NETHERLANDS

Defence Line of Amsterdam

Brief description
Extending 135 km around the city of Amsterdam, this defence line (built between 1883 and 1920) is the only example of a fortification based on the principle of controlling the waters. Since the 16th century, the people of the Netherlands have used their expert knowledge of hydraulic engineering for defence purposes. The centre of the country was protected by a network of 45 armed forts, acting in concert with temporary flooding from polders and an intricate system of canals and locks.

1. Introduction

Year(s) of Inscription 1996

Agency responsible for site management
Mailing Address(es)
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2. Statement of Significance

Inscription Criteria C (ii) (iv) (v)

Justification provided by the State Party
The Stelling van Amsterdam as a group of monuments is in its entirety of outstanding universal value based on the following criteria (1995 Guidelines, par. C, 24. a):

- A structure of permanent defence structures which has remained intact. The defence technique is specifically Dutch: a defence works with a complex water management system which derived its efficacy from inundations. This type of defence work is a unique combination of nature and culture. In combination with the Nieuwe Hollandse Waterlinie, this system, of this size, is unique in the world and is hence the most exemplary. (i);

- In the Europe of the 19th century, the Stelling van Amsterdam was considered a leading example of a ring of forts. (iv);

- The length, surface area and circumference of the Stelling area is considerable. The main defence line has facilities stretching 135 kilometres, situated at a range of 15-20 kilometres from the centre of Amsterdam. During a war, the encompassed area could be closed off hermetically and also fulfil all the needs of the population residing within.

The Stelling van Amsterdam has had a qualifying and direct influence on the environmental development of the City of Amsterdam itself and on the use of land and the structure and infrastructure of the landscape in and around the area in which the Stelling is situated since the Vestingwet (1874) (law prescribing the use of fortresses) came into effect. Moreover, the stipulations of the 1853 Kringenwet (law regarding the zones of military servitude, 'rayons'), the 1874 Vestingwet and the 1896 Inundatiewet (Inundation Act) influenced and have influenced environmental planning and design. Because of the limiting stipulations of these laws, a good part of the Stelling area is still authentic (unchanged), despite the fact that the population density in this area can be counted among the highest in the world. The Stelling van Amsterdam, as 'military landscape', is a second, binding and regulating element in the man-made landscape of The Netherlands. Both landscapes, the military landscape and the agricultural and urbanized landscape, mesh uniquely. (ii);

- The forts illustrate the transition in building and architecture from brick construction in the 19th century to applying reinforced concrete in the 20th century. This transition especially, with its experiments in concrete and emphasis on applying unreinforced concrete, is an episode in the European history of architecture which in the material sense has only rarely been preserved. (iv);

- Hydraulic works are typical in and for the landscape of the Low Countries. The developments and technological developments ensue from civil hydraulic engineering. In a typological sense, hydraulic works for military purposes are extremely rare and do not occur anywhere else in the world. (iv, vi):

- Building rings of forts was not uncommon in 19th century Europe. Because of the rapid development of mobile warfare all over the world, the increase in scale, larger political associations (League of Nations, United Nations, European Community, etc.), the building of permanent fortifications in Europe is a thing of the past (up to 1945). Because of extensive and expanding urbanisation, the
remaining examples of permanent defence structures have become extremely rare. (iv);
- As a ring of forts, the Stelling van Amsterdam is an exceptionally rich representative in Europe. That a defence line like this was built, also reflects the rise of national awareness, such as it developed in 19th century Europe. A nation could only grow if it could secure its independence and unity. From a historic (military, historical and cultural-historical), it derives its intrinsic significance from it. (vi).

The Stelling van Amsterdam as a whole is of outstanding universal value based on its following authentic qualities (1995 Guidelines, par. C 24, b):
- The ring of forts is a group of connected buildings and works, whose homogeneity and place in the landscape have remained unchanged and distinguishable in all its parts, which together form the connected main defence line consisting of dikes, line ramparts, hydraulic properties, forts, batteries and other military buildings, as well as in the environmental structure of the landscape, in which this structure is situated. (i);
- The works were built with exceptional care. They have been preserved as they were designed and specified. The materials and building constructions used have also remained unchanged. Repair in arrears applies is some cases. No parts of the Stelling have been reconstructed. (i);
- Each individual and combined part of the structure of the Stelling van Amsterdam is a significant social, cultural-historical and scientific source of historic material, which has been secured for the future through protection as individual monuments (State, province, municipality) and possible designation as a Conservation Area (former Article 35 of the Dutch Monuments and Historic Buildings Act 1988). (ii);
- Its outstanding universal value is expressed in the authenticity of the design (the typology of forts, sluices, batteries, line ramparts), of the specific use of building materials (brick, unreinforced concrete, reinforced concrete), of the workmanship (meticulous construction apparent in its constructional condition and flawlessness), and of the structure in its setting (as an interconnected military functional system in the man-made landscape of the polders and the urbanised landscape). (i).

