P4 Presentation

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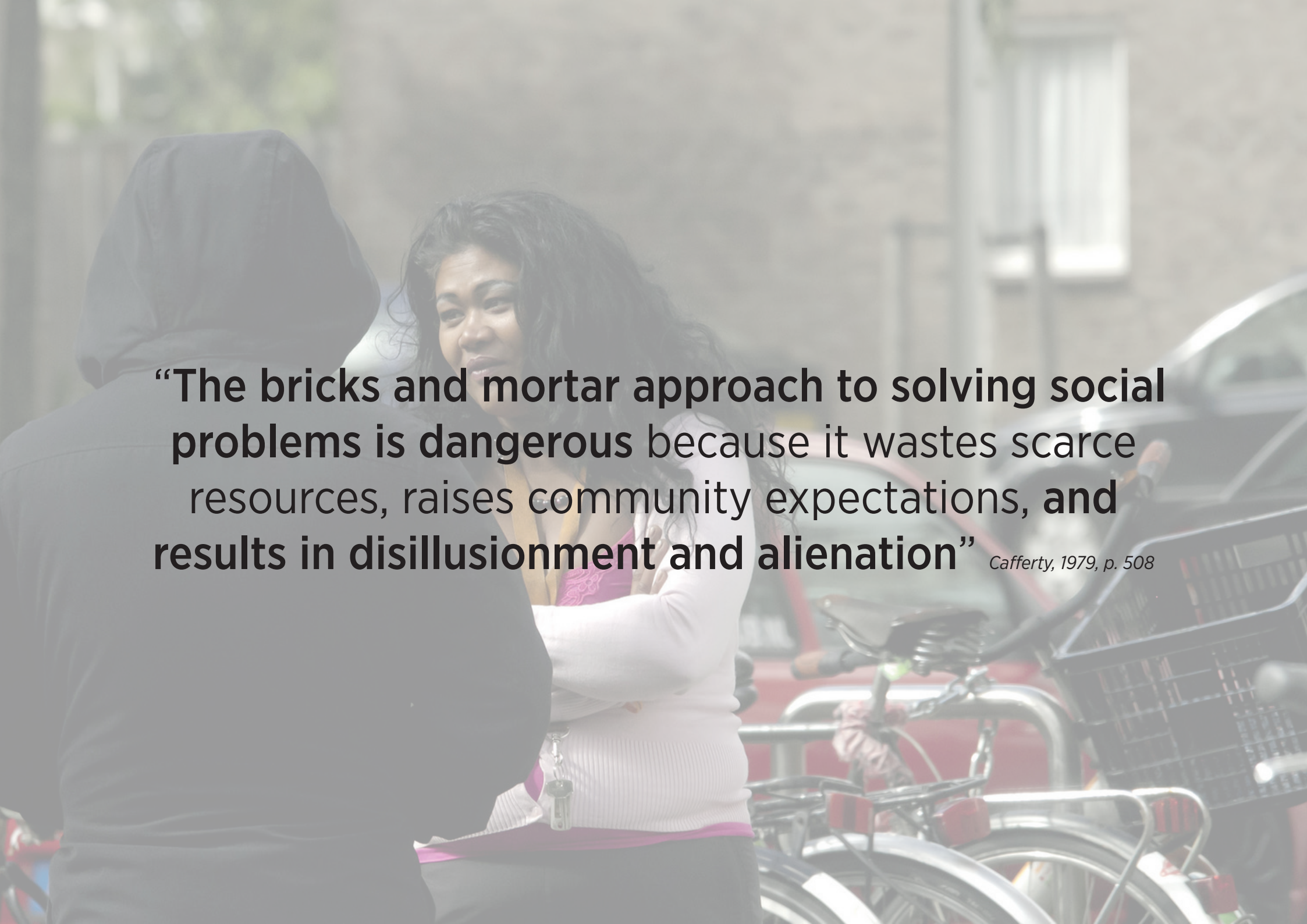
4064119

STREET SMART

A Social Learning Perspective on the Restructuring of Oud-Charlois



"**The bricks and mortar approach to solving social problems is dangerous** because it wastes scarce resources, raises community expectations, **and results in disillusionment and alienation**" *Cafferty, 1979, p. 508*

PROBLEM NEIGHBOURHOODS?

Or problems *in* neighbourhoods

NEIGHBOURHOOD EFFECTS

Poor neighbourhoods make people poorer

ITS CAUSE: SOCIAL LEARNING

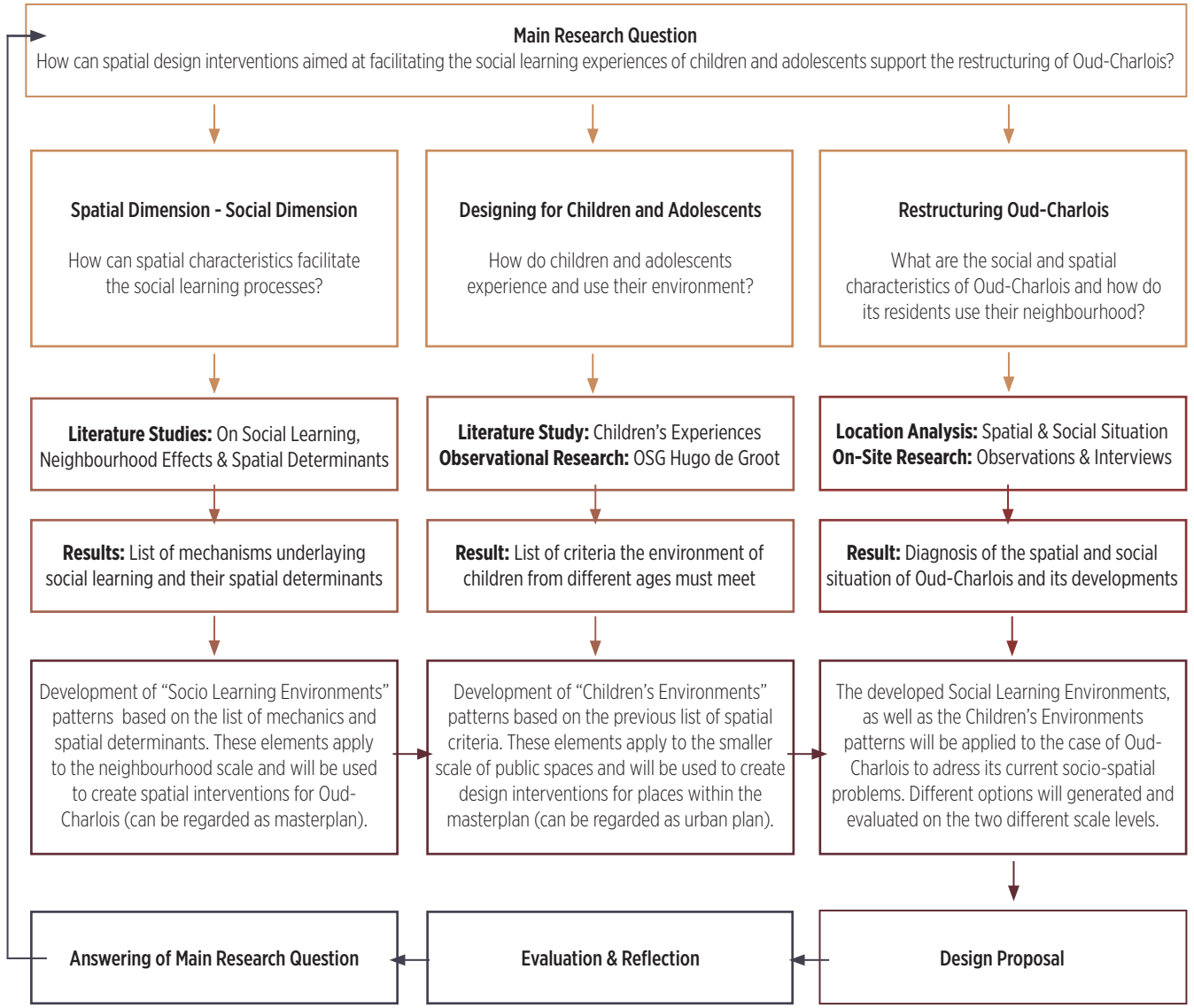
Especially where children are concerned


NEIGHBOURHOOD MATTERS
And so does the school environment

OSG HUGO DE GROOT

“Superschool” in Oud-Charlois

“How can **spatial design interventions** aimed at facilitating the **social learning experiences** of **children and adolescents** support the restructuring of Oud-Charlois?”


Main Research Question
How can spatial design interventions aimed at facilitating the social learning experiences of children and adolescents support the restructuring of Oud-Charlois?
Spatial Dimension - Social Dimension
How can spatial characteristics facilitate the social learning processes?
Designing for Children and Adolescents
How do children and adolescents experience and use their environment?
Restructuring Oud-Charlois
What are the social and spatial characteristics of Oud-Charlois and how do its residents use their neighbourhood?
Literature Studies: On Social Learning, Neighbourhood Effects & Spatial Determinants
Literature Study: Children's Experiences
Observational Research: OSG Hugo de Groot
Location Analysis: Spatial & Social Situation
On-Site Research: Observations & Interviews
Results: List of mechanisms underlaying social learning and their spatial determinants
Result: List of criteria the environment of children from different ages must meet
Result: Diagnosis of the spatial and social situation of Oud-Charlois and its developments
Development of "Socio Learning Environments" patterns based on the list of mechanics and spatial determinants. These elements apply to the neighbourhood scale and will be used to create spatial interventions for Oud-Charlois (can be regarded as masterplan).
Development of "Children's Environments" patterns based on the previous list of spatial criteria. These elements apply to the smaller scale of public spaces and will be used to create design interventions for places within the masterplan (can be regarded as urban plan).
The developed Social Learning Environments, as well as the Children's Environments patterns will be applied to the case of Oud-Charlois to adress its current socio-spatial problems. Different options will generated and evaluated on the two different scale levels.
Answering of Main Research Question
Evaluation & Reflection
Design Proposal

SOCIAL LEARNING

Social →

Social Science

Social Contagion

People with a network outside the neighbour-hood are less prone to neighbourhood effects; spatial layout of routine activites.

Collective Socialization

Isolated neighbourhoods adopt deviant social norms as dominant, increasingly the occurance of deviant behaviour.

Social Cohesion & Control

Neighbourhoods close to areas with more affluence and high in close, exchange and control have more collective efficacy.

Social Networks

If enough people from the same background live close by, they stop socializing with others.

