

# From international development to a more edible Montréal: *Urban agriculture and urban design at McGill*

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**McGill University, Montréal**

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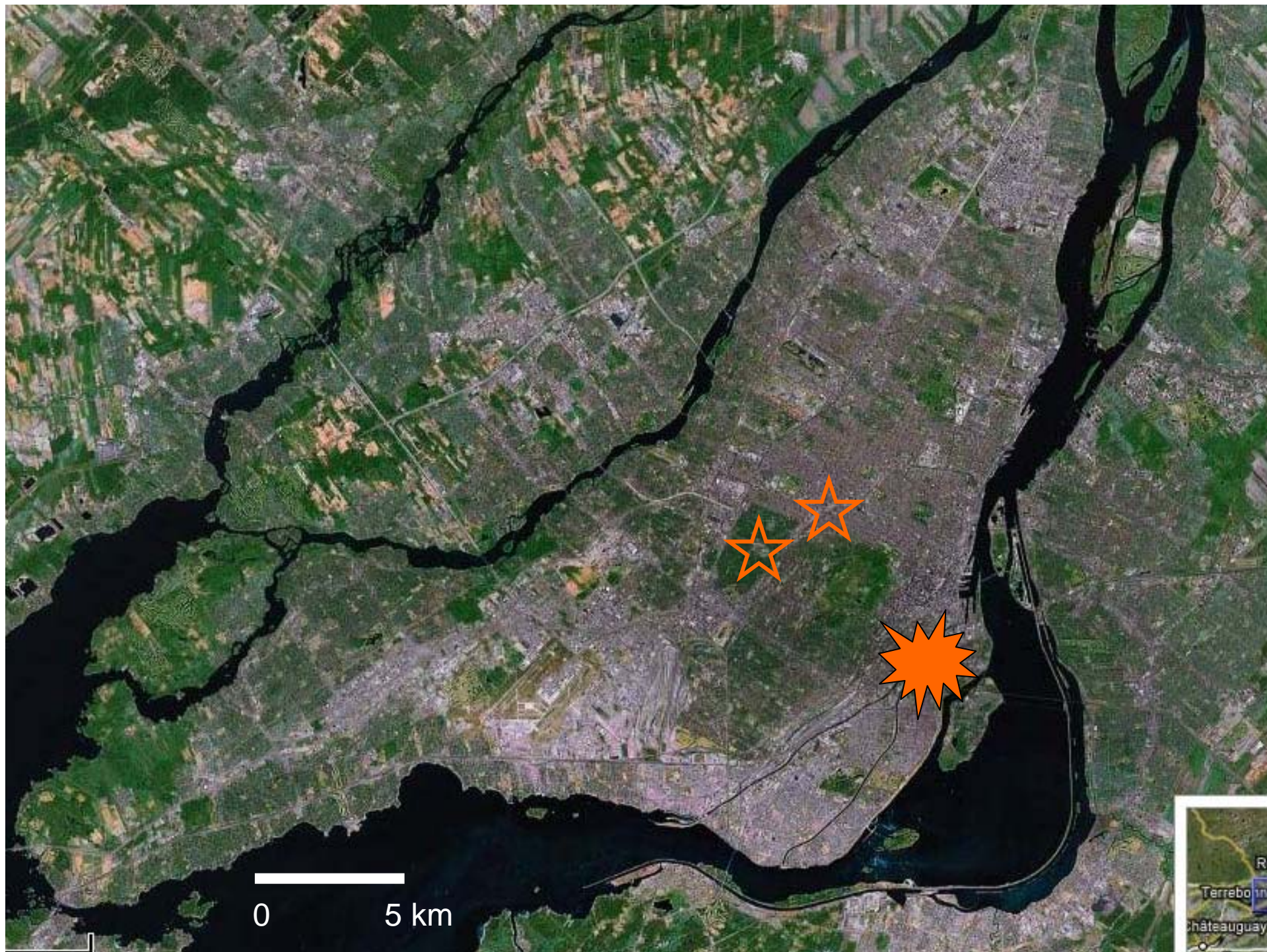
## Themes for today: Pedagogical Challenges

1. Legislative and professional mindsets ...  
and popular misconceptions
2. Social and contextual dimensions of UA:  
the case of Colombo (Sri Lanka)
3. Environmental concerns related to UA:  
the case of Kampala (Uganda)
4. Urban horticultural awareness:  
the case of Montréal

# 1. Legislative and professional mindsets ... and popular misconceptions

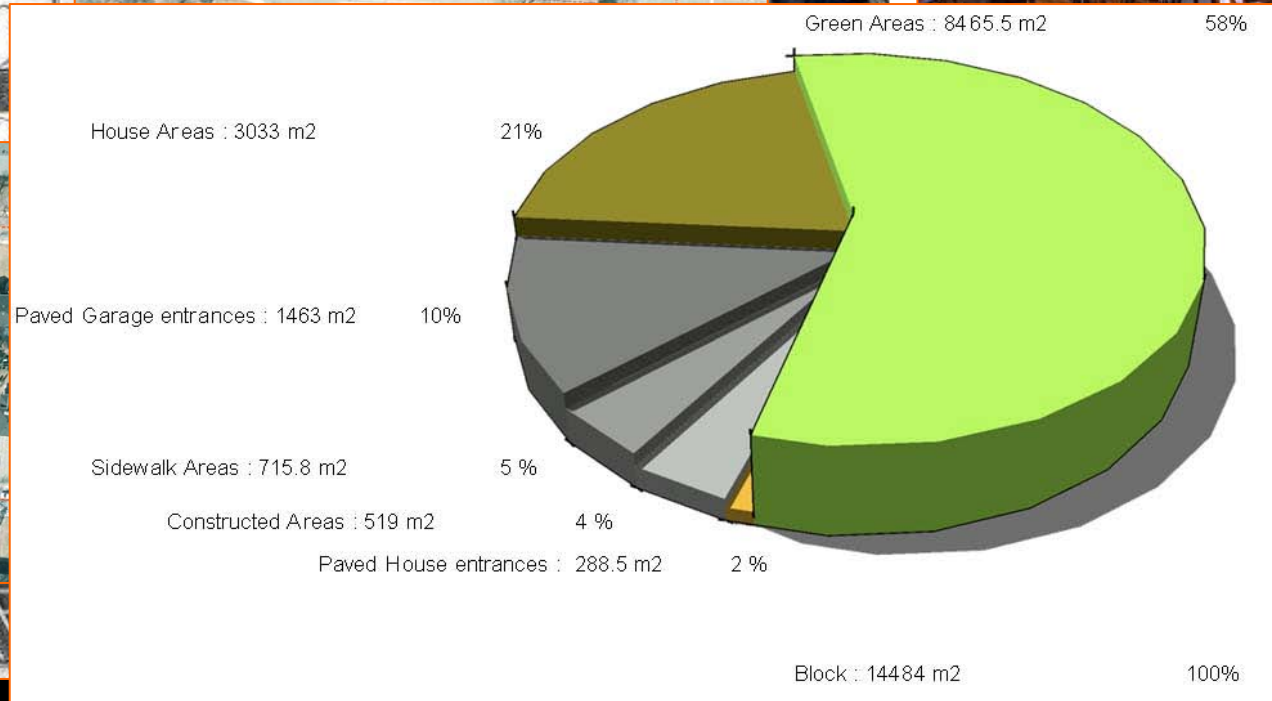
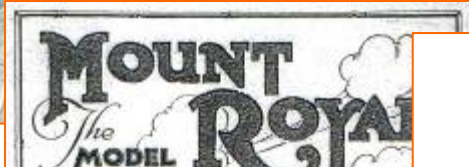
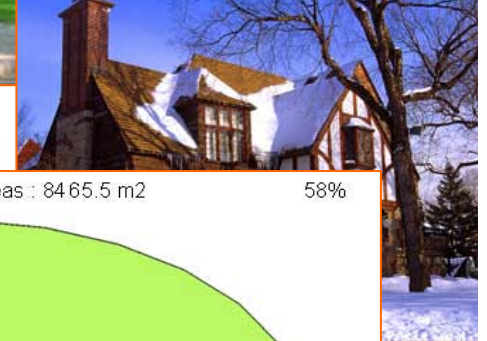




