GROUNDED
BINDING THE CITY OF TOMORROW
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BINDING THE CITY OF TOMORROW
SCHOOL FOR ADVANCED METROPOLITAN AGRICULTURE

P2 REPORT
Theme: AR3CP01 Complex Projects
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The United States of America are in a constant state of overconsumption. According to the Complex Projects research book Eco-Logic, the States consume almost twice the amount of their resources (reference, 2014). The bio-capacity per capita of the U.S. is shrinking; sources are running out while consumption stays similar. To be able to continue our current lifestyle, cities, regions, and countries will have to cooperate in dealing with these issues. Our dependency is a fact. We need to reconnect to reality, work together and create awareness of this fact. The city of Chicago is the pioneer of sustainable technology, their environmental awareness and most important their central location in the Midwest is the perfect ground to discuss our current system and society. To solve the environmental issues raised, we need to find common ground.

SUSTAINABILITY IS COMMON GROUND
The United States of America are in a constant state of overconsumption. According to the Complex Projects research book Eco-Logic, the States consume almost twice the amount of their resources (reference, 2014). The bio-capacity per capita of the U.S. is shrinking; sources are running out while consumption stays similar. To be able to continue our current lifestyle, cities, regions, and countries will have to cooperate in dealing with these issues. Our dependency is a fact. We need to reconnect to reality, work together and create awareness of this fact.

The city of Chicago is the pioneer of sustainable technology, their environmental awareness and most important their central location in the Midwest is the perfect ground to discuss our current system and society. Environmental, social, spatial and economic sustainability is our ultimate common ground.

OUR HABITAT IS THE ULTIMATE COMMON GROUND.
In Architecture, economic, social and ecological sustainability are used and randomly combined at will by Architects, and sustainability is addressed without thorough knowledge on the subject. The consequence is a definition that is rendered unreliable and often neglected in our field. A definition which is not able to precisely value a design for its sustainability. We question today's spatial developments, what could be a spatial strategy to integrate ecological, social and economic sustainability into an undeveloped neighbourhood as South-works.

The questioning of the role of Architecture in relation to our habitat is not something of recent years. To take a leap into history, it reminds of the primitive hut of Laugier, described in l'essay sur Architecture written by him in 1753. Prior to the enlightenment the Architectural toolbox was excessive, according to Laugier, and did deviate too much from the essence of Architecture. Laugier instead, looked back at nature, and hereby marks an early stage of (ecological and economic) sustainability. The primitive hut describes that the toolbox of the Architect is not sufficient and essential aspects of Architecture are forgotten.

According to the common definition of sustainability by the Brundtland report of 1968, a sustainable development meets the needs of the present without compromising the needs of future generations. In Architecture there is a field that comes close to applying this definition into its design strategy, it is called integrated sustainable design, an approach that bases its design tools on the combination of physical parameters of design with knowledge on the complexity of our habitat today. A complexity lost by most current day Architects, stated already by the sustainable pioneer, Reyner Banham (Banham, 1969, p. 12).

This duality between the need of the present and the need of future generations reveals the current situation of the term sustainable in Architecture today. Integrated design pleads for extensive knowledge and research on social, economic and ecological sustainability and uses this knowledge in design. The urban strategy based on a toolbox of Architectural layers can be used as parameters on which a design can be tested and developed. In the sense of sustainability, integrated design provides a more thorough, flexible and precise definition on multiple fields of sustainability in Architecture. A missing toolbox of objective evaluation of a sustainable design on a social, economic and ecological level, currently missing in contemporary Architecture and urban design.

How can we design a strategy using a toolbox of spatial layers that addresses sustainability on ecological, social and economic levels over time that impacts macro and micro scale.