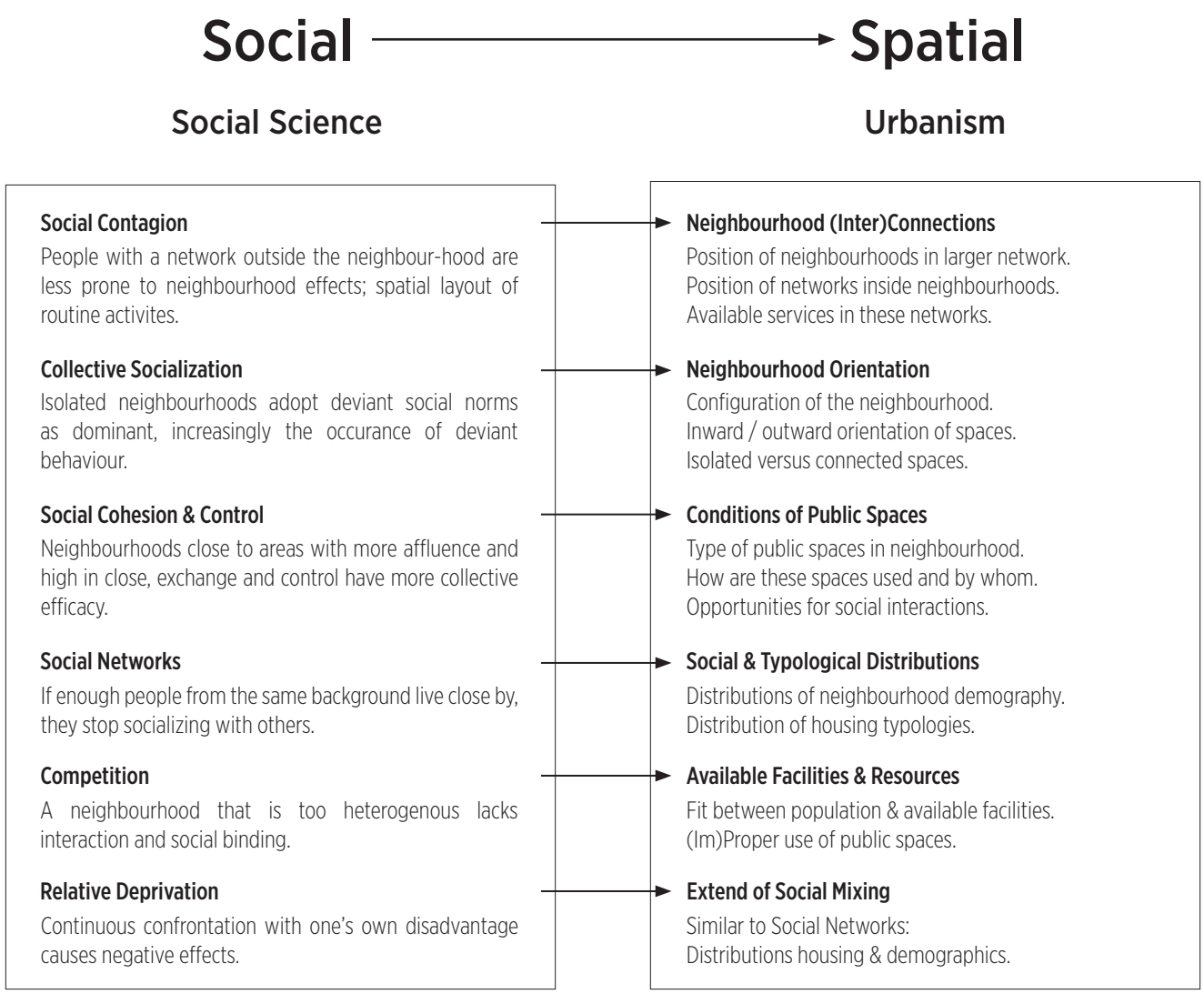
Competition

A neighbourhood that is too heterogenous lacks interaction and social binding.

Relative Deprivation

Continuous confrontation with one's own disadvantage causes negative effects.

Social Learning **ENVIRONMENTS**



CHILDREN'S NEEDS

Social →

Social Science

Primitive Space

Perceived by children in the first sensorimotor stage of development, it is the space of physical action and sensory experience.

Perceptual Space

Perceived by children in the second pre-operational stage of development, it is the space of sensory imagery and imagination.

Existential Space

Perceived by children in the third, concrete operational stage of development, it is the space of impressions and context.

Cognitive Space

Perceived by children early in the formal operational stage of development, it is the space of perspectives and representation.

Abstract Space

Perceived by children and adults in the later formal operational stage of development, it is the space of abstract concepts and relations.

Children's **ENVIRONMENTS**

Social → Spatial

Social Science

Primitive Space

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Urbanism

0-2: "Sensory" Space

Children in these ages require spaces to meet basic needs (physiological and safety), allowing them to see and feel the world.

2-7: "Discovery" Space

Children in these ages require space to meet all deficiency needs, so they can start to discover the world safely and comfortably.

7-11: "Explorative" Space

Children in these ages require space to meet "growth" needs, allowing them to search for new knowledge and perceptions.

11-16: "Self-Actualizing" Space

Children in these ages require space to meet "being" needs, allowing them to express themselves and discover who they are.

16+: "Mini-Adult" Space

Children after the age of 16 can be considered "mini-adults", they require the same type of spaces they do to continue to develop.

A PATTERN LANGUAGE
Alexander (1977)

4 AGRICULTURAL VALLEYS*

. . . this pattern helps maintain the INDEPENDENT REGIONS (1) by making regions more self-sufficient agriculturally; and it will create CITY COUNTRY FINGERS (3) almost automatically by preserving agricultural land in urban areas. But just exactly which land ought to be preserved, and which land built upon?

✣ ✣ ✣

The land which is best for agriculture happens to be best for building too. But it is limited—and once destroyed, it cannot be regained for centuries.

In the last few years, suburban growth has been spreading over all land, agricultural or not. It eats up this limited resource and, worse still, destroys the possibility of farming close to cities once and for all. But we know, from the arguments of CITY COUNTRY FINGERS (3), that it is important to have open farmland near the places where people live. Since the arable land which can be used for farming lies mainly in the valleys, it is essential that the valley floors within our urban regions be left untouched and kept for farming.

The most complete study of this problem that we know, comes from Ian McHarg (*Design With Nature*, New York: Natural History Press, 1969). In his "Plan for the Valleys" (Wallace-McHarg Associates, Philadelphia, 1963), he shows how town development can be diverted to the hillsides and plateaus, leaving the valleys clear. The pattern is supported, also, by the fact that there are several possible practical approaches to the task of implementation (McHarg, pp. 79–93).

Therefore:

Preserve all agricultural valleys as farmland and protect this land from any development which would destroy or lock up the unique fertility of the soil. Even when valleys

are not cultivated now, protect them: keep them for farms and parks and wilds.

✣ ✣ ✣

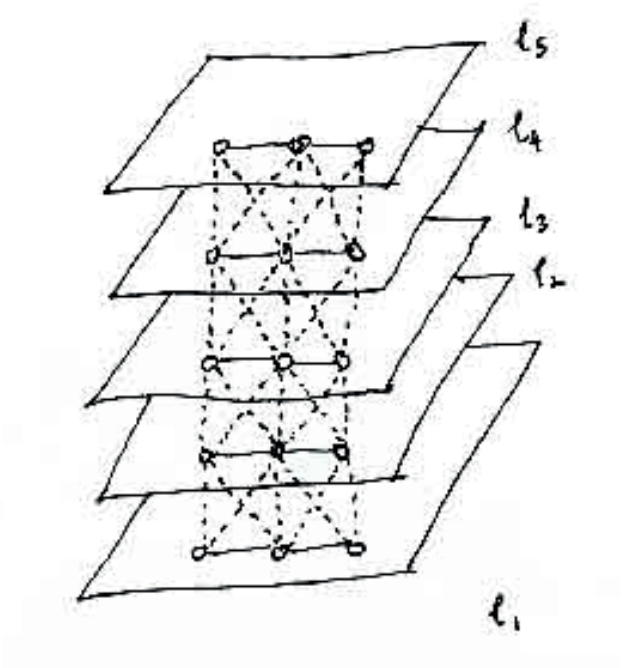
Keep town and city development along the hilltops and hillsides—CITY COUNTRY FINGERS (3). And in the valleys, treat the ownership of the land as a form of stewardship, embracing basic ecological responsibilities—THE COUNTRYSIDE (7). . . .

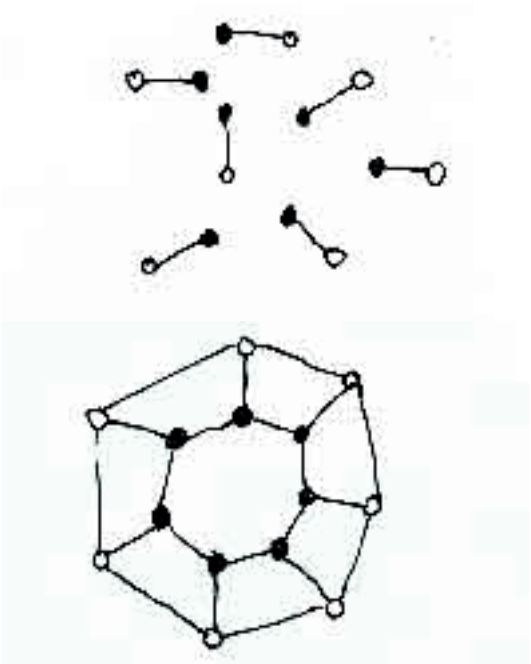
Pattern nº 4

Alexander (1977, pp. 26-28)

A COMPLEX LANGUAGE

Salingaros (2000)





FROM RESEARCH TO DESIGN
Social Learning Environment Pattern

04

O PEN
NEIGHBOURHOODS

[META-PATTERN]

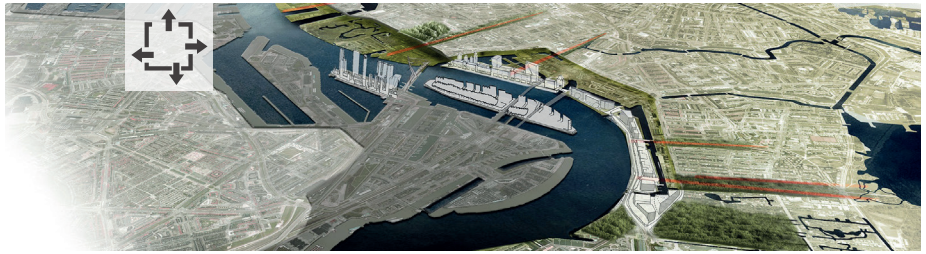
[L] Daily Urban System
[L] Public Facilities

[S] Mixed Neighbourhoods

[I] Neighbourhood Connections

[O] Open Space Networks
[O] Interaction Environments

Creating an open and outwardly oriented neighbourhood morphology will benefit disadvantaged neighbourhoods by integrating it into the morphology of adjacent, non-disadvantaged, areas, which decreases its isolation.



Wolbert van Dijk © Example of a dyke as visual link between areas.

Context - Contact with peers or other residents and users of a disadvantaged neighbourhood can negatively impact individual's behaviours, attitudes and aspirations.

Problem - Local social norms are generally conveyed through neighbourhood role models and other social pressures. Negative role models are abundantly present in disadvantaged neighbourhoods, whereas positive role models are not. This increases the likelihood that youth will adopt these deviant local norms and start to display the same negative behaviours, attitudes and aspirations (e.g. teenage pregnancy, academic disinterest and lack of labor force participation).

Solution - By transforming disadvantaged neighbourhoods in open, outwardly oriented neighbourhoods, the social isolation of that neighbourhood will diminish. A more diverse social structure can be created by improving the visual links between neighbourhoods and their typology and physical form (Shibu, 2010). In achieving this, it will be important to pay attention to the design of the urban open spaces, most importantly the streets (Thompson, 2002). Moreover, recent research shows that chosing to either adhere to or contradict existing homogeneities and regularities such as architectural elements or urban block patterns to be effective urban design tools in stimulating urban tourism (Gospodini, 2001).

FROM RESEARCH TO DESIGN
Children's Environment Pattern

11

ELEMENTS OF RISK

[H] Discovering
[H] Exploring

[C] Individual Adventures

[O] Parental Supervision
[O] Individual Adventures
[O] Natural Environments
[O] Artificial Environments

It is important to incorporate elements of risk in the environments of young people, irrelevant of their age or gender and the type of space.

Flickr; Matthew King © Children require spaces that offer challenges and risk.

Context - It is important to provide children with an environment that engages and challenges them to discover all it has to offers, alone or with peers or caregivers, in a way that allows them to feel accomplished about their actions.

Forces - The opportunity to engage in activities that are challenging and even offer an element of risk is a vital element of children's development and, furthermore, engages them in the most active types of play, both physically and cognitively.

