

# The Green Loop for Active Ageing

The Caring Landscape Design in the Shrinking Parkstad

#### North Sea Museum Adventures The Netherlands Onderban (C) Belgium Germany **Parkstad** Brunssu **Zuid-Limburg** Shopping Zoo, Playground... France Luxembourg Landgraaf Nuth Parkstad Voerendaal Kerkrade Heritages Maastricht Beers and Wines impe Animal Husbandry Belgium Aachen Fruits and Vegetables

1.0 Parkstad

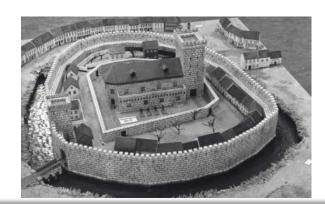


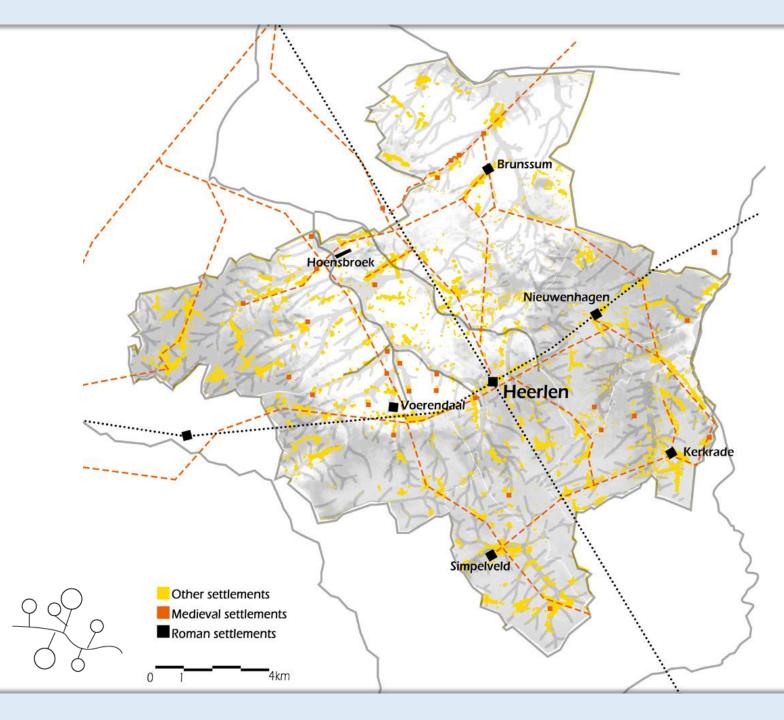
#### 2.0 Problem Statement - history

Amount of Inhabitants

- Average Dutch Income

450-1890 Roman and Medieval Settlements



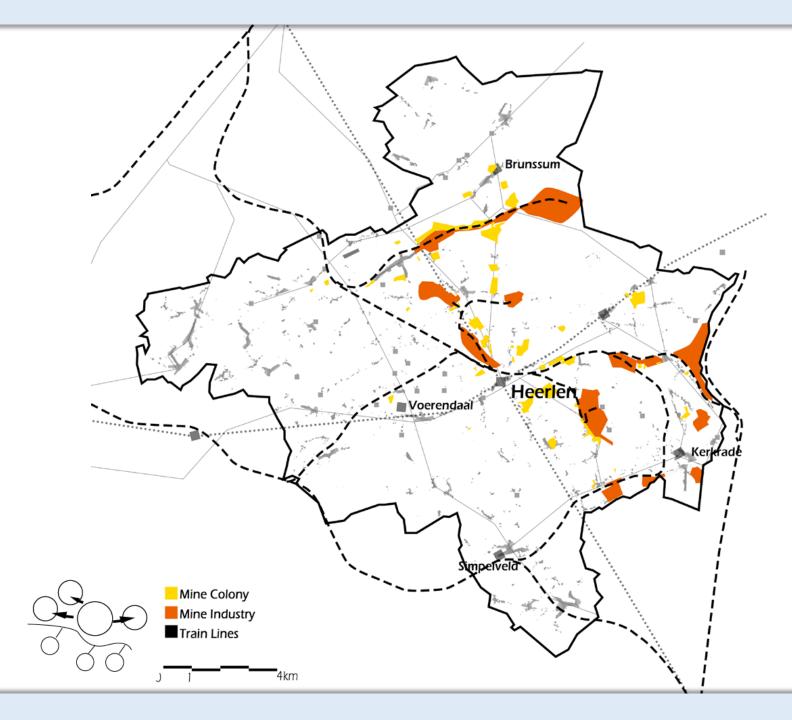


Amount of Inhabitants

-- Average Butch Income

1890-1924 Mining Industry 1. Originated

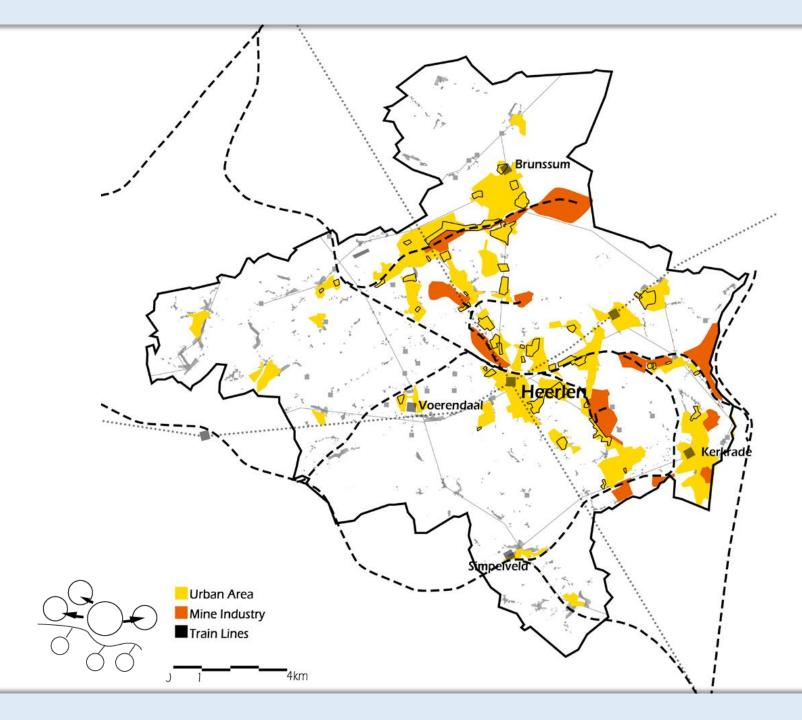


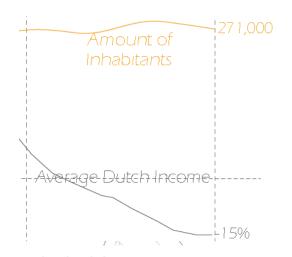




1924-1969 Mining Industry 2.Development

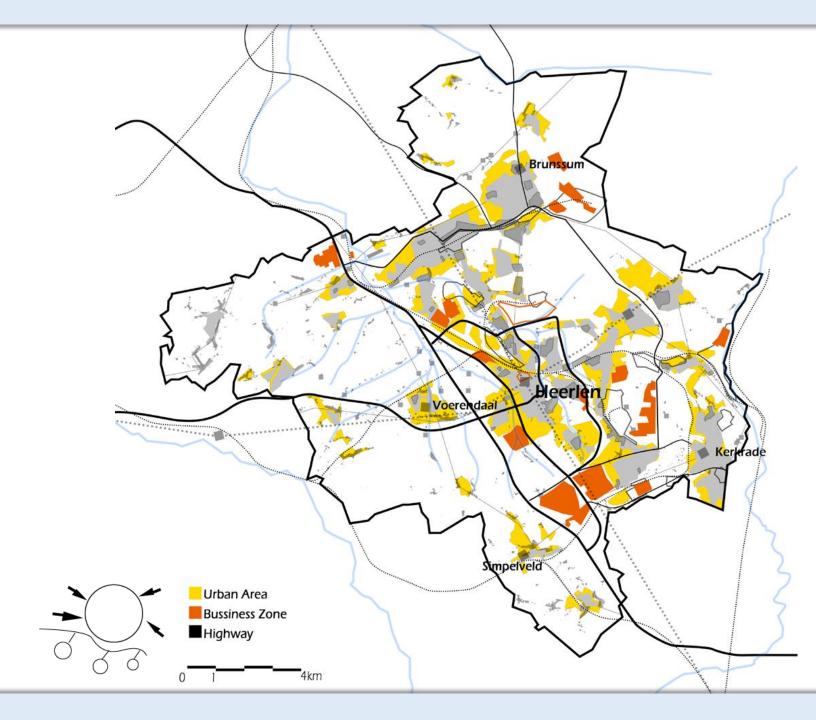




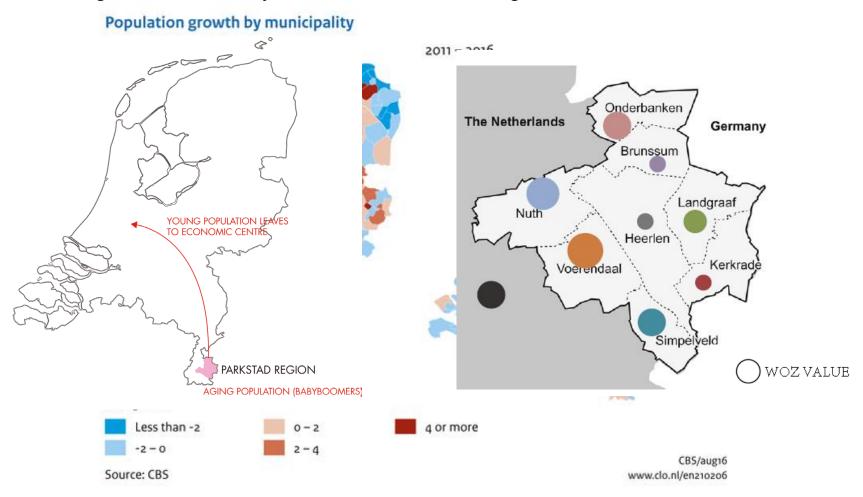


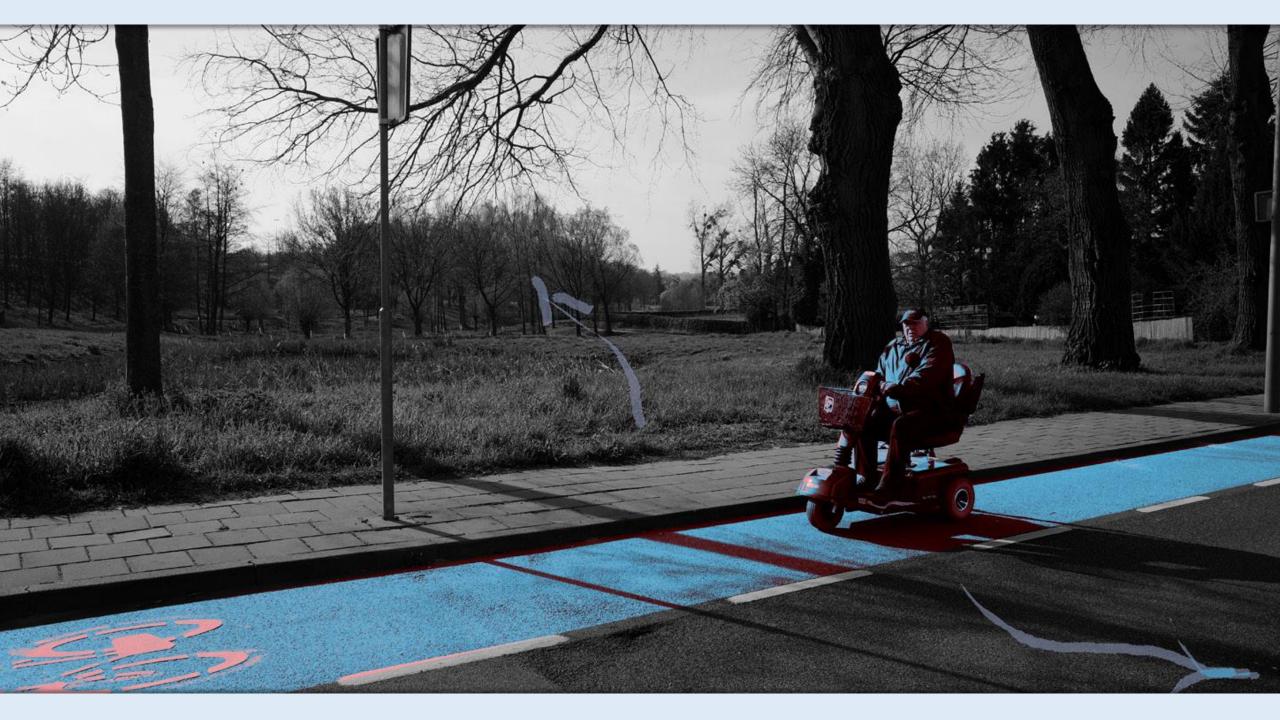
1969-2017Mining Industry3. Closure and Remediation





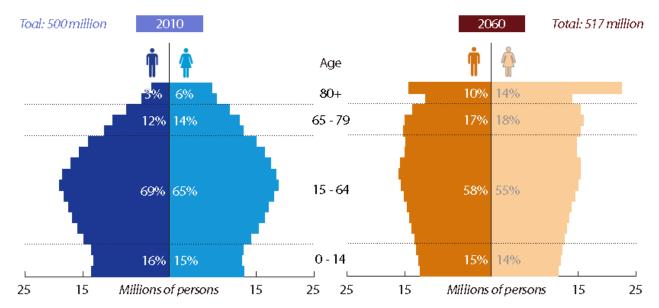
#### 2.1 Urban Shrinkage-economically driven selective outmigration





#### 2.2 Ageing Society

Ageing population: projections 2010 - 2060 for the EU



2060 In the Europe: 228 million (+50m)

In the Netherlands:
4.83 million (+1.8m)

40 years later...





