introduction

The Oostelijke Eilanden neighbourhood is located just east of the city centre and with its low-medium density post war buildings a suitable location for densification. The neighbourhood, which is surrounded by recently redeveloped neighbourhoods, has been lacking behind compared to its surroundings. The area is badly connected to rest of the city and within. The western tip of the neighbourhood, Kattenburg islands and its post war buildings, forms the biggest blockage to the reconnection of the neighbourhood to the city and thus its redevelopment. A strong intervention was needed to both achieve the island’s reconnection and the densification needs. The upcoming opening up of the navy Marine area and the redevelopment of kattenburg was the missing link to development of a strong Oostelijke Eilanden neighbourhood. The masterplan assignment addresses the densification and redevelopment of the more difficult part of the Kattenbrug Island, the east with its existing post war housing estate.

Product

These problems were addressed in the Loop masterplan which creates multiple urban loops linking alike functions in the neighbourhood together. The building I designed is bordered by the park loop on the north and west side, On its east side its bordered by the local facilities loop and on the West of the building lies the business loop. As densification is a major part of the assignment and extra functions arrive from the masterplan the design resulted into a Highly dense mixed use building. Here I already decided to deviated a bit from the general approach of Dwelling of creating straight-forward developer’s architecture.

My research question also reflected this:

How can different functions be combined in a dwelling building in a way that they will strengthen and enhance each of them to create a stronger mixed-use-building.

Process

As I’m highly ambitious and didn’t align with my pre p2 tutors, I went to look for a new one. The process of changing tutors had cost me a lot of time. since the moth after the p2 I dint have a new tutor yet and was also did not have tutorial for my previous tutors.

These first month I spent time on doing research into mixed use buildings, mostly through case studies and developing a concept. Especially the concept development took far too long least 5 week. The mayor reason that it took this long was the lack of strict requirements or a brief since I also did the masterplan and there was no client. I think that the concept makes the building and should be very strong to create an exceptional building. This makes it quite different form standard dwelling assignment which doesn’t lean as strongly on conception design as my process did. These high requirements from myself have let to this extensive search for a form concept. I used different methods to find a building.
form/organisation/concept. Through sketching on paper I devised diagrams and schemes that showed the important thinks that a mixed use building should be or can do. But I also sketched the resulting form for the building. I used 3d modelling to test my ideas and new typologies. I have modelled over 100 different types of buildings that all failed the high standards set at just after p2.

After a month I had my first tutorial with my new mentor that resulted in the task of setting a stricter brief and redefining the assignment. Instead of trying to making the building special to be special focusing on quality and going back to the early courtyard typology set by the masterplan. The analysis of this resulted in the conclusion that the courtyard was too large and should be smaller to enforce people to engage with each other. To provide sufficient space for the commercial space the more northern courtyards were lifted up 3 and 6 floors, resulting a cascade of courtyards. Around the courtyard the high varies greatly to allow the sun in on the south.

From this point on the project started picking up speed. Firstly, the circulation has changed a few times in order to create a better crème of letting the dwellers and working meet each other. This has also let to a shift of the targets groups around the building, as the starter studios have been moved downwards to the courtyard to compensate them in the lack of a balconies, the larger dwellings have been moved up giving them a south facing balcony at the courtyard side.

The use of the cascading courtyards quite quickly resulted the placement of the different functions. For the connections between all the commercial functions and the dwellings I researched multiple high density mixed use buildings, both by literature and by a field trip to Rotterdam. For this I looked into: The Rotterdam (OMA), het Timmerhuis (OMA), The Red Apple(KCAP) and de Markthal (MVRDV). The common use of a large meeting space as a connecting element was reoccurring element which I then also applied in my design.

When designing the outer façade, I did experience some reoccurring problems. As I had the personal urge to make it give the building a ‘Amsterdam’ look. The most common Amsterdam style buildings are off course the Canal house. Though these appeared too small to be comparable or applicable to be a theme. The next thing was the warehouse style, which are larger buildings. My personal need to make the façade look like typical Amsterdam kept classing with the form and functions in the building. I wanted to apply a brick façade. But the base of the building had to be very open (glass) to allow light into the commercial space, which created a heavy façade hovering over a light one. It created a separation instead on unifying the functions. The solution came in a panel façade that allowed to randomly spread brick and glass panels, resulting in one unified façade. The façade was later revised to strengthen the shape of the building, replacing the brick for a lighter colour material (lime stone) creating a grid façade. This reflects the inner workings of the building.

social context

Through this project I have researched two mayor themes: how multiple functions can be combined in one building in a way that they benefit each other and how a high standard of liveability can be provided in a high density building.

As stated in my gratudation plan:
The 21st century city is a mixed one, functions are no longer clustered on one spot. This creates a more diverse and lively urban city throughout. This should be no different for future Kattenburg.

Here I referred mostly to neighbourhoods but this also applies to the buildings. The mixed use buildings are the future for high density city developments. As more people are moving into the cities, the high pressure on the dwelling market is high. The city of Amsterdam has the ambition of the addition of 70,000 new dwelling within the ring to counter the high pressure and accommodate more people within the city. Mixed use building can also provide other functions cutting down on travel time, energy cost and benefits social structures between dwellers and the working and the relaxing people.

Therefore, this knowledge of high density urban buildings that provide a high standard of liveability in the city can be used to create better high density buildings which are also highly liveable.