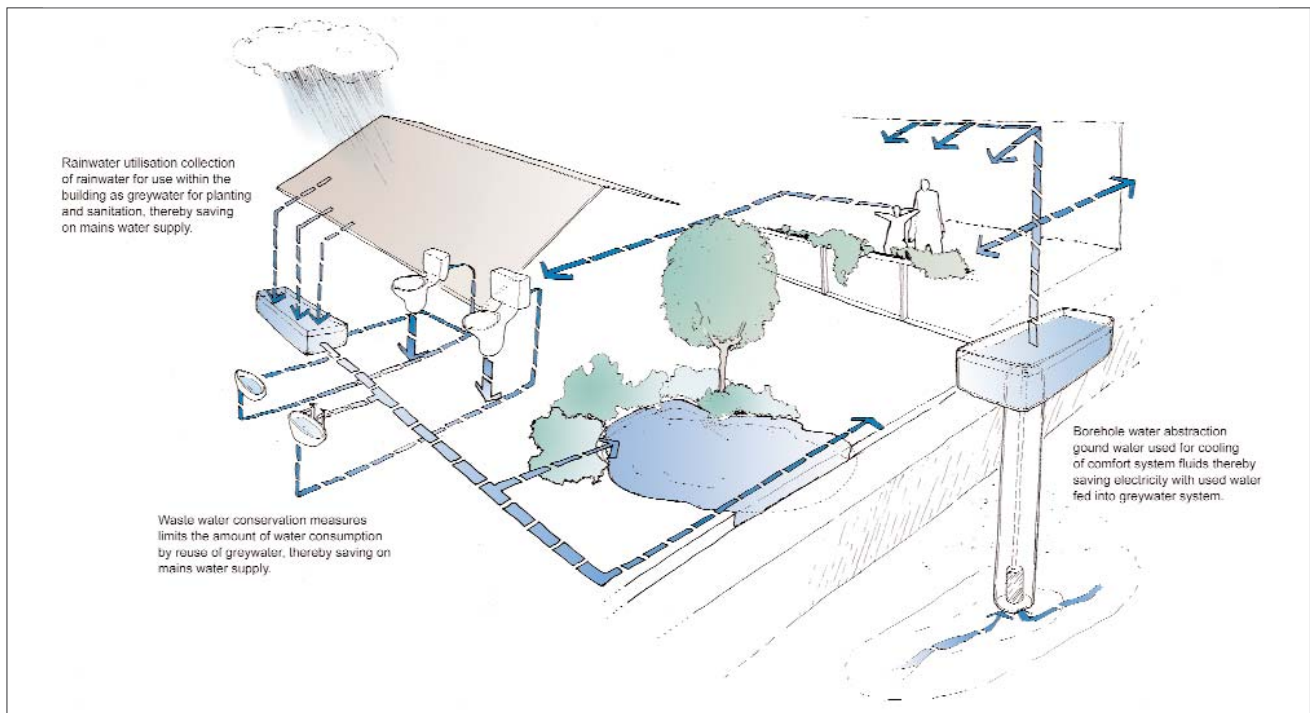


BATTLE McCARTHY©

Consulting Engineers & Landscape Architects



PROJECT:

Durand Close, Housing Development

CLIENT:

London and Quadant Housing Trust, London Borough of Sutton

ARCHITECTS:

BPTW Architects

BM SERVICES:

Civil and Structural Engineering, Mechanical, Electrical and Public Health Engineering, Environmental Analysis and Sustainable Masterplanning

VALUE:

Classified

DESIGN BRIEF

To undertake a major redevelopment of an existing housing development with significant restructuring and masterplanning of the street and property layout.

DESIGN INITIATIVES/ACTIONS UNDERTAKEN

In 2002 Battle McCarthy and BPTW Architects submitted design proposals for a competition to redevelop a 1960s housing estate in Sutton.

Durand Close is a mixed residence development with 295 dwellings, over half of which have 3 or 4 bedrooms. Despite the obvious appeal to families the area is unpopular with local residents; 80% of whom voted during consultation for complete demolition and rebuilding. Not only will the existing housing provision be replaced but further private sale residences will be made available with shared ownership opportunities. It is hoped that a greater mix of housing types will enhance the development and its popularity with local residents.

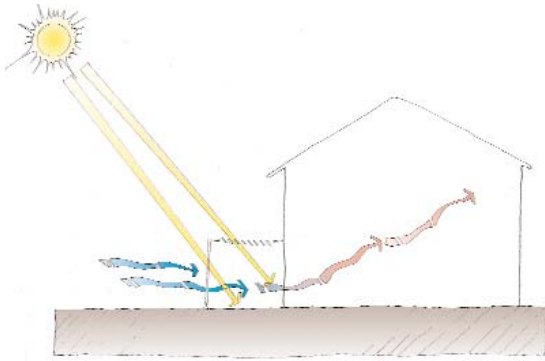
In order to replace the current provision whilst also enhancing the area a number of key principles were set out;

- **environmentally friendly homes**
to reduce energy costs and use low impact materials & processes that have less impact on the environment
- **homes to lifetime standards**
to adapt to the changing needs of families
- **secured by design standards**
to improve security and help residents feel safer
- **homes to high space standards**
good size rooms and good levels of internal and garden storage
- **houses with gardens**
increase number of homes with gardens and off street parking
- **immediate environment**
areas around the homes are well designed and maintained.

