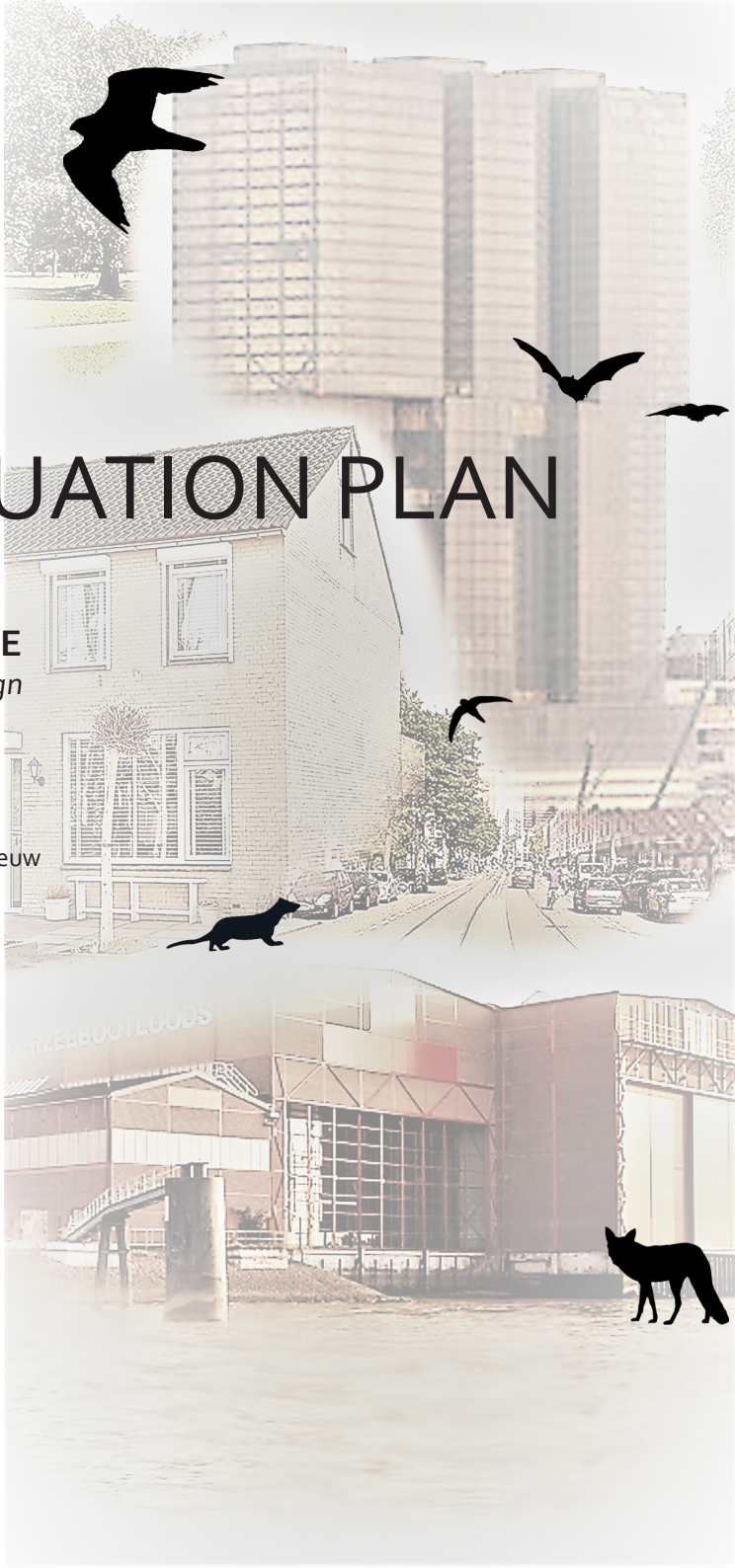
GRADUATION PLAN

URBAN NATURE

Analysis and design

Bonnie de Waardt
Explorelab 2021/2020
Peter koorstra/ Peter Teeuw



Content:

