

BATTLE McCARTHY ©

Consulting Engineers & Landscape Architects



PROJECT:

River Lane Petersham

CLIENT:

Berkeley Homes

ARCHITECTS:

Terry Farrell & Partners

BM SERVICES:

Structural Engineering & Building Services

CONTRACT DATES:

2002 - 2004

VALUE:

£4m (approx)

DESIGN BRIEF

The development at River Lane Petersham consists of three innovative houses and it was the client's requirement that the houses should be engineered to high standard. It was particularly important that the Structural Engineering was integrated with the Architecture, the Building Services Engineering and the Landscape Architecture so to reflect the client's aspirations and concern towards the environment.

DESIGN INITIATIVES/ACTIONS UNDERTAKEN

Terry Farrell and Partners were invited by Berkeley Homes to conceptually design three prestige contemporary homes at Courtyards, River Lane, Petersham. Their proposals were later implemented and Battle McCarthy were invited to provide structural and building services engineering services.

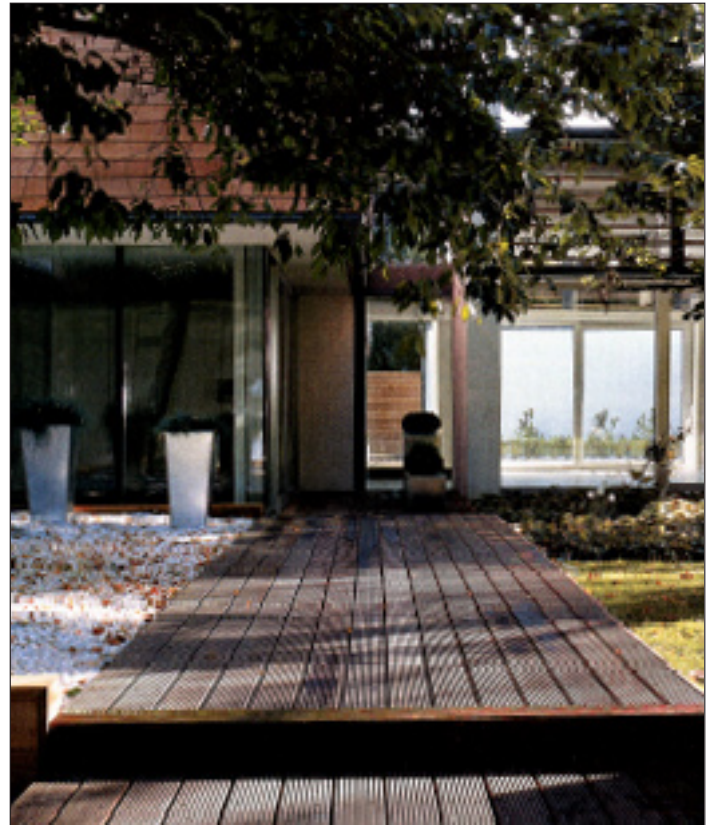
The site is very secluded, surrounded by established trees and is accessed from a long private lane. The local planning authority required a modest development, invisible from outside the immediate site.

Terry Farrell's concept was for three individual family homes grouped on site but with distinct private space. Internally the houses are arranged along a central double height gallery, with a dining room, kitchen, study and bedrooms. Since planning regulations restricted the houses' height the living room has become a double height garden pavillion.

The 2 storey north walls act as a boundary wall to the adjoining property providing privacy and acting as a passive thermal regulator. The enclosure formed by the elongated building forms a large garden into which the pavillion living room protrudes. The building layout ensures complete privacy with no internal or external spaces being overlooked.



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A number of building materials are used to create a high quality contemporary finish. Large expanses of white rendered walls are punctuated by timber and grey steel. Full height glass doors are used on every room to link the internal spaces with their stone and timber flooring.

The Primary structure was designed for a 50 year period (excluding roof/wall cladding) with planned maintenance periods. This is standard for a development of this nature.

The courtyards development is an important precedent in courtyard design. The basic principles of orientation, high density living, privacy and sustainability can be readily applied to the Terry Farrell's conceptual design for use in a wide range of applications. Such design principles also offer the opportunities for pre-fabrication for rapid high quality construction.

The key issues considered in formulating the various options were:

- Low energy demand
- Optimisation of structural efficiency
- Provision of flexible and adaptable building for future needs
- Optimisation of ease of construction
- Minimum dependence upon non-renewable energy sources
- Provision of structurally efficient system
- Use of high performance/quality material
- Appropriate design loading
- High workmanship standards
- Simplicity of element manufacture and assembly
- Reduction in quantity of materials, in manufacture time and in assembly time
- High occupancy comfort
- Personal control

The Courtyards homes were completed in 2003 to critical acclaim and significant press interest looks to signal an awakening in suburban family home design.