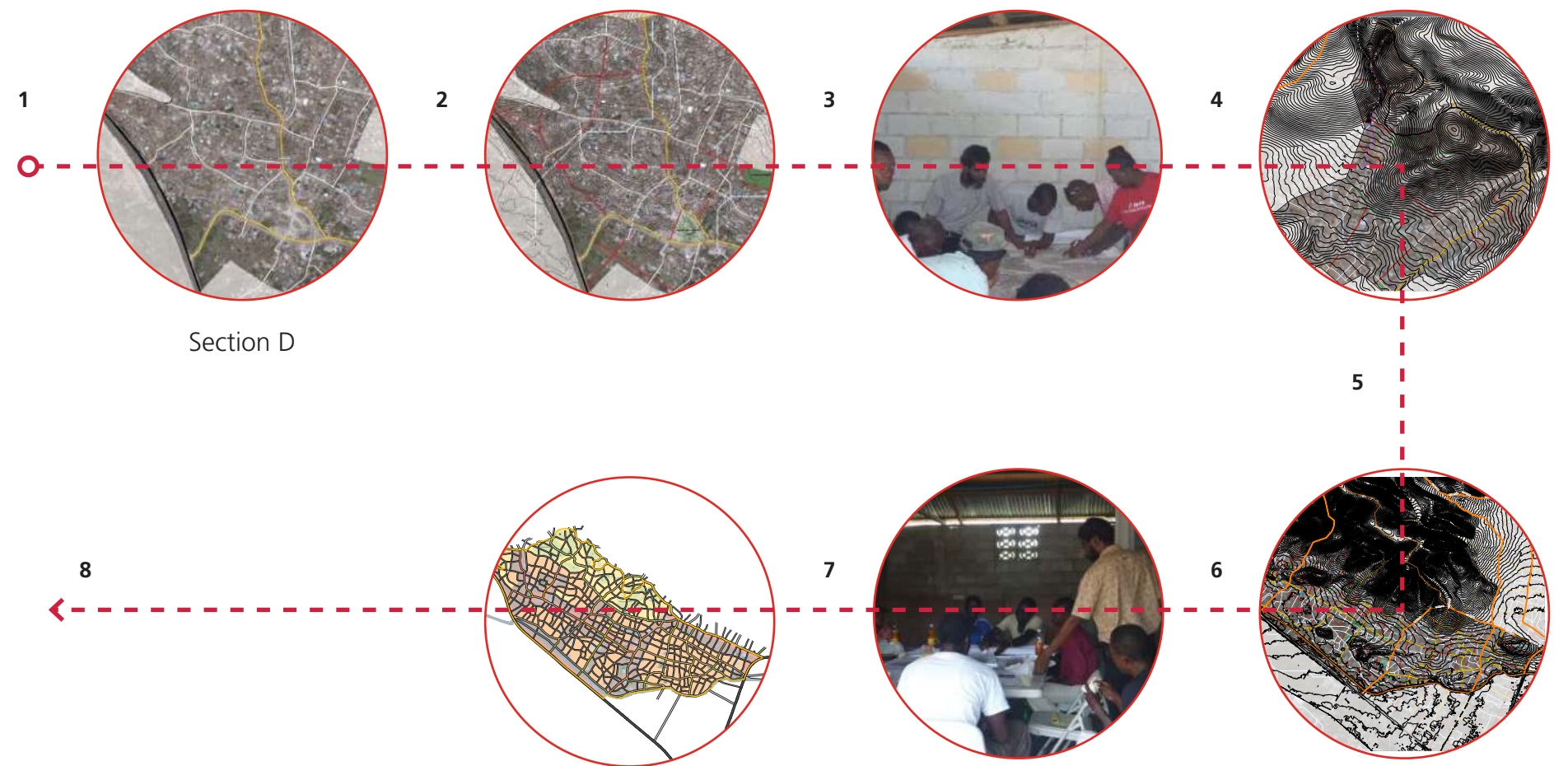


Canaan III, located in the southern part of Canaan, is the densest neighbourhood with a population of 22,413 inhabitants. The densest region is the centre where the concentration of houses and services is abundant. The topography of Canaan III is moderate and opens the possibility for development. This neighbourhood does not face environmental risks and thus has the potential to be a rich neighbourhood. There are few sports facilities, public spaces and small shops in Canaan III, however it is essential to keep ensuring the provision of services in order to support urban growth.

The proposals in this section are based on a participatory process with the Canaan II community that lasted an average of three months. The UN-Habitat team maps the existing situation and then the community validates and proposes ideas. The LAB of urban planning and design checks the proposed interventions and modifies if necessary. Then, a neighbourhood assembly is organized to present the vision and a land use plan is developed.



1. Mapping the existing situation
2. Mapping proposed interventions
3. Community workshops

4. New proposals draft
5. Selected interventions map
6. Neighbourhood assemblies

7. Draft of land use plan
8. Charrette and implementation

Fig.88: Canaan III: participatory planning process

A. STREET NETWORK

Improving the road network is essential to prevent congestion and traffic, this will help promote connectivity and reduce car dependency. Also, preserving spaces for streets is important before it is too late. There are two national roads that extend along the eastern and western limits of the neighbourhood.

Existing situation

Streets percentage

UN-Habitat: 30%

11%

Streets km/sq.km

UN-Habitat: 18 km/sq.km

18.48 km/sq.km



Fig.89: Canaan III: existing street network

Two arterial roads that link several main streets are proposed, as well as secondary streets that interconnect settlements are also suggested. The LAB, with its new proposal, reached an increase in the percentage of street network from 11% to 31%. The new plan does not only suggest the creation of new roads, but also aims to improve the current situation by enlarging the streets for example. Different widths are defined for the different types of roads (Option A and B, see below).

