

LINDHURST
MANSFIELD

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

CONTENTS

- 2.1 Introduction
- 2.2 Vision
- 2.3 Design Objectives
- 2.4 The Framework Plan – Proposed Development
- 2.5 Landscape and Open Space -Green Infrastructure Framework
- 2.6 Access and Movement
- 2.7 Environmental Performance Measures
- 2.8 Utilities
- 2.9 Implementation
- 2.10 Potential Effects of Lindhurst Wind Farm

FIGURES (REFER TO ENVIRONMENTAL STATEMENT VOLUME 2)

- 2.1 Framework Plan

APPENDICES (REFER TO ENVIRONMENTAL STATEMENT VOLUME 2)

- 2.A Land Use Schedule

2.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 This chapter of the ES describes the Proposed Development. Some details are addressed in the Design sections of topic-specific chapters, where appropriate. The totality of the Proposed Development is described across this chapter and those sections.

2.1.2 The Proposed Development comprises a sustainable urban extension to Mansfield, on land located either side of the A617 Sherwood Way (Mansfield and Ashfield Regeneration Route) to the east of the A60 Nottingham Road, identified on the Location Plan (Figure 1.1). It consists of 23.1 hectares of employment land together with up to 1,700 new homes of a wide range of types and sizes, including affordable homes, a primary school, local centre, commercial complex, formal and informal open space, cemetery and provision for access and movement. A comprehensive integrated framework of Green Infrastructure (GI) encompasses the development proposals.

2.1.3 The proposed quantum of development and mix of uses are provided within the schedule of proposed development at Appendix 2.A. Further details are also provided within section 5 of the Design and Access Statement (DAS), submitted as part of this application. This should be considered in conjunction with the Framework Plan (Figure 2.1).

2.2 Vision

2.2.1 The DAS (Section 4) describes the development strategy and vision as follows:

“To create a new integrated employment and residential area that has a positive relationship with Mansfield: Connecting both physically, through safe and direct movement links, and visually, through high quality design solutions that make reference to the local character, urban grain, architectural styles and materials. Best practice and contemporary design solutions will be embraced, inspiring a high quality, legible development with a strong sense of place.

The emphasis is on simplicity and legibility with well proportioned buildings and spaces.”

2.3 **Design Objectives**

2.3.1 The Proposed Development is based on a set of design objectives drawn from national and local urban design policies and from good practice. The objectives also reflect the results of the stakeholder engagement and public consultations. These objectives include:

- Delivery of a high quality “place” which is sustainable, safe, and attractive;
- Creation of a series of inter-related high quality employment sites directly related to the Sherwood Way;
- Delivery of up to 1700 dwellings with a mix of housing, offering 1-5 bedroom properties, comprising a range of house types, from terraced/linked dwellings to detached properties;
- Provision of a high quality community core with a well designed Local Centre and Primary School;
- Provision of a high quality urban design that incorporates Best Practice principles, using as a reference the core design texts of “ Manual for Streets”, “Safer Places ”, and “By Design”;
- Establishment of a legible environment, with a choice of interconnecting attractive streets and pedestrian routes which provide excellent connectivity across the site and into the existing context;
- Adoption of inclusive design, by making the place accessible for all;
- Promotion of sustainability and reducing energy consumption;
- Establishment of a significant green infrastructure for the local and wider community, which provides amenity, recreational, biodiversity and sustainability benefits.

2.4 **The Framework Plan – Proposed Development**

2.4.1 The Framework Plan (Figure 2.1) sets the location and scale of the land uses. The proposed development consists of:

Employment

2.4.2 23.1 hectares of the site will be used to accommodate proposed high quality offices (B1) and general industrial (B2 / B8) employment land. Premium employment will be located adjacent to A6191 Southwell Road West and A60 Nottingham Road to create ‘Gateways’ into Mansfield. The development will provide for a broad mix of employment within these use classes to accommodate a range of business sizes.

Housing

- 2.4.3 The Proposed Development includes 55.9 hectares of residential land, providing up to 1700 new homes. There would be a range of densities across the site with an average density of 31 dwellings per hectare. New housing will comprise of a mix of dwellings and house types, ranging from 1 to 5 bedroom units, offering market housing of apartments and family homes. The housing mix will include adequate levels of affordable housing, with an agreed tenure split between social rented and intermediate housing. All of the required affordable dwellings will be accommodated on site in small clusters and evenly distributed around the Proposed Development. Housing will be set within a contextual framework of attractive streets and a landscape setting of green links and street trees.

Local Centre

- 2.4.4 The Local Centre occupies 3.7 hectares, which would accommodate community facilities, retail space, and a Health Centre. The Local Centre will accommodate cycle and vehicle parking, bus stops, servicing, and a well designed high quality public realm.

Primary School

- 2.4.5 Land to accommodate a 1.5 entry form primary schools with on-site playing field, parking and servicing are proposed. The primary school site occupies 2.1 hectares, located adjacent to the distributor road near to the local centre. It is well connected to the proposed footpath / cycleway network.

Commercial

- 2.4.6 Located centrally within the site, this plot will have the joint benefits of being located immediately adjacent to Sherwood Way for easy access, whilst facing onto the Forest Stone Community Park. It is anticipated that this will comprise hotel and leisure facilities with associated car parking.