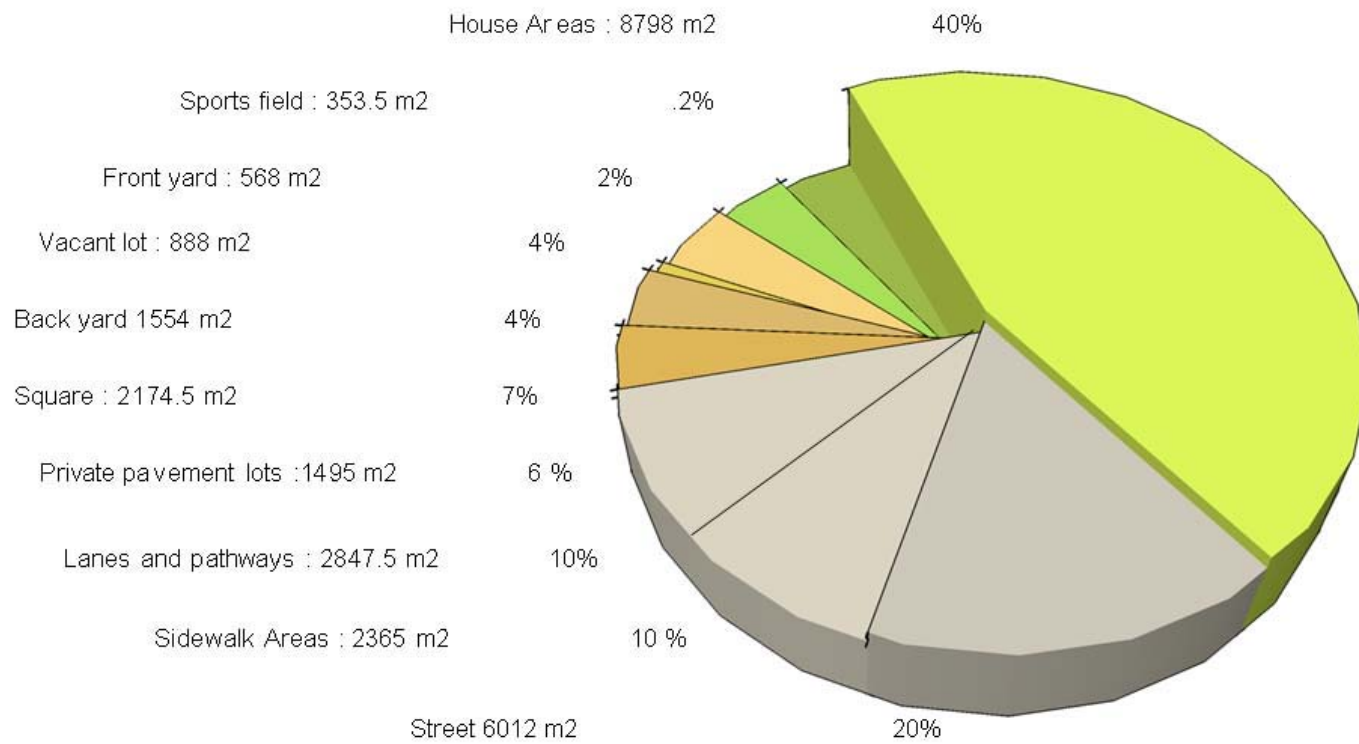




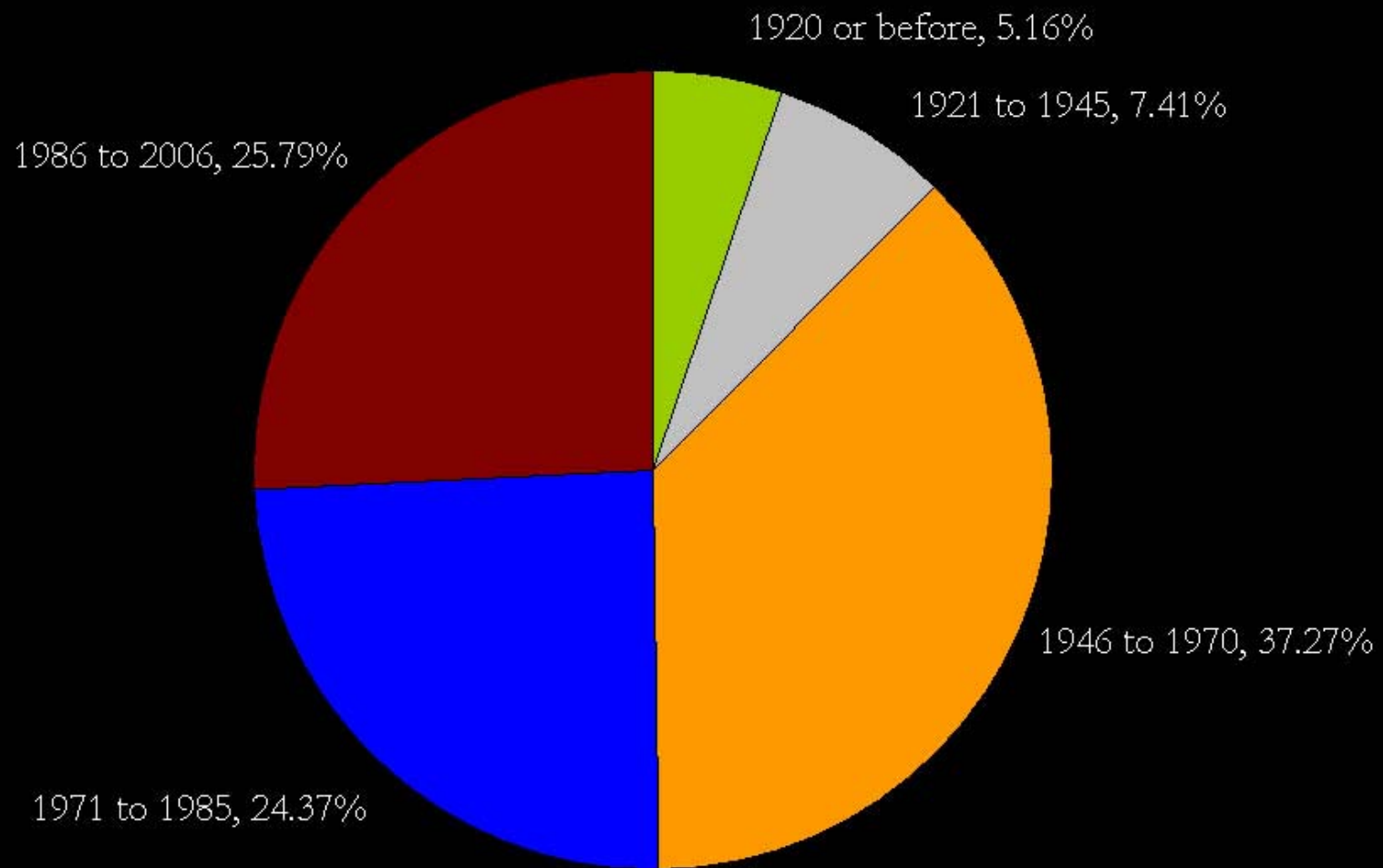
# Town of Mount-Royal (latter 20th c.)



