



Country / City Israel, Haifa

University / School Technion - Israel Institute of Technology

Academic year 4th year, thesis project

Title of the project AGROPOLIS I Territorial Agriculture in Petah-Tikva Urban Region

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PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

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TECHNICAL DOSSIER

Title of the project

Authors

Title of the course

Academic year

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Written statement, short description of the project in English, no more than 250 words

The project proposes a new approach for urban agriculture: a multi-functional infrastructure that will provide most of the demand for fresh-food consumption of the city. Massive population growth and new agricultural technologies, including the declining political value of agriculture in Israel is leading to a spatial change that is expressed in urban sprawling into the agricultural lands. On the other hand, there are new trends of urban renewal and densification that the project addresses as well. The project presents a new agricultural urban system in Petah-Tikva, as a case study. This agricultural system relies on three different and complementary typologies. The first typology is monolayer agriculture, which is based on a continuous connection of green layered zones for orchard trees. This infrastructure could be used as an open space with beneficial use for the public.

The second typology - technological agriculture (high-tech), requires relatively small areas to produce high yields (at least 100 times greater than those produced in a regular agricultural process); however, with higher rates of investments.

The third typology is private-community-based agriculture that could provide a small amount of fresh food in the building area, including most of the herbs and vegetables that require a small area of land to grow.

The design will be based on the up-coming changes - the light rail infrastructure and urban renewal zones. It will provide not only fresh produce, but also a new mode of transportation through the city, clean air, water management, a meaningful public space and a cultural landscape inside the densified city.

For further information

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Consult the web page <http://landscape.coac.net/>