Clarification - An extensively documented theme in the literature on the developmental effects of children's play is the benefit of risk and risk-taking (Gleave, 2008). The ability to engage in challenging and risk-taking play is reasoned to provide children with important abilities to cope with the unpredictable nature of our world in adulthood (Gill, 2007). Furthermore, risk-taking is considered to benefit the development of confidence and an "I can do"-attitude (Dweck, 2000), as well as other desireable personality traits such as creativity (Ball, 2002). Some researchers even claim that shielding children from challenge and risk is "deliberately disabling and ethically unacceptable" (Hughes, 2001, p.53).

It is therefore important to incorporate elements of risk in the environments of young people, irrelevant of their age and gender or the type of space (Jones, 1997; Acar, 2003; Steampfli, 2009). This can be done through the inclusion of natural elements (Shackell et. al., 2008), which offer a greater variety of relatively safe risk-taking opportunities (climbing a tree, sliding down a hill). It should be mentioned however that it is necessary to provide a balance between opportunities for risk and keeping children reasonably safe from harm (Moorcock, 1998). This can be done by designing environments to mitigate the effects of risk-taken gone awry through, for instance, materialization (e.g. soft grass, sand, or even water beneath climbing structures).

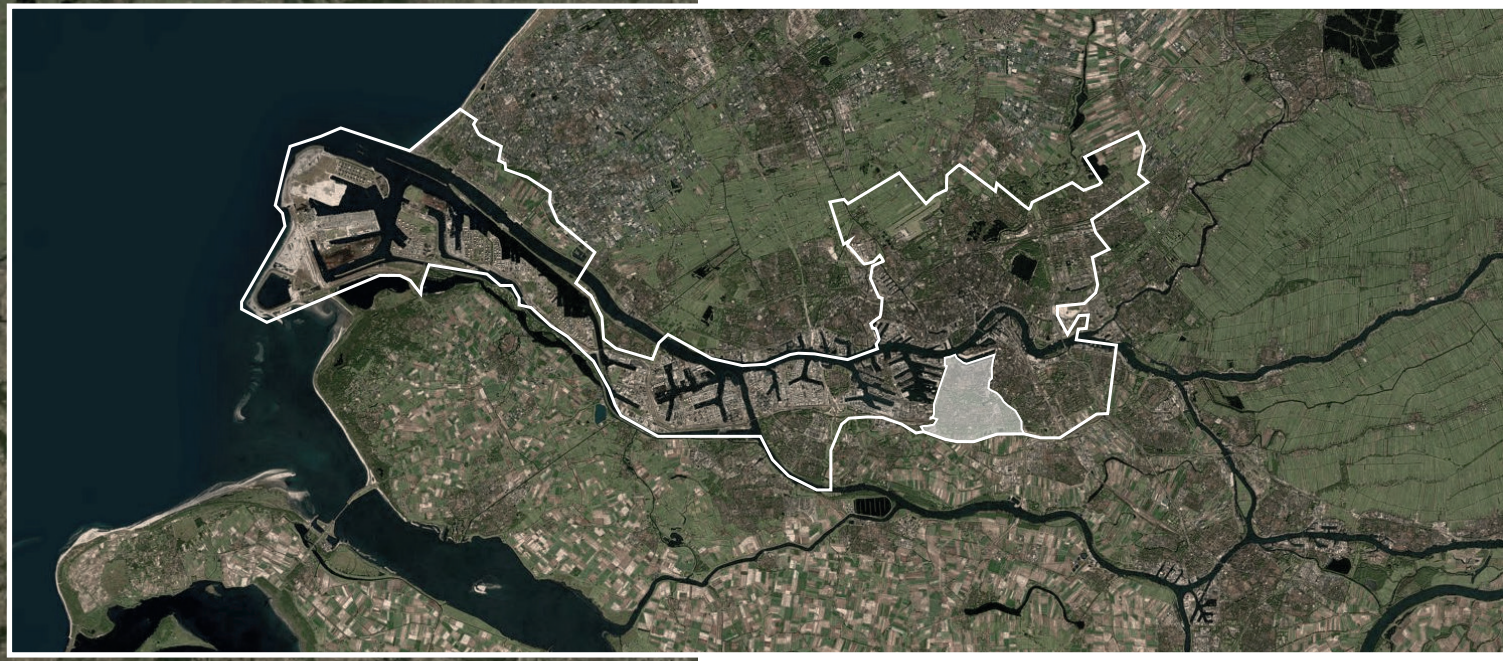
ROTTERDAM

618.109 inhabitants
317.855 households

16,5%

102.271 children up to 15 years
92.347 households with children

29,1%



CHARLOIS

64.488 inhabitants
33.812 households

18,2%

11.576 children up to 15 years
9.843 households with children

30,0%

OUD-CHARLOIS

13.094 inhabitants
6.701 households

18,0%

2.378 children up to 15 years
2.011 households with children

29,1%


E KOOP
zuidstad
makelaars
240 41 42
70-GF-NF


MCD

NETWORK ANALYSIS

Where do people go and how do they move?

SOCIAL & SPATIAL ANALYSIS

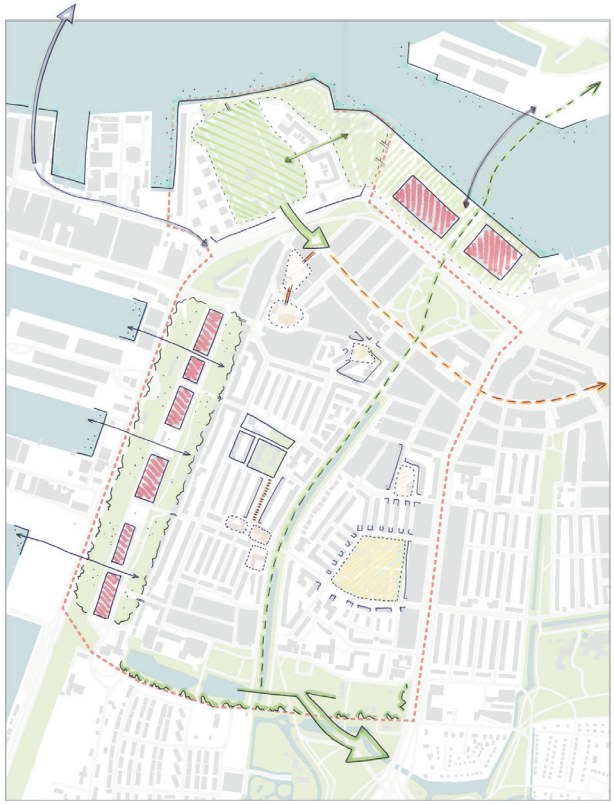
Which people live here and in what conditions?

OBSERVATIONAL ANALYSIS

How do people use the public spaces?

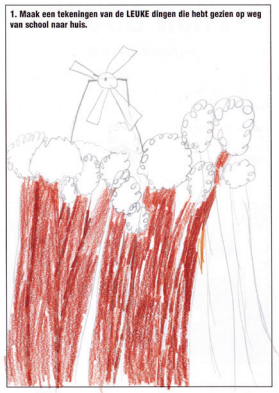
CONCLUSIONS

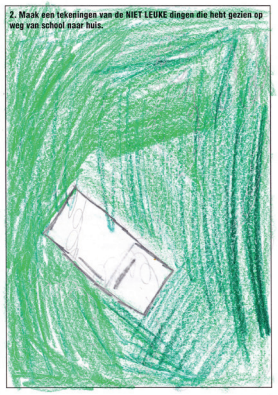
Problems, Qualities & Opportunities



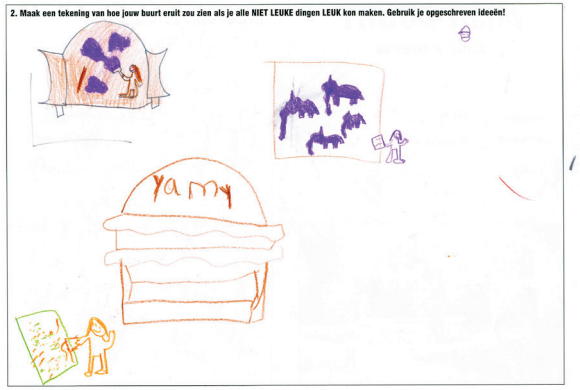
AND HOW DO THEY PERCEIVE THEIR NEIGHBOURHOOD?

