

Photo Report Midden-Delfland

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Date

2 July 2024

Introduction

During the first week of education I visited the extensive site of Midden-Delfland by car, taking my camera with me to get a feeling for the site and to produce this Photo report giving an impression of the landscapes, water systems, infrastructures, flora, fauna and architecture there is to be found.

I quickly found out that the site was so extensive that I needed more than one day to comprehensively capture the landscape. Even after driving through the area for almost three days I have got the feeling that I have not seen everything yet. This has partly to do with the fact that a lot of places are not accessible by car, which brings me to my first impressions of the site.

Overall I think that the pace of living lays lower that the average city around Midden-Delfland (Rotterdam, Delft, The Hague, maybe even Pijnacker.) The people take their time and no one comes across like they are in a hurry, which raises the question: Who lives here? Or What would be our future target group? Or in other words, who would like to live here?

I did my best to capture that slow pace I was mentioning, so I can bring that across to you, the viewer of this photo report.

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Landscape

The landscape exists of mostly two types of soil. On the one hand there is the clayground, where the rivers used to flow, bringing clay from rivers and or the sea to the area. On the other hand there is the peatlands, that were used for producing fuel that was used for heating stoves inside of the Dutch households.

When driving or biking through the area the different soil types are spottable by looking at the flatness of the ground. A flatter ground means less sinking of the soil and hits at clayground, whilst an undulating ground hits at the sinking peatland.



page 05 figure 01 - Old lock near the Schie

Peatlands



The peatland viewed from an observation tower, because of the sinking of the peat undulations are clearly visible.

figure 02 - Overview of peatland from tower



The peatlands offer many possibilities for birds to nest or take a rest before flying out.



Because of the softness of the Peatland heavy vehicles are requested to reduce their speed near the built environment to prevent the ground from shaking, resulting in damage to the buildings.

page 07 figure 03 - Irregular lands due to sinking figure 04 - Traffic sign

Clay Ground



figure 05 - Farmland with cows



In comparison to the peatlands the clay ground is a lot flatter, because it doesn't sink as much.



The clayground offers excellent possibilities for planting trees, which is also done on both sides of the cycling path on the top of this page. ZUS also suggested planting trees on the clayground in their proposal, which is reflecting the reality in that sense.

Water

Basically the whole ecosystem of the polder and its surroundings rely on the water. This water can be seen as the friend and enemy of the site at the same time. To keep our feet dry we need structures (gemalen) like the one on the image on the right. These structures pump the redundant water of the polders to the boezems, which in their terms release the water to the sea or larger canals.

Despite the risk of the water and the need to constantly manage the system we also get rewarded by the properties the water brings to the area. The water offers space for birds and other species of animals to nest, it is used by farmers to water their land and is used by recreants to swim, row or boat in during warm summer days.



Schie Canal



Because of the history of transportation of goods over this canal a lot of shipyards are situated along the shores near Delft.

figure 09 - View over the Schie



The waterlevel is almost the same level as the road. The polder is a considerable amount lower, stressing the importance of the watermanagement to prevent flooding.



Between Delft and Rotterdam lots of dwellings are situated by the roads running on both sides of the shores of the Schie canal.

page 13 figure 10 - View over the Schie figure 11 - Dwelling next to the Schie page 14

Gaag Boezem

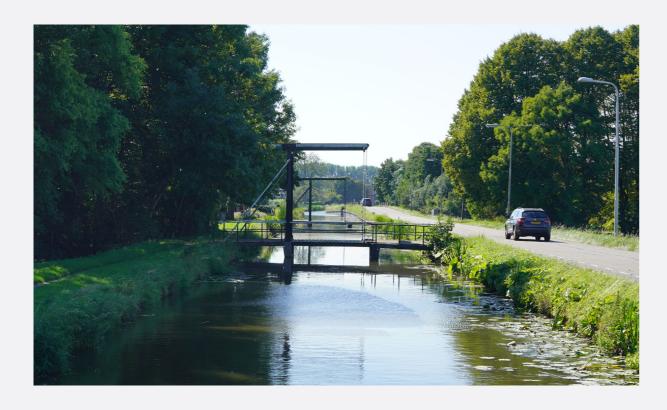


figure 13 - Lift bridges over the Gaag



The Gaag boezem is one of the main structures for the water management



This boezem has a lot of linear settlements along its edges, which are connected to the roads running parallel to the water on both sides.

