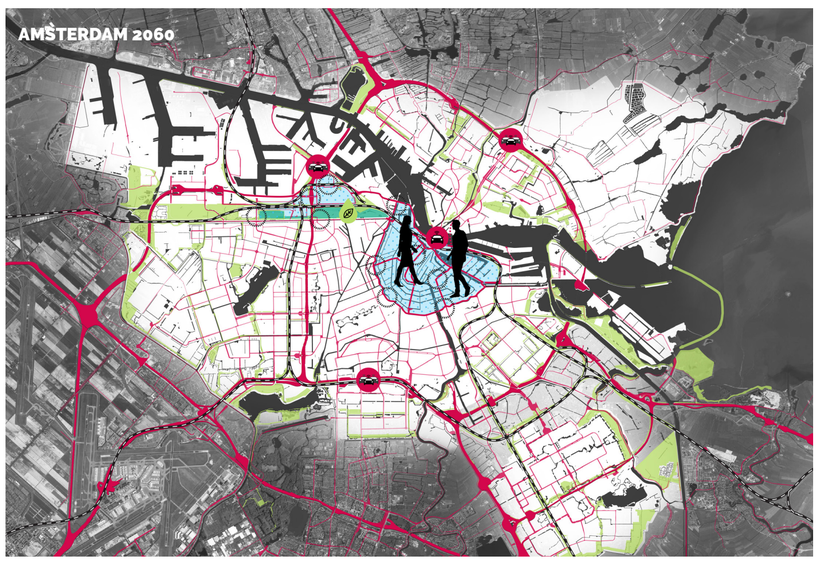
FUTURE MOBILITY x LIVABILITY

NEW OPPORTUNITIES FOR ENHANCING LIVABILITY IN **AMSTERDAM**

The city of Amsterdam is prospering, the amount of residents and visitors continues to grow every year. With this rapid population increase there are more people seeking to travel each day. This increases the pressure on all types of modalities in Amsterdam. As a result of this, the city becomes more busy, congestion increases, the air quality gets worse, noise caused by traffic increases and the public space diminishes. The current mobility systems have negative and positive effects on the livability in Amsterdam. The way people move through cities is changing rapidly. New technologies in mobility are making it possible for people to navigate through their city more safely and efficiently. Different modes of automated mobility will emerge in the next 30 years. (Papa & Ferreira, 2018) There are still many uncertainties related to their spatial impact on our cities. This graduation project attempts to identify how automated mobility can contribute to enhance livability in Amsterdam. It explores the spatial impact of automated mobility in Amsterdam. To understand this spatial impact the research projects first identifies the scenarios on how automated mobility will be implemented and subsequently researches how this new mobility system can contribute to enhance livability. The design project seeks to propose a model for the implementation of automated mobility in Amsterdam that contributes to enhancing livability.

Key words: Amsterdam, Automated mobility, Livability, Scenarios, Environmental health

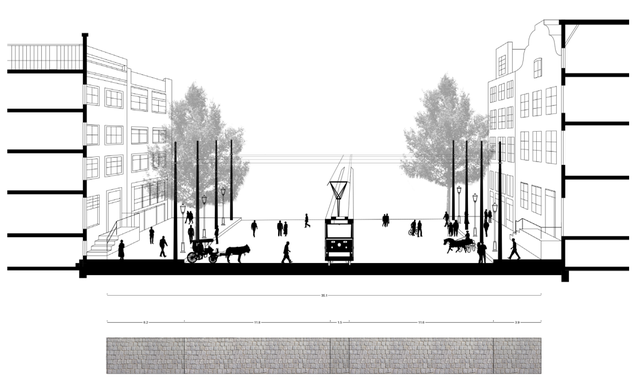


- **AMSTERDAM**
- FAST AUTOMATED MOBILITY ROUTE
- CITY CENTRE CONNECTION ROUTES AUTOMATED MOBILITY
- MAIN ROADS AUTOMATED MOBILITY
- EXISTING ECOLOGICAL STRUCTURE
- NEW ECOLOGICAL CORRIDOR
- PARKING HUBS/TRANSITION ZONES
- IMPROVE AIR QUALITY
- AUTOMATED CARS ON HIGHWAY
- AUTOMATED CARS ON MAIN ROADS
- ENHANCE/PRESERVE ECOLOGICAL STRUCTURE

DESIGN CITY CENTRE

NIEUWEZIJDS VOORBURGWAL

The design for the city centre features the changes automated mobility brings in the streetprofiles. The biggest differences from the past to the present are the zones created to ensure safety of the people on the street and clear marking of these zones trough curbs, roadmarkings, trees parking spaces etc.
With the evolving technology modalities are becomming more safe, there is no need for curbs, road markings, streetlights/traffic lights etc. The transitions to the zones are much softer or even dissapear.



