

## ***A “twin pack” of cast iron pipes on the banks of the river Maas***



### ***Venlo puts its money on ductile cast iron sewage pipes***

In Venlo, the main town in the northern part of the Dutch province of Limburg, the “Maaswaard” project, to which the public response has been very favourable, has been in the process of implementation since the beginning of the year. The town has 90,000 inhabitants and in the south, apartment blocks, containing more than 100 flats, and a range of social and welfare services, businesses and surface and underground car parks are being built on the banks of the river Maas to the designs of architects Benthem Crouwel. As part of the preparatory measures, extensive soil remediation work has been done on the site on the floodplain of the Maas and during this an old wall of the town came to light. This delighted the municipal archaeologists in Venlo but the companies doing underground work were not so happy, because it meant there were slight delays before they could begin work.

Then, in November 2008, the time had come. The remains of the town wall gave up their star role and ductile cast iron pipes took over. The Ploegam BV company could start laying the pipe, in which there is free surface flow and which replaces an old pipe which is no longer serviceable. The company handling the below ground installation was very well prepared in advance for the laying work by the Buderus Applica-

tions Engineering Division. Along its route, there was provision for the pipe to pass below the dykes which protect the town from flooding if high water levels occur in the Maas. For this reason, the customer, namely the municipality of Venlo, together with the Rijkswaterstaat water authority and the water supplier Waterschapsbedrijf Limburg, placed the very greatest importance on a reliable pipe material being used. Any possibility of damage to the sewage pipe had to be ruled out in the event of floods or, if the worst came to the worst, of a dyke breaking.

In the preliminary negotiations, BGW, together with its Dutch sales partner SAMSON APPENDAGES, was able to convince the customer of the large safety margins provided by the ductile cast iron pipes and the BLS® joint.

348 metres of DN 1000 ductile cast iron sewage pipes of wall thickness class K9 were laid. In the past, the sewage treatment plants have become overloaded at times of heavy rainfall, and because of this the decision was made to lay the new pipe as a twin pipe for a length of 200 metres. In this way excess rainwater can be conveyed straight into the Maas through the second pipe, which acts as an overflow.

The work was successfully completed after an installation time of about two months.