



RWS BEDRIJFSINFORMATIE

Market consultation

Construction method envisaged for the sunken construction on the A27, between the Lunetten and Rijnsweerd junctions



Colophon

Issued by	The Directorate-General for Public Works and Water Management, Big Projects and Maintenance
Information	Stan van Veenendaal (Contract Manager)
Telephone	+31 6 53 93 36 25
Case number	AT/2020/06
Date	19 March 2020
Status	Final
Reference	HB-3828317
Version number	1.0

Contents

1	Introduction—4
2	Object and approach of the market consultation—6
2.1	Object of the market consultation—6
2.2	Outline of approach underlying the market consultation—6
2.3	Target group of the market consultation—6
3	Scope of the market consultation—7
3.1	General description of the Utrecht Ring Road—7
3.2	Project objectives—7
3.3	Scope of contract South—7
3.4	Indicative schedule—8
4	Market consultation—9
4.1	Procedure—9
4.1.1	Schedule—9
4.1.2	Application—9
4.1.3	Questions about the market consultation document—9
4.1.4	Plenary meeting—9
4.1.7	Conclusion of the market consultation and feedback on results—10
4.2	Confidentiality—10
4.3	Other provisions in relation to the market consultation—11

1 Introduction

On 17 July 2019, the Council of State ruled that the planning procedures order on the A27/A12 Utrecht Ring Road could not be upheld. This was prompted by a ruling by the Council of State on 29 May 2019 to the effect that the Programme to Combat Nitrogen (*Programma Aanpak Stikstof (PAS)*) could no longer be used to support the permit granting process. The Minister of Infrastructure and Water Management has now decided to prepare a new planning procedures order for the Utrecht Ring Road in 2020.

Heavy through and regional traffic converge on the Utrecht Ring Road, causing problems like congestion, noise pollution and a deterioration in air quality. Hence the decision to create extra lanes and separate busy traffic flows, which will reduce congestion and improve safety and accessibility. The object is for the modifications to facilitate improved and safer traffic flow, with respect for the environment.

Part of the A27 motorway near Utrecht is below groundwater level. In the 1980s, a sunken construction method, involving a box structure and film construction below groundwater level, was chosen for the section of road between the Lunetten and Rijnsweerd junctions. When this motorway is widened in the future, it will be important for the various lanes to remain dry at all times, even while road-widening work is in progress. The water pressure under the film will make an innovative construction method imperative.

When widening the motorway within the film structure, there is a risk that the film will break while the work is in progress. This could result in the temporary flooding of the A27. To avoid the risk of film failure, extensive research was conducted into potential construction methods and the possibilities that each has to offer to limit the risks that arise when carrying out construction work within the film structure. Essentially, two principles need to be observed when widening the section of motorway within the foil construction:

- Ensure that sufficient cover/weight remains in place above the film to avoid the film rupturing;
- Temporarily remove the groundwater pressure exerted on the film from underneath.

Research was conducted on a very large number of options for the widening of the A27 sunken construction within the film polder(s), to the south of the Koningsweg. The five most promising options were considered in greater detail. The 2016 planning procedures order, which has since been quashed, was prepared on the basis of the following five basic options:

- The water-level method (1st principle);
- The trench method (1st principle);
- The press method (1st principle);
- The grout method (1st principle);
- A method involving the temporary reduction of groundwater pressure (drainage, 2nd principle).

Further research into these five basic options was carried out in 2016-2019. This involved the production of risk analyses, a further technical elaboration on each of the options, the analysis of environmental impact and practical research, such as

additional soil surveys and a large-scale groundwater-pumping test. The research carried out showed that all of the basic options come with significant disadvantages. Given this fact, the Directorate-General for Public Works and Water Management now envisages a construction method that involves the use of a water-inhibiting construction in combination with return drainage. This water-inhibiting construction will extend down to the water-inhibiting layer, making it possible to safely widen the motorway without any risk of the film breaking.

