# XIII World Congress of the Organization of World Heritage Cities

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# Urban resilience and management Beemster: development, tools and historic values

# **Unesco World Heritage the Beemster Polder**

In 1612 about 7.200 hectare of land was drained to create the Beemster Polder. To complete this massive work, more than 58 watermills were used. A heroic and unique project in the beginning of the 17th century. A plan was made to split up the land into a special pattern. This pattern is based on the Divine Proportion. To apply this ratio to an artificial cultural landscape was something completely new in the beginning of the Renaissance period. The brilliant idea to divide the land using this method is still preserved and allows living and working in the polder. The Beemster Polder has preserved intact its well-ordered landscape of fields, roads, canals, dykes and settlements. The pattern of roads and watercourses runs from north to south and from east to west, with buildings along the roads. The most important universal values of the Beemster Polder are its geometrical structure and the wideness of the landscape.

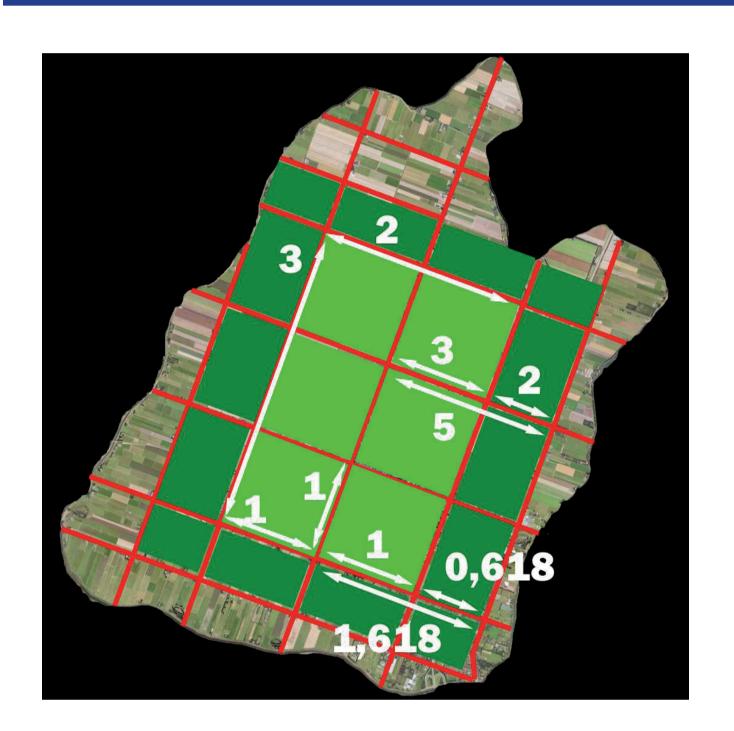


Figure 1. The Beemster Polder with its special pattern based on the Divine Proportion.



Figure 3. The Copper Engravure, the most important historical reference.



Figure 5. Beemster policy: design the perfect yard according to historical values. A practical tool for inhabitants.

## Historical references and knowledge of the heritage

In 1644 the unique spatial pattern of the Beemster Polder was registered on the so called 'Copper Engravure'. On the Copper Engravure the roads and watercourses are shown, as well as historic buildings and some nowadays archaeological sites. The municipality of Beemster has digitalized the Copper Engravure, which forms the basic instrument for spatial planning developments. Whenever i.e. a farmer desires to extend his yard, a judgment takes place whether the watercourse is a historic one and if other Outstanding Universal Values (OUV) of the World Heritage site are not jeopardized.



The Copper Engravure as a historical reference has been translated into policy and some practical tools for spatial planning. In the Beemster Polder there is an overall development policy for the polder, based on its OUV.

This policy concerns every development level. For each level (i.e. total area, villages, neighborhoods, but also for agricultural yards) the policy provides specific rules and tools to manage and to preserve the historical structure of the Beemster Polder. The policy on spatial planning and developments also takes every type of area into consideration. I.e. there are zoning plans for the more agricultural area, but also for villages and sometimes there are even specific zoning plans for individual yards. In those zoning plans the morphology and the specific features of the area form the starting point. That is why each spatial development knows an accurate and customized judgment by the municipality whether the urban development jeopardizes the OUV.

