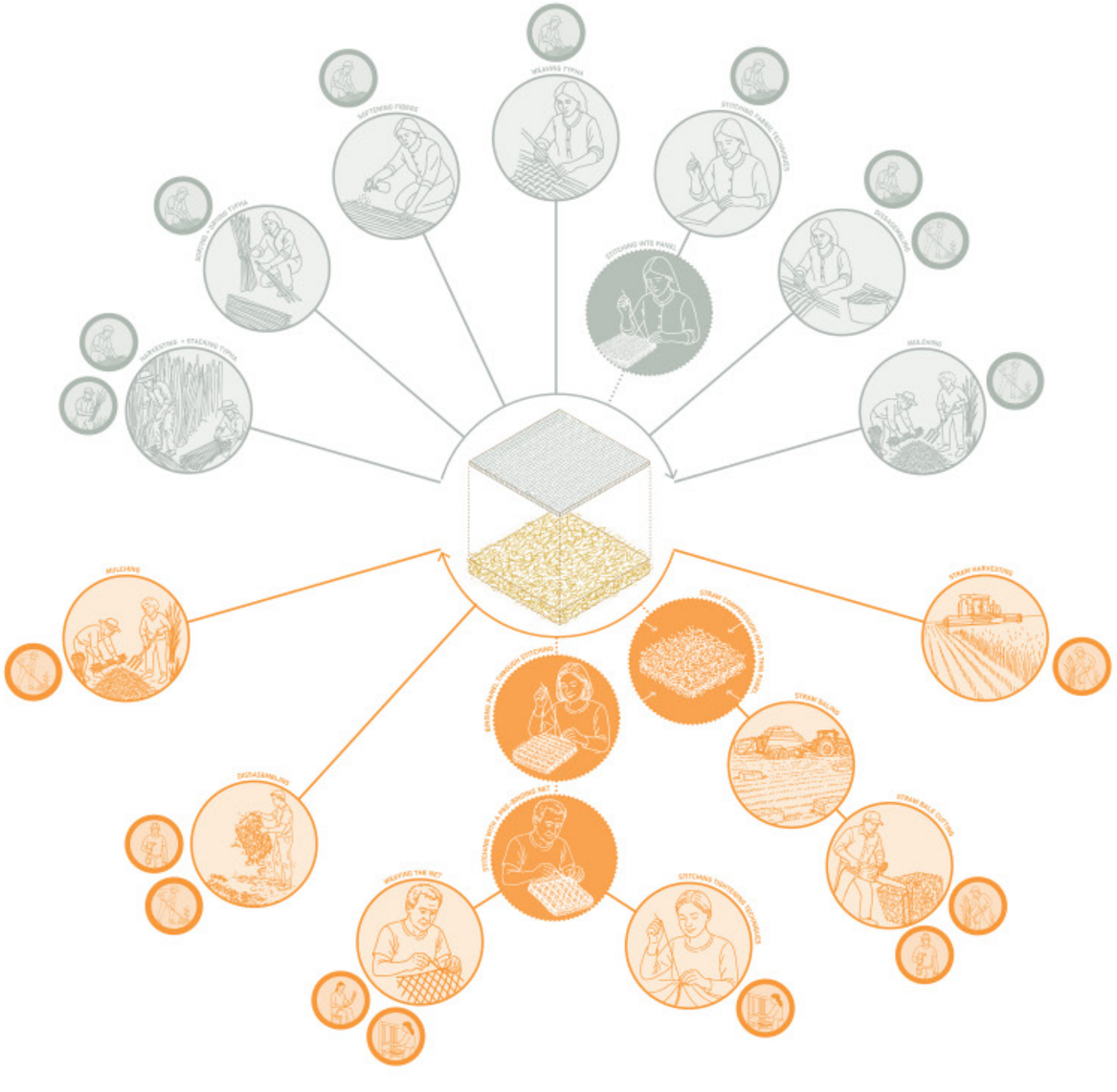


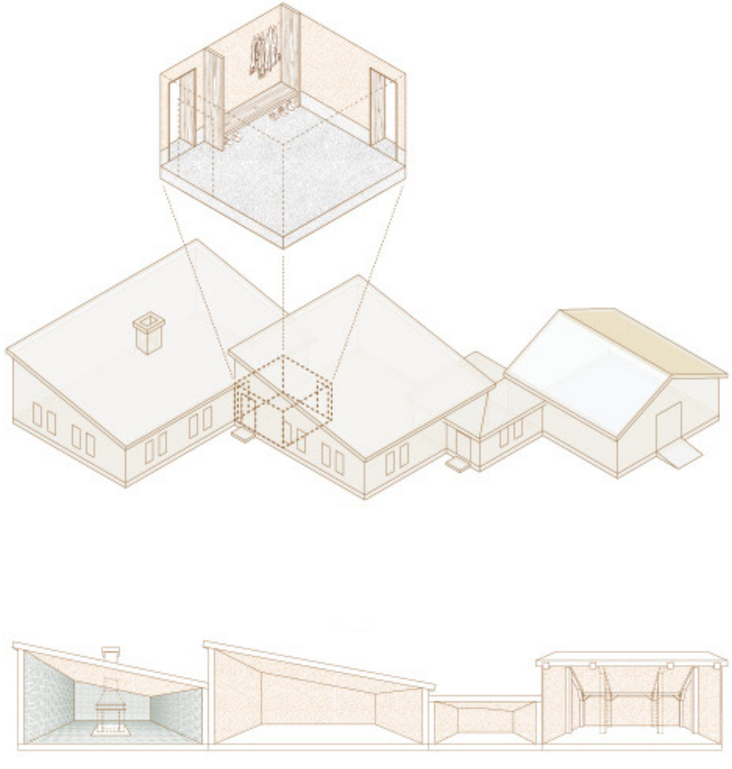


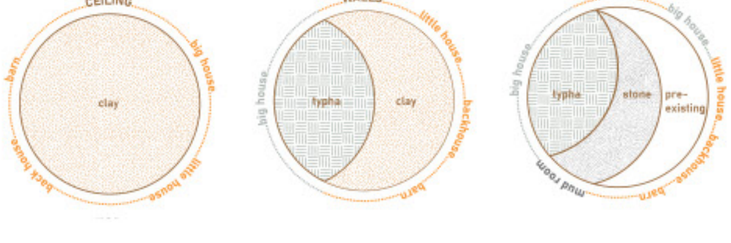




Connected Farm Site Analysis: In Collaboration Eugenia Lopez Valdes + Nicole Kertznus


MULCHING
DEGRASSEMBLING
WEAVING THE MAT
STITCHING TONTERING TECHNIQUES
STRAW BALE CUTTING
STRAW BALING
STRAW COMPRESSION OVER A TWIN PANEL
STRAW HARVESTING
MULCHING




CEILING
big house
little house
back house
barn
clay
WALLS
little house
backhouse
barn
big house
typha
clay
FLOOR
big house
little house
backhouse
barn
mud room
big house
typha
stone
pre-existing