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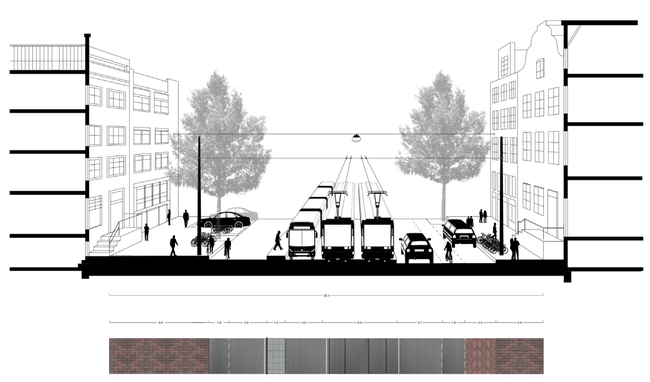
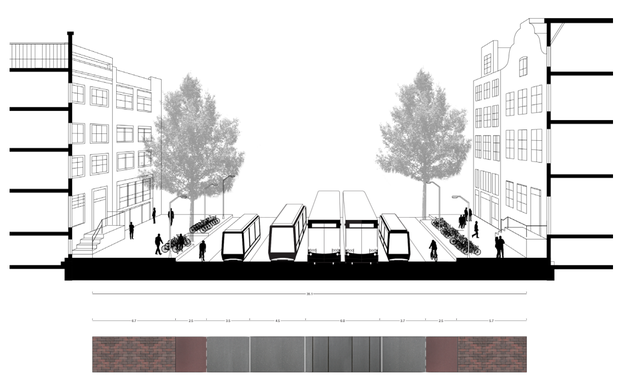
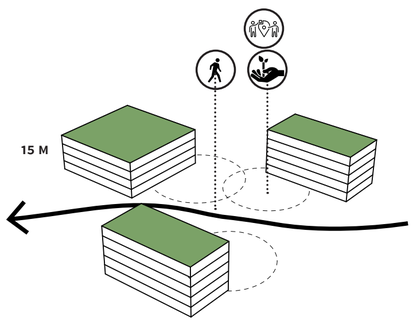


