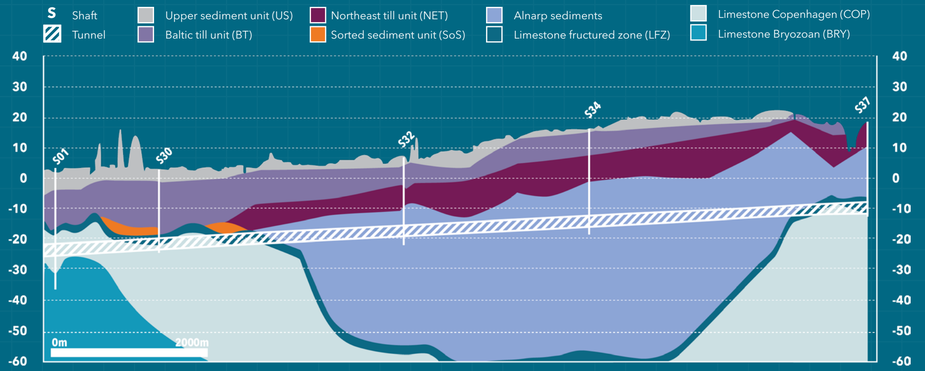
Construction in well-researched geological conditions

Within the scope of the new wastewater system MAXIMA, an approximately 18 kilometres long tunnel system will be constructed about 20–35 metres underneath the localities of Arlöv, Burlöv, Hjärup, Lund and Malmö.

The tunnels will be excavated with tunnel boring machines (TBM), a proven technology that has been used in other projects with similar geotechnical conditions in the region. The Southern tunnel, including the micro tunnels, will be excavated in limestone and sediment. The geological conditions for the Northern tunnel are illustrated below.



Geological conditions along the Northern wastewater tunnel.

The Southern wastewater tunnel
Location: underneath Malmö to Sjölunda wastewater treatment plant
Length: 5.5 kilometres
Placing: 20–35 metres below ground
Internal diameter: 5 metres
Storage capacity: 100 000 cubic metres
TBM technology: Earth Pressure Balance (EPB) Segmental Lining

The Northern wastewater tunnel
Location: from Källby in Lund to Sjölunda wastewater treatment plant
Length: 10.5 kilometres
Placing: 20–35 metres below ground
Internal diameter: 3 metres
Storage capacity: 80 000 cubic metres
TBM technology: Earth Pressure Balance (EPB) Segmental Lining

Micro tunnels
Length: a total of 2.4 kilometres
Placing: 15–25 metres below ground
Internal diameter: 2 metres
TBM technology: Earth Pressure Balance (EPB) Pipe Jacking

MAXIMA

One of southern Sweden's largest infrastructure investments of our time.

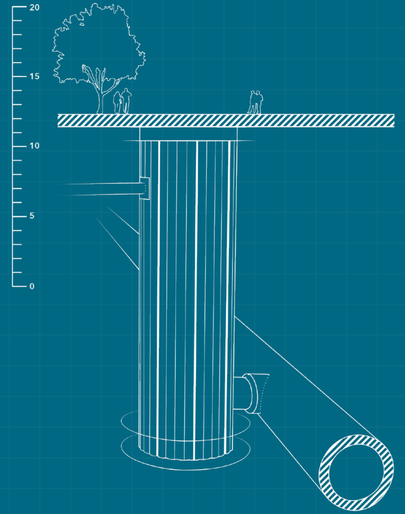
55°37'58.4"N, 13°02'27.6"E

VASYD MAXIMA

Building on history

For a better future

The MAXIMA infrastructure investment is a shared regional solution for sustainable, robust wastewater treatment for the future. This wastewater treatment system will include several interconnected parts – a wastewater treatment plant with new outlet pipes, two main wastewater tunnels and two micro tunnels, a number of shafts along the tunnels, a major pumping station, and pressurised wastewater transfer pipes.



Shafts
Southern wastewater tunnel: 11 shafts
Northern wastewater tunnel: 4 shafts
Size: typically 4–15 metres in diameter but with exception of two launching shafts, one of which will be 20 metres in diameter and the shaft closest to Sjölunda with diameter 45 metres in diameter for building the new pumping station
Depth: 18–37 metres
Application: tunnelling, evacuation during the construction phase, connection of the existing pipe network, construction of a new pumping station and access for operation and maintenance

2025 – Submission of environmental permits

2026 – Launch of procurement

2028 – Construction of tunnels and shafts

2033

2035 – MAXIMA completed

Looking for top contractors

The development of MAXIMA is VA SYD's first entry into constructing deep underground wastewater tunnels, and will provide new knowledge to our organisation.
To ensure a successful implementation, VA SYD want to join forces with the contractor with the very best ability to construct a sealed tunnel constructed in limestone and sediment, in urban as well as agricultural areas.

Do you want to be part of building a sustainable future in southern Sweden?

We are VA SYD

VA SYD is one of Sweden's largest organisations working with water and wastewater treatment, supporting environmentally smart solutions in the municipal development. Our operations are open 24/7, has over half a million customers and a turnover of one and a half billion SEK per year.

Procurement

Our legal framework includes the Public Procurement Act (LOU) and the Act on Procurement in the Utilities Sector (LUF).

The contractual model for the subproject Tunnels and shafts will be design and build, carried out as a turnkey project – with the main contractor entering once the basic design is completed. The compensation form will be unit price contract.

Scan the QR code to get the latest information about MAXIMA.

maxima.vasyd.se

VA SYD MAXIMA