page 15 figure 12 - House next to Gaag figure 14 - View over the Gaag page 16

Canal Zijde

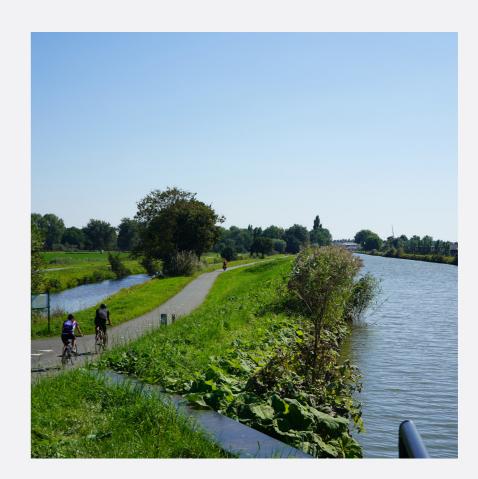
The Zijde is part of the boezen system, laying at 50 centimetres below NAP, as seen on figure 15.



figure 15 - Waterlevel gauge Zijde canal



The canal and its edges are used for recreation by bike and by boat. The bottom image shows clearly that the water level of the boezem is clearly above the polder level.



page 17 figure 16 - Boezem seen from brige figure 17 - View from gemaal

De Vliet

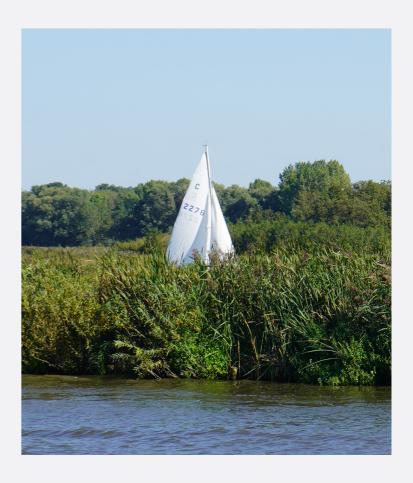


A sailing school having their ships moored ashore of the Vliet.

figure 19 - Bridge over the Vliet



Pontoons near a restaurant offer passers by a place to berth their ships and visit the restaurant.



The Vliet offers pace for motorized vessels, rowers and is used by small scale sailing yachts. The lake and its canal-systems is truly a recreational water.

page 19 figure 18 - Recreational vessels on the Vliet figure 20 - Sailing-vessel on the Vliet page 20

Zweth

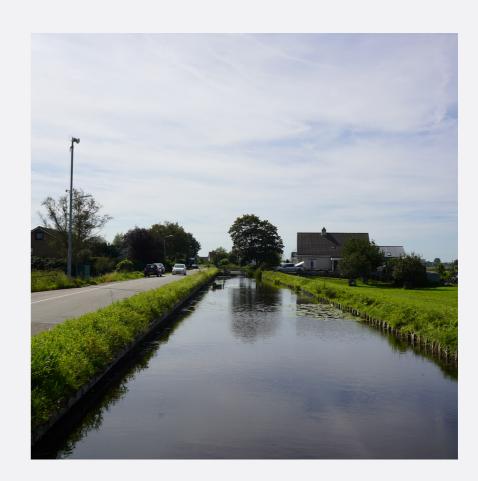
The Zweth is one of the main boezemsystems for pumping out water of the polder landscape.



figure 21 - Zweth Boezem with lower polder landscape



The Zweth boezem goes straight through the polder, with in some places a cycle path next to it. In some instances housing is found alongside the boezem in the form of linear settlements.



page 21 figure 22 - Zweth Boezem looking towards Pijnacker figure 23 - Zweth boezem with road

Ackerdijkse Plassen



In the middle of a swampy-woodland area there is a pond for ducks to nest in a safe environment.