Proposed street network

Streets percentage

31% -Option A

Arterial road: 24m

Main roads: 18m

Secondary streets: 12m

- Option B

Arterial road: 18m

Main roads: 12m

Secondary streets: 9m

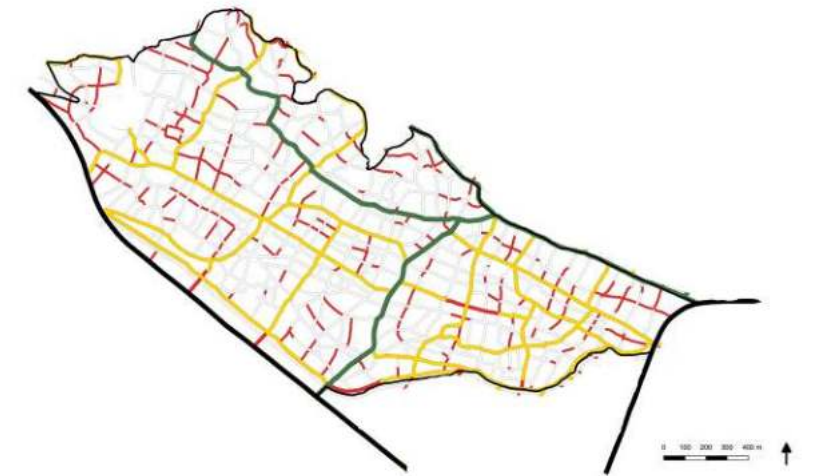
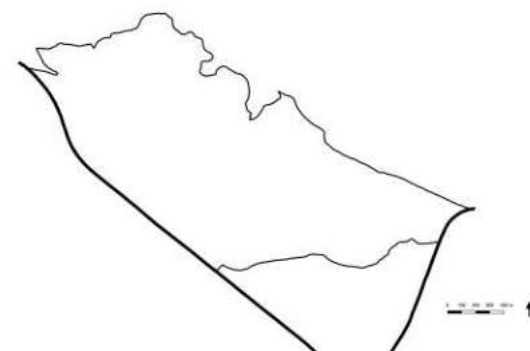
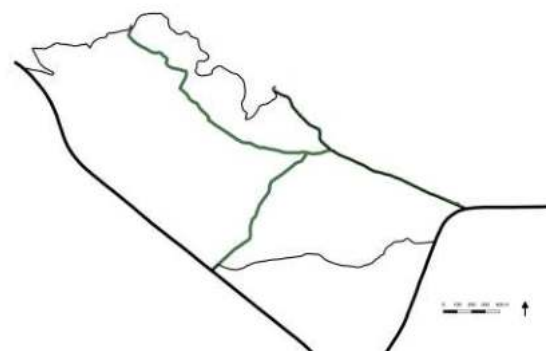