MATTER(ing): On Materiality and State Change
Mario Gooden

02 Repairing Perceptions of Once-Sacred Waters in the Basin of Mexico

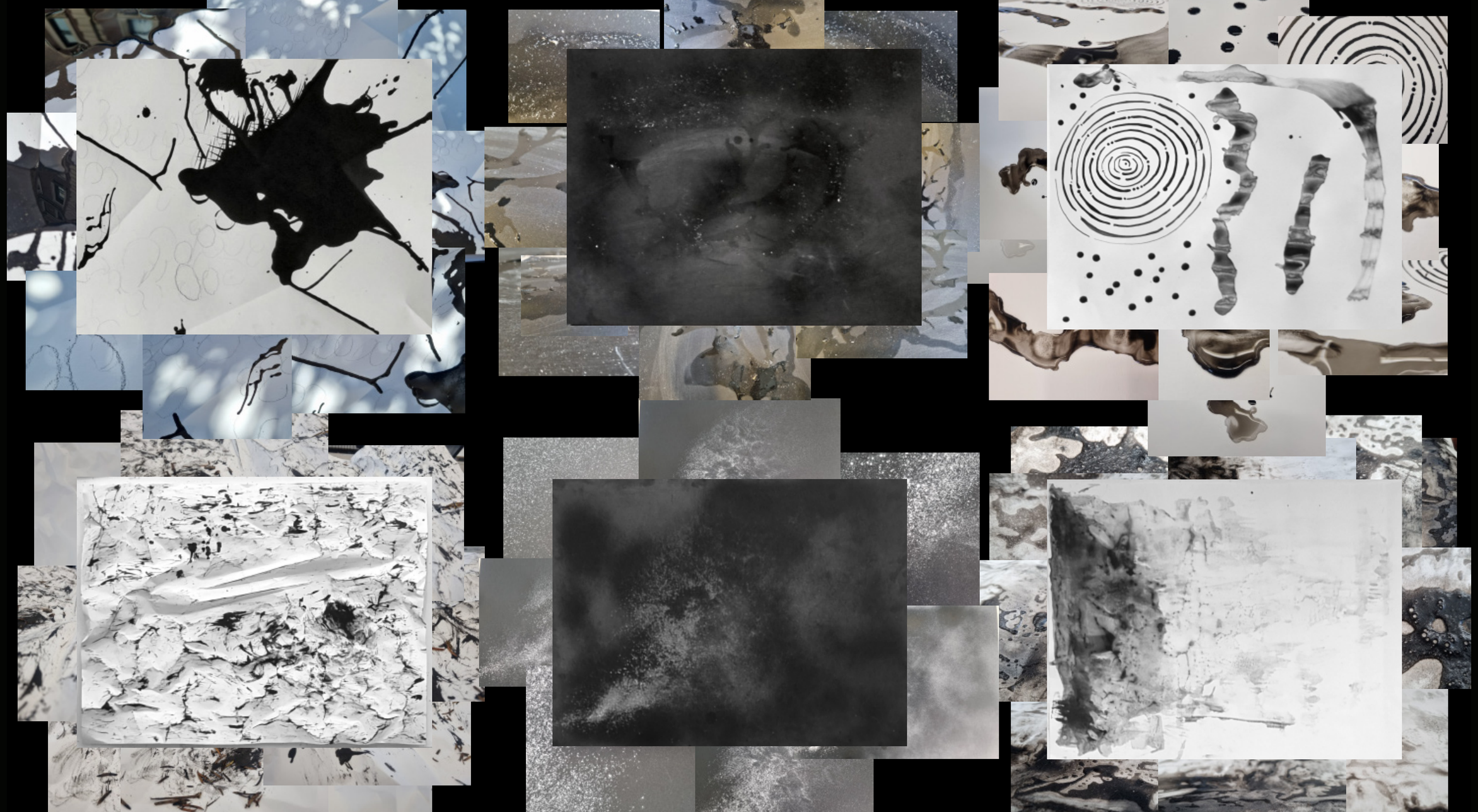
fall 2026

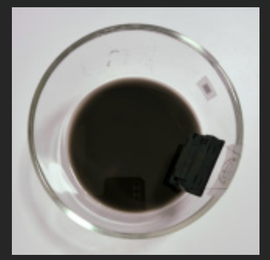
Beginning with a story of earth, water, and air, the studio conceptualized their transformation through states of change. Starting with drawings of these elemental conditions, the process evolved into material experimentation. In this case, the chosen materials were water and copper, reflecting a critique of frustration and control.

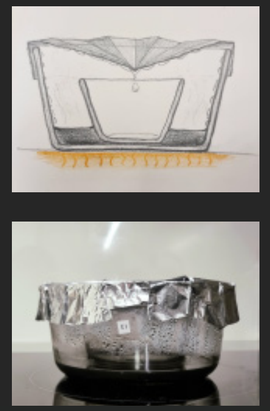
This reflection led to the creation of an architectural window detail that intentionally allows leakage, expressing the changing states of water and enabling its movement from the exterior to the interior. The ideas explored through this detail informed the selection of a site shaped by centuries of imposed control and environmental frustration: the Basin of Mexico and the former Lake Texcoco. Here, water has been systematically drained for centuries, and this history of control reflects the irreversible transformation of both climate and culture.

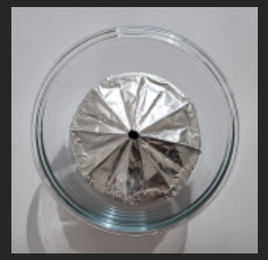
Within this context, the studio culminated in an architectural project grounded in the logic and critique embedded within the detail itself. By uncovering the buried Mexica temple of Cihuacoatl and reconnecting water, earth, species, and ritual, the project proposes acts of architectural repair that begin to heal the ecological and spiritual ruptures caused by a colonial perception of water as a commodity, ruptures that desiccated Lake Texcoco and destabilized the ecology of the Basin of Mexico.

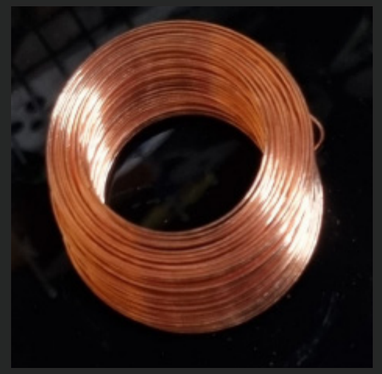
Project Development:
Eugenia Lopez Valdes