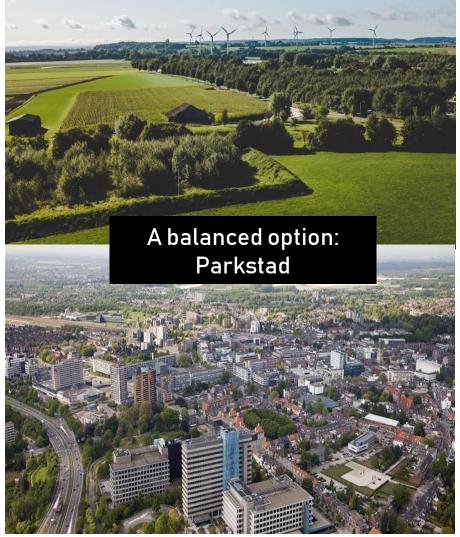




Where do you want to live?







### Compare with Gearths/stities:

Grantesp Spte Month Facilities Airfe Communication Activities





#### 2.3 Research Question



How can I design a landscape that reduces the shrinkage and benefits from the ageing society?

Ageing Economy & Landscape

#### 3.0 Ageing Economy



"Ageing often have a negative connotation, especially in an economic sense.

However, Ageing is not just a story of declining economic potential.

The other side of the coin shows rising demand for products and services that are tailored to the needs of the elderly. Opportunities grow for providers and investors who active in these markets.

As such, the resulting largely market supply further contributes to the option for people to enjoy comfortable life in old age."

--ING Economics Department, May 2019

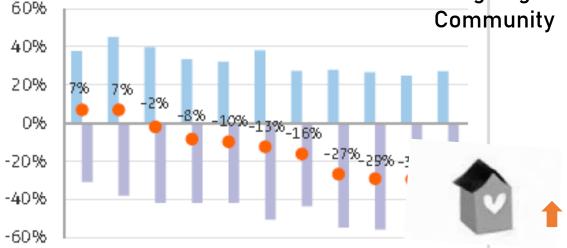
#### 3.0 Ageing Economy

#### Dutch and Italians most willing to pay for quality

Survey question: Suppose you (if 65+)\* or your parent(s)\*\*. could no longer live at home because of the need for elderly care. Would you be both willing and able to p extra, above average costs for a living environment: above average quality?



Ageing



Net Ita Spa UK Bel Rom Fra Aus Cze Pol <sup>G</sup>Nursing

With Ageing Society, the Netherlands will Certainly or probably not need an extra 44, 000 houses that suitable Home every year from now to 2021.

According to 2018 figures from information centre V**Subisortedfby**itheegovernmenterved for healthcare in was spent on care for age-in-place as those aged over

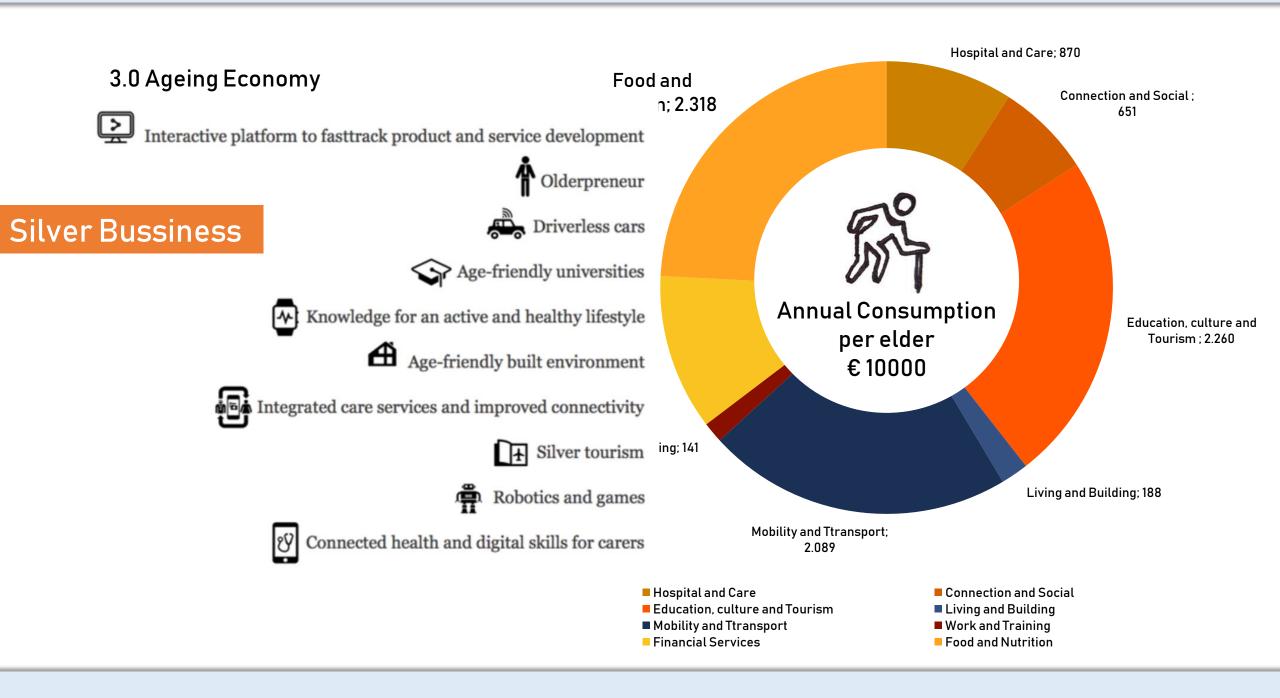
Supported by the institutions:

The changing ideas of citizens in terms of expectation of care.

less hospital-like and clinically institutions

More Nursing Homes with better outdoor environment

#### 3.0 Ageing Economy **Housing Market Potential** erlen < Sittard / Geleen Onderbanken Kerkrade Panhuys Zorgboerderij Ravensbosch Fonterhof Landgraaf Nuth Oosterbeemd Landgraaf Valkenheim Geerlingshospice Dr. Ackensh Nursing Ho tricht Aken Ageing Brunssum Nursing Community Home elveld



#### 3.1 Caring Strategy- High Quality Ageing



Ageing is not a stage of life, but anatural process.

Ready to againg ges. <65 yrs

Exercising time: 1h per day Active Distance: 6-7km

Care of Ageing Process is about the high-quality life strategy of Young ageing 65-75 yrs

Exercising time: 30min per day Active Distance: 3-4km

Senior ageing >75 yrs

Exercising time: 15min per day Active Distance:1km

Urban Green Infrastructure

Community Caring Landscape

#### 3.1 Caring Strategy-Design Goals



## 1. The Caring Landscape

- -new attraction for the elderly
- Fits the Requierments of the Elders to Active Age

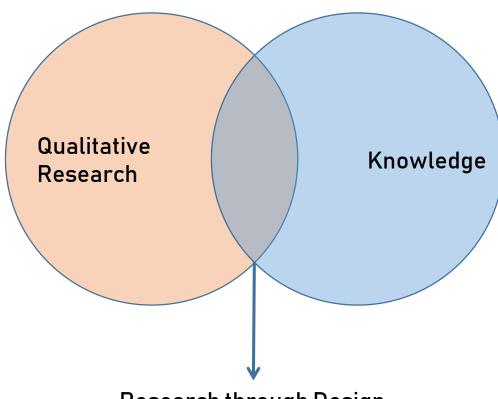
#### 2. The Green Infrastructure

- -new possibility in economy
- Develope the Ageing Market
- Improve these Qualities for all the Inhabitants of Parkstad

#### 3.2 Qualitative Research and Research through Design

#### Interviews Obeservation





#### Case Study Database Research



#### Research through Design

design as a "vehicle" to visualise and spatialise the spatial problems, and investigate possibilities and make solutions.

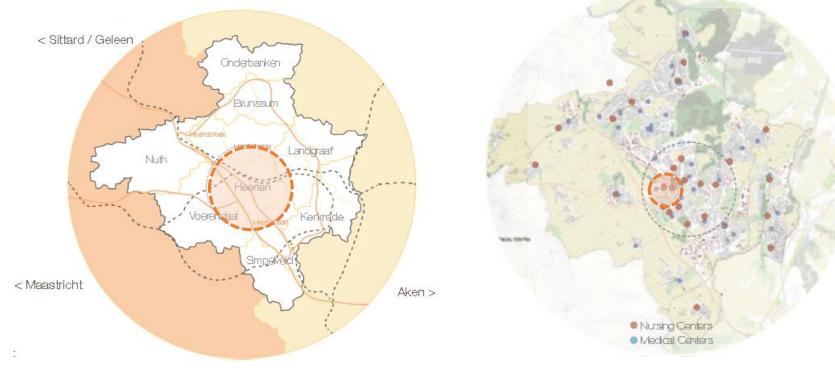


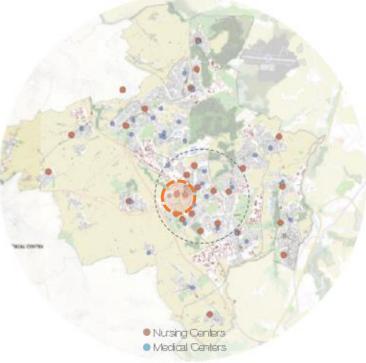


Site- the caring landscape

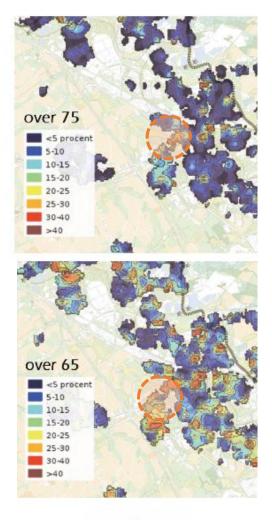
Fits the Requierments of the Elders to Active Age

