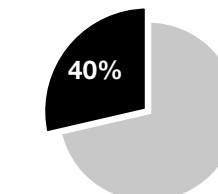


LOCATION
Kuala Lumpur, Selangor, Malaysia

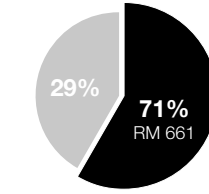


AVAILABILITY:
Import-dominated food commodity



Percentage of imported food in Malaysia.
Source: Seng, 2003.

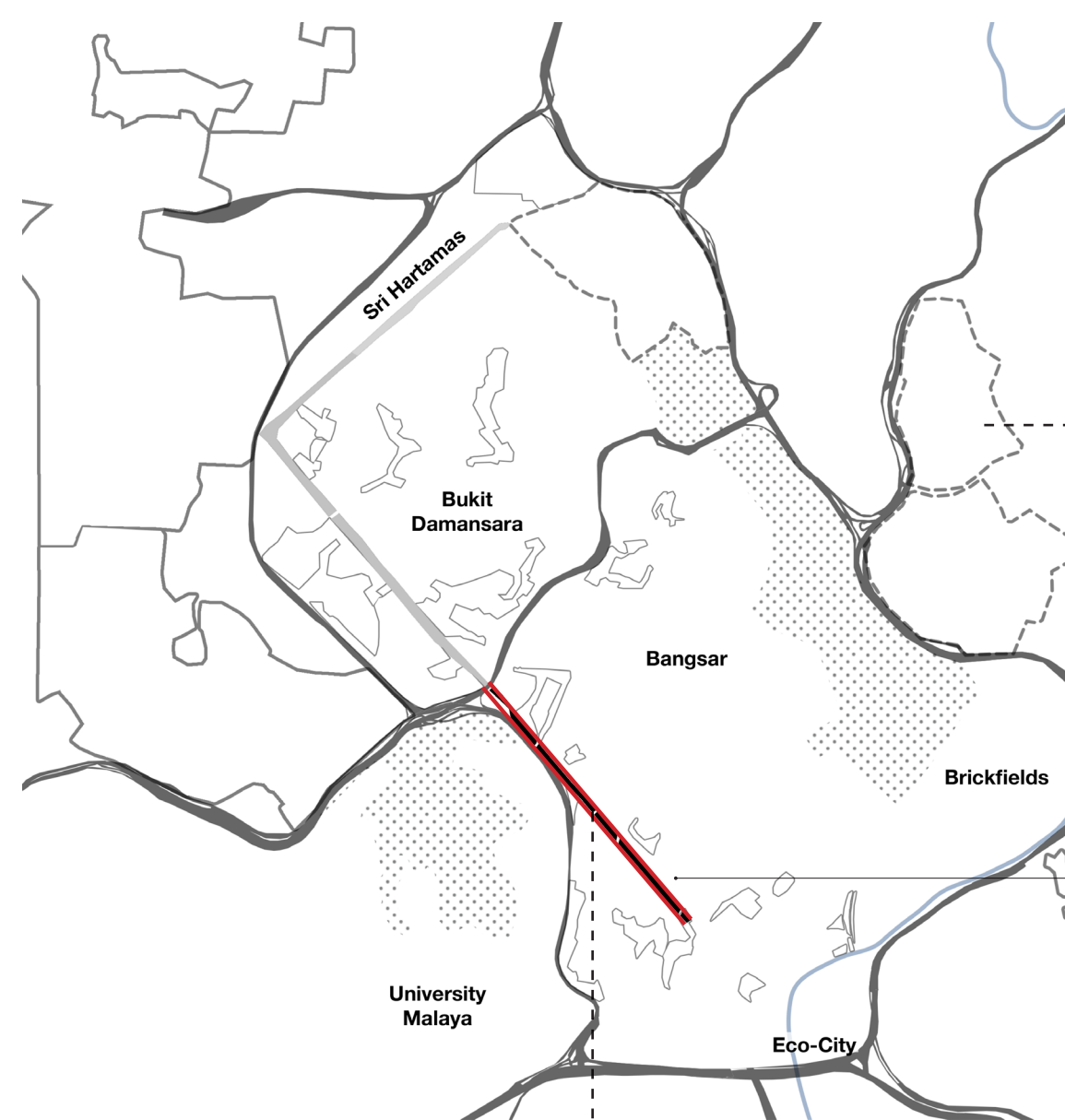
ACCESSIBILITY:
High household food expenditure



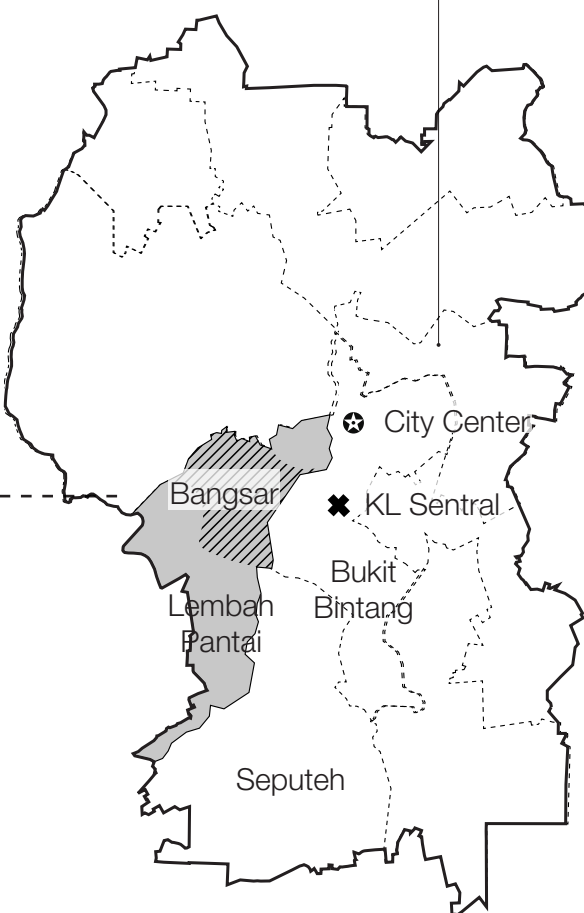
Household monthly expenditure in 2016.
Source: Sundaram et al., 2019

REGIONAL ISSUE
Food security

PROJECT FRAMEWORK



LOCAL OPPORTUNITY
Infrastructural voids



BANGSAR Sri Hartamas - TNBHQ
electrical transmission line 132 kV
(low emission)
2 km, 12.3 ha

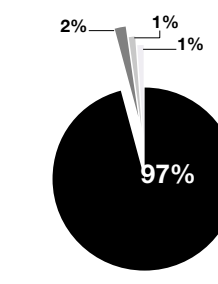


STABILITY:
Low preparedness to food shocks

COVID Pandemic: Food Shock
price of a cucumber rise by **300%**
during government-ordered Movement Control Order (MCO), 2020

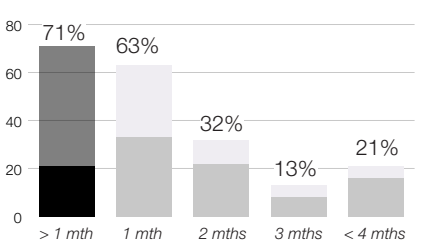
UTILISATION:
Difficulty in meeting nutritional needs

Challenges to prepare healthy food for children



Source: United Nations Children's Fund (UNICEF) et al., 2020.

How long will your savings last? (%)



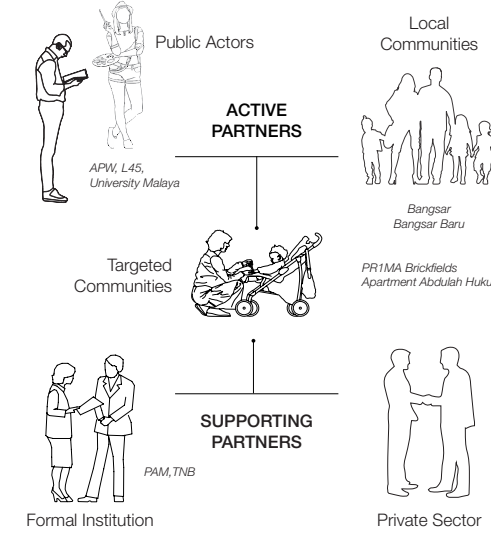
Source: United Nations Children's Fund (UNICEF) et al., 2020.

POTENTIAL SOLUTION
Agro-civism/ civic agriculture

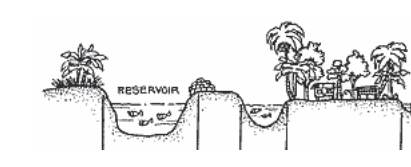
1. Farming on available land



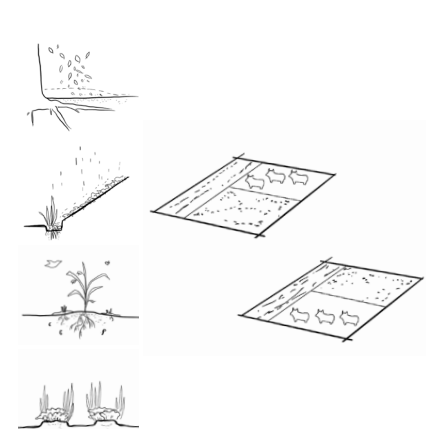
2. Cooperation between various actors in the community



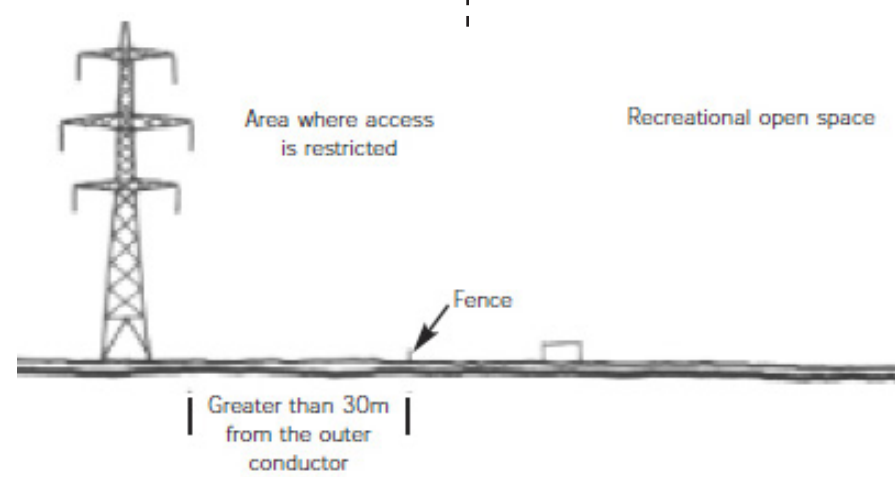
3. Preservation of local, ethnobotanical and vernacular character



4. Design considerations: Environmental conservation & aesthetic values



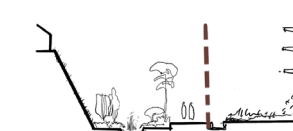
WORKING METHOD
Designing with clearances



1. Transmission buffers



2. Environmental buffers



3. Residential buffers

HOLISTIC OUTPUT

URBAN (XL) SCALE

Continuous Productive Urban Landscapes (CPULs) Potential Map
Accessibility, Physical Barriers, and Environmental Actors Network Strategy Map

NEIGHBOURHOOD (L) SCALE

Neighbourhood Scale Strategy Map
User & Activity Strategy Diagram
Landscape Aesthetics Diagram

LOCAL (S) SCALE

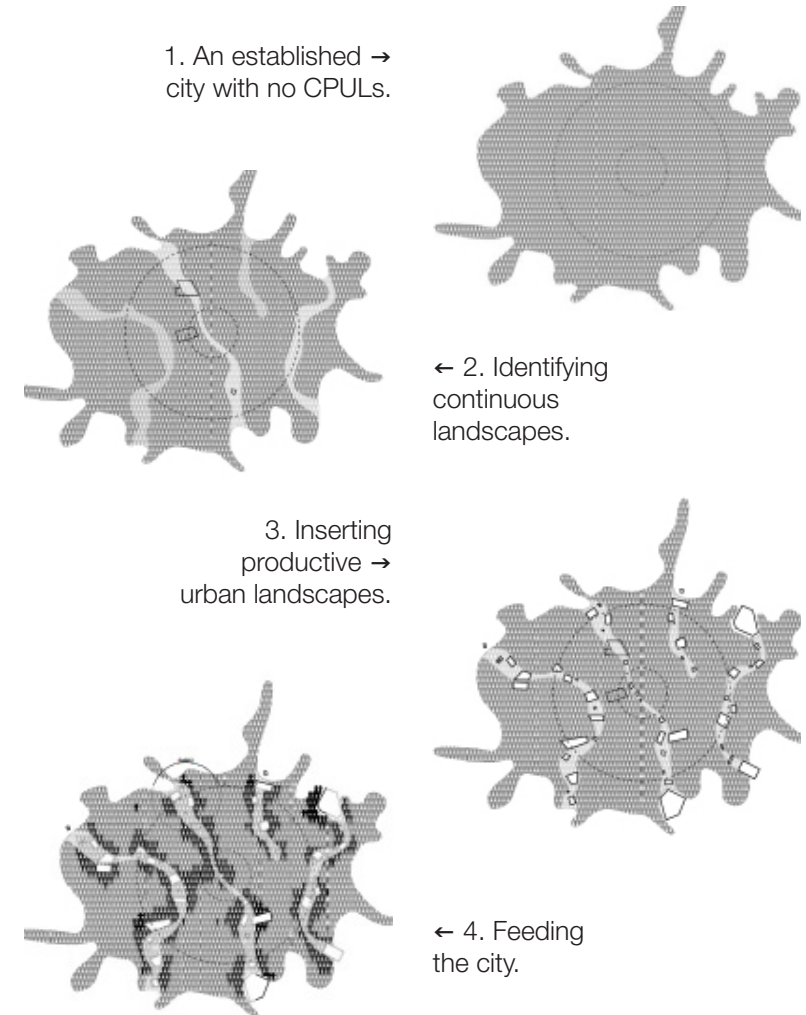
Masterplan Design
Masterplan Structure
Parcel Design
Landscape Programs
Agricultural System
Ethnobotanical Recommendations

URBAN (XL) SCALE OUTPUT

CONTINUOUS PRODUCTIVE URBAN LANDSCAPES (CPULs)