The toolbox for sustainable Architecture consists of extensive knowledge and research on ecological, social and economic aspects
Norman Foster // Masdar city, Abu Dhabi
100% renewable energy

HOK planners /
Bioinspired master plan for a new residential district around
Meixi Lake in Wuhan, China

HOK planners // Lavasa, India
Rainforest --> collecting water, storage and filtering

SOM // South-works, Chicago
LEED Certificate on sustainable development
Many projects are being developed with high interest for sustainability. Projects in Abu Dhabi, Wuhan, Lavasa, and our own site, propose a change in the way we built. These plans provide most of all the infrastructure for sustainable development. Masdar city, Abu Dhabi will be a technological hub which will provide research and education for the entire country, and even the world. The Bio-inspired masterplan in Wuhan, China mimics the surrounding ecosystem, to reverse the damage done by slash-and-burn agriculture of the past centuries. In Lavasa, India, biomimicry inspired by nature helps solve the large volumes of rain during Monsoon. The current plan for Chicago South-works uses sustainability as a business plan, to attract new residents and companies to an area that is not favourable now.

These projects, some more than others, show a certain relevance towards their surroundings. They all have influence on various scales, from very local to global and focus on spatial or social awareness toward nature and ecology.
FROM THE MANIFEST FOR COMMON GROUND
PRODUCTION & CONSUMPTION OF LAND

One of the main topics in the urban strategy is the relation between production and consumption of land. As we state: “The time of overconsumption is done’. The strategy proposes to produce and consume with balance. The strategy demonstrates the land needed to provide for its inhabitants. Building and inhabitation is limited to the ability of the surroundings to provide with food/agriculture, recycling, waste water treatment, and energy production. Because of this new relation, common ground receives new meaning. Not only do we all stand, literally, on the same ground we are all responsible for, producing and consuming with balance adds a new field of common ground to the already existing fields of sports, music, dance, and everything that binds us as a collective.

“We are all responsible for the same ground we stand on.”
RELATION PRODUCTION AND CONSUMPTION

Water storage
First filter under the strip
Second filter as the wetland
Agricultural production and waste water treatment
Reused
METROPOLITAN AREA

CHICAGO

11A

CUSTOMERS FOOD 11T

SCHOOL CONTROL

IN
This proposition means a radical change in the relation between consumption and production within the built environment. A change between the relation man and productive land. It calls for a shift in the way we built and develop neighbourhoods, cities and regions but also redefines the relationship of the individual within the collective. More important than the consequences for the built environment are the social consequences of this plan. The Utopic statement that the South-works site will provide for all basic needs implies most of all the cooperation of people in their own food production and active involvement in waste, water, energy production and reduction. It implies a certain collective awareness, or common ground towards ecological independency.

Chicago South-works, a former thriving Industrial area of steel production, lies abandoned. A proposition for the urban strategy is a sensitive issue in a neighbourhood like South Chicago, an area that's being isolated due to closings of schools and health clinics, poor transportation, high crime rates and low poverty levels, causing frustration that is largely expressed through violence.

Current inhabitants of South-works, a monotonous ethnics and income groups, do not need ecological independency, or awareness for the far future. While people are living in the now, sometimes living day to day. Then again, are we designing for a situation that could be radically different in 10 years? The task is to find a relevant intervention that deals with the complexity of the now, and the future to come. So what is needed for the now? On a local scale, the area is being isolated due to closings of schools and the lack of education and simultaneous job-opportunities. The lack of education and job-prospects has to be dealt with. For the future, the area needs new meaning, not only on neighbourhood scale, but on the scale of the city, the region and the Mid-West to break the negative circle of decreasing property value, school closings and the lack of jobs. Meaning which can be achieved by setting the example for a new sustainable future, a very important issue in the strategy for common ground. As the development will attract new people, the intervention will have to pose value for a diverse group of people which differences on social, ethnic and economic backgrounds create a diverse climate of subjectivity.

“The Utopic statement that the South-works site will provide for all basic needs implies most of all the cooperation of people in their own food production and active involvement in waste, water, energy production and reduction.”

“How to achieve this collectiveness in a place like South-works, a place that is fragmented within a society only used to consume with no awareness or knowledge of production.”
A proposition for a plan like this is a sensitive issue in a neighbourhood like South Chicago, an area that's being isolated due to closings of schools and health clinics, poor transportation, high crime rates and low poverty levels, causing frustration that is largely expressed through violence. Does South-works really need ecological independency? Or awareness for the far future, while people are living in the now, sometimes living day to day? Ecological independency should therefore be more than just another green label. Like the precedents responding to what is needed in the area, “ecological independency as common ground” has to do the same. So what is needed? Now the area is being isolated due to closings of schools and the lack of education. Exactly that is missing in South-works. Providing for relevant education is an important issue to tackle. Combining education with the ambition for ecological independency can create awareness through knowledge, provide new meaning and opportunities for the area on multiple scales, for the existing community and new inhabitants of South-Works. A common ground.