# Rosemont (late 19<sup>th</sup> and early 20<sup>th</sup> c.)

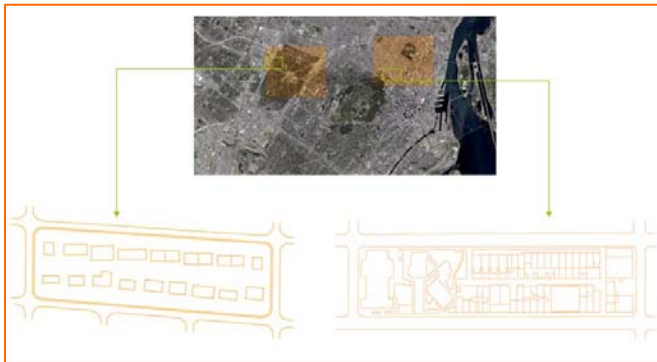


*Montréal CMA: Occupied private dwellings by period of construction*  
(Statistics Canada, 2006 Census)

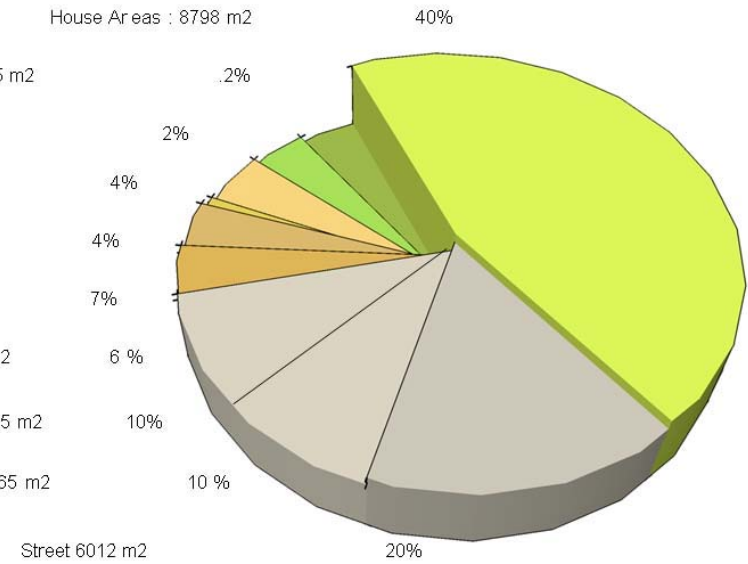




# Comparison



House Areas : 8798 m<sup>2</sup>  
 Sports field : 353.5 m<sup>2</sup>  
 Front yard : 568 m<sup>2</sup>  
 Vacant lot : 888 m<sup>2</sup>  
 Back yard : 1554 m<sup>2</sup>  
 Square : 2174.5 m<sup>2</sup>  
 Private pavement lots : 1495 m<sup>2</sup>  
 Lanes and pathways : 2847.5 m<sup>2</sup>  
 Sidewalk Areas : 2365 m<sup>2</sup>



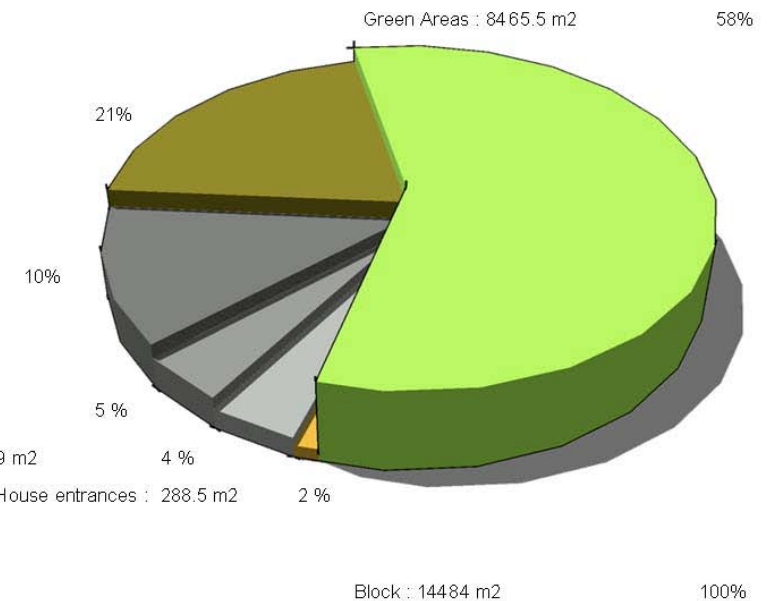
House Areas : 3033 m<sup>2</sup>

Paved Garage entrances : 1463 m<sup>2</sup>

Sidewalk Areas : 715.8 m<sup>2</sup>

Constructed Areas : 519 m<sup>2</sup>

Paved House entrances : 288.5 m<sup>2</sup>





## 2. Social and contextual dimensions of UA: The case of Colombo (Sri Lanka)



## Context: Informal Settlements, Colombo

### Colombo Population in 2007:

2,324 millions

50 to 60% lived in informal settlements.

Source: Shelter for all, 2007

<http://hq.unhabitat.org/content.asp?cid=4878&catid=542&typeid=13&subMenuId=0>

Category	Housing Units
Slums	25,000
Shanties (squatter	13,313
Low cost flats	
Relocated housing	14,814
Old deteriorated quarters	2,757
Unplanned permanent dwellings	870
<b>Total</b>	<b>66,022</b>

Underserved settlement distribution.  
Map of Colombo, Sri Lanka.