Groep 5: Ages 7-8
Photo Workshop

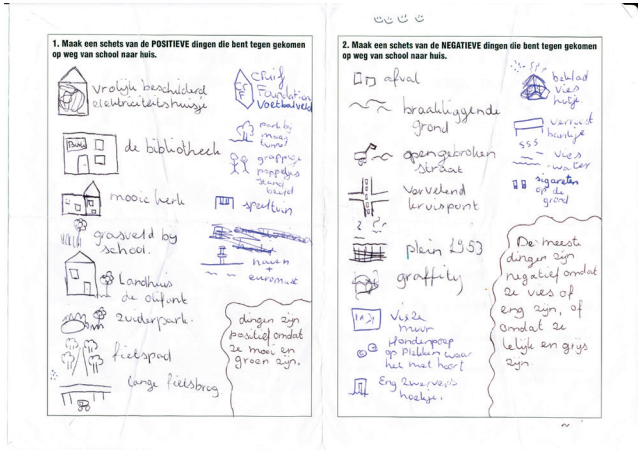


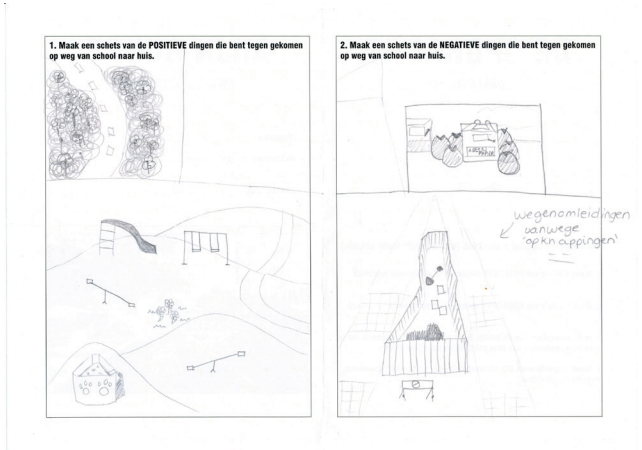


Groep 5: Ages 7-8
Design Workshop

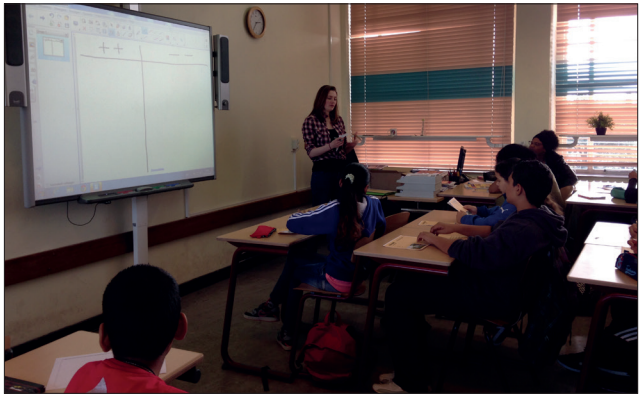


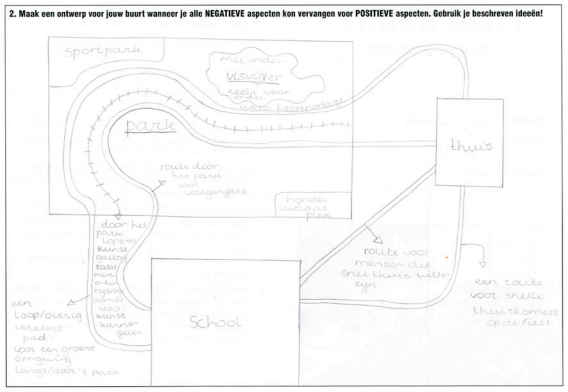
Klas 2: Ages 13 & 14
Photo Workshop

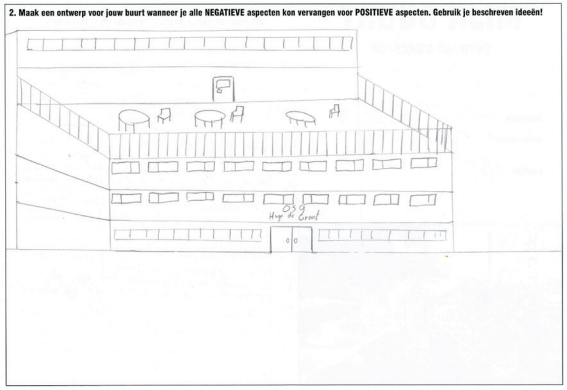


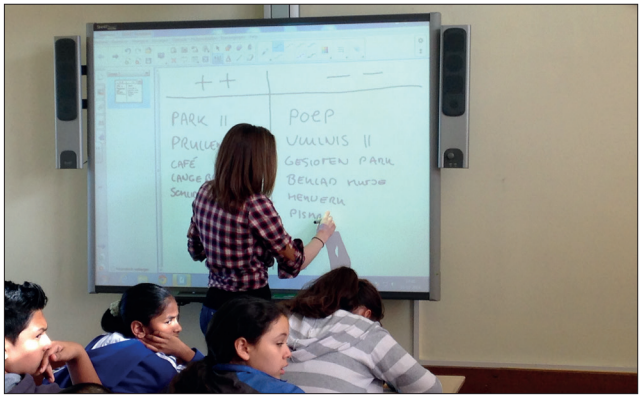


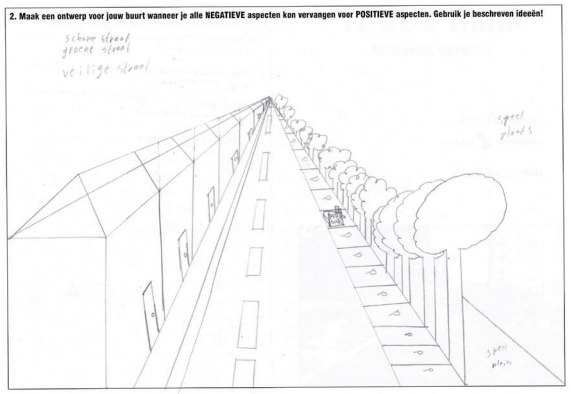
Groep 5: Ages 7-8
Design Workshop

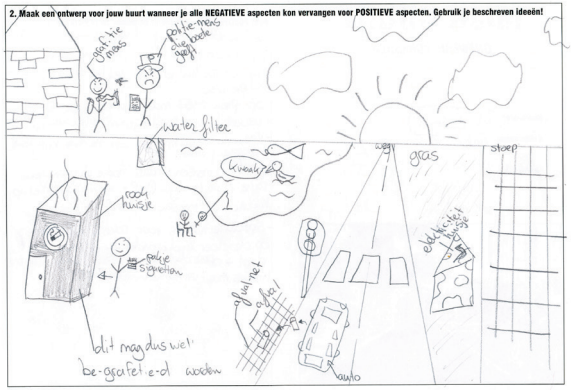












SOCIAL LEARNING ENVIRONMENTS

Applying the patterns to generate a vision

Incorporated Patterns:


Open Space Network

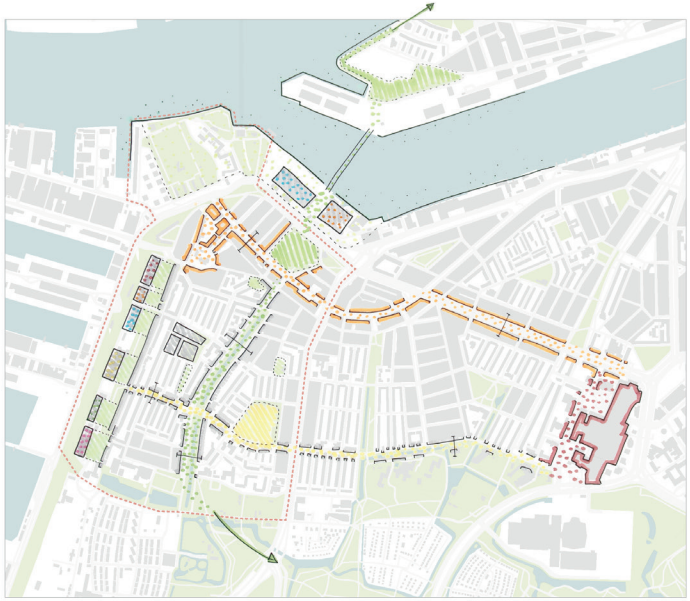
07


Mixed Neighbourhood

10


Communal Spaces

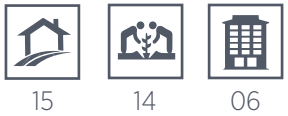
14

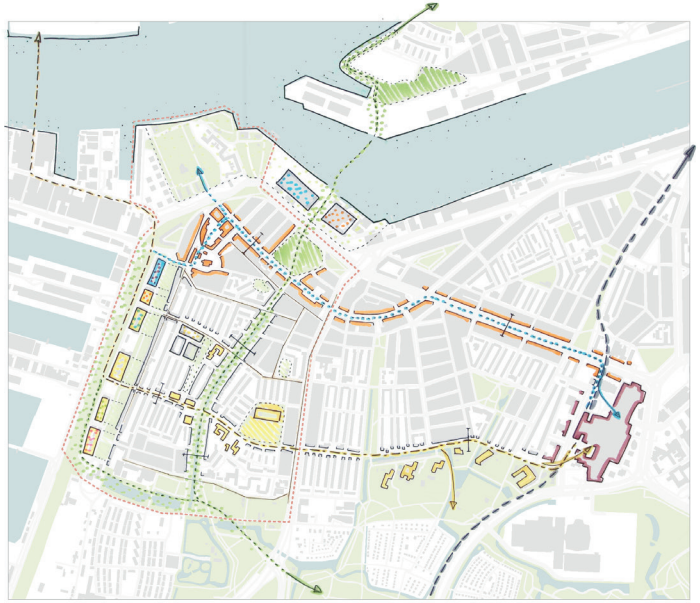


SOCIAL LEARNING ENVIRONMENTS

Applying the patterns to generate a vision

Incorporated Patterns:





ONE RECOGNIZEABLE NETWORK

"Fun" Eye-Catching Elements

Physical "trail" in the sidewalks

Glow-In-The-Dark Road Paint

MASTERPLAN

0 100m

0 SG HUGO DE GROOT

CONNECTING SCHOOL & NEIGHBOURHOOD

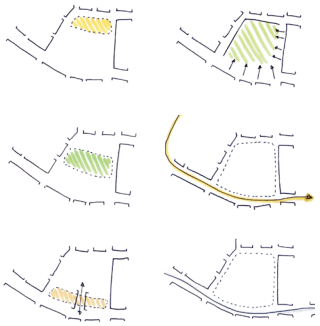
02 04 11

03 07 15

13 Object Ambiguity

18 Gender Design

20 Outdoor Education



Structure sketches

CONNECTING SCHOOL &
NEIGHBOURHOOD

18 13

Skate park with green character

18

Quiet grass areas with flowers

11

Sunken "theater" for gatherings

SG HUGO DE GROOT

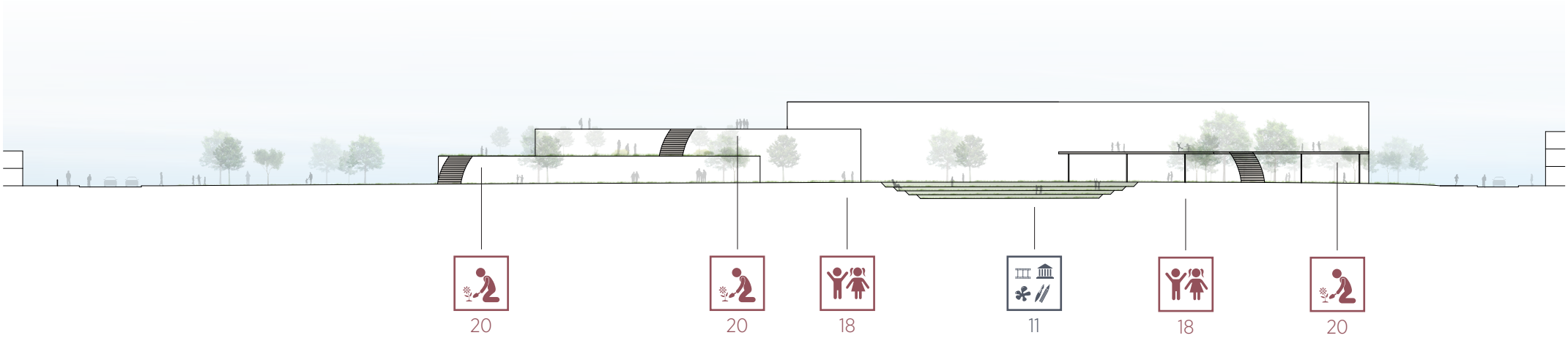
03
04
07
02
11
15

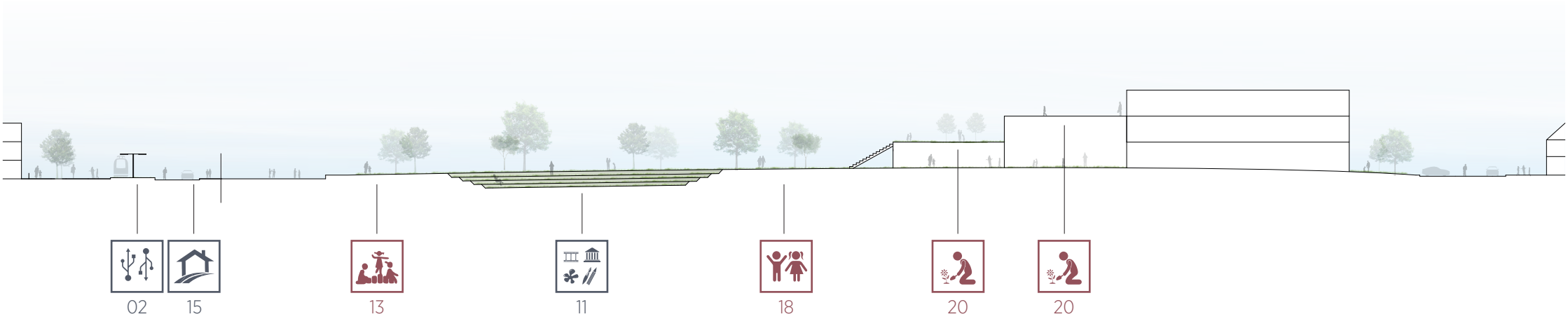
13
18
20

1 2 3
2 3 1

N

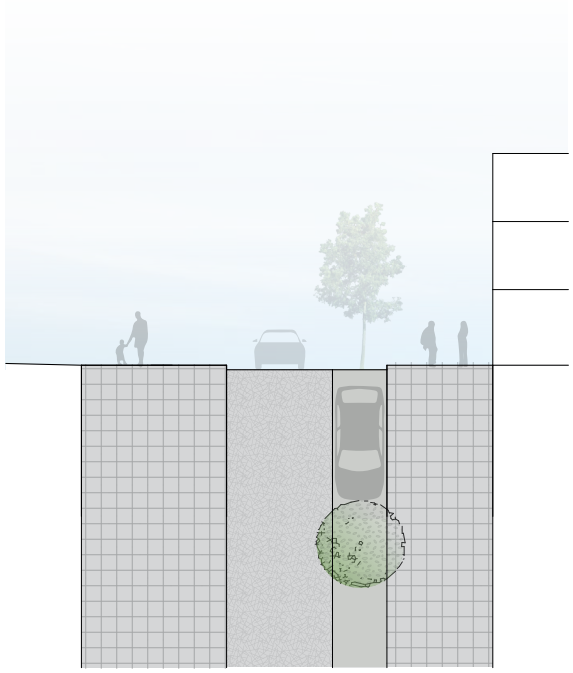
0 50m

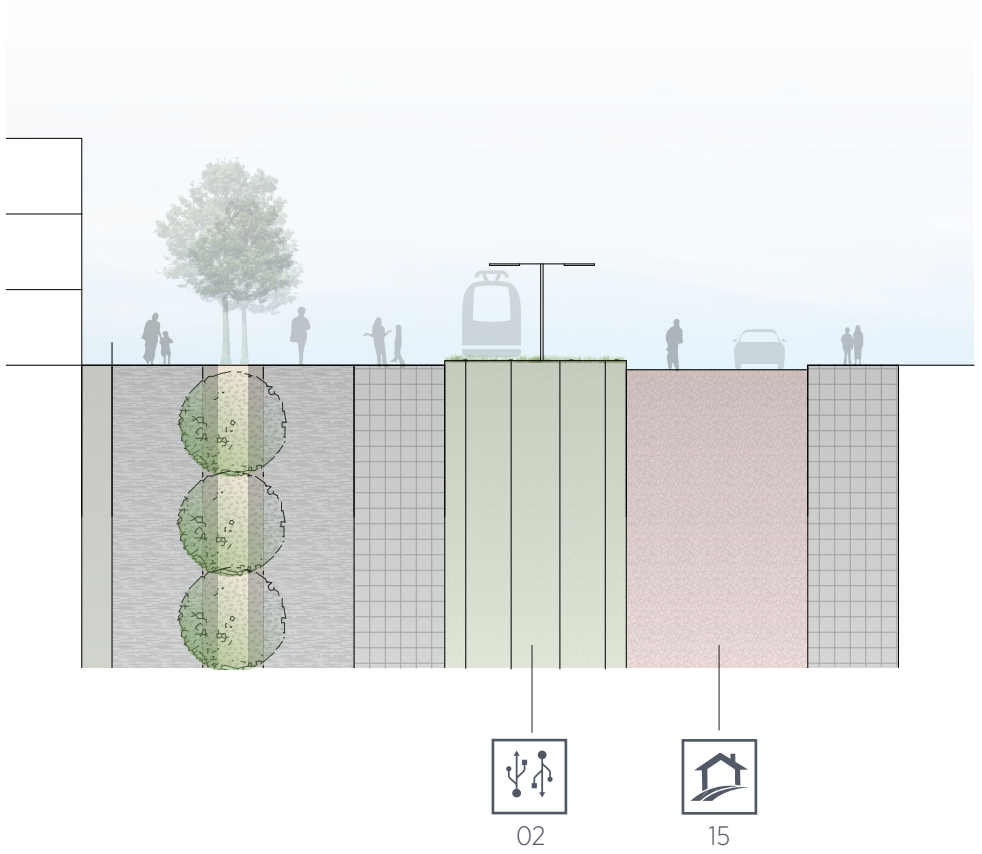




0 25m

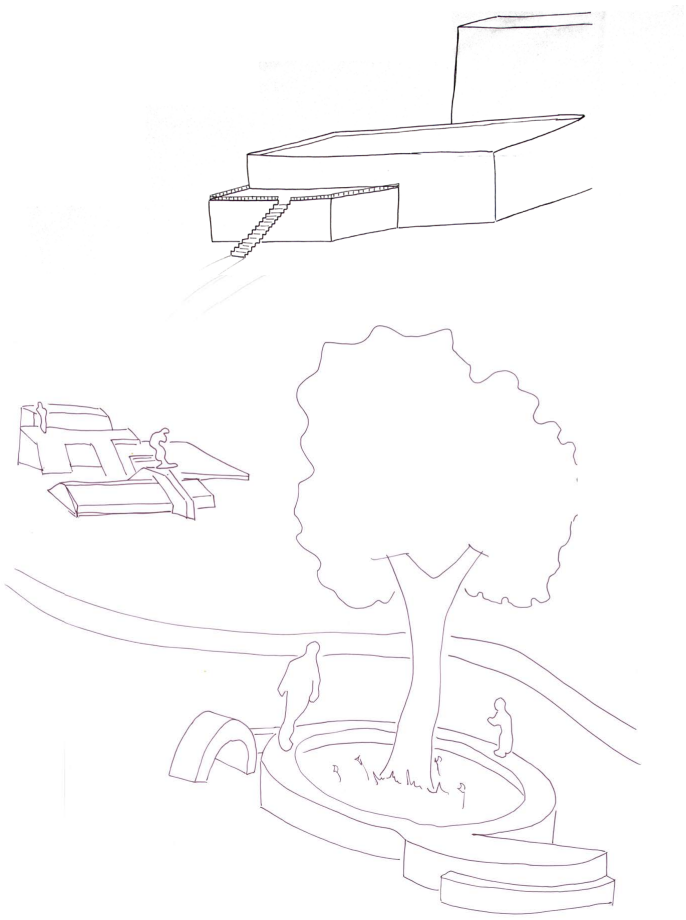
STREET PROFILES





SKETCH 3D

Principles behind visualization



B OERGOENSEVLIET

CONNECTING SCHOOL & NEIGHBOURHOOD

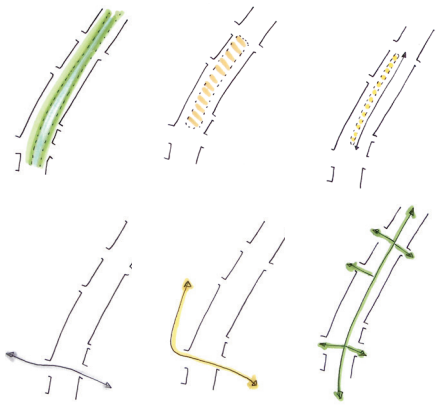
02 11

07 15

Exploring
03

Nature
08

Elements of Risk
11