Fig.90: Canaan III: Proposed street network

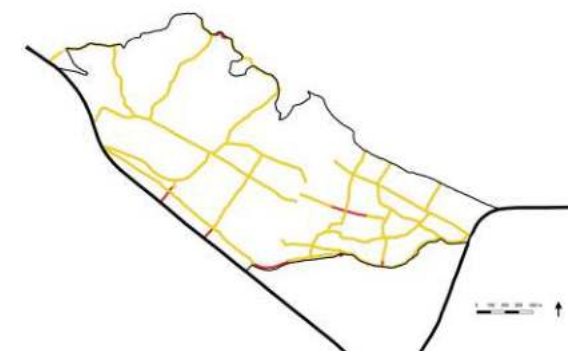
Layers of the proposed street network



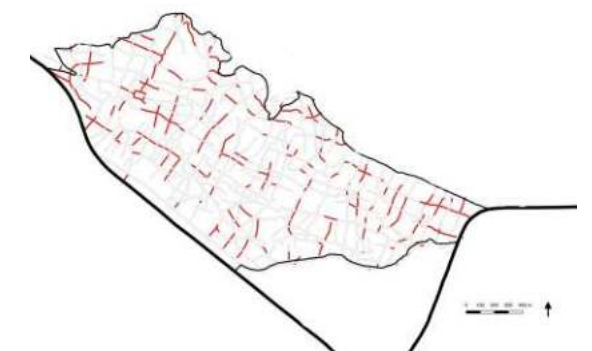
National road



Arterial road



Main roads



Secondary streets

Fig.91: Canaan III: Layers of the proposed street network

B. PUBIC SPACES



Fig.92: Canaan III: Existing Public spaces



Fig.93: Canaan III: Public spaces proposed by the community

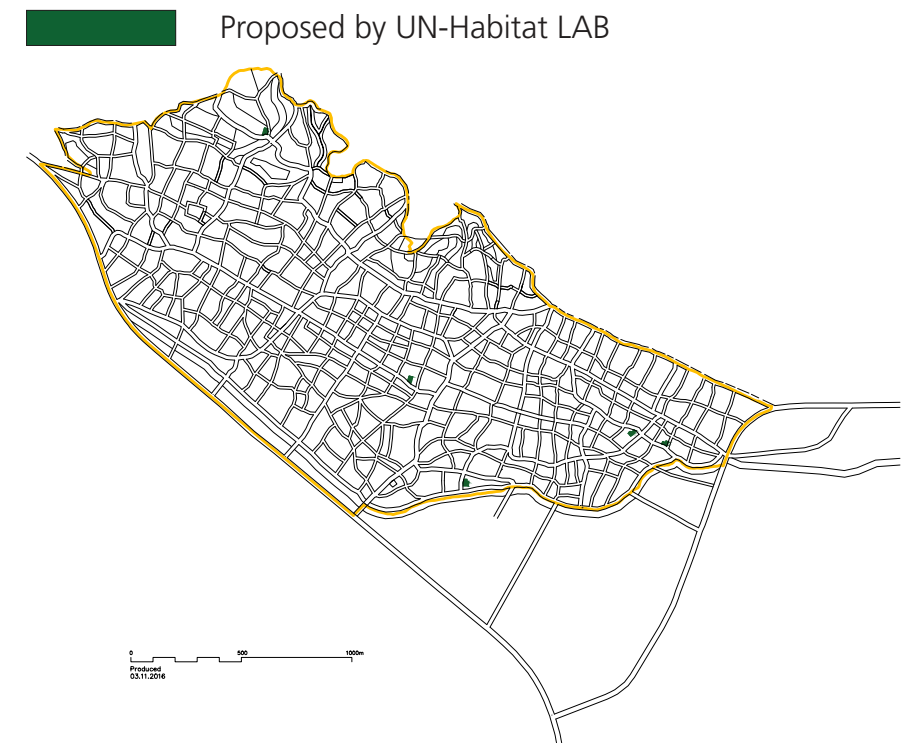


Fig.94: Canaan III: Public spaces proposed by UN-Habitat LAB

#	PUBLIC SPACES IN CANAAN III	STATUS	NAME	m ²	Ha	%
Area of the neighbourhood				3.269.000	327	100%
1	Public space	Existing		3.100	0,31	
2	Public space	Existing		757	0,07	
3	Public space	Existing		3.014	0,3	
4	Public space	Existing		830	0,08	
5	Public space	Existing	Ecole Fondamentale de Canaan	2.760	0,27	
6	Public space	Existing		2.340	0,23	
				12.801	1,28	0,39%
7	Public space	Proposed by the community		2.883	0,28	
15	Public space	Proposed by the community	Place Delivrance	580	0,05	
8	Public space	Proposed by the community		1153	0,11	
9	Public space	Proposed by the community	Place Publique De Canaan	2.295	0,22	
				6.911	0,69	0,21%
10	Public space	Proposed by the lab		491	0,04	
11	Public space	Proposed by the lab		556	0,05	
12	Public space	Proposed by the lab		720	0,07	
13	Public space	Proposed by the lab		500	0,05	
14	Public space	Proposed by the lab		400	0,04	
				2.667	0,26	0,08%
				22.379	2,23	0,68%

Table 11. Canaan III: Percentage of public spaces

Currently, there are some public spaces in Canaan III that covers 0.3% of the total neighbourhood area. UN-Habitat recommends a coverage of 15% of public spaces. This recommendation implies that these spaces are spread equitably in the neighbourhood. Most of the existing public spaces are concentrated in the centre and therefore a decentralization of these spaces is essential. Ideally they should be easily accessible and located at a maximum distance of 400 metres to reduce car dependency and improve walkability.

During the participatory assemblies, the community strongly expressed its need to improve the green network. The results after the new public spaces propositions shows an increase in the percentage of these spaces, and also a good distribution in the neighbourhood. The amount of public space remains low and could be further improved. To meet the demands of the growing population, ways must be found to preserve more land for public purposes.

It is important to guarantee from both sides of the ravine, a distance 50m as a buffer zone. These zones were designed with the potential of becoming public spaces and not just protection areas. If these proposals are put into place, the allocated public space in Canaan III will reach 1.4% ensuring 2m² of space per inhabitant.

The total number of public spaces remains low and can be further enhanced. More spaces should be considered or preserved for public usages in order to meet the demand of the growing population.

#	PUBLIC OPEN SPACES IN CANAAN III	STATUS	NAME	m ²	Ha	%
	Neighbourhood area			3.269.000	327	100%
	Public spaces			22.379	2	0.68%
16	Buffer area next to ravine	Proposed by lab		13.968	1,39	
17	Buffer areas next to ravine	Proposed by lab		9.636	0,96	
	Total:			23.604	2	0,72%
Total Public open spaces:				45.983	4,59	1.40%

Table 12. Canaan III: Total percentage of open public spaces

The World Health Organization (WHO) recommends 9m²/inhabitant

Existing	Proposed public space	Proposed P.S + non-aedificandi
12.800 m ²	22.379 m ²	45.983 m ²
22.413 inhabitants	22.413 inhabitants	22.413 inhabitants
0,57 m²/inhabitant	0,99 m²/inhabitant	2 m²/inhabitant

Table 13. Canaan III: Public space area per inhabitant diagram

Proposed public spaces with 400 metres buffer

- Existing public spaces
- Proposed by the community
- Proposed by UN-Habitat LAB