General information:

NAME: Bonnie de Waardt
STUDENT NUMBER: 5263476
TELEPHONE NUMBER: [redacted]
E-MAIL ADDRESS: [redacted]

STUDIO: Explorelab 2021/2022
RESEARCH TUTOR: Peter Teeuw
DESIGN TUTOR: Peter Koorstra
BT TUTOR: Jan van de Voort

Graduation project:
Urban nature anylisis and design

Goal:

Location:
Rotterdam

Option 1: Coolsingel 4-18
Option 2: RDM-straat 3089
Option 3: Havenkwartier Katendrecht
Option 4: Noordsingel 250

The posed problem:
The city is home to many humans and is being expanded almost daily. But besides humans the city is also home to many animals. When designing nature inclusive both humans and animals will benefit. Maintaining a balanced ecosystem in the city contributes to health, prevention of the greenhouse effect, pest control and many more. Nature inclusive design is still in its pioneering phase and is in need of more awareness and adaptation.

Research question and wanted outcome:
How can a designer analyze a Dutch city to find the existing ecological structure and nature inclusive potential?

The research will result in a clear way to analyze an Dutch city. The outcome will be an analysis method that can be used as a tool for designers to find the existing ecological structure and nature inclusive potential of a Dutch city.

Design assignment in which these result:
Designing an nature inclusive apartment building in a Dutch city. The building will be used as student housing and housing of groups with similar needs. Besides housing of humans the building will actively help target animal groups. The building must function as an pioneers building for nature inclusive design. To be used as an example and giving possibilities to connect to other nature inclusive buildings in the future. The design must lead by example.

Process:

Method descripition:
By gathering information about nature inclusive design trough literature and talks with experts, criteria will be divined to fabricate an analysis method. This method will be tested by analyzing a Dutch city on its nature inclusive potential.

The city chosen will also function as the design location for the second part of the graduation. The research and the design question have an direct correlation this way.

Literature and general practical preference:
Nature inclusive is a verry broad topic to explore in such a short time. In order to achieve quality results the focus of the research will be on the animals in the city. Other aspacts of nature inclusive design such as plants are included only when in direct correlation with the animals. Target species and other information is location bound. Therefor literature and expertise used are of the same or similar location. Using mainly literature about Dutch cities, nature and species.

The location used in the design is the same location used in the research. Conclusions made in the research can so be directly implemented in the design.

Reflection:

Relevance:
Nature inclusive is an relatively new topic. The implementation of nature inclusive design is compared to the sustainable building design during the 70's. Building nature inclusive in Dutch cities is needed to sustain or even improve biodiversity in the city and create an healthy ecosystem. An well balanced ecosystem will prevent pest and will contribute to the prevention of the greenhouse effect. Because nature inclusive is a relatively new term it is important to make it accessible to designers in an early stage. It is an mindset that needs to be implemented during the entire process of design to work. This is why using an analysis method will help designers to understand the needs of an location in terms of nature inclusive potential at the start of the design. Making it possible to incorporate design elements that will help maintain and/or create an balanced city ecosystem.

Time planning:

The Msc4 will be completely devoted to the Graduation project.

After the P2
The first weeks after the P2 will be used to incorporate feedback and make changes to the research and design. The research will be finished around the second week of February. This is also when the final location for the design is chosen and the first design studies are finished.

Mid-February till P3 (mid-March)
Completely devoted to the designing phase. Using mainly physical models to experiment and finalize decisions. Finalized sketches should be done around one week before the p3 including floorplans, sections, elevations and scale models.

P3 (mid-March) till P4 (mid-June)
Elaboration on the design. Detailing, materialization, technical qualities. Technical engineering of the building and specific models will be made. P4 the design is finalized.

P4 (mid-June) till P5 (July)
Making of the finial presentation products. Final correction of previous work.