Combining education with the ambition for production and consumption of land can create new meaning and opportunities for the area on multiple scales.
According to our studio research, which has resulted in three Complex Projects research books, the United States of America are in a constant state of overconsumption. The United States consume almost twice the amount of their resources. The bio-capacity per capita of the U.S. is shrinking; sources are running out while consumption stays similar. To be able to continue our current life style, cities, regions, and countries will have to cooperate in dealing with these issues. Our dependency is a fact. We need to reconnect to reality, work together and create awareness of this fact. The city of Chicago is the pioneer of sustainable technology and its central location in the Mid-West are the perfect ground to discuss sustainability and our current system of production and consumption of food, energy, waste and water.

The studio research has resulted in a position towards to the complex conditions found. This position, formed by a group of 5, have been formulated in the manifest for common ground. A manifest that comprises of 7 main issues bound by the fact that environmental, social, spatial and economic sustainability is our ultimate goal as an individual and as a collective. This is our ultimate common ground. We further define common ground as the moment of interruption where the only solution is a series of experiences, adventures and encounters that creates all sorts of disturbance. Common ground is a situation of dialogue, a rapid interruption of an individual within a group. Within the subjective field of common ground: sports, music, dance, food, work or language, we recognize ourselves to become part of the collective consciousness. Within space we are constantly in search for recognition or alienation of a group to make us aware of the collective. Hannah Arendt describes the current situation of common ground in the public realm, as a fact that the public realm lost the power to gather men together (Arendt, 1998, p. 53). As a position I believe that strong physical places representing common interest remain of high importance in connecting individuals to the collective. Responsibility for a sustainable habitat lies simultaneously in the hand of the collective, as well as in that of the individual. Here, a problem arises: How do we facilitate the transition towards a sustainable habitat while embracing a fragmented society of individualism?
Common ground is a situation of dialogue, a rapid interruption of an individual within a group. We recognize ourselves to become part of the collective consciousness. Consciousness is an awareness. To create awareness, one must have knowledge. To provide for knowledge in current day complex society, education is key.

Sustainability is our ultimate common ground. That is why I choose to design a school to provide education on sustainable consumption and production of food in the city. A school for advanced urban agriculture.
1. COMMON GROUND
SPATIAL EXPRESSION

How can common ground be expressed spatially?

Common ground is a situation of dialogue, a rapid interruption of an individual within a group. Within the subjective field of common ground: sports, music, dance, food, work or language, we recognize ourselves to become part of the collective consciousness. Within space we are constantly in search for recognition or alienation of a group to make us aware of the collective.
2. EDUCATION IS COMMON GROUND PROGRAMMATIC

What is the role of education in common ground?

We state that all developments within the urban plan are responsible for production of their own food. The urban strategy implements agriculture on an urban level at large scale, unprecedented in the current metropole, which means a new understanding and knowledge is necessary.

Our habitat is our common ground, and we need collaboration, awareness and responsibility to sustain it. How do we facilitate the transition towards a sustainable habitat while embracing a fragmented society of individualism?
DESIGN STRATEGY FOR COMMON GROUND

PRIMARY DESIGN PARAMETERS
1. COMMON GROUND

PARAMETERS
PROGRAM // EDUCATION IS COMMON GROUND
MORPHOLOGY // SPACE IS COMMON GROUND

SECONDARY DESIGN PARAMETERS // INTEGRATED DESIGN
2. CONDITIONS // urban strategy

PARAMETERS
INFRASTRUCTURE // CONNECTION
THE CATALYST // RULES FOR DEVELOPMENT
DENSITY // STAGE IN THE CITY

3. THE SITE // Phenomenology

PARAMETERS
QUALITIES // THE VISTA
ENVIRONMENTAL CONDITIONS // SUN, WIND, CLIMATE
TRANSITION AND EXPERIENCE OF SPACE
1. COMMON GROUND // PROGRAM
EDUCATION IS COMMON GROUND

Our formal/institutional educational system has changed rapidly over the last 50 years and learning has become increasingly important for our complex society (Fejes, 2008, p. 49). As the notion of education is rapidly changing, how does this affect the Architecture facilitating formal education?