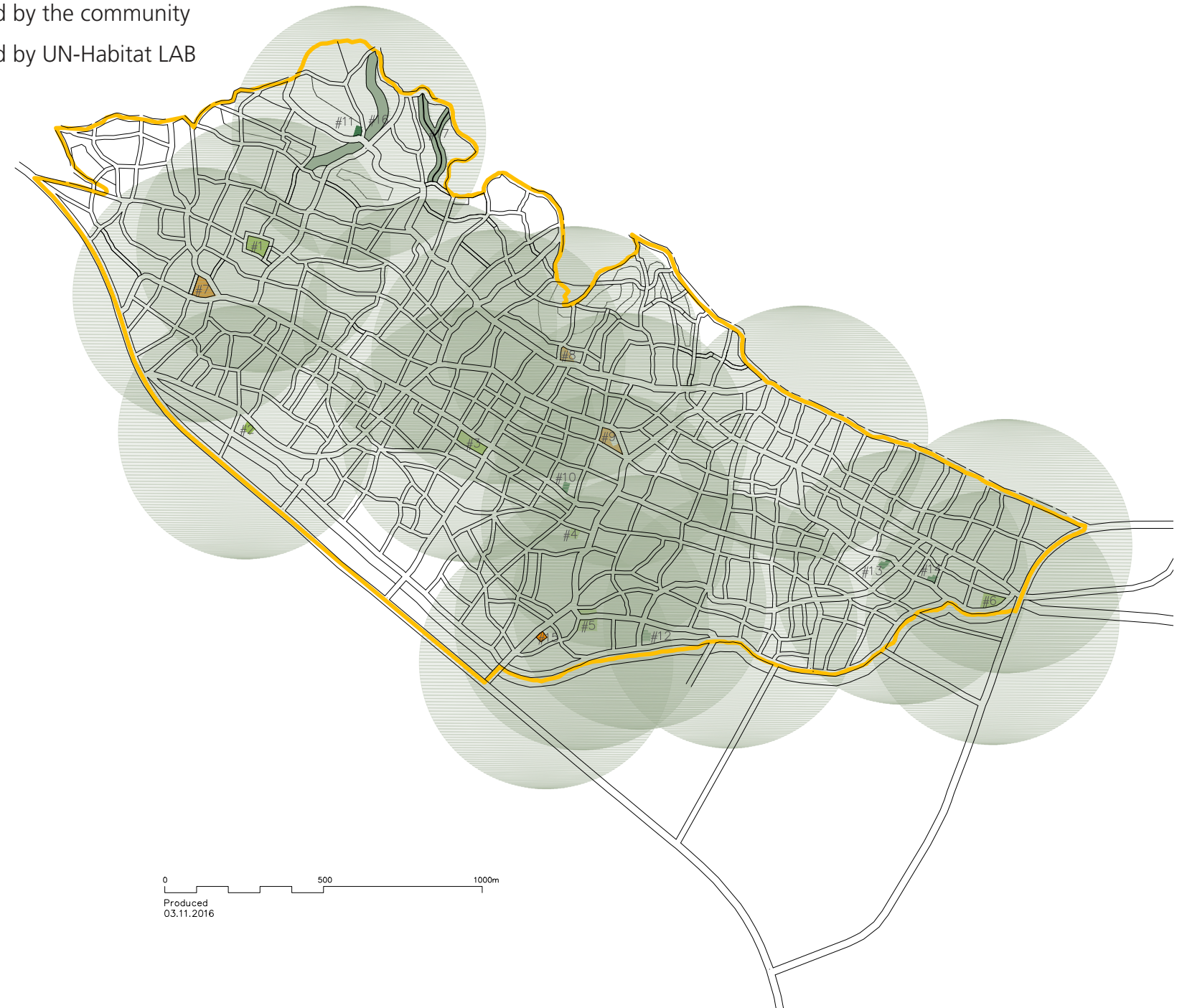


Fig.95: Canaan III: Overall public spaces' land use and buffer area (400m)

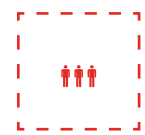
C. RESIDENTIAL AREAS



3.27 km²
Neighbourhood area



22,413
Inhabitants
(source ARC household survey 2016)



6,854
People/km²

Existing residential areas



0 100 200 300 400 m
Drone Image 01.07.2015
Existing Buildings DSM 22.01.2016

Fig.96: Canaan III: Existing settlements

Canaan III is the densest among the 15 neighbourhoods of Canaan. This is due to the fact that it is situated in the most urbanized areas and with flat topography.

**Canaan III
Population growth**

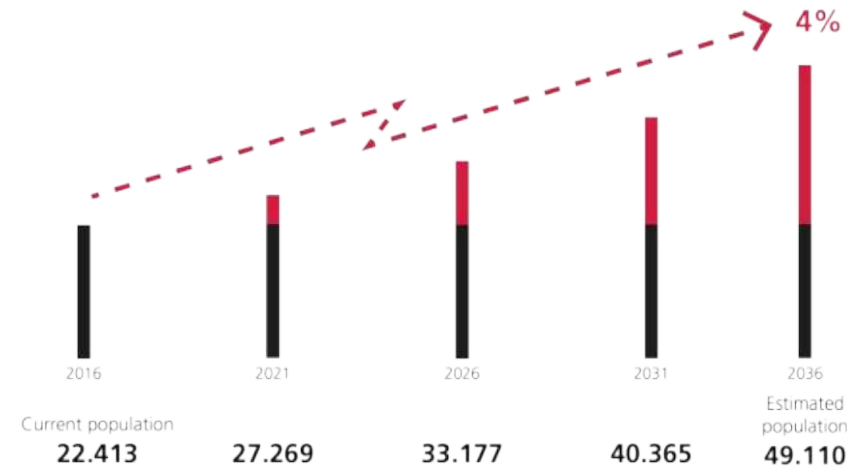


Fig.97: Canaan III: Projected population increase

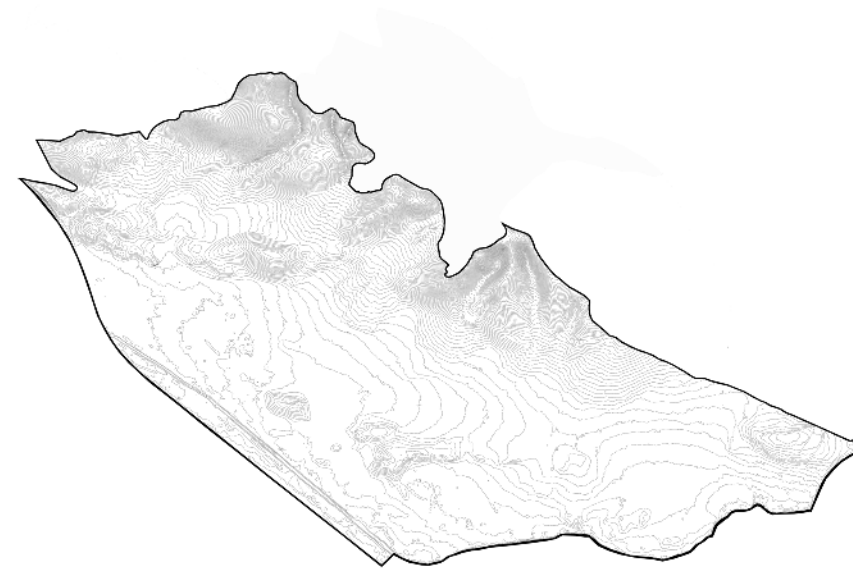


Fig.98: Canaan III: Contours

Located just at the entrance of Canaan, the neighbourhood has a strategic location with a great potential and opportunities for development. The population growth of Canaan III is of 4% per year.

