

SUSTAINABILITY APPRAISAL

PROPOSED CARE HOME FOR OLDER PEOPLE,
THE COTTAGE, SHRIPNEY ROAD, BOGNOR REGIS, PO22 9PA

LNT Care Developments

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Helios 47

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1.0 INTRODUCTION

- 1.1 This statement is submitted in support of the planning application made on behalf of LNT Care Developments, a company with considerable experience in the development and operation of care homes for older people. This strategy sets out the commitments of the developer in relation to sustainability and energy.
- 1.2 LNT Care Developments acknowledges the importance of the term ‘sustainability’ within both the immediate and wider context. The main contribution towards sustainability is the extensive research that has been undertaken into finding the most appropriate locations for development.
- 1.3 In accordance with National Planning Policy Framework (NPPF) and the policies making up The Arun Local Plan 2011-2031 the proposed development seeks to mitigate its impact on climate change and reduce carbon dioxide (CO₂) emissions.
- 1.4 The following sustainability statement will demonstrate that thought has been given to both the area chosen for development and the materials and processes that are to be used in construction.
- 1.5 The report aims to cover the main aspects with regards to Sustainable Design and Construction in addition to wider issues in relation to sustainable development.

2.0 LOCATION, TRANSPORT AND THE LOCAL ECONOMY

- 2.1 At the heart of the NPPF is a ‘presumption in favour of sustainable development’. The more efficient use of land through higher density, mixed use development and the use of suitably located land, has always been a key element to achieving sustainability objectives.
- 2.2 At local level the Council has also developed policies aimed at achieving sustainable development. As with many local authorities, all policies have been strengthened to concentrate development on sustainable sites in accessible locations within urban/suburban areas.
- 2.3 All previous care homes by LNT Care Developments have been constructed in urban or suburban locations. An urban location benefits from the provision of existing community facilities and services, but also contributes towards the further development of sustainable communities. The development of this site provides a positive contribution to the area in all social, economic and environmental senses.
- 2.4 The proposed development is set within the village of Shripney, predominantly surrounded by residential dwellings and a hotel and public house adjacent to the sites northern boundary. The site has been identified as suitable for a care home, contributing to the redevelopment of the area as well as providing social care services and employment opportunities and as such reduce the need to travel outside the area.
- 2.5 The majority of the construction work is likely to be done by sub-contractors. Wherever possible, local firms and people will be given opportunities to tender and undertake works related to the development, and will be a benefit to the local economy.
- 2.6 Once complete and operational, the proposed care home will require between 50-60 employees. Opportunities will consist of a wide range of full and part time roles and flexible working hours, at various levels.
- 2.7 Work experience and long-term training opportunities/career progression are offered to all, from care assistant to care home manager. Other service sector jobs will also be available, such as kitchen and domestic staff.

- 2.8 The proposed site is ideally located within a wider residential area to reduce the average journey time to work, thereby helping to reduce pollution and emissions, as the proposed home can be effectively reached by a range of sustainable transport modes (bus, cycle and walking).
- 2.9 As the submitted Travel Plan has demonstrated, the site for the proposed development aims to help reduce the proportion of journeys made by non-sustainable modes of transport, in line with national and local transport policy objectives.
- 2.10 The Travel Plan Co-ordinator aims to help achieve a shift of 15% away from the use of private cars by staff and visitors to public transport and other modes of travel to the site by the expiry of the first two years of occupancy.
- 2.11 The site is well served by adjacent footways and there will be good opportunities for cycling to work. The site also has good access to public transport.