Agricultural system of mass-production
 R&D centers
 Energy production



Continues green Infrastructure
 Water management
 Reducing pollution



Urban densification

Agricultue

public

Densification

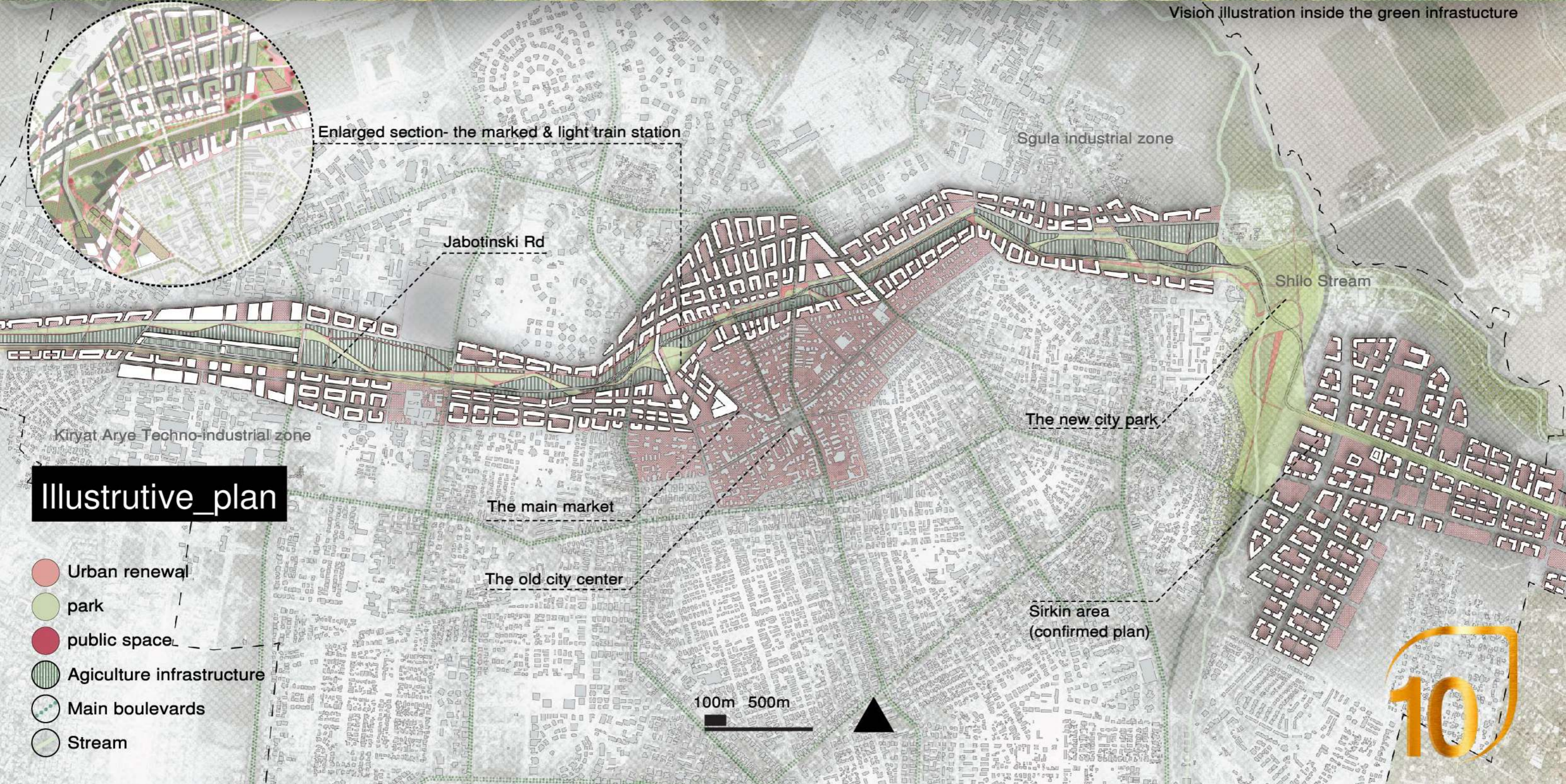
Re-parcelation

The_multi-line





Vision illustration inside the green infrastructure



Illustrative plan

- Urban renewal
- park
- public space
- Agriculture infrastructure
- Main boulevards
- Stream