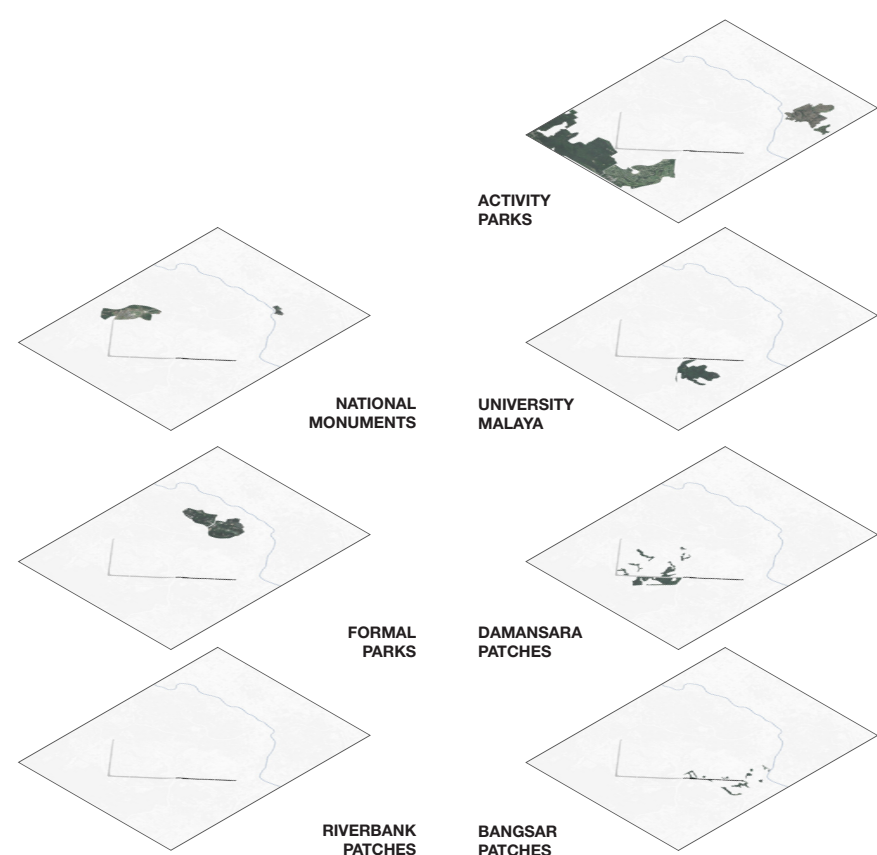
Strategical background

Source: *Vijoen, Bohn, & Howe, 2005*



IDENTIFICATION OF URBAN LANDSCAPES AROUND BANGSAR

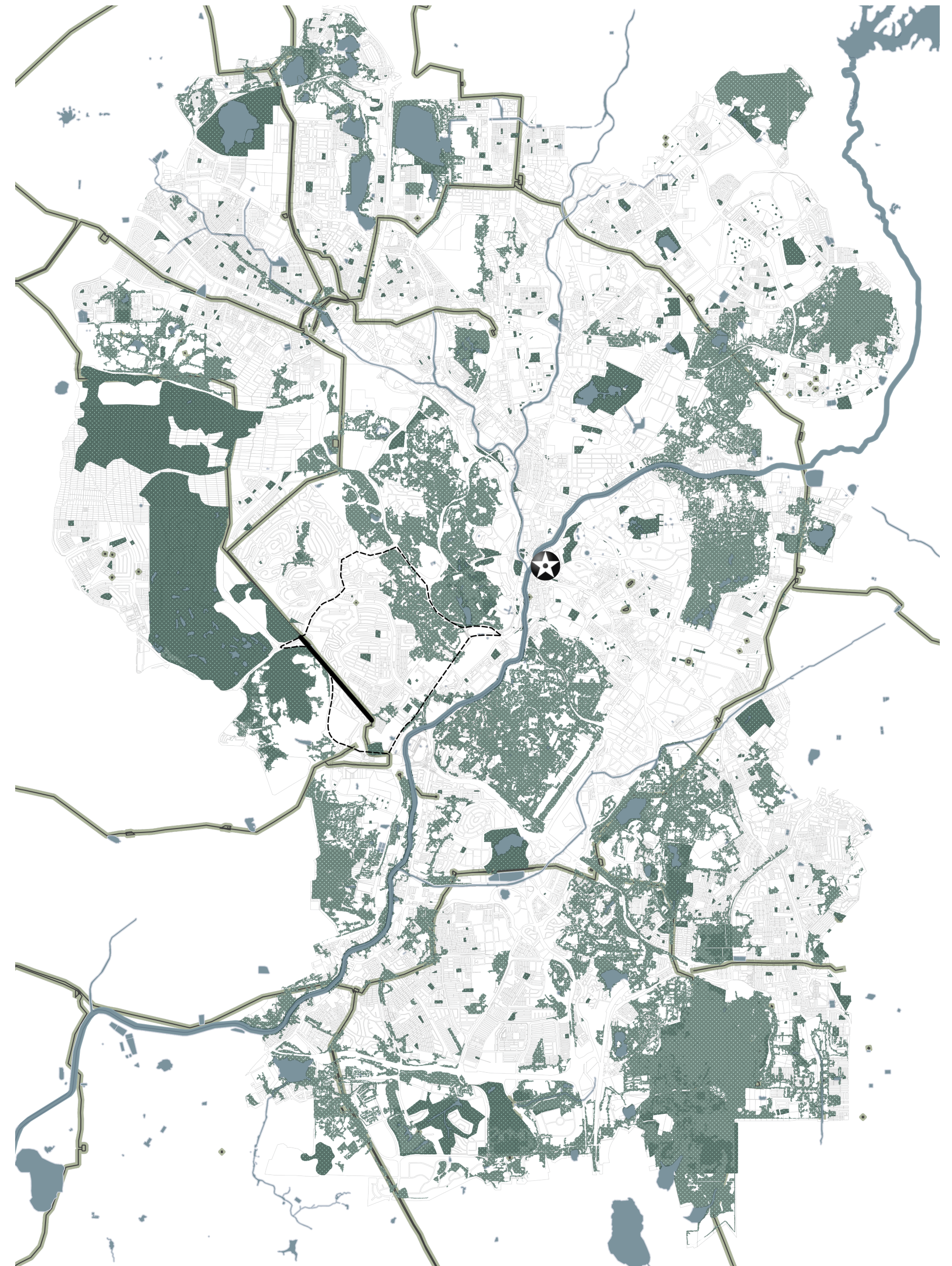
Potential neighbourhood CPUL connections



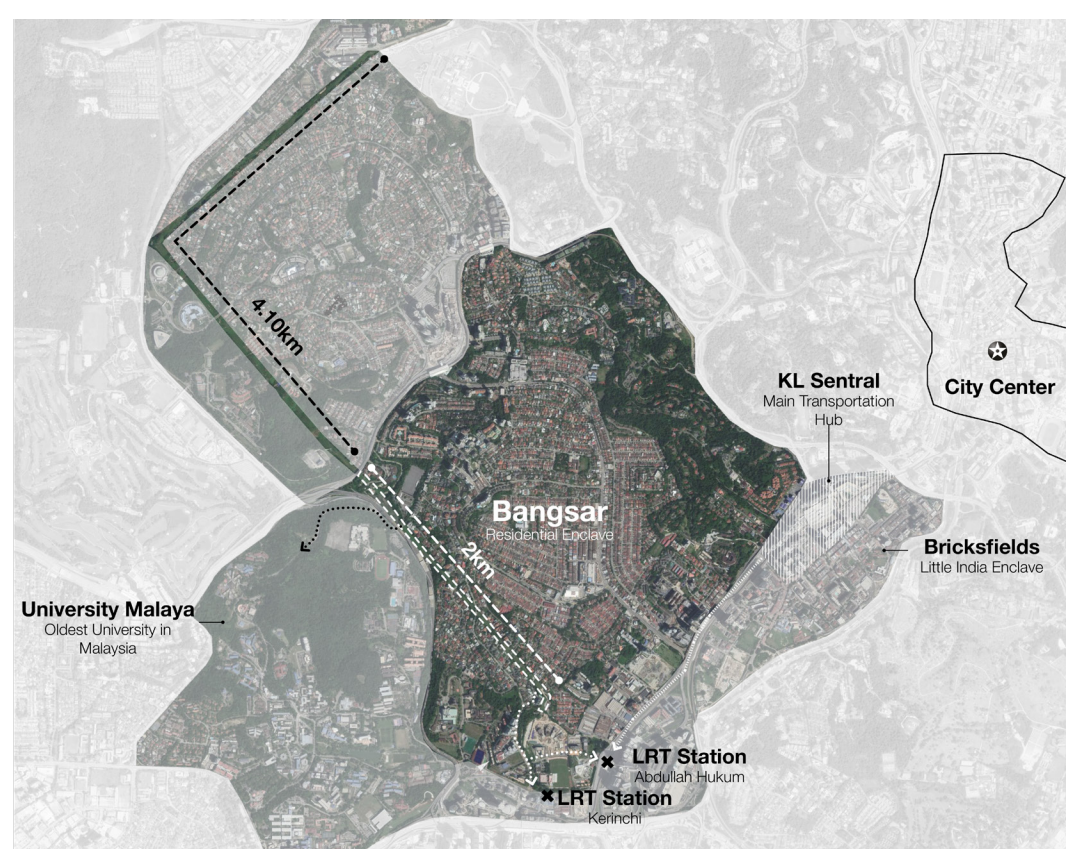
Potential of CPULs in Kuala Lumpur

The infrastructural lines (marked in yellow), especially, run through several strategic areas.

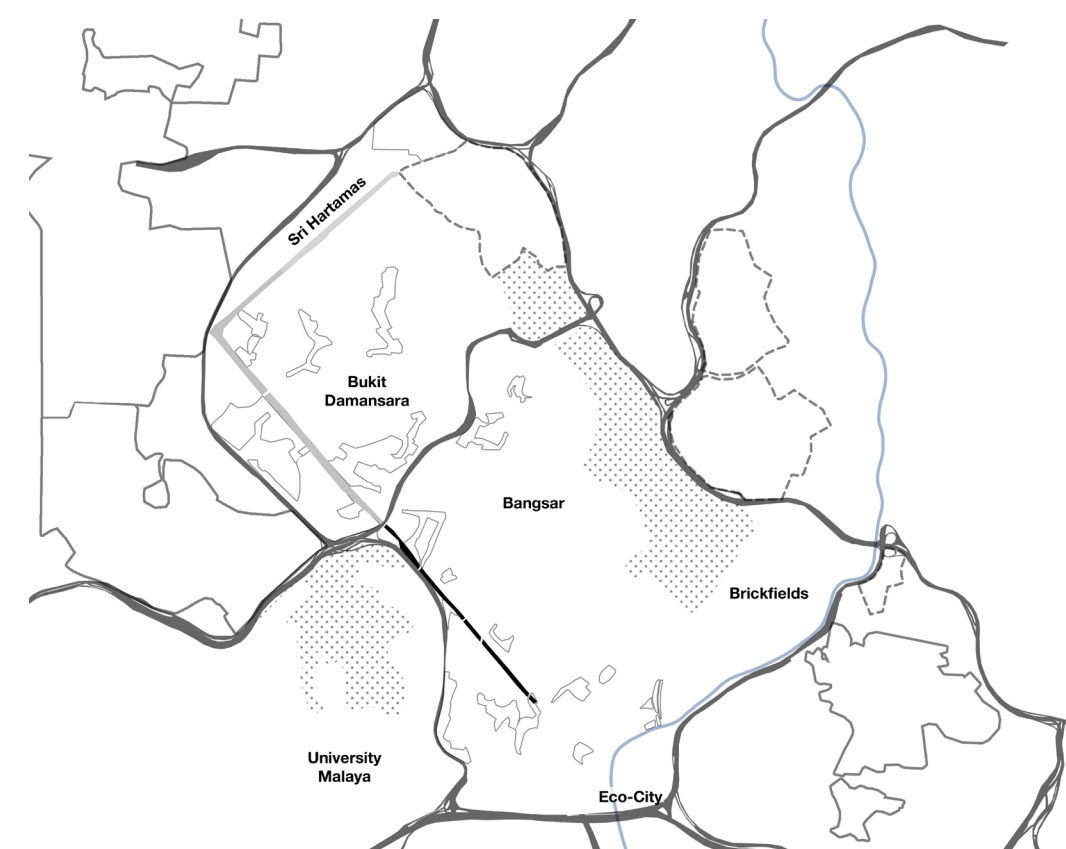
Seeing the potentials of the Bangsar TNB line, other infrastructure-related green areas can be treated with the same considerations, contributing to a new kind of green network, and creating a network of continuous productive urban landscapes (CPULs) throughout the city.