Structure sketches

ATTRACTIVE BLUE-GREEN
CONNECTION & DESTINATION

03

Enclosed path for children to explore

08

Added biodiversity to create natural banks

11

Wooden walkway with subtle edges

B OERGOENSEVLIET

07

02

11

15

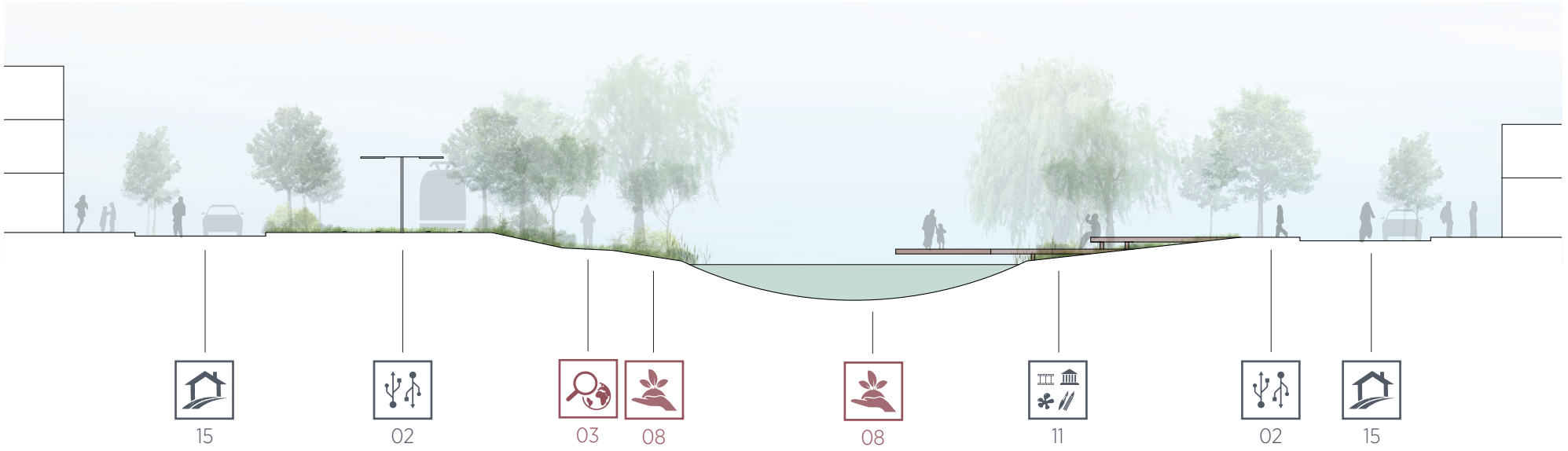
03

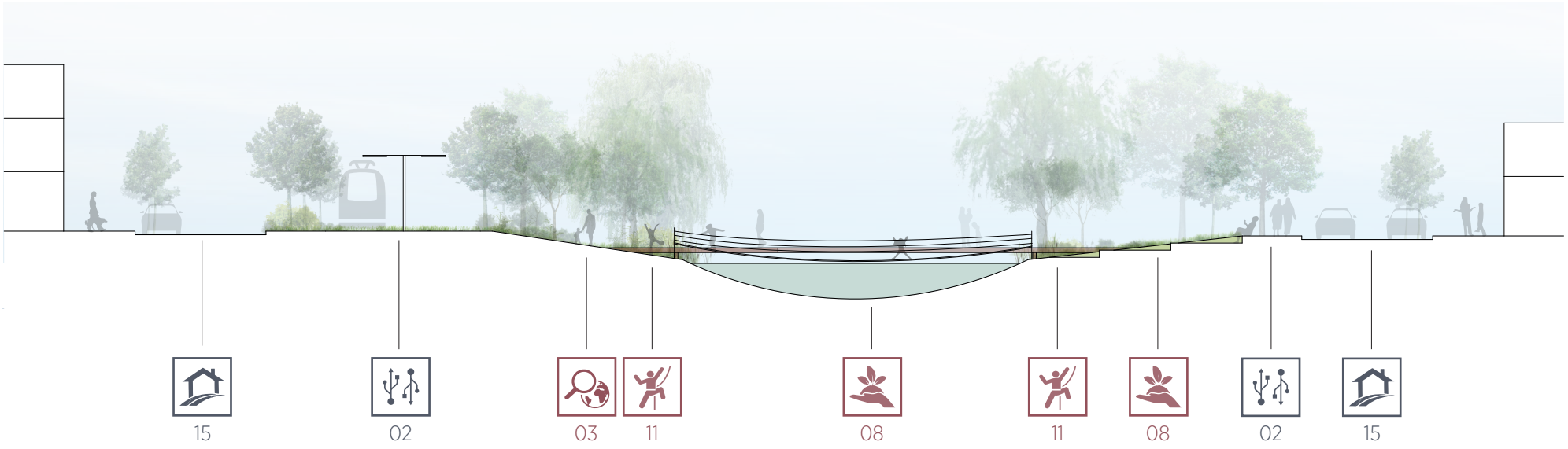
08

11

N

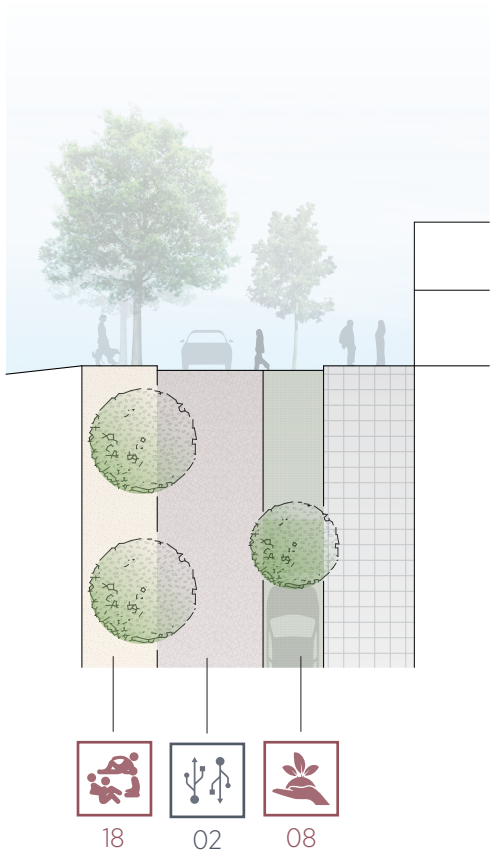
0 50m

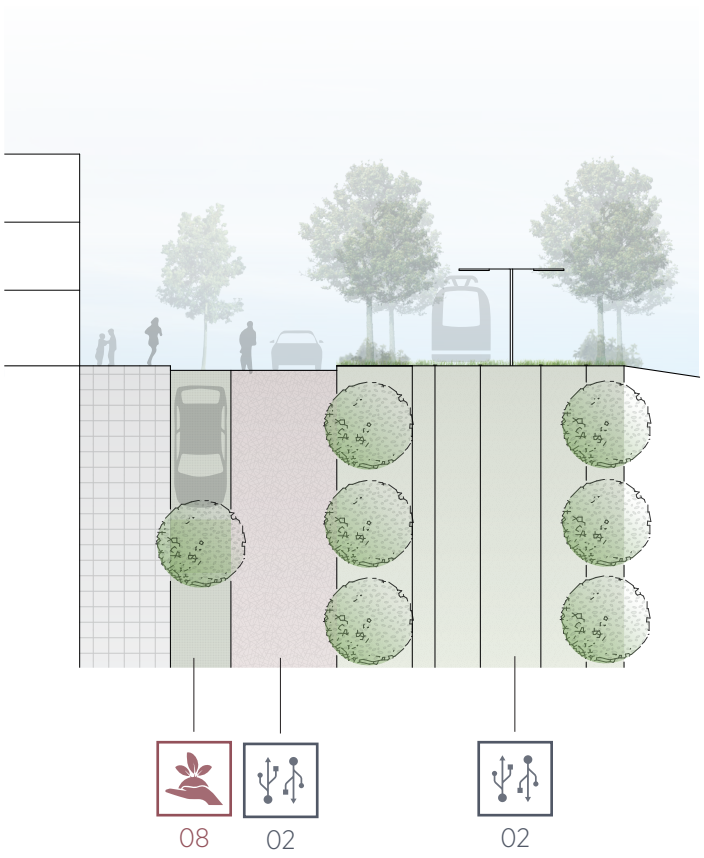




0 5m

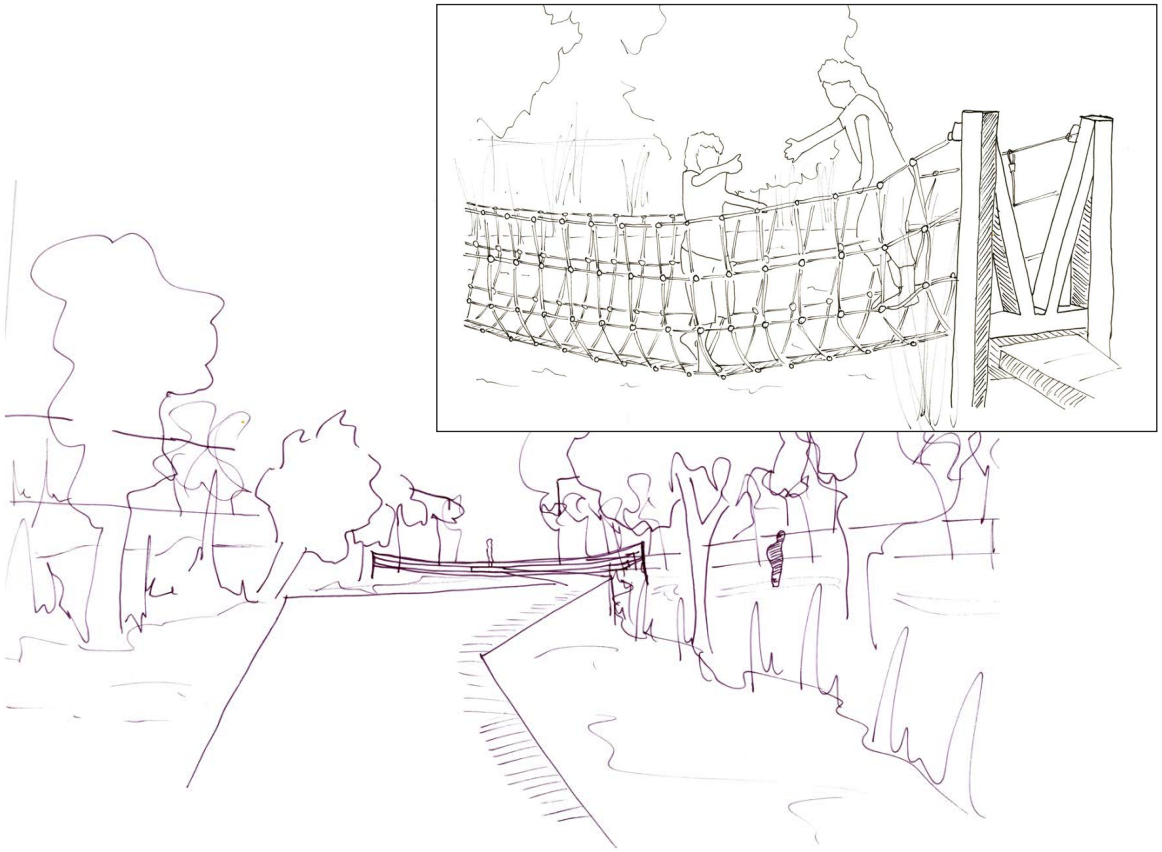
STREET PROFILES





SKETCH 3D

Principles behind visualization



B LOOMSTEYNWEG

NEIGHBOURHOOD HUB FOR SMALL CHILDREN AND THEIR PARENTS

02 06 11

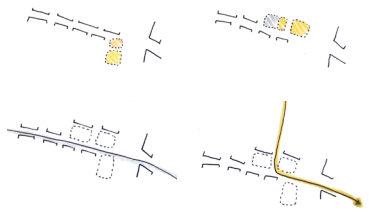
03 07 14

04 10 15

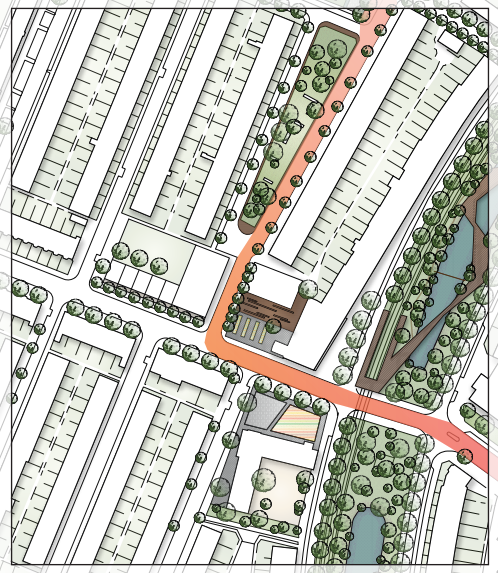
Discovering
02

Materials
07

Parental Supervision
09



Structure sketches



NEIGHBOURHOOD HUB FOR SMALL CHILDREN AND THEIR PARENTS

02

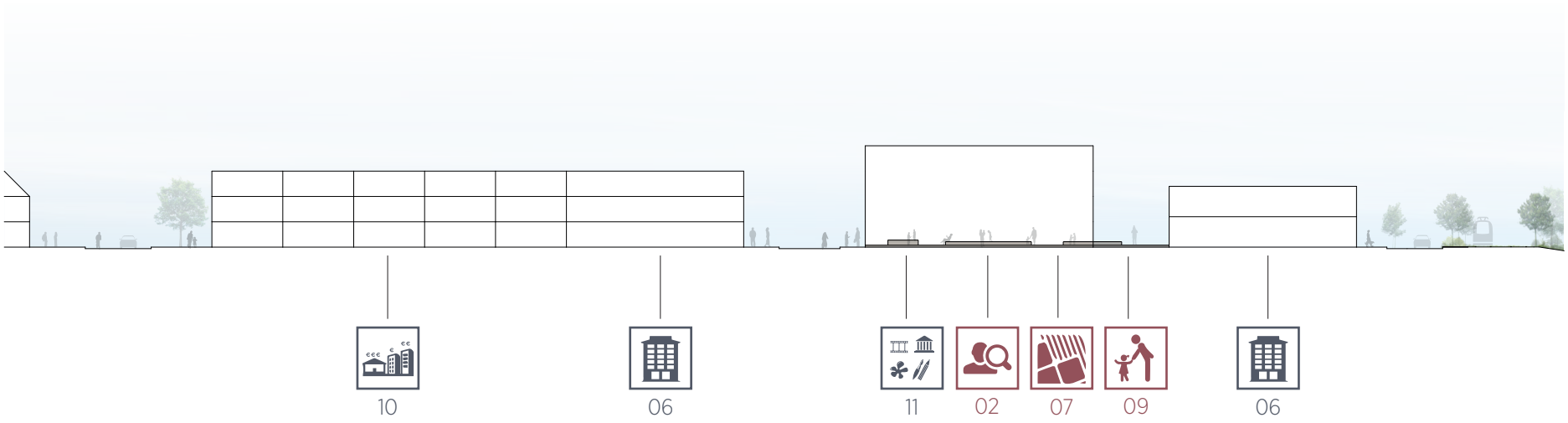
Earth beds with plants and flowers

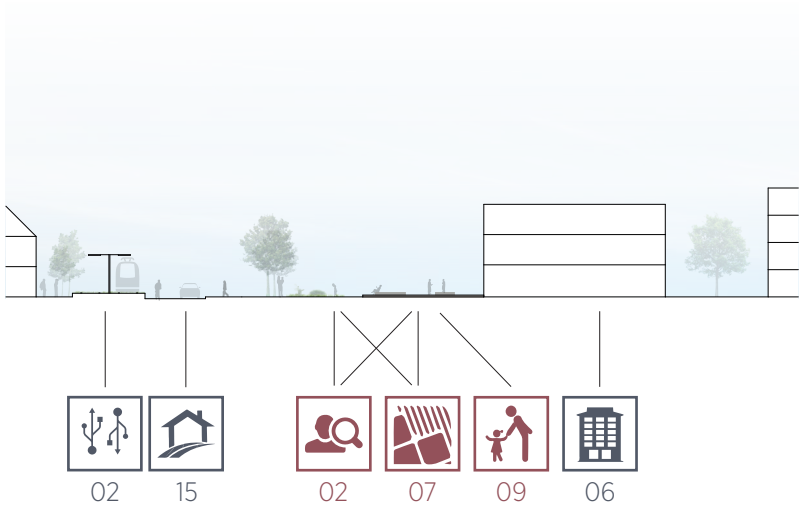
07

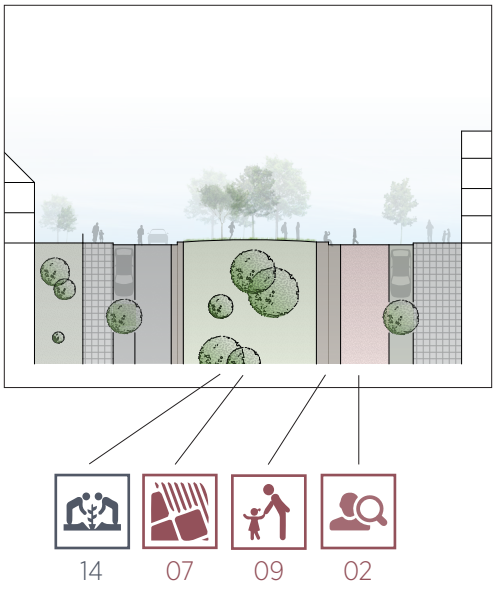