Proposed densities

Low density

Low density housing are suggested where the topography is not complex. With reference to the map on the right, the northern part of Canaan III was designated for low densities where it is proposed to have 8,000 inhabitants per square kilometre. Existing homes may remain, although it is recommended not to further densify the site.

Medium density

The topography where medium density housing is proposed, is abrupt but still considered suitable for dwellings. The level of densification depends on the proximity of the arterial and main streets, as well as the commercial and the service-oriented areas. The in-between areas of the most urbanized and the low density areas are therefore recommended to be of average density with 12,000 people per square kilometre.

High density

High density areas with 15,000 people per square kilometre are advised to take place near the arterial roads. The southern region that is between the RN 1 and the proposed arterial road is to become a completely high density area. It is preferable to combine high residential densities with commercial services with the aim of promoting a mixity of usages. In Canaan III, this was proposed in the central parts of the district, extending horizontally to the north and south. This encourages a compact urban form and also reinforce the urban economic and the social and cultural activities.

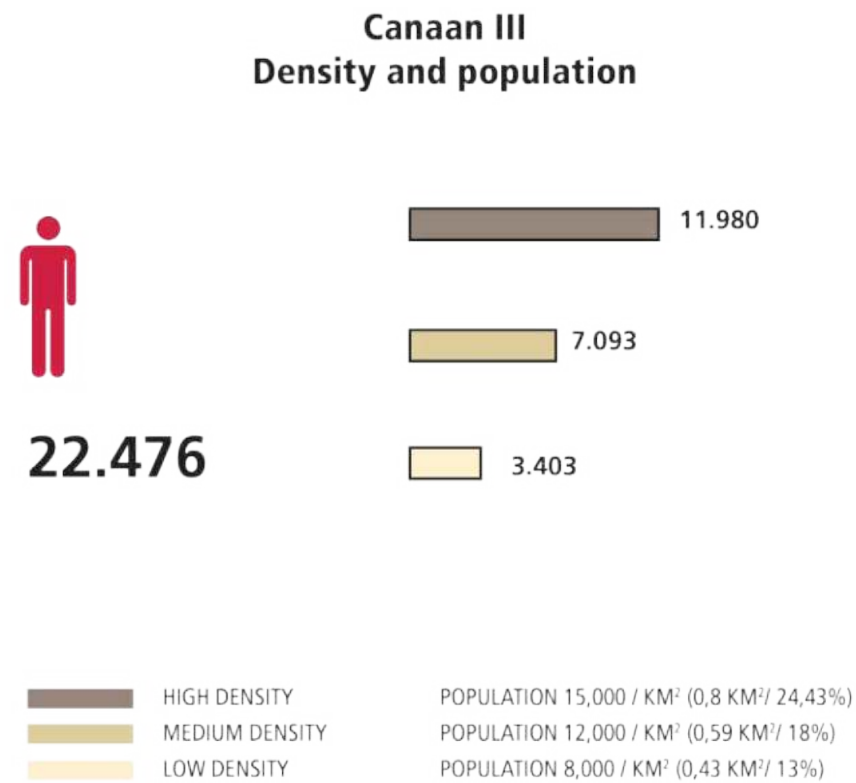


Fig.99: Canaan III: Diagram of population in the new proposed residential areas.

In the plan of Canaan III, the residential areas must not be mono-functional; the integration of mixed uses into the urban fabric is essential to promote walkability, encourage the inclusion of vulnerable people and maintain social cohesion. In 20 years, and if the growth remains of 4%, the current population of 22,400 will reach 49,000 people.

The densification of Canaan III, as proposed, will accommodate 22,470 inhabitants. In order to meet the demands of the growing population, further densification will be required as well as the consideration of an extension plan for the region.

