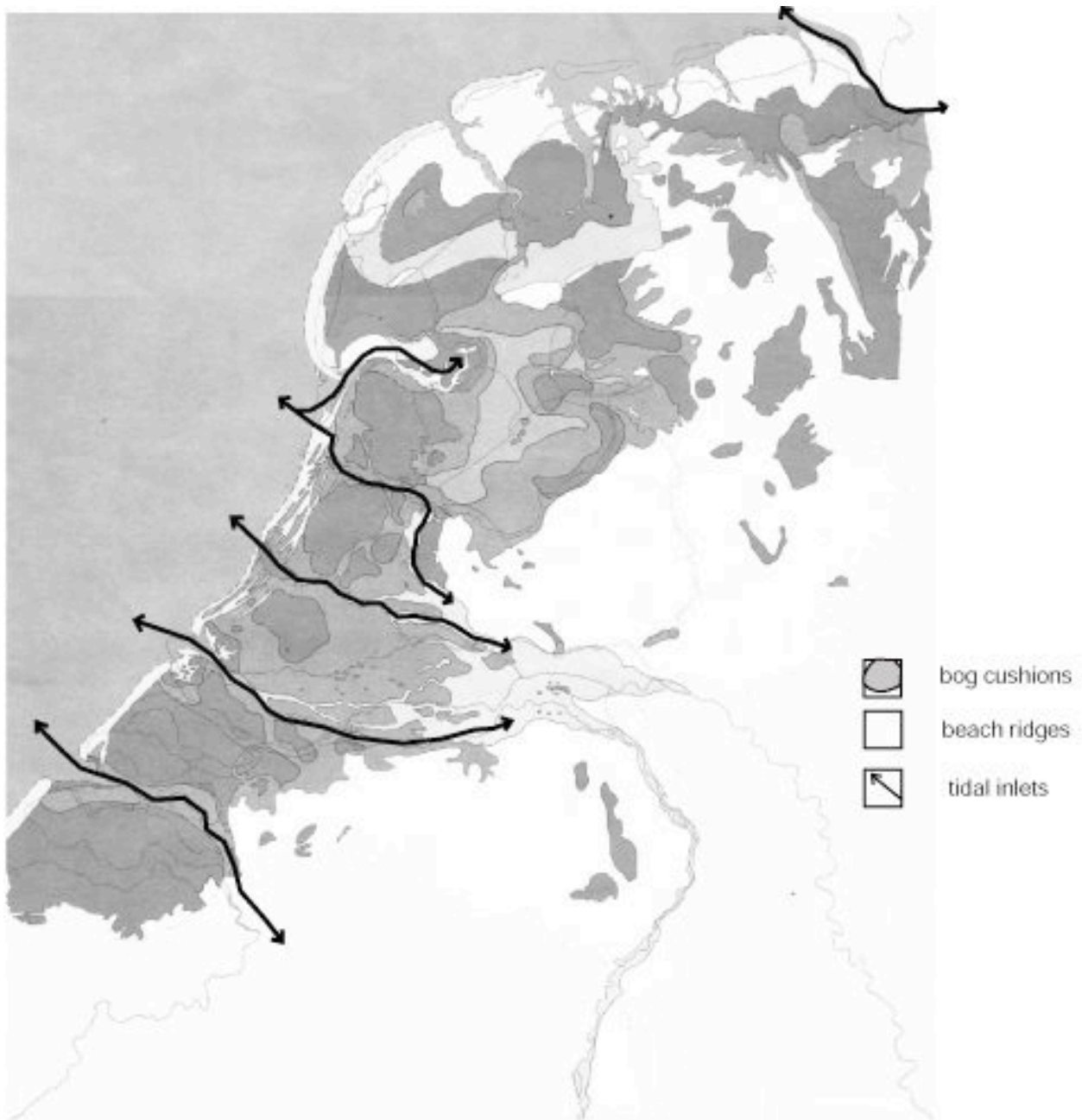
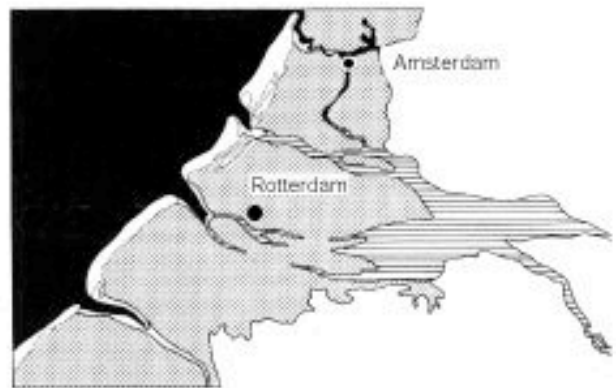
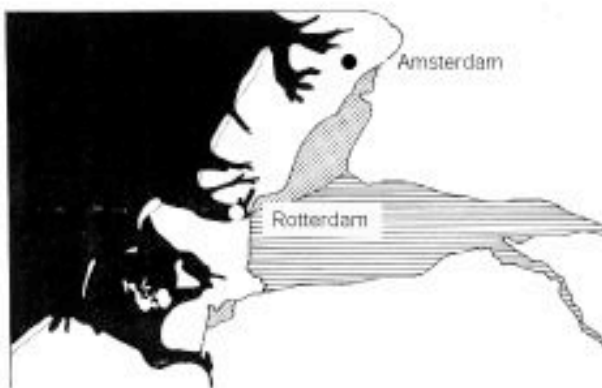


The Dutch Delta

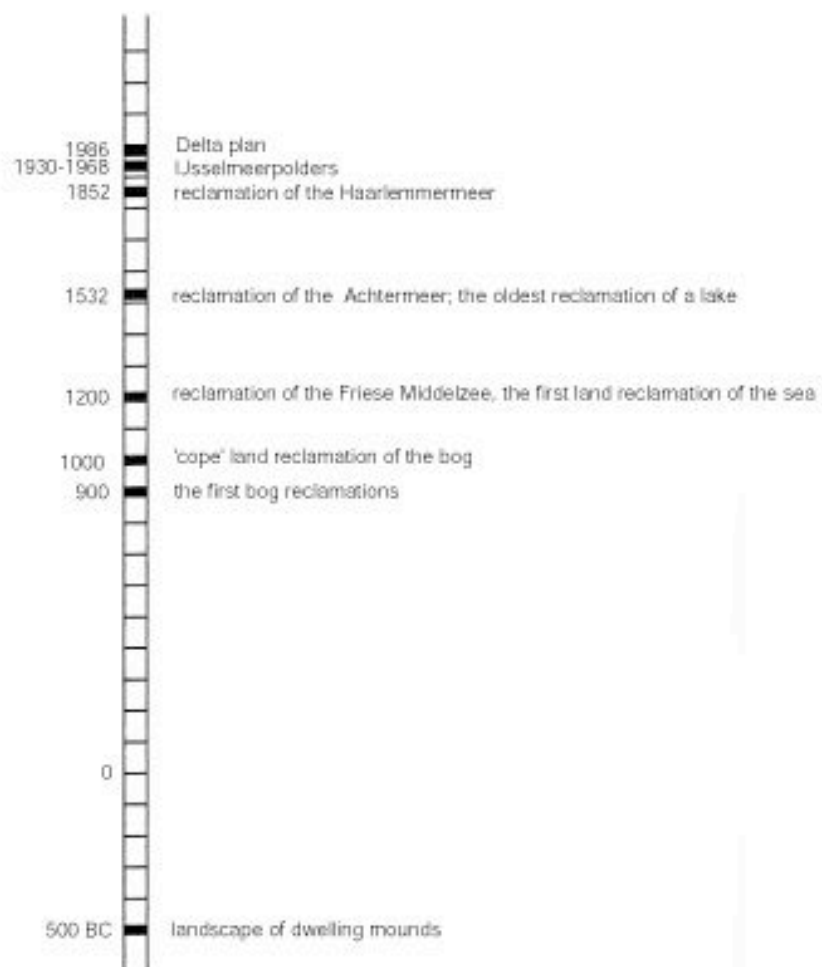


the form of the natural landscape

In the sheltered lagoon behind the beach ridges thick layers of bog are formed; tidal inlets traverse the bog



shifting relations between sea, rivers and bog created the landscape of the Delta



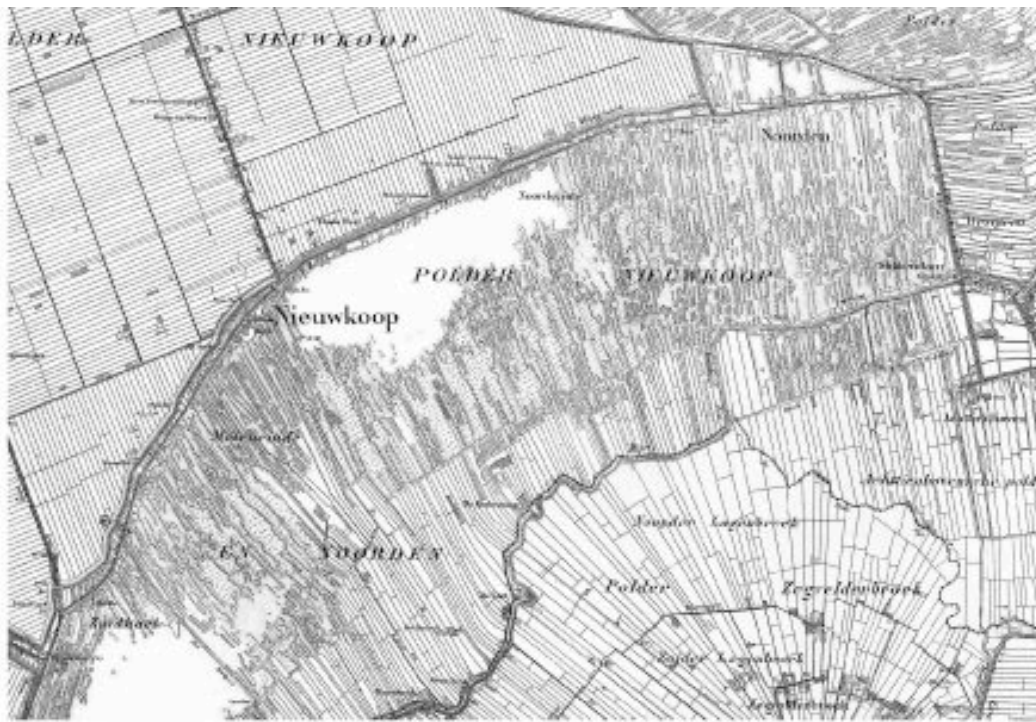
peat plain and reclaimed lakes



peat reclamations: the elongated plots
(the Northern Holland peat district)



peat reclamations: the 'cope'
(the Utrecht and Holland peat district)



peat reclamation in polder Nieuwkoop
(Utrecht)