From the observation tower views over the swampy-woodland area show the diversity of the polder landscape.



Close to the A13 highway the Ackerdijkse Plassen offer a retreat for the constant noise of the road. Once inside the area the surrounding sound is dampened offering shelter for humans and animals.

page 23 figure 25 - View from tower figure 26 - View onto Ackerdijkse Plassen page 24

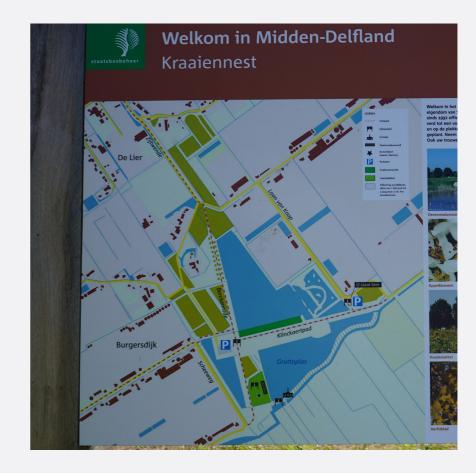
Gruttoplas



figure 27 - Gruttoplas



Greenhouses are present on the edges of the Kraaienest, indicating the beginning of the Westland area.



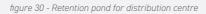
The Kraaiennest is a natural area maintained by the Staatsbosbeheer. It offers plenty of spaces for birds and other animals to nest, which helps stimulating the biodiversity.

page 25 figure 28 - Greenhouses near the Gruttoplas figure 29 - Information panel Gruttoplas page 26

Water Retention



Large distribution centres, surrounded by water that serve as retention ponds.





For compensation of the large distribution centres a retention pool is made, to store water that is caught by the large roofs.



The water near the greenhouses is used for watering the crops inside, a lot of water is needed for this procedure, which results in desalination of the groundwater.

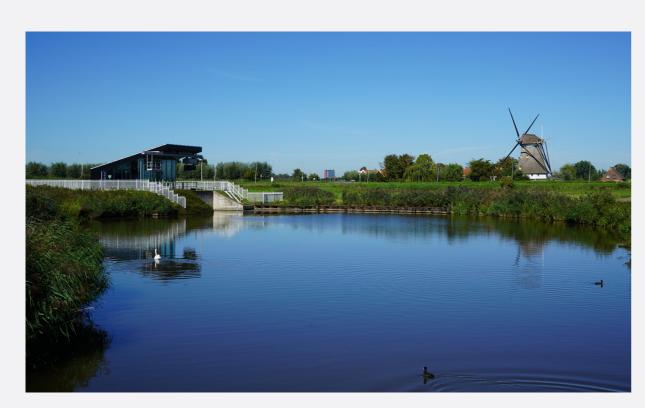
page 27 figure 31 - Retention pond for distribution centre figure 32 - Water supply for greenhouses page 28

Water Management

Before the contemporary looking buildings, with their pumps were in use, the old mill in the background used to pump the water to the boezem structures. As seen in the bottom image the footprint and impact of the new buildings on the landscape is kept to a minimum respecting the old mills.



figure 33 - Water overflow



Besides the larger structure for pumping water to the boezems there are also smaller elements in managing the water, like the overflow system on the left page and the lock on the bottom of this page.



page 29 figure 34 - New and Old methods figure 35 - Lock for overflow of water page 30

Fauna

A vast part of the polder landscape is allocated as a protected or natural park, or used as farmland. This implies that there is a lot of biodiversity and thus fauna to be found.

On the side of the farmland, a lot of sheep, cows and horses are present, although not in as large of a scale as in the Albasserwaard for instance. Most livestock is kept for milk, or eventually for the meat-industry.

Besides the animals that are put in place by farmers, there is also a lot of wildlife to be found that has gotten used to life in the polder landscape. There are a lot of birds like ducks, swans, herons etc. all using the fruitful polder landscape.



