

Southfields Station

LONDON - UK

Existing track monitoring at Southfields Station during redevelopment

SolData was appointed to provide a 'real-time' monitoring solution to ensure track safety during building work as part of the design and build project for the Step-Free Access works at Southfields Station (in close proximity to Wimbledon All England Lawn Tennis and Croquet Club) as part of the 2012 London Olympics upgrade.

The redevelopment works consisted of a new station control point, ticket office, and secure suite areas, and installation of a new MIP (Mobility Impaired Persons) lift, with associated supporting steelwork and cladding. It was of key importance during the installation of the new MIP lift on the platform that the integrity of the rails and platform structure was not compromised and that disruption to the safe running of District Line trains was kept to a minimum.

Sol Data installed its CYCLOPS automatic monitoring system on site in July 2009 for ongoing track and platform monitoring.

Birse Metro used the data supplied from automatic monitoring system to confirm the stability of the rails and the platform. The client presented reports to London Underground using the data recorded and displayed on Sol Data's Geoscope Software.

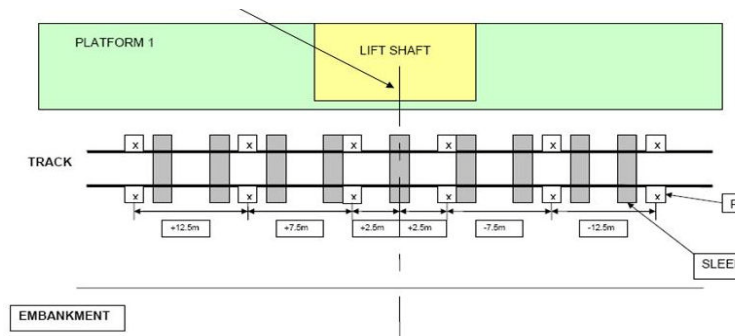
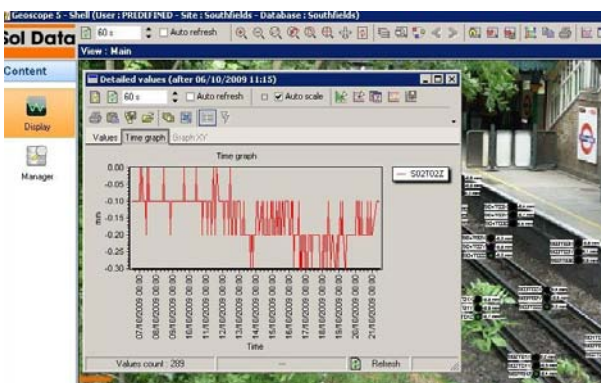
Of note is that the instrumentation demonstrated that prior to the commencement of any digging of the lift pit there was already some track movement in one area which was then investigated.

All data was processed automatically within the monitoring control office and stored on a central dedicated server. Birse Metro can access and interrogate the data via secure web connection using the Sol Data Geoscope software 24 hours a day.

The services comprised of:

- Design, installation, commissioning and maintenance of the monitoring system.
- Software programming including development of automated macro driven spreadsheets.
- Rapid technical maintenance response from Sol Data's London offices.

Below – A typical GEOSCOPE view.



OWNER :	NETWORK RAIL / LUL
CONTRACTOR :	BIRSE METRO
PROJECT DURATION :	JULY 2009 – DECEMBER 2009
SCOPE OF WORKS :	
<ul style="list-style-type: none"> • 1 nos. CYCLOPS monitoring 18 track sleeper and platform positions. • Additional reference targets positioned in and around the site to ensure the integrity of the monitored locations. • 'Real-time' monitoring and instant client access to all data via Geoscope. • SMS text, visual and audible alarms. • Remote archiving of all data on secure servers at Sol Data HQ. 	