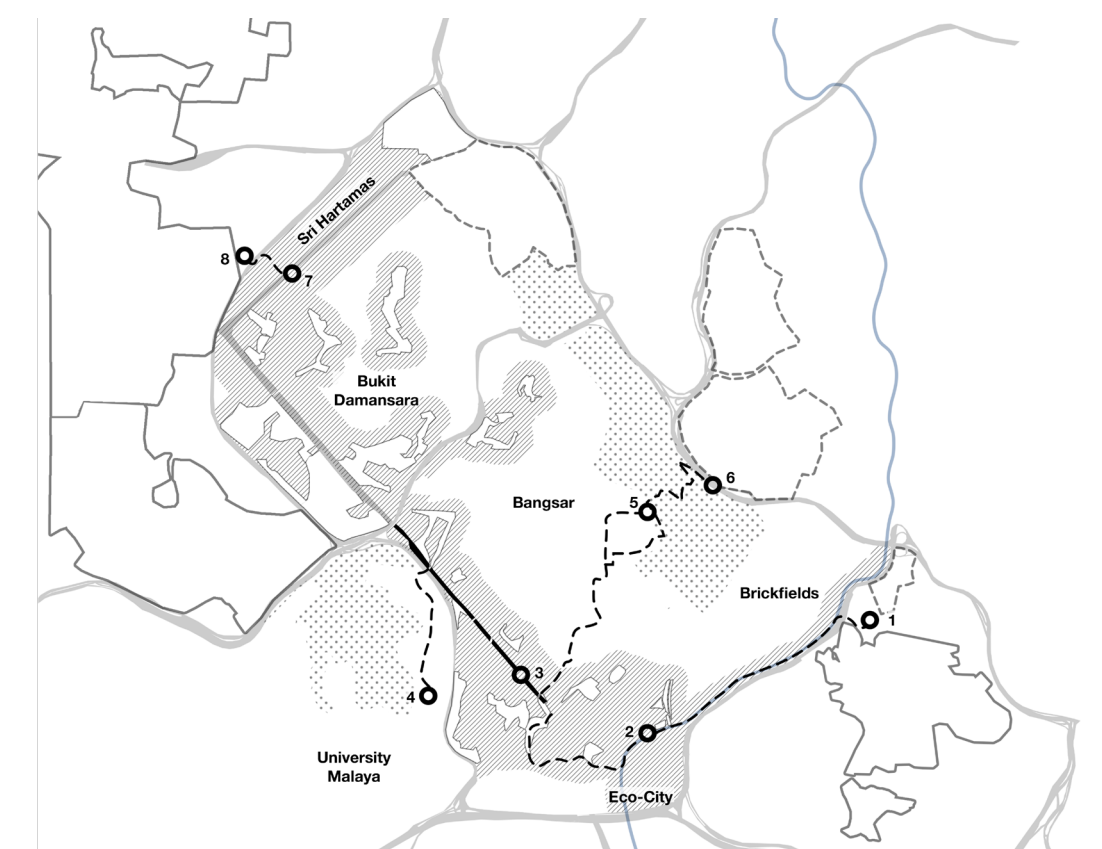
ACCESSIBILITY NETWORK MAP



PHYSICAL BARRIERS MAP



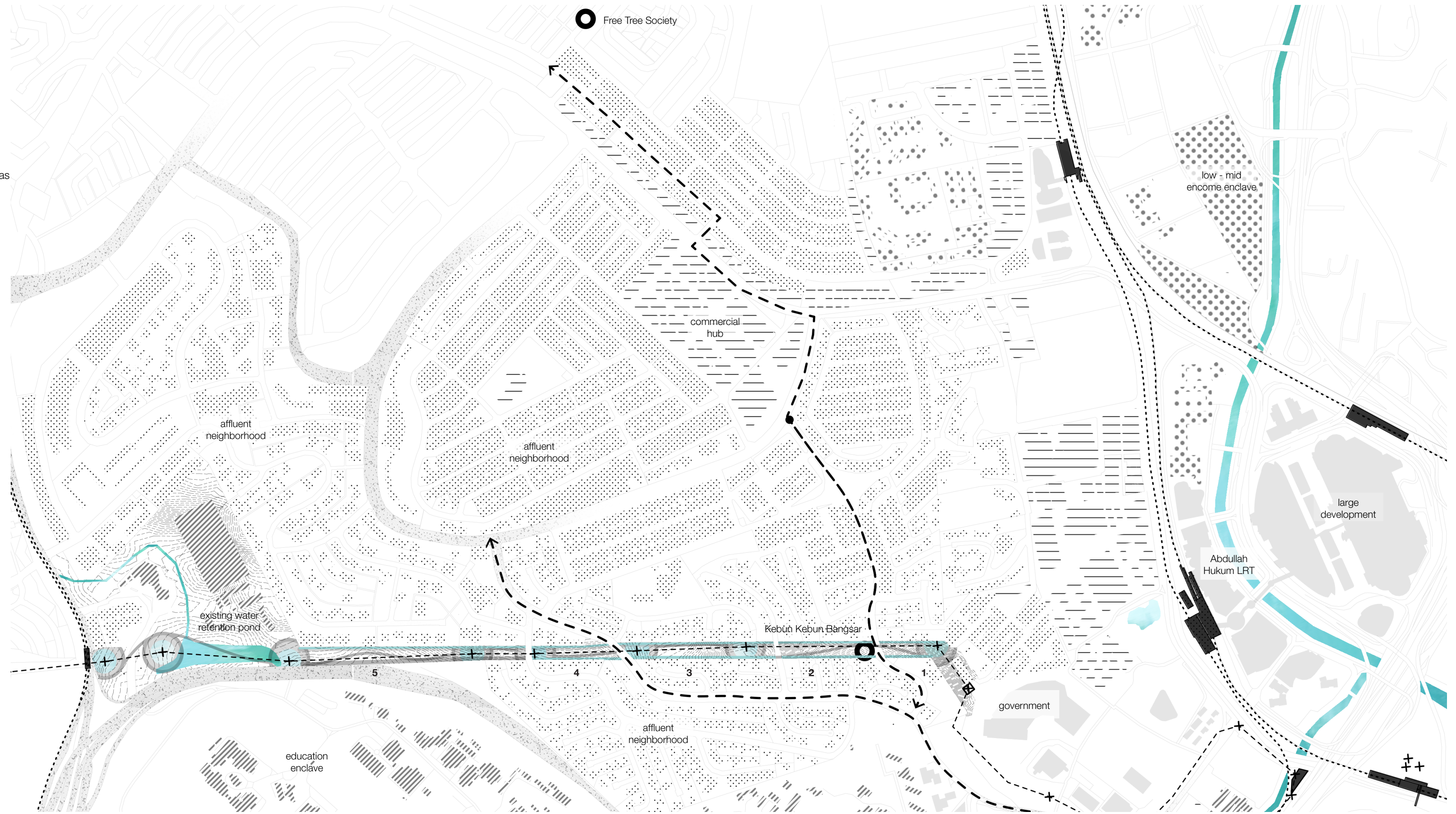
ENVIRONMENTAL ACTORS NETWORK STRATEGY MAP



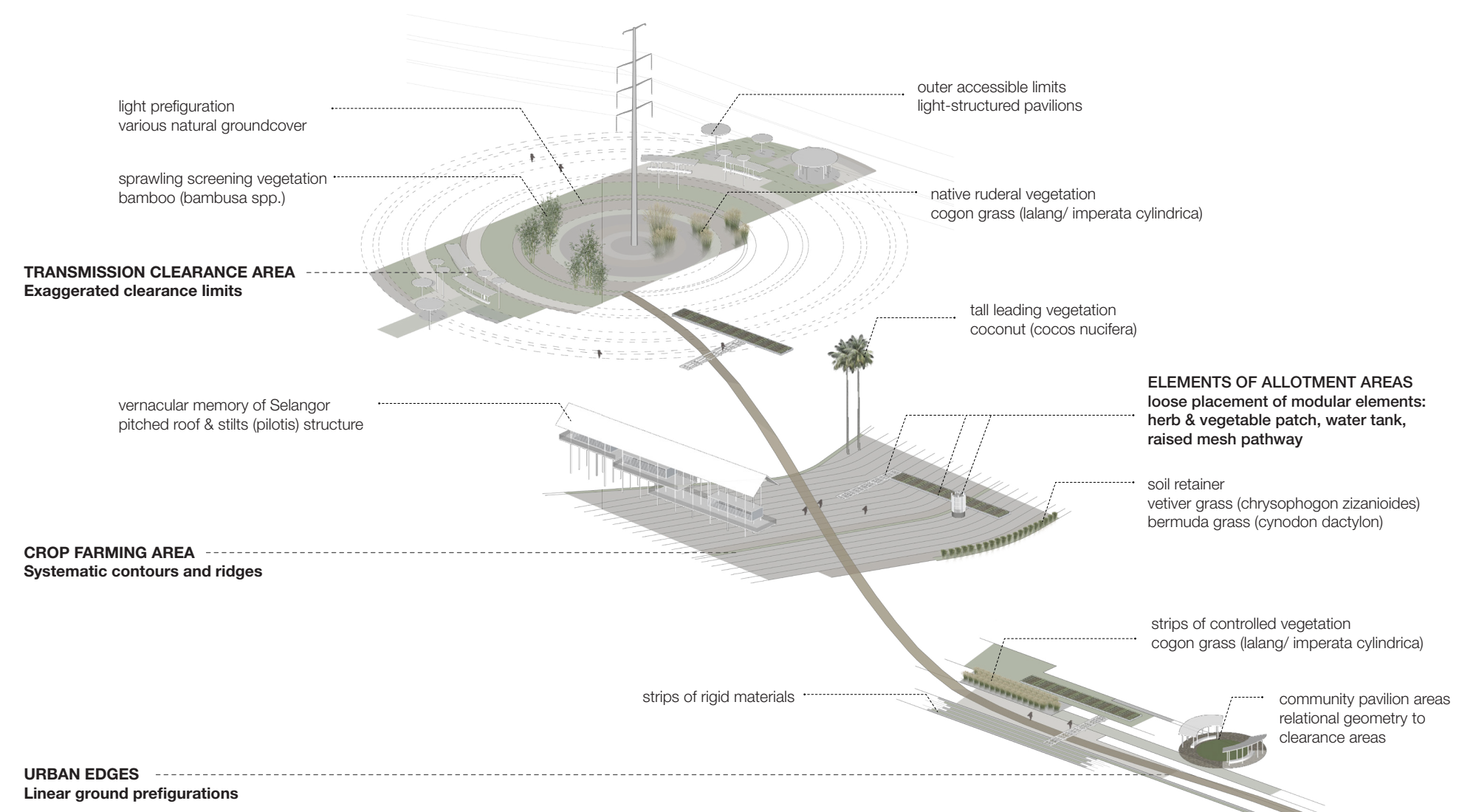
NEIGHBOURHOOD (L) SCALE OUTPUT

STRATEGY MAP

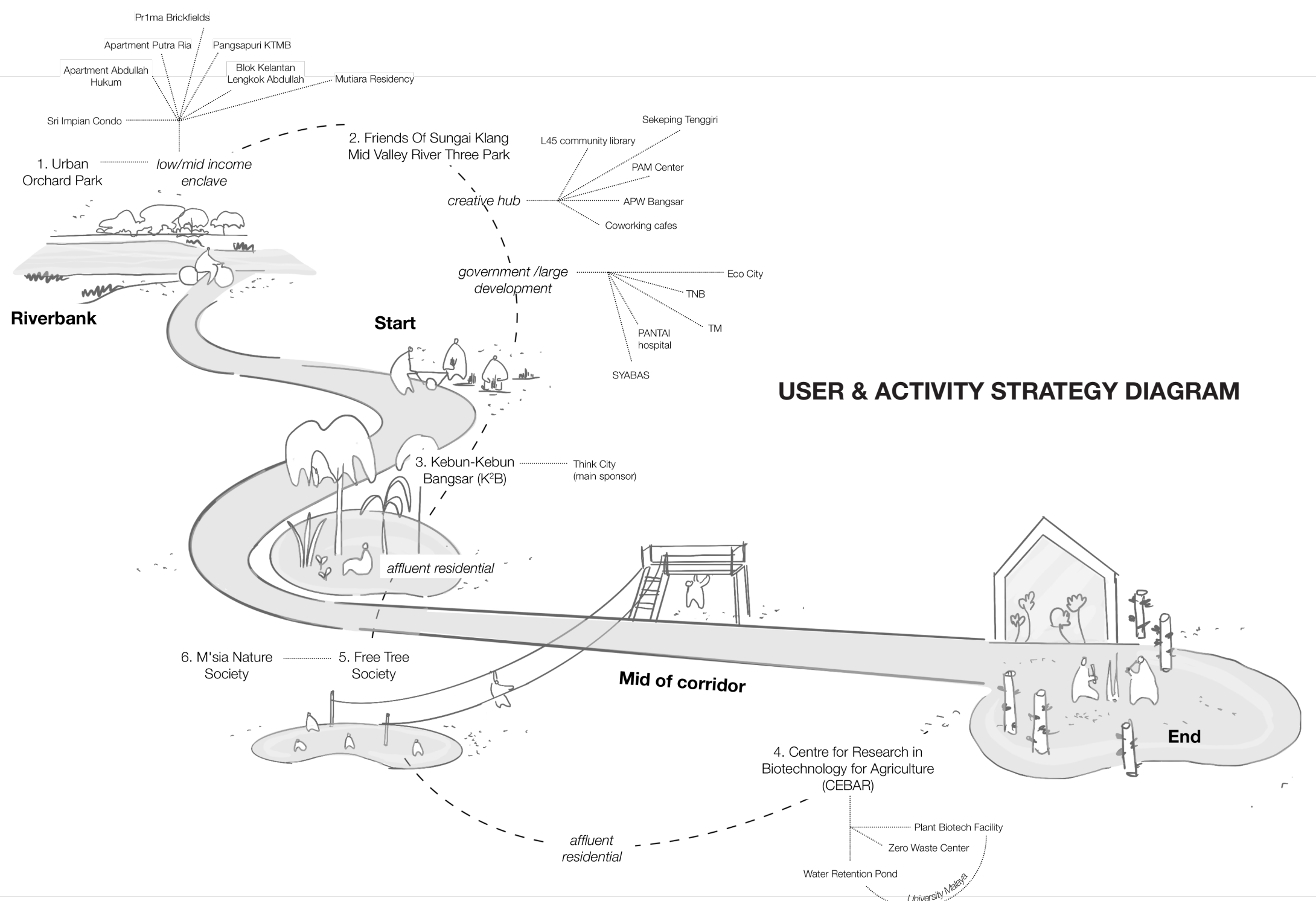
- Legend
- permanent structure
 - ▨ 30m safety clearance
 - water buffer
 - vegetation soft buffer
 - ⊛ transmission tower & electric lines
 - pedestrian access
 - ↔ drive-by areas



LANDSCAPE AESTHETICS DIAGRAM



USER & ACTIVITY STRATEGY DIAGRAM



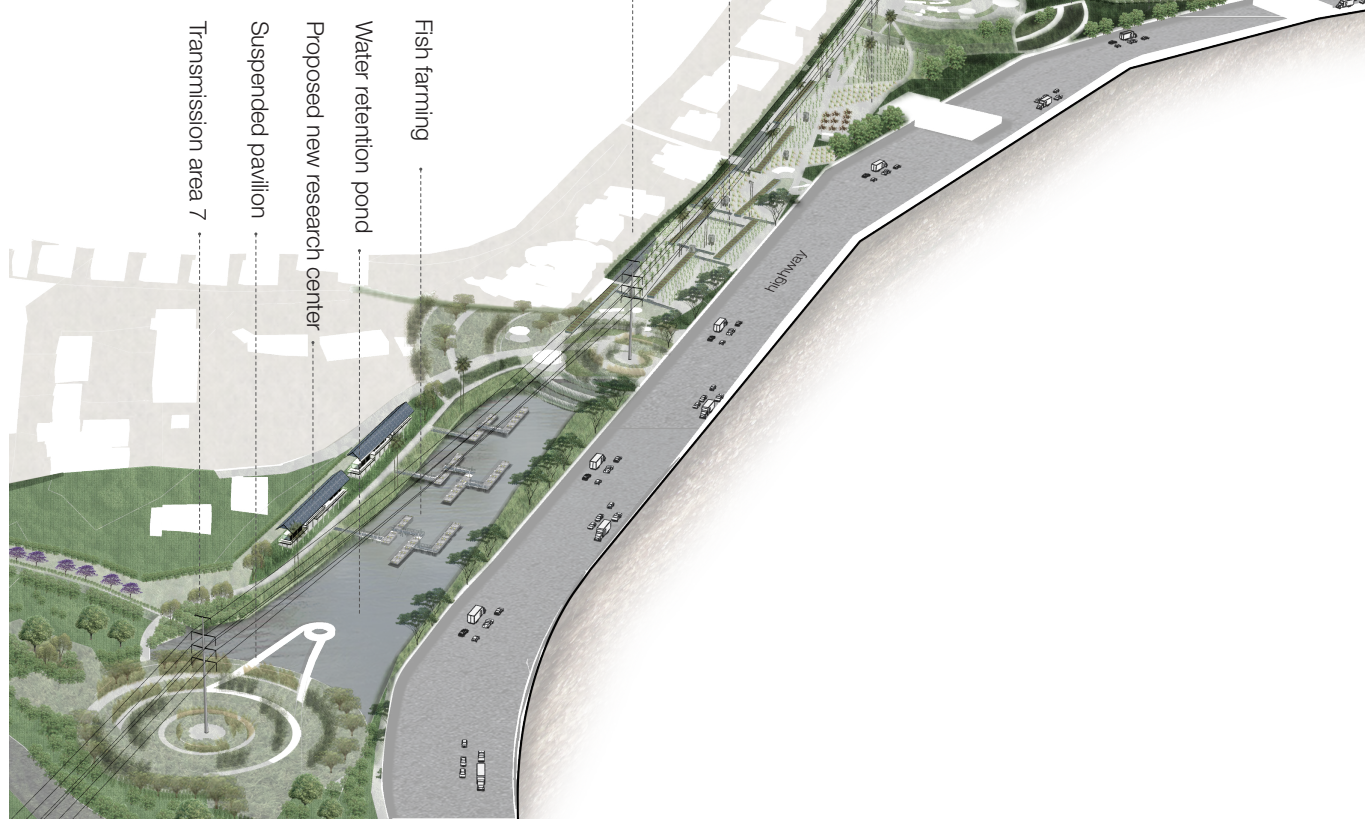
MASTERPLAN DESIGN



PARCEL 5 Urban activity areas

- Highway buffer
- Forest activity park
- Open space
- Transmission area 5
- Lawn & grazing area
- Orchard & agricultural area
- Transmission area 6

PARCEL 5 Wetland park

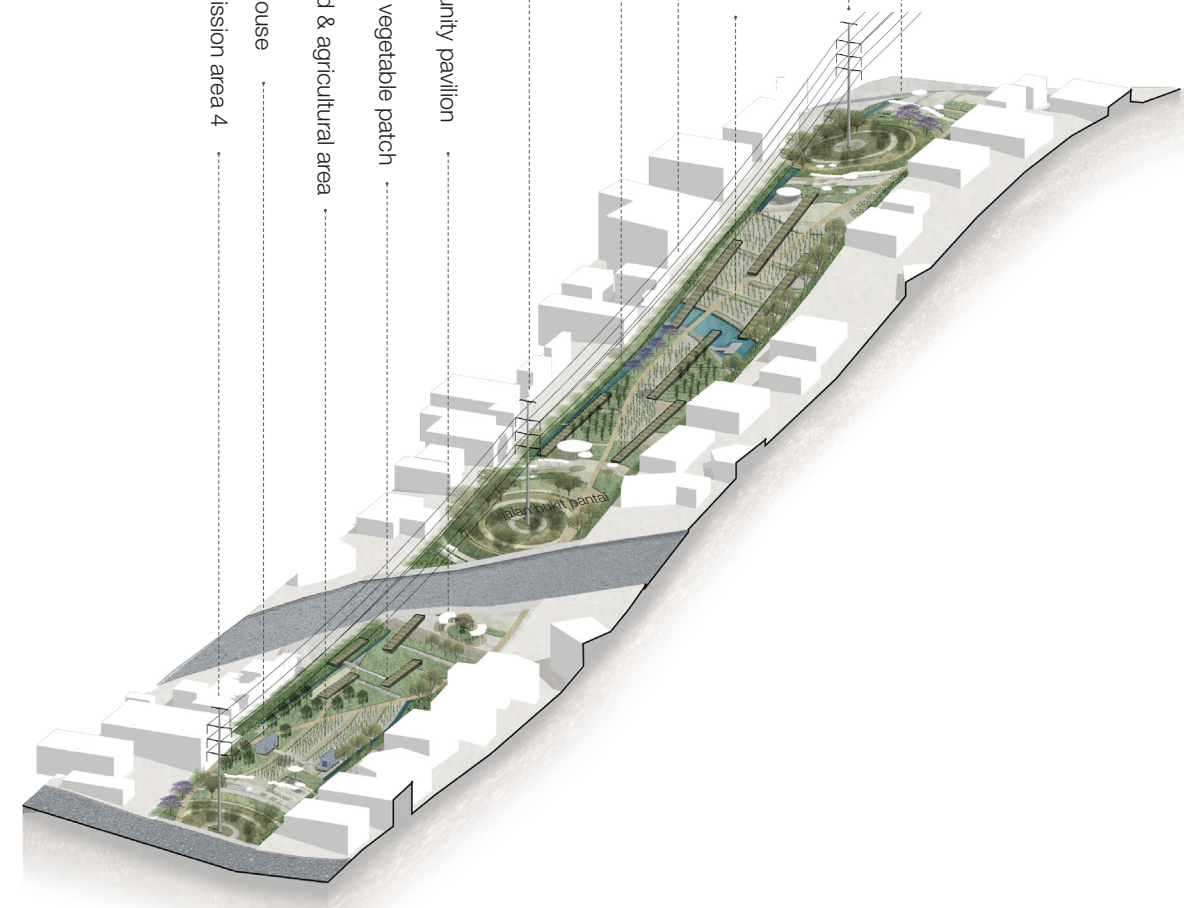


PARCEL 3 Orchard & agricultural area

- Open space
- Transmission area 2
- Orchard & agricultural area
- Water reserve
- Herb & vegetable patch
- Transmission area 3