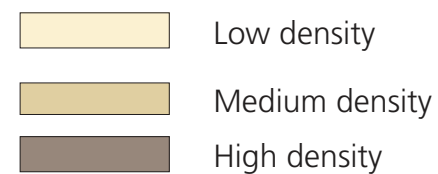


Fig.100: Canaan III: Residential areas and proposed densities

D. COMMERCIAL AREAS

● Existing commercial

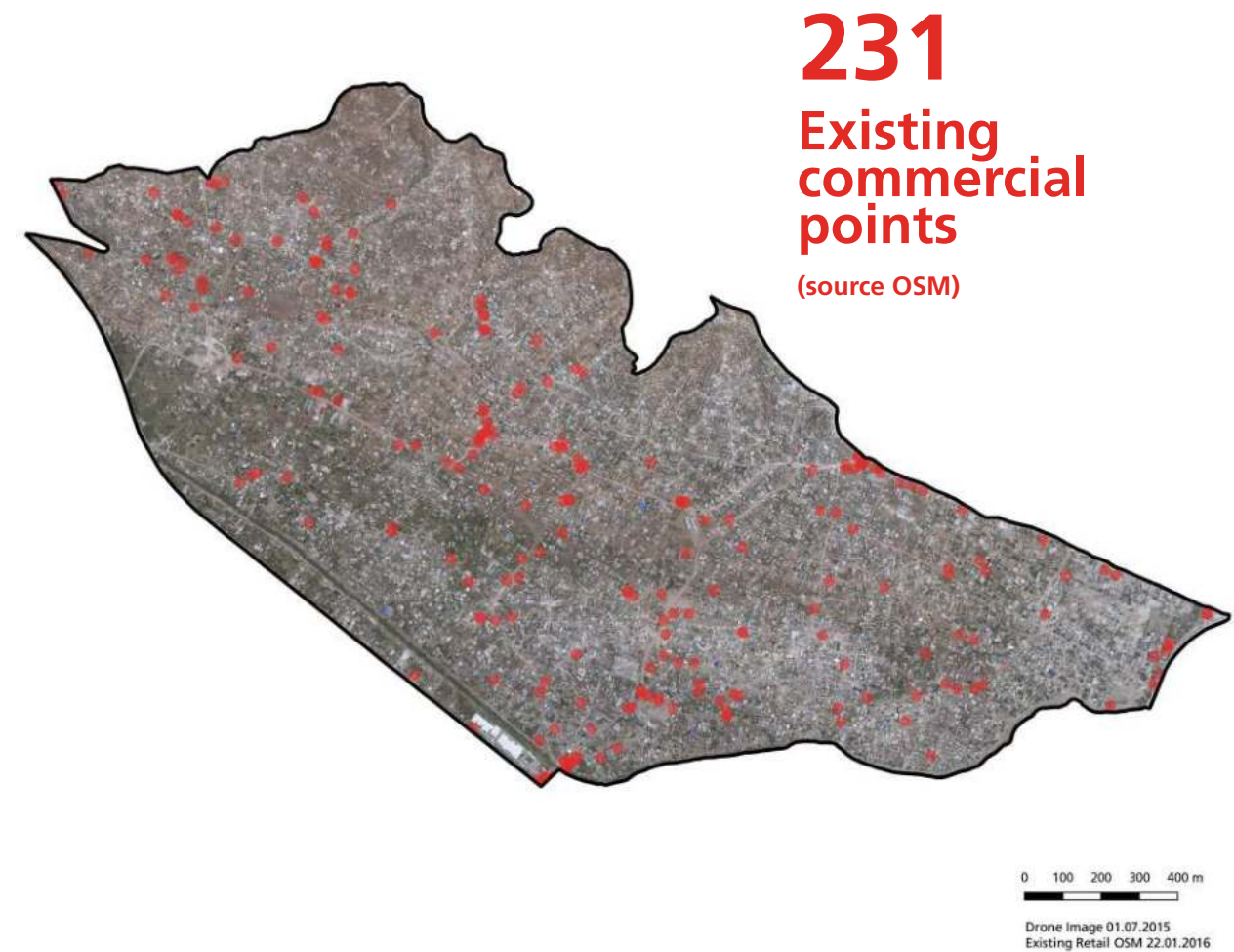


Fig.101: Canaan III: Existing commercial points (Source: OSM)

The commercial activities are found dispersed in the neighbourhood with little concentration. The shops are of different utilisations like vegetable shops, tailor, etc... In order to keep with the urban growth of 4%, it is essential to provide further commercial activities and encourage commercial streets. The decentralization of these services and the good planning of street network will increase employment opportunities for the residents.

■ Proposed commercial areas (mixed-use)