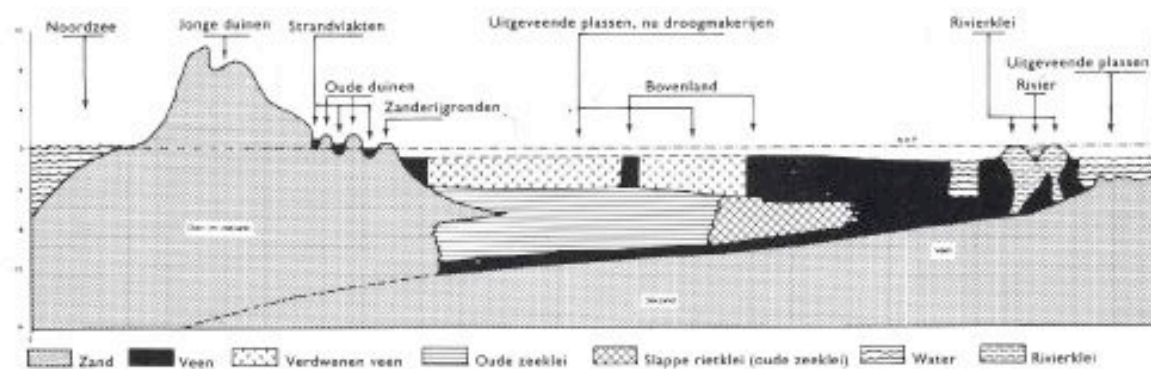
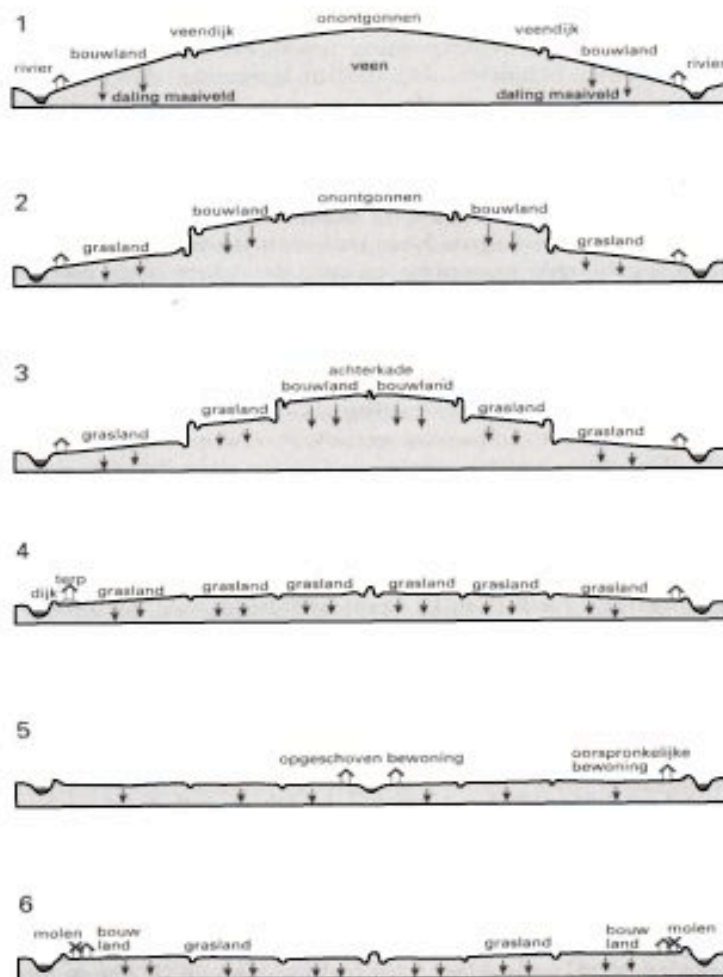


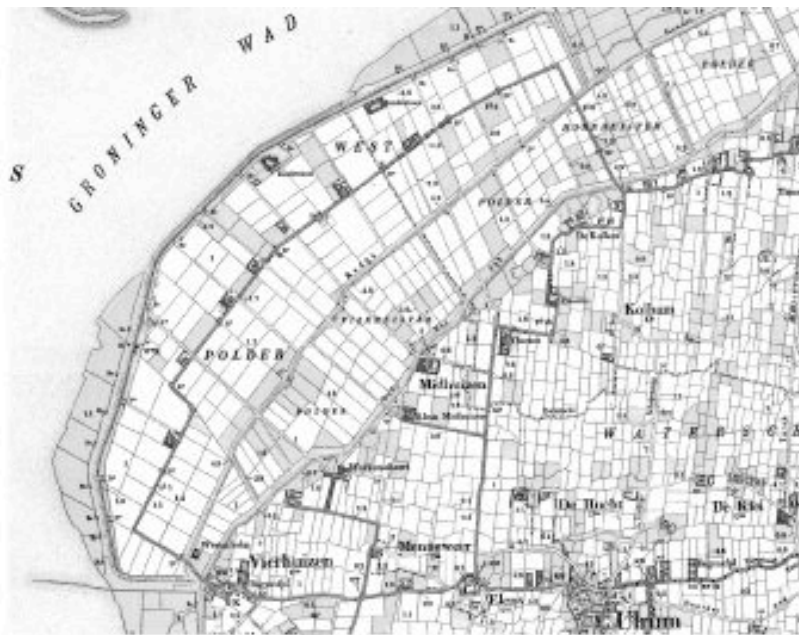
diagram of a peat reclamation landscape



peat reclamations: the Holendrecht and Waardassacker polder (Utrecht)



scheme of the peat reclamation in Holland and Utrecht



reclamations from the sea: Westpolder
(North-west Groningen)



reclamations from the sea in the Netherlands since about 1200



land reclamation from a lake: Bijlmermeerpolder
(North-Holland)

Egmondermeer
(686 ha, 1562-1564)



Beemster
(7100 ha, 1608-1612)

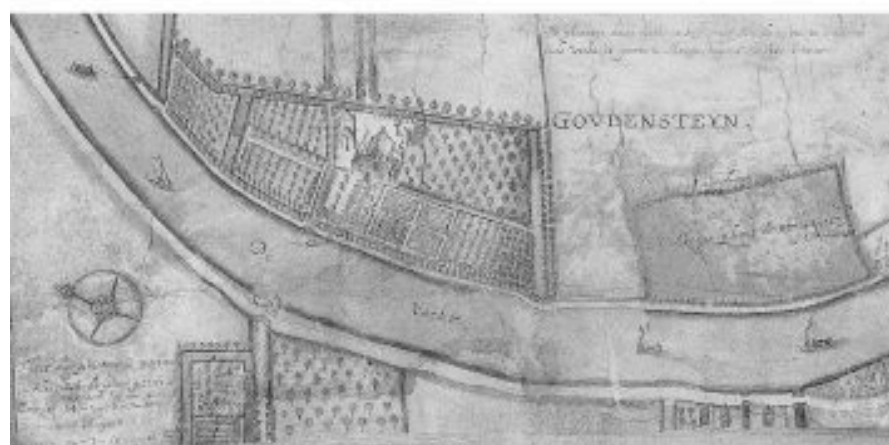
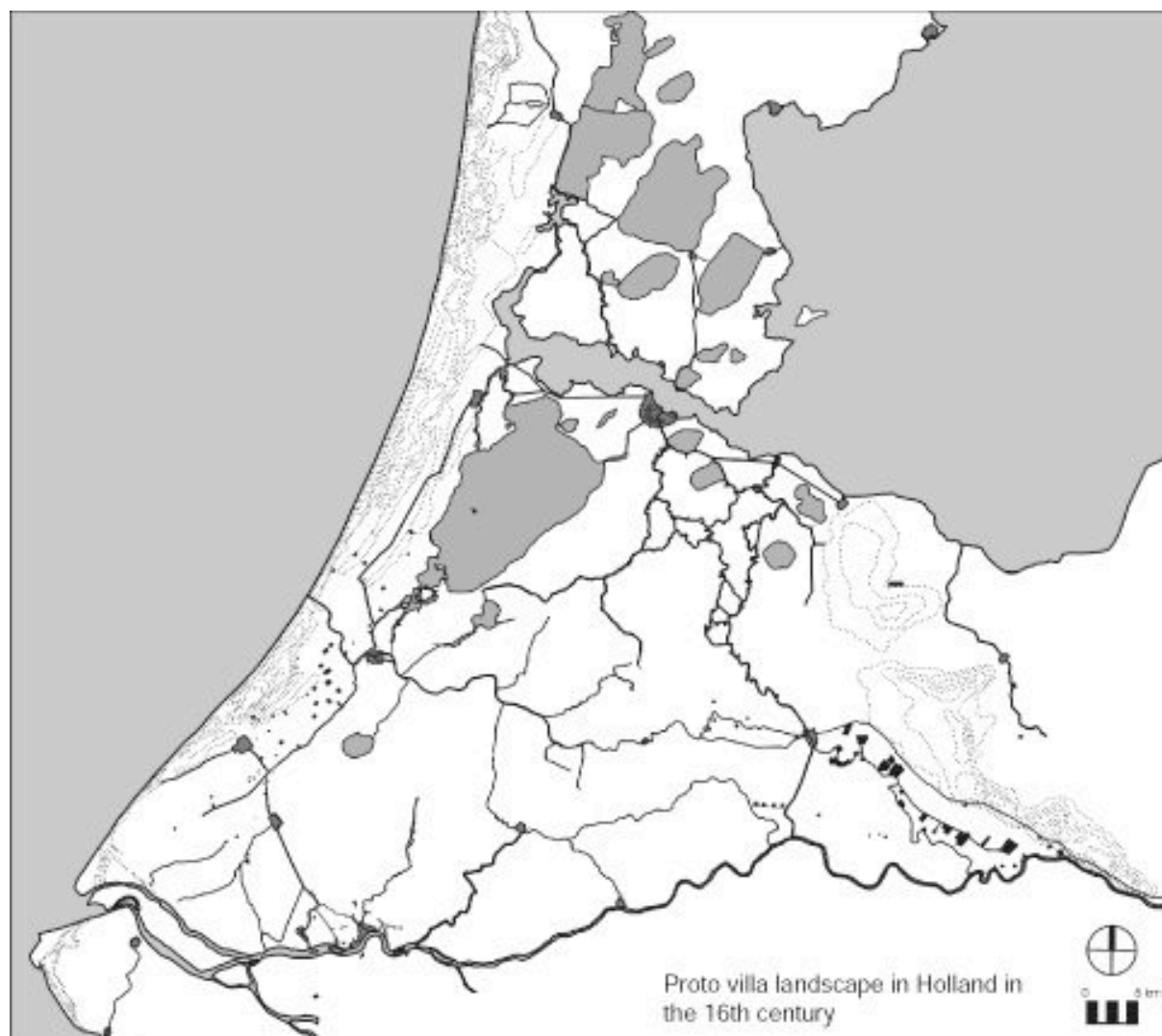


