

Document Reference FD2406_102

**Proposed Residential Development for 21 residential dwellings
and associated infrastructure and landscaping
with access from The Blossoms**

Land Off Garstang Road East Poulton-Le-Fylde FY6 7EH

WBC Application Number: 24/00129/FULMAJ

Introduction

This document considers climate change adaptation and mitigation considerations as part of the design process for the proposed development of 21 residential properties and associated infrastructure and landscaping located off the Blossoms, Garstang Road East, Poulton le Fylde.

It is clear is that there is no substitute for the conservation of and reduction in use of energy through a Fabric First approach and this is to be the focus of the current proposal.

1. Reducing Energy

The scheme has been designed with a view to reducing demand and subsequent energy consumption, and thereby reducing the associated carbon emissions. Reducing the initial demand provides opportunities where the inclusion of renewable source energy becomes more significant and effective.

The demand for energy and sustainable solutions will be incorporated where deemed appropriate in the following areas:

- Reducing space heating needs via Super-insulation/ Air-tightness/ High mass/Passive solar design. Incorporate energy efficient ventilation via mechanically assisted ventilation with heat-recovery, passive ventilation and smart metering technology.
- Scheme layout has been designed to assist in the reduction energy use; providing opportunities for passive solar design and providing external space for drying washing naturally.
- Reducing hot water energy requirements via super-insulated storage tanks, shorter dead-legs, and strategies to reduce volume use.
- Reduction in energy use from lighting and appliances via use of low energy light bulbs and 'A' rated appliances and/or 'Energy Saving Recommended' products.
- 'Welcome Packs' to inform occupiers of the efficient use of their heating and lighting systems.

2. Water Strategy and SUDS

A strategy based on the implementation of Sustainable Urban Drainage Systems (SUDS) is to be provided and water resource management is to be integrated into the scheme from the outset.

The scheme will consider opportunities to minimize water usage as part of the development proposals.

These measures are intended to reduce the amount of water that the development consumes during its lifetime and ensures efficient use of natural resources.

Measures for Water Saving include water efficient appliances such as water-efficient toilets, low flow/spray taps and low flow showers.

Low water use appliance washing machines and dishwashers should be considered.

Water meters are to be included to make users aware of volume/cost ratios and providing a ready opportunity to quantify the benefit of reduced water wastage.

3. Building Materials.

The homes should consider using modern methods of construction and pre fabrication to allow off-site construction to be employed in a controlled manufacturing environment.

This approach will in turn reduce the amount of construction waste created on site and waste requiring disposal in landfill sites.

Building materials for the proposal should be sourced locally where possible and make use of recycled and low embodied energy options where feasible.

The buildings have been designed with environmental performance in mind.

4. Waste

Construction work generates carbon dioxide emissions in a number of ways including the production and transport of components and the treatment of waste.

Measures to minimize carbon emissions and waste during construction will be assessed and include;

Follow a waste management hierarchy strategy during the development construction process and subsequent occupation.

Refuse and recycling to be designed as an essential part of the new development.

Maximize the use of timber from sustainable Forest Stewardship Council (FSC) sources.

5. Air Pollution

Air quality and emissions will be reviewed including;

- Locally sourced materials will reduce delivery transport emissions.
- A Travel Plan will outline the benefits and encourage the use of alternative modes of transport to the car
- Installation of Electric Vehicle charging points will be included in accordance with the Local Authority and Building Regulation requirements.
- Insulating materials for the walls, roofs, and floors and heating systems specified to avoiding where possible, the use of substances that have a global warming potential in either their manufacture or composition.
- Space heating and hot water systems to reduce the emission of nitrogen oxides into the atmosphere.

6. Health and well-being

The scheme provides opportunities for both outdoor recreation through the internal paths, and communal areas, together with landscaped public open space and water features.

This element of the scheme is a high priority with considerable care being taken in respect of the health and well being of the residents and visitors.

Lifetime homes standards will be assessed, with the aim to allow the homes to be accessible to everyone with layouts that can easily be used to meet the needs of future occupiers.

7. Transport

The scheme should encourage sustainable modes of transport through the reduction of car use.

The following are incorporated into the proposals,

- Permeability for pedestrians and cyclists and provision of cycle parking;
- Design features to ensure reduced vehicle speeds;

- Direct, safe and convenient access to the nearest bus stops;
- The promotion of public transport, pedestrian, and cycle links.

8. Landscaping, Ecology and Biodiversity

The development provides an opportunity for the enhancement of biodiversity on the site with the creation of the public open space to the east and linkage to the adjoining residential developments open space.

Wildlife corridors along the east and southern boundaries will be established creating a continuous green link and habitat connectivity comprising native species-rich hedgerows and trees providing habitat corridors for foraging birds.

The landscaping scheme including ground preparation, tree and shrub planting and maintenance schedules has been designed by Trevor Bridge Landscape Architects.

9. Summary of Proposed Measures

To conclude, the proposal is to create an exemplar development with established sustainability measures taking into account climate change that will allow residents to be comfortable within their homes, with the knowledge that they are contributing to a sustainable form of development.

The properties will be built maximising renewable energy resources, including on-site generation and community-led initiatives.

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