Natural values are included in the Provincial ecological main structure. Management plans prevail for preserving and maintaining natural and natural science values.

Planning facilities (Regional Plans, Zoning Plans) are in force. Commencing 1996, the Province of Noord-Holland will delegate the preservation, management and opening up of the parts of the Stelling to some operating associations (Foundation, Project Agency), in which the efforts of both the governmental levels and private individuals and owners will be combined.

Regarding the environment of the Stelling, preparations have been made to designate the Stelling as a 'Conservation Area' based on the Dutch Monuments and Historic Buildings Act 1988, for the purpose of safeguarding the environmental structure indefinitely. (ii).

The Stelling van Amsterdam is also a connected man-made landscape, where natural elements such as water and soil conditions have been incorporated by man into a constructed system of engineering works, creating a clearly defined landscape. (C, 39, (i)):

All parts of the Stelling have a historic-functional, geographical and visual relationship. The nature of the design determined this rationally down to the finest detail.

The structure of the total Stelling consists of recognisable connected parts which, in respect to location and design, were determined by the local military situation. Large parts, such as the forts and dikes, are typical point and line elements in the landscape, the smaller parts articulate the spatial representation;

The relationship and combination between nature and culture is three-fold:
1. The Stelling's course was determined at time of construction by the geomorphological structure of the landscape;
2. The spatial entity in the Dutch polder landscape of peat extraction and empolderings was created since the early Middle Ages through the interaction between the natural and the man-made landscape;
3. Unique natural values were able to develop on the military sites and works because of the fact that these had and have been closed for intensive purposes, public and otherwise, for more than a century. Rural areas of great significance to local ecosystems could thus develop;
A valuable balance developed for certain natural values in the use of a number of sites for specific agricultural or recreational purposes. (If necessary, sites are closed due to the unique ecosystems present there.)

As provided in ICOMOS evaluation

Qualities: the Stelling van Amsterdam is an example of the type of extensive defensive lines in use from the late 16th to mid 20th centuries, especially in Europe. It is especially noteworthy by virtue of its particular Dutch characteristics, its completeness, its remarkably high level of conservation, and the unique feature of being dependent upon the use of water inundation to reinforce the defences. It should not be overlooked that it is also a virtually intact cultural landscape of high quality.

Its cultural value is enhanced by the fact that it is part of a continuum of defensive measures that both anticipated its construction and were later to influence some portions of it immediately before and after World War II. The addition of reinforced concrete bunkers and a command post to the IJmuiden fort at the mouth of the Noordzeekanaal to create an important element of the German Atlantic Wall of 1942-44 adds a further historical dimension.

The land forts have an important place in the development of military engineering worldwide. They mark the shift from the conspicuous brick/stone casemated forts of the Montalembert tradition, which are represented in some of the Nieuwe Waterlinie forts, and the bastioned trace of the Vauban tradition that had failed the French in 1870, in favour of the steel and concrete structures that were to be brought to their highest level of sophistication in the Maginot and Atlantik wall fortifications. The combination of fixed positions with the deployment of mobile artillery to the intervals between the forts was also advanced in its application. There are also several important civil engineering innovations, such as the development of mass concrete as additional protection to the bases of gun casemates or the fronts of batteries.

Recommendation: that this property be inscribed on the World Heritage List on the basis of criteria ii, iv, and v:

The Stelling van Amsterdam is an outstanding example of an extensive integrated defence system of the modern period which has survived intact and well conserved since it was created in the later 19th century. It is also notable for the unique way in which the Dutch genius for hydraulic engineering has been incorporated into the defences of the nation's capital city.

Committee Decision

Bureau (June 1996): the Bureau recommended the Committee to inscribe the nominated property on the basis of criteria (ii), (iv) and (v) considering that the site is of outstanding universal value as it is an exceptional example of an extensive integrated defence system of the modern period which has survived intact and well conserved since it was created in the later 19th century. It is also notable for the unique way in which the Dutch genius for hydraulic engineering has been incorporated into the defences of the nation's capital city.

Session (1996): the Committee decided to inscribe the nominated property on the basis of cultural criteria (ii), (iv) and (v) considering that the site is of outstanding universal value as it is an exceptional example of an extensive integrated defence system of the modern period which has survived intact and well conserved since it was created in the later 19th century. It is also notable for the unique way in which the Dutch genius for hydraulic engineering has been incorporated into the defences of the nation's capital city.