PARCEL 4 Orchard & agricultural area

- Community pavilion
- Herb & vegetable patch
- Orchard & agricultural area
- Greenhouse
- Transmission area 4



PARCEL 1 Parking & Nursery

- Agricultural area
- Transmission area 1
- Greenhouse
- Parking space

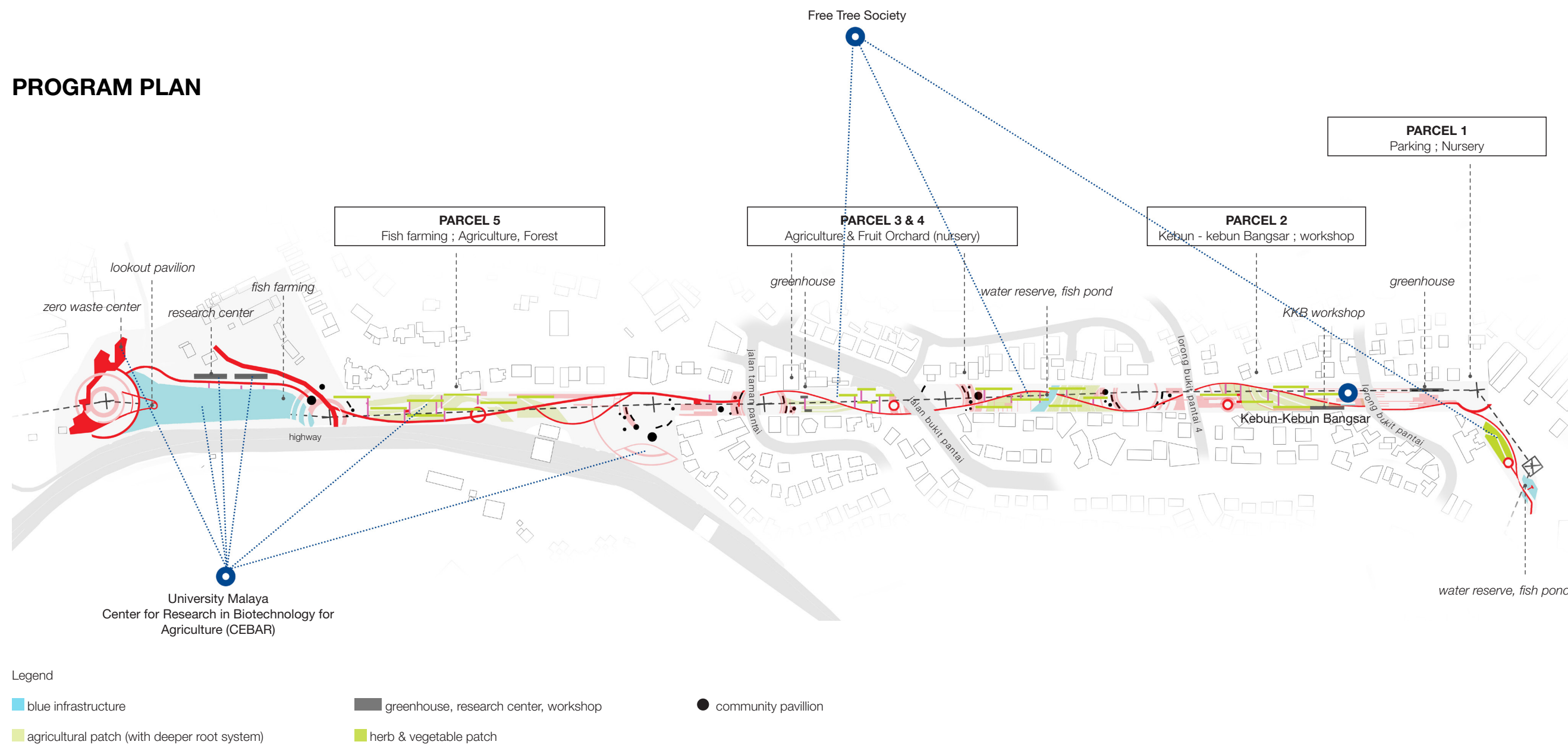
PARCEL 2 KKB, workshop

- Open space
- Reorganised KKB workshop
- Herb & vegetable patch
- Orchard & agricultural area
- Community pavilion
- Open space



MASTERPLAN STRUCTURE

PROGRAM PLAN

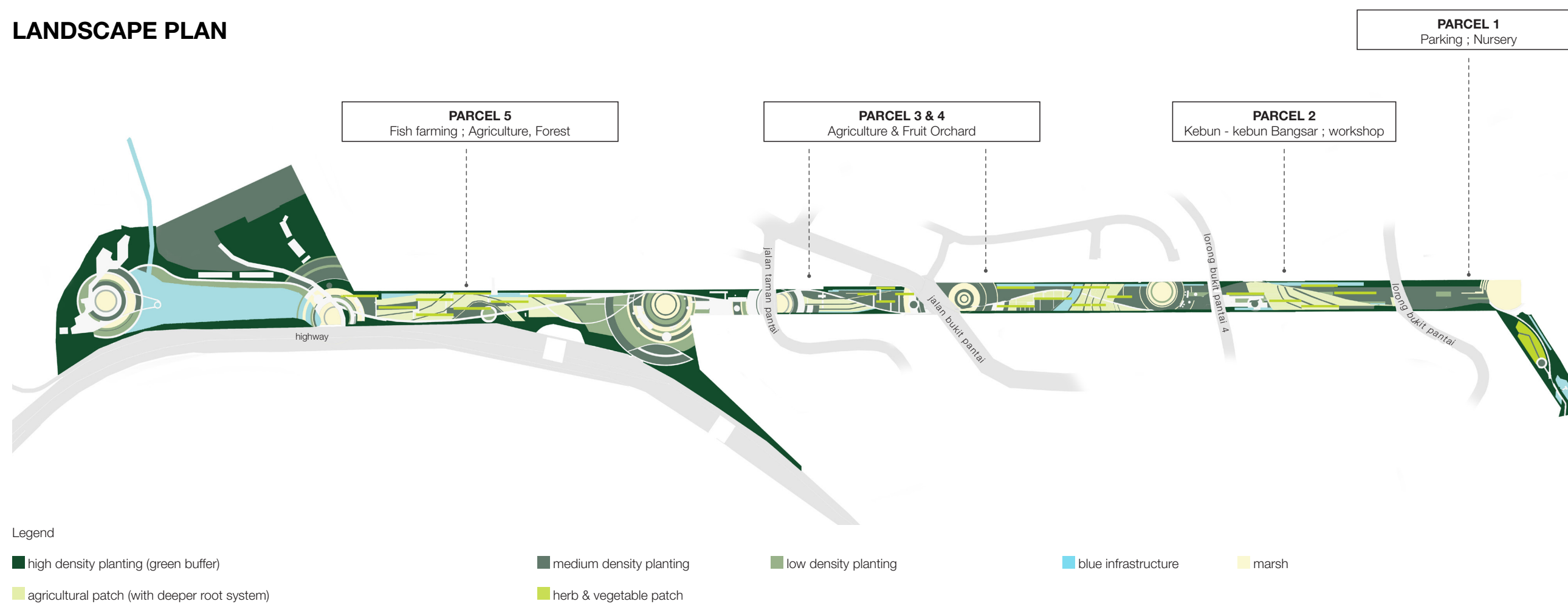


“Tending an urban orchard should be about more than subsistence farming. Yes, you can grow food in the city, but farming within the public realm begs for art.”