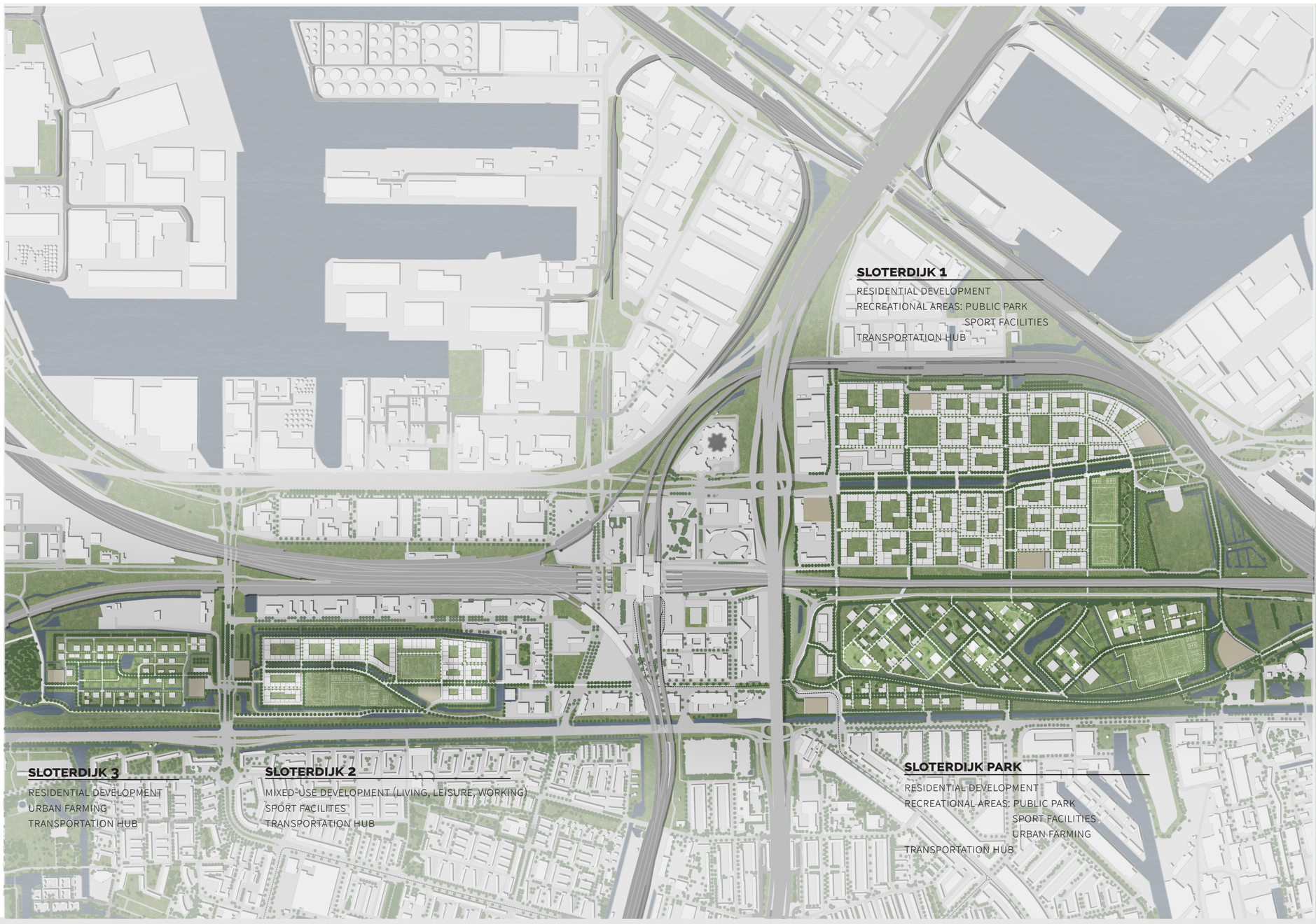
PRESENT



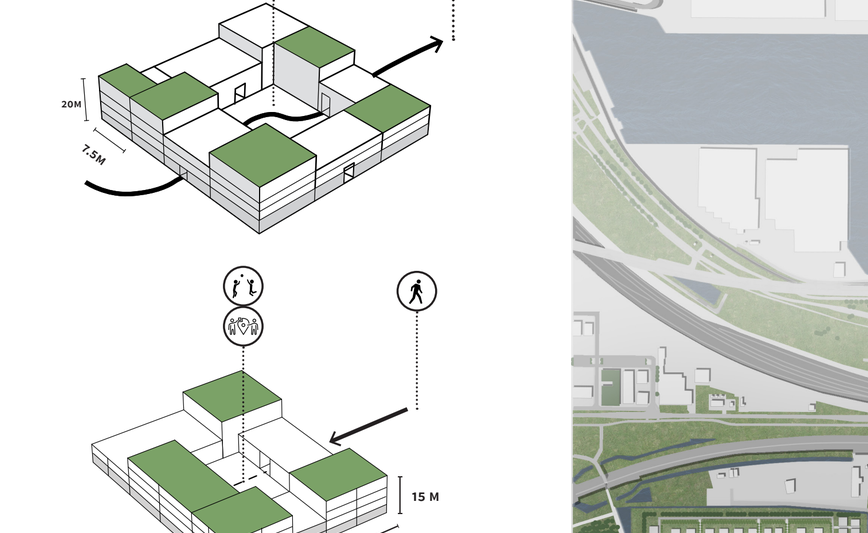
FUTURE

BUILDING TYPOLOGIES 4 NEIGHBOURHOODS





IMPRESSIONS HIERACRHY OF STREETS



Motorised streets
Automated vehicles dominate these roads. Future technology has made it safe for cyclists and automated vehicles to share the same road space. Automated vehicles are parked in parking HUBS in the neighbourhood.

Primary streets
Pedestrians and Cyclists dominate the streets, primary streets feature a public program on the ground floor, offices and residences on the top floors. The tree rows characterize the street as a primary street. Cyclist, pedestrians and other forms of micro mobility share the same space

Secondary streets
Streets become places where children play and people meet to socially interact. These streets are semi-public and more quiet than primary streets. Flexible programs such as markets, food truck festivals and pop up events happen here.

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