Haarlemmermeer
(18.100 ha, 1840-1852)

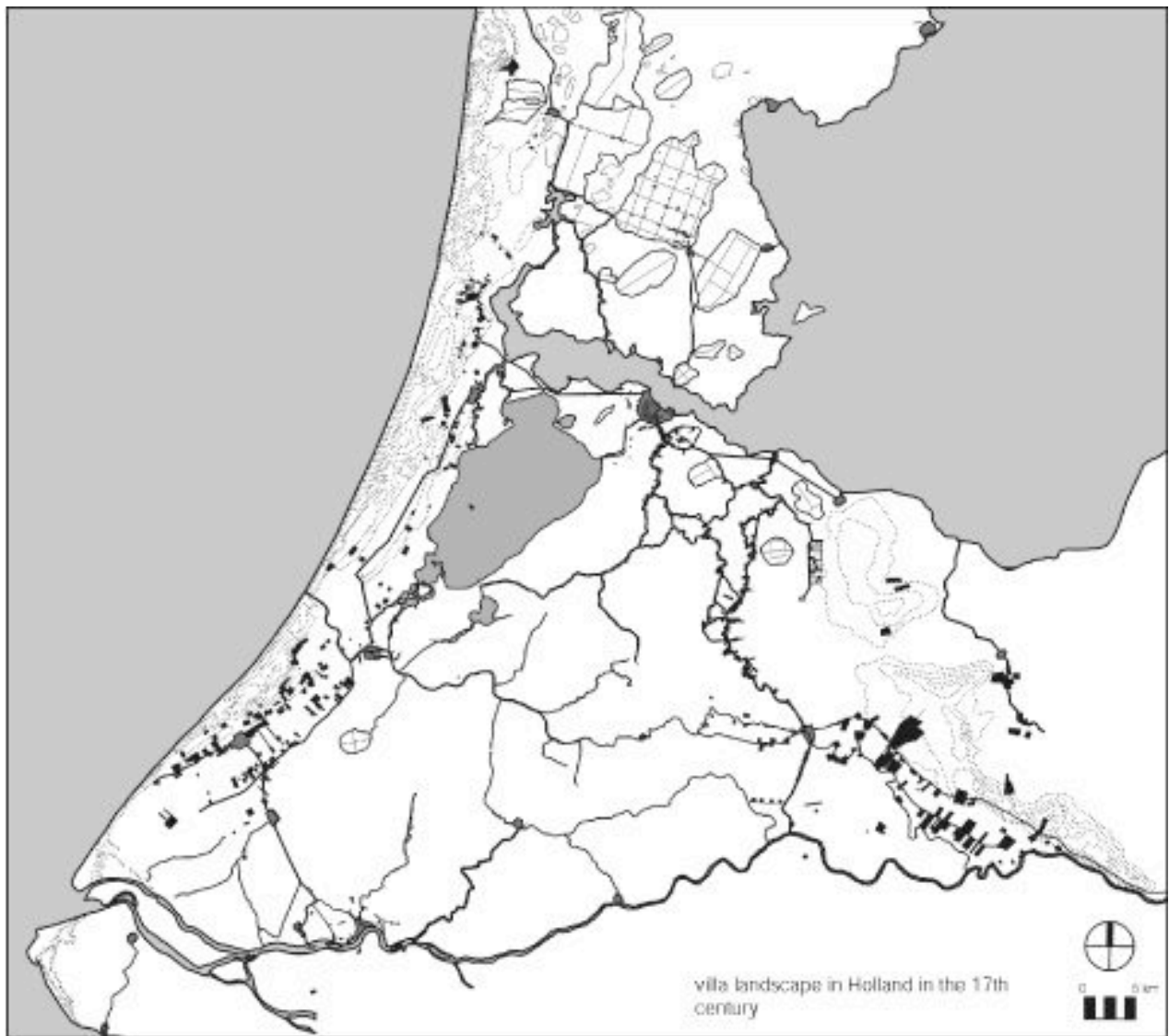


Zuidelijk Flevoland
(43.000 ha, 1968-1994)

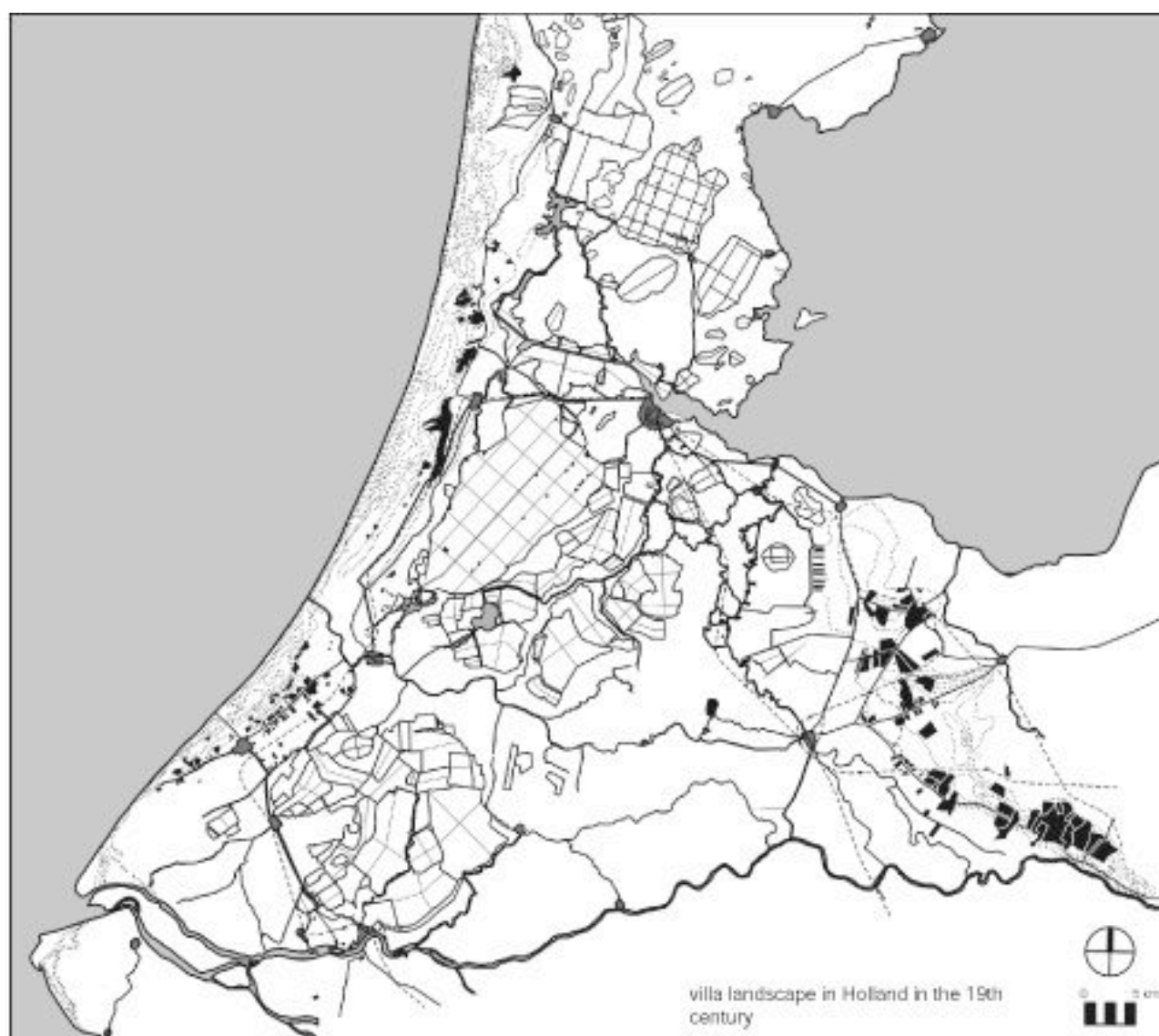
parcelling in 4 characteristic patterns of reclaimed lakes



16th century homestead along the Vecht
(Balthasar Florisz. van Berckeroede, 1629)



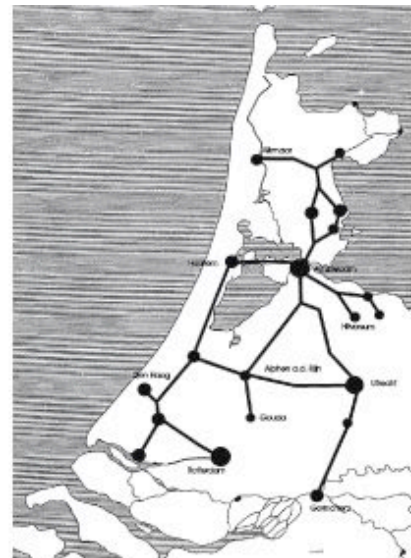
16th century villa along the Vecht: transformation of the cultural landscape
(D. Stoopendaal, c. 1700)



17th century villa as a representation in the natural landscape: slot Zeistt (1869)



earliest urbanization: The Friesian merchant routes between Dorestad and Het Vliet in the early Middle Ages



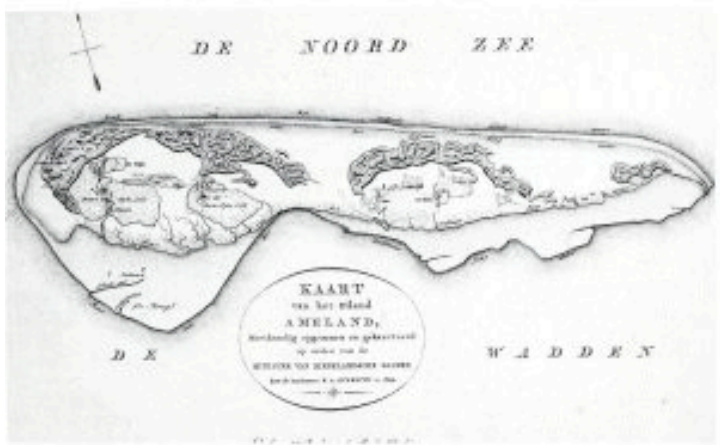
the network city of the 17th century: canals connected the Dutch cities.