## 4.0 Site- the caring landscape





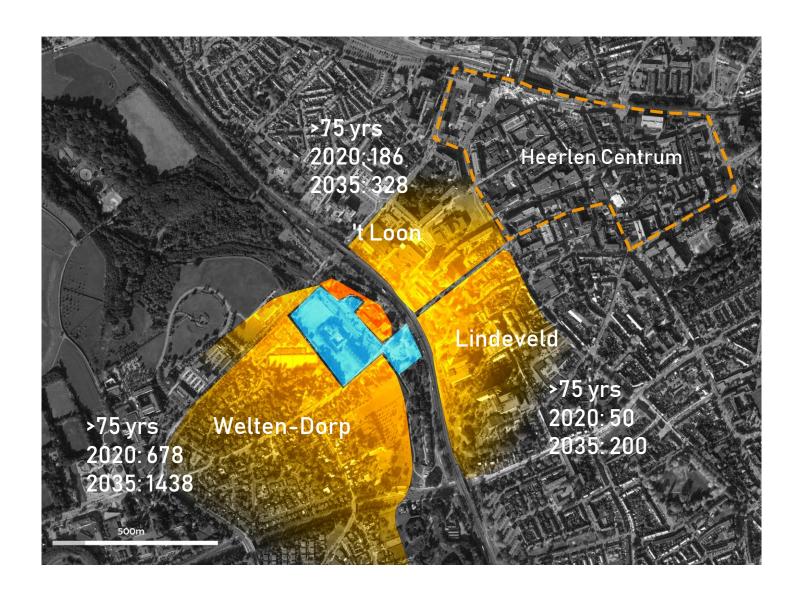






#### 4.0 Site-the caring landscape

#### The Senior Ageing Population:



### 4.0 Site- the caring landscape

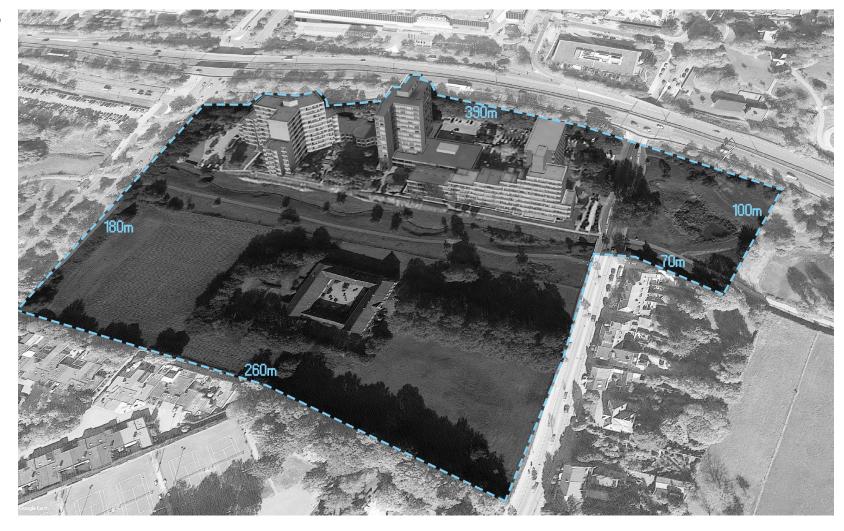


Senior ageing
>75 yrs
Exercising: 15min per day

Distance: 1km

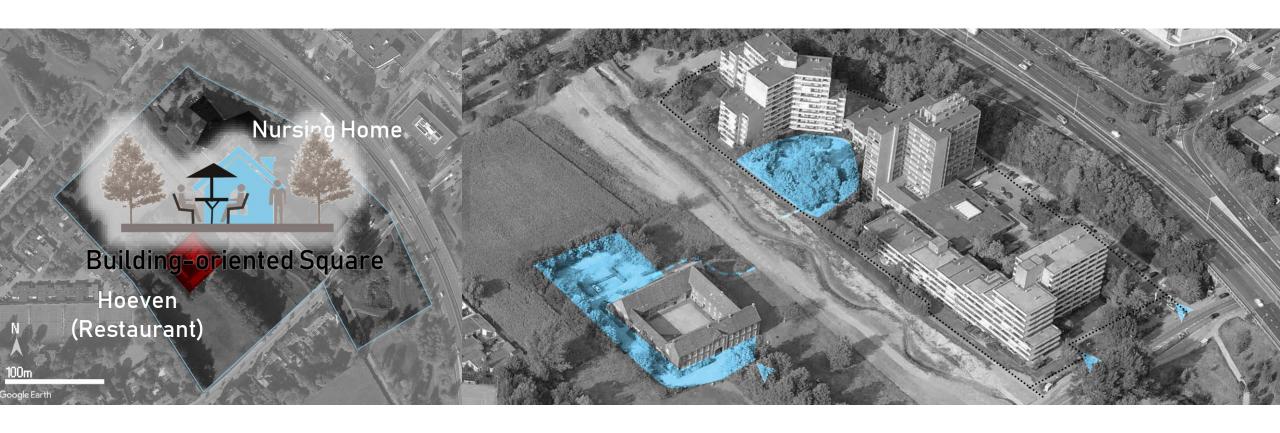
Maximum path length: 1km





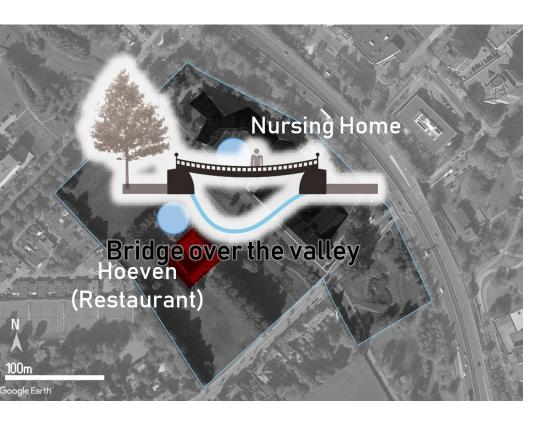


Indoor Connection

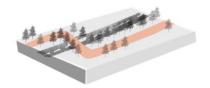




#### Indoor Connection

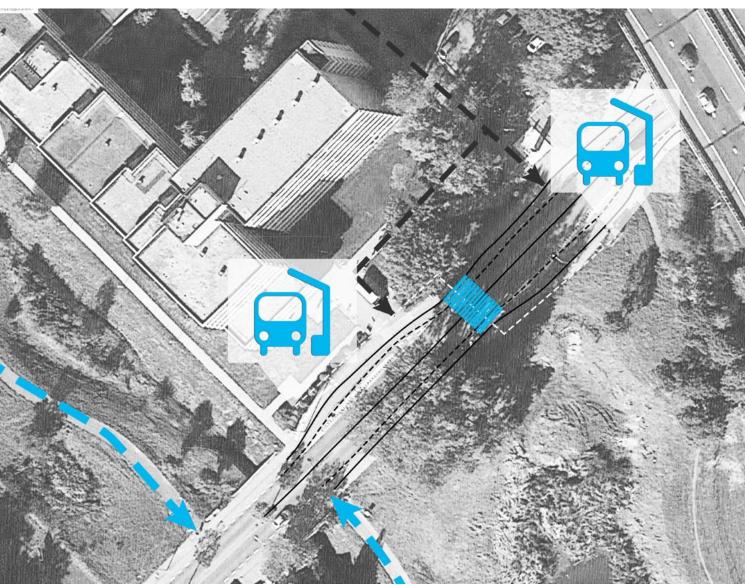


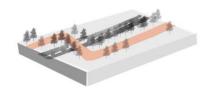




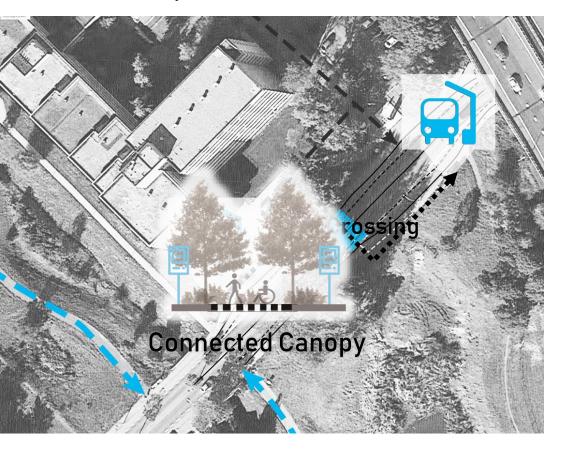
Pedestrians System

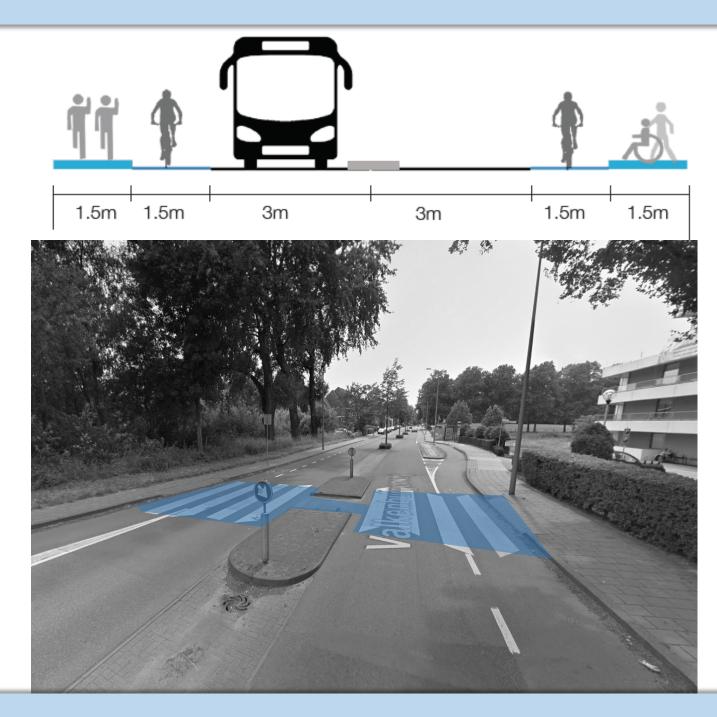


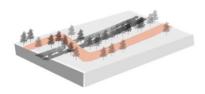




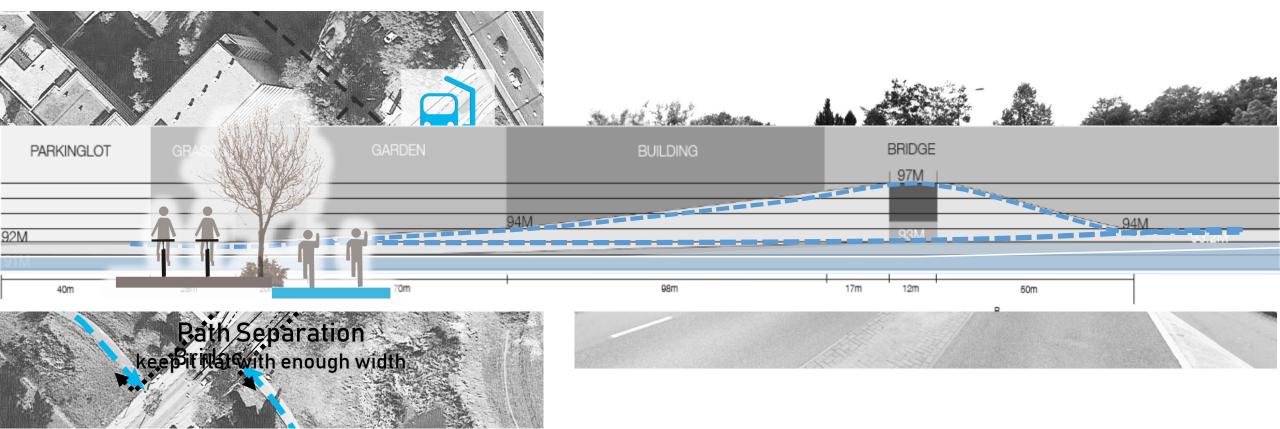
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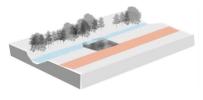






#### Pedestrians System

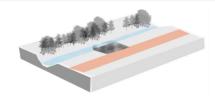




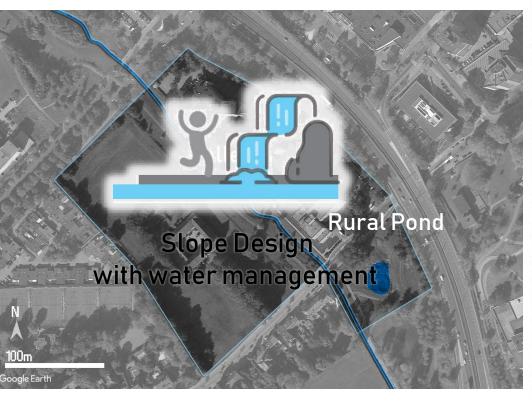
Waterspace

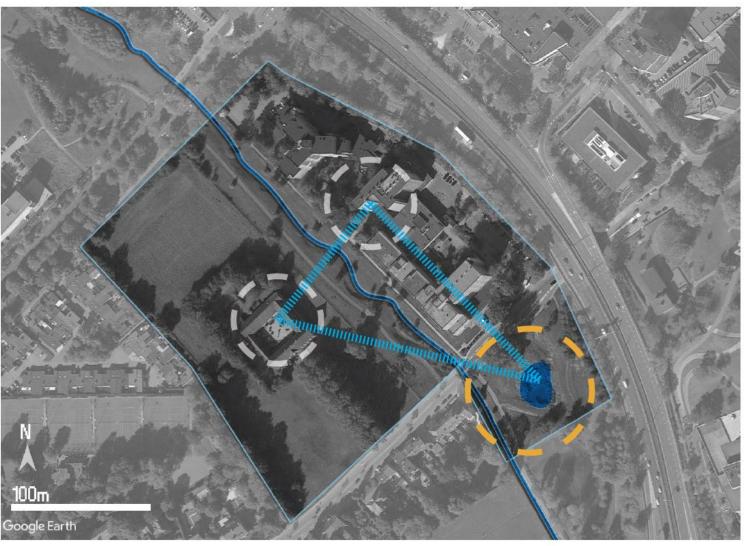


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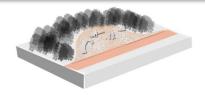