Source : Colombo Municipal Council



## Context: Halgaha Kumbura, Colombo



View of the site, Google Earth, July 2007





## Context: Halgaha Kumbura, Colombo





# Identifying potential growing areas MCHG students

**SITE PLAN: STATE OF HOUSING**

*Plan du site: état des habitations*



**BUILT ENVIRONMENT**

*Environnement bâti*



**POTENTIAL GARDENS**

*Jardins potentiels*



**VERTICAL GARDENS**

*Jardins verticaux*



**POTENTIAL PERGOLAS**

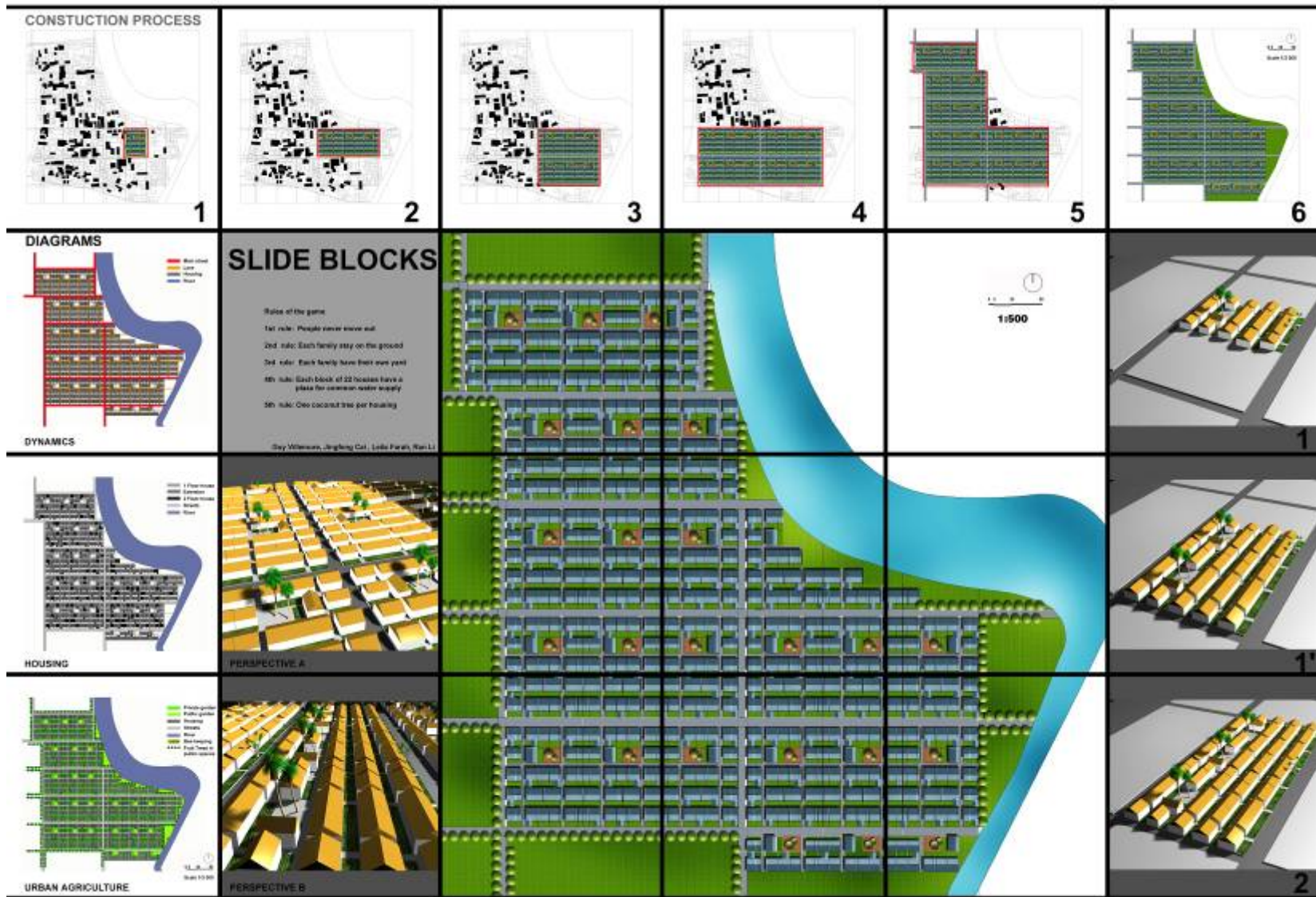
*Pergolas potentielles*



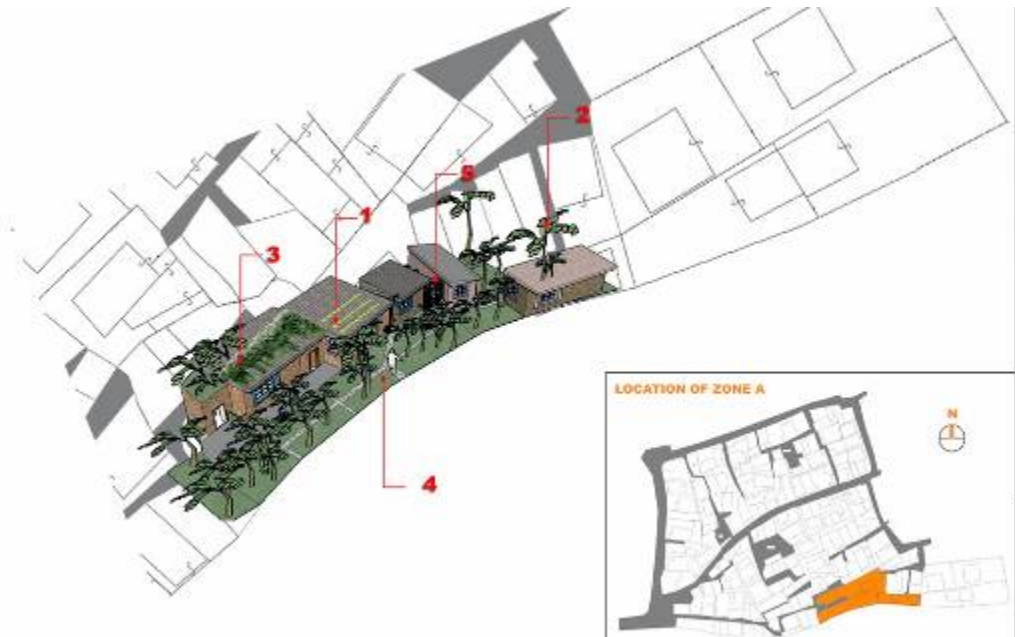
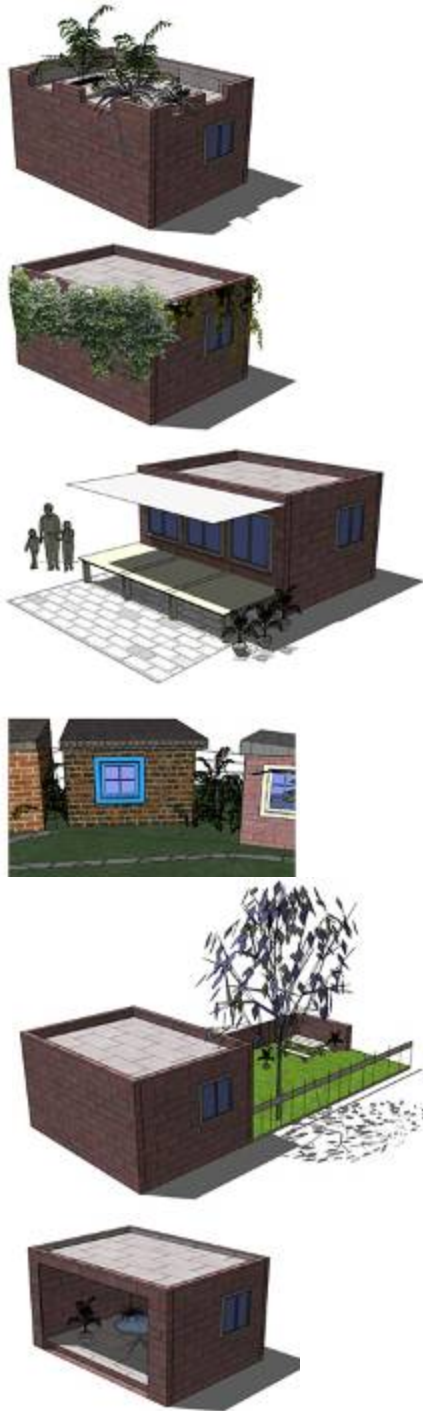
**POTENTIAL COMMERCIAL SPACES**