The Directorate-General for Public Works and Water Management, Big Projects and Maintenance, has prepared this market consultation document for the purpose of market consultation about the construction method it envisages for the sunken construction of the A27 between the Lunetten and Rijnsweerd junctions. As such, this market consultation will relate to part of the scope of the A27/A12 - South construction contract (hereinafter: South contract).

Before starting the tendering process, the Directorate-General for Public Works and Water Management would like to hear what possibilities, impossibilities and risks apply in the opinion of market parties with experience in this construction method.

The South construction contract is part of the A27/A12 Utrecht Ring Road project. The other construction contracts relate to the contracts for North, the Galecopper Bridge and the National Nature Network (*Natuur Netwerk Nederland*) and fall outside the scope of this market consultation.

This market consultation is the fifth market consultation on the Utrecht Ring Road. Information about the previous market consultations follows below:

- April/May 2016: a market consultation to ask market parties for advice and about possible process improvements to the tendering process for and contracting of the scope of the Utrecht Ring Road project. This market consultation resulted in the decision to opt for a separate Engineering & Construct (E&C) contract for the Galecopper Bridge and the contracting of Arup to provide support during the contract preparation and tendering process;
- September 2017: a market consultation was organised specifically for contract South about the content of a number of specific tendering-related or contractual details;
- January 2019: a private market consultation about the Galecopper Bridge with seven market parties. Discussions were limited to the tendering process for the Galecopper Bridge contract in general;
- February 2020: a private market consultation with four market parties about the use of 200-m-thick high-strength concrete (HSB) as part of the Galecopper Bridge contract.

Section 2 will discuss the object of and approach to be adopted in the current market consultation. Section 3 will explain the scope of the market consultation, while Section 4 will describe its structure.

2 Object and approach of the market consultation

2.1 Object of the market consultation

The Directorate-General for Public Works and Water Management has organised the present market consultation in order to:

- assess the feasibility of the construction method envisaged;
- discuss the technical and environmental risks that the market sees and identify critical issues for the Directorate-General for Public Works and Water Management.

2.2 Outline of approach underlying the market consultation

The market consultation will consist of a number of parts:

- First, a plenary meeting in which the Directorate-General for Public Works and Water Management explains the project and issues;
- Second, participants will be asked to take part in a written question round. Interested market parties will be asked to answer the questionnaire handed out in the plenary meeting and then return it to the Directorate-General for Public Works and Water Management;
- Third, if necessary, the Directorate-General for Public Works and Water Management will approach one or more parties to explain and discuss their answers in more detail;
- Finally, the Directorate-General for Public Works and Water Management will publish a report on the market consultation on TenderNed.

2.3 Target group of the market consultation

The market consultation will focus on the feasibility of and risks in relation to the construction method envisaged for the sunken construction of the Utrecht Ring Road. The Directorate-General for Public Works and Water Management is particularly interested in market parties that have knowledge of and experience with deep water-inhibiting constructions. The Directorate-General for Public Works and Water Management will approach both general construction companies and specialist European companies with experience in the construction of deep water-inhibiting constructions and the associated equipment.

3 Scope of the market consultation

3.1 General description of the Utrecht Ring Road

The Utrecht Ring Road is the central hub of the Dutch network of motorways. Traffic from every direction flows via Utrecht to a number of different destinations: via the A2 on the west side, via the A12 on the south side, via the A27 and the first part of the A28 to the east of the city. The Utrecht Northern Bypass is a link in the Ring Road too. The Utrecht Ring Road project will involve modifications to the A12, the A27 and the first part of the A28.

For more information about the Utrecht Ring Road project, see the project website: www.a27a12ringutrecht.nl. The information provided includes the Route Information Map (RIM), which is a visual representation of the planning procedures order for the Utrecht Ring Road project.