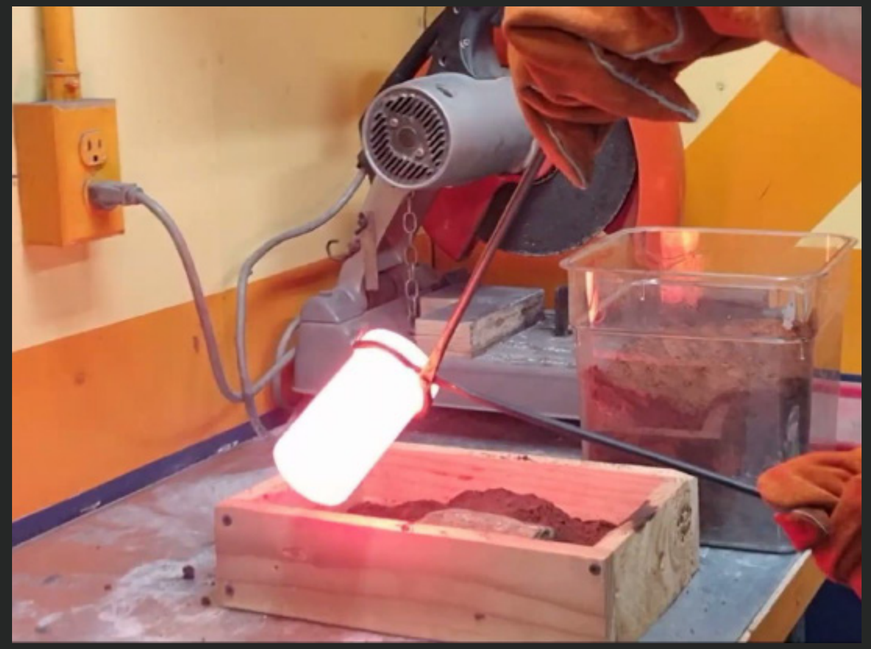


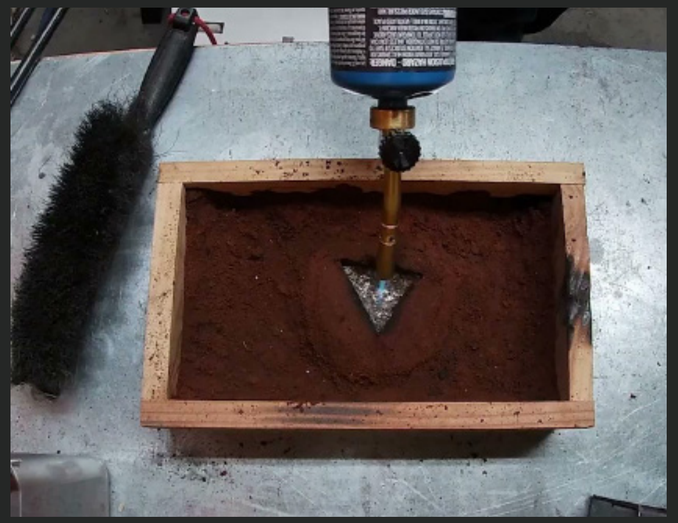


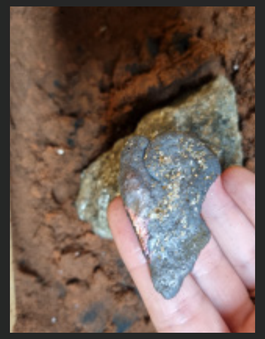


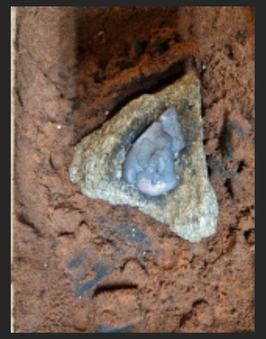


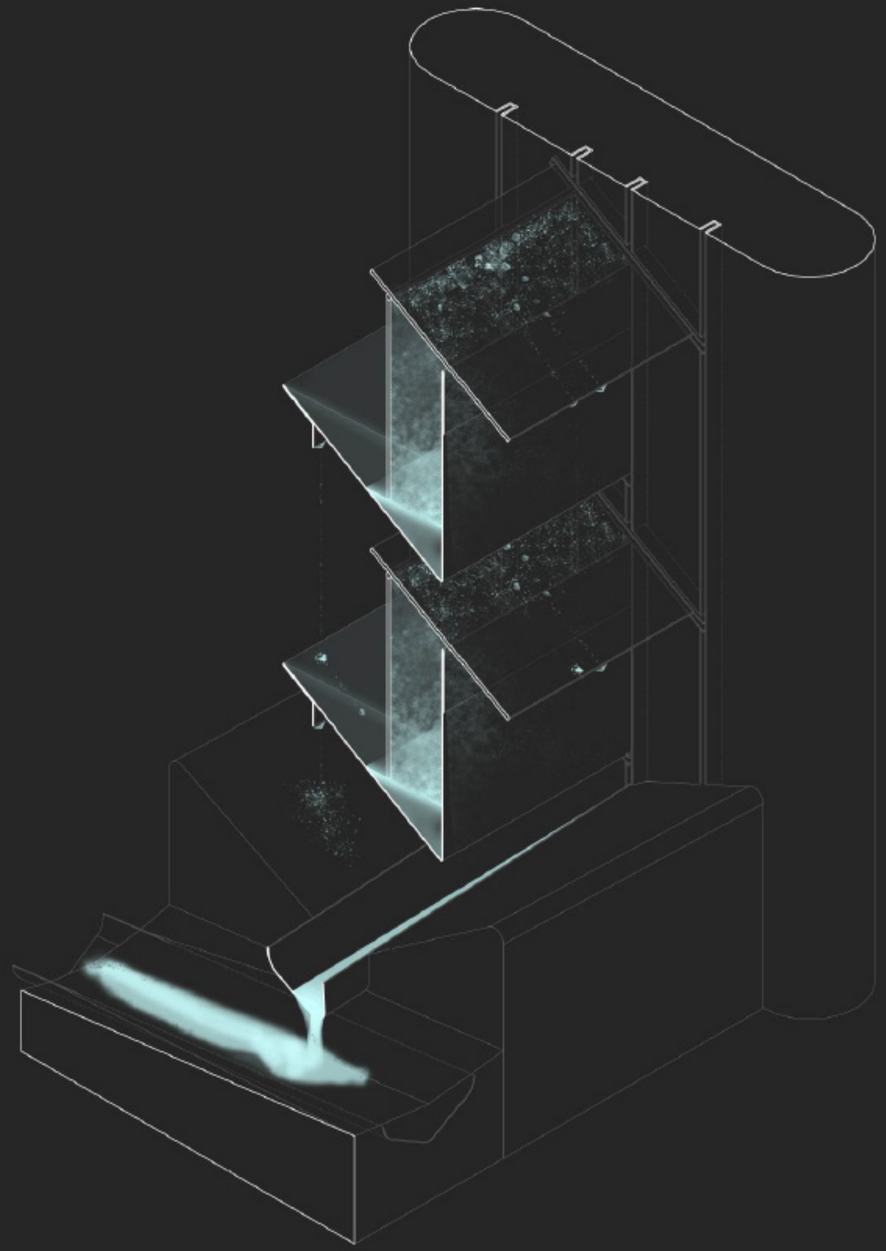


