Movement Monitoring

0310/MM/01 February 2019



1.0 The contractor will monitor adjacent structures and party walls for movement during the structural construction works. It is the Contractors responsibility to review the results of the monitoring as they are received and to consider the implications in relation to ongoing construction activities. In the event of any movement approaching the proposed limits the engineers, architect and party wall surveyors are to be informed and method of works to be reviewed and altered as necessary.

The proposed monitoring points are to be agreed with the Contractor and Party Wall Surveyors. For purposes of tender assumed target positions to be installed at front and rear facades as shown on drawing 0310/700.

- 2.0 The trigger levels are tabulated on drawing 0310/700 and are to be agreed with the Party Wall Surveyors.
- 3.0 The monitoring regime and frequency will be:

Site set up Demolition and basement excavation Installation of rear steel frame and jacking	 Bi-weekly to establish reference readings Weekly Immediately before and after steel installation, to be published prior to removal of temporary works.
Underpinning	- Weekly
Basement slab	- Weekly to continue for 4 weeks after casting
Remaining works	- Bi-weekly

Target monitoring to achieve an accuracy of +/- 1mm

- 3.1 The results of the monitoring are to be recorded and issued by e-mail to the engineer, contract administrator and party wall surveyors immediately after results have been recorded. The results are to be presented in tabular form and with graphs for each point plotting the readings taken against time.
- 4.0 The following actions are to be taken when indicated trigger levels are approached:
- 4.1 Green Continue monitoring. Contractor to consider rate of movement and relate to any visible signs of damage to building and adjacent buildings and to ascertain if additional measures are required to reduce further movements.
- 4.2 Amber Notify Engineers and increase monitoring to a daily basis. Rate of movement to be reviewed by Engineers and Contractor with consideration to current sequence of works and likely implications on further potential movement.
- 4.3 Approaching Red Contractor to stop all works and notify Engineers immediately. Contractor and temp works engineer to develop additional measures, such as enhanced basement propping and/or sequence revision to limit movement to an acceptable level.