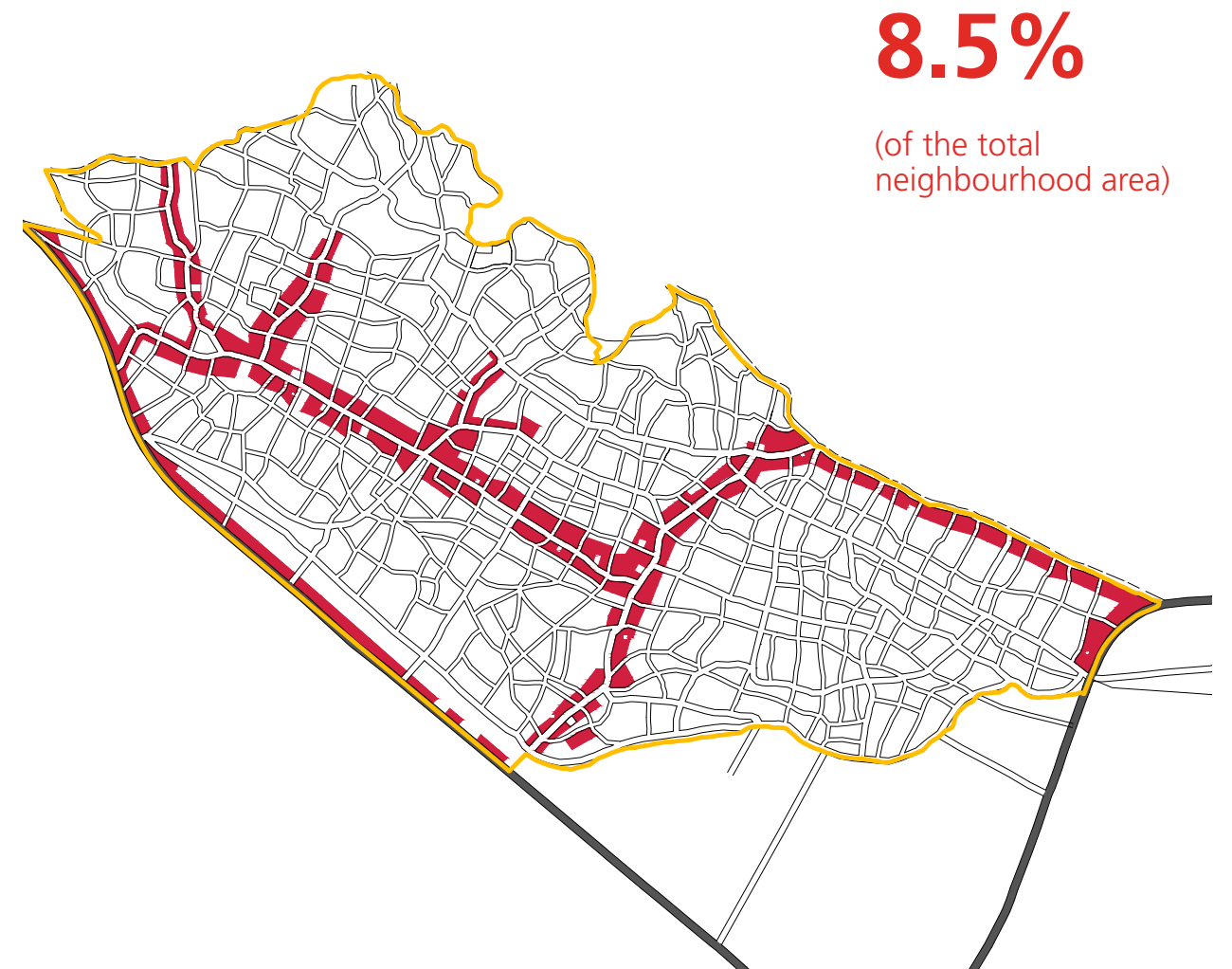


Fig.102: Canaan III: Proposed commercial areas

After the community workshops, different commercial roads were identified. The location of these services was concentrated near the main roads, as well as the arterial roads. This will ensure that they are easily accessible. Commercial services are catalysts for local economy. It is important to note that these services are not monofunctional and are not limited to commerce but open space for different functions to be present. The new commercial will occupy 8.5% in the new land use plan of Canaan III.

E. PUBLIC FACILITIES

- RELIGIOUS - EXISTING
- EDUCATION - EXISTING
- HEALTH - EXISTING
- OTHER PUBLIC FACILITIES - EXISTING



Fig.104: Canaan III: Existing public facilities

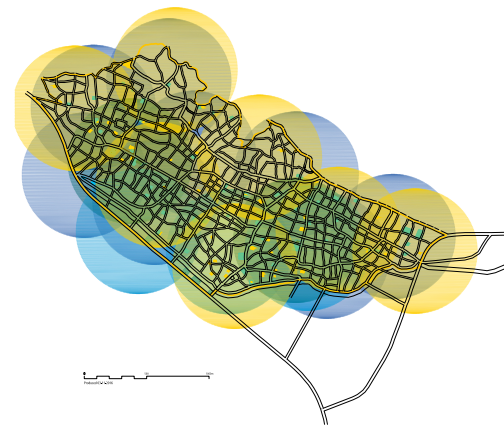


Fig.103: Canaan III: Existing public facilities and a 500m buffer catchment area.

There are 85 plots for schools in Canaan III. These schools are well distributed in the neighbourhood and can support the population growth of the neighbourhood. The data has been validated with the community, however there is always lack of information concerning the types of facilities (primary, secondary, etc.). In consequence, no new school is proposed, but the upgrading of the current facilities and the quality of the educational program is recommended.

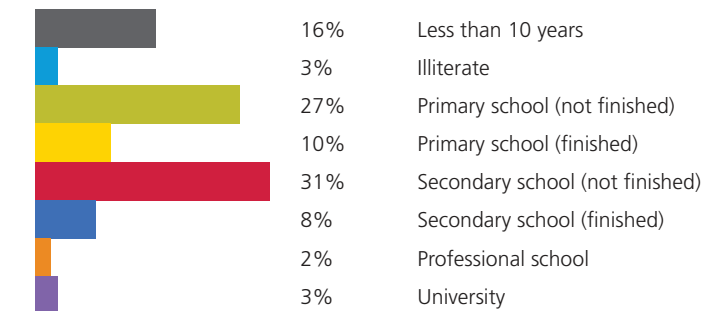


Table 14. Canaan III: Participation level (Croix Rouge Americaine, Juillet 2016)

The neighbourhood has 79 worship places. The frequency of these services follows the density of the population. Where the density is high, the religious facilities are found abundant and vice versa. There are no information regarding health facilities, community centres, security and others. For planning reasons, and in order to have a sustainable city, it is essential to consider the mentioned services in the new land use plan of the neighbourhood. Generally, these services demands a good accessibility to the road network and their location should be well studied. Normally, it is recommended to locate them within 500 metres in order to reach them easily within few minutes' walk.

F. NATURAL RESOURCES AND ENVIRONMENT

Due to the topography that is almost flat, there is barely no-built areas in Canaan III. Two ravines that crosses the neighbourhood in the North and therefore buffer zones are proposed to take place. These open spaces of 50 metres from both sides of the ravines are designed to mitigate the risk of flooding and to protect the environment. These spaces were also planned with the potential to become public spaces. The no-built areas in Canaan III form 0.72% of the total neighbourhood area.