Waterspace









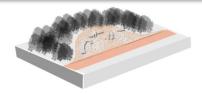
Senior Care

4.2 Site Analysis



Interactional Planting and Waterforms



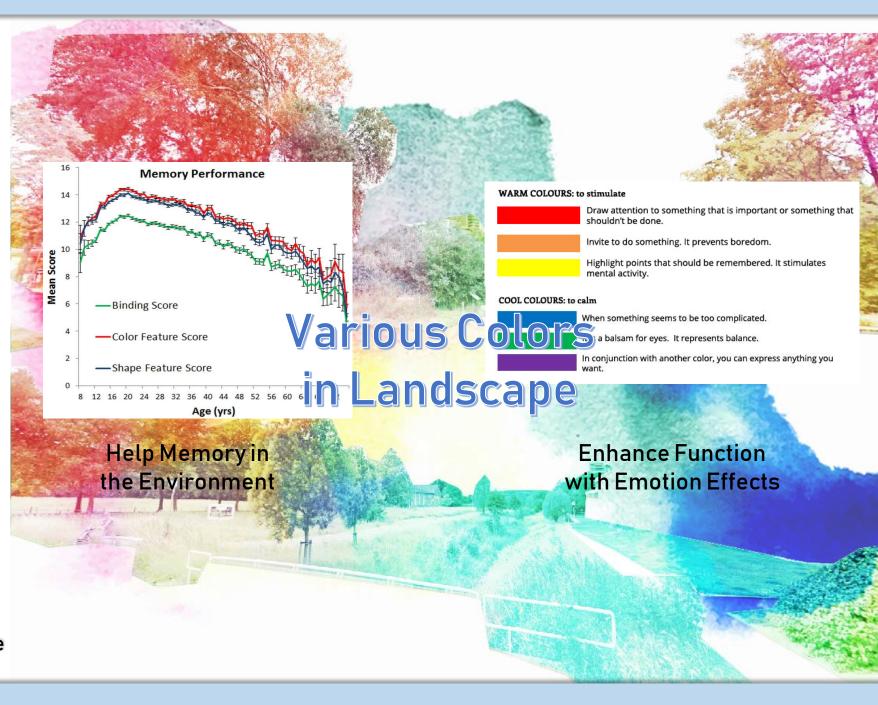


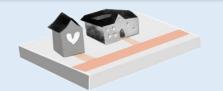
**Senior Care** 

4.2 Site Analysis

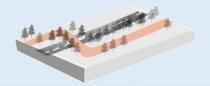


Colored Planting space distinguish and emotion change

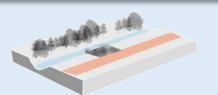




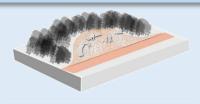
Indoor Connection



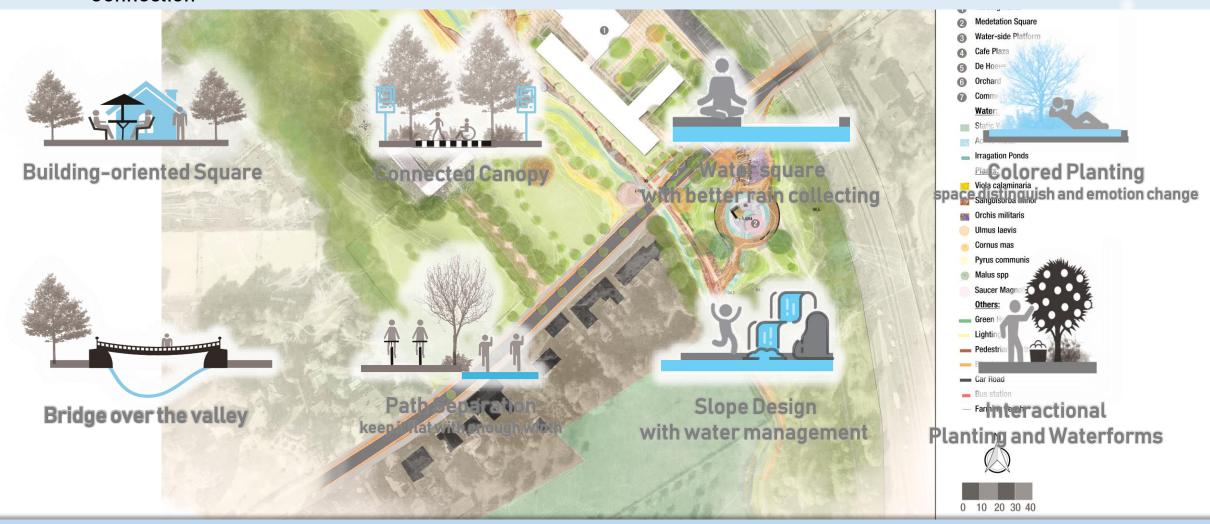
Pedestrians System



Waterspace



**Senior Care** 





## 4.3 Site Design-Indoor Connection



**Building-oriented Square** 









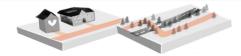






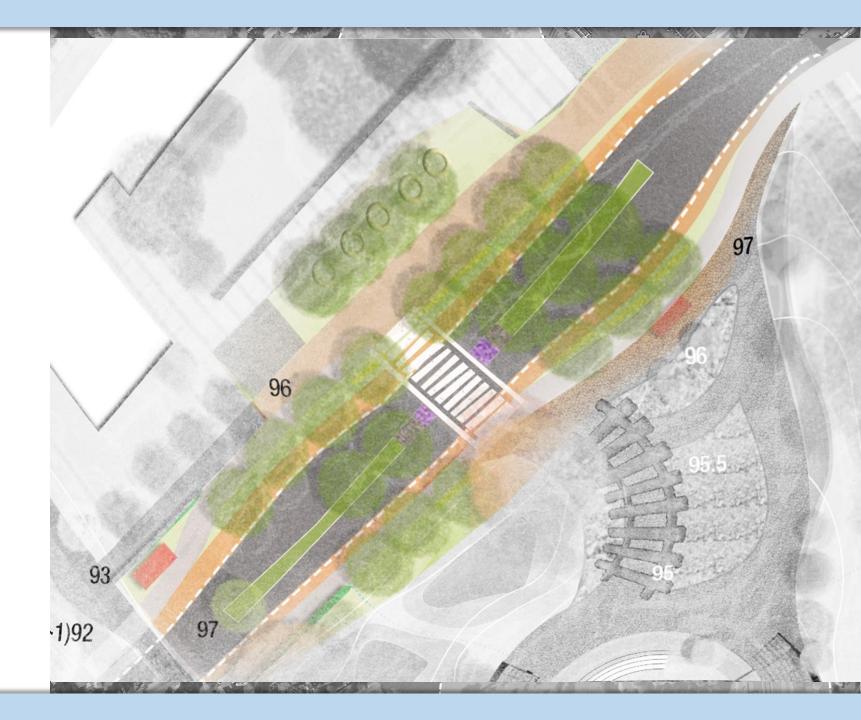




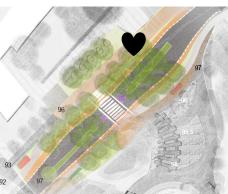


# 4.3 Site Design-Pedestrians System











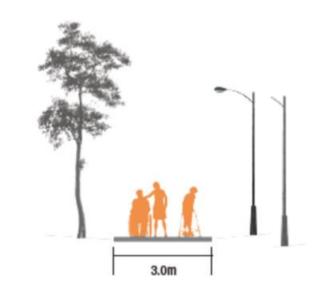