*Espaces commerciaux potentiels*









- UA IMPLEMENT**
- 1. ROOF GARDEN A
  - 2. ROOF GARDEN B
  - 3. ROOF GARDEN C
  - 4. COMMUNITY GARDEN
  - 5. PERGOLA



- UA IMPLEMENT**
- 1. ROOF GARDEN A
  - 2. ROOF GARDEN B
  - 3. ROOF GARDEN C
  - 4. SMALL YARD
  - 5. BIG YARD
  - 6. PERGOLA
  - 7. COMMERCIAL SPACE
  - 8. VERTICAL ORNAMENTAL GARDEN

## Urban Context in HK, Colombo :

*Irregular and narrow patterns of streets and alleys*



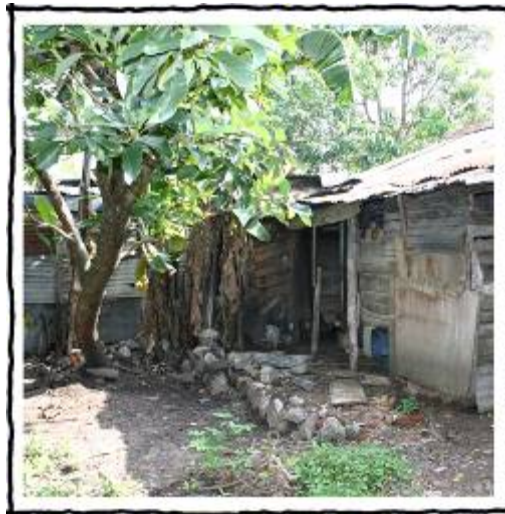
*Recycling materials*



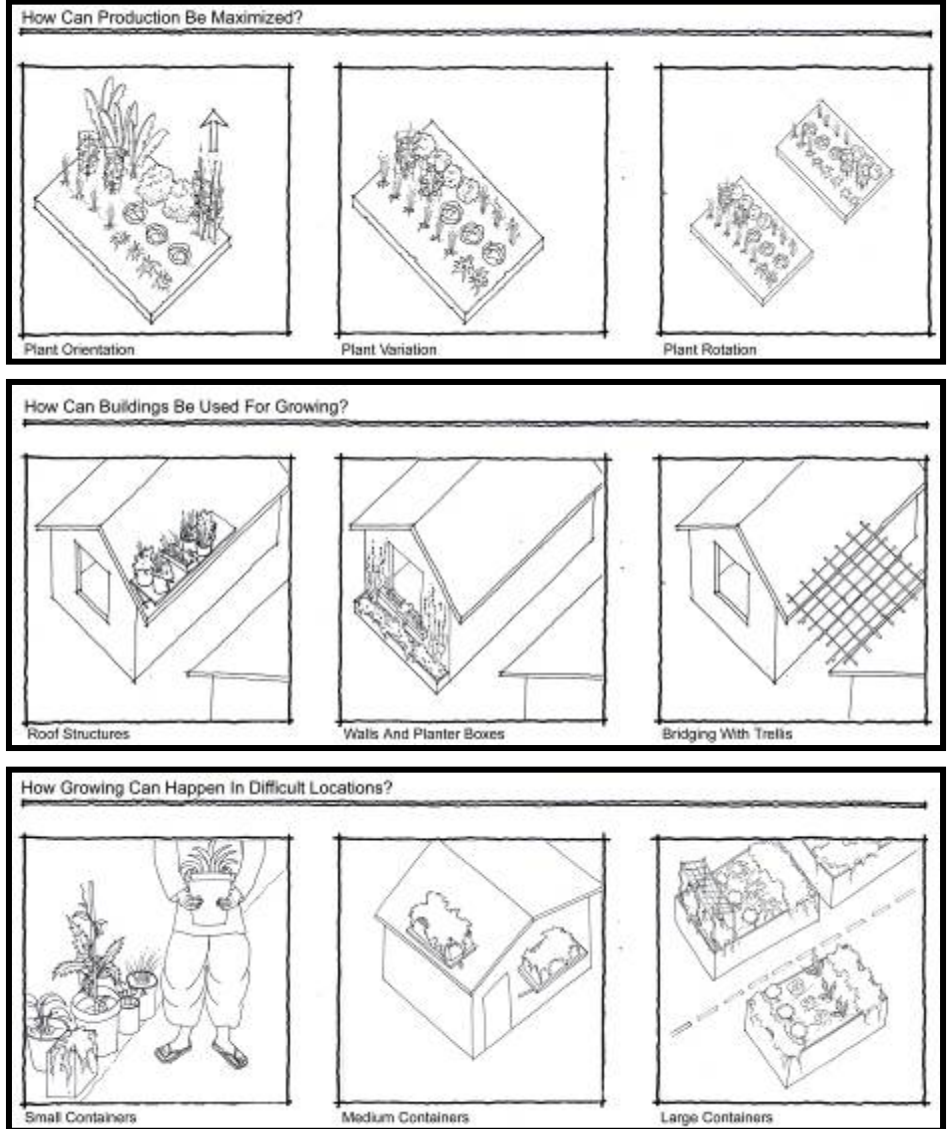


## GARDEN ORGANIZATION

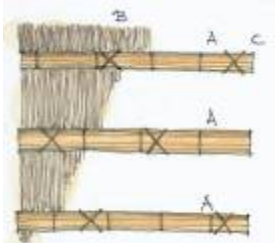
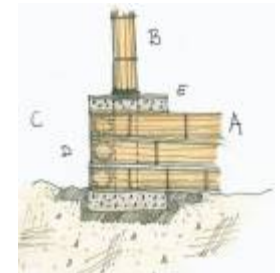
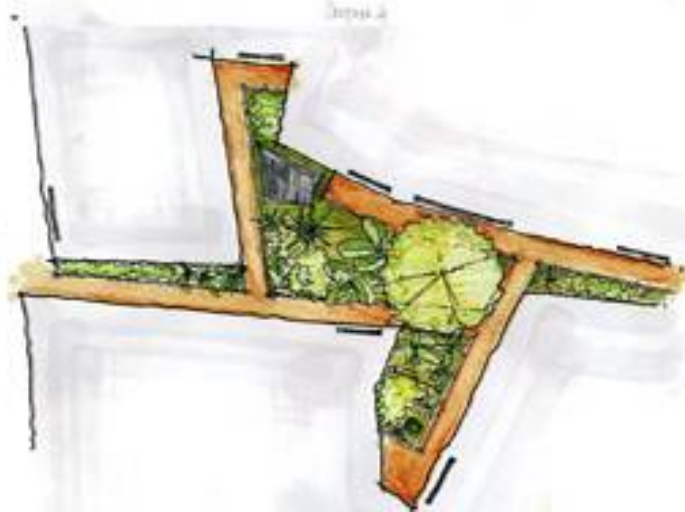
- Plot Type
- Size and Shape
- Circulation
- Orientation
- Ground Type
- Water Sources



## GROWING TECHNIQUES









## Community participation

© Minimum Cost Housing Group, McGill University