Birds

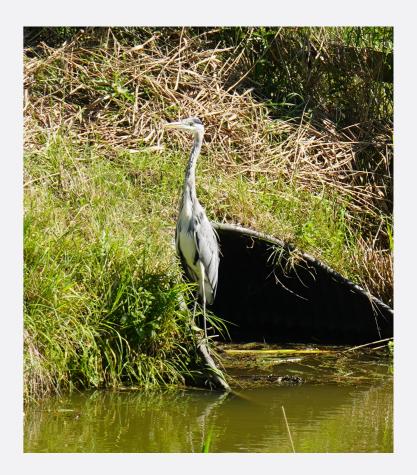


Grebe just after reaching the water after a dive looking for fish.

figure 38 - Grebe looking for fish



The duck is a common bird in the area. In the past the ducks were hunted on by the means of duck cages, still to be found near Schipluiden.



A heron sitting on a culvert near the greenhouses, looking to find fish in the ditch.

page 33 figure 37 - Duck sitting near the water figure 39 - Heron sitting on culvert

Birds

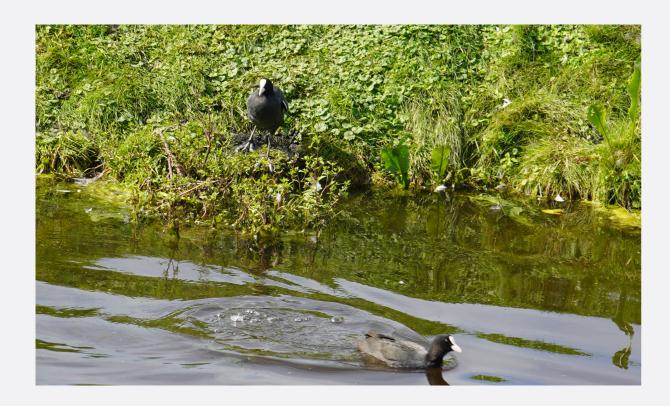
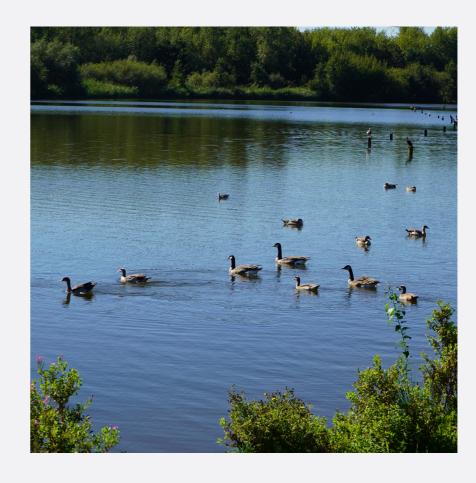


figure 41 - Coots building a nest



Coots are a common bird to be found on the shores of ditches in the polder. Near the greenhouses a lot of sparrows are flying around.



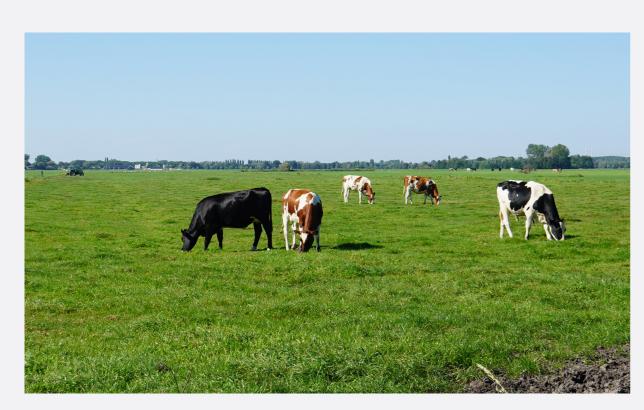
Geeses are found almost everywhere in the polder, most of the times you hear them coming by their distinctive sound.

