



Case study 4: **site supervision service saves client £50,000**



The challenge

This development was designed to include high quality private housing, starter home units and apartment blocks for first time buyers. Because of the type of buildings (terraced houses, detached units and apartments all of which can be susceptible to differential settlement in uneven ground) the foundation construction required careful design.

The site was pocketed with ancient quarrying and lime kilns, and was the subject of intensive archeological investigation as a part of the planning consent.

KEY FACTS

- ▶ 260 unit development of private and social housing
- ▶ Traditional 2/3 storey housing and apartment blocks
- ▶ Greenfield site with areas of previous lime kiln workings, dating from medieval times
- ▶ Combination of traditional and pile & ground beam foundations
- ▶ GRM produce £170,000+ savings

The solution

Cost effective site management and design



GRM were commissioned to carry out a full site investigation which revealed complex natural and disturbed strata, all hidden below innocuous-looking fields.

Specialist pile and ground beam foundation designs were prepared for units in disturbed areas, with traditional deep trench fill foundations elsewhere.

The client took our advice to invest £10,000 in plot-by-plot investigations, resulting in a saving of £120,000 by avoiding piling.



GRM's inspectors provided full time supervision throughout the specialist pile and ground beam works and a tailored package of support during the traditional foundation construction. Areas of

works covered by GRM's team included quality control, testing of piling, authorisation of remedial works required to ensure QA standards were met and liaison with both NHBC and local authority inspection teams to ensure the relevant approvals were given and that planning conditions were signed off promptly.



By employing GRM's specialist team of site inspectors costs were controlled through close liaison with sub contractors, regulators and the site management team. Regular progress meetings were held to ensure that both programme and QA standards were met.

This service resulted in GRM's site supervision team becoming an integral part of the client's site management structure, throughout the construction phase.

Quality control issues were dealt with by GRM's site staff, allowing the site management team to concentrate on fast-track construction.

GRM's Construction Manager worked closely with the client's commercial team to review the specialist sub-contractors' claims. GRM were able to provide site report information which ensured that claims for additional costs were kept realistic.



Conclusion

The client's progressive approach to including GRM's full design and supervision package has ensured that the most cost-effective foundation solutions have been provided.

By incorporating GRM's site supervision team into the management structure on site, the client has allowed GRM to control on-site foundation costs, negotiate with regulatory authorities on the client's behalf and ensure that excellent standards of work are achieved.



During the closing negotiations with the client and their sub-contractors GRM were instrumental in achieving real savings of around £50,000, in claims for additional works from the client's sub-contractors. Without GRM's supervision it is likely that these cost demands would have been paid, as the claimed additional works would not have been monitored to the required level by the client's site management team, due to work pressures on this busy development.