urban landscape: canal city Amsterdam as a transformation of the IJ, the Amstel and the parcelling of the polders



urban landscape: Egmond aan Zee



Ameland



the Dutch Shallows



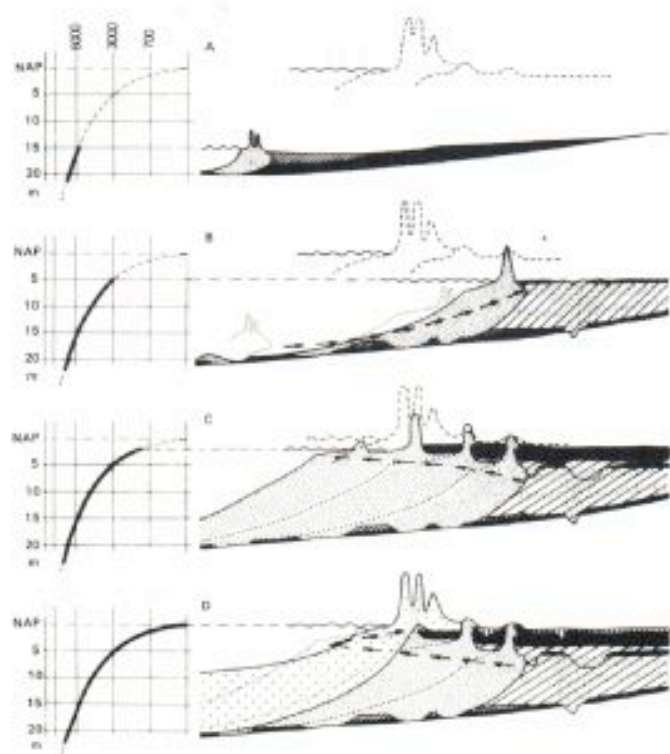
the dwelling mound landscape



two dwelling mound villages in Groningen: Marsum and Biessum
The marshland is reclaimed from the villages

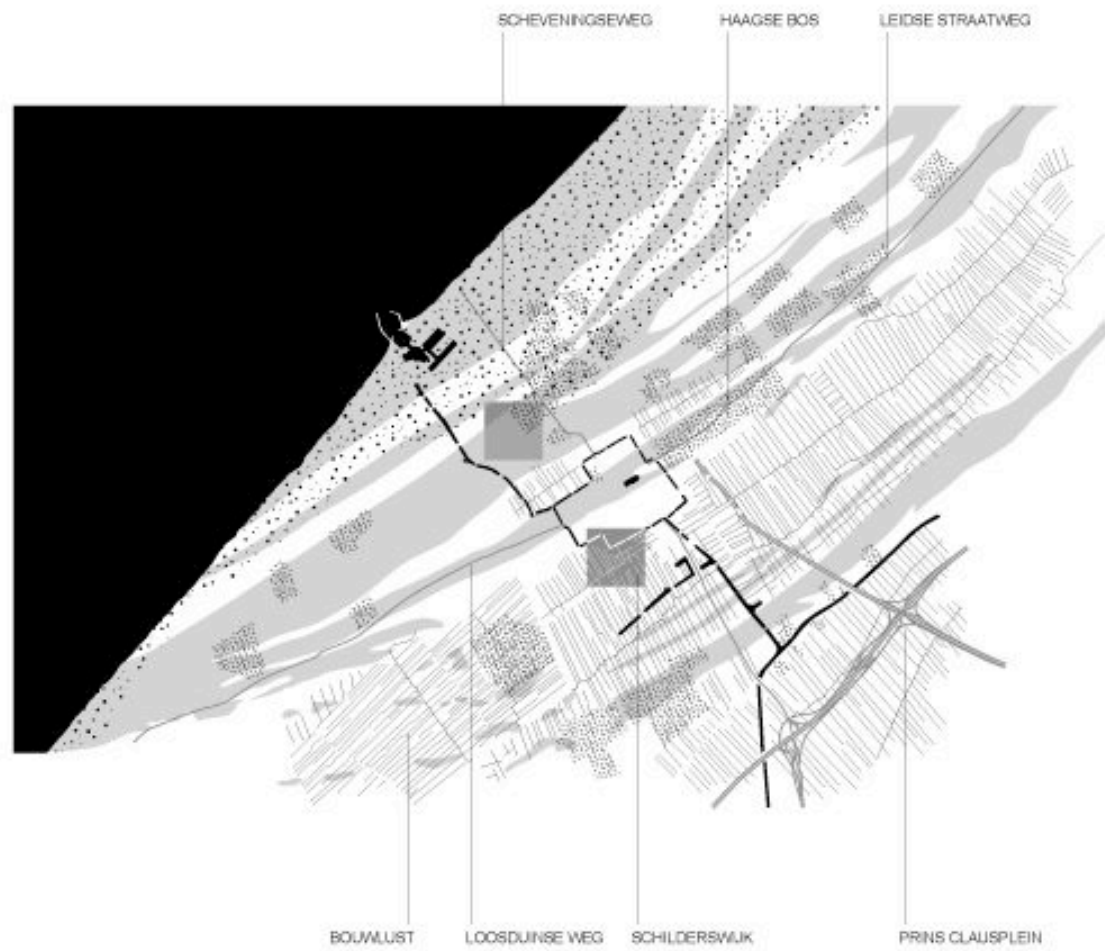


the double narrow beach ridge of Akersloot with its many characteristic small parcels. To the left polder land that can be distinguished from the sand of the beach ridge by its colour



The genesis of the Dutch dune coast. The diagrams at the left represent the rise of the sea level during the past 7000 years.

DEN HAAG

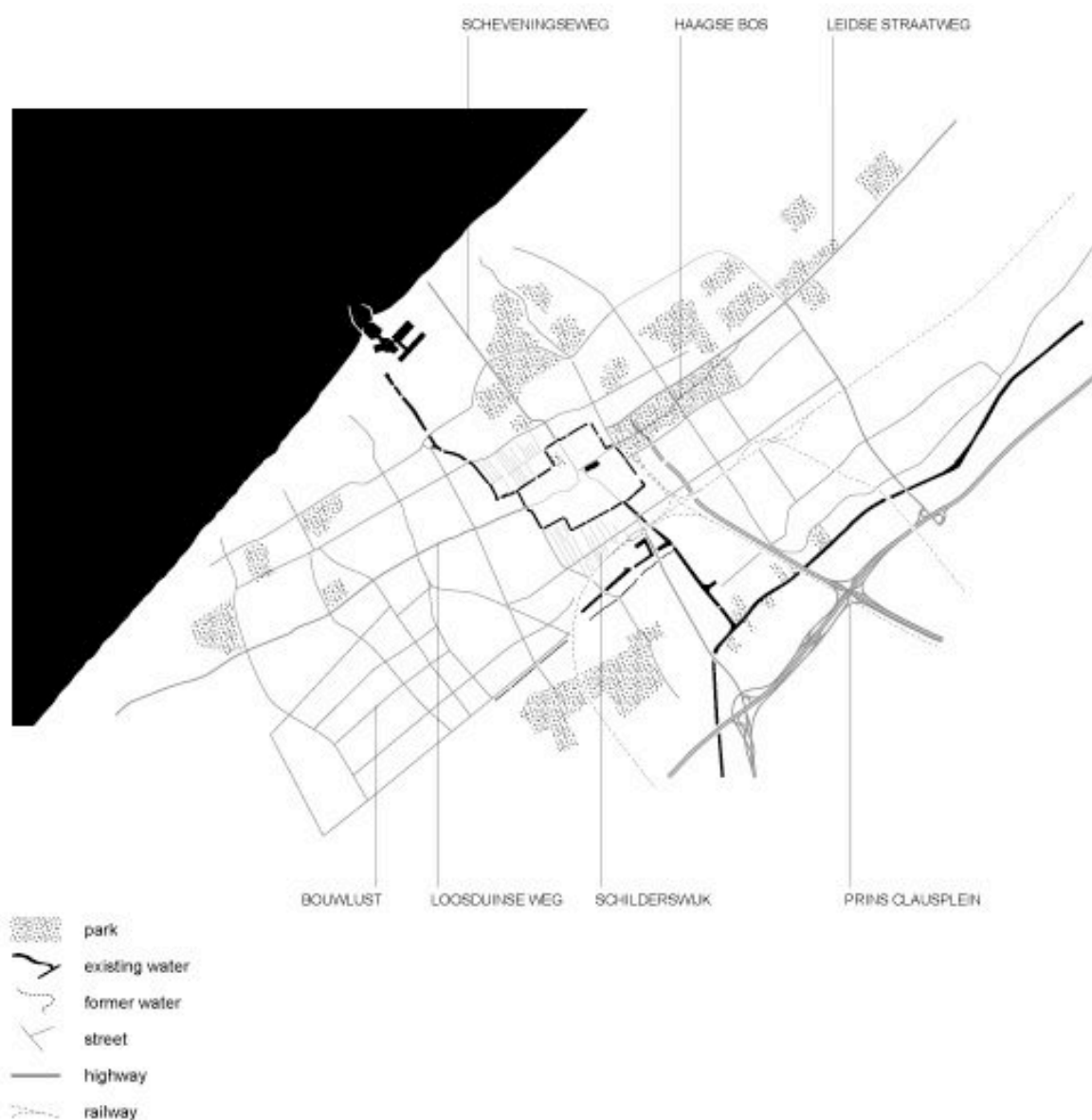


-  coastal sands
-  new sand dunes
-  peat cultivation
-  park
-  existing water
-  former water
-  street
-  highway
-  railway

The urban pattern projected on the pattern of the natural and cultural landscape.