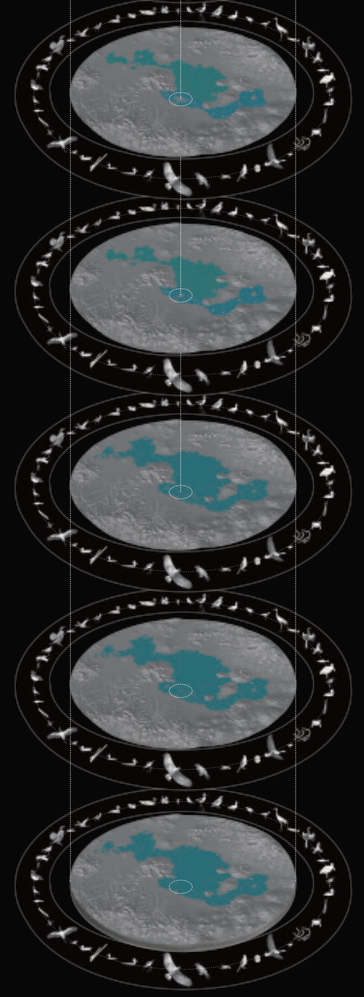


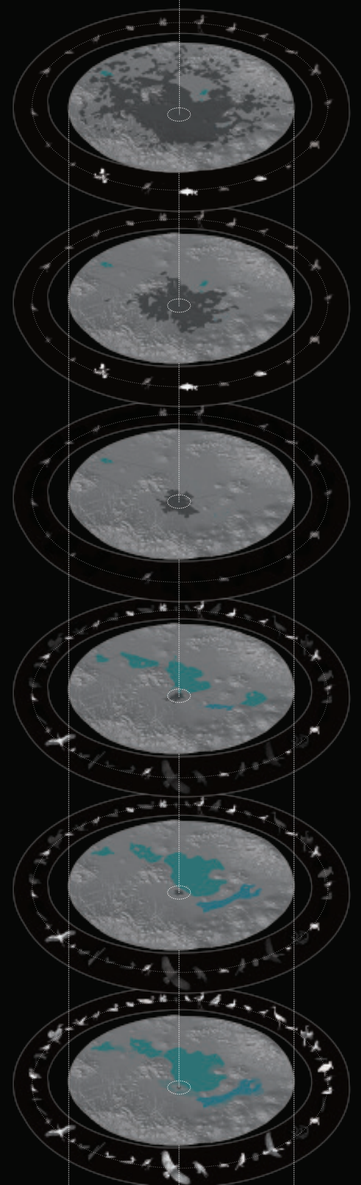


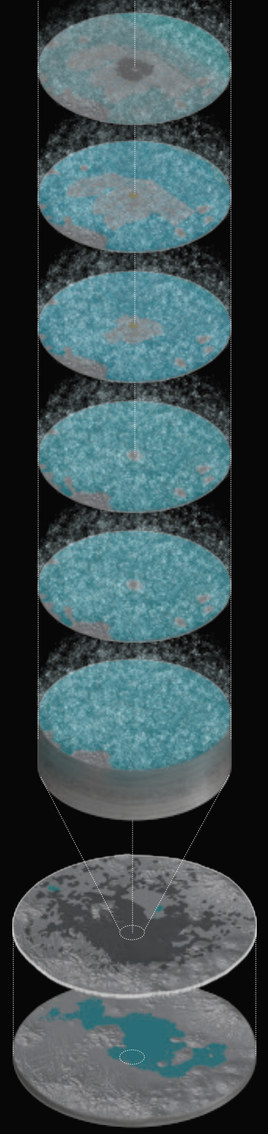


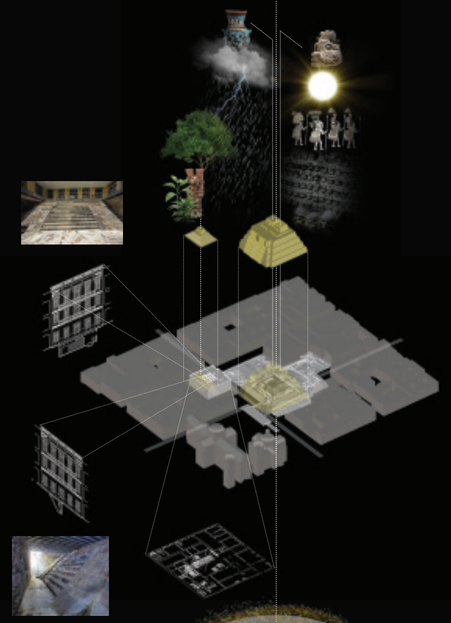