- Statement of Significance adequately defines the outstanding universal value of the site
- No change required

Boundaries and Buffer Zone
- Status of boundaries of the site: not provided
- Buffer zone: no buffer zone has been defined but none is needed since the site is adequately protected by existing legislation

Status of Authenticity/Integrity
- World Heritage site values have been maintained
- The ‘Project Centre for the Stelling van Amsterdam’ (‘Programmabureau Stelling van Amsterdam’) was set up by the Province of Noord-Holland in 2005 and is responsible for fitting developments into the historical character and significance of the Defence Line of Amsterdam site (future spatial plans, traffic infrastructure, housing locations, expansions, the possible construction of industrial estates, etc.)

3. Protection

Legislative and Administrative Arrangements
- The Defence Line of Amsterdam (Stelling van Amsterdam): 125 buildings and structures
protected by Provincial Monuments Bye-Law (Provinciale Monumentenverordening) and more than 25 components protected by the 1988 Monuments Act (Monumentenwet 1988)

- Edam, Middenbeemster, Spaarndam, Abcoude, Weesp and Muiden are protected under the 1988 Monuments Act
- The Space/Space for Development Document (Nota Ruimte. Ruimte voor ontwikkeling, 2004): the Stelling van Amsterdam is one of 20 National Landscapes in the Netherlands
- Regional Plan for Southern Noord-Holland (Streekplan Noord-Holland Zuid) (Province of Noord-Holland, 2003)
- The Area Programme for the Stelling van Amsterdam, 2005-2008 (Gebiedsprogramma Stelling van Amsterdam, 2005-2008), was drawn up by the Province of Noord-Holland in 2005
- Parts of the Stelling situated in the Province of Noord-Holland are also part of the Provincial Ecological Network (PEHS) (1992, updated in 2003), particularly the northern part
- The protection arrangements are considered sufficiently effective

4. Management

Use of site/property
- Visitor attraction, rural landscape

Management/Administrative Body
- No steering group and no plans to create one, but the Provincial Government of Noord-Holland is considering organizing governmental joint ventures
- Site manager on full-time basis
- Project Centre for the Stelling van Amsterdam (Defence Line of Amsterdam) manages the Stelling on behalf of the Province of Noord-Holland. The Centre is run by the member of the Provincial Executive who is in charge of the Culture portfolio and responsible for the Stelling van Amsterdam. Its detailing is based on the Area Programme 2005-2008 (Gebiedsprogramma 2005-2008) which was approved by the Provincial States in 2005
- Levels of public authority who are primarily involved with the management of the site: regional; local (23 municipalities)
- The current management system is sufficiently effective

Actions proposed:
- In 2005, the Province of Noord-Holland drew up the Area Programme for the Defence Line of Amsterdam (Gebiedsprogramma Stelling van Amsterdam, 2005-2008) and set up a Project Centre for the Stelling van Amsterdam. The Provinces of Noord-Holland and Utrecht are currently discussing the future management of the Defence Line of Amsterdam

5. Management Plan

- Management plan is being implemented
- Implementation commenced: May 2005
- Title: the Area Programme for the Defence Line of Amsterdam (Gebiedsprogramma Stelling van Amsterdam)
- The Province prefers to base matters on a long term vision (up to 2020) and to fulfil that vision through short-term programmes (2005-2008; 2009-2012 and successive periods). An action plan will be drawn up every year in December
- The state government and the Province of Noord-Holland are discussing drawing up an ‘area document’ for the Stelling van Amsterdam. This depends partly on the conclusions of this ‘periodic report’, the geographical positioning to be specified for the Stelling and further specifications concerning National Landscape (Defence Line of Amsterdam) (Nationaal Landschap Stelling van Amsterdam)
- Effective
- Responsibility for over-seeing the implementation of the management plan and monitoring its effectiveness: the Province of Noord-Holland and the Government. Responsibilities must be arranged in more detail with the Province of Utrecht. These will be recorded in an ‘area document’

6. Financial Resources

Financial situation
- Province of Noord-Holland (co-financing with third parties such as the municipalities of Velsen, the Department of Public Works and the European Community PESCA/ESF). Others include: Rural Area Investment Programme (ILG) (Ministry of Agriculture, Nature and Food Quality (LNV), Ministry for Housing, Regional Development and the Environment (VROM), Ministry of Education, Culture and Science (OCW) for the Stelling of Amsterdam/Nieuwe Hollandse Waterlinie (inundation defence line)
- The Herstelling Foundation (Stichting Herstelling Amsterdam), established in 1998 at
the initiative of the Stelling van Amsterdam Foundation, the Maatwerk Foundation and the Province of Noord-Holland made a great effort in restoring the Stelling, for instance at the Forts at Edam, Spijkerboor, Marken-Binnen, Penningsveer, Vijfhuizen, Hoofddorp, Aalsmeer, Kudelstaart and Abcoude, the forts along Middenweg and St. Aagtendijk, the Forts on the Ham and on the Winkel, Fort Bezuiden Spaarndam, Fort Nigtevecht, Fort Uitermeer, Fort Veldhuis and Kringenwetboerderij Zeeoever ('Kringenwet' farm) in Diemen