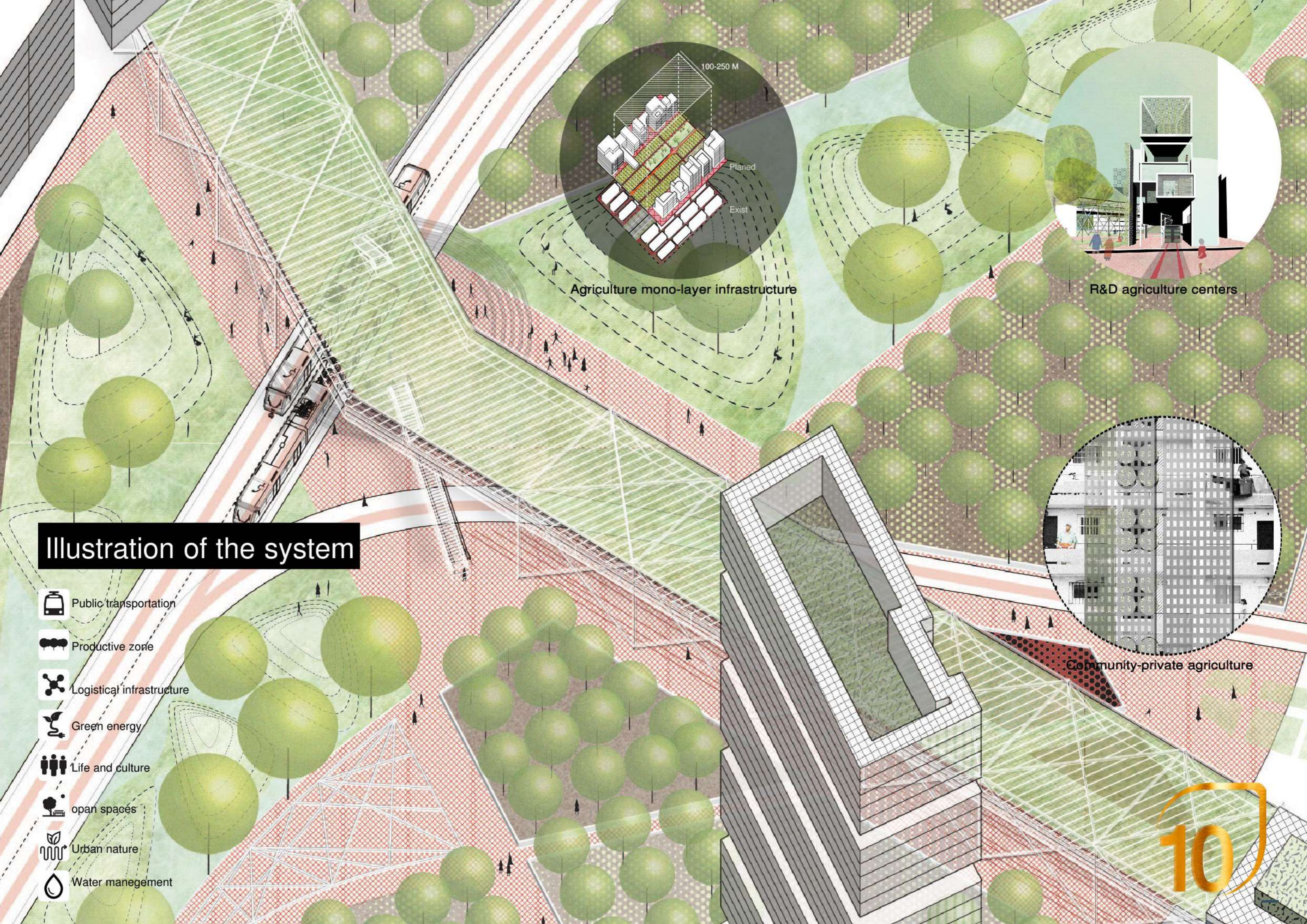








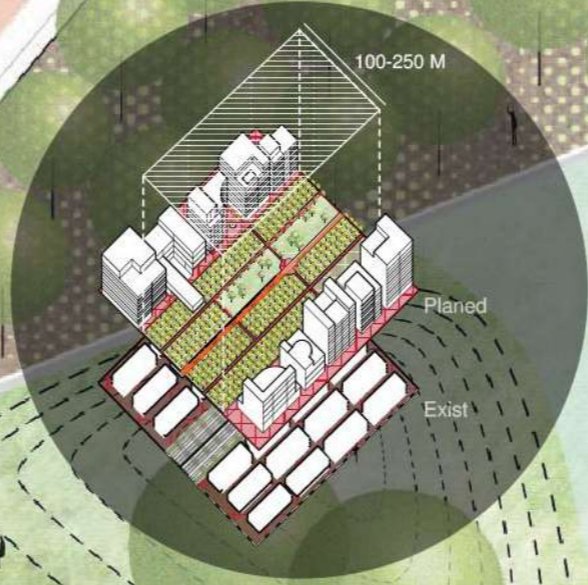


Illustration of the system

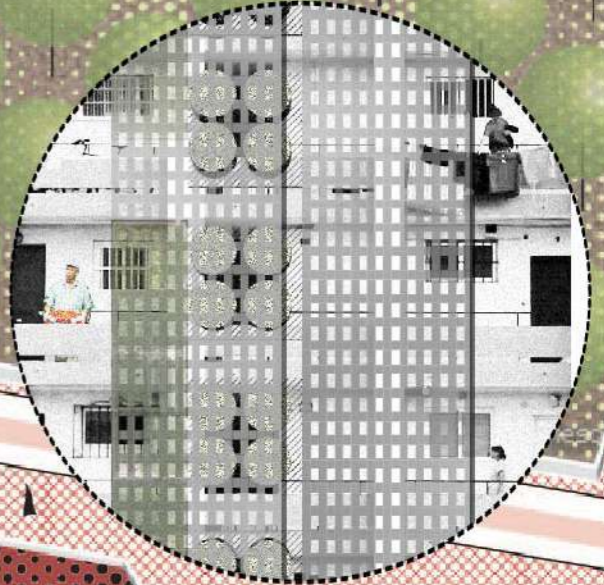
-  Public transportation
-  Productive zone
-  Logistical infrastructure
-  Green energy
-  Life and culture
-  Open spaces
-  Urban nature
-  Water management



Agriculture mono-layer infrastructure



R&D agriculture centers



Community-private agriculture

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