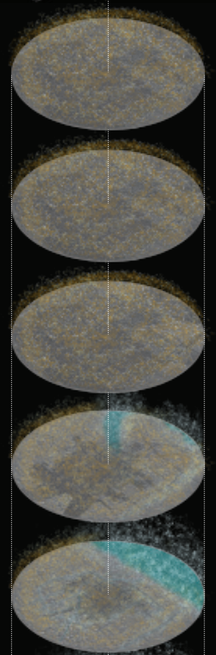


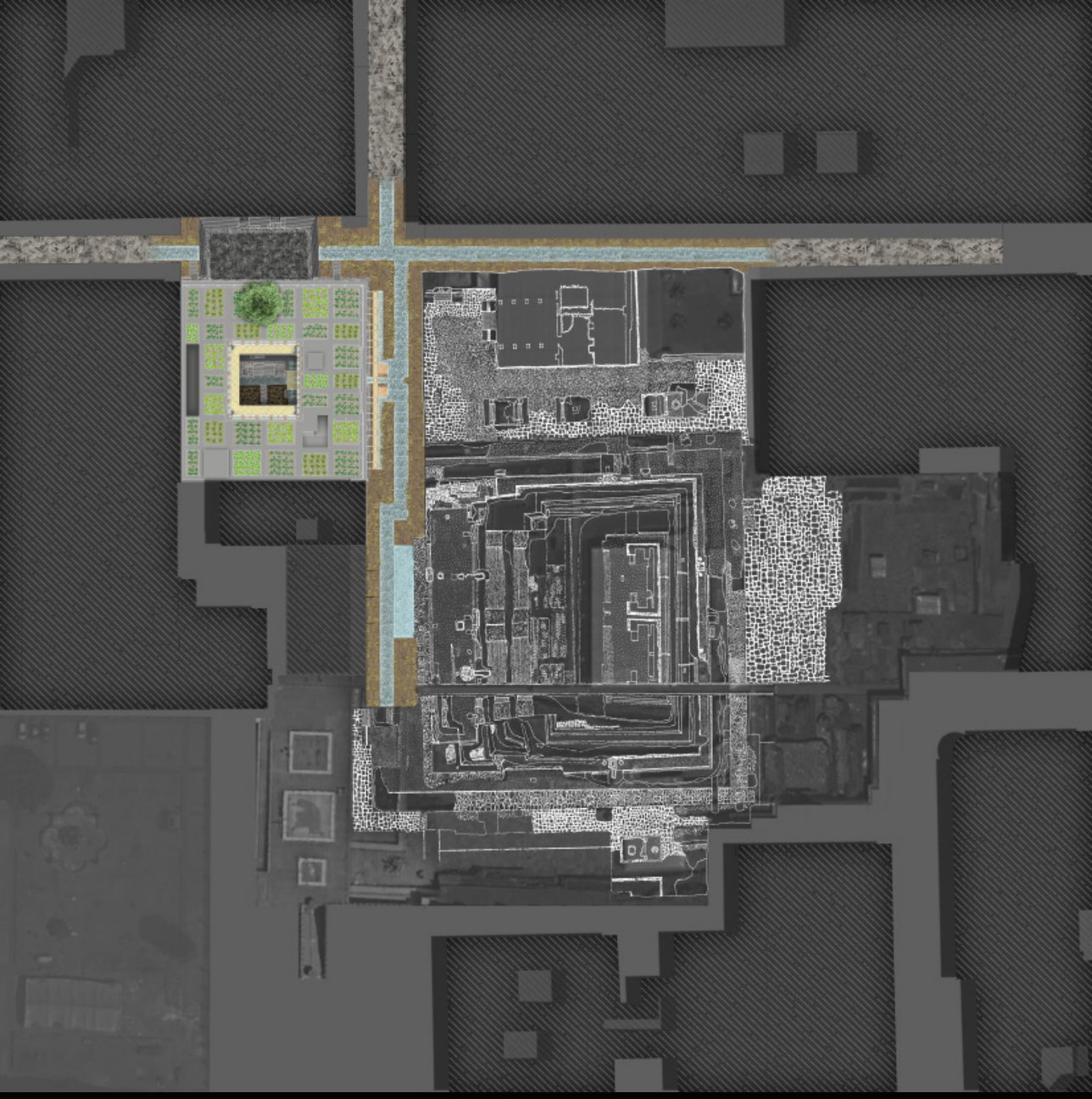


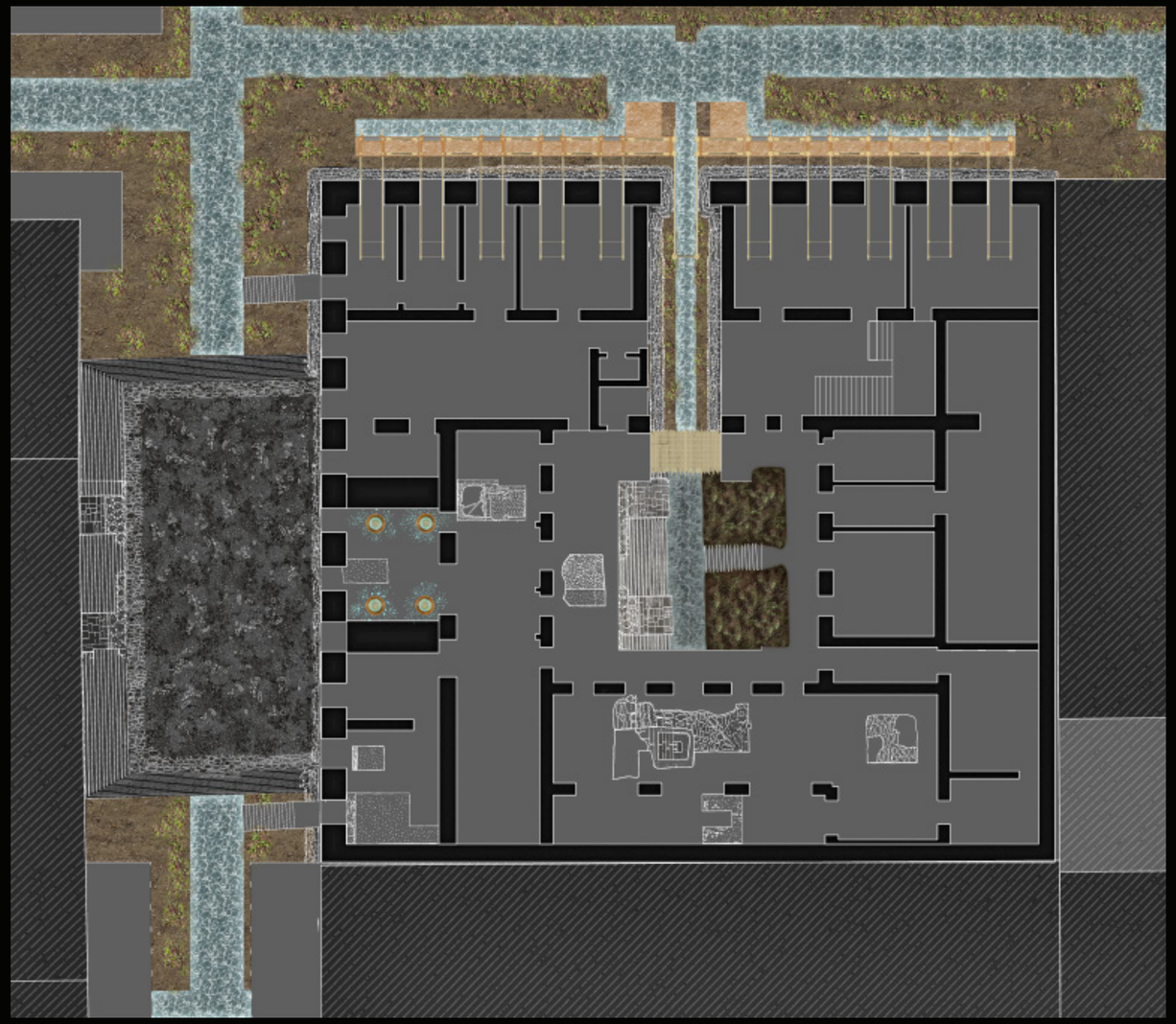


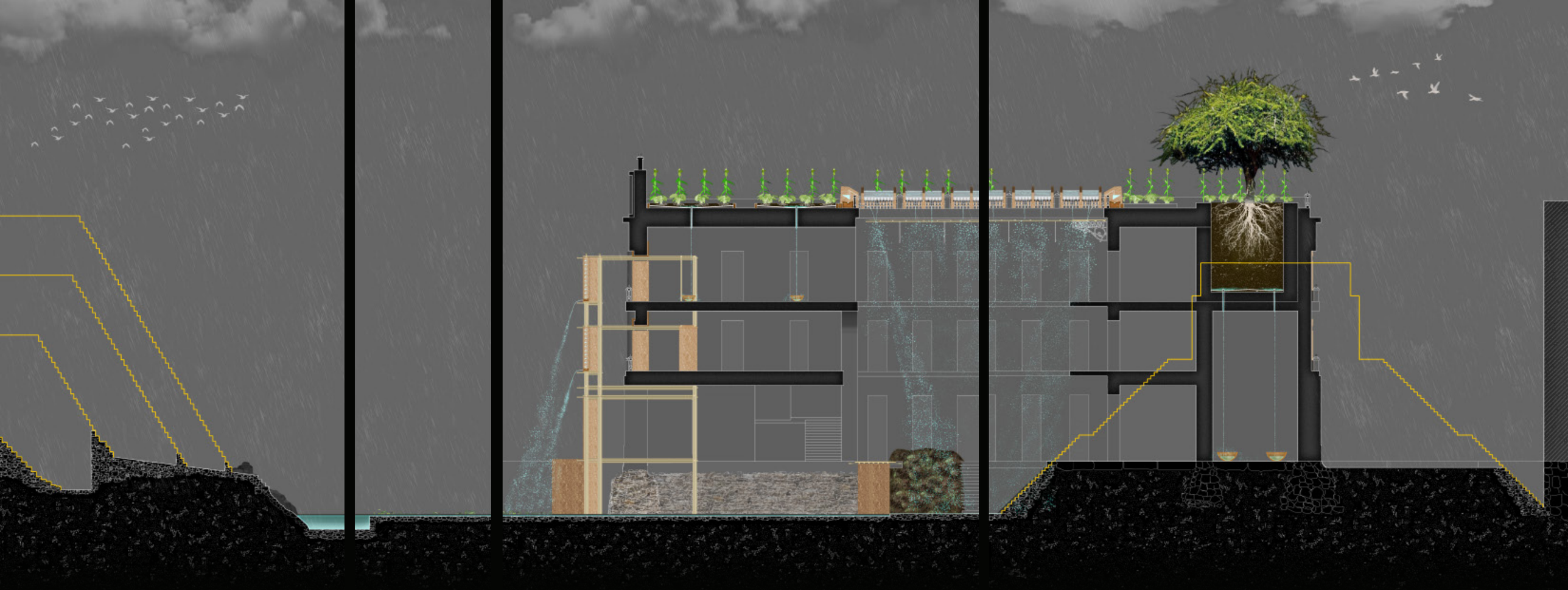


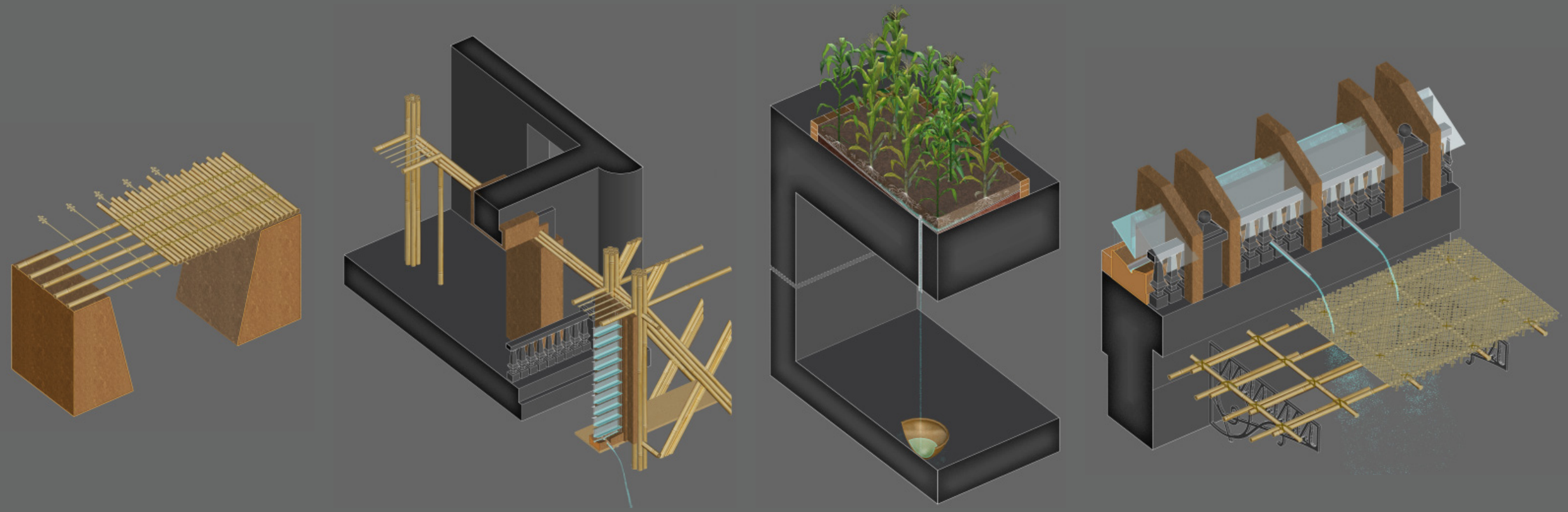


