

# MMP Design – Chartered Structural Engineers

## Review of RBKC Basements Publication Planning Policy Published July 2013

### Executive Summary

- Basements have been designed and constructed successfully throughout London for decades and the principle of retrofit basements is not new. A previous Scoping Study prepared by Arup Geotechnics in 2008 (Page 30 Paragraph 7, Conclusion 4) *“subterranean developments have been successfully achieved in London and elsewhere over many years. In general these successful projects have been undertaken by experienced competent teams who recognised the potential hazards and mitigated against them.”*
- Added to this, basement construction is subject to strict control under The Party Wall Act and schemes are comprehensively reviewed by an independent Chartered Engineer acting on behalf of an adjoining owner.
- It is normal to design basements to CIRIA C580 Damage Category 1 (fine cracks than can easily be treated during normal decoration) and that in layman’s terms this is the similar to the type of damage that can occur regularly as a result of seasonal ground movements.
- **There are no structural engineering reasons why a basement should be restricted to 50% of the garden area.**
- It is entirely unnecessary for RBKC to adopt a precautionary approach in effectively banning basements of more than one storey based upon unfounded structural concerns. It is a fact that constructing a second storey beneath a single storey basement scheme is normally more straightforward than constructing the initial single level because all of the temporary works will be in place along with the structural floor slab to basement level one.
- **It is not necessary to extensively modify the existing foundation of a listed building when a basement is constructed within the garden** and the original listed building is not underpinned, irrespective of the garden size; it is also perfectly feasible to design a basement within the garden of a listed building such that any damage is restricted to classification zero of CIRIA report 580 – hairline cracks having negligible structural implications.
- The detailed technical modelling together with soil reports, foundation trial pits and laboratory analysis enable highly accurate designs that are compliant with British Standard codes of practices and Building Regulations etc.
- **If all of these factors are considered and embraced by suitably qualified and experienced professional team, the construction of a retro-fit basement should pose no structural threat to the stability of the host property, nor any adjoining or adjacent buildings.**