## Micro UA

© Minimum Cost Housing Group, McGill University



### **3. Environmental concerns related to UA: The case of Kampala (Uganda)**



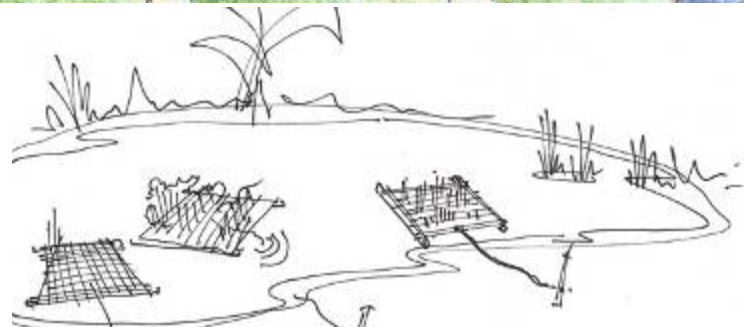
## USE OF PONDS

- Growing
- Fishing
- Water as infrastructure



## GROWING IN PONDS

- Rafts
- Baskets





## PRIVATE SPACE

- Lot layout
- House layout
- Areas for growing

## DESIGN CRITERIA

- Constant location
- Constant setback
- Variable house size
- Variable interior design



## FROM PUBLIC TO PRIVATE

- Street specifications
- Transition public-private
- House setback



## GROWING IN PUBLIC SPACES

- Areas for crops
- Areas for orchards
- Areas for marketing

## **4. Urban horticultural awareness: The case of Montréal**

### **EXAMPLES:**

**Housing and urban horticulture  
Nutri-Centre collective garden**



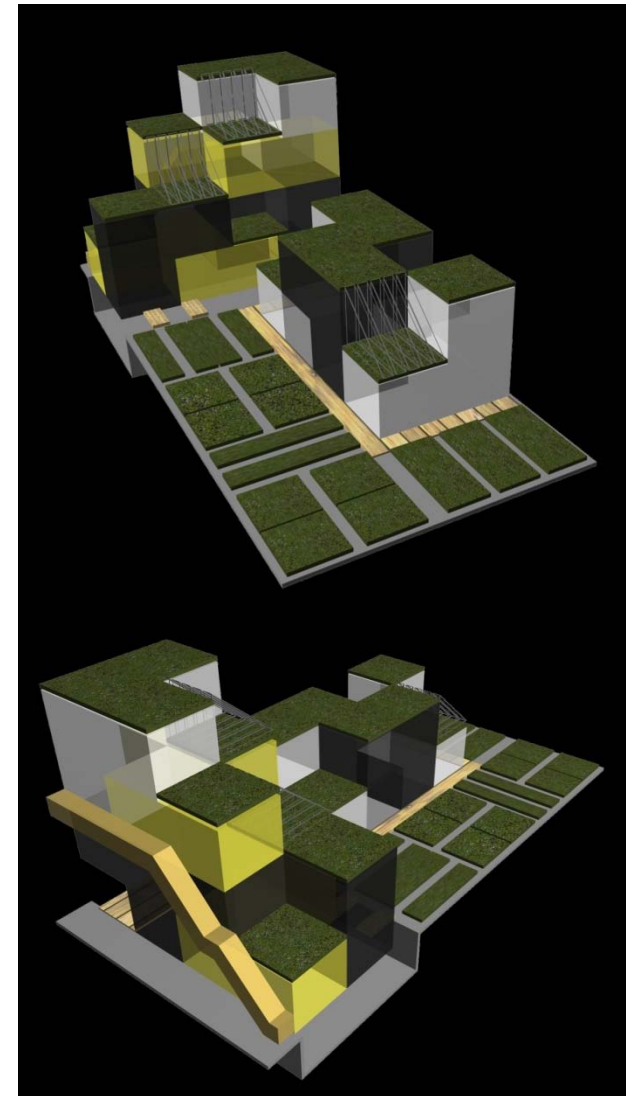
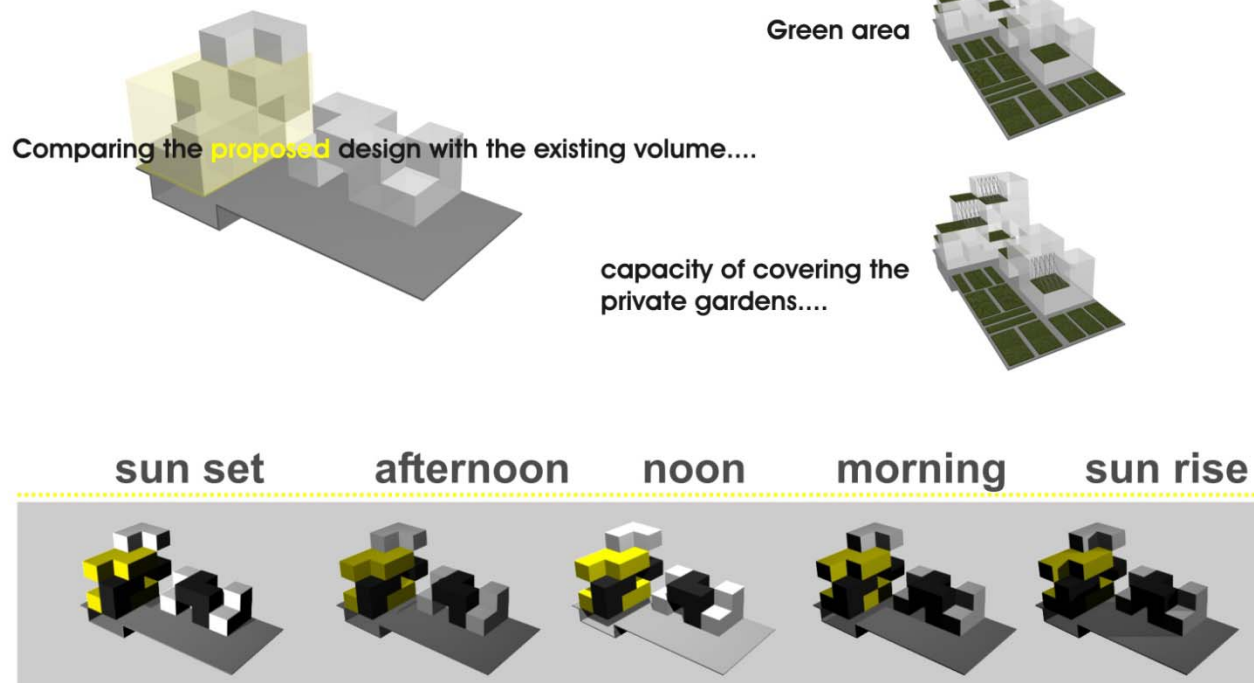
# Housing & Urban Horticulture