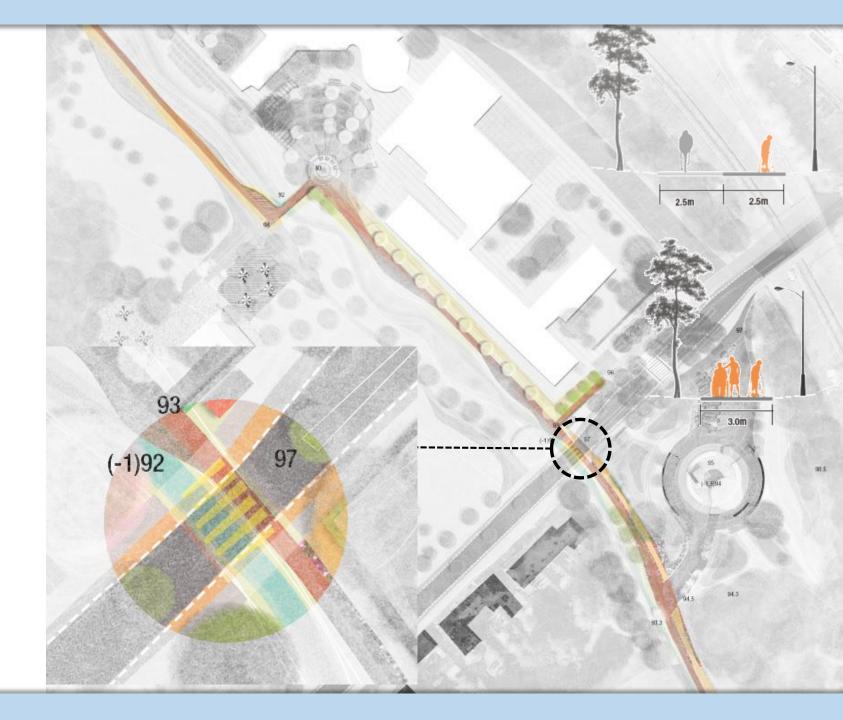




## 4.3 Site Design-Pedestrians System



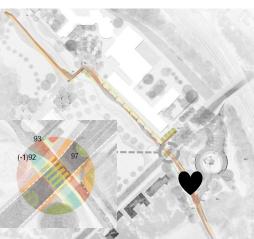




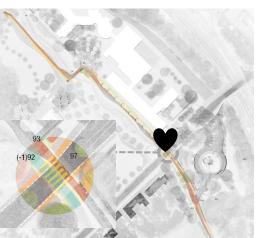














Digging-out: 3000 m³ Soil from the pond and path built



Water square with better rain collecting



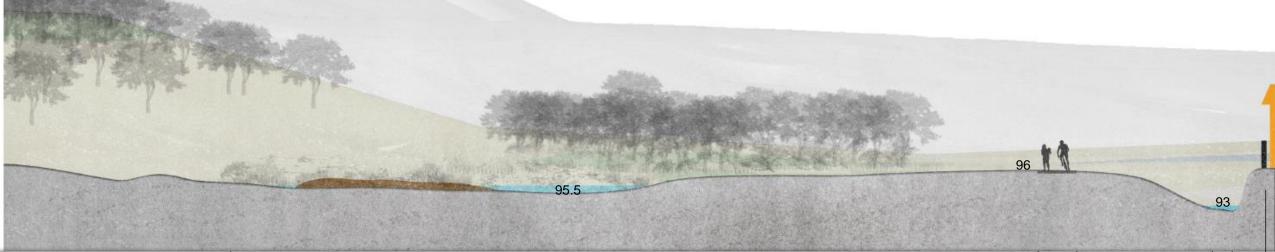








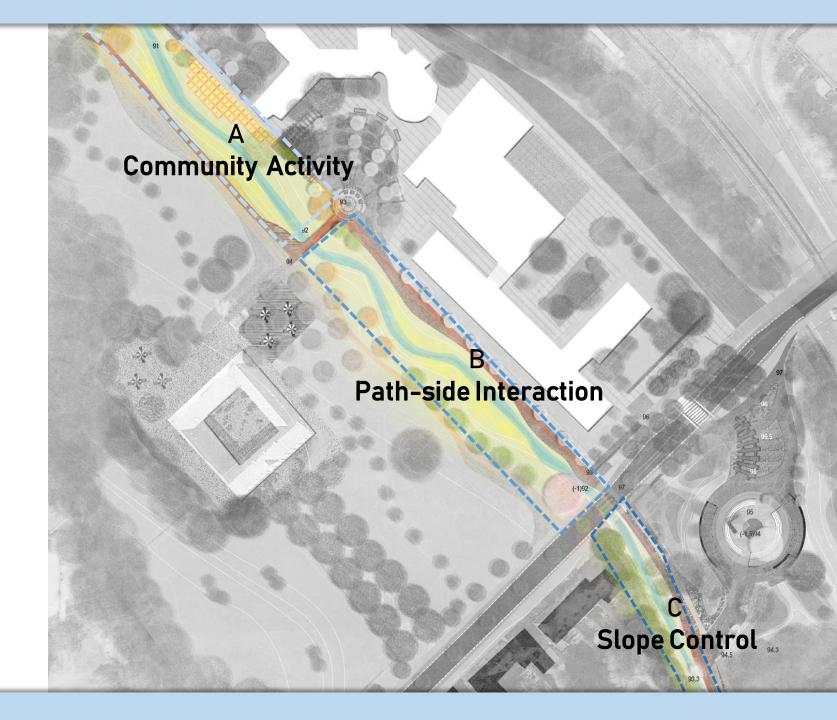


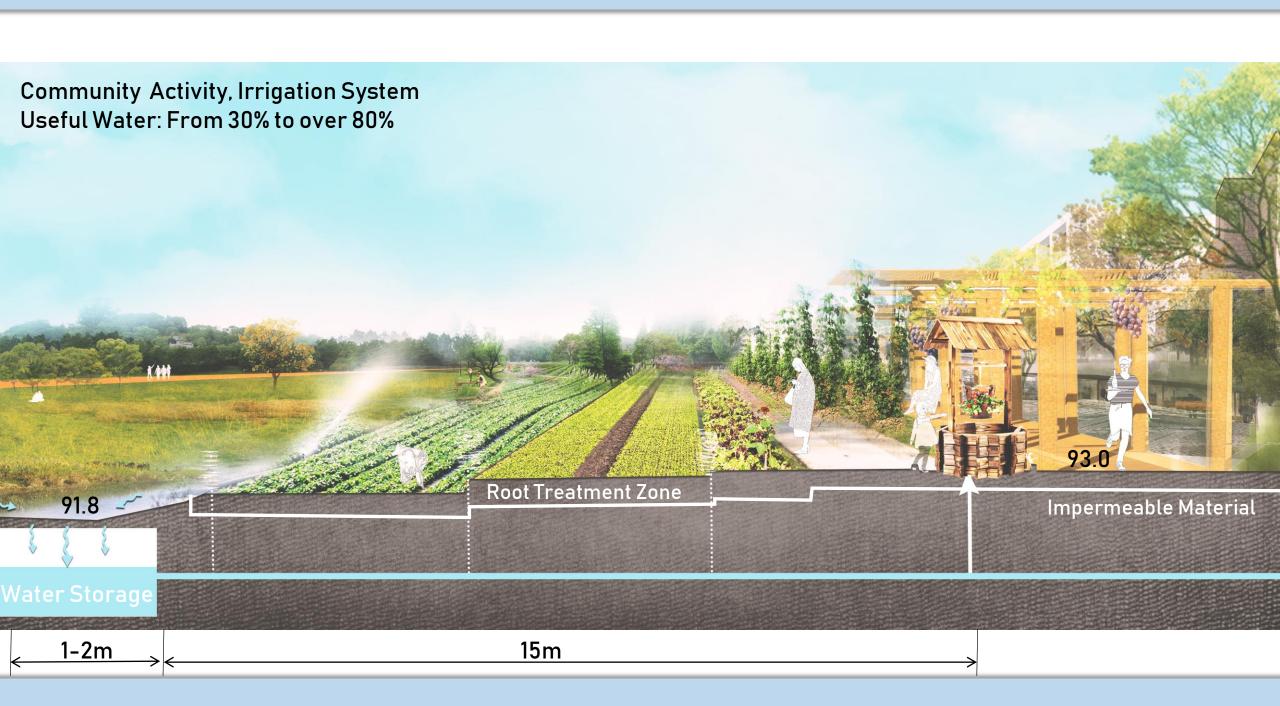






Slope Design with water management



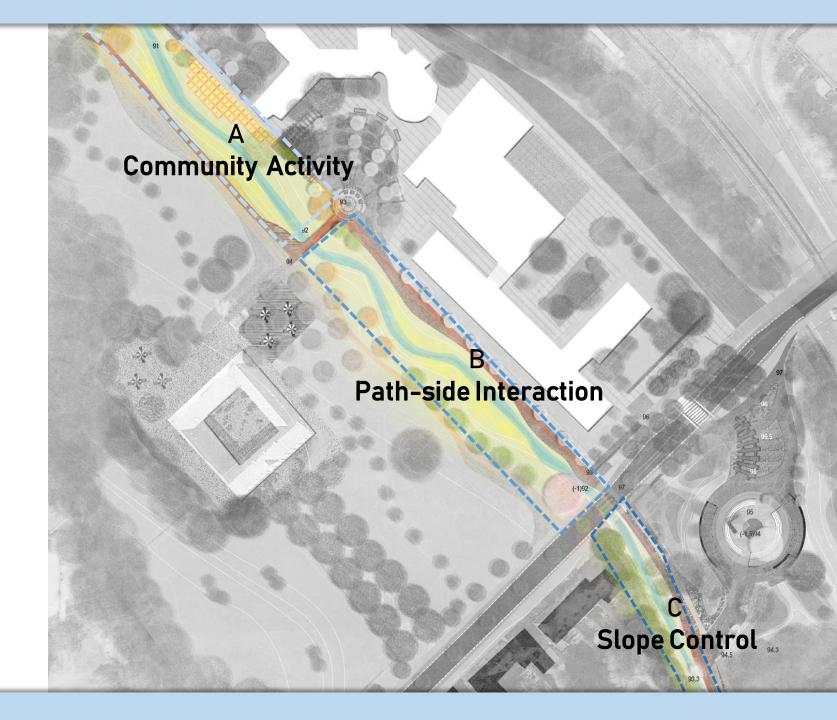


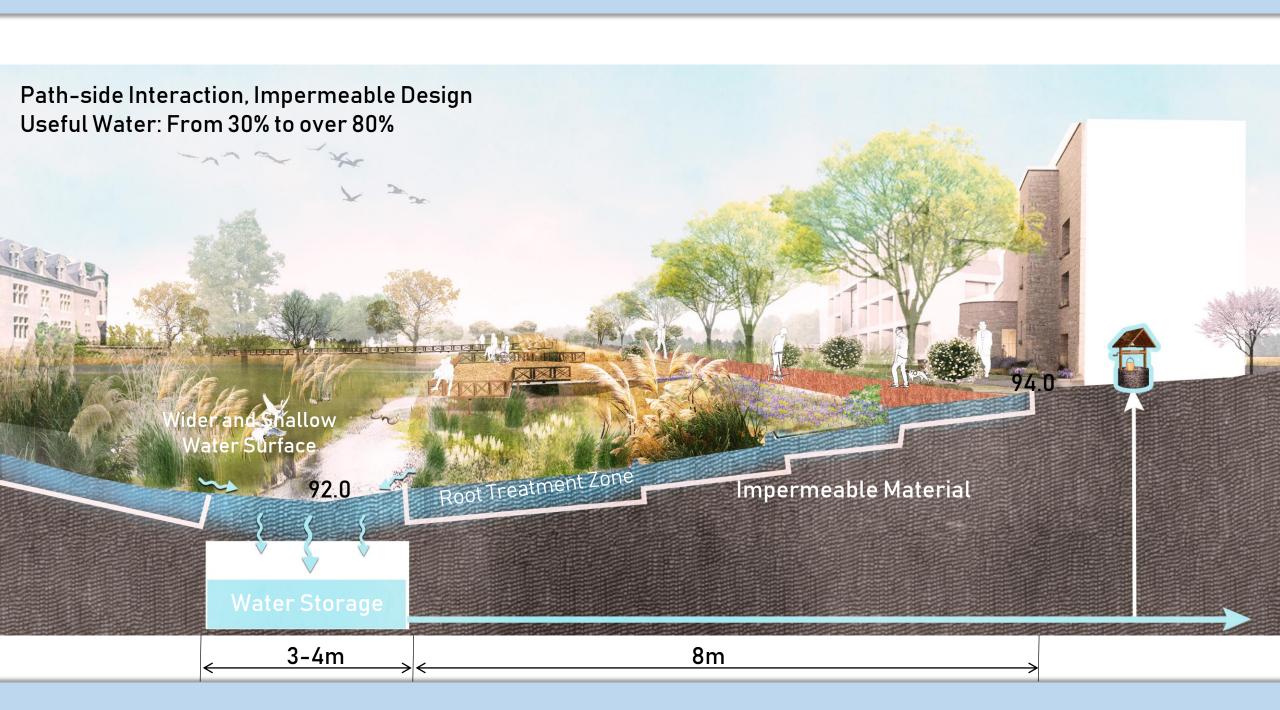






Slope Design with water management



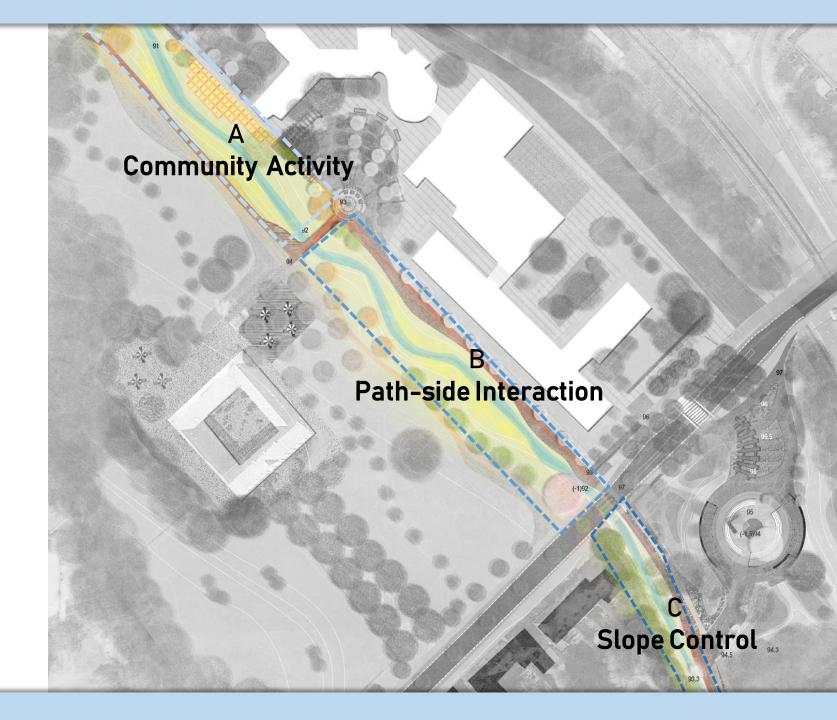


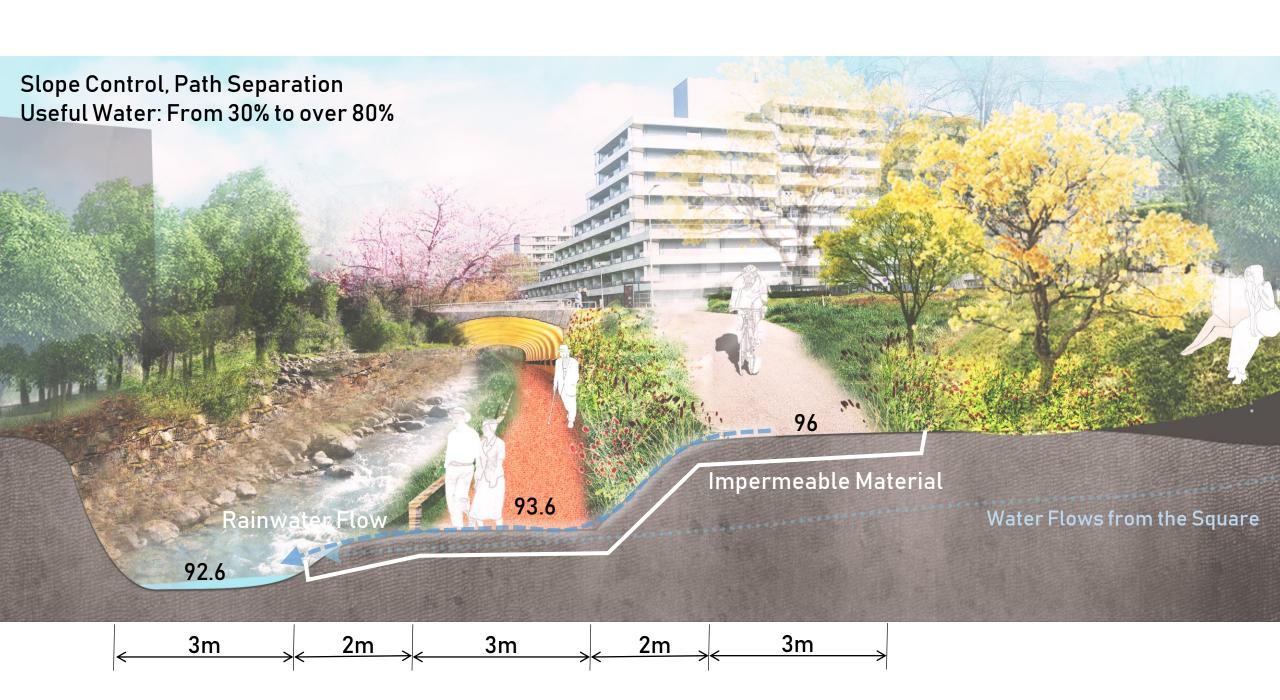






Slope Design with water management







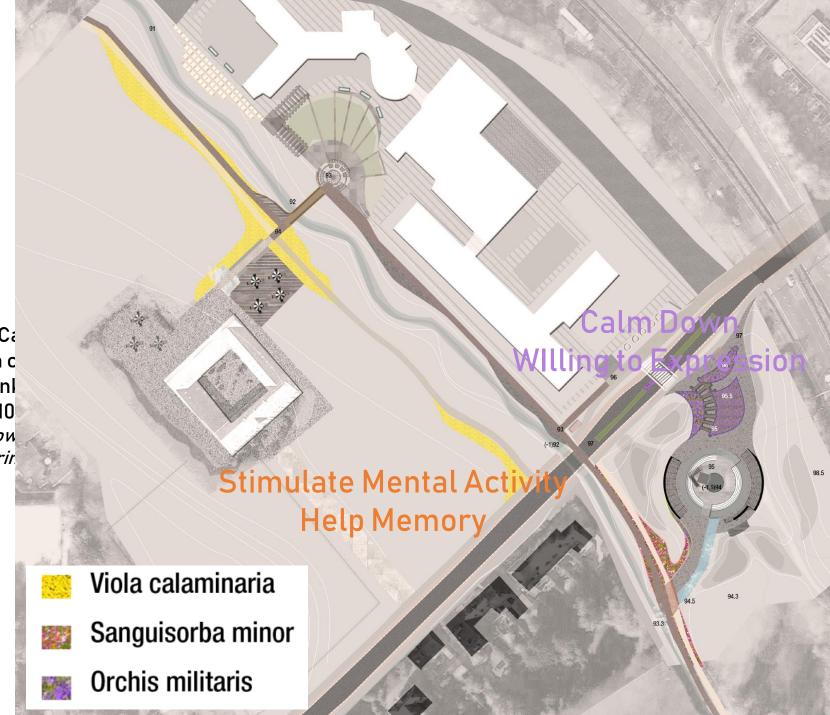