According to “the will to learn and the assemblage of the learning apparatus”, by Maarten Simons, the complexity of the educational apparatus can be understood as an assemblage (Fejes, 2008, p. 48). The assemblage theory, defined by Manuel Delanda, is comprised of certain characteristics and these characteristics show that education simultaneously has relations with multiple other systems, like for instance our economic system (Fejes, 2008, p. 49), and is part of the larger process of learning in society (Laal, 2012).

The power of education lies not only in a curriculum defined by a closed institute, but also in the ability to become part of the larger learning apparatus and connect to society itself.

An institute that embraces multiple relations and connections with society will provide recognition and awareness of the self and the self within society, a common ground.
1. COMMON GROUND // PROGRAM

In the urban strategy, intensive metropolitan agriculture is proposed questioning the relation between the built environment and open land. Consumption and production of food in cities.

Every new development will be assigned to a certain plot which will be cultivated. This requires dedication and knowledge unknown to most of us.

As we propose urban agriculture on an unprecedented scale, consciousness, knowledge and research is necessary to succeed. A collaboration between public and private actors.

The school as center for metropolitan agriculture
Based on the Virginia tech minor ´´civic agriculture and food systems, which combines community engagement, education and research on urban agriculture
<table>
<thead>
<tr>
<th>Program School for Advanced Metropolitan Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Civic Engagement</strong></td>
</tr>
<tr>
<td><em>What is civic engagement?</em></td>
</tr>
<tr>
<td>“Learning together”</td>
</tr>
<tr>
<td>Ken Meter, Food System Analyst</td>
</tr>
<tr>
<td>Providing a ground not only for students, but also to support the local community in urban agriculture.</td>
</tr>
<tr>
<td><strong>2. Practical Education</strong></td>
</tr>
<tr>
<td><em>What is educating urban agriculture?</em></td>
</tr>
<tr>
<td>“Experiential based education”</td>
</tr>
<tr>
<td>Susan Clark, NACTA (North American College and Teacher of Agriculture)</td>
</tr>
<tr>
<td>Educating students by theory and actively practicing urban agriculture.</td>
</tr>
<tr>
<td><strong>3. Research</strong></td>
</tr>
<tr>
<td><em>What is research on urban agriculture?</em></td>
</tr>
<tr>
<td>“13 topics”</td>
</tr>
<tr>
<td>The RUAF foundation</td>
</tr>
<tr>
<td>Research on and improvement of current day knowledge on urban agriculture.</td>
</tr>
</tbody>
</table>
### 1. CIVIC ENGAGEMENT PROGRAM

**LEVEL: BRIDGE BETWEEN VOCATIONAL AND LAND GRANT COLLEGE**

UNDERGRADUATE

Based on the Civic Agriculture and Food Systems (CAFS) minor of Virginia Tech.

“developing an economically, environmentally and socially sustainable system of agriculture that relies on local and regional resources, markets and community connections” Clark, S. et al. (2013) Framing an Undergraduate Minor through the Civic Agriculture and Food Systems Curriculum 1 (p.60)

### 2. EDUCATION

**LEVEL: BRIDGE BETWEEN VOCATIONAL AND LAND GRANT COLLEGE**

Based on the Civic Agriculture and Food Systems (CAFS) minor of Virginia Tech.

1. Introduction to Civic Agriculture
2. Ecological Agriculture: Theory and Practice
3. Concepts in Community Food Systems:
4. Capstone: Civic Agriculture and Food Systems

Curriculum with the capacity to engage students in integrative and experiential learning, community problem solving and systems thinking ... all learning must be put into context of prior knowledge and experience, the key for an enhanced education was for students to “learn by doing.”