DEN HAAG

strandwallenstad

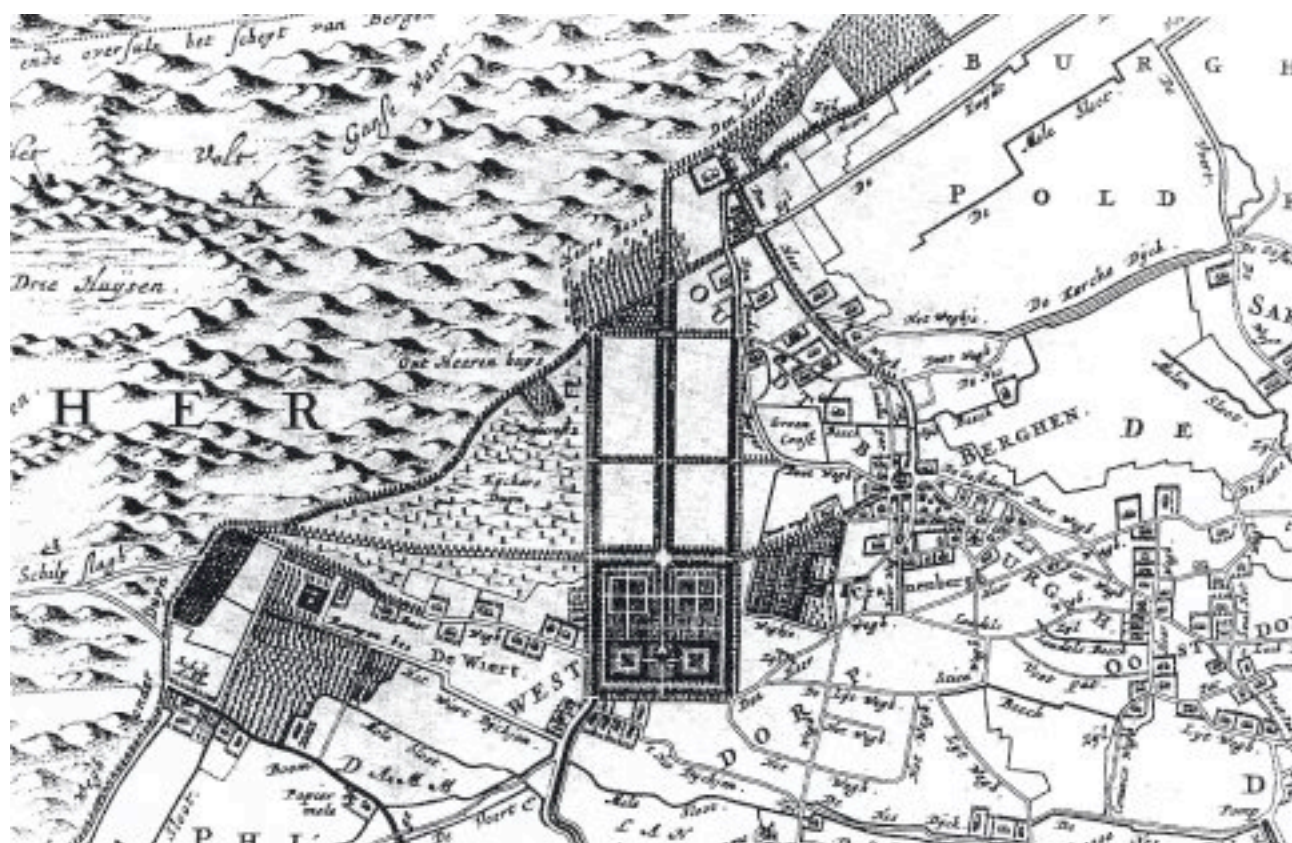


fragment Zorgvliet



fragment Schilderswijk

Elements of the city plan reacting on the original landscape.



Hof te Bergen, c. 1650
(gravure J.J. Dou, *Territori Bergensis accuratissima descriptio*, detail)



Wijkmeer 1729
villa's





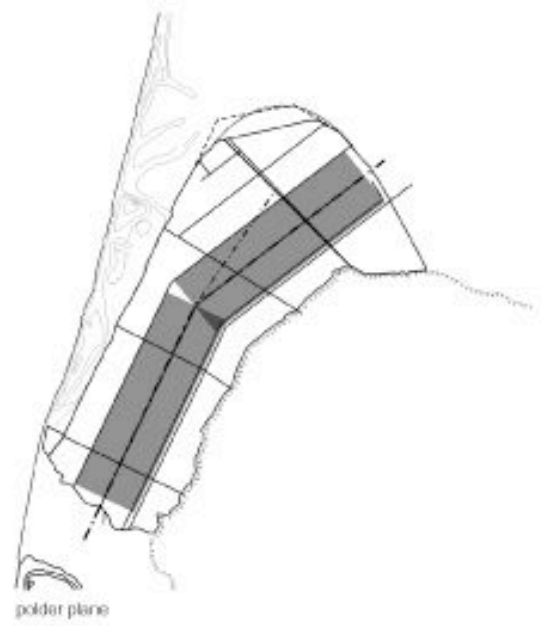
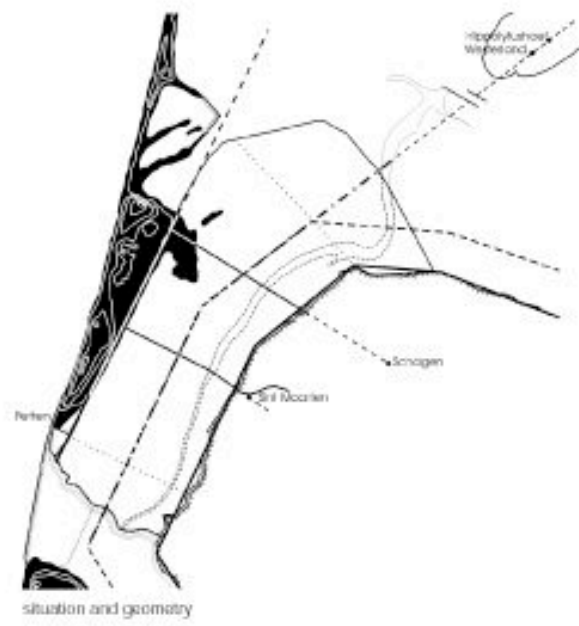
villa landscape The Hague 16th century



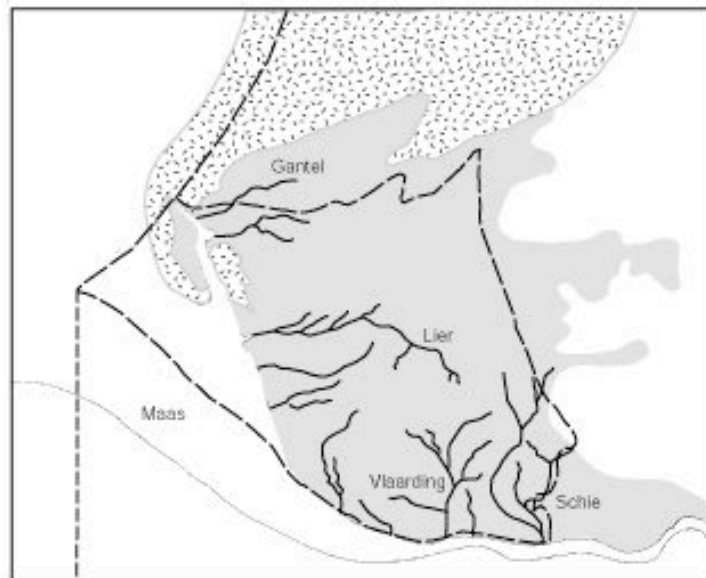
villa landscape The Hague 17th century



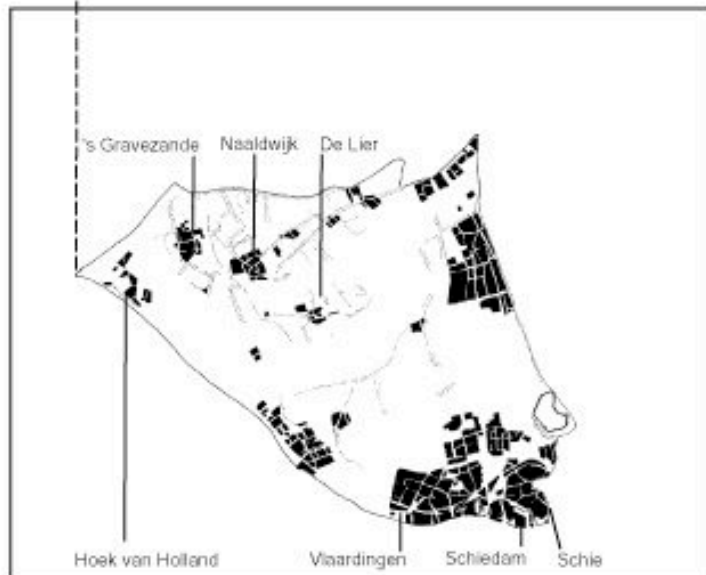
villa landscape The Hague 19th century



the Zijpe

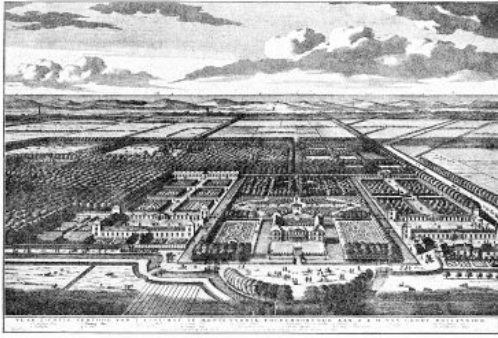


the Westland: natural landscape

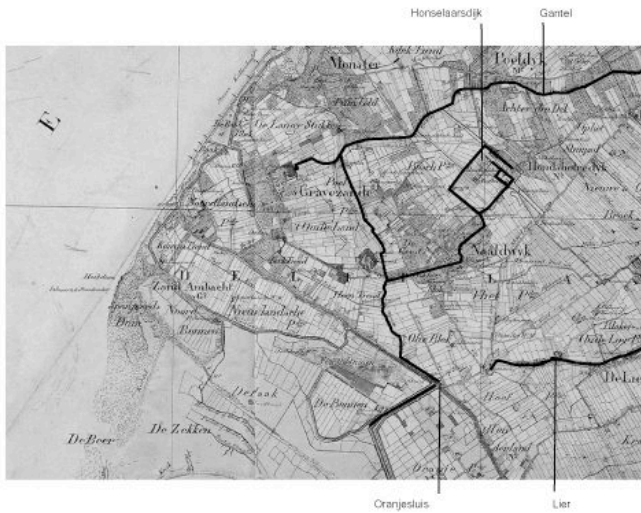


the Westland: urban landscape

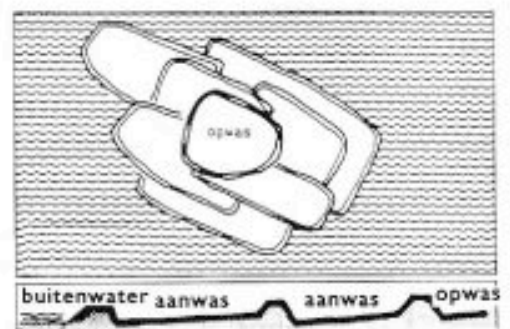
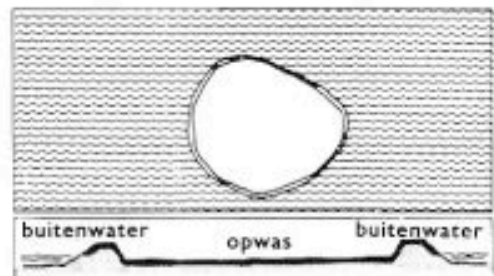