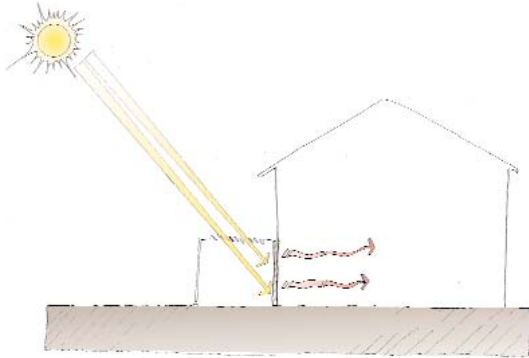
Battle McCarthy and BPTW Architects were shortlisted for the final competition stage, however lost out to a group led by Broomleigh Housing Association and Rydon Construction.

Masterplanning development has continued to focus on resident input with regular design panel meetings. After their appointment, in June 2003, Broomleigh opened a local information centre and in May 2004 masterplanning was completed and funding secured. The development is expected to be completed in 2007.

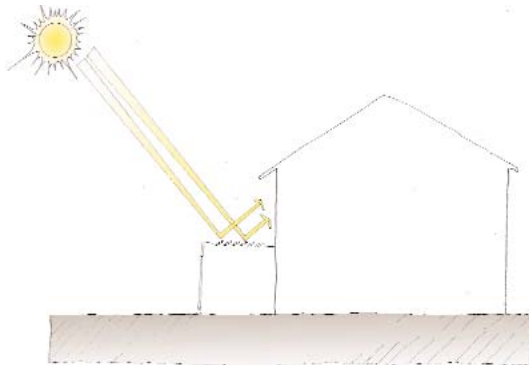
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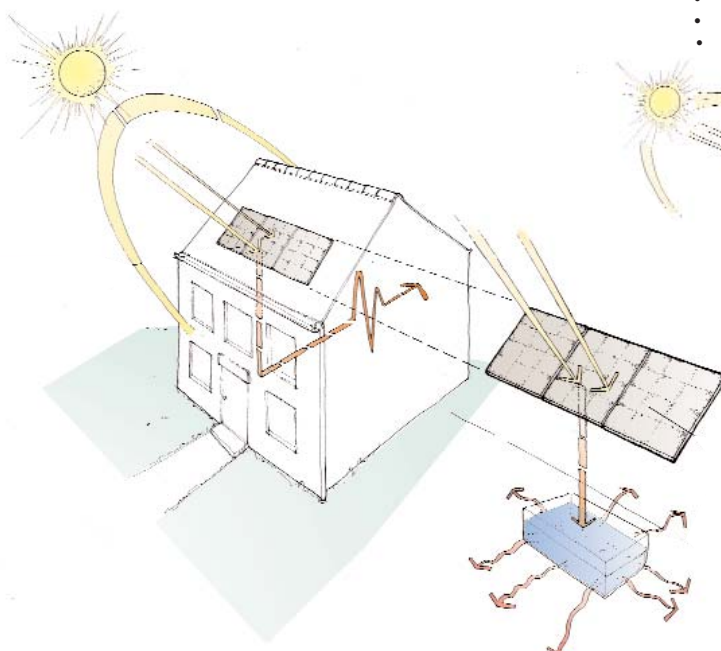
Winter thermal buffer



Winter use of thermal mass



Summer shading strategy



Roof PVs and solar thermal panels for onsite energy generation and hot water

Energy Targeting

The National Home Energy Rating (NHER) will be used with a target of 9.5, this ensures the energy and carbon efficient design of new dwellings and checks that affordable warmth targets are met.

An EcoHomes standard of 'very good' will also be targeted to assess the following:

- Energy
- Transport
- Pollution
- Land Use and Ecology
- Health and Well Being
- Materials
- Water

Building Technology and Construction

Dwellings will be built to maximise the use of natural daylight and ventilation with pre-engineered solutions enabling performance targets to be met and many benefits including:

- Reduced construction time, minimal impact on the local environment
- Improved efficiency - time and use of materials
- Less disruption, pollution and associated nuisance
- Reduced waste through efficient factory production, approximately 30% less than a conventional project
- Improved acoustic performance due module separation
- Good thermal insulation, lower heating bills and CO2 emissions
- Reduced maintenance
- Flexible and adaptable units (life time homes)
- Provide opportunities for employment and skills/training

Masterplanning

- a 'home zone' type layout will be adopted in order to improve pedestrian movement through the site, minimise the impact of the car and reduce the potential for joy riding
- opportunities to provide 'safer routes to school' and use of the river walkway through improved pedestrian and cycle routes through the site will be examined
- suitable links to the public transport system and accessibility to and within the site will be provided

The open space provision for public and private use will be improved providing:

- a range of private gardens, public/private spaces and community open space
- good quality imaginative landscape design
- flexibility of use throughout the year through design and amenity
- reduced crime and fear of crime
- improved views into and through the site