Clark, S. et al. (2013) Framing an Undergraduate Minor through the Civic Agriculture and Food Systems Curriculum 1 (p.60)

### 3. RESEARCH

**LEVEL: LAND GRANT COLLEGE**

Based on topics discussed by the RUAF foundation, (Resource centres on urban agriculture & food security)

1. Urban food systems
2. Planning, processes and tools
3. Short food chains
4. Reuse of waste in urban agriculture
5. Urban agriculture and climate change
6. Technology development and extension
7. Urban horticulture
8. Urban agro-forestry
9. Urban food policies
10. Food security and health
11. Urban agriculture and emergencies
12. Multifunctional land use
13. Financing urban agriculture
PRECEDE NTS

1. CIVIC ENGAGEMENT
   - local initiatives

2. PRACTICAL EDUCATION
   - interior programmatic study
     - Jåttå Vocational School, Norway
   - exterior program study
     - E. Goode S.T.E.M., Chicago

3. RESEARCH
   - Research facility, Groningen

Multiple global urban agriculture initiatives

W.B. Paul High School of agricultural sciences, Philadelpia
CIVIC ENGAGEMENT AND LOCAL INITIATIVES

Learning together

<table>
<thead>
<tr>
<th>Civic Urban Agricultural Initiatives</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>180 m² cafe/rest.</strong></td>
<td>small cafe/restaurant (100 seats)</td>
</tr>
<tr>
<td><strong>400 m²</strong></td>
<td>helpdesk/office/information and material store</td>
</tr>
<tr>
<td><strong>1.000 m²</strong></td>
<td>food trucks loading bay and warehouse</td>
</tr>
<tr>
<td><strong>5.000 m² gardens</strong></td>
<td>exterior and interior community gardens &amp; greenhouses</td>
</tr>
</tbody>
</table>

Civic urban agricultural initiatives can be supported by providing knowledge on urban agriculture and by providing expertise and technical equipment when necessary. Freshly produced food is sold in the cafe/restaurant.
JÅTTÅ VOCATIONAL SCHOOL, JÅTTÅ NORWAY

Type: Vocational high-school
Nr. of students: 1600
Age: 12-16 year
Architect: Henning Larsen
City: Jatta, Norway
Size: 16.000 m² school
2.700 m² sports

PRECEDENT
PRACTICAL EDUCATION INTERIOR PROGRAM

8.000 m² vocational
5.000 m² classical
3.000 m² serv.

<table>
<thead>
<tr>
<th>area</th>
<th>program description</th>
<th>specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.000 m²</td>
<td>vocational education</td>
<td>8000 m²</td>
</tr>
<tr>
<td>5.000 m²</td>
<td>classical education</td>
<td>5100 m²</td>
</tr>
<tr>
<td>3.000 m²</td>
<td>collective space</td>
<td>1400 m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1500 m²</td>
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<td></td>
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<td>1000 m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>900 m²</td>
</tr>
<tr>
<td>4500 m²</td>
<td>indoor sports facilities</td>
<td>2700 m²</td>
</tr>
<tr>
<td>1000 m²</td>
<td>outdoor sports facilities</td>
<td>1000 m²</td>
</tr>
<tr>
<td>800 m²</td>
<td>courtyard</td>
<td>800 m²</td>
</tr>
</tbody>
</table>

8000 m² vocational
5100 m² classical
5000 m² classical education
3000 m² collective space
800 m² indoor sports facilities
1000 m² outdoor sports facilities
3000 m² classical
8000 m² vocational
5100 m² vocational classrooms
1400 m² flexible space
1500 m² 2 double high halls
1400 m² 2 lecture rooms
1500 m² 2 lecture rooms
1500 m² self study
1300 m² library
1300 m² restaurant
800 m² courtyard

8000 m² vocational
5100 m² classical
3000 m² specified
800 m² indoor sports facilities
1000 m² outdoor sports facilities
800 m² courtyard

SPECIFIED
PRACTICAL EDUCATION INTERIOR PROGRAM
SPATIAL CONCEPT

school and sports facilities

“the street”
collective interior space

urban quarters

teaching environment
All collective functions are placed in this double height central space.
Vocational education and classrooms are clustered.

Urban quarters provided access to different teaching environments.
The E. Goode S.T.E.M academy shows programmatic similarities with Jatta vocational school.
Type: vocational high-school
Nr. of students: 530
Age: 12-16 year
Architect: unknown
City: Philadelphia, U.S.A.