Honselaarsdijk seen from the crescent shaped entrance space. Three canals are enclosing one another: around the house, around the garden and around the park. Two long lanes connect the park to the Gantel and behind one can see the dunes. (17th century, C. Allard)



The canals of Honselaarsdijk are connected to the Meuse

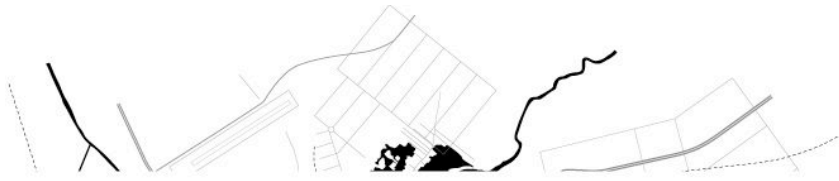


sediment-grown islands and accretions



West Zeeuwsch Vlaanderen around 1600. Biervliet was an island; many areas like the environment of Schoondijke were inundated at that time.





ROTTERDAM bedijkingenstad



- 19th century city
- outside the dike
- park
- existing water
- former water
- dike
- street
- highway
- railway

VREEWIJK



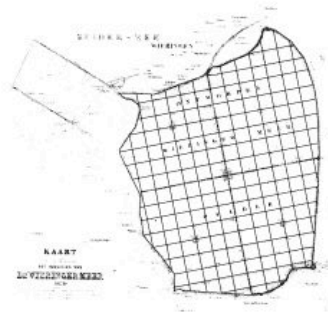
fragment Vroeswijk

Elements of the city plan reacting on the marine clay landscape with its original ring polders.





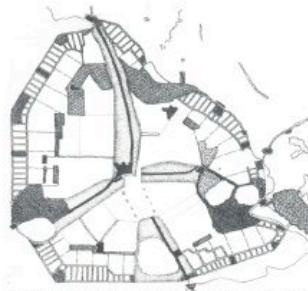
the Wieringermeer



the Wieringermeer, early design
(P. Loke and J. Wellan) 1870



the Noordoostpolder



the Noordoostpolder, landscape plan 1942-1947
(M.J. Granpre Moliere, Piet Verhagen, Jan Bijhouwer)



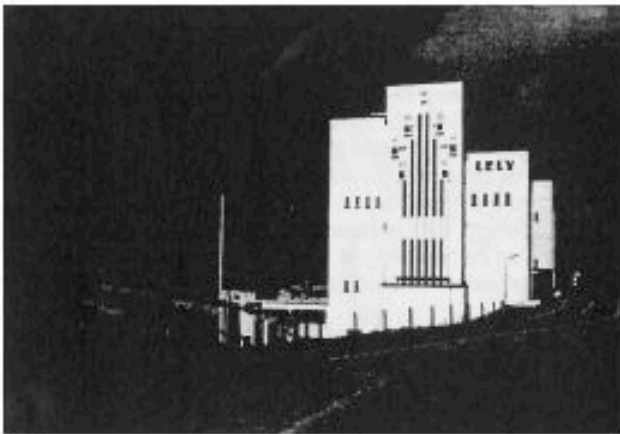
Oostelijk Flevoland



Oostelijk Flevoland, landscape plan (De Jonge, 1961)



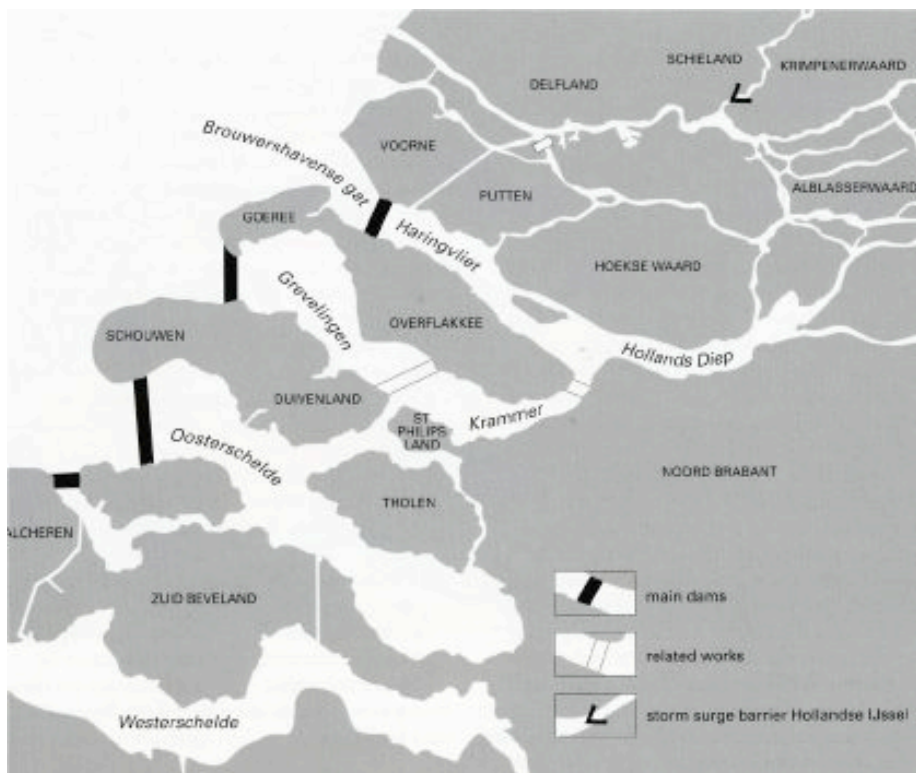
the Wieringermeer



Lorentzsluizen, designed by D. Roosenburg, 1933



pumping station 'Lely', designed by D. Roosenburg, 1930



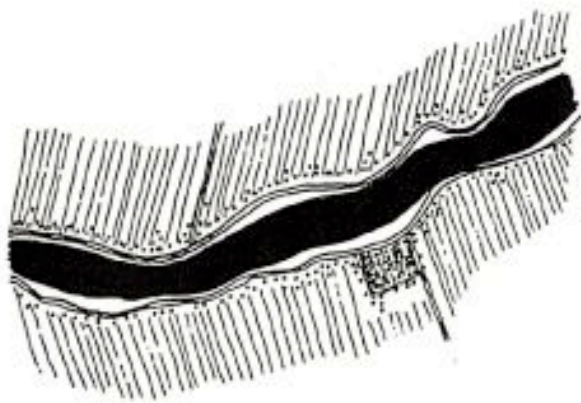
the Deltaplan, 1957



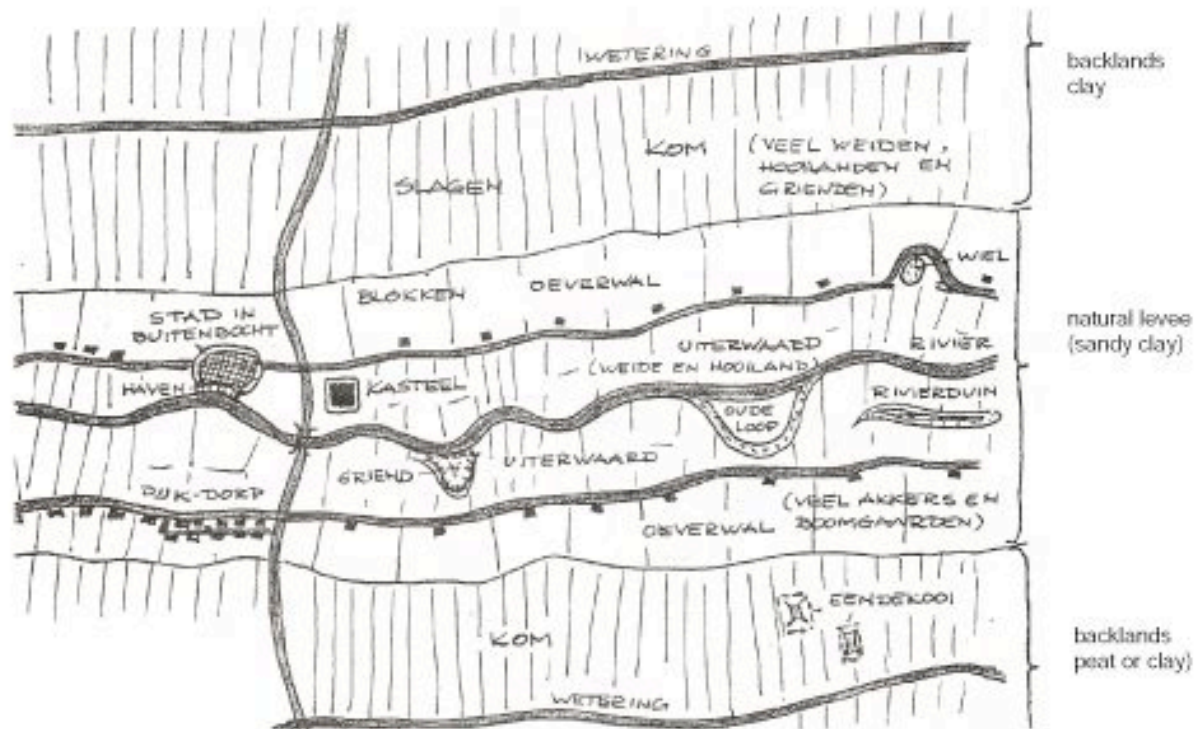
the Oosterscheldebijlamboulevard



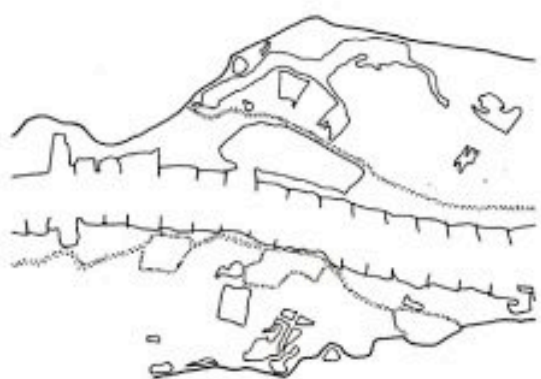
Ripples in the plain. The river plain has a relief by the alternation of natural levees and backlands



