

Waddenwerken Afsluitdijk >>>



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project
Market research Afsluitdijk

location
Afsluitdijk

designers
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partners
DHV
Imares

client
Ministry of Waterways and Public Works,
IJsselmeer Department

size
32 km of dike/1500 ha. new nature

year of design
2008 - 2010

illustrations
Lucas Kukler

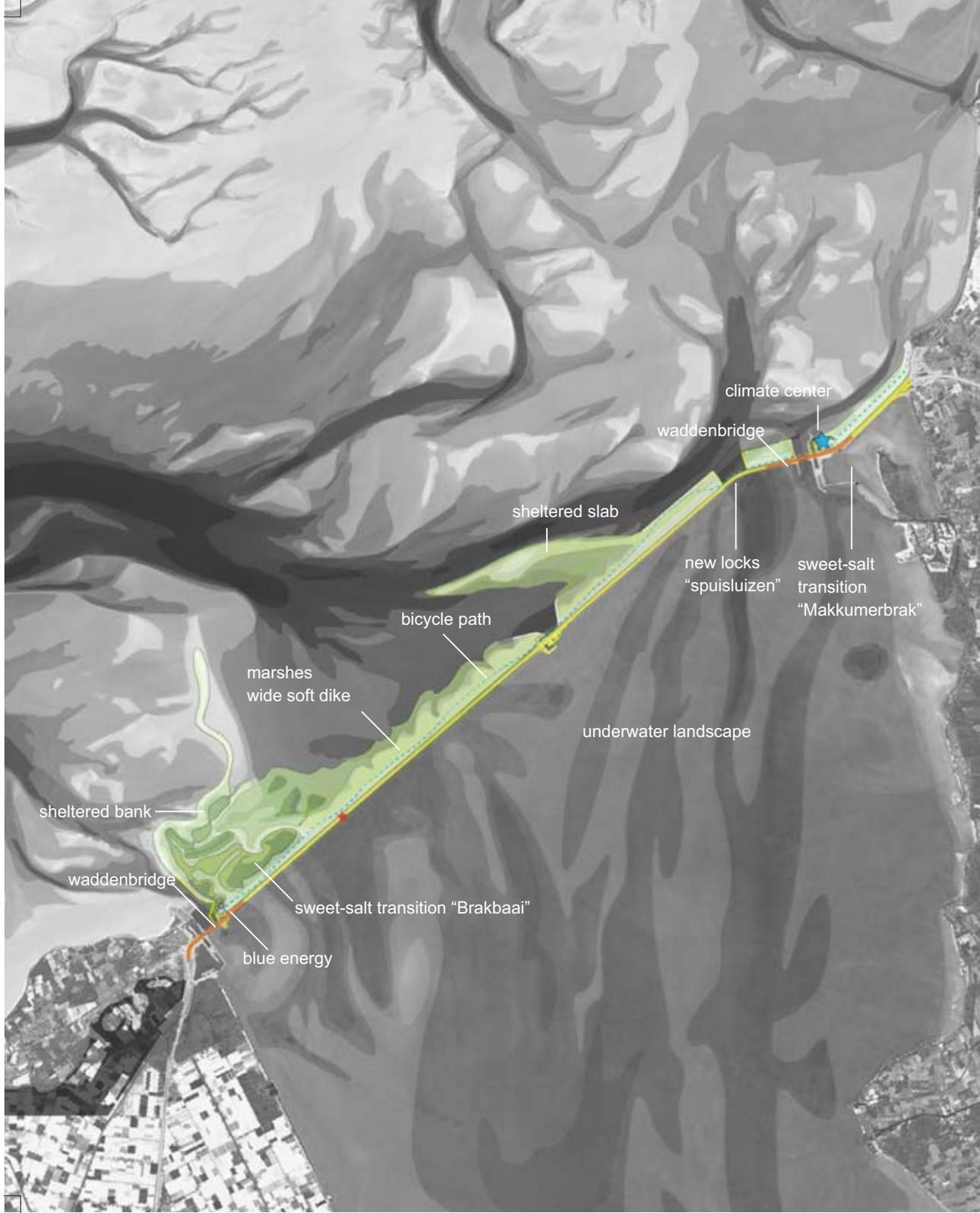


A safe dam that grows with the sea

Sea barriers such as dikes are essential to safety. Especially for the Netherlands - a country in large part located below sea-level. The Afsluitdijk, one of the most important primary dams, does no longer meet safety requirements. The solution: creating tidal marshes that grow with the rising sea-level.