On 17 July 2019, the Council of State ruled that the planning procedures order on the A27/A12 Utrecht Ring Road could not be upheld. This was prompted by a ruling by the Council of State on 29 May 2019 to the effect that the Programme to Combat Nitrogen (*Programma Aanpak Stikstof (PAS)*) could no longer be used to support the permit granting process. The Minister of Infrastructure and Water Management has now indicated that the aim is to establish a new planning procedures order for the Utrecht Ring Road in 2020.

3.2 Project objectives

Two objectives govern the Utrecht Ring Road project:

- improving traffic flow through the Dutch traffic hub; and
- ensuring that the quality of life in the vicinity of the project is not impacted any further and improved where possible.

3.3 Scope of contract South

Three separate contracts will be awarded for the A27 Utrecht Ring Road: contract North, contract South and the Galecopper Bridge. The widening of the motorway in the sunken construction forms part of contract South. This contract also includes work to widen the A12 and convert the Lunetten junction. The broad scope of work to be completed in the vicinity of the sunken construction is as follows:

- Separate traffic flows between the Lunetten and Rijnsweerd junctions;
- Widen the road body within the film construction;
- Widen the box structure for the A27 sunken construction by 2 x 15 metres in order to achieve 2 x 7 lanes and a hard shoulder;
- Add a roof of no more than 250 metres to the box structure in the A27 sunken structure;
- Extend ProRail rail structures;
- Extend and renew various structures.

Sunken construction

The sunken construction in the Utrecht Ring Road was opened to traffic, as part of the A27 motorway, in 1986 and is located between the Lunetten and Rijnsweerd junctions. The northern part of the sunken construction involved the use of a

concrete box structure, while the southern part was sunk using a plastic film construction.

Before road widening can start in the vicinity of the sunken construction, steps will need to be taken to ensure the stability of the film construction. Specifically, this will require the presence of sufficient soil cover/downward pressure to prevent the film from rupturing. Another option would be to remove the groundwater pressure being exerted on the film from underneath. After much research in the preparation phase, the Directorate-General for Public Works and Water Management currently envisages a specific construction method in which a water-inhibiting construction is used around the sunken construction. The construction will extend down to the water-inhibiting layer. This construction method will make it possible to safely widen the road without any risk of the film breaking.

3.4 Indicative schedule

Milestones

Based on the current schedule, a number of important milestones are listed below for the Utrecht Ring Road project. Interested parties will not be able to derive any rights from the schedule below and the Directorate-General for Public Works and Water Management reserves the right to change this schedule. The milestones below are therefore indicative. Every effort will be made to stay on schedule.

Milestone	Date
2020 planning procedures order signed	Autumn 2020
Start of the tendering process for contract South	Q4 2021
Awarding of contract South	Q2/Q3 2022
Opening	Q2 2028

4 Market consultation

4.1 Procedure

4.1.1 *Schedule*

The Directorate-General for Public Works and Water Management has drawn up the following schedule for the present market consultation:

Activity	Date
Send out invitations with the market consultation document	10 March 2020
Last date to ask questions about the market consultation document	16 March 2020
Publish Summary of Additional Information and Changes	18 March 2020
Last date to register to participate	24 March 2020
Plenary meeting as part of the market consultation	26 March 2020
Last date to submit completed questionnaire	7 April 2020
Invitation to attend verbal meetings	14 April 2020
Dates for any verbal clarification meetings	20 and 21 April 2020
Publication of general report	June 2020

Interested parties will not be able to derive any rights from the schedule above and the Directorate-General for Public Works and Water Management reserves the right to change this schedule. The schedule above is therefore indicative. Every effort will be made to stay on schedule.

4.1.2 *Application*

Each interested market party that complies with Section 2.3 and believes that it can contribute to the market consultation is requested to register, stating his/her name, the name of his/her organisation and his/her position, via the message module on TenderNed.nl before the 'Last date to register' referred to in Subsection 4.1.1. To ensure that discussions involve the widest possible mix of participants, a maximum of three participants per organisation will be permitted to attend. Any interested market party that registers via TenderNed will automatically qualify for participation in the market consultation day.