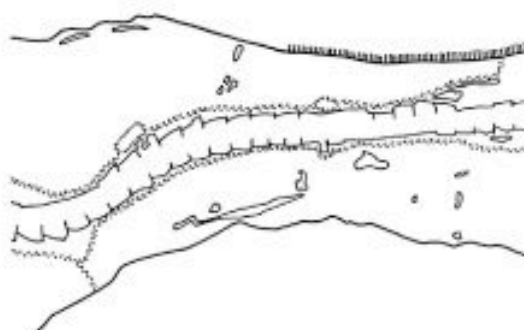
Upstream and downstream. The difference in scale between summer and winter bed of the river and the difference in pattern of built-up areas and parcelling



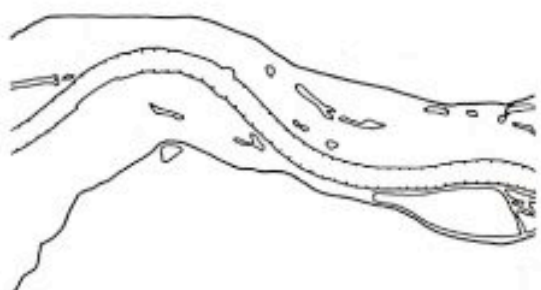
river landscape



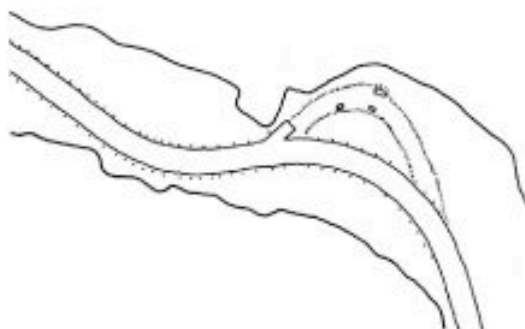
a



b



c



d

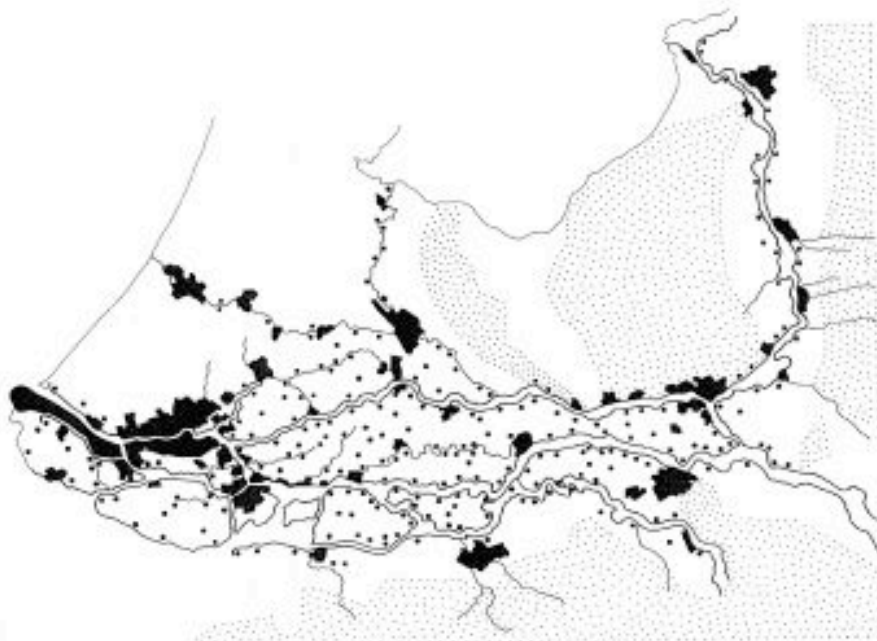
The form of the river branches Waal, Neder Rijn, IJssel and Meuse.

a. Waal near Ochten/Druten

b. Neder-Rijn near Wageningen

c. IJssel near Olst

d. Meuse near Batenburg

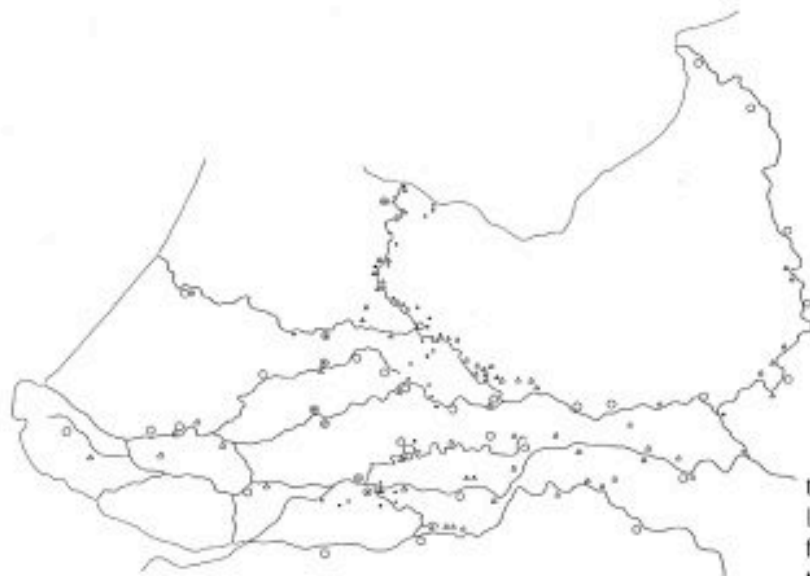


Settlements in the river area.
Many settlements are related to places of bifurcation and confluence of rivers and to the higher places. They show a slow rhythm. Villages are situated on short distances from each other scattered over the river region. Often they are situated along a dike.

River and infrastructure

Coarse meshed network of highways and railroad tracks, oriented mostly parallel or perpendicular to the main direction of the river. The river crossings show a slow rhythm, although a bridge and a railroad bridge are often combined. Downstream tunnels replace the bridges.

Legend: river, motorways, railroad track, (railroad) bridge, (railroad) tunnel



the fortified river plain.

Legend: castle (ruins) or countryseat, former fortified town, fortress or fort of the (Nieuwe) Hollandse Waterlinie.

UTRECHT

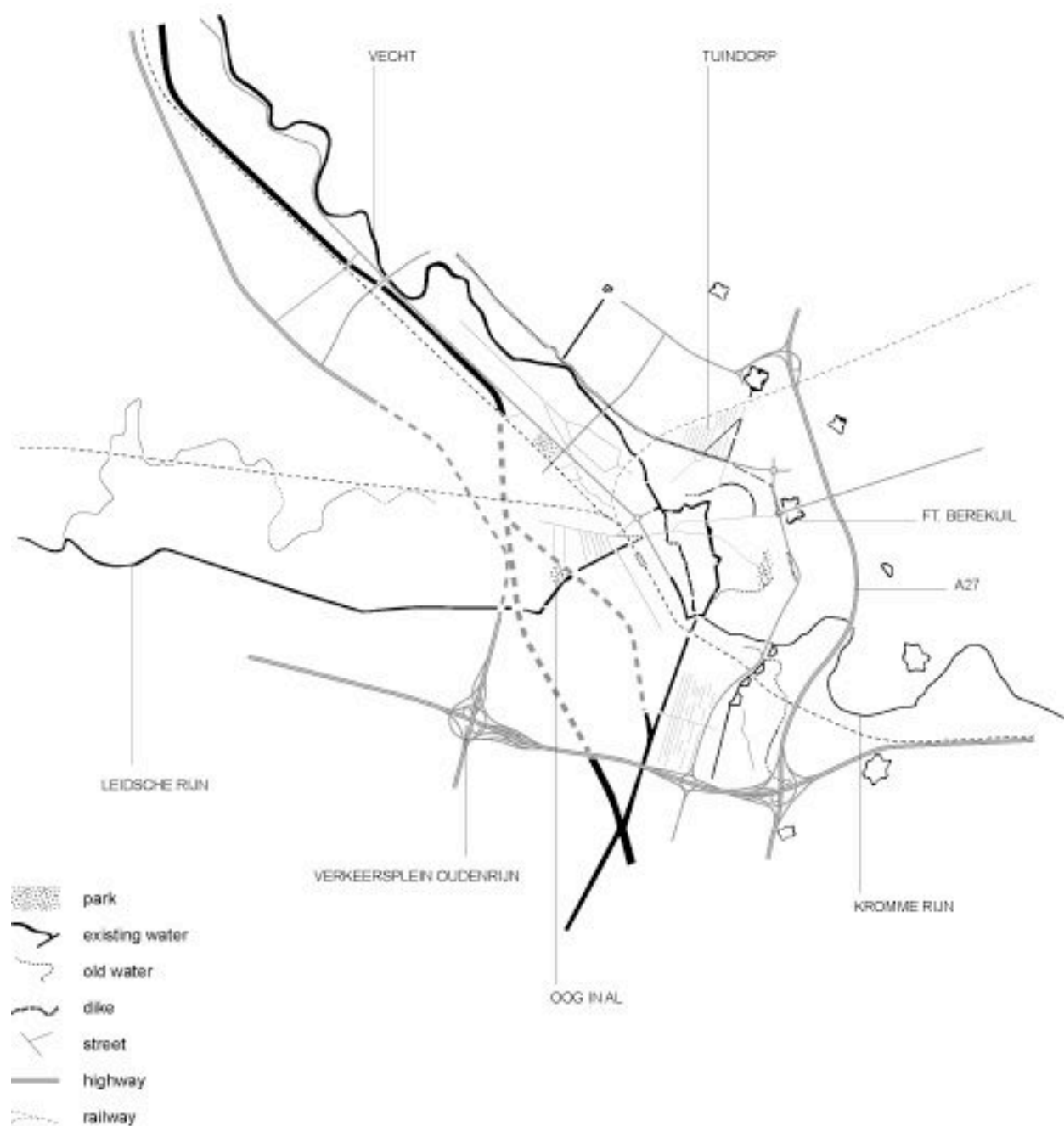


-  sand
-  river clay
-  cultivation pattern
-  park
-  existing water
-  old water
-  dike
-  street
-  highway
-  railway

The urban pattern projected on the pattern of the natural and cultural landscape.