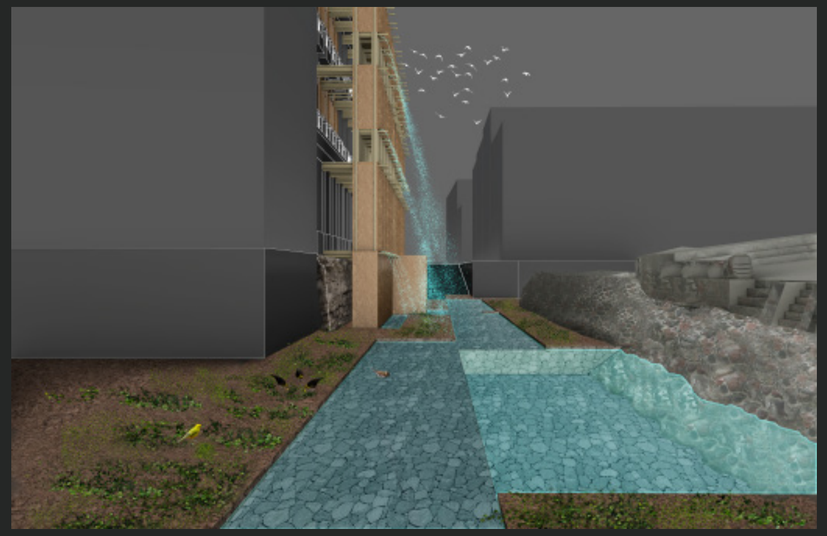
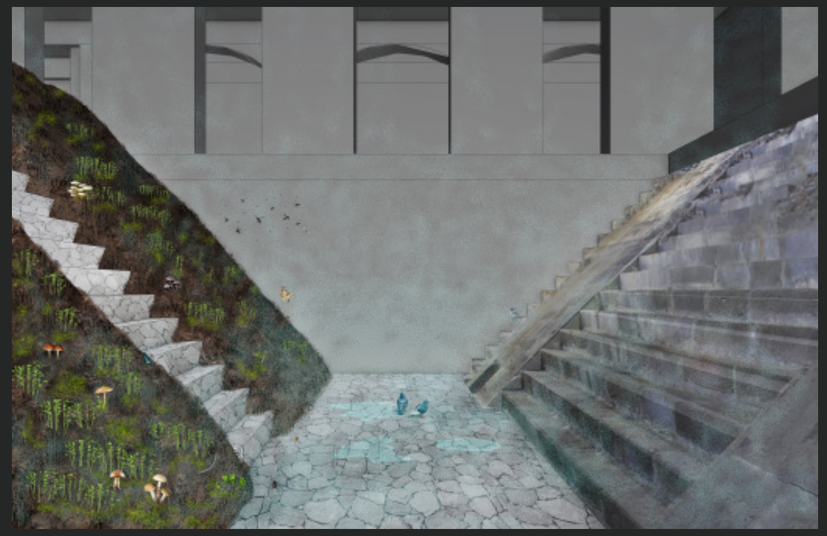
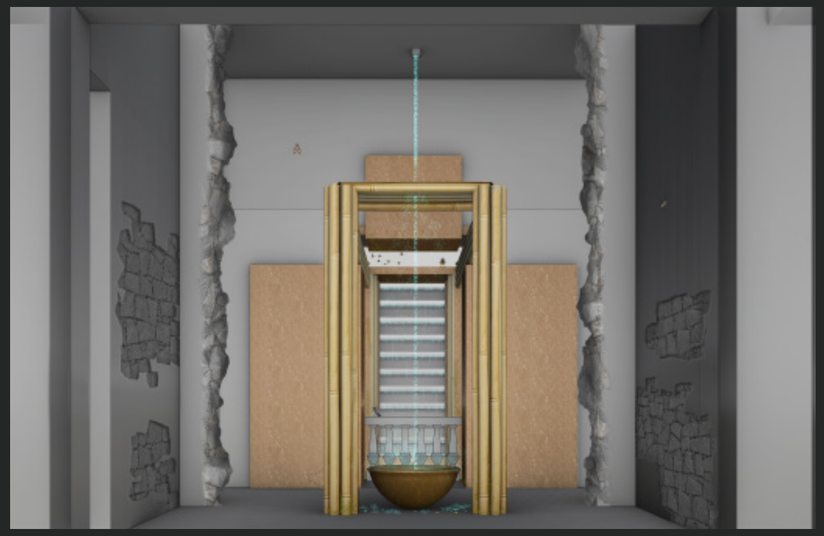
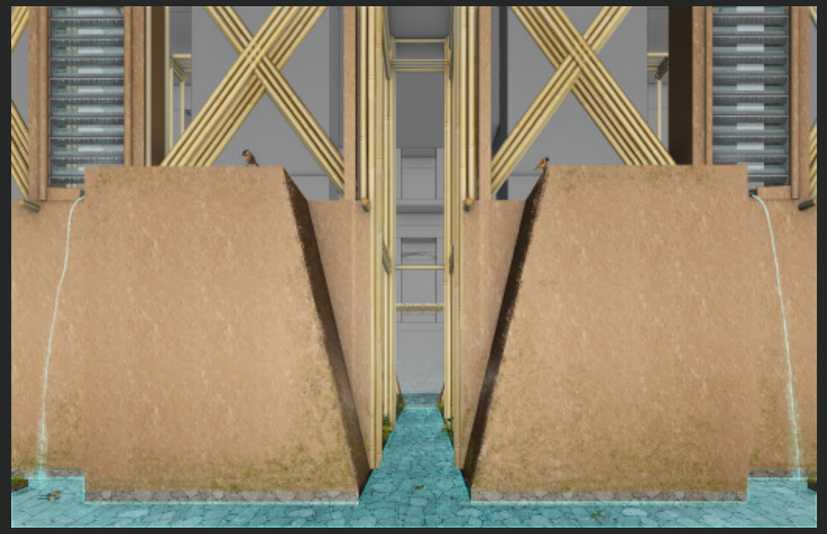
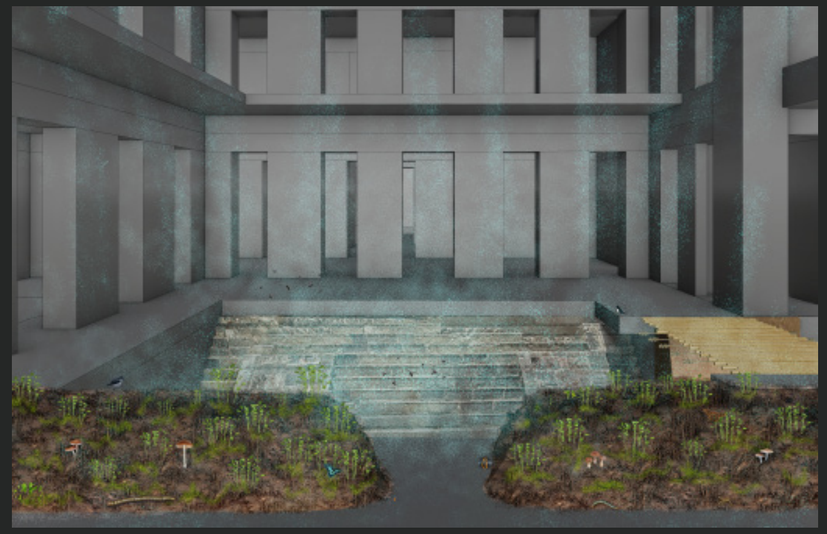