#### 4.3 Site Design-Senior Care



Yellow Ca Viola c (zinl 10 Flow late sprin







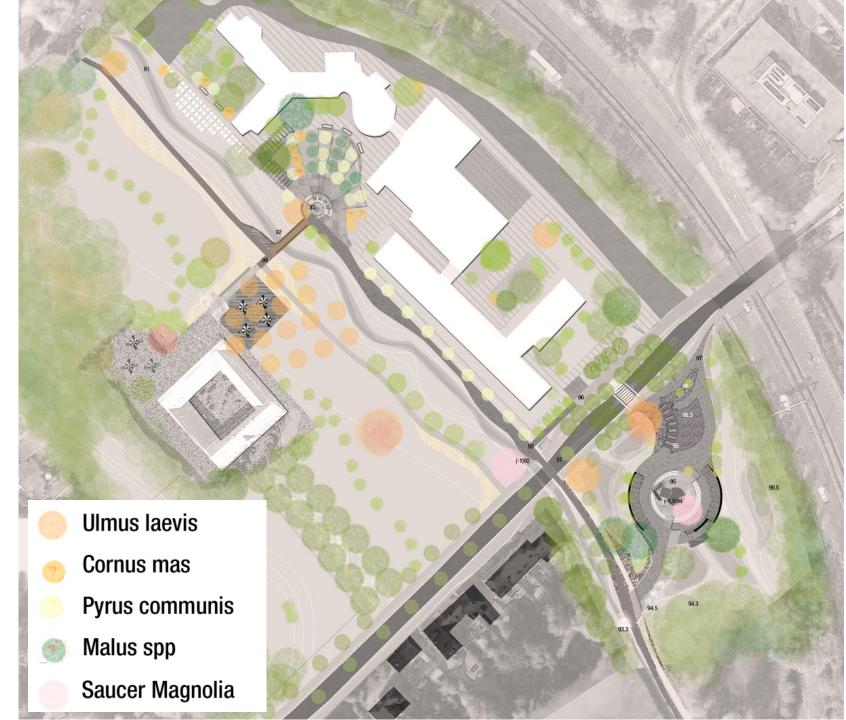
## 4.3 Site Design-Senior Care

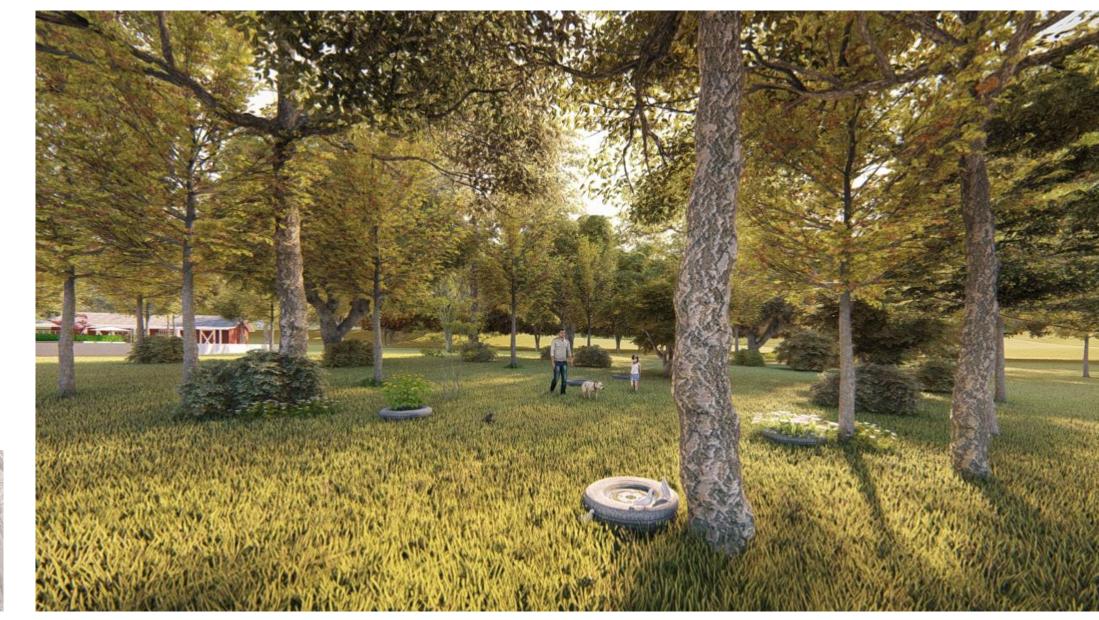


Colored Planting space distinguish and emotion change



Interactional Planting and Waterforms









### 4.3 Site Design-Senior Care

# Water:

- Static Water
- Active Water
- Irragation Ponds







4.3 Site Design- the vision





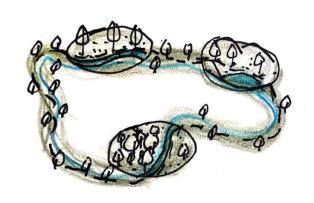
# 4.3 Site Design- the vision



The Caring Landscape new attraction for people Fits the Requierments of the Elders to Active Age

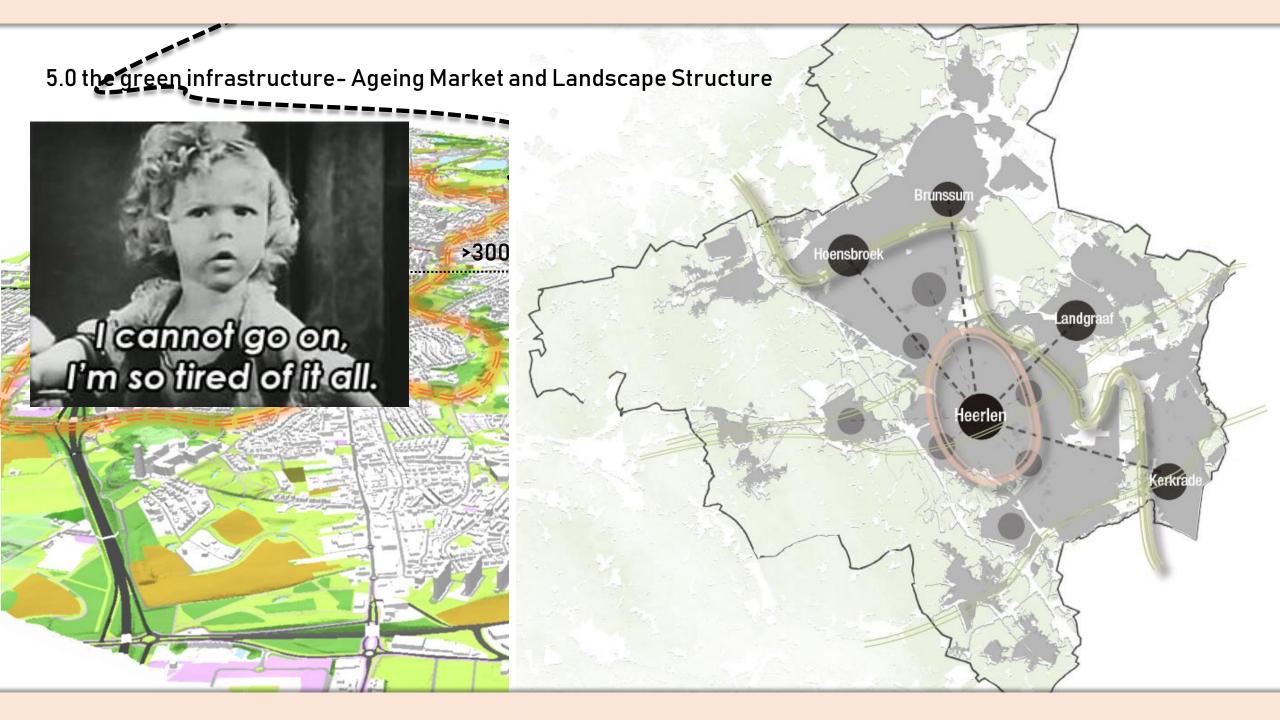




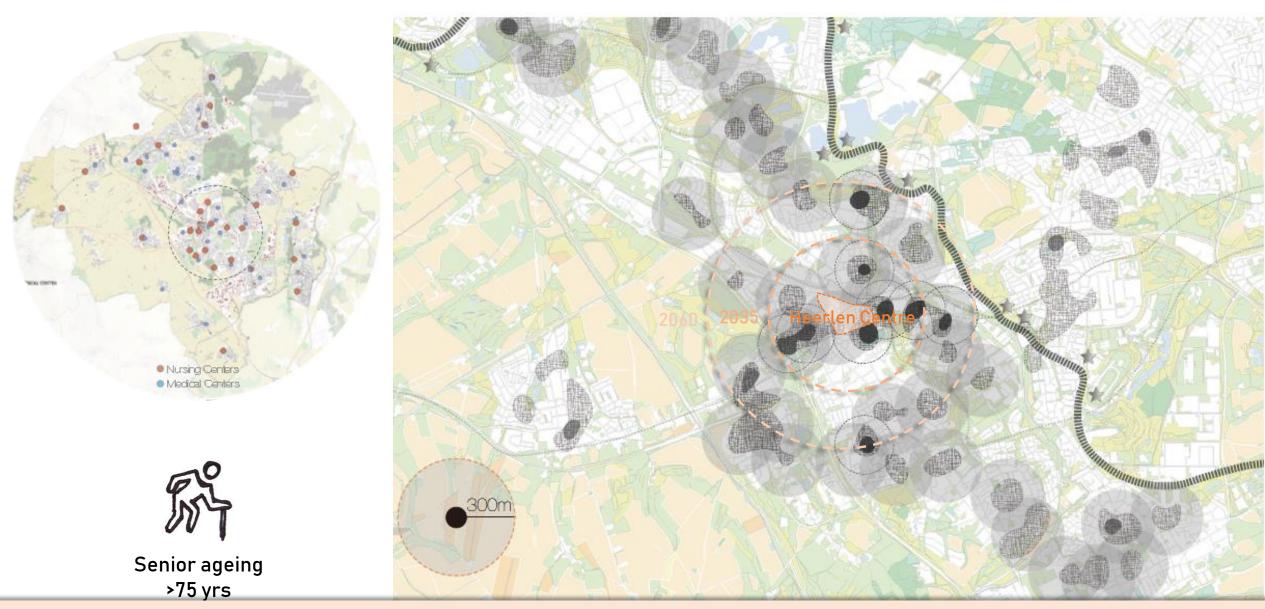


**Urban-The Green Infrastructure** 

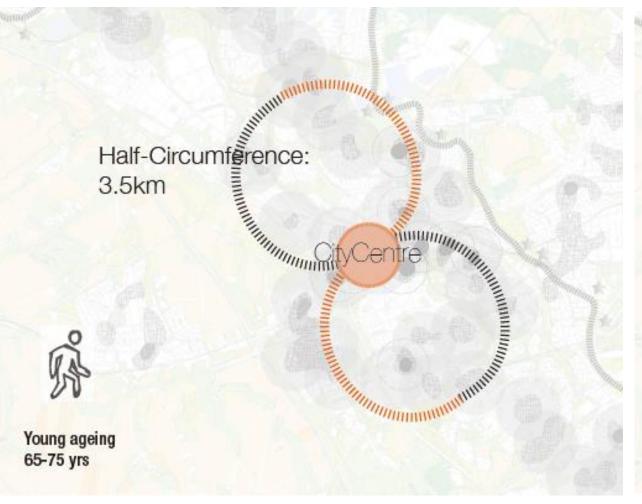
Develope the Ageing Market Improve these Qualities for all the Inhabitants of Parkstad