Safe yet attractive materialization

09

Opportunities for parents to sit closeby







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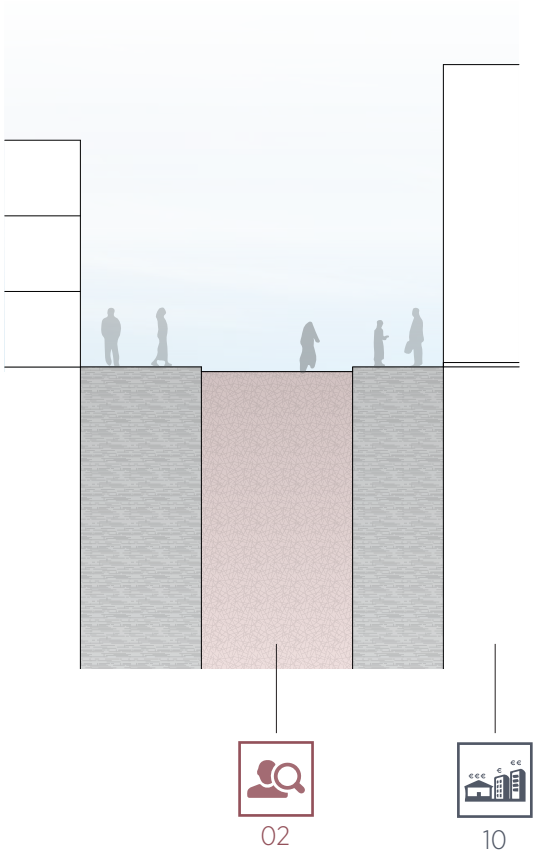
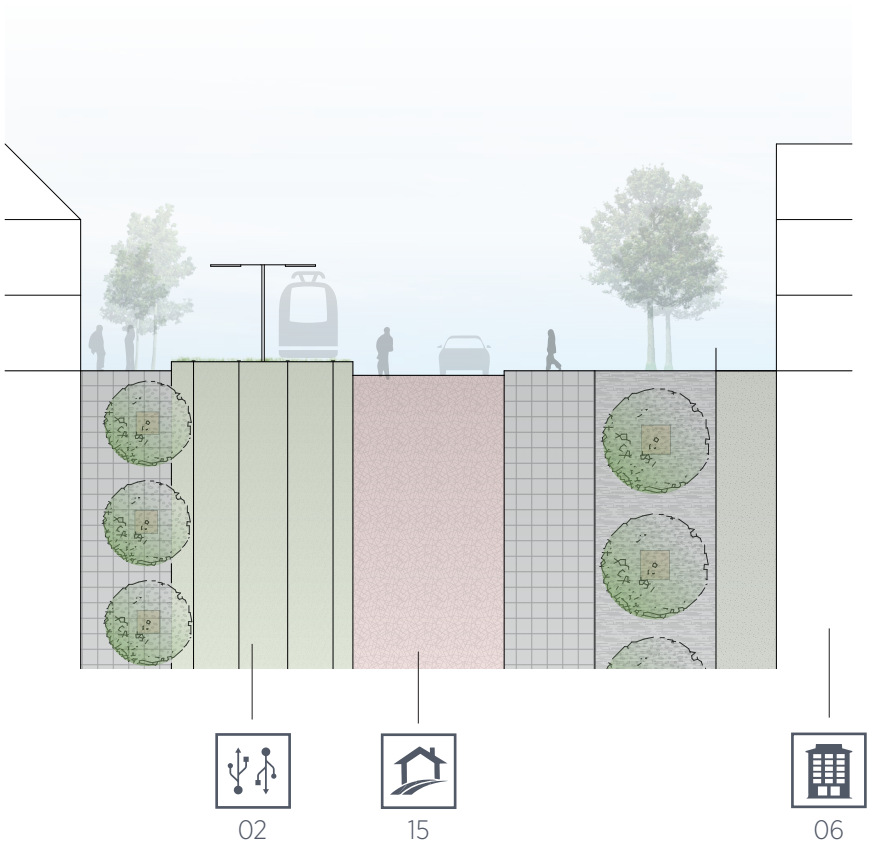
STREET PROFILES





SKETCH 3D

Principles behind visualization

V OORNSEPLEIN

FACILITY HUB SUPPORTING THE DEVELOPMENT OF TEENS

03 06 14

04 10 15

Cultivating
04

Artificial Environments
14

Adult-Child Spaces
21

Structure sketches

FACILITY HUB SUPPORTING THE DEVELOPMENT OF TEENS

04

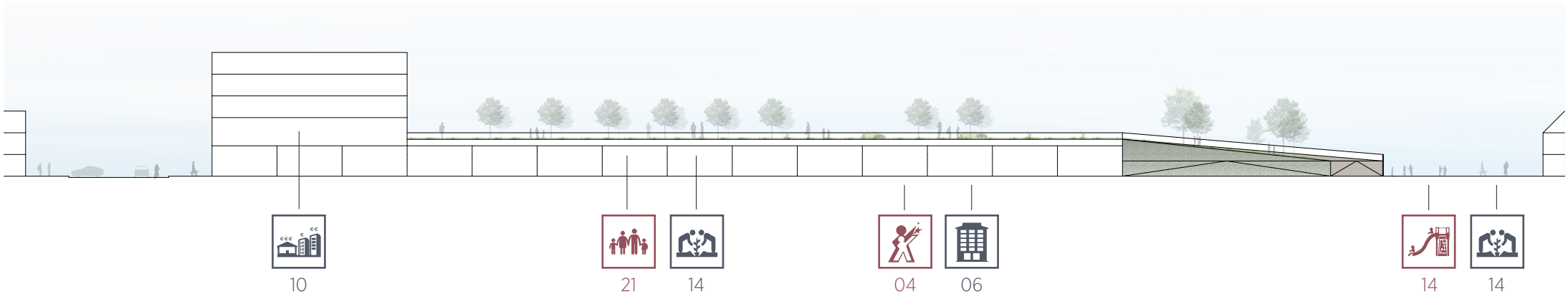
Graffitti wall to be painting by teenagers

21

Community garden as parent - child space

14 14

Water elements in schoolyard for play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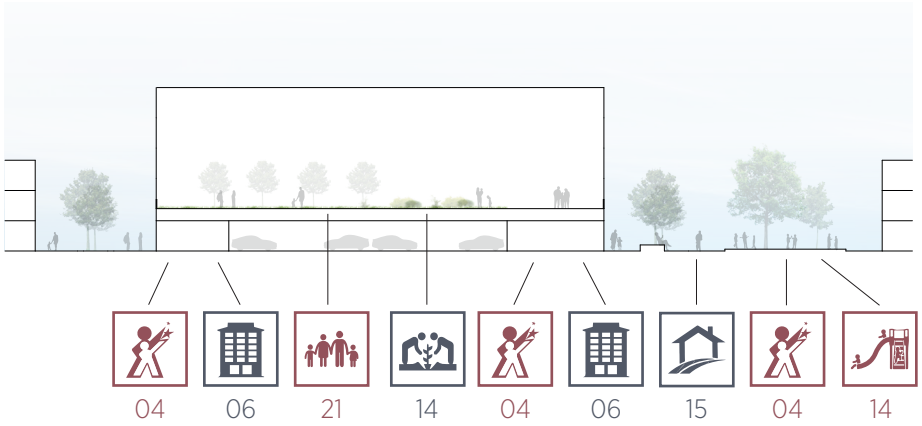
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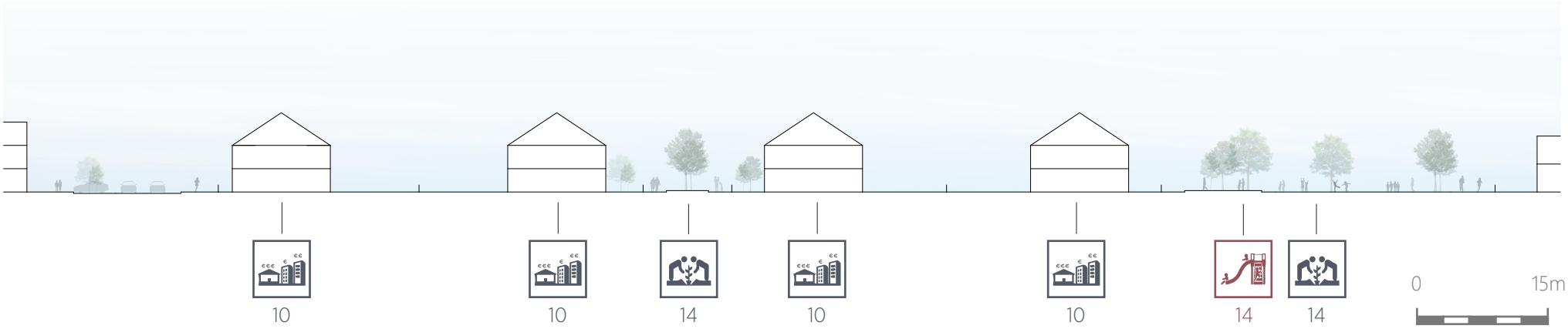
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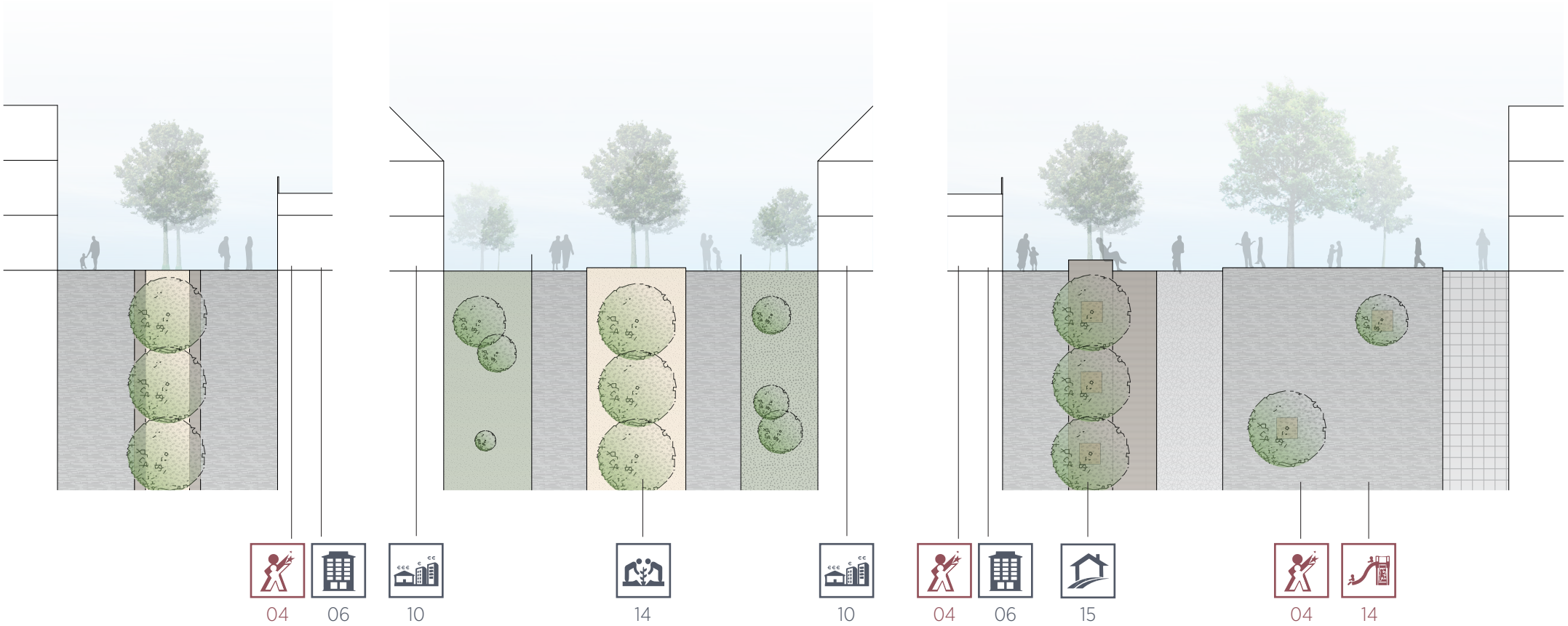
STREET PROFILES



