

**Re: Land North West of Southdean Road, Huyton – Energy & Sustainability Statement**

**1.0 Introduction**

The proposed development site to the North West of Southdean Road, Huyton is 2.88 hectares of land situated within a largely residential area of Huyton. The site is bound by residential dwellings to the South, a church to the South West and a school to the North East with open fields to the north west boundaries, Please see Figure 1 below.

The site is currently vacant hardstanding and self-seeded scrub land.

**Figure 1 – Pre-development Site**



## 2.0 Development Proposals

The proposed scheme will deliver a mix of apartments and houses, creating a residential development of 137 dwellings and associated highways, infrastructure and landscaped areas. The site comprises a mix of one, two, three and four bedroom dwellings in a combination of houses, maisonettes and apartments as shown on the proposed site layout (see Figure 2).

**Figure 2 – Proposed Site Layout**



## **2.0 Energy Strategy**

The development will fall under the 2025 Lifetime Homes Standards of the building regulations. The approved documents for these new regulations have not yet been officially released and so assumptions can only be made at this stage, but the regulations pose a significant improvement in the base-line energy consumption and CO<sub>2</sub> emissions of new dwellings and will be assessed under the Home Energy Model for compliance.

Subject to the release of the Lifetime Homes Standards, in order to limit energy demand and carbon dioxide (CO<sub>2</sub>) emissions from the operation of the new dwellings, the following design features will be integrated within the scheme to enable occupants to lead a low environmental impact lifestyle:

- The proposed approach to emissions at the development will be through a fabric led energy strategy and efficient servicing in accordance with the principles of the energy hierarchy;
- Provision of air source heat pumps to all dwellings;
- Provision of A and A+ rated white goods (where applicable);
- Provision of a Home User Guide explaining the EU energy efficiency labelling scheme to assist in the purchasing of energy efficient white goods;
- 100% low energy internal lighting;
- All external space lighting to be provided by dedicated energy efficient fittings;
- Individual cycle storage will be provided for each dwelling to promote more sustainable modes of transport;
- Electric vehicle charging points provided to all dwellings.

## **3.0 Water Usage Strategy**

The buildings will be designed to reduce mains/potable water consumption and will include water efficient devices and equipment as follows:

- Provision of A rated appliances (where applicable);
- Specification of water-efficient fixtures throughout the scheme (flow restrictors and low-flow taps and showers, dual flush WC's and low volume baths);
- In order to reduce the demand for water, sanitary fixtures will be specified to achieve a calculated daily consumption of no more than 100 litres/person/day, exceeding the regulatory standard of 140 litres/person/day.
- Landscaped areas of the development will be irrigated solely by precipitation throughout all seasons of the year to reduce unregulated water consumption.

#### **4.0 Sustainability of Construction Materials**

The development will contribute towards the more efficient use of non-renewable material resources and to reducing the lifecycle impact of materials used in construction. This will be achieved by the selection of:

- Materials with low environmental impact throughout their lifecycle;
- Materials responsibly sourced from suppliers operating an Environmental Management System or procuring timber from FSC and PEFC sources will be prioritised;
- Consideration will be given to local sourcing of construction materials where feasible, which will contribute to the retention of the local housing characteristics of the area and minimise the impact of carbon dioxide emissions associated with the transportation of materials.

#### **5.0 Health and Wellbeing**

To enable the occupants of the new homes to lead lower environmental impact lifestyles and enhance their quality of life, the following measures will be delivered at the proposed development:

- Good levels of natural day lighting reducing the need for energy to light the dwellings;
- Private outdoor space will be provided to all dwellings in the form of rear gardens;
- An area of public open space (POS) encouraging residents to access outdoor green space, thereby creating a more socially sustainable residential development;
- All dwellings will comply with National Space Standards, ensuring that all dwellings are of a sufficient size and include minimum requirements for built-in storage;
- 18% of the overall dwellings will meet the requirements of optional regulation M4(2) for wheelchair accessible dwellings;
- A further 9% of the dwellings will meet the requirements of option regulation M4(3) for wheelchair user dwellings.