Using traditional methods of strengthening the dike would require the 32 kilometre Afsluitdijk to be enlarged and newly clad. This large intervention has serious consequences for the current cultural-historical valuable profile.

In the WaddenWerken vision, the safety issue has been used to bring about a sustainable, integral development of the area.

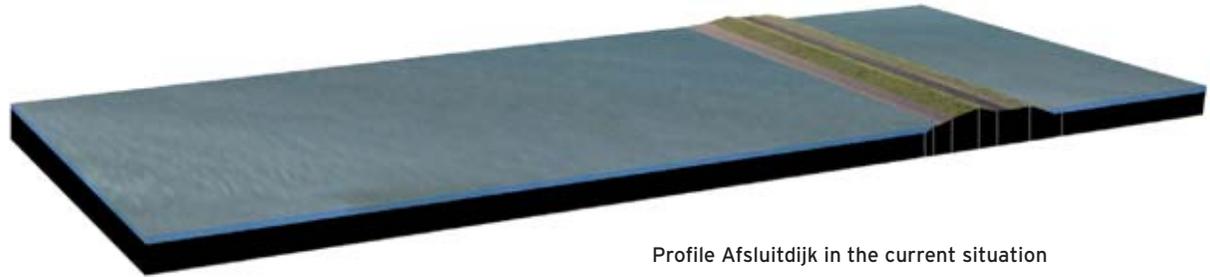


Using tidal marshes for strengthening
In WaddenWerken natural processes are used to strengthen the dike. It will not be heightened, but broadened at the sea side with tidal marshes - overgrown mud flats that occur often in the Wadden area. They form a natural, robust bank for the dike and break the incoming waves. By naturally silting up, if necessary accelerated using simple methods such as dams made from willow branches, they grow with the rising sea level. This is sufficient to form a robust and sustainable dam that meets current and future safety requirements. The tidal marshes (400 - 600 metres in width) may be realized within the available budgets and require little maintenance because they are part of the natural system of the Wadden Sea. They also form a new nature reserve of 1500 ha. that offers recreational opportunities as well.

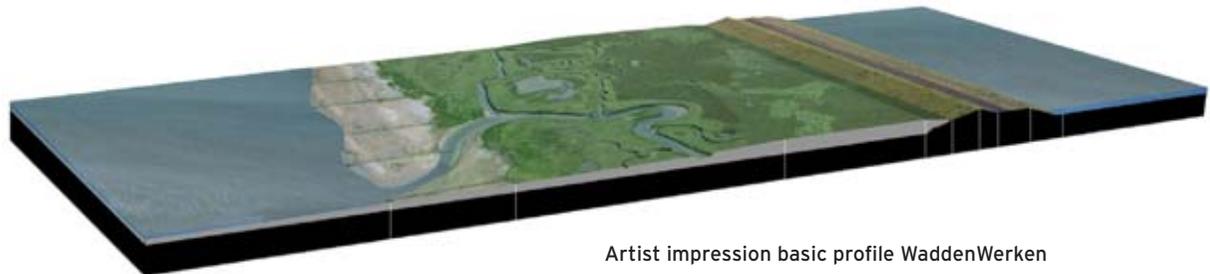
WaddenWerken has been designed in such a way that the original profile of the Afsluitdijk remains recognizable, cultural-historical values are preserved, and the ecological values and recreational opportunities are strengthened. The experience of the landscape is strengthened by the building of two high bridges as access bridges that allow for the simultaneous passage of ships and road traffic and offer fantastic views on the Wadden Sea and the IJsselmeer (IJssel lake).

Unique concept

WaddenWerken is unique: never before has that type of land been used as part of the safety concept on such a scale. At the same time, the natural values in the area are enlarged and the experience of the landscape becomes more diverse. Also, the design respects the rich cultural history: the original Afsluitdijk remains recognizable.



Profile Afsluitdijk in the current situation



Artist impression basic profile WaddenWerken