Naturalized Neighborhoods to Residentialize the Metropolitan Forest

Juan Herreros + Aistyara Shanning

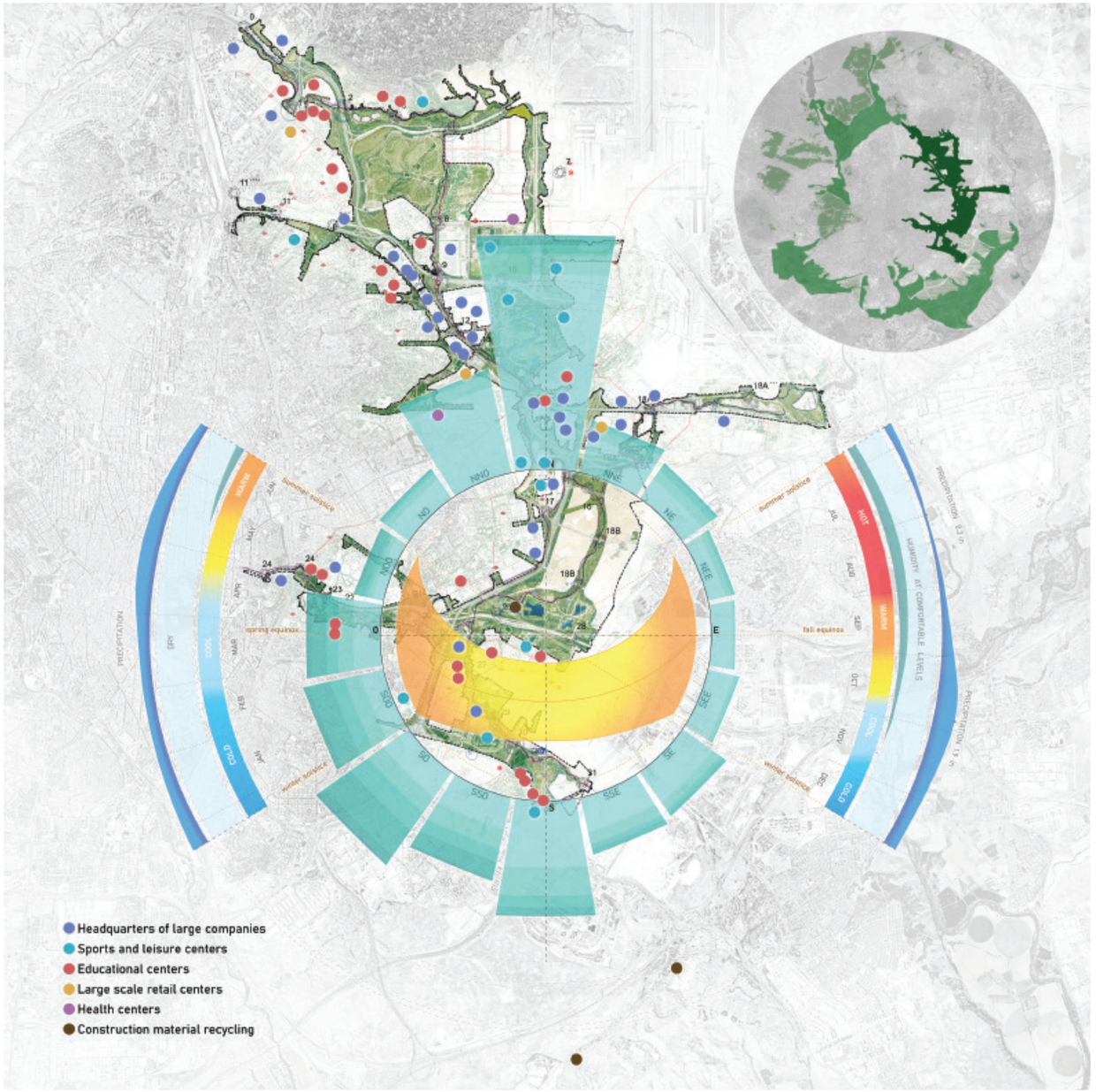
03 Nido Ambroz: Nested in Water

spring 2026

Nido Ambroz is a co-living housing project located in Lot 2 of Madrid's Bosque Metropolitano, conceived as an alternative to the proposed urban development of Nueva Centralidad del Este. The project begins with the ecological and historical significance of Laguna Ambroz, a former extraction pit that gradually transformed into a thriving wetland ecosystem after mining operations ended. This process of natural regeneration became the project's central precedent, demonstrating the site's capacity for healing and coexistence between water, soil, vegetation, insects, and migratory birds. Rather than imposing a continuous urban fabric onto this sensitive landscape, Nido Ambroz proposes a porous housing strategy that reinterprets Madrid's dense urban block by fragmenting and dispersing it across the site, allowing biodiversity and seasonal flood conditions to move through and around the architecture. Using excavated earth from the site alongside recycled construction materials sourced from nearby recycling centers, the project develops a regenerative material and construction strategy rooted in the landscape itself. Organized around shared ecological and social spaces, the proposal integrates wetland stewardship programs, adaptable co-living units, floodable forests, and habitats for non-human species, positioning housing not as a force of occupation, but as an active participant in ecological restoration and collective living.