Alternative x

Arch 645 Housing project 1, fall 2005

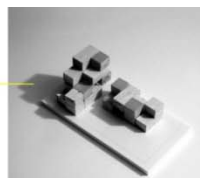
Design Alt. N

Analytical Study



Total built area : less than 70% : maximum growing space  
using roof tops , growing available space = lot area

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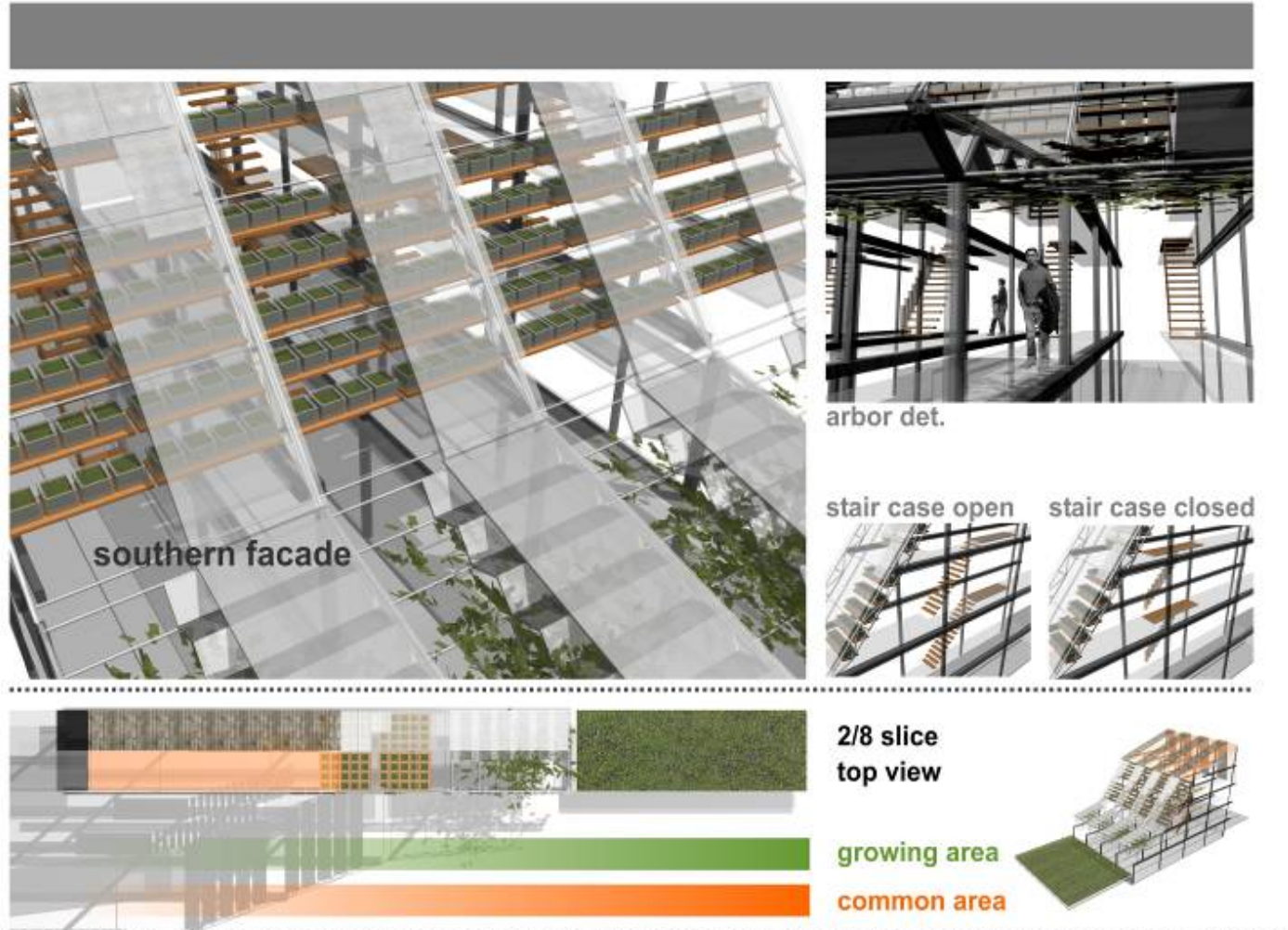