Land bound animals

Cows and horses grazing in the freshly mowed landscape, most cows are kept for producing milk, and eventually end up in the meat-industry. The horses are kept by horse riding schools.



figure 43 - Horse grazing



The sheep are mainly kept for maintaining the dikes and to reduces the need for the mowing of the grass. They also produce wool, which is sold by the farmers.



page 37 figure 44 - Cows grazing figure 45 - Sheep looking at photographer (me) page 38

Infrastructure

Because the area of Midden-Delfland is not very densely populated, because of its polder landscape the infrastructure is less prominent than we are used to in more crowded areas.

The main access roads are the A13 and the A4, (photo on the right) these roads lead to so-called N-roads, which can be seen as secondary roads connecting the biggest towns like Maasland, Schipluide en Oude-Leede. Then there are the roads that are more narrow (one and a half cars width) that access the dwellings situated in the polder area.

Besides the road network there is also an extensive water network, which is used for commercial shipping as well as recreation shipping, rowing and even swimming.



Main roads

The area is being crossed by two main highways, the A4 and the A13. Besides those highways there are multiple secondary roads (N-roads) that are making the towns inside the area accessible. The top speed on these N-roads vary between 60 and 80 km/h.



figure 47 - N468 Delft to Maasland



The A13 and the road parallel to it are constructed as being part of the dike structure around the polder landscape. On these roads cyclist still are an important factor to take into account, as seen on the image below with the specific striping on the sides of the asphalt road.

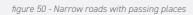


page 41 figure 48 - A4 highway figure 49 - Road parallel to A13

Local roads



The Schieweg has enough space for passing traffic, but will become very busy during rush hour because of the many cars coming through dodging traffic jams.





This image illustrates clearly the narrow roads with just enough space for a lorry.



Almost all roads in the area are based upon one and a half car width. This ensures traffic slows down, because there are limited places for passing. Cars and cyclists can still pass each other without the help of a dedicated passing spot.

page 43 figure 51 - Narrow roads with lorry figure 52 - Dedicated places for passing traffic page 44

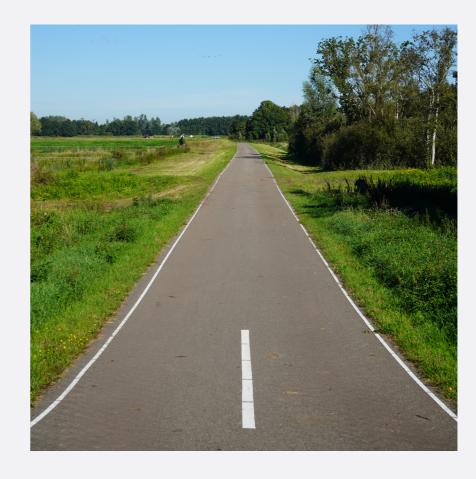
Cycle paths



figure 53 - Cyclists on a cycle path



The cycle paths are extensively used by recreational cyclist, especially in the so called 'stiltegebieden' (quiet areas)



A vast amount of the area is only accessible by a bicycle, as illustrated in the photo above this text. Roads like these are designed for cyclists and pedestrians, which takes them though quiet areas of the polder landscape.

page 45 figure 54 - Traffic sign (Cycle path) figure 55 - Road dedicated for cyclists

Waterways

The Schie canal is used extensively by recreational and commercial shipping in varying sizes. Barges transporting sand and other cargo from Delft to Rotterdam and the opposite way around are commonly found on this stretch of water.



figure 56 - Recreational ship moored at pontoon



The waters in this area are commonly used for recreational purposes. There are multiple rowing associations housed by the Schie canal, because of its long and straight form. Recreational motorized vessels are also found on the canal traveling from Rotterdam to Delft on the Schie or just for a day out on one of the many canals or lakes in the area.



page 47 figure 57 - Barge transporting sand over the Schie canal figure 58 - Rowers and recreational yachts on the Schie page 48

Architecture

The area of Midden-Delfland is an interesting area on the topic of architecture. Even though there is a lot less built in comparison to the surrounding cities of Rotterdam, Delft and The Hague, there is still a lot of variation in building types.