UTRECHT

rivierenstad



fragment Oog in Al

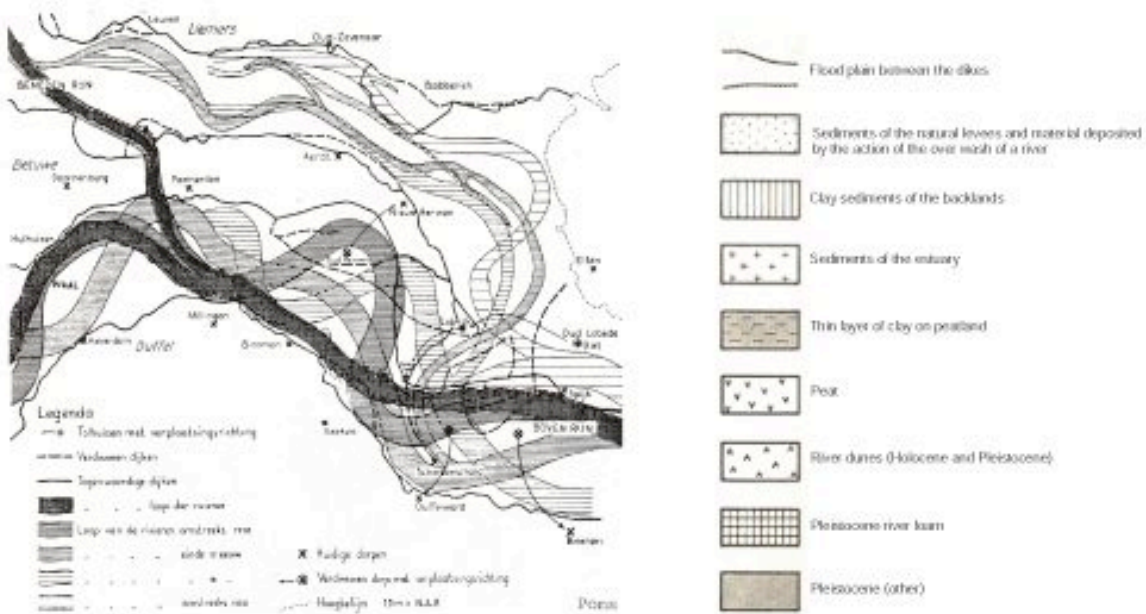


fragment Tuindorp

Elements of the city plan reacting on the original landscape.



natural landscape



Neder Rijn (part from Neder Rijn and Lek, from Amersfoort as far as Hagenvan Loosdrecht): river plain, gently swinging upper course of the river, dammed up



Neder Rijn (from the Usselkop near Wessenvoort as far as Amersfoort): river plain bordering an ice pushed ridge, dammed



Neder Rijn (dug canal from the Pannederse Kop as far as the Old Rhine near Kanakla and from the Old Rhine near Kanakla as far as the Usselkop near Wessenvoort): river plain, gently swinging upper course of the river, partly man made



Waal (from Wierik as far as Vark and from Vark as far as Woudrichem): river plain, gently swinging upper course of the river



Muse (interface between Waal and Meuse: from Litz as far as Kerckhof, Meuse: from Kerckhof as far as Housdon and dammed Meuse: from Housdon as far as Woudrichem): river plain, gently swinging upper course of the river



Waal (Upper Rhine and Waal: from the German border near Speik as far as Woudrichem): river plain, bordering an ice pushed ridge, strongly swinging upper course of the river



Muse (from Grijk-Haamen as far as Litz): river plain, (in former days) swinging upper course of the river, dammed up



River as a series of curves. The river bed is characterized by a typical form (straight, swinging, or meandering) by the rhythm of the curves and by the dimension of the main stream bed



River as a series of floodplains with interfaces between river bed and winter dike. Between the streambed and the winter dike the floodplain or outer marshes are situated. The floodplain is characterized by its form, by a specific segmentation, by the rhythm of the contact points and by the surface.



Waal dike near Waardenburg with an abandoned river course



The same situation in winter time during an exceptional high water level 4 years later. The pollard willows in the foreground are in the meantime ripe for cutting.

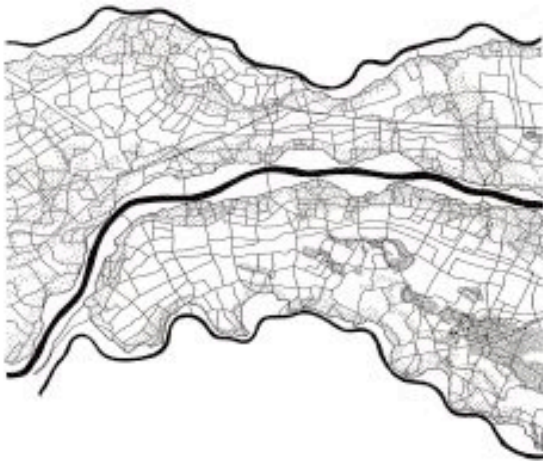


River and dike, summer streambed and winter streambed, wet and dry.

a. The contact points, where the winter dike changes its direction abruptly, are indicated. The dike has more local swinging than the river, especially near the pools or potholes. The rhythm of the river is dictated by the jetties.

b. Water in the summer stream bed and the floodplain during low water level. In the floodplain elongated abandoned streambeds or 'strangen' are situated, potholes along the dike, old clay pits with remnants of embankments, large sand pits connected to the river and harbours on the contact points between river and dike.

c. Water in the winter streambed. The high situated terrains of the brick ovens and the farmhouses lie as islands in the water. On the other side of the dike the church towers function as beacons.



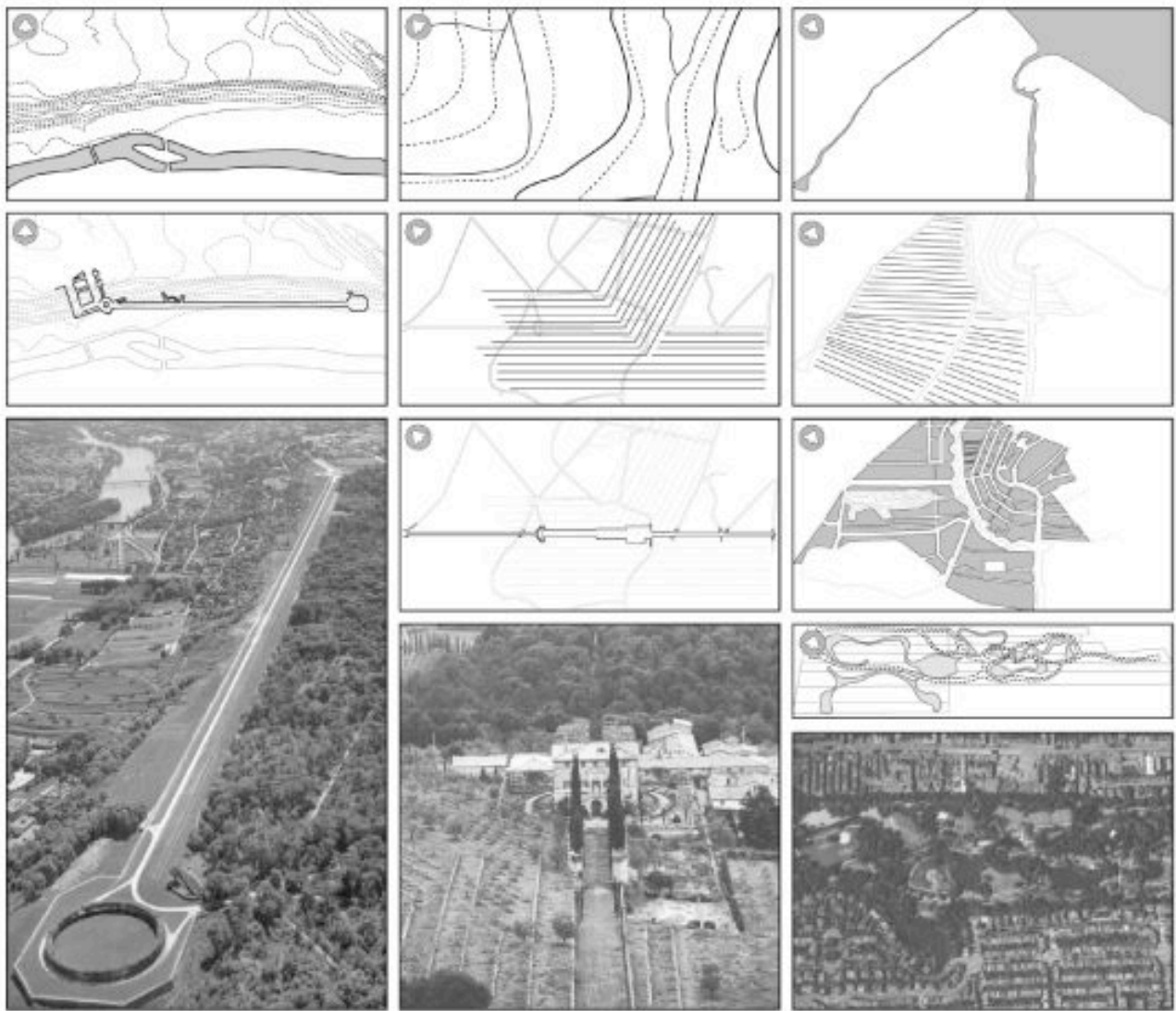
Zoning of the lowland, from river to river. Parallel zones of river streambeds, outer marshes (floodplains), winter dikes, natural levees and backlands. The network of roads is oriented mostly parallel or perpendicular to these zones. Villages are scattered on the natural levees in a rhythm of approximately one-hour walking from each other.



The rhythm of beacons along the routes on the dike and the river.



Congeaed river form: the old meander of the Kromme Rijn between Werkhoven and Cothen. In 1870 this curve was cut short by the Hoge Leemkolk



layering of the landscape: natural landscape, cultural landscape, urban landscape and architectural landscape. The architectural landscape is a transformation of the foregoing three layers.

St. Germain-en Laye in Paris (1665-1669) is a direct transformation of the natural landscape of the river Seine.

Villa Cetinale near Siena (1678) is a transformation of the cultural landscape of agricultural terraces, that in itself is a transformation of the natural landscape.

The Vondelpark in Amsterdam (1864-1877) is a transformation of the urban fabric, an adaptation of the cultural landscape, that again is an adaptation of the natural landscape of IJ, Amstel and Schinkel.