Project Development:

Nadeysh Sophie Ojasmar + Eiwa Colburn + Eugenia Lopez Valdes


Headquarters of large companies
Sports and leisure centers
Educational centers
Large scale retail centers
Health centers
Construction material recycling

TYPES OF SOIL
Quartz-feldspathic Sandstones
Arkose Sands
Flint Layers
Coarse Arkoses with Clasts
PROPOSED TYPES OF FORESTS
Floodable Forest
Border Forest
Afforested Woodland
Riverbank Forest

Unknown - 1300s
Foundation
Village of Ambroz
with its own parish of
San Benito Abad

1575
First Detailed Record
Felipe II's
Relaciones Topográficas

1785 - 1803
Village Abandoned
Possible Causes Linked to Malaria

1936 - 1939
Civil War
Bunkers and trenches built

1977
30 Year Mining
Concesion Granted to Tolsa
Extraction of Spiolite

1980 - 2004
Highway Development

2007
Mining Concesion Ends
and a Lagoon Begins to Form

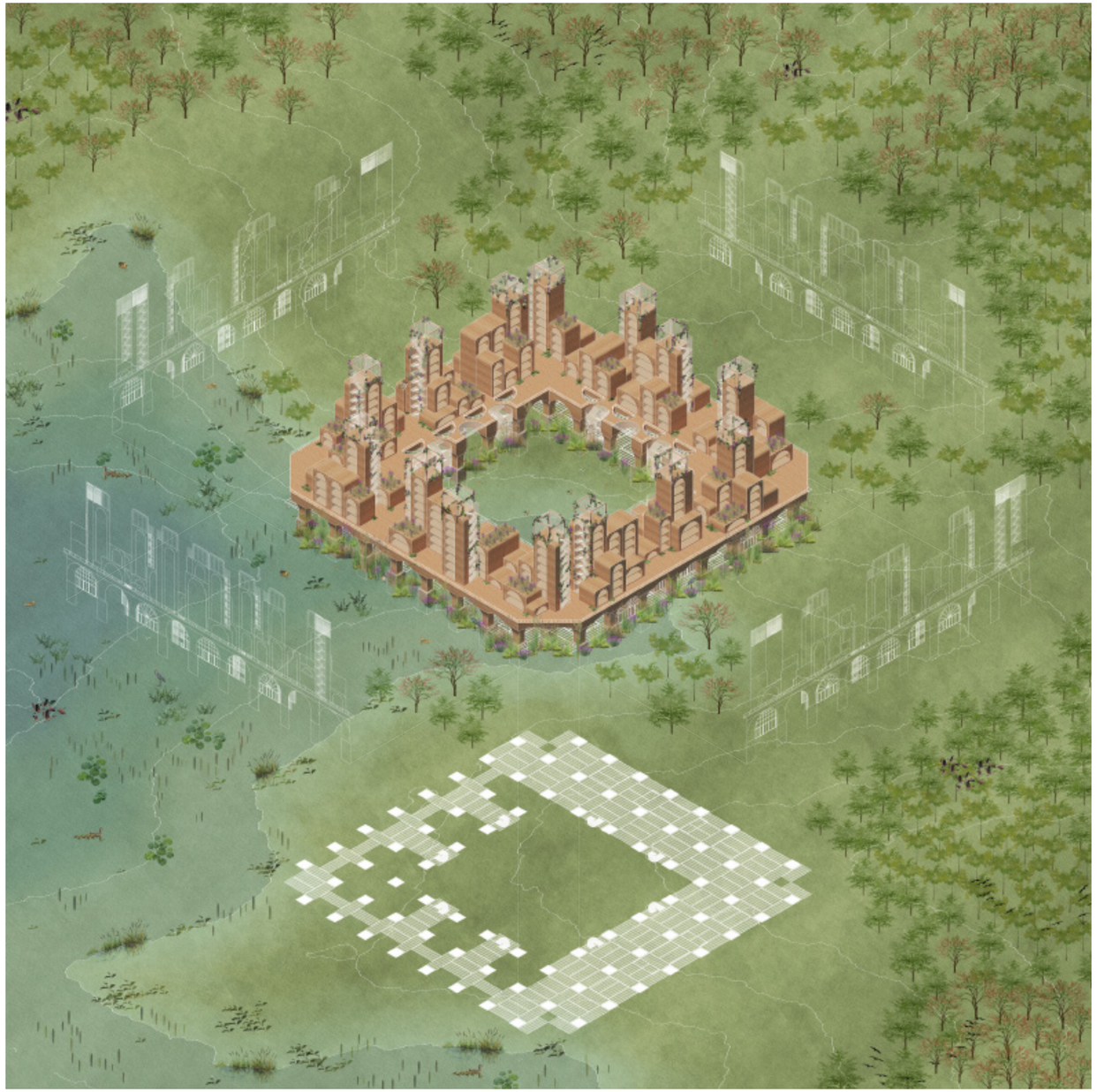
2015
Growth and Establishment
of Ambroz Lagoon
156 bird species,
1,080 invertebrate species, and
449 plant taxa colonise the site

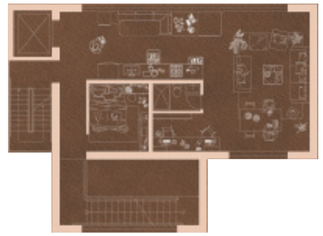
2018
San Blas District Board
Protection Plan Approval
for Ambroz Lagoon

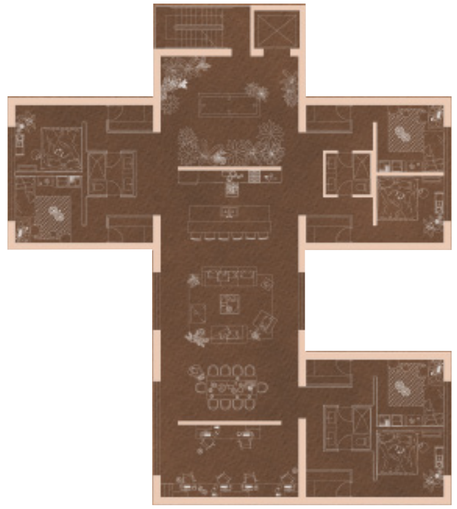
2020
Metropolitan Forest Competition
is Launched
"Butterfly Effect" anounced as the Winner
for Lot 2 Development

2023
"New Centrality of the East"
Project is Launched

2026
Raised Concerns of Ambroz Lagoon
Being Under Threat by NCE







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EUGENIA LOPEZ VALDES