

# SILT MONITORING CAMPAIGN

## DURING LAND RECLAMATION IJBURG

Ontwikkelingsbedrijf Amsterdam is developing the land reclamation project IJburg 2. The land reclamation starts in wet conditions. During the first stage, under wet conditions, sand is put in place by a sand squirt pontoon. Silt curtains are used to prevent silt from being transported to the surrounding area. The reason is the presence of zebra mussels (driehoeksmosselen) around IJburg 2 which cannot handle too much siltation.

Svašek Hydraulics is asked to monitor the siltation around the reclamation of the first part of IJburg 2. Key question is: how effective is a silt curtain? Before, during and after the half year construction phase the sedimentation of silt is monitored in a grid of measurement locations around the reclamation.

The demand was to monitor the sedimentation caused by the land reclamation with an accuracy of 1 mm. In order to satisfy this very challenging accuracy a tailor-made silt sedimentation measure device has been designed for this project. Several laboratory and in-situ tests has been undertaken to optimise and validate the measurement method. Also, optical OBS turbidity

measurements are taken to gather extra information about the silt dispersion around the land reclamation area. Preparations started in 2009 and the actual monitoring takes place first half of 2010.

### CLIENT

Ontwikkelingsbedrijf Amsterdam

### LOCATION

Amsterdam, the Netherlands

### DATE

2009 - 2010

### SERVICES

Half year silt measurement campaign



**SVASEK**  
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