## CASE STUDY



Part of the Plowman Craven group



# **Nova Victoria Phase 1**

**Client: Mace** 

## **About the Project**

Nova Victoria is a 897,000sq ft mixed-use scheme delivering Grade-A office space, contemporary high-quality apartments and high-profile retail. It will also provide numerous eateries and restaurants, making it London's next up-and-coming Food Quarter. The development will consist of five buildings within a new pedestrianised landscape public space opposite Victoria mainline railway station in the heart of London's West End.

We worked closely with the client and consulting engineer to provide a cost-effective automated and manual solution.

### Approach

The size and depth of the basement excavation required to facilitate a development of this nature raised concerns over pile and ground movement surrounding the site. The specialist engineering team at Plowman Craven was able to provide a mixed automated and manual monitoring solution to meet the engineer's specification.

Working with the projects engineers, we were able to offer a best-value solution, providing high-frequency automated monitoring in critical areas of the secant wall, and manual inclinometers read less frequently in lower risk areas. Data from the inclinometers was available to stakeholders via web-based software, and alarm criteria set as an early warning.

The deformation of the secant wall beyond design parameters would indicate possible damage to structures bordering the site perimeter. As a secondary monitoring system, precise levelling points and 3D monitoring targets were installed in the roadway and on structures surrounding the site.

## Instrumentation and Services:

- 12 Automated Inclinometers
- 12 Manual Inclinometers
- Precise Level Points
- 3D Monitoring Targets
- Web-Based Software
- Control and Topographical Survey

#### About PC Monitoring

PC Monitoring provides manual and automated monitoring to the construction industry. With a forward-thinking and progressive approach, we deliver expert advice and practical benefits to clients requiring complete and seamless monitoring solutions.

Our construction monitoring services are also fully integrated with PC Enviro, Plowman Craven's environmental monitoring division for centralised installation, management and delivery of a complete package.

#### **PC Monitoring**

115 Southwark Bridge Road, London SE1 0AX Tel: (0) 20 7490 7700

#### **Plowman Craven**

2 Lea Business Park, Lower Luton Road, Harpenden, Herts. AL5 5EQ Tel: +44 (0)1582 765566 www.plowmancraven.co.uk