

Information about rock mass disposal

PlanID NO201703



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1. About the disposal

The Norwegian Public Roads Administration (NPRA) and Bane NOR (BN) are planning the joint project “E16 and the Voss Line Arna–Stanghelle”. The new solutions for the road and railway to a large extent involve tunnels. We are seeking contact with interested parties who wish to buy/take over rock masses generated from the project. The total surplus of rock masses in the project amounts to 10–11 mill. m³ (volume measured in filling). The invitation is part of our work to find the most socially beneficial way to use surplus rock masses.

Initially, the NPRA/BN wish to sign letters of intent with qualified parties who signal their interest. One qualification requirement in the invitation is that the interested party wants to buy/take over a minimum of 100,000 m³ tunnel rock material.

Read more about the project here:

<https://www.vegvesen.no/Europaveg/e16banearnastanghelle>

2. Time perspective

The project is included in the National Transport Plan for 2018–29, scheduled to start after 2024. Before approved plan data and a total financial package are in place, it is not possible to specify exactly when the construction work will be carried out and the rock masses available. Extraction of rock masses from the construction site will probably take place over a period of four–five years.

3. Type and quality of masses

The tunnels will be excavated using the drill–and–blast method, not by tunnel boring machine. Masses generated will then mainly be suitable as filling material. More detailed information about rock masses and quality is given in a separate memorandum (Sweco, 2019) and a rock type map that is enclosed with the invitation. On request we can provide detailed reports on examined rock samples.

Masses from tunnel blasting have a smaller share of coarse chips and a larger share of fine–grained material than from regular stone quarries. Blasted rock will contain remnants of explosives containing nitrates and ammonium as well as nitrogen compounds. The masses may also contain remnants of plastics. During the excavation of tunnels, there will be rock masses left on the bottom (floor) of the

tunnel while the tunnelling work proceeds forward (construction road surface). These masses will be wet when carried out of the tunnel, and contain significant amounts of fine-grained material, up to 5 % of the tunnel mass.

4. Interface

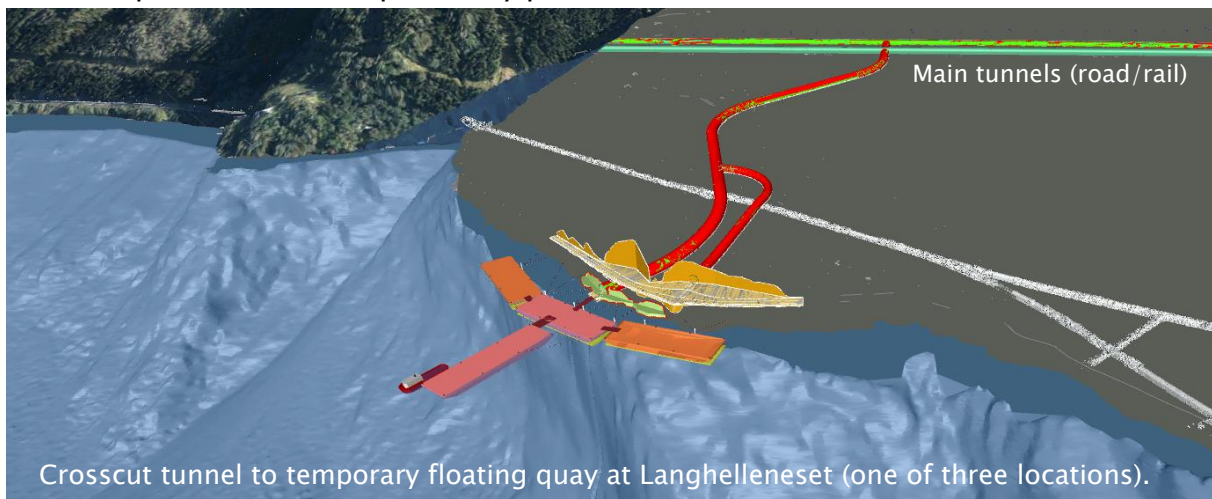
Normally, the interface will be that the Construction Client (the NPRA/BN) is responsible for transport of masses to the reloading point or an agreed interim storage area near the tunnel mouth/quay, while the receiver is responsible for the reception, transport and further approved deposit/processing of the masses.