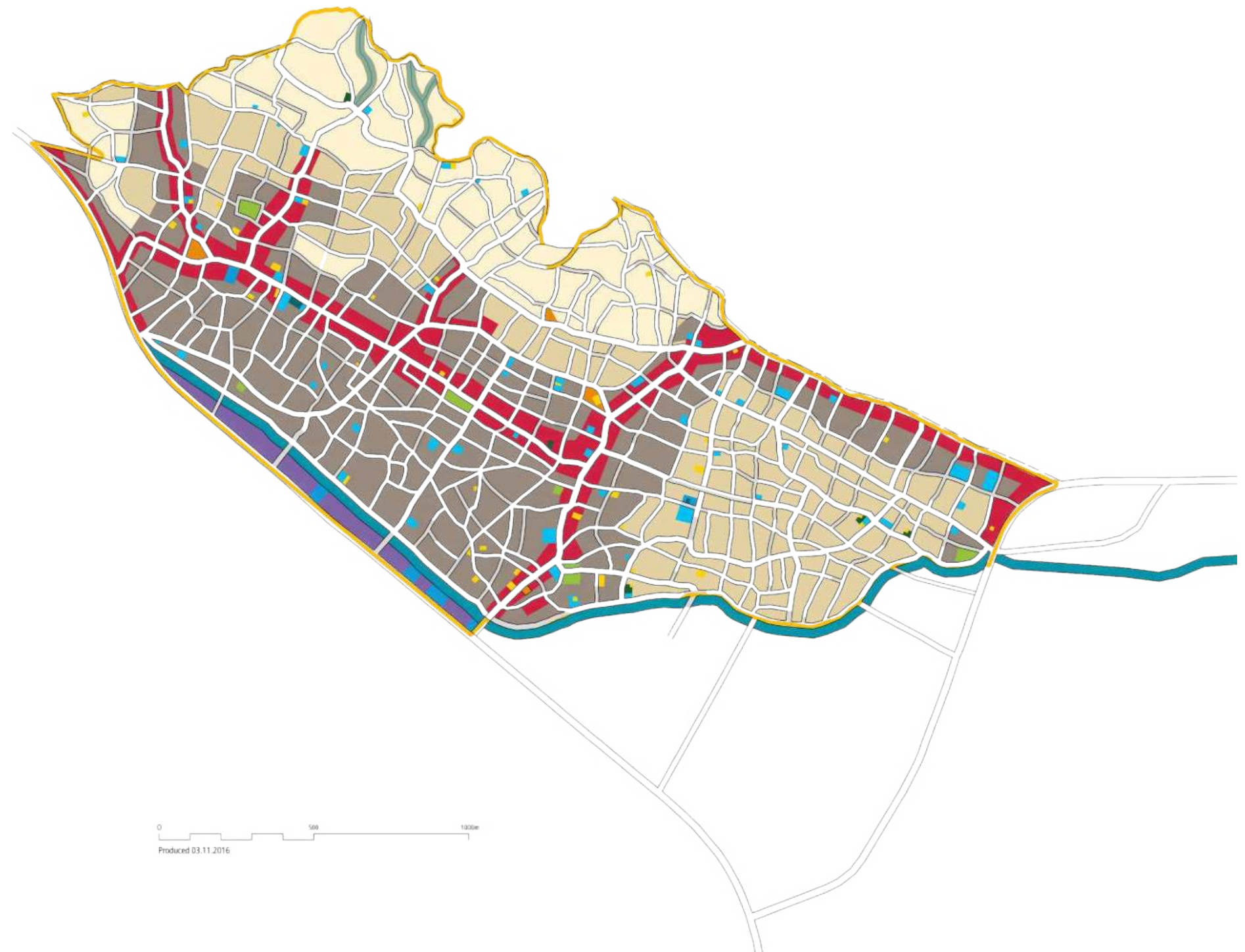
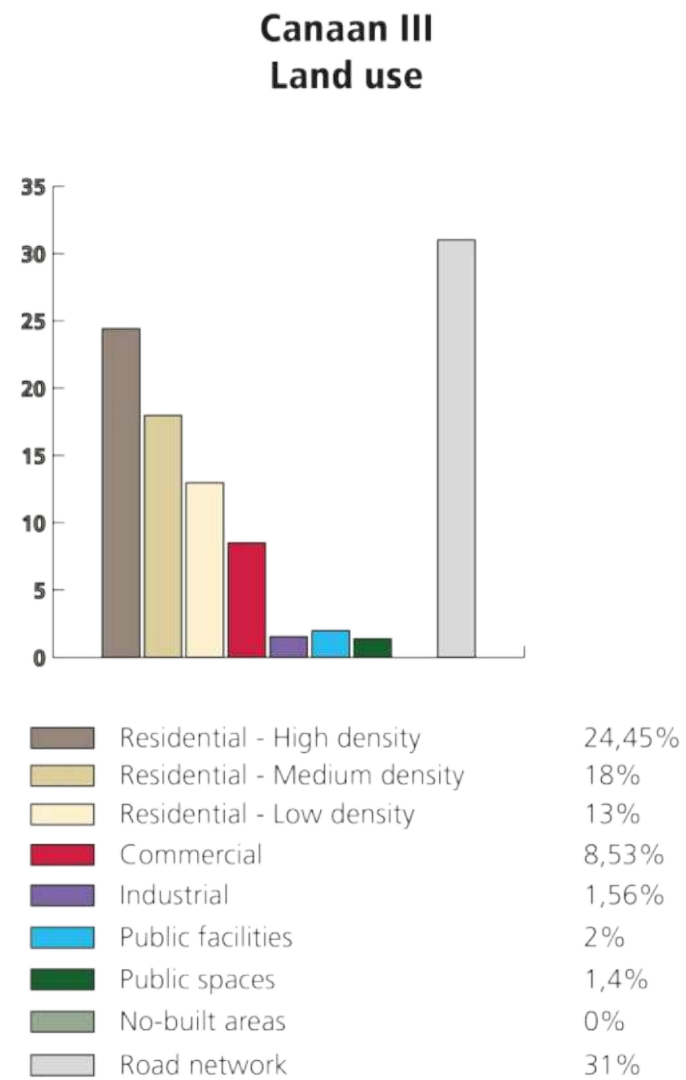
#	No-built areas	m ²	ha	%
	Neighbourhood area	3.269.000	327	100%
16	Buffer zone next to ravines	13.968	1,39	
17	Buffer zone next to ravines	9.636	0,96	
	Total:	23.604	2	0,72%

Table 15. Canaan III: Total percentage of no-built areas



Fig.105: Canaan III: No-built areas

G. CANAAN III LAND USE



The land use plan of Canaan III is a result of a continuous engagement with the community. The plans were examined and validated with the residents and the community leaders. The assemblies, facilitated by the UN-Habitat team in Haiti, identified the main needs of the residents of Canaan III. It responds as much as possible to their needs and proposes new ideas that can induce prosperity and sustainability.

The plan was reviewed as a whole, taking into account the neighbourhoods nearby and how they connect. It is mandatory to situate each of the individual neighbourhood plans in the whole Canaan area to achieve a coherent and rich structure.

Fig.106: Canaan III: Proposed land use plan