3.0 SITE LAYOUT, DESIGN AND MATERIALS

- 3.1 The proposed building configuration and form has been designed to create a building of suitable scale for the central village location and appropriate to the neighbouring developments. The elevations benefit from views out over Shripney Road to the west with its associated activity, to the east the majority of the rooms will over look the rear garden areas and fields beyond.
- 3.2 Secured by Design principles are incorporated into the proposed care home. The site layout, building orientation and design are around a singular point of access to the site for both pedestrians and vehicles. The entrance to the building is on the southern elevation, the main office which is manned 24hours a day is located within reception, providing continuous monitoring of the buildings entrance at all times. Suitable boundary treatments are also proposed, with bow top railings used to secure the private resident's garden.
- 3.3 Windows located at the ends of corridors and within stairwells would provide natural light into circulation areas and reduce the level of artificial lighting required. The use of large windows within the main lounges and dining elements of the building will maximise the opportunity for the absorption of natural daylight into the building.
- 3.4 The materials used within the development will be locally sourced, where possible. Particular attention will be paid to the main walling and roofing materials, which will make up the bulk of the construction.
- 3.5 These design considerations ensure that the development is energy efficient, maximising the use of sun and shade to offset the demand for heating and cooling through the orientation of building, the internal layout, external landscaping, window design and intended material finishes.

4.0 ENERGY

- 4.1 General planning policies within the NPPF require development to:
- i. Include measures to maximise energy conservation through the design of buildings, site layout and provision of landscaping; and
 - ii. Incorporate the best practical environmental option (BPEO) for energy supply.

- 4.2 In terms of building design, steps have been taken to reduce energy demand having regard for the operational requirements of the home.
- 4.3 Low energy luminaires and occupancy sensors are used within the communal areas, corridors, bathrooms, toilets and ensembles to control and minimise the energy used. There will also be a control centre which will enable areas within the building to be isolated at night as required, to further minimise energy use. This will shut off lighting within communal and corridor areas. However, these lights will still operate on a Passive Infra Red (PIR) system, if people enter these areas during the night.
- 4.4 The building has been designed to a high specification of construction. High levels of insulation will be provided to reduce the consumption of energy required for heating. The Building Regulations submission provides the Simplified Building Energy Model (SBEM) calculations relating to the energy efficiency of the building and its heating, lighting and orientation.
- 4.5 High levels of insulation in the walls, roofs, floors, doors and windows will be included in the construction of the building to reduce winter heat loss and energy demand. Insulation also helps keep the building cool during the summer months, an increasingly important issue in climate change.
- 4.6 Due to modern construction methods the buildings are all air tight, the installation of heat recovery ventilation combines energy efficiency with a healthy indoor living environment. Wherever possible, natural ventilation methods will be utilised; but comfort cooling will be installed, where necessary, provided through the energy efficient ground source system.

5.0 RENEWABLE ENERGY

- 5.1 As a company, LNT continues to review a range of renewable energy technologies, such as biomass, ground source and air source heat pumps, photovoltaic and solar power. It is acknowledged that technologies are continually improving and for this reason a review of the viability of the various options available is ongoing.
- 5.2 At present the preferred technology we utilise to contribute to the overall energy requirements of the care home is Ground Source Heat Pumps. These systems are installed in all new LNT facilities, in order to provide heating and comfort cooling, as well as hot water, to ensure that at least 15% of all the facilities energy requirements are met from renewable energy source(s).
- 5.3 **Solar Panel** – it is estimated that solar panels will be placed on six of the buildings roof planes, each individual panel measuring 2m x 1.1m, the number of panels is yet to be confirmed. The solar panels are designed to be flush with the roof plane to limit the impact on the general outward, public appearance.
- 5.3 **Ground Source** – The installation of Ground Source Heat Pumps will involve the creation of vertical bore holes within the site to extract heat from the ground. As the heat from the ground stays at a fairly constant temperature year-round, the system will be less likely to be affected by seasonal temperature changes, the amount of energy needed to heat the building is minimal, and constantly renewed naturally. Therefore, making the Ground Source Heat Pumps the most energy efficient way of providing and maintaining constant optimum temperatures throughout the care home.
- 5.4 The bore holes for the Ground Source Heat Pump will be located underneath the proposed garden areas and/or beneath the proposed parking area. However, further investigation is required, before the locations of the boreholes are confirmed.