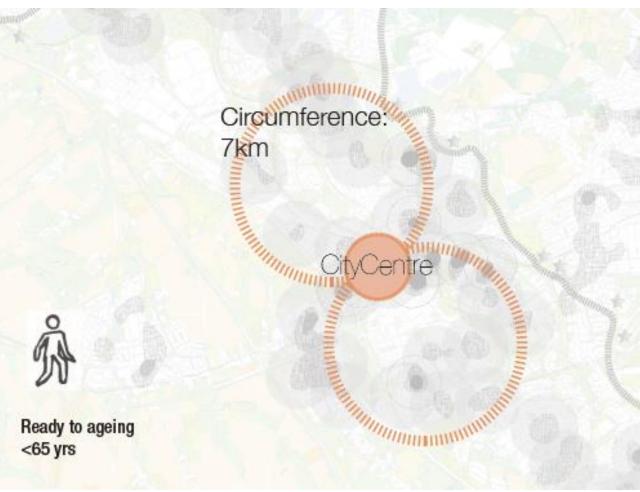


## 5.0 the green infrastructure- Ageing Market and Landscape Structure



## 5.1 Ring-Qualities for all the Inhabitants



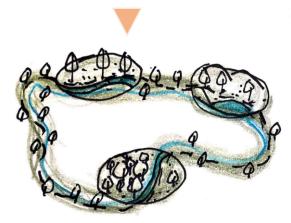


## 5.1 Ring-Qualities for all the Inhabitants



#### **Senior ageing**

>75 yrs
Exercising: 15 min per day
Distance: 1km



#### **Young ageing**

**65-75 yrs** Exercising: 30min per day

Distance: 3km

#### Ready to ageing

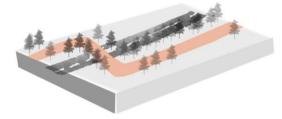
<65 yrs
Exercising: 1h per day
Distance: 6-7km</pre>



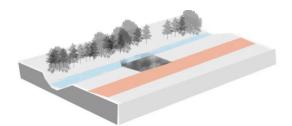
## 5.1 Ring-Qualities for all the Inhabitants



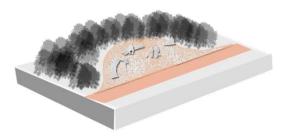
**Indoor Connection** 



Pedestrians System



Waterspace

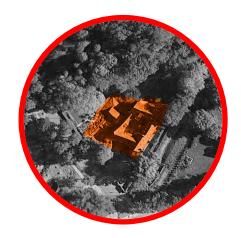


**Active-Ageing Care** 



## 5.2 Ring Analysis

## Indoor Connection



Heritages and Facilities

12x Hoeve
1x Castle
1x Watermill
1x Roman ruin
2x Indoor Playground
5x Gyms
1x Bowling



**Ageing Care** 

13x Nursing Homes





## 5.2 Ring Analysis

Indoor Connection

55000

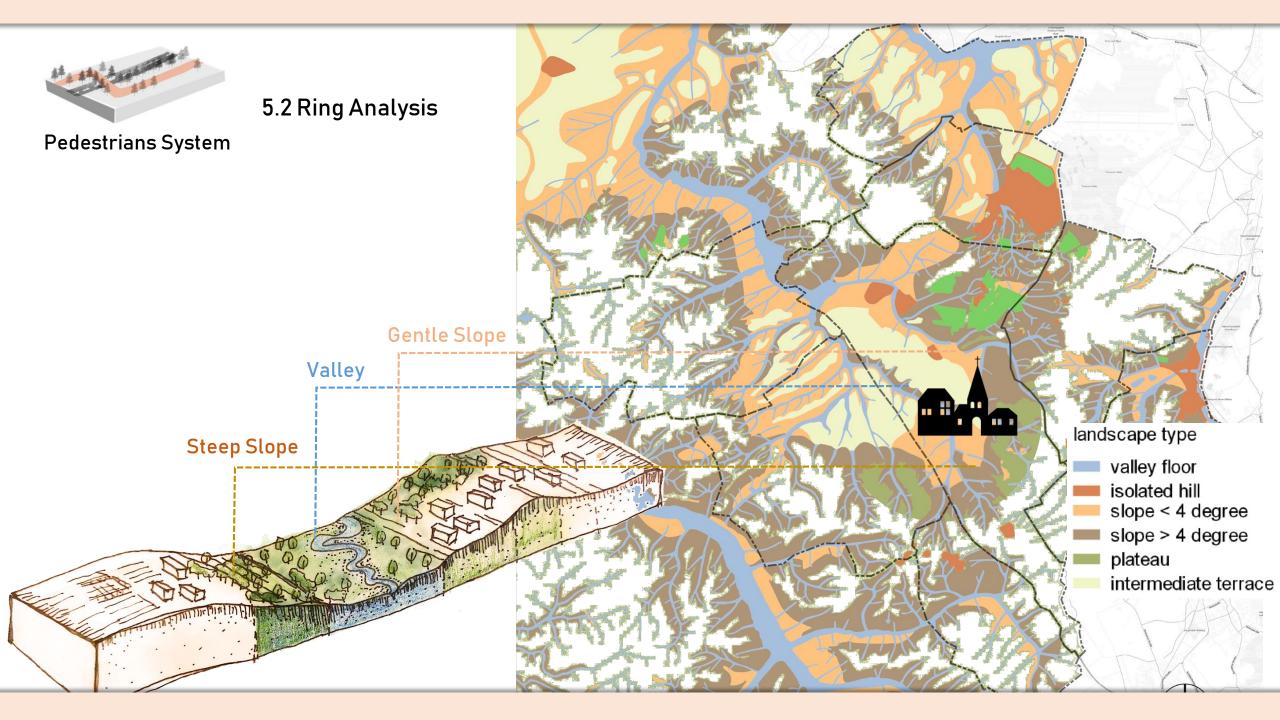




Senior ageing >75 yrs

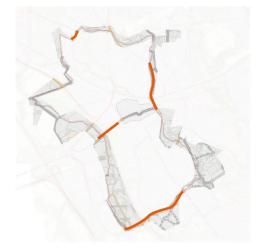
2060





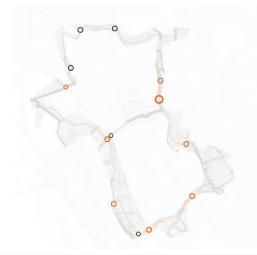


5.2 Ring Analysis

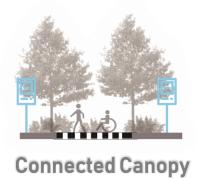


Mixing with other traffic

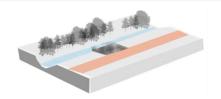




Crossing







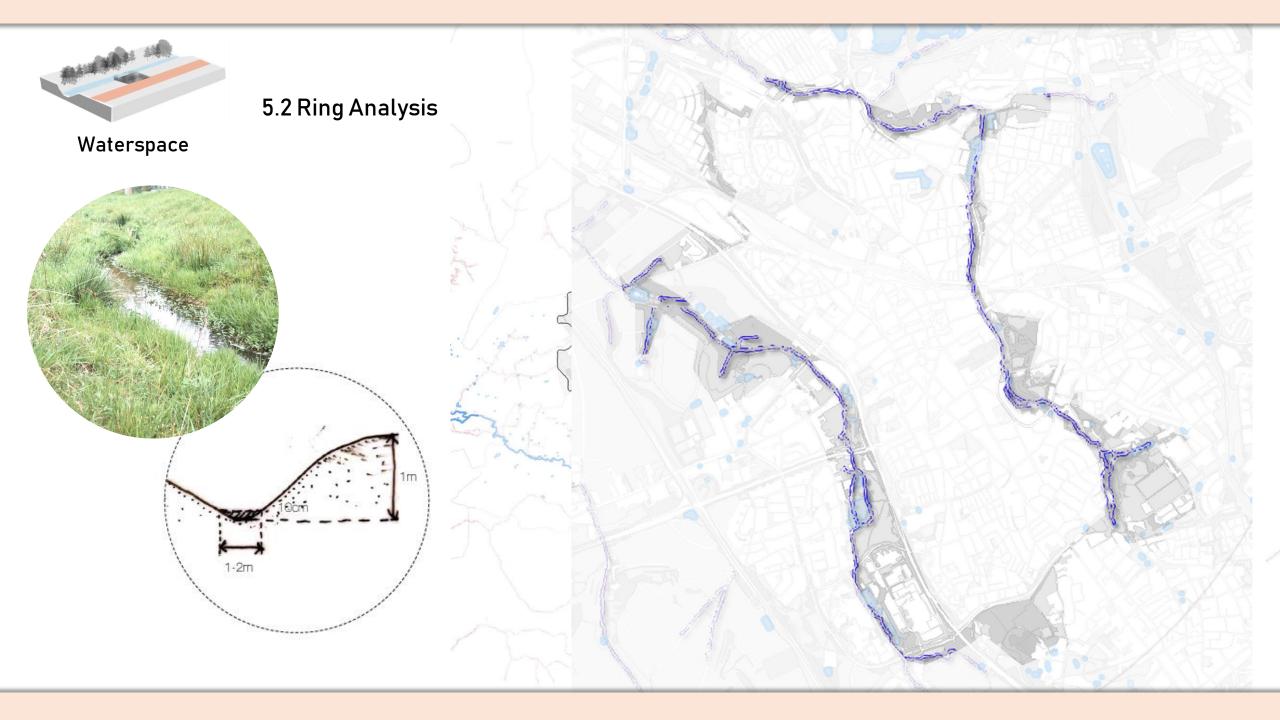
5.2 Ring Analysis

Waterspace



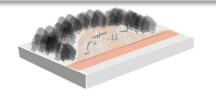








5.2 Ring Analysis sand deposits boulder clay Waterspace high ground Useful Water: From 30% to over 80% moraines stream valley Influences of Impermeable Surface Runoff and Grou d peat deposits and peat Less surface runoff More infiltration More More Runoff Storage More storage Loam the Soil

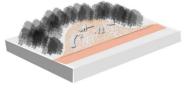


**Active-Ageing Care** 



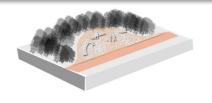






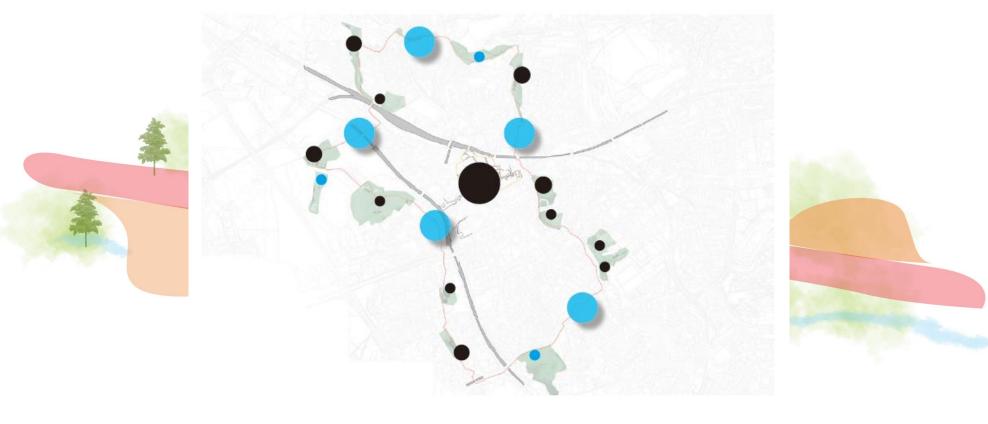
Active-Ageing Care





5.2 Ring Analysis

Active-Ageing Care



An Activity Network

# **Green Loop Design**





## 5.3 Green Loop Design-Indoor Connection

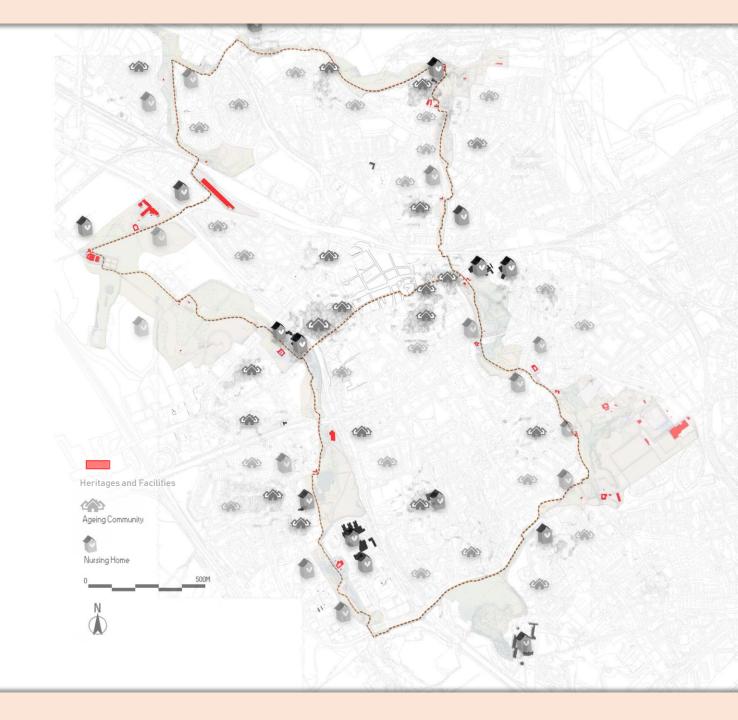
Path through as many nursing homes and public buildings as possible