**PRECEDENT**

**PRACTICAL EDUCATION EXTERIOR PROGRAM**

*Experiential based education*

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<table>
<thead>
<tr>
<th>Area</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 m²</td>
<td>land life stock</td>
</tr>
<tr>
<td>1000 m²</td>
<td>agriculture test fields</td>
</tr>
<tr>
<td>100 m²</td>
<td>farm building</td>
</tr>
<tr>
<td>200 m²</td>
<td>small animals (25 m² build, 175 m² land)</td>
</tr>
<tr>
<td>800 m²</td>
<td>land around farm buildings</td>
</tr>
<tr>
<td>3.100 m²</td>
<td>arboretum</td>
</tr>
<tr>
<td>1.850 m²</td>
<td>additional crop fields</td>
</tr>
</tbody>
</table>
SPATIAL PROGRAM
1. academic, agricultural, Greenhouses
2. main building, classical teaching
3. small animal building
4. arboretum
5. farm which houses poultry, dairy, swine, sheep, horses and meat Science program, pasture area livestock
6. field crops
7. academic buildings / Physical Education
8. athletic fields

Academic program
Agricultural and Food Products
Processing
Animal Science
Applied Horticulture
Natural Resources Management and Policy

http://webgui.phila.k12.pa.us/schools/s/saul/about-us
PRECEDE nt RESEARCH FACILITY
ENERGY CAMPUS GRONINGEN

Type: Research facility
Nr. of students: unknown
Degree: College
Architect: PvdB architecten
City: Groningen, the Netherlands
Size: 8,500 m²
  2,000 m² lab & offices
### PROGRAMMATIC REQUIREMENTS SCHOOL FOR ADVANCED METROPOLITAN AGRICULTURE

#### 1. CIVIC ENGAGEMENT

<table>
<thead>
<tr>
<th>Area</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 m²</td>
<td>Cafe/restaurant</td>
</tr>
<tr>
<td>500 m²</td>
<td>Helpdesk/offices/information and store</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Loading bay and warehouse (food trucks)</td>
</tr>
<tr>
<td>12,000 m²</td>
<td>Community gardens &amp; greenhouses (defined in the urban strategy of Common Ground)</td>
</tr>
</tbody>
</table>

#### 2. PRACTICAL EDUCATION // 18,000 m² interior

<table>
<thead>
<tr>
<th>Area</th>
<th>Program Description</th>
<th>Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>18,000 m²</td>
<td>Vocational education</td>
<td>5,100 m²</td>
</tr>
<tr>
<td>8,000 m²</td>
<td>Vocational classrooms</td>
<td>4,000 m²</td>
</tr>
<tr>
<td>5,000 m²</td>
<td>Classical education</td>
<td>2,000 m²</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Classical rooms</td>
<td>1,000 m²</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Lecture hall</td>
<td>1,000 m²</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Entrance/lobby/expo</td>
<td>1,000 m²</td>
</tr>
<tr>
<td>900 m²</td>
<td>Library</td>
<td>900 m²</td>
</tr>
<tr>
<td>400 m²</td>
<td>Restaurant</td>
<td>400 m²</td>
</tr>
<tr>
<td>3,000 m²</td>
<td>Flexible space</td>
<td>3,000 m²</td>
</tr>
</tbody>
</table>

#### 3. RESEARCH // 4,000 m² interior

<table>
<thead>
<tr>
<th>Area</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000 m²</td>
<td>Labs and offices</td>
</tr>
</tbody>
</table>

#### 4.000 m²

<table>
<thead>
<tr>
<th>Area</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 m²</td>
<td>Land life stock</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Agriculture test fields</td>
</tr>
<tr>
<td>1,000 m²</td>
<td>Farm buildings</td>
</tr>
<tr>
<td>200 m²</td>
<td>Small animals</td>
</tr>
<tr>
<td>800 m²</td>
<td>Land around farm buildings</td>
</tr>
<tr>
<td>3,100 m²</td>
<td>Arboretum</td>
</tr>
<tr>
<td>1,850</td>
<td>Additional crop fields</td>
</tr>
</tbody>
</table>
PROGRAMMATIC RELATIONS

1. civic engagement
   - entrance zone
   - cafe/restaurant
   - helpdesk
   - exposition