- 5.5 It is the applicant's intent to implement renewable energy technologies which will reduce CO2 emissions and deliver in excess of 15% of the care homes predicted energy requirements.

6.0 SITE WASTE MANAGEMENT

- 6.1 Resource management in the construction process is an essential element in the efficiency of the design and build of a project. Integral to the design strategy, is to ensure the creation of waste and potential adverse impacts on the environment are minimised.
- 6.2 At the very basic level LNT Care Developments maximise the opportunity to work with the existing site characteristics and site levels to minimise the creation of waste for landfill. Where possible, alterations to site levels will be kept to a minimum and where remodelling is required, efforts to minimise waste generation will be made.
- 6.3 All of our development schemes are accompanied by a Site Waste Management Plan (SWMP) which have a number of objectives, as follows:
- All environmental safeguards are carried out correctly;
 - Site activities are well managed;
 - Adverse impacts on the environment are minimised;
 - The biodiversity of the site is conserved or enhanced;
 - All relevant legislation is complied with; and
 - The project is monitored for environmental impact.
- 6.4 From a very early stage in the project, the development team will review how waste generation can be minimised, thereby reducing the amount of waste to be removed from the site. Trade Contractors, the Design Team and Suppliers are all to be encouraged to look at ways to minimise waste.
- 6.5 Surplus or waste materials arise from either the materials imported to site or from those generated on site. Imported materials are those which are brought to the project for inclusion within the permanent works. Generated materials are those which exist on the project such as topsoil, sub-soil, trees and materials from demolition works etc.
- 6.6 There are other considerations to waste management such as; waste reduction; segregation of waste; disposal of waste; financial impacts of waste disposal; and recording, monitoring, education and review. A project's SWMP will outline the procedures that have been put in to place and demonstrate: how they benefit the environment; how we can measure the effects; and how these procedures and practices are sustainable.

7.0 BIODIVERSITY

- 7.1 There is a tree line on the northern boundary and a hedgerow along the western boundary of the site, all of which will be retained. Any existing habitats around the site will be retained where possible as well as new habitats created through the intended soft landscaping.
- 7.2 Management and conservation of new hedgerows and new planting will be included as part of the overall landscaping scheme for the proposed site. The aim will be to provide an attractive landscaped setting and bio-diversity enhancement in accordance with the NPPF.
- 7.3 Proposed planting is shown with additional hard and soft landscaping to provide an attractive landscaped setting for the home and usable amenity space for residents. The proposed planting scheme would be designed to include native indigenous species and aim to provide all year round colour and interest and also to enhance local biodiversity.

8.0 COMMUNITY INVOLVEMENT

- 8.1 The proposed care home would provide a form of residential accommodation for the elderly and elderly dementia residents. It would provide a much needed local service to support the local community, either directly in the case of future residents, or indirectly in the case of those with elderly, dependant relatives. In doing so, it would assist in providing a balanced and well-integrated community service within the local area.
- 8.2 The development should assist in creating a place where people want to live and creating a positive contribution to the surrounding area, through providing additional services and facilities that should reduce the need to travel further afield to access such services.
- 8.3 Supporting neighbourhoods is a fundamental element of sustainability; therefore, communication with local residents is essential. The applicant will endeavour to respond appropriately and effectively to any comments raised by the local community. A representative will be available, at all reasonable times, to answer any questions that may arise during the application and consultation process and will endeavour to respond positively to any comments made.
- 8.4 Arrangements will be made to prevent or deal with any issues that might arise as a result of the proposed development. Advance warning will be provided to all neighbouring residents/land users of the commencement of the construction works and emergency telephone and contact details will be distributed within the local area, should they be required.
- 8.5 Notification of the application submission with copies of the submitted plans has been sent to adjoining neighbours and local ward councillors. Further consultations with the neighbouring residents can be arranged, should the need arise.