### Ageing Care

- Direct link to 23(+14) Nursing Home The rest 4 are in 500m
- Service for ageing communities (people>65yrs: >25%)

### Heritages and Facilities

- 11/12 Hoeve
- 1x Castle
- 1x Watermill
- 1x Roman ruin
- 1/2 Indoor Playground
- 1x Bowling

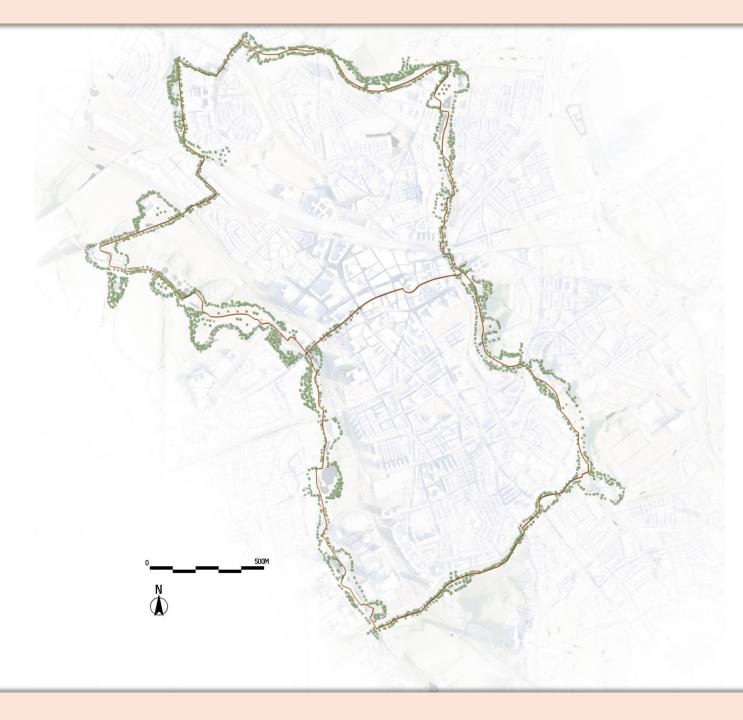




5.3 Green Loop Design-Pedestrians System

Using the pavement and plants to shape the corridor with walking priority

Little mix with the busy traffic work as an independent secure system



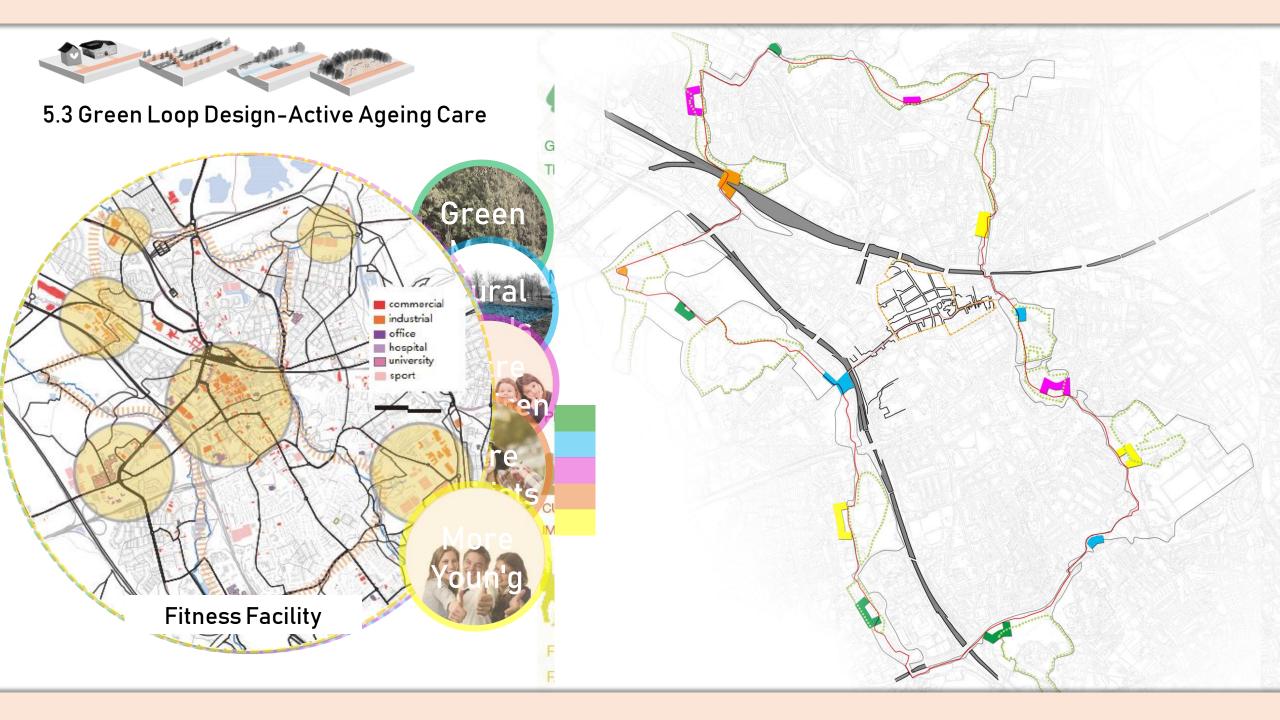


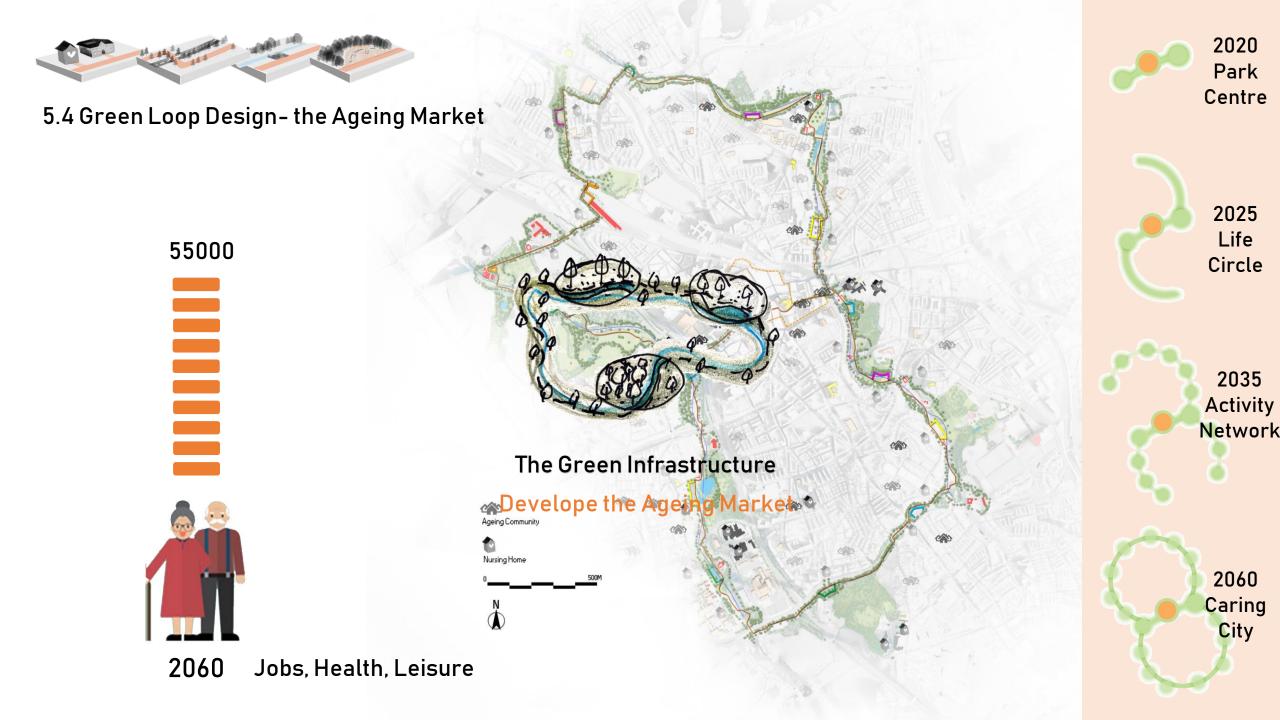
# 5.3 Green Loop Design-Waterscape

Walking along the Water

- Flat side: walking inside and forest healing
- Slope side: walking along the boundary



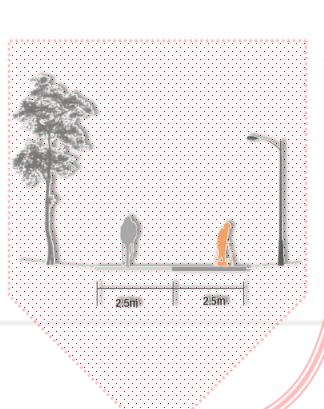


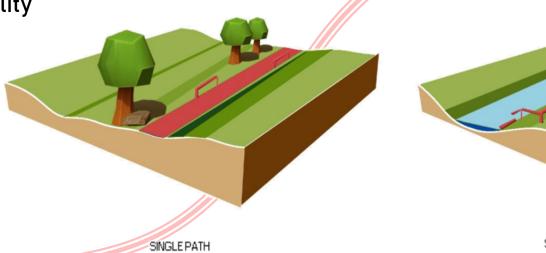


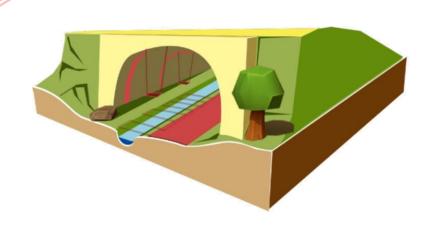




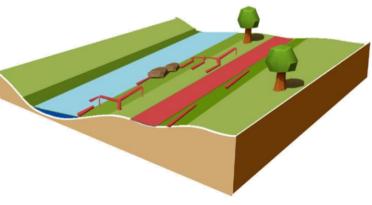
5.4 Green Loop Design- the Living Quality



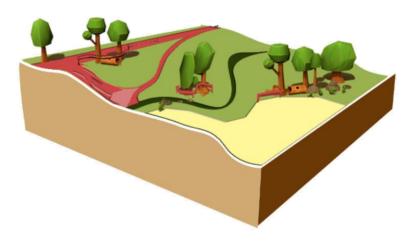




SINGLE PATH + BRIDGE







SINGLE PATH + FOREST



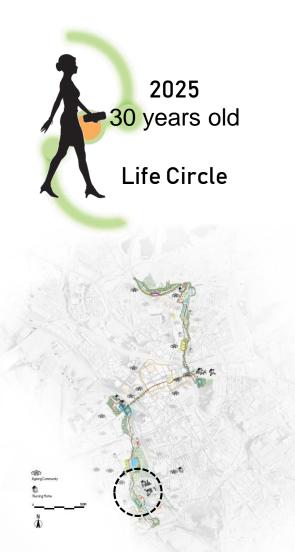














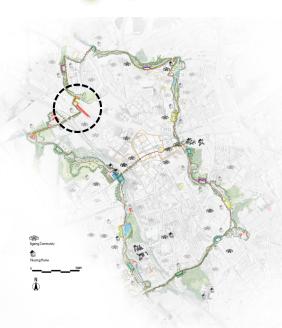
















Green Loop towards Active Ageing

Therapeutic

Water Square All-ages Playground Cultral Emmersion

Fitne Facil



#### When you are old

WILLIAM BUTLER YEATS (1865-1939)

When you are old and grey and full of sleep, And nodding by the fire, take down this book, And slowly read, and dream of the soft look Your eyes had once, and of their shadows deep;

How many loved your moments of glad grace, And loved your beauty with love false or true, But one man loved the pilgrim soul in you, And loved the sorrows of your changing face;

And bending down beside the glowing bars, Murmur, a little sadly, how Love fled And paced upon the mountains overhead And hid his face amid a crowd of stars.