## Overall awareness and integrating the civil society

The Beemster Polder is a World Heritage site, but also a living and working area for the about 9.000 inhabitants. In order to raise awareness for the historical and universal values and in order to make policy that also considers the needs and wishes of the inhabitants, Beemster decided to involve i.e. farmers in the policy making on spatial planning. That is the reason why the Beemster policy does not only focus on preserving the World Heritage site, but also provides tools for the management of agricultural businesses. By this approach it is verified that the policy is not only preserving but also practicable and it also raised awareness by the inhabitants for the special features of the site. The final goal is to implement this awareness by all inhabitants, so that if they desire to found a new business or if they have development plans, they already know how to design their plans conform the specific rules of maintaining the OUV.



Figure 2. Impression of the Beemster Polder with its orthogonal roads, watercourses and open views.

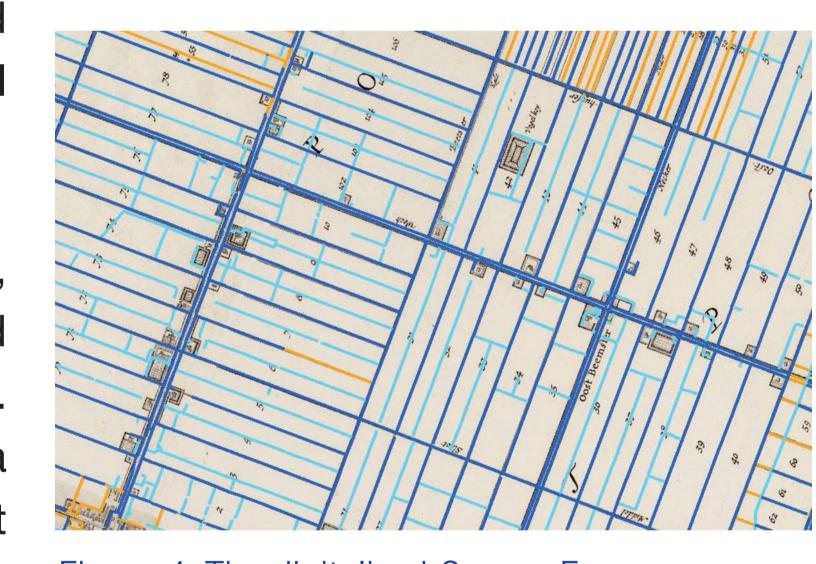


Figure 4. The digitalized Copper Engravure, whereby the blue lines are the remaining historic watercourses, the orange lines are historic watercourses that should be restored and the light blue lines are new watercourses without any historical value.

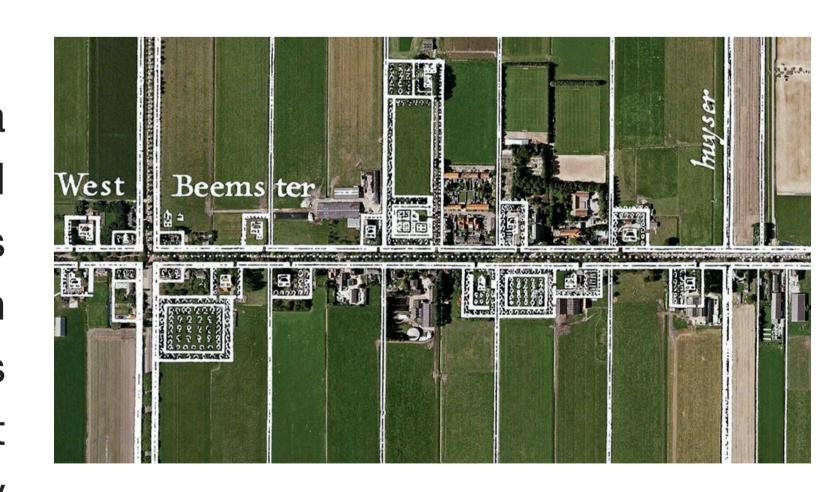


Figure 6. Due to the policy, tools and its management of the OUV, the Beemster Polder has not changed much. On this areal view one can see that the contemporary urbanization (the colored map) does not diverge much from the original urbanization as is shown on the Copper Engravure (the white lines).