REDEVELOPED HARBOUR AREA
WITH CHILDREN FACILITIES

02 06 11

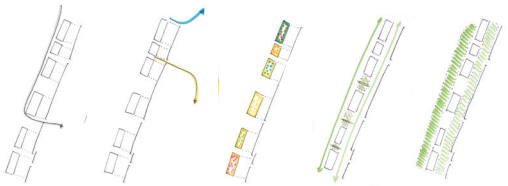
03 07 14

04 10 15

12 Inidvidual Adventure

17 Cognitive Activites

18 Mobility Level



Structure sketches

P LOMPERTSTRAAT

FACILITY HUB SUPPORTING THE DEVELOPMENT OF TEENS

12

Rope bridges as path for the children

17

Outdoor workshop to build and create

10

Maintaining harbour character

P LOMPERTSTRAAT

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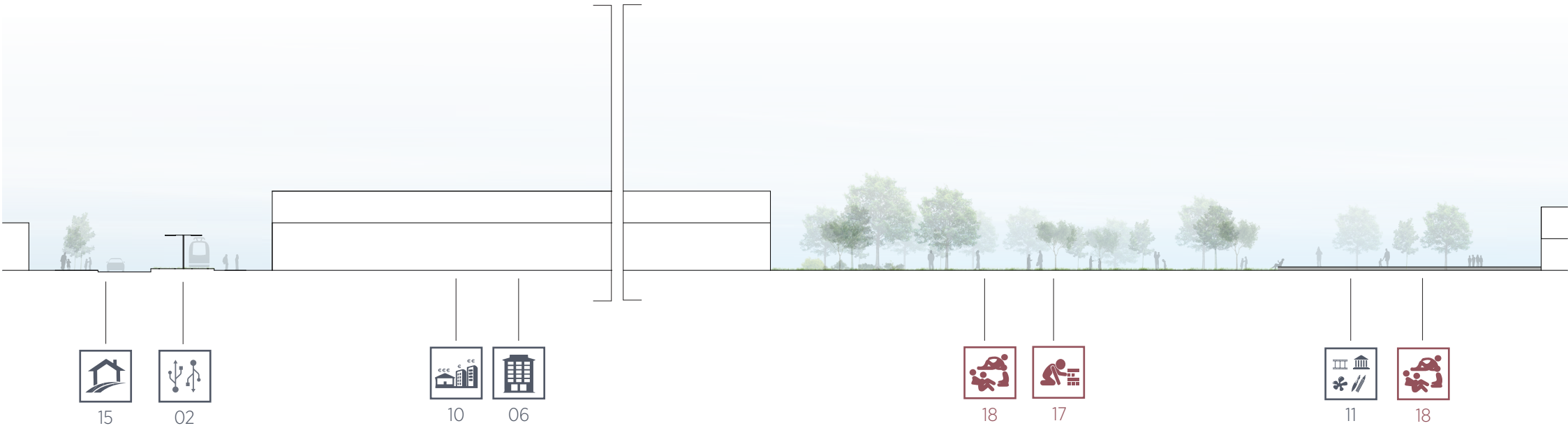
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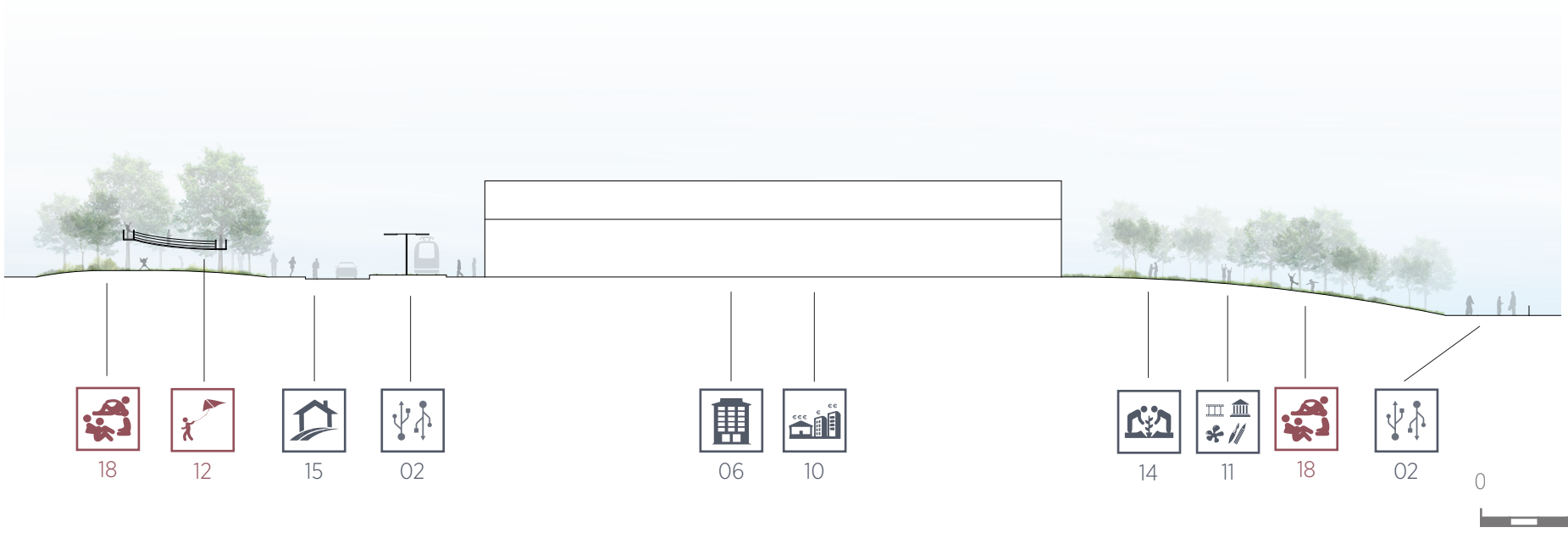
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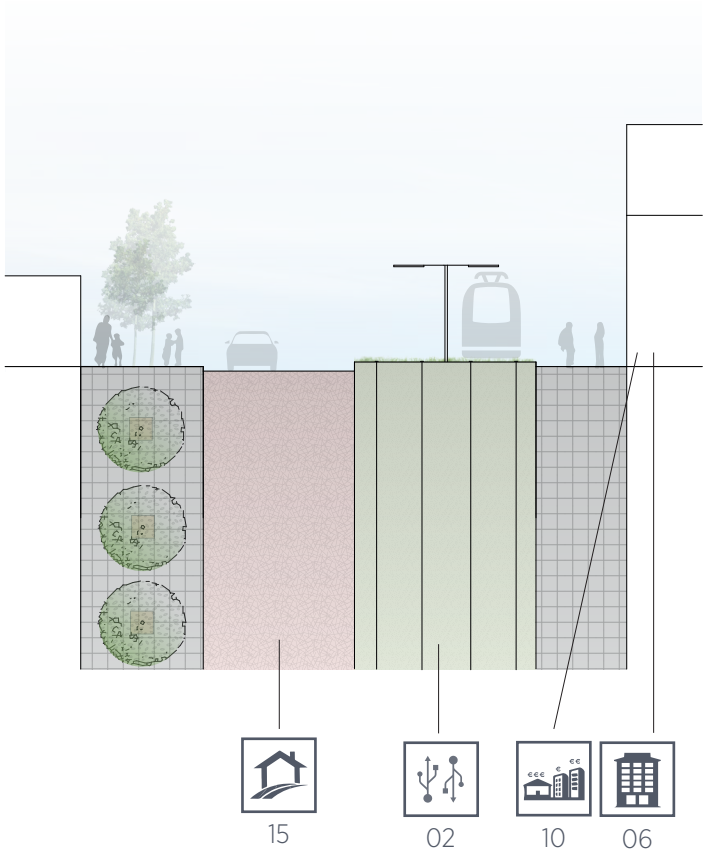
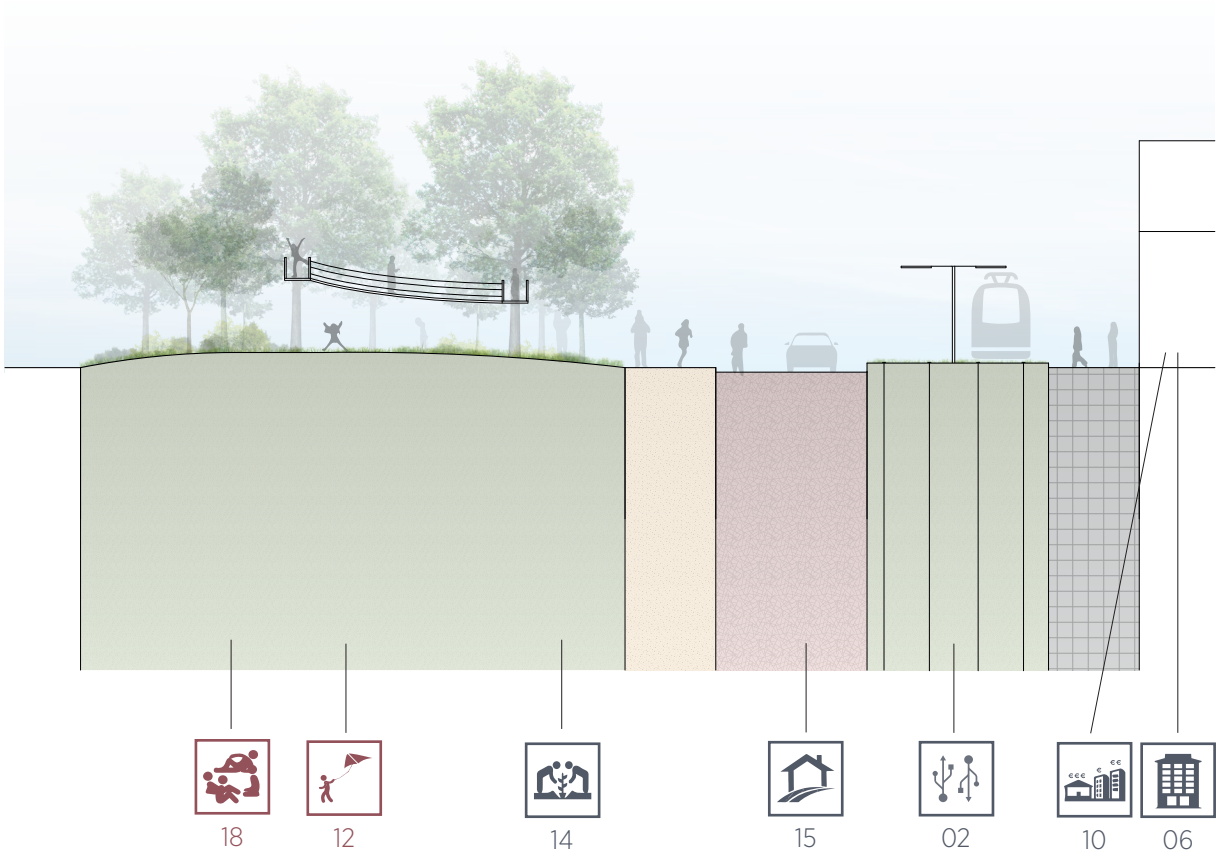
STREET PROFILES





"How can **spatial design interventions** aimed at facilitating the **social learning experiences** of **children and adolescents** support the restructuring of Oud-Charlois?"

REFLECTION

Proces, Product & Pattern Language

Architecture & Urbanism Master Students

Pattern Workshop