# Housing & Urban Horticulture

Alternative y

Arch 645 Housing project 1, fall 2005

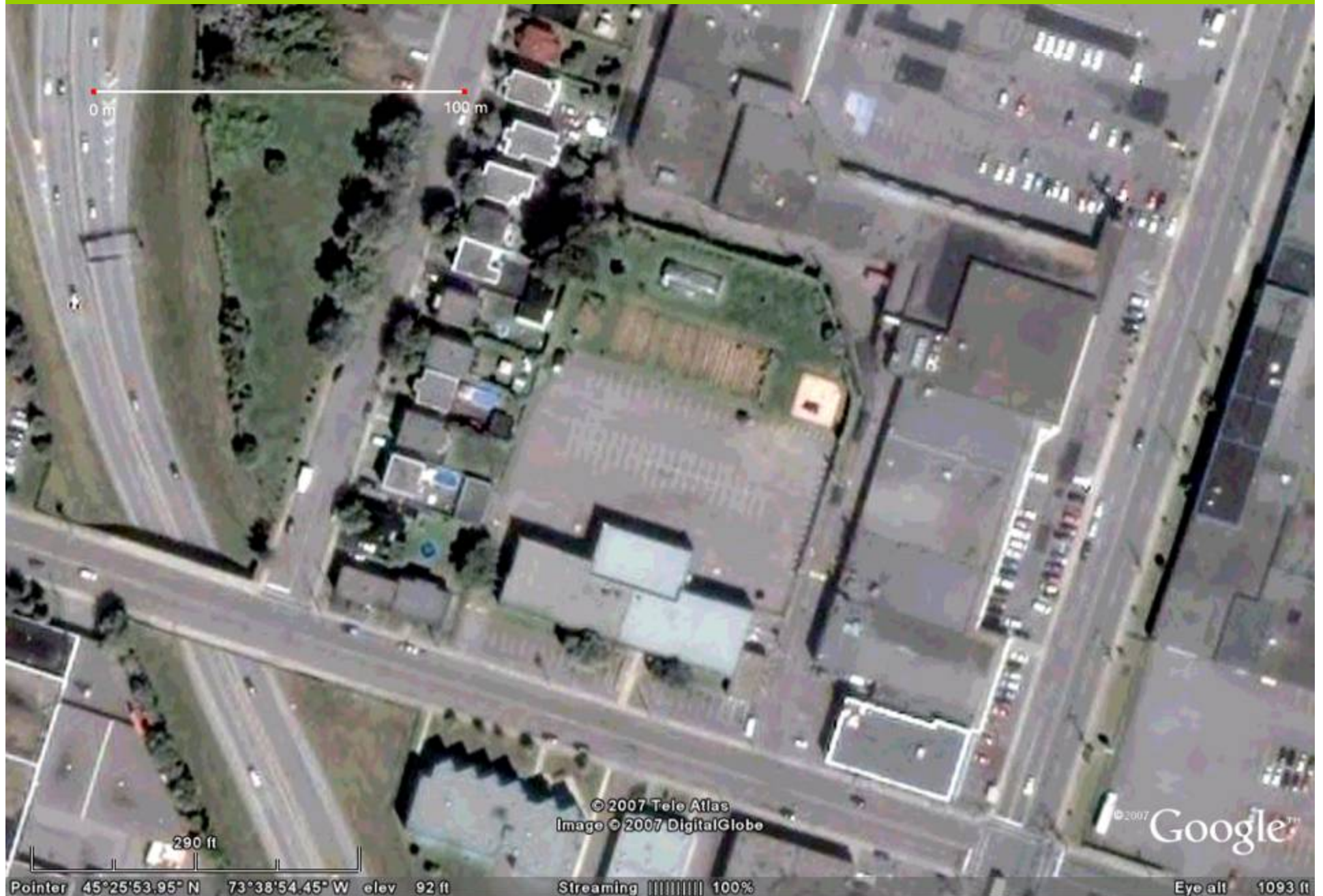
## Design Alt. R : Details...



30 Nov. Final Review, Productive House Montreal,

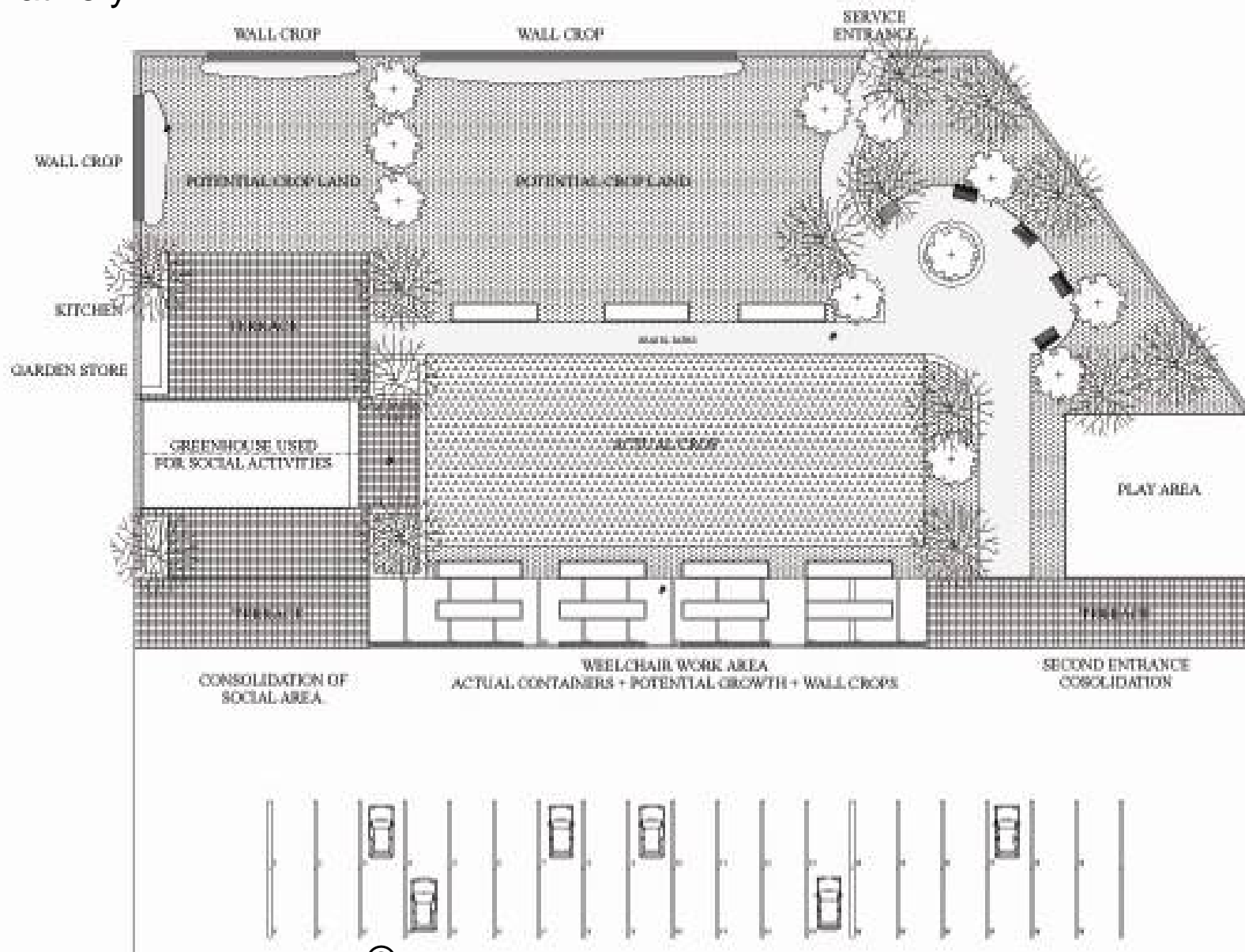


## Nutri-Centre Lasalle: Collective garden



# Nutri-Centre collective garden

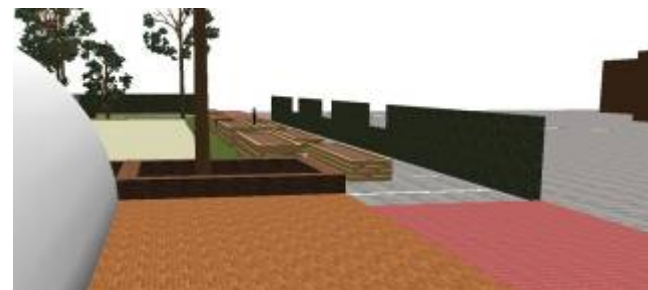
## Alternative y





## Nutri-Centre collective garden

Alternative y



## Nutri-Centre collective garden

Alternative y





*To find out more...*

**Minimum Cost Housing Group**

<http://www.mcgill.ca/mchg/>

**Joint Urban Design Program**

<http://www.mcgill.ca/urbandesign/>