

PMC Hitchin conduct hydrostatic testing across Kings Road in Fulham

In August, PMC Hitchin were approached by tRiIO to Hydrostatic test a 700m section of 630mm HDPE pipe. Bob McKinley explains: "At the time this seemed like a straight forward test that we've carried out on numerous occasions. However, we had never tested high pressure plastic pipe this big before, the largest being 450mm.

The next day I went on site and got to understand the technical issues involved. The pipeline had been inserted in a decommissioned 36" main on the Kings Rd. This is one of the busiest roads in West London, starting at the old Fulham Gas works and finishing outside the well known 'Worlds End' Pub. The traffic diversion was creating long hold ups in West London featuring on Radio 2 everyday and started all the way back at Earls Court so it was quite high profile. Safety was of utmost importance as the pipe was to be tested to 10.5 bar in the middle of a really busy street in London. Usually this is done in remote locations, if anything was to go wrong it would have severe consequences.

Another important aspect was that there was 65m of 600mm steel laid across the Stanley bridge that ducked and dived and was full of short radius bends. The size of the foam pig size was critical as there was an inside diameter difference of 80mm from the plastic to steel pipe. If it got stuck in a bend or valve, to dig it out would have been a very serious problem as all the reinstatement had been carried out on the bridge. Loading of foam drying pigs was going to be an issue as well as the pigs were 1m long and 150mm wider than the pig trap itself.

We came up with a low pressure hydraulic cylinder used for trailer tail lifts that could extend from 1m-2.7m with a 6" dome end on the front that would push the pigs slowly from a fixed point into the pig trap ready for launching with air.

Delivery and sitting of plant also had to be planned properly as a compressor the size of a Transit



van and surplus water catchment tanks were craned into position which partially closed the Kings Road.

150,000 litres of water was used for testing and delivered by seven 50 tonne tanker lorries supplied by Veolia. This was pumped in using a large high flow pump that could deliver 180,000 litres an hour. It was critical that the tankers would drop a continuous flow of water which meant they had to be strategically placed in the right place at the right time as there was only enough room for three on site at a squeeze. We had three placed on site the night before the filling, and held four at Northampton which started to arrive bang on time the next day just as the third had finished unloading.



Capital Delivery were also working in the area, carrying out a big 24" high pressure diversion project at the Fulham AGI end of the job. We had to liaise and work closely with them so as not to get in each other's way especially when we were filling the pipeline and there were seven tankers moving around site.



The pipelines construction was completed on Monday 19th September and we started the next day. The deadline for the main to be commissioned was Monday 10th October and no later which gave us three weeks to complete. There was a fifteen day air test after the hydrostatic which would then give us six days minus two days for prep. So four days to fill, test, de-water and dry the pipe. It was completed on time with no problems arising.

We handed the pipeline back to tRiIO on Saturday 8th October and its was commissioned and became live on Monday 10th October.”