The receiver must have infrastructure for reception, with sufficient capacity with regard to continuous operation of the project Arna–Stanghelle. The NPRA will normally not process the masses before delivery.

The recipient is responsible for ensuring that the required plans and approvals for its own project are obtained before delivery starts. Depending on the solution chosen and the use of the masses, the NPRA/BN in negotiations will discuss further details related to the reception of masses and interface between the parties involved, as well as financial issues if applicable.

5. Transport

Minimum 2/3 of the surplus rock masses will be brought out to temporary floating quays through tunnel crosscuts. Most likely there will be three such crosscuts to the fjord, one for each of the three main tunnel stretches. Maximum 24h–production per crosscut will be 3–3.500 pfm³, or approximately 10.000 tonn. The Construction Client wishes to facilitate further transport of surplus masses by barge/ship (sea transport) to external receivers. In addition NPRA/BN also applies to deposit rock masses in the fjord from the temporary quays. It may be an option that parts of the mass surplus can be transported by public road.



For transports by sea, the NPRA/BN will be responsible for and cover the cost of establishing a temporary quay/loading facility, as well as loading. For barge transports to deposit sites/reception facilities relatively close to the construction site, it may be an option that the NPRA/BN also handle the transport while the receiver covers the costs of this. For longer sea transports by ship, the receiver itself will be responsible for transport vehicles (ships) and transport costs to its own approved reception facility. For transports by public road, the receiver will be responsible for loading and transport from the agreed interim storage area. The receiver of the masses will be responsible for ensuring that all transports after reception of masses take place in accordance with applicable rules and regulations, and that existing roads, structures etc. have sufficient bearing capacity.

6. Capacity requirements

The qualification requirement in the invitation is that the interested party wants to buy/take over a minimum of 100,000 m³ tunnel rock material. Minimum reception capacity has been set to 5,000 m³/day based on a 6-day week. Emphasis will be placed on the ability of interested parties to offer stability of reception, to eliminate the risk of delays in planned deliveries.

7. Required information

The interested party must, in its letter of interest to the NPRA/BN, provide the following information:

1. Planned use of masses
2. Location
3. Possible access to the reception site
4. Assessment of appropriate transport method for transport of masses from the construction site to reception site.
5. Brief description of reception site status: remaining parts of the planning process, ground investigations etc., and plans for subsequent use.
6. Estimated volume capacity / desired volume of masses (min. 100,000 m³).

8. Address for letters of interest

The letter of interest should be sent by email to olalof@vegvesen.no

Please include «Interessemelding, Arna–Stanghelle» in the email subject line.

9. Criteria for selection / agreement

Based on the received letters of interest, the NPRA/BN wish to open a dialogue with one or more parties who together cover the needs of the project. Important selection criteria will be:

- The use of the masses for purposes for public benefit will be given priority
- Capacity /safety for stable reception
- Transport impacts: traffic safety, environment, strain on the road
- Financial conditions

The NPRA/Bane NOR initially wish to enter into a letter of intent with relevant parties. Such letters of intent will be renewed and confirmed at regular intervals until binding agreements are signed, that regulate all aspects of the disposal.

Letters of intent may be established for a larger total volume than what is actually available. Regardless of signed letters of intent, the NPRA/Bane NOR have the right to enter into agreements with other parties that signal their interest while the project is in progress.

Questions about the invitation may be directed to:

Olav Lofthus (NPRA), Phone (0047) 55 51 62 12 or olalof@vegvesen.no

Gunnar Söderholm (NPRA), Phone (0047) 57 65 57 89 or gunsod@vegvesen.no

Statens vegvesen / Bane Nor