

Grand Arcade, Cambridge

Our Services

- Site Investigation
- Raft Foundation Design
- Settlement Analysis
- Monitoring
- Engineering Advice



Geotechnical Advice and Analytical

For this scheme **CGL** is providing geotechnical services for the design of raft foundations plus advice on the interaction with neighbouring properties.

The Grand Arcade is a major city centre development in Cambridge. It comprises a 450,000 square foot retail redevelopment of an existing department store and adjoining land. In addition to a five storey department store and 50 shop units, a new Magistrates Court will also be incorporated into the development.

CGL undertook a state of the art supplementary site investigation, involving rotary coring, soil suction measurement and stress path testing, in order to augment existing information and to verify the high in-situ soil stiffness of the Gault Clay that underlies the site.

By using the data from this additional site investigation, and monitoring data from an adjacent site, a refined ground model suitable for the analysis of raft foundation options was developed.

Settlement analysis is being undertaken in conjunction with structural raft analysis to ensure that the correct response has been predicted.

Finally, **CGL** is providing damage potential assessments in relation to adjoining properties and assisting in the development of construction control criteria, in order to ensure that these properties are protected.

Client: Beatty Watkinson for Grande Arcade Partnership

Contractor: Bovis Lend Lease