

Part of the Plowman Craven group

St William



King's Road Park - Gasholder Monitoring

Client:

St William

WHAT'S THE STORY?

King's Road Park is a 16-acre former National Grid site and part of the Fulham Riverside Regeneration Area. Once complete, the development will deliver more than 1800 new homes and 100,000 sq ft of commercial space

Plowman Craven's PC Monitoring division has been involved from the beginning, providing a bespoke solution for gasholder No.2 - as well as other listed buildings on the site that monitors potential structural movement during piling and excavation works.





Read how Plowman Craven delivered a comprehensive BIM model of the King's Road Park Gasworks Redevelopment

AT A GLANCE:

- Bespoke monitoring solution
- Automated & manual structural monitoring
- Web-based monitoring dashboard
- Grade II-listed structures

What we did.....

PC Monitoring worked closely with the client, St William, to develop an automated solution that could monitor the 12 gasholder stanchions for inclination/convergence and divergence. Customised bracketry was developed to enable wireless optical displacement sensors and biaxial tilt sensors to be attached to this unique structure. This instrumentation is designed to measure both tilt of individual stanchions and distances to stanchions opposite to sub-millimetre, pre-defined trigger levels set by the client's structural engineering team.

The data collected is logged remotely and transferred to PC Monitoring's web-based monitoring dashboard, providing the client team with an early warning to assist with risk mitigation and help protect this heritage structure.

In addition to the automated monitoring system, a manual monitoring regime was implemented to gauge global movements of the stanchions and to measure the water levels during dewatering activates. Dewatering was required so the client could understand how the structure would behave when pressure is released.

The monitoring solution also included the manual monitoring of the 1856 Engineers Office (also Grade II-listed). PC Monitoring installed precise levelling barcode stripes, total station monitoring targets and crack meters to understand both lateral and vertical movements that might occur during the piling and excavation activities. Manual monitoring surveys take place on a monthly basis.

Link to the web-based version

About Plowman Craven

Plowman Craven provides integrated measurement and consultancy services to the property and infrastructure markets, pioneering the use of technical innovation to deliver proven expertise and trusted results throughout the project lifecycle.

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