2. practical education Interior
   - collective open space
   - lecture hall
   - practical education and exposition
   - helpdesk
   - indoor agriculture
   - supermarket
   - gym and sports facilities
   - collective subspaces
     - library
     - self study
     - computer rooms
   - closed space
     - study-rooms
     - lecture rooms and classical education
     - service
     - labs

3. practical education exterior
   - small animal Laboratory building
   - arboretum
   - farm which houses life-stock
   - field crops
   - pasture area livestock
   - buildings for machinery and technology
   - storage and maintenance
   - food trucks loading bay & warehouse

4. research
   - research facilities
   - offices
   - labs
1. COMMON GROUND // MORPHOLOGY
A centrality on a vast and open site.
1. THE SQUARE
DEFINITION OF SPACE AND PLACEMAKING

2. THE CATALYST
PROGRAM AND ARCHITECTURE AS
INITIATOR OF THE URBAN DEVELOPMENT

3. DENSIFY
ATTRACTOR FOR OTHER INITIATIVES AND
FUNCTIONS
DESIGN // PROGRAM AND MORPHOLOGY AS COMMON GROUND

1. point on infrastructural lines
2. forms a square
3. The square as urban podium
4. central point, the collective inner court

5. program
2. SECONDARY DESIGN PERIMETERS
2. CONDITIONS // PLACEMENT OF FRAGMENT

lake shore drive
2. CONDITIONS // INFRASTRUCTURE

rules for development

infrastructure + tramstop      the square      secondary line of development and distribution of food and goods into the city
secondary line of development and distribution of food and goods into the city
2. CONDITIONS // INFRASTRUCTURE

relation land and built environment
2. CONDITIONS // DESIGN

tramline & stop
3. PHENOMENOLOGY // THE VISTA

Public space study
Rules for the character and diversity of the public space

A. Centerpoint, connect
   Accessibility
   Transport health

B. Accepting the existing
   Gradient transition
   Governmental functions

C. Combine and converge
   Densification
   Sports education

D. The vista
   Viewports towards productive land and existing qualities

E. Transition
   Converging point
   Agricultural research
   F. Monumental ending
3. PHENOMENOLOGY // ENVIRONMENTAL CONDITIONS
SKETCHES EXPLORING DESIGN OPTIONS
3. PHENOMENOLOGY // TRANSITION AND EXPERIENCE OF SPACE
6. Views towards Chicago, the ore-walls, and open fields. Guided by Architecture, simultaneously entrance daylight into the interior.

7. Openings are adjusted best suiting environmental conditions and building physics.

8. Water purification and food production.

3. PHENOMENOLOGY // DESIGN

- Passive heating
- Shading
- Blocking wind
- Soil insulation

<table>
<thead>
<tr>
<th>Category</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built Land</td>
<td>1.82M</td>
</tr>
<tr>
<td>Wetland (100%)</td>
<td>1.41M</td>
</tr>
<tr>
<td>Agriculture (50%)</td>
<td>0.14M</td>
</tr>
</tbody>
</table>
PROGRAM // STREET LEVEL

1. main entrance
2. research facility
3. library
4. cafe/restaurant
5. school side entrance

main entrance
side entrances
tram stop
shared functions // school/civic engagement/research facility
school // flex-space
school // classical education
IMPRESSSION
INTEGRATION COMMON GROUND, CONDITIONS URBAN STRATEGY AND THE LOCUS
APPENDIX
FURTHER EXPLORATION OF THE DESIGN AFTER P2
shared functions (civic engagement/school/research)

school // vocational education

school & research // classical & labs

1. CIVIC ENGAGEMENT // 2.000 m² interior

2. PRACTICAL EDUCATION // 8.400 m² vocational
5.600 m² classical
7.000 m² exterior

3. RESEARCH // 3.000 m² interior
DESIGN STEPS

1. platform
2. grid
3. continue 83rd street
4. vista’s
5. tramline
6. interconnecting platforms
7. building volumes
8. necessary land
SECCION AA"
Literature on sustainability:

Literature on agricultural education and urban agriculture:

Literature on experience

Other:
unpublished work: Journalistic editions Complex Projects 2013. S, M, L