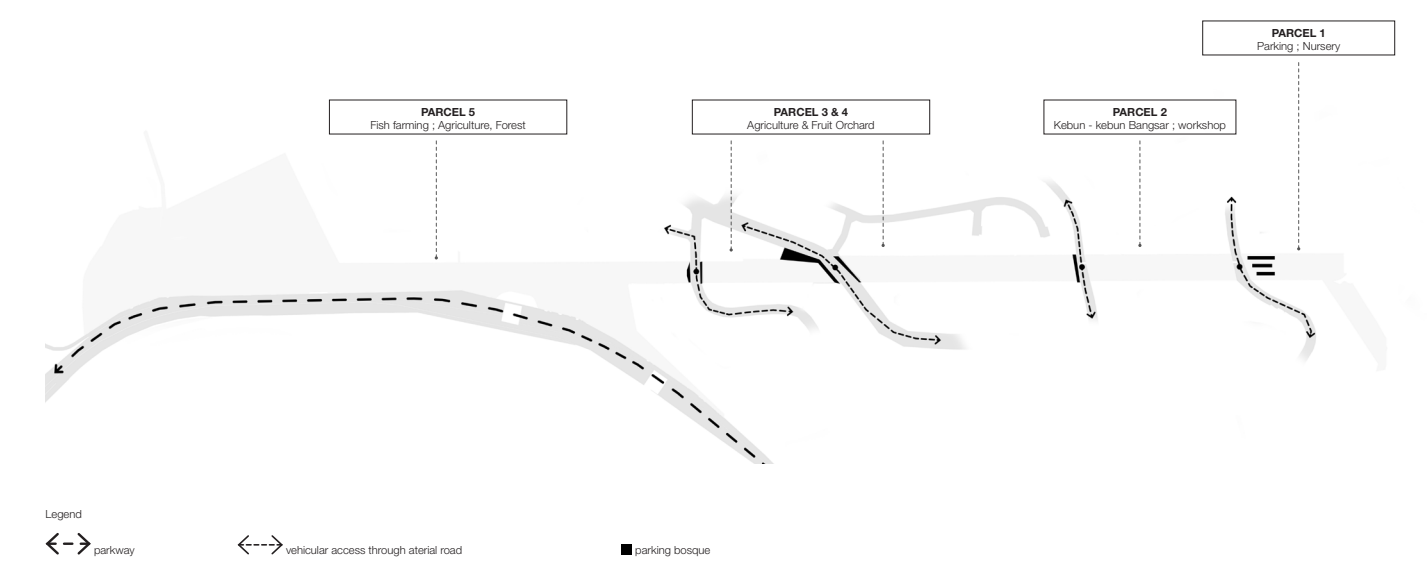
- Richard Joseph Ingersoll



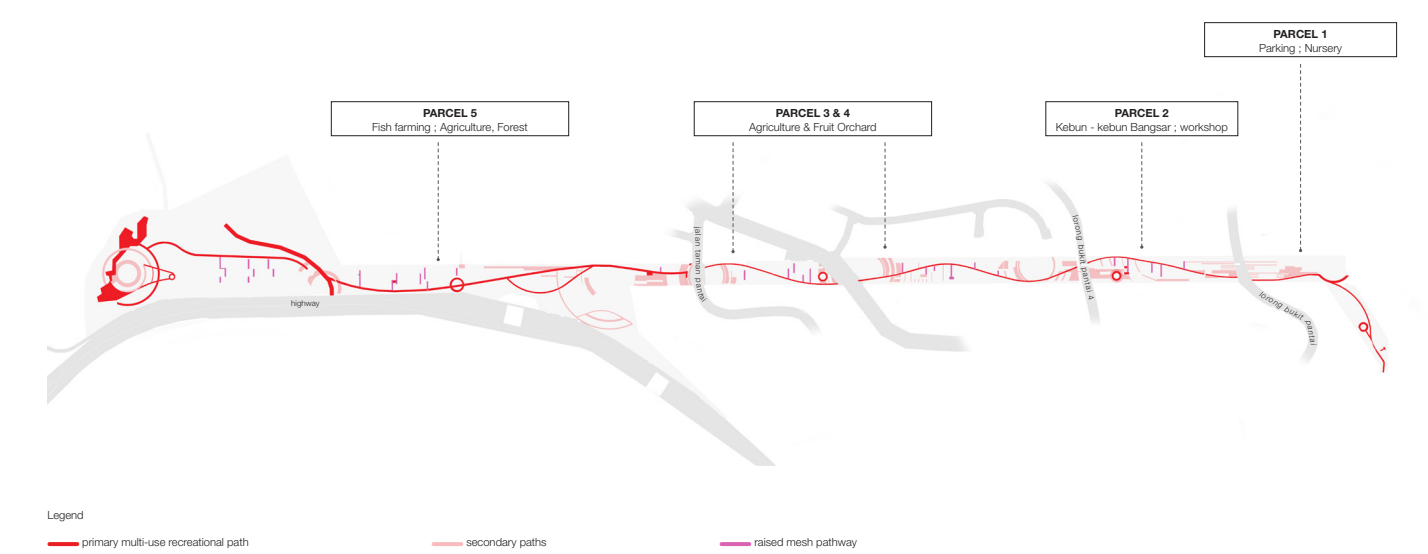
LANDSCAPE PLAN



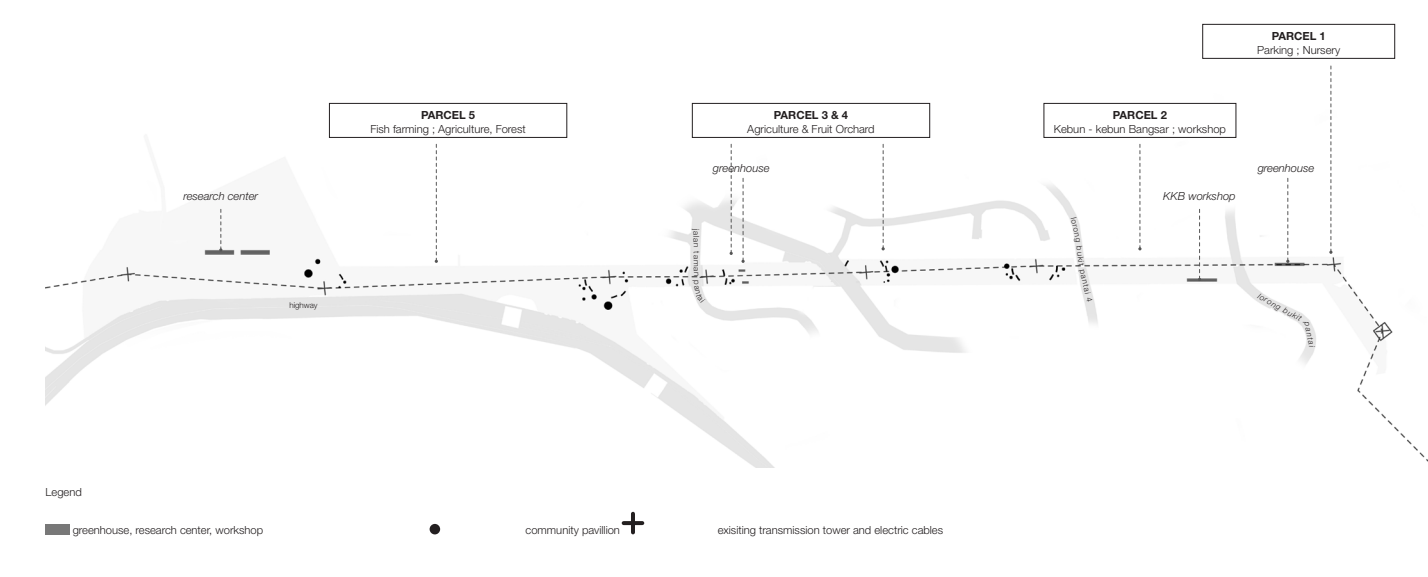
Vehicular Circulation



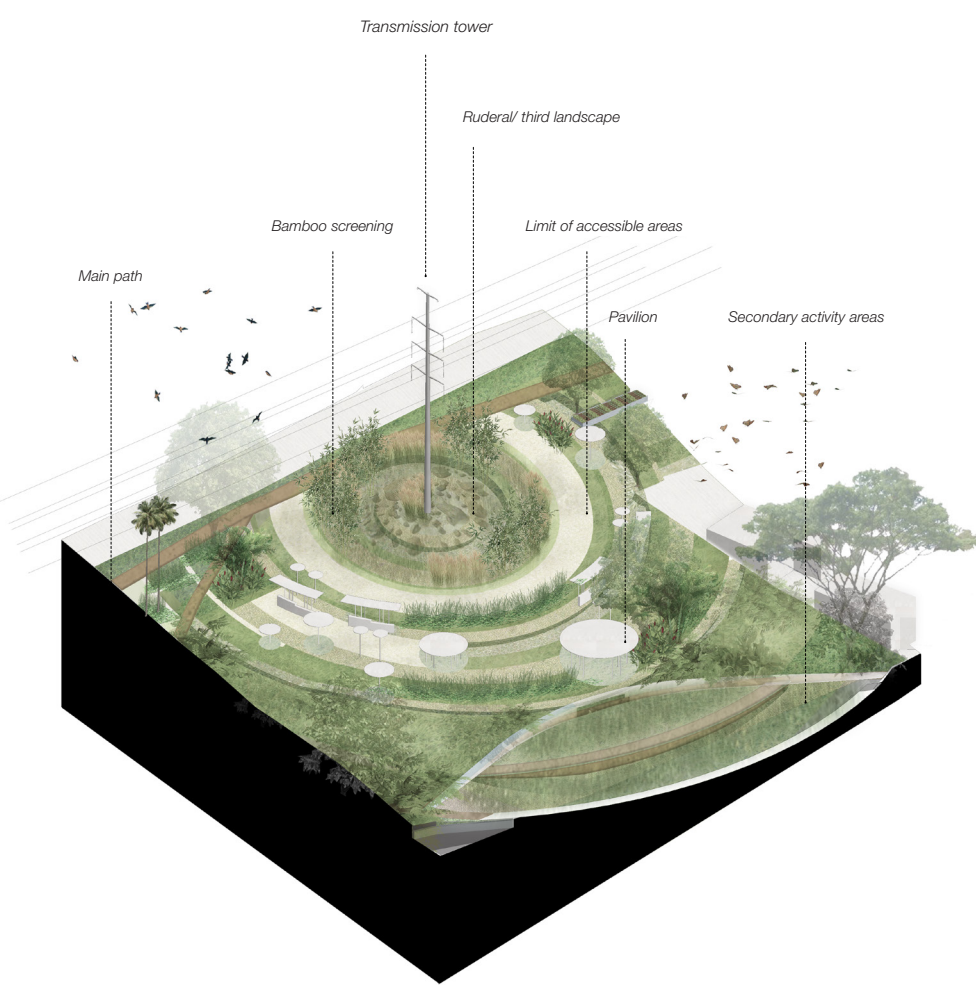
Pedestrian Circulation



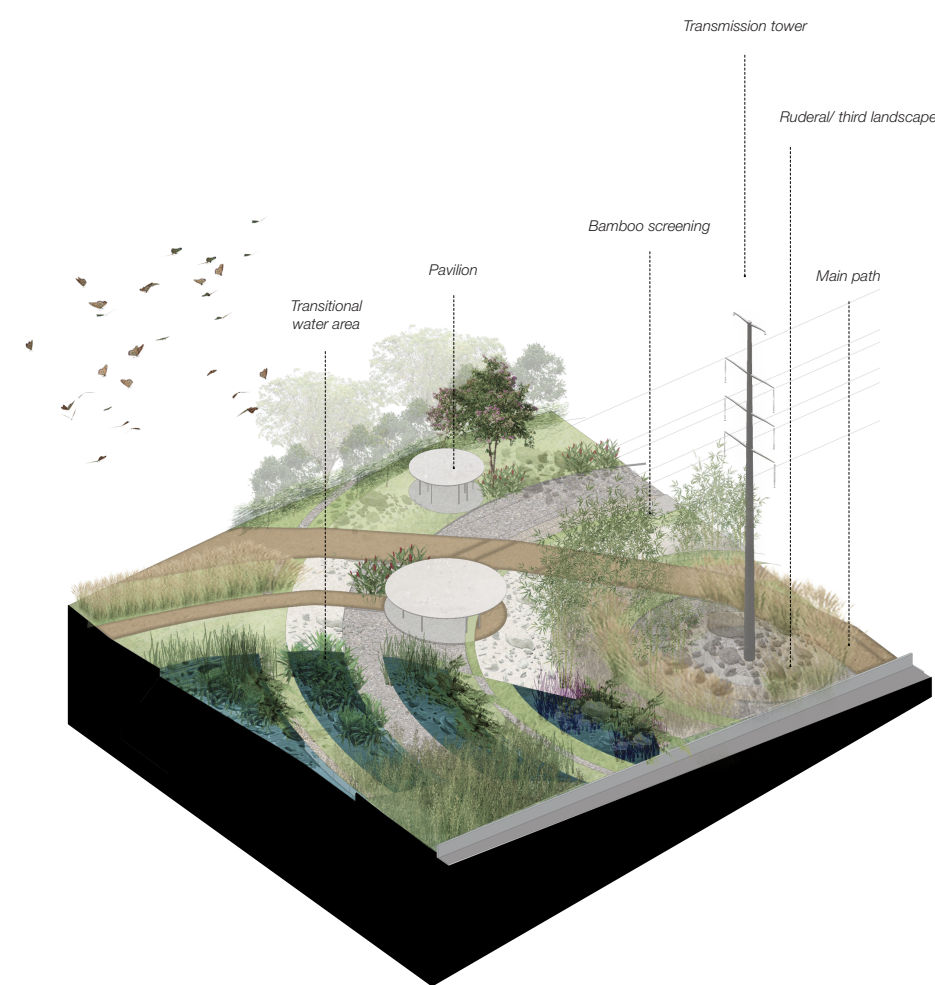
Structures Plan



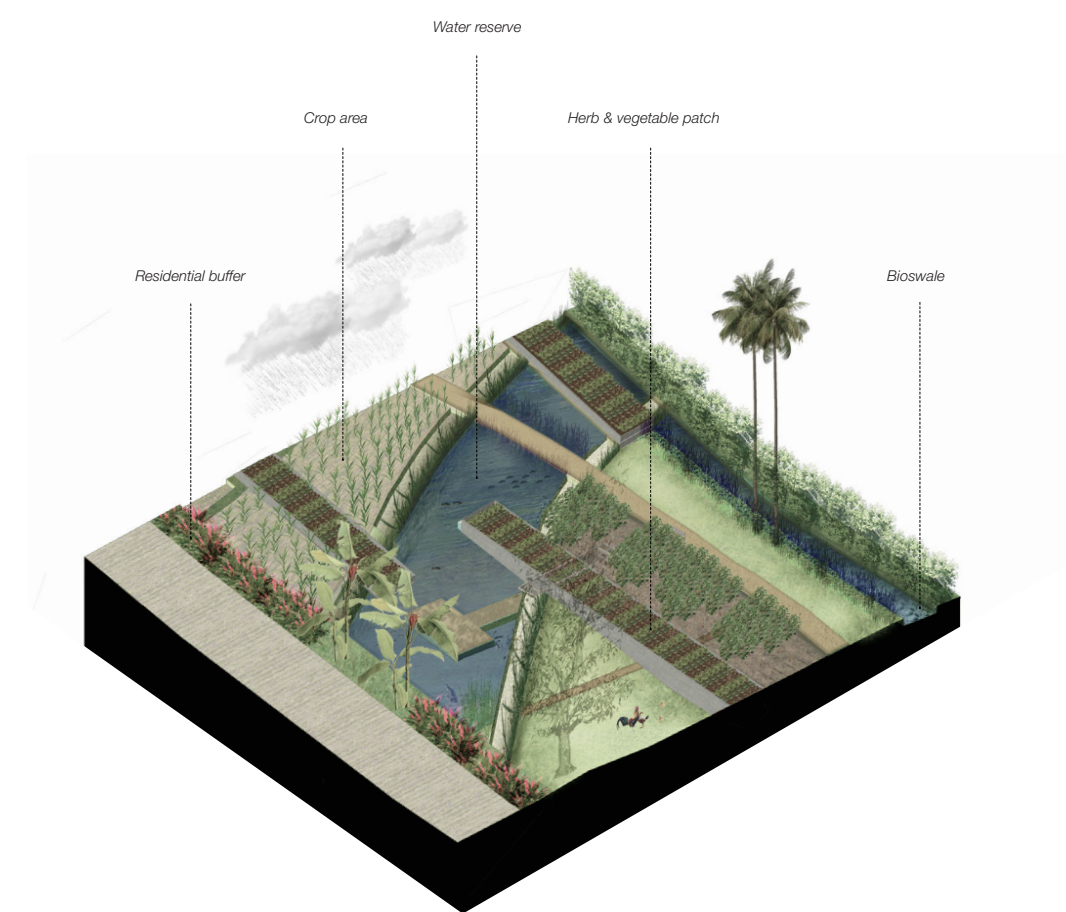
LANDSCAPE PROGRAMS



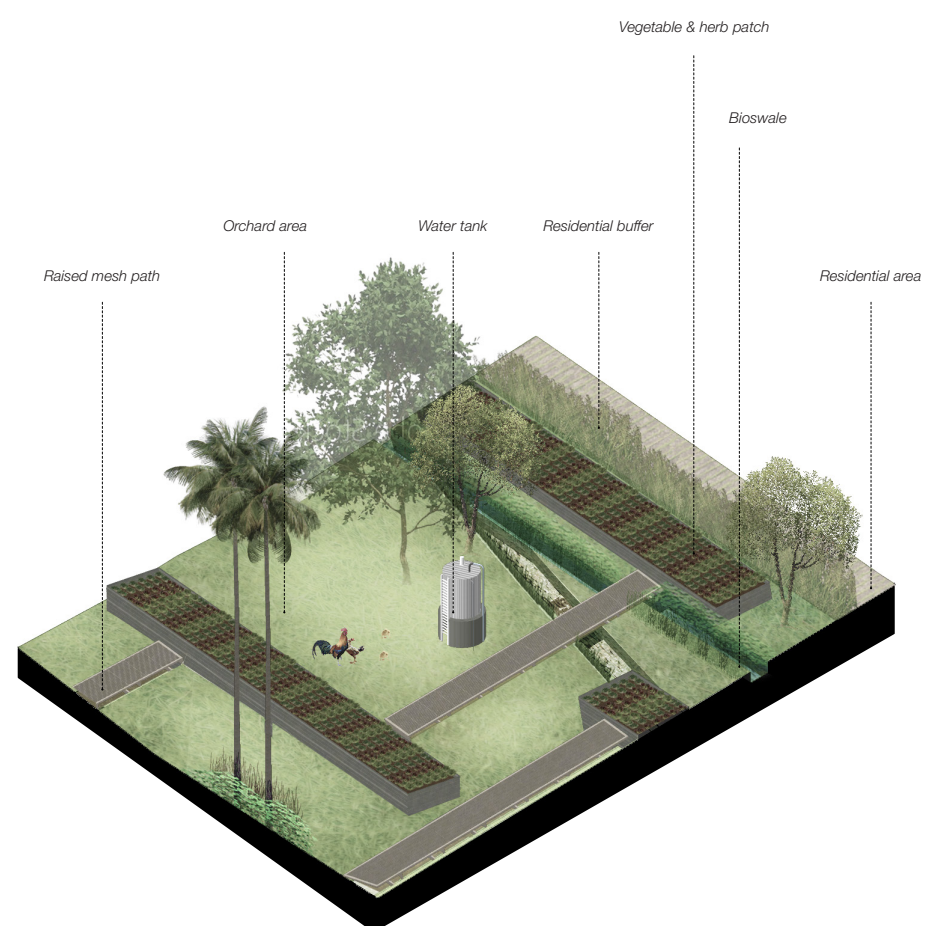
TRANSMISSION BUFFER



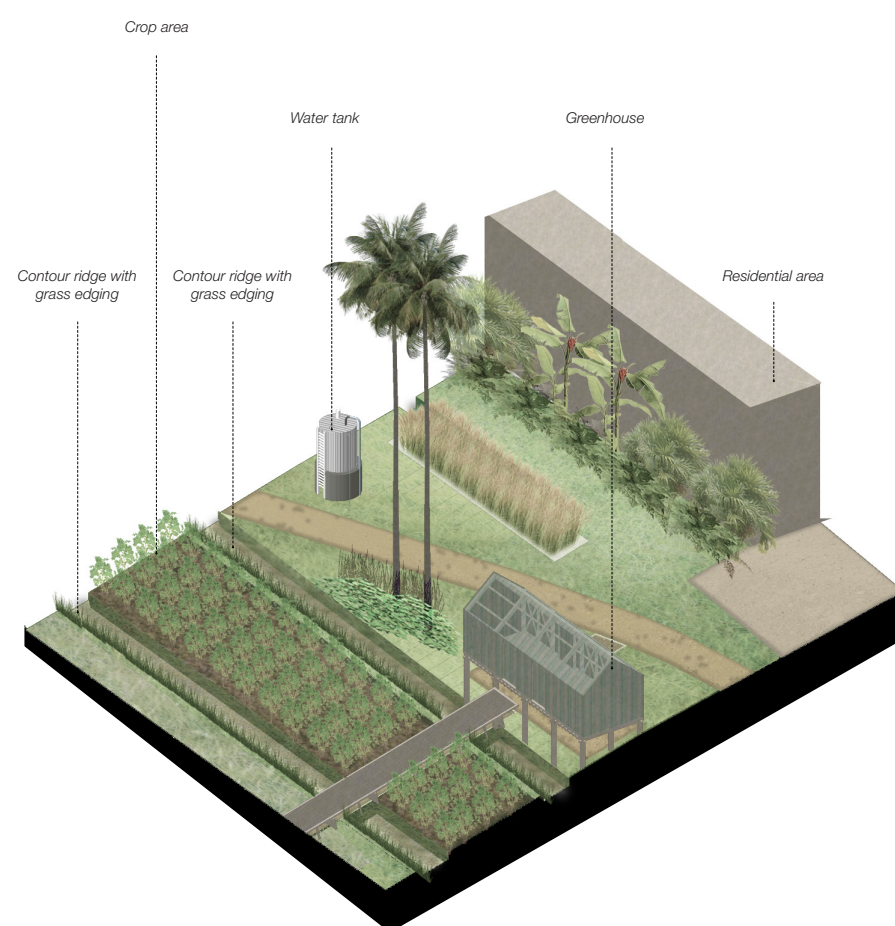
TRANSITION BUFFER



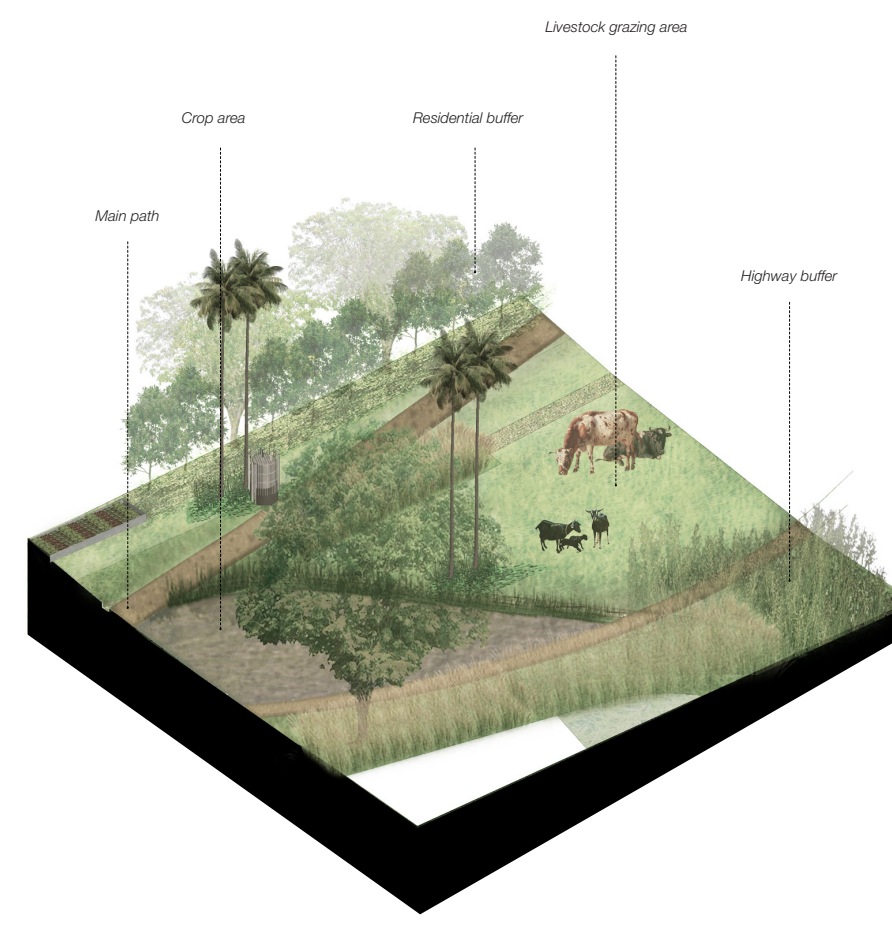
WATER RESERVE



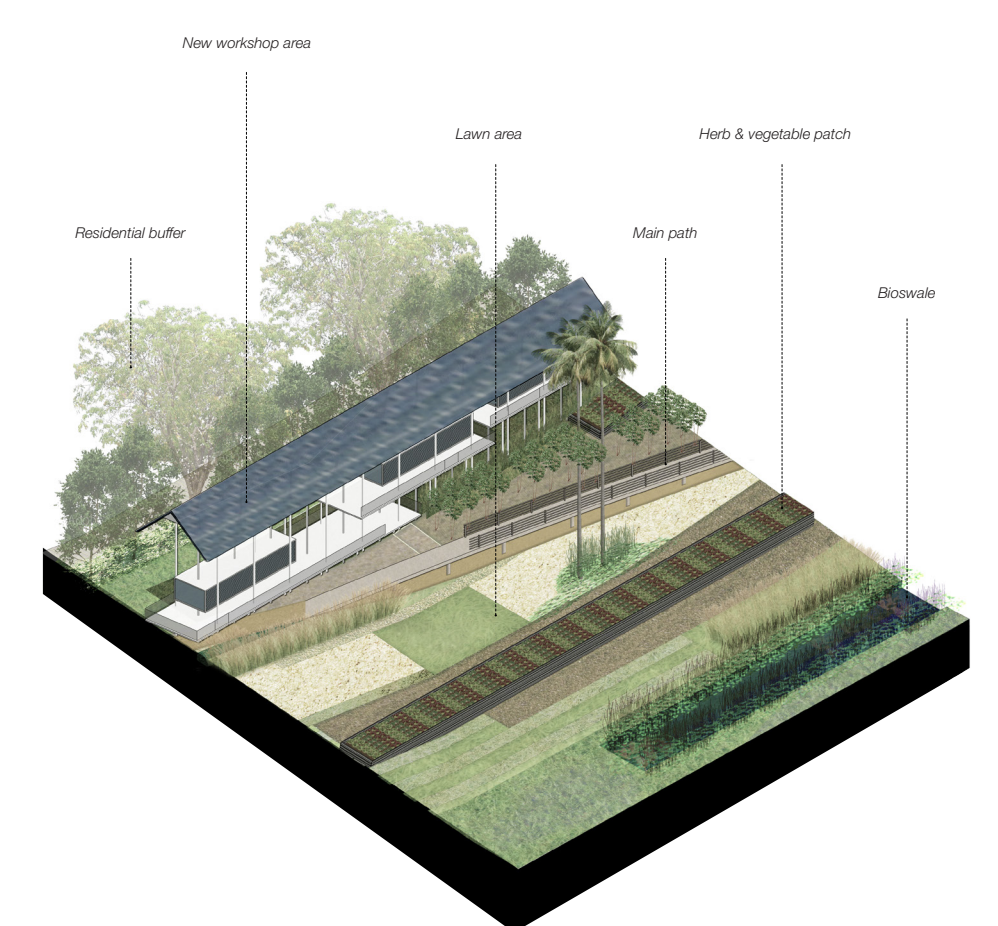
HERB & VEGETABLE AREA



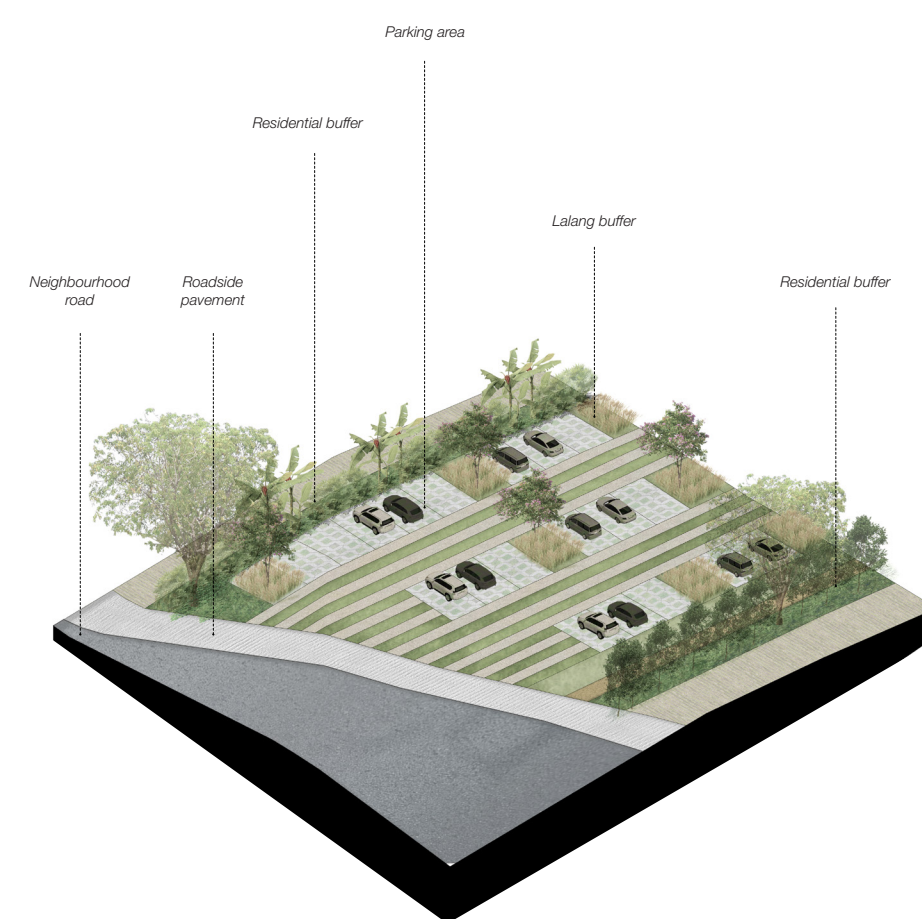
CROP FARMING



