

HOBAS Case Study

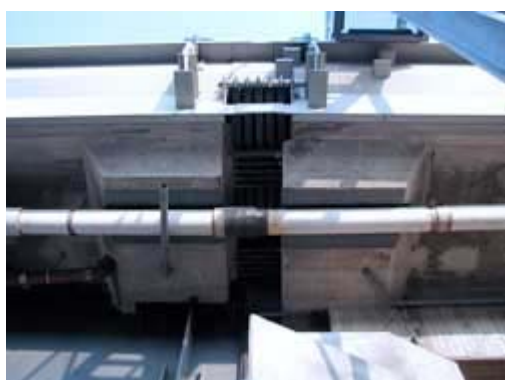
Tackling Bridge Drainage

The North Bridge in Vienna, a busy route between the 20th and 21st districts, was in urgent need of repair - not least the surface water drainage system.

With their kilometre long spans, Vienna's bridges over the Danube are among the largest in Austria. Due to the physical dimensions involved, the surface water collecting on the multi-lane highways in heavy rain is therefore not to be underestimated. Tire abrasion, grit and other residues mix with the water to form a 'cocktail' that has to be drained and disposed of properly. Little thought was previously given to this



problem anywhere in the country and the dirty water simply went down an open drain or ran off somehow. Increasing environmental awareness means that the problem of storm water run-off from roads is finally being addressed. In fact, HOBAS CC-GRP Pipe Systems have already proved their worth in this application at the Lueg Bridge on the Brenner Pass highway.



At the beginning of 1996 the new drainage system on the Northern Bridge was commissioned. The advantages of HOBAS CC-GRP Pipe Systems for such projects are obvious. Low weight is vital for suspension, while the length of 6 meters facilitates and speeds up installation. Insensitivity to temperature fluctuations and excellent UV resistance guarantee problem-free function and long

service life. The pipe was suspended under the road on both sides of the Northern Bridge using stainless steel hangers.

Water drains from the road through intake screens and pipes into the main. From there it flows through various pipes at the piers and finally into the storm water sewer. Mud and oil

traps ensure that critical substances are removed before they can do any harm. This not only protects the groundwater, but also solves another wastewater problem.

Year of Construction	1995/96
Duration of Construction	2,5 months
Length of Pipes Laid	1,850 m
Pressure Class	PN 1
Diameter	DN 200- 400
Stiffness Class	SN 5000 - 10000
Method of Installation	with a crane from the bridge
Application	Road and bridge drainage
Client	Vienna City Council Department 29
Contractor	RAB, Maria Lanzendorf, Austria

Feature

- Stainless steel hangers
- Pendulum design to compensate for expansion in the North Bridge and pier movement
- Dilation couplings with lubrication capability
- Low weight: quick pipe laying, small cranes were sufficient, thus saving costs
- Excellent resistance to impact, chemicals, temperature fluctuations and UV light
- Sand exterior of pipe favored due to proximity of the colour to the environment
- Pipes can easily be cut on site if necessary