4.1.3 *Questions about the market consultation document*

Market parties will have the opportunity to ask questions about any ambiguities in the market consultation document. It is hoped that this will ensure that all communication circulated about the market consultation is transparent and clear. If parties have any questions about the market consultation document, they may raise them by email via stan.van.veenendaal@rws.nl before the 'Last date to ask questions about the market consultation document' referred to in Subsection 4.1.1. The Directorate-General for Public Works and Water Management will answer the (anonymised) questions submitted by market parties in a Summary of Additional Information and Changes.

4.1.4 *Plenary meeting*

Once the Directorate-General for Public Works and Water Management has familiarised itself with the parties that have registered, the plenary meeting part of the market consultation will take place from 09:30 to 12:00 on 26 March 2020. The

exact venue will be announced in the invitation you receive after you register. The Directorate-General for Public Works and Water Management will also invite you to attend the lunch afterwards.

4.1.5 *Submission of questionnaire*

Each interested market party that complies with Section 2.3 and believes that it can contribute to the market consultation will be asked to submit answers to the questionnaire (to be made available on 26 March 2020) via the message module in Tendered.nl before the 'Last date to submit completed questionnaire' referred to in Subsection 4.1.1.

4.1.6 *Verbal clarification of written answers*

Once the Directorate-General for Public Works and Water Management has familiarised itself with the written answers to the questions submitted, it may decide to proceed to invite a number of market parties to attend individual clarification meetings. Market parties should note that they are not entitled to an individual meeting of this nature and that they will not achieve a preferential position by attending an individual meeting. Nor will the Directorate-General for Public Works and Water Management be obliged to organise meetings of this nature. Any such meetings will take place during the period referred to in Subsection 4.1.1.

4.1.7 *Conclusion of the market consultation and feedback on results*

The market consultation will conclude on the date referred to in Subsection 4.1.1.

The Directorate-General for Public Works and Water Management will conclude the market consultation by publicly publishing a report about the market consultation on www.tendered.nl. The report will set out what the Directorate-General for Public Works and Water Management considers to be the most important conclusions to emerge from the market consultation. The Directorate-General for Public Works and Water Management explicitly advises market parties of the following in connection with the report referred to above:

1. The report will be published publicly. Market parties will grant the Directorate-General for Public Works and Water Management permission to use their answers and other information and/or data provided by them in this report;
2. The above-mentioned answers and other information and/or data will be anonymised in the report. However, the report will state the names of the participating market parties;
3. The report will set out the conclusions drawn by the Directorate-General for Public Works and Water Management. The draft versions of the report and its contents will not be discussed with participating market parties. However, the report will state that the report reflects the views of the Directorate-General for Public Works and Water Management, which views the participating market parties may not necessarily share.

4.2 Confidentiality

The Directorate-General for Public Works and Water Management will treat the input provided by participating market parties as confidential. The Directorate-General for Public Works and Water Management will only show this information to employees and consultants who are directly involved in the market consultation and/or tendering process, unless statutory regulations require the Directorate-General for Public Works and Water Management to disclose the information in question to other

parties too. However, the Directorate-General for Public Works and Water Management will be entitled to use the input provided by the participating market parties to prepare tender documents.

The Directorate-General for Public Works and Water Management will not include any specific references to participants or commercially sensitive information in the tender documents.

4.3 Other provisions in relation to the market consultation

The market consultation does not form part of the tendering process. To ensure that participants in the market consultation do not gain an unfair advantage, the Directorate-General for Public Works and Water Management will ensure that all information shared during the market consultation continues to be accessible during the tendering procedures.

During the tendering process, no distinction will be made between parties that did or did not take part in the market consultation.

The information shared in the current market consultation may be different to information that is provided later (in the context of a tendering process or other procurement process). No rights may be derived from the information provided in the context of the market consultation. This information will be indicative and intended solely to improve the quality of the market consultation.

The Directorate-General for Public Works and Water Management will not make any form of payment to participants in the market consultation.