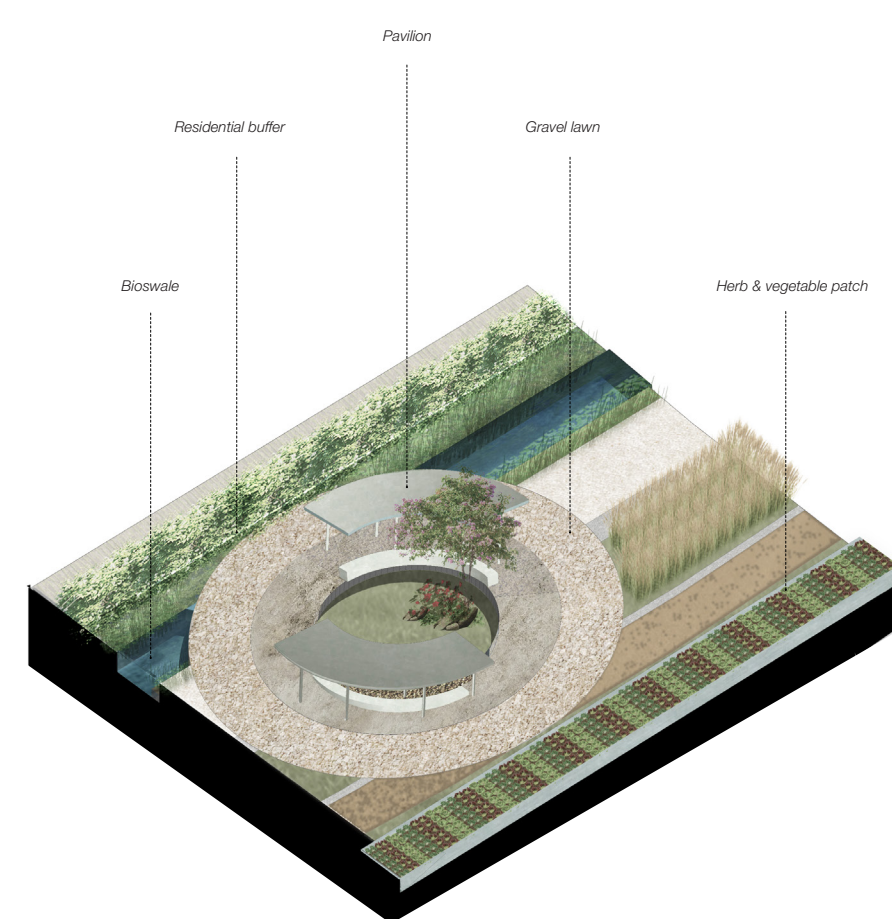
LIVESTOCK GRAZING



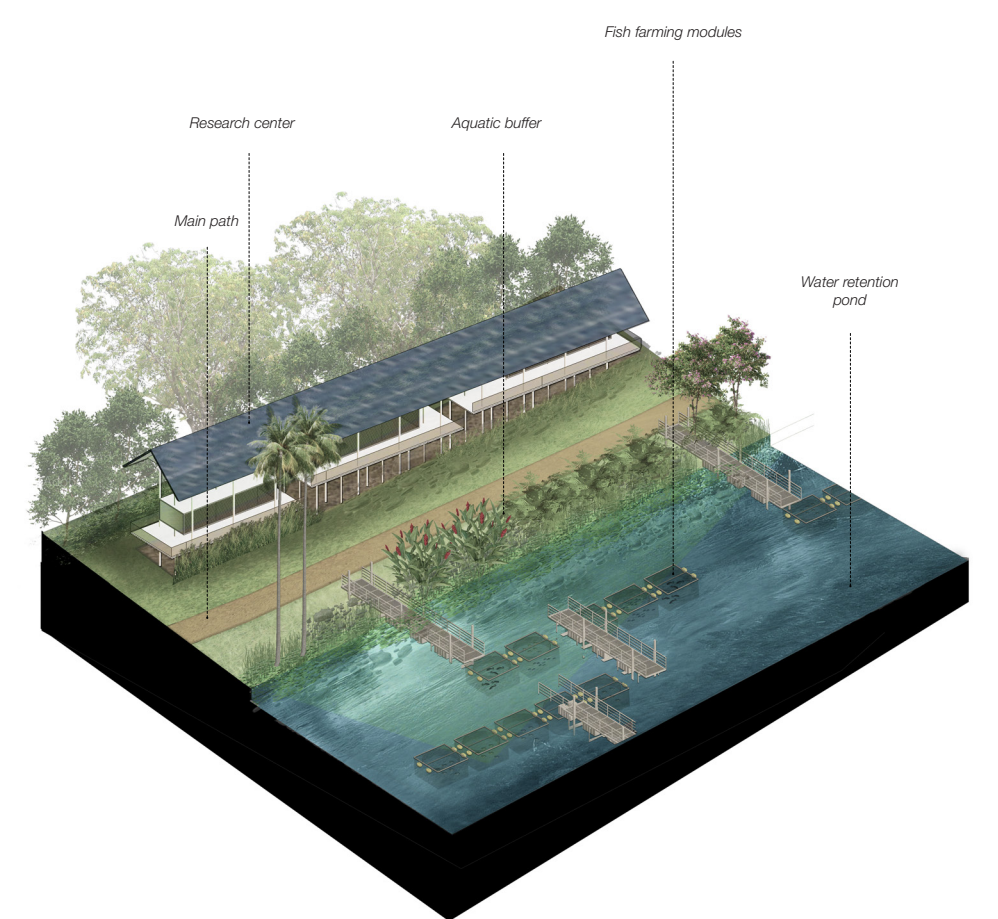
WORKSHOP



PARKING AREA



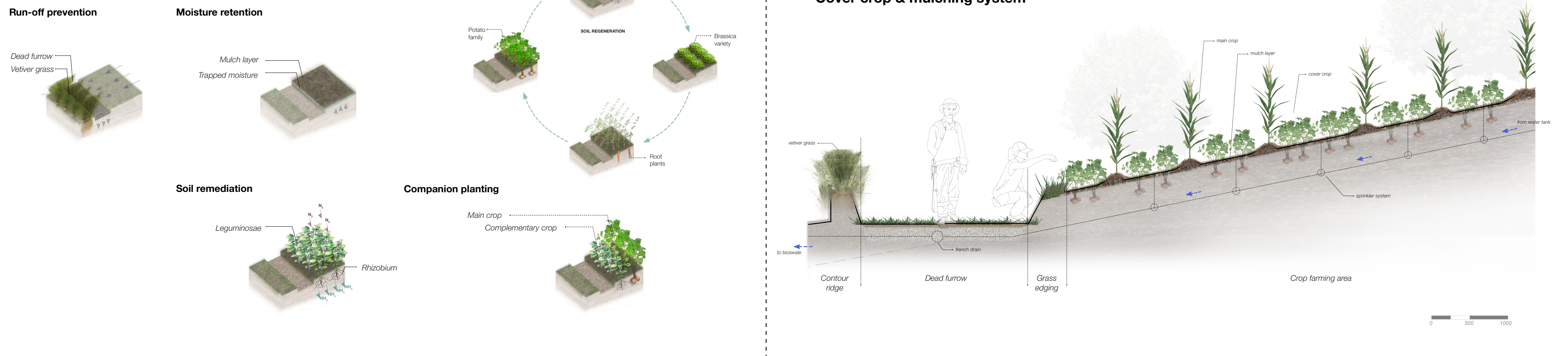
COMMUNITY PAVILION



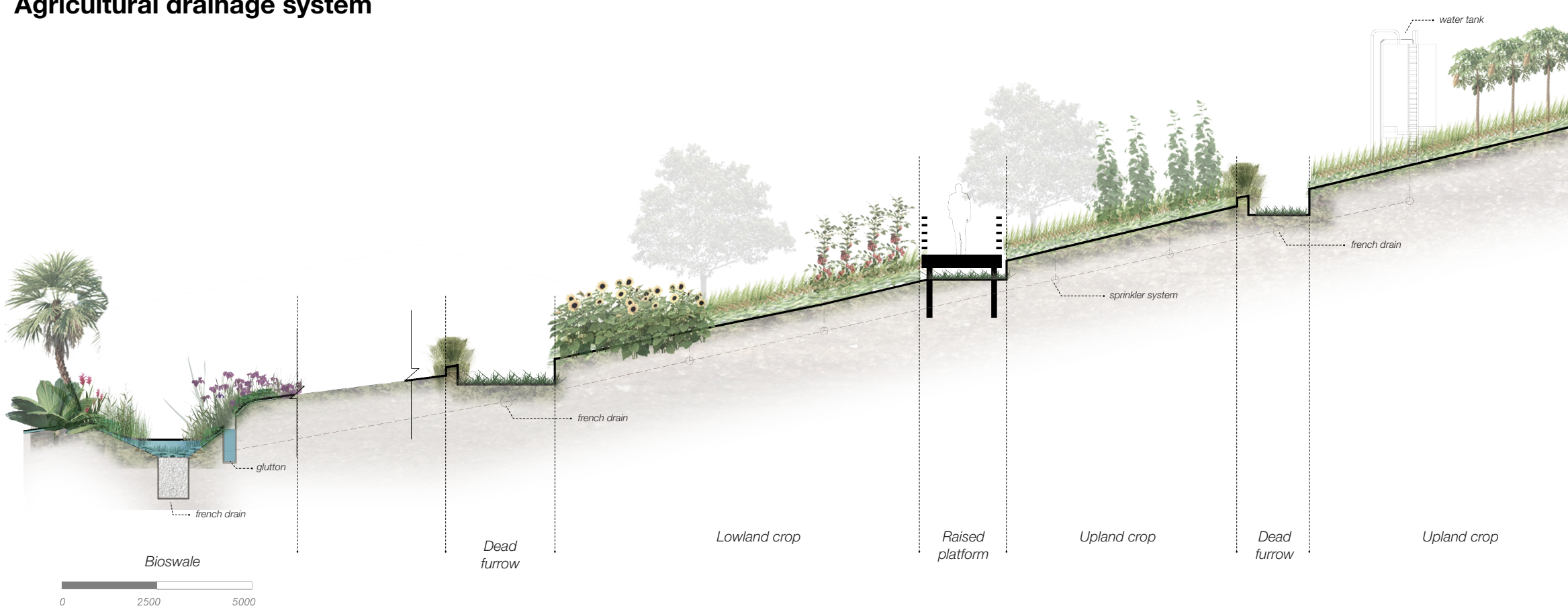
FISH FARMING

AGRICULTURAL SYSTEM

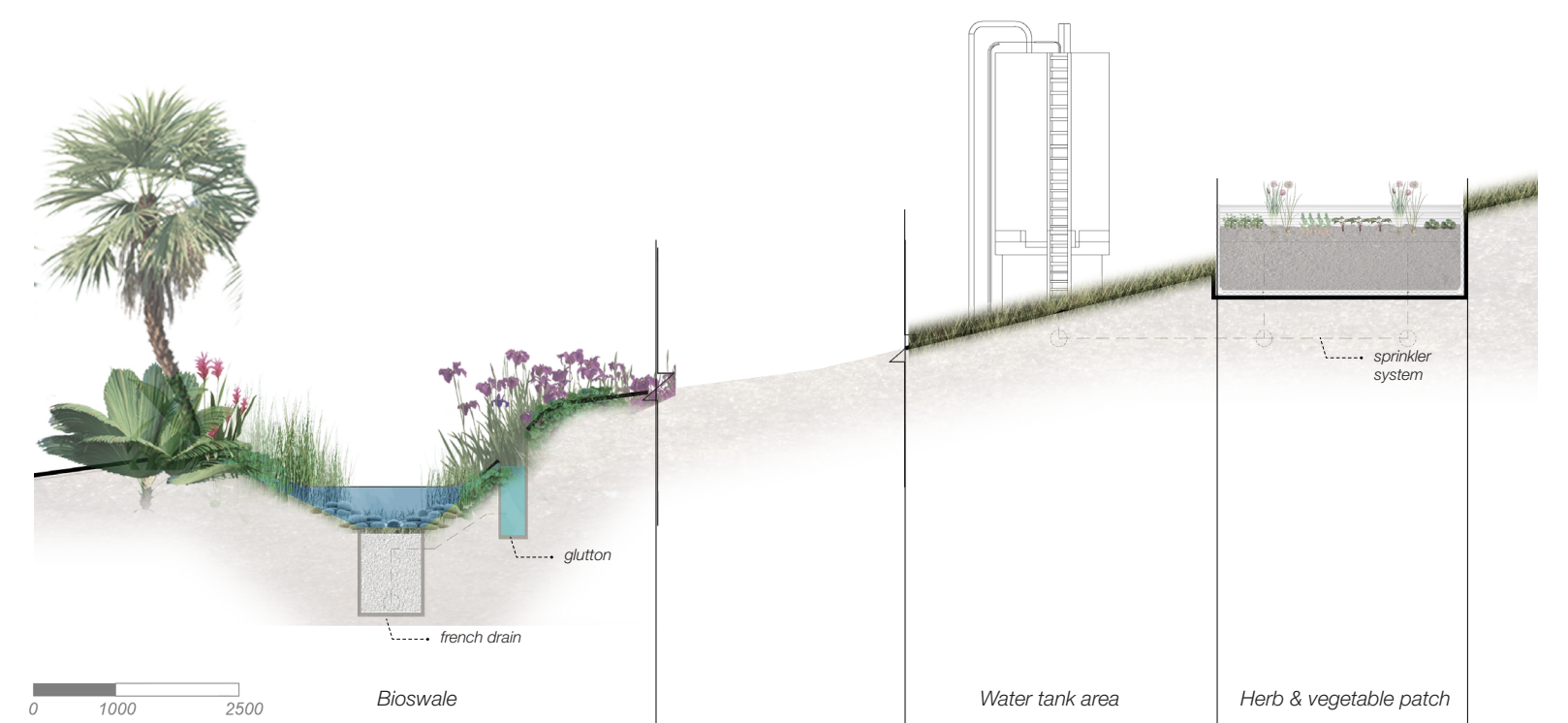
AGROECOLOGICAL STRATEGIES



Agricultural drainage system



Herb & vegetable patch system



Contoured agricultural system

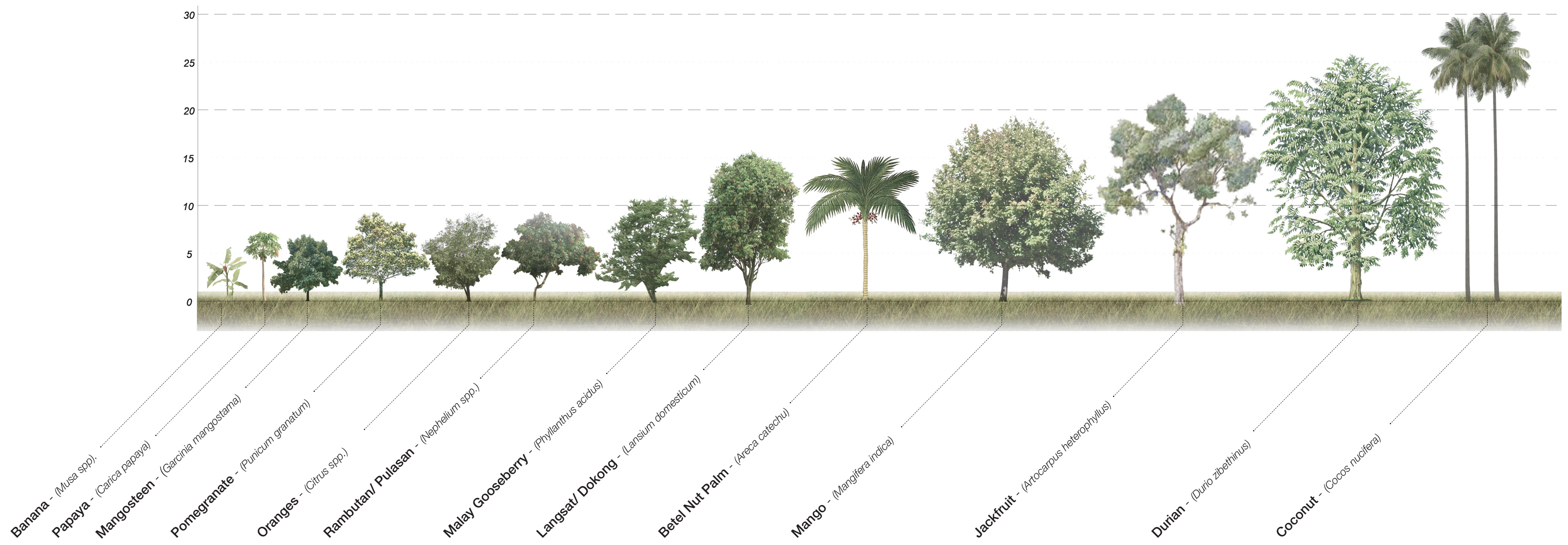


ETHNOBOTANICAL RECOMMENDATIONS

'VILLAGE ORCHARD' ENVIRONMENT

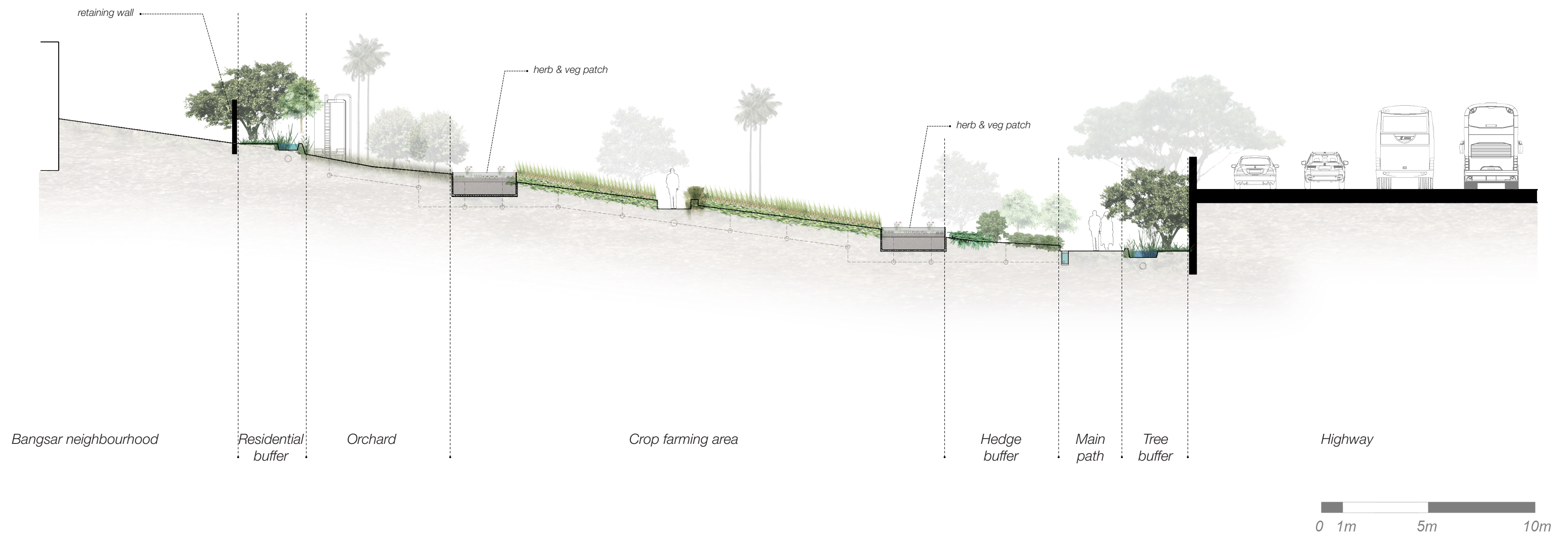


'VILLAGE ORCHARD' ETHNOBOTANICAL SELECTION



ETHNOBOTANICAL RECOMMENDATIONS

BUFFER AREA ENVIRONMENT

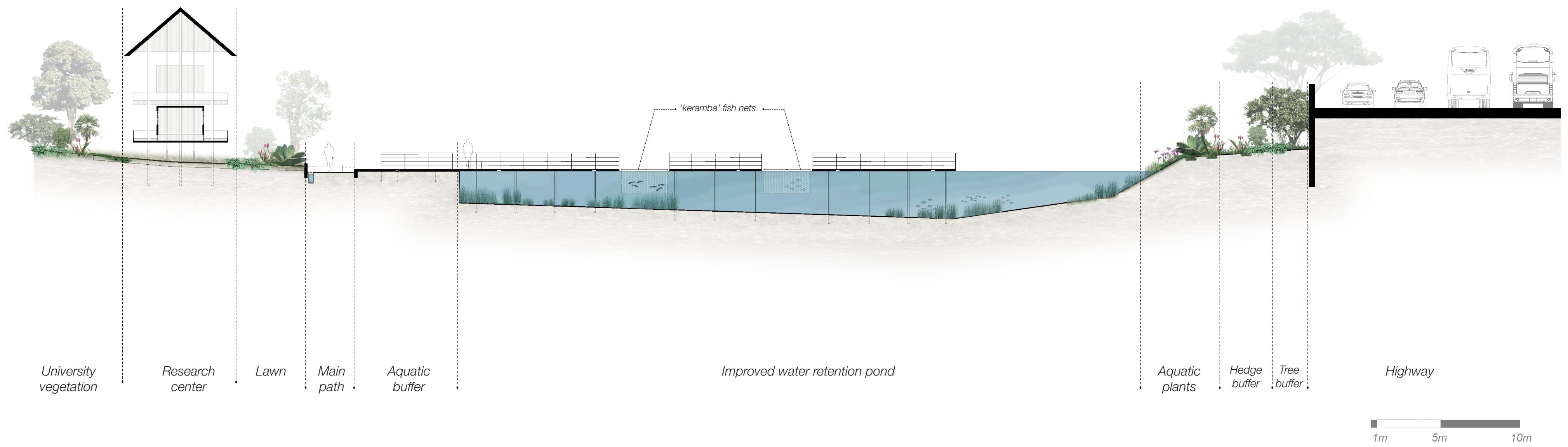