- No funding drawn in through the WH Fund
- Insufficient

7. Staffing Levels
- Number of staff: 6

Rate of access to adequate professional staff across the following disciplines:
- Good: conservation, management, promotion
- Average: interpretation, education, visitor management
- Staff resources are adequate
- Volunteers are actively involved in maintenance activities and providing tours at several forts (such as Fort Pampus, Penningsveer)

8. Sources of Expertise and Training in Conservation and Management Techniques
- Not provided

9. Visitor Management
- Visitor statistics: not provided for the overall site (Fort along the Pampus that has more than 30,000 visitors per year)
- Visitor facilities: bicycle routes, walking paths, visitors centre ‘Hollands Licht’ at Fort Pampus opened in 2005, art galleries, museums, recreational facilities, canoe rental, overnight stays, campsite, music school, club houses, events, tours, restaurants
- Stelling Month (‘Stellingmaand’), every year during the month of September
- Visitor facilities are inadequate
- Visitor needs: a central visitors centre; long distance walking paths along the Stelling van Amsterdam; organizing public events; making a film of the Stelling (see 13.04); organizing tourist arrangements; longer/more frequent opening hours at more forts
- There is no tourism/visitor management plan for the site

10. Scientific Studies
- There is no agreed research framework/strategy for the site
- Studies related to the value of the site
- Studies used for management of site (and sustainable development of the site while respecting its cultural value and integrity/authenticity): the Netherlands Department for Conservation (Rijksdienst voor de Monumentenzorg – RDMZ) (since 1st November 2006: Netherlands Department for Archaeology, Cultural landscape and Monumentens – RACM (Rijksdienst voor Archeologie, Cultuurlandschap en Monumenten), published a study in 1998 (‘Cultural-Historical Study’) entitled ‘The Stelling van Amsterdam in the Wijkermeer Polder’ (De Stelling van Amsterdam in de Wijkermeerpolder) focusing on the development of a ‘wet’ industrial estate and harbour in Wijkermeer Polder (land designated for ‘quay-bound and harbour-related business’)

11. Education, Information and Awareness Building
- Not enough signs referring to World Heritage site
- World Heritage Convention Emblem not used on publications
- Adequate awareness of World Heritage among: visitors, local communities, local authorities. Inadequate: businesses
- Is there an education strategy for the site? The Stelling van Amsterdam Foundation has released an educational programme for schools
• Need for awareness raising: construction of a visitors centre; realization of a film (2006), promotional activities (media), development of new public events
• ‘Stelling Month’ to be held in the month of September
• Website available
• Local participation

12. Factors affecting the Property (State of Conservation)

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Conservation interventions
• Present state of conservation: needs more resources

Threats and Risks to site
• Threats: expansion of Schiphol Airport (Mainport Schiphol); construction of new or restructured industrial estates in accordance with Actieplan Bedrijventerreinen (Industrial Estates Action Plan) (Ministry of Economic Affairs); possible change of the Wijkermoerpolder for harbour and ‘wet’ industrial estate; ‘Geniedijk Overpass’ crossing motorway A4/dual carriage road N201; access road to IJburg, section between the fort and Kringenwetboerderij (‘Kringenwet’ farm) de Zeehove
• The Stelling van Amsterdam is transacted by roads in several places (traffic infrastructure), age-old breaches must be enlarged and clearly marked, construction of motorway A9 along the Wijkermeer polder. The entire Stelling is under spatial pressure: advancing urban expansion in the western part of the Stelling, the former ‘West Front’ and the ‘South West Front’
• Emergency measures: the Province of Noord-Holland is examining how the projected A4/N201 overpass can be realized without damaging the significance/integrity of the Geniedijk (Dike) as a historic linear element. No timeframe provided

13. Monitoring
• No formal monitoring programme
• Monitoring activities and indicators will need to be included in the ‘area document’ to be drawn up for the Stelling van Amsterdam, also considering the sexennial periodic reporting of the World Heritage

14. Conclusions and Recommended Actions
• Main benefits of WH status: conservation, management. Inscription of the ‘Stelling van Amsterdam’ on the World Heritage List activates the development of projects (conservation; public oriented; education) in and around the site

Future actions:
• An ‘area document’ will be drawn up for the Defence Line of Amsterdam (Stelling van Amsterdam) which will also define tasks and responsibilities of the various area partners (state, province, polder board, municipalities, conservationists). An active role for the Project Centre for the Stelling van Amsterdam to bring developments (particularly spatial) in line with the ‘outstanding universal value’ of the site
• No WH Funding is sought