Multiple generations of building styles are to be seen in the little towns that are gradually expanding, but also in the way we treat our water management with the old mills, as seen on the image on the next page, and nowadays the 'gemaal' buildings.

Despite the different generations that are present over the complete area of the Midden-Delfland district, it is still notable that the new architecture is, most of the time, based upon the older and more traditional architecture that is already present. In the case of dwellings it is noticeable that the average houses are bigger than the original ones that were built generations before.

Overall there is a richness of architecture in the area, which will be made visible on the next pages.



Dwellings (previous generation)



Houses of previous generations were relatively small compared to the newer houses that are being built now. This row has three houses under one roof, which results in narrow dwellings.

figure 60 - House near the Schie



A detached dwelling, which was previously part of an garage or workshop for cars or other mechanical systems.



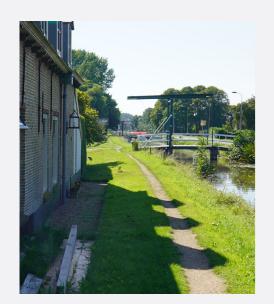
Typical for the more luxurious dwellings of the time that they were built in is the more detailed masonry. The different stones (color) and patterns are clearly visible on this image.

page 51 figure 61 - House next to the Ackerdijkse plassen figure 62 - House near de Gaag

Dwellings on the dike



figure 63 - Dike dwellings next to de Zweth



In some cases the dwellings are built on the dike itself, like on the bottom image. On the top image an old 'gemaal' building is visible with a dwelling below dike level next to it.



A typical sight for the older houses near a dike is their position relative to the water level. Sinking ground and raising the dikes have resulted in these houses that are in some cases just sticking out over the dike structures.

page 53 figure 64 - Dike dwellings next to de Gaag figure 65 - Dike dwellings near the Gaag

Farm dwellings

Most farmhouses are modest in their architecture, there is not a lot of detail in the facade as compared to the dike dwellings. Most of the time the buildings are made out of masonry with gable roofs. In some occasions the roofs are built following the jerkinhead type.



figure 66 - Farmhouse in Oude-Leede



Greenhouses near the farmhouses is a common sight around the area. Some are small, which suggest they are used for personal food production. Larger greenhouses could function to sell their own produced food alongside the road.

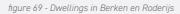


page 55 figure 67 - Milk-farm near the Gaag figure 68 - Farmhouse near the Gaag page 56

Contemporary dwellings

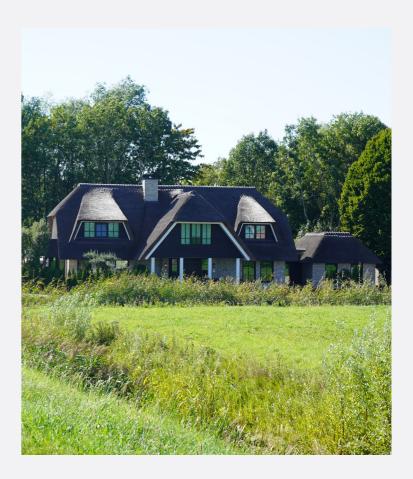


In Berkel en Roderijs this street consisted out of a lot of recently built dwellings. Although the contemporary look of most of them, the inspiration of these dwellings still lie at the old typologies found in the area.





Another contemporary dwelling in Berkel en Roderijs, this dwelling is clearly inspired after a barnesque style with modern materials and aesthetics.



This villa is one of the more luxury ones around the area, still this architecture can be related to the older farmhouses in its close proximity. The jerkinhead for instance is one that is found commonly on building next to the Gaag.

page 57 figure 70 - Dwellign in Berken en Roderijs figure 71 - Villa near the Gaag

Water management



figure 72 - Gemaalgebouw



The concrete plinths of the buildings are detailed with the engravings of the reeds found on the shore sides of the boezems.