BUFFER AREA ETHNOBOTANICAL SELECTION

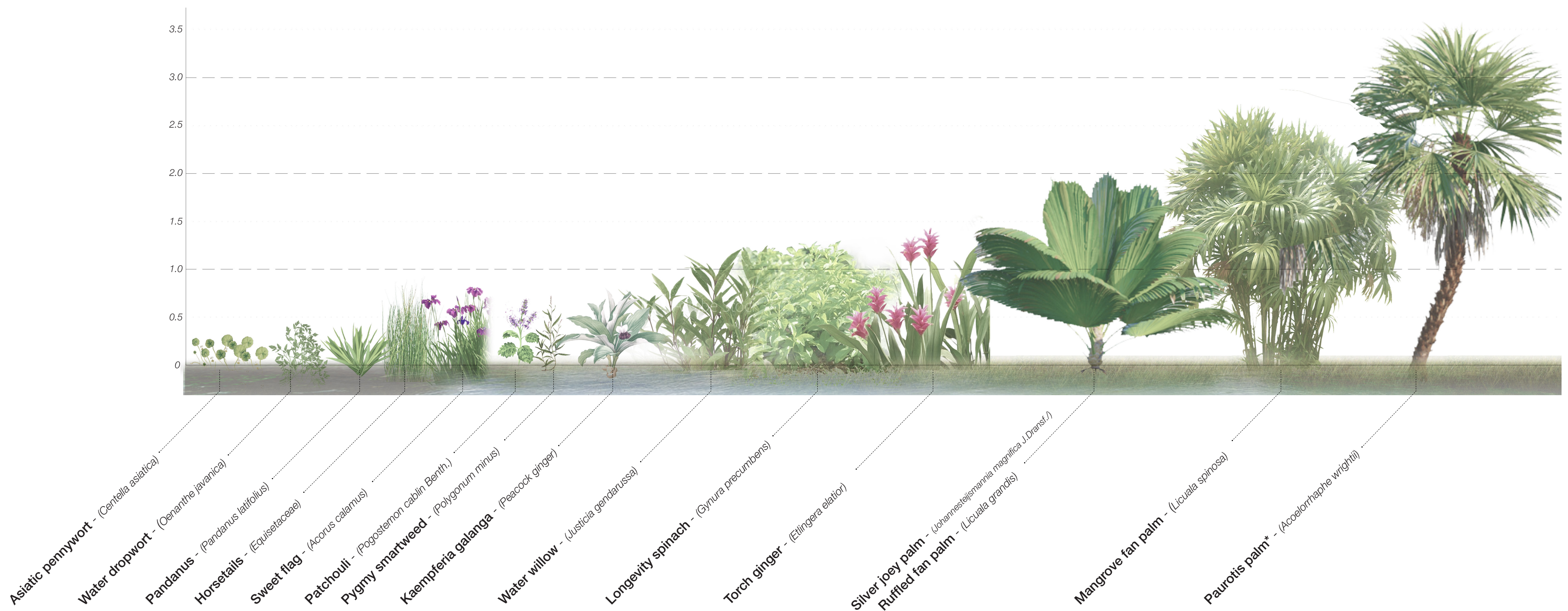


ETHNOBOTANICAL RECOMMENDATIONS

BIOSWALE/ AQUATIC ENVIRONMENT



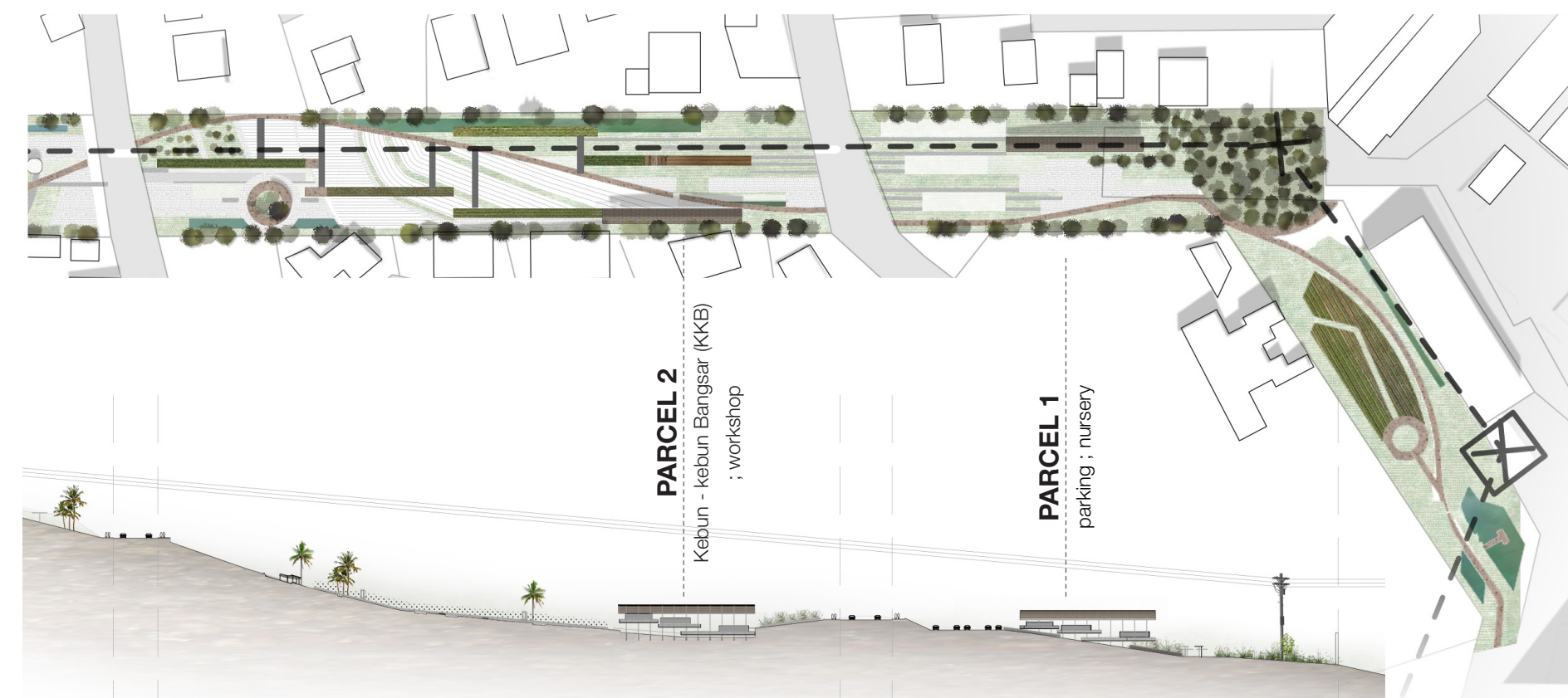
BIOSWALE/ AQUATIC ETHNOBOTANICAL SELECTION



MASTERPLAN DESIGN



PARCEL PLANS 1 & 2

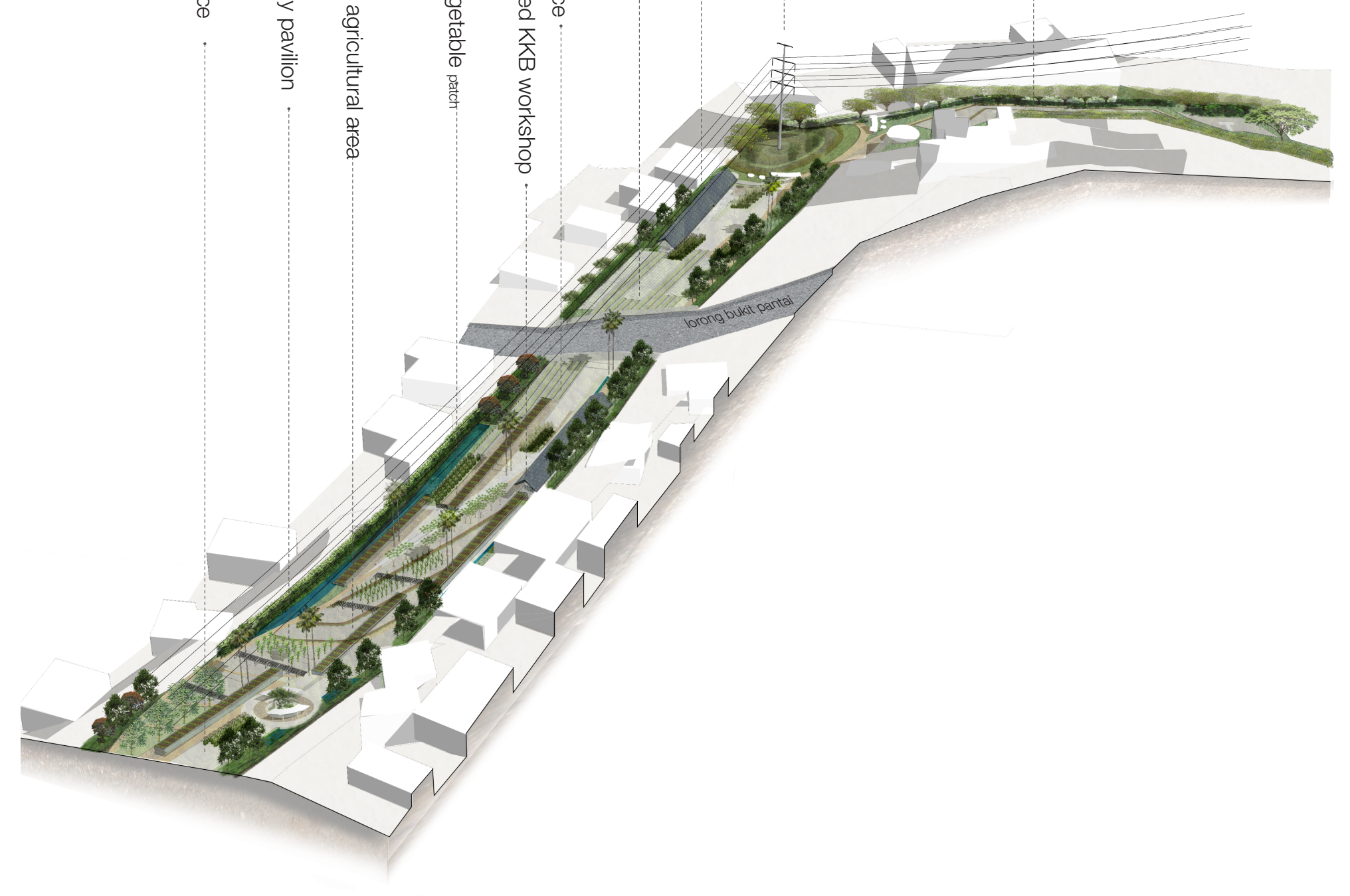


PARCEL 1 Parking & Nursery

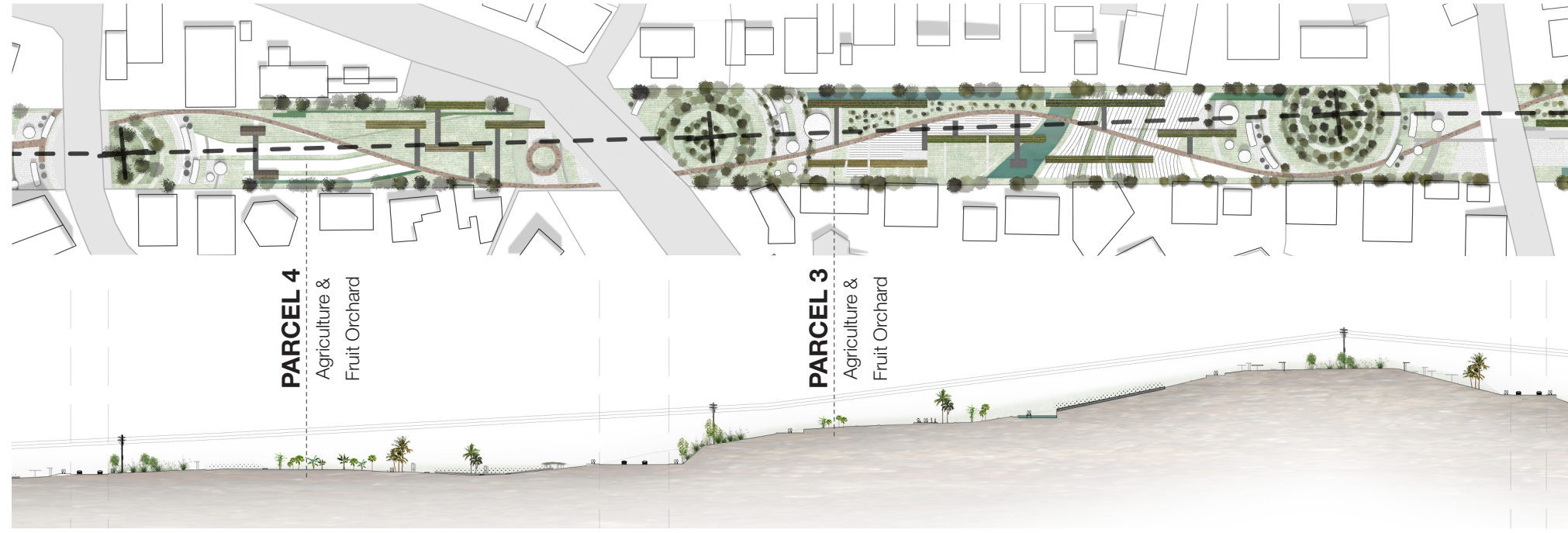
- Agricultural area
- Transmission area 1
- Greenhouse
- Parking space

PARCEL 2 KKB, workshop

- Open space
- Community pavilion
- Orchard & agricultural area
- Herb & vegetable patch
- Reorganised KKB workshop
- Open space



PARCEL PLANS 3 & 4



PARCEL 3

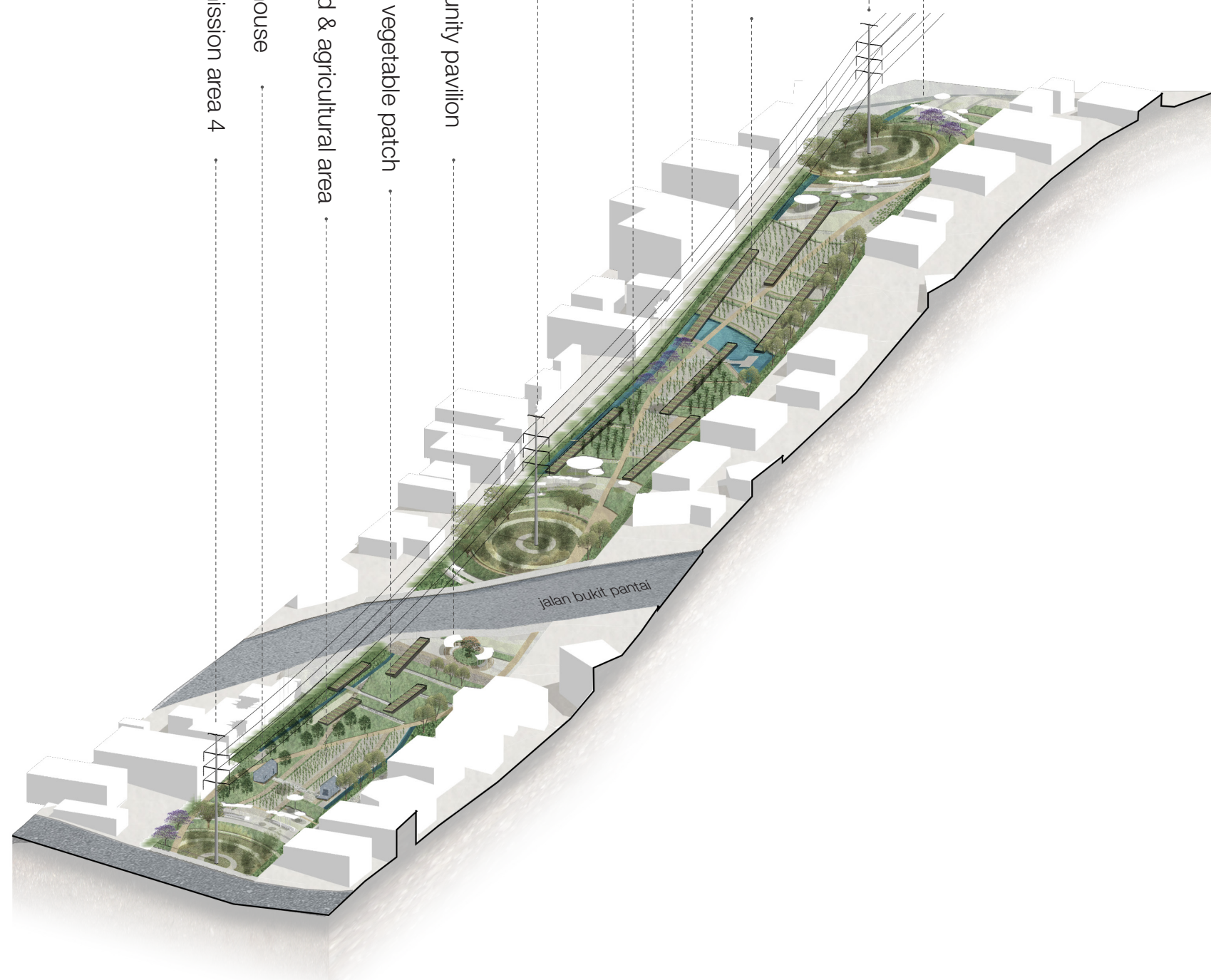
