

# Leidsche Rijn Sewage Treatment Plant, Utrecht

**Client:** Hoogheemraadschap De Stichtse Rijnlanden  
**Design:** DHV Water bv / BAM Infraconsult  
**Construction:** BAM Civiel bv  
**Contract value:** € 10,384,000  
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## BAM Civiel

The sewage treatment plant built for the Leidsche Rijn urban development area in Utrecht has the capacity to clean the waste water generated by up to 150,000 inhabitants in this new town. The contract covered the waste water intake facility and various buildings, tanks, wells and foundations for plant operation and sludge processing, as well as an access bridge and site layout. The plant consists of two active sludge tanks (aeration circuits), each nine metres high, and two settlement tanks. The four tanks are all nearly 50 metres in diameter. The active sludge tanks were built into the ground. Since drainage is not permitted in this area, the sludge tanks, intake facility, site wells and underground cast-iron pipes were built/installed in a construction pit using sheet piling

and underwater concrete. The underwater-concrete foundations are two metres thick and act as a weighted floor to resist upward forces. The other tanks, buildings and installations were built on piles. The 160-metre-long external walls of the active sludge tanks were each cast in eight sections. The inner walls were also made at the same time. These divide the tanks into compartments in which the various treatment stages take place. Most of the in-situ concrete walls used prefab reinforcement cages and were manufactured on five parallel production lines because of the short construction time available.