In comparison to the old mills the new buildings that house the pumpsystems to pump the water from the polder to the boezems are designed with a modern language. Despite this modernity the buildings do not stand out in the landscape due to their colours and small footprint, especially when compared to the old mills.

page 59 figure 73 - Details in concrete gemaalgebouw figure 74 - Gemaalgebouw

Industries

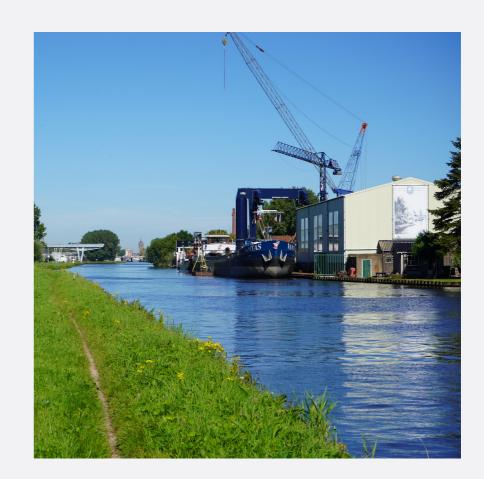
Most industries are based around the edges of Midden-Delfland. Near the West is the Westland area, containing a lot of greenhouses. In the polder itself there are small scale workshops to be found, but almost none big scale buildings except farms.



figure 75 - Greenhouses



Water, and therefore boats are an important element of the area, especially around the Schie, which was a trading route ever since the canal was dug out. This is also the reasoning why there are so many shipyards based on the shores of the Schie canal.



page 61 figure 76 - Workshop of a contractor figure 77 - Shipyard next to the Schie

Other buildings



In Oude-Lede an old school building from 1923 is converted to multiple dwellings, with the sports facility converted to a centre for the neighbourhood.

figure 78 - Schoolbuilding



An old mill converted to a dwelling, the hexagonal structure of the old mill building is still visible. Another hint is the water surrounding the building, which used to be separated streams of water.



Recreation is an important part of the area, near most of the national parklands are observation structures to observe wildlife of have an overview over nature.

page 63 figure 79 - Old mill converted to Dwelling figure 80 - Observation tower page 64

Town extensions



figure 81 - Extension of Oude Leede



In linear settlements like Oude-Leede extensions are subtle and still leave space for sightlines, which gives the urban fabric room to breath.



The newly built extensions on a somewhat larger scale are built quite densely because of the constraints of the dikes and the existing urban fabric.

page 65 figure 82 - Sudden sightlign over town extension figure 83 - New town extension in construction

Landmarks

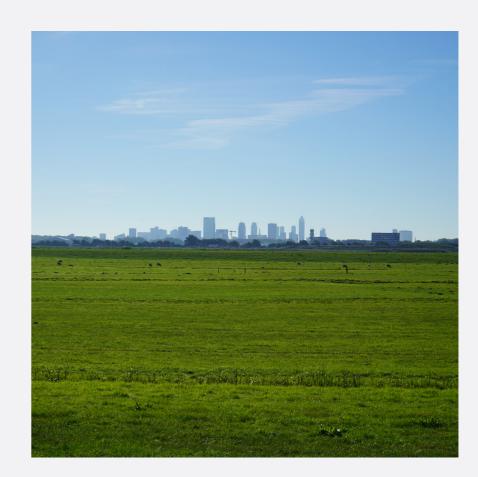
The thing that stands out in Midden-Delfland is the lack of things sticking out. Most of the "landmarks" are situated on the perimeter of the landscape, like the EWI building of the TU Delft Campus. Only important historical buildings, like churches, are taller than the 2 to 3 stories most buildings have.



figure 84 - EWI building



The skyline of Rotterdam is also present from many of the locations around Midden-Delfland. It is, out of respect, important to keep this contrast and not to invade the countryside with tall buildings as well.



page 67 figure 85 - Church tower of 't Woude figure 86 - Skyline of Rotterdam

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Hospitable Movement

2024

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TU Delft

Advanced Housing Desigr