Orchard & agricultural area

- Open space
- Transmission area 2
- Orchard & agricultural area
- Water reserve
- Herb & vegetable patch
- Transmission area 3

PARCEL 4

Orchard & agricultural area

- Community pavilion
- Herb & vegetable patch
- Orchard & agricultural area
- Greenhouse
- Transmission area 4



PARCEL 5

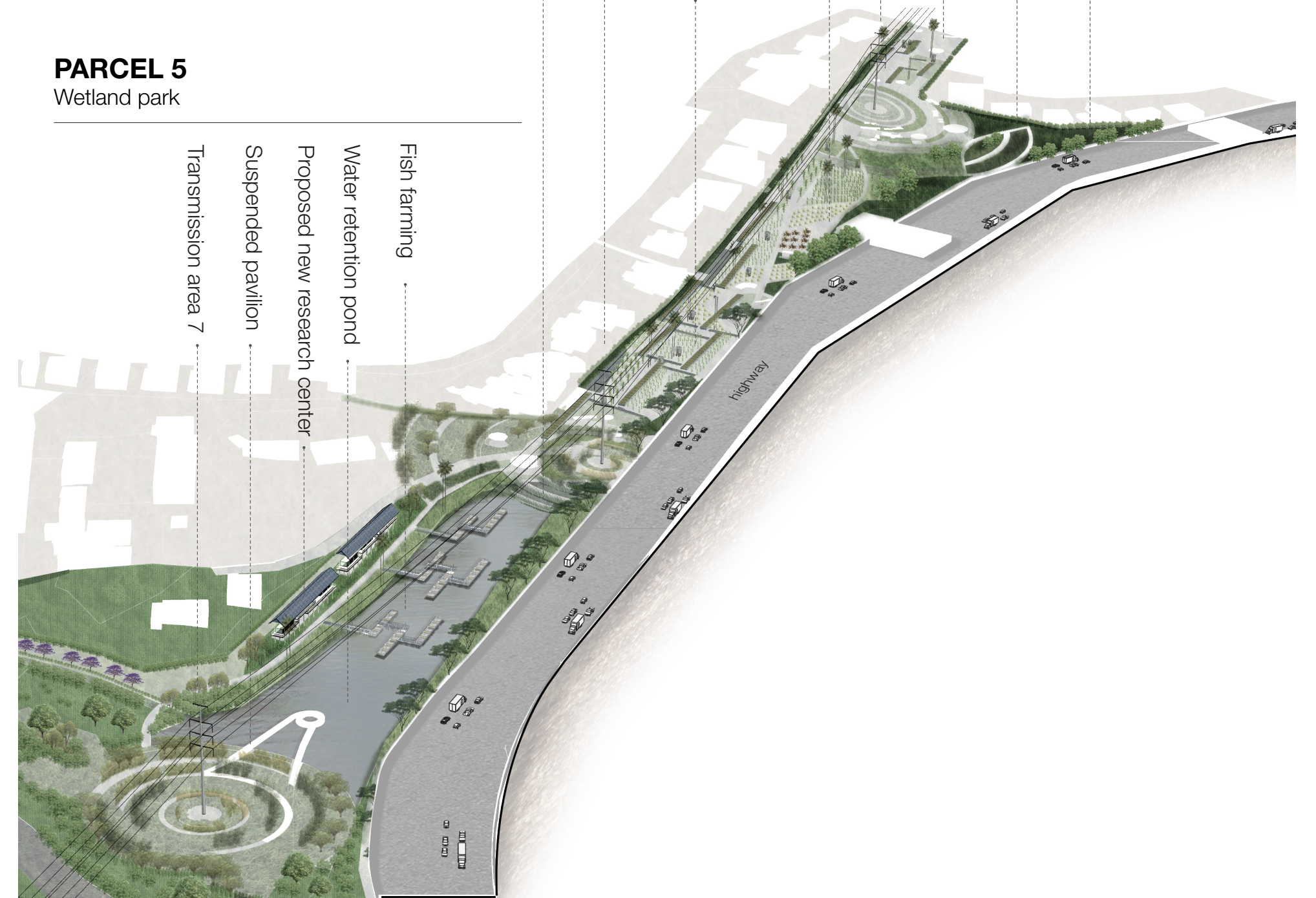
Urban activity areas

- Highway buffer
- Forest activity park
- Open space
- Transmission area 5
- Lawn & grazing area
- Orchard & agricultural area
- Transmission area 6
- Transition buffer

PARCEL 5

Wetland park

- Transmission area 7
- Suspended pavilion
- Proposed new research center
- Water retention pond
- Fish farming



PARCEL PLANS 5

