Project: Woodsgate Park Culvert, Bexhill on Sea

Role: Supply and application of Warren S 301-14 XT Epoxy Resin

Client: Volkerstevin working on behalf of the Environment Agency

The culvert at Woodsgate Park, Bexhill is made up of a brick section (similar in appearance to a Victorian sewer) leading in to a steel Armco section. The culvert had been inspected by the Environment Agency and noticeable deterioration had been identified, particularly to the steel Armco section. Furthermore, a resident's garden which is adjacent to the culvert had reported some subsidence.

The culvert is 75 metres long (43m steel & 32m brick) with a chamber adjoining the two sections. The Culvert runs adjacent to the A2690, underneath the Woodsgate Park overpass.

The initial plan was to coat the Steel Armco section of the culvert, however, after the inspection we advised coating the entire culvert to achieve the best results. This option arrests the deterioration, extends the life of the culvert and achieves the loading bearing capacity required by both sections.

The equipment was delivered to site which included, the coating Rig and Resin, Container to house the Resin on site, Jet Sprayer and Water Pumps.

A number of challenges were faced on arrival to site, including over pumping through the Culvert to mitigate any road closures while leaving the Culvert in a workable condition to continuously complete the spraying.

Had this been CIPP, then Road closures would have been inevitable due to over pumping having to circumnavigate the Culvert.

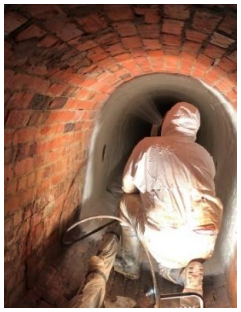
The Buckhurst team Jet cleaned the entire Culvert, situated the Rig at the closest point to the Culvert and began the spraying process. The team masked around both ends of the Culvert so they could do a wrap-around spray to give a complete finish on the first course of Bricks on the outside of the Culvert at both ends.

Two different thicknesses were applied to the two sections. The Steel Armco section was sprayed at 14mm thickness and the brick section and chamber at 6mm to achieve the required load bearing capacity. (41.85kN/m2 for the Steel section and 131.5kN/m2 for the brick section)

The Environment Agency specified a 50 year design life, for which Warren S 301-14 XT resin is recommended.

The spraying was finished on the Thursday and de-mobilisation was complete on the Friday morning. The over pumping pipes were removed leaving the site in good condition for Volker to finalise their own de-mobilisation. A great job completed in 2 weeks to the satisfaction of a very happy customer.

Before

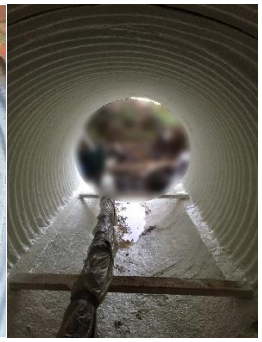


During

After

Before

During



After