Cemetery (8.9 Ha)

- 2.4.7 The existing cemetery on Derby Road will reach capacity in 2017, when the proposed cemetery will replace it and serve Mansfield for the next 50 years. The cemetery will be located on the north facing slopes near Lindhurst Farm. An attractive setting will be provided, with robust native tree planting helping to integrate the Cemetery with the surrounding green infrastructure.

Existing Highway Land (20.2 Ha)

2.4.8 This area largely consists of Sherwood Way and the Adamsway link. Flood attenuation ponds, recent tree planting and grass verges are included within this area. New roundabouts will be constructed on both roads to create improved permeability across the site, while existing junctions will be improved to accommodate increased traffic flows.

2.5 **The Landscape and Open Space (Green Infrastructure Framework)**

2.5.1 The Green Infrastructure (GI) Framework consists of a network of multi-functional green space and environmental mitigation. The GI has been formulated to respond to and enhance features of landscape and nature conservation value across the site. In particular:

- The more elevated areas of land would be protected and carefully enhanced;
- Harlow Wood is an important landmark which would be buffered and protected;
- The relic hedgerow framework would be retained and protected;
- Particular care will be required in the treatment of the interface with the existing urban edge to ensure a satisfactory transition. Proposed landscape buffer zones are included along the new rural edge to assist in the assimilation of development into the wider countryside;
- Subdivision of the site with a proposed landscape framework/green infrastructure, reflecting the framework provided by the existing and historic field pattern.

2.5.2 The GI is made of up the following components:

- Forest Stone Community Park
The proposed Park is approximately 14 Ha which will provide a significant area of open space, informal recreation and formal sports provision for the proposed development and the wider community. The Park will be largely open in its character and the detailed design will sensitively integrate with Harlow Wood, which lies outside the application site. To increase biodiversity the Park will also include a mosaic of new habitats, to include trees and species-rich hay meadows. The Park also includes a series of informal routes and a small car park adjacent to the development edge. This will provide space for cycle parking, information boards and small car park.
- Green Links

These are 15-30 metre wide green swathes of open space that run around and through the core of the development. They include the retained existing hedgerows and lanes. They will also include the provision of new trees, new hedgerow planting, swales, amenity and conservation grassland, heathland planting, and pedestrian/ cycle movement routes.

- Equipped Children's Play Space

Circa fifteen equipped Play Areas will be provided, offering toddler, child and teenage play provision. Level of provision will be in accordance with the Fields In Trust 'Planning and Design for Outdoor Sport and Play' standard.

- Structural Landscape

Structural landscape contains areas proposed for creation of a range of habitats including conservation grassland, new hedgerows, individual trees, wetland areas and native woodland planting. The detailed character and management approaches will vary across the site depending upon the local context. The Structural landscape also includes the land for the attenuation areas. These will be designed as open grassland areas with some ground modelling to create a shallow basin. New hedgerow and tree planting will be included and the opportunity exists for wetland planting and grass mixes.

2.6 **Access and Movement**

2.6.1 The Proposed Development, through sustainable design, aims to minimise the effects of the private car on the highway network and to encourage greater use of other transport modes. The Proposed Development's proposed measures are identified below and further details provided at Chapter 12 of this ES and also within the Transport Assessment and Travel Plan, which are submitted separately with the planning application. The Transport Assessment should be considered as a component of the Environmental Statement.

Travel Plan

2.6.2 In addition, a draft Travel Plan is submitted as part of the application and contains a number of measures and commitments aimed at reducing dependency on car transport. The draft Travel Plan details a range of sustainable transport initiatives, including enhancements and incentives to maximise greater use public transport, walking and cycling.

2.7 **Environmental Performance Measures**

2.7.1 The Proposed Development will adopt protocols under the Code for Sustainable Homes to ensure that appropriate standards dictated by Building Regulations are met, ensuring site wide sustainability such as construction management, health and well-being, energy, water minimisation and surface water attenuation, materials, waste, pollution and ecology. Details of how this will be achieved are outlined below and in Chapter 13 (Sustainability).

2.7.2 To meet the above standards the Proposed Development's design measures will include:

- Dwellings will show a reduction in carbon dioxide emission over current building regulations. This will be through reducing energy use by improving efficiency;
- The Proposed Development will aim to reduce energy of build materials by using wherever possible low impact and sustainability sourced materials;
- Water use will be restricted in excess of current building regulations;
- Waste management and reduction will be encouraged through use of on-plot recycling, on plot space for refuse bins and waste recycling;
- Surface water runoff will be controlled by the use of a sustainable drainage system that will ensure runoff rates do not exceed the baseline condition.

2.7.3 It is envisaged that the Proposed Development would incorporate the range of measures proposed in order to meet the required environmental performance standard.

2.8 **Utilities**

2.8.1 Within the development, a common utilities strategy would be applied locating main utilities alongside and within the main street network.

2.9 **Implementation**

2.9.1 The Implementation proposals cover the proposed phasing, the approach to construction, and the approach to the future management and maintenance of the proposed development.

Phasing

- 2.9.2 Establishment of tree planting will occur early on to ensure that the green infrastructure is robust to limit any visual impact and to create buffers between the existing development / woodland and the proposed development. The built development will be occur as follows:
- 2.9.3 It is anticipated, assuming that planning consent is forthcoming during 2010, that construction could commence in 2011, with the whole development being completed by 2026, subject to market conditions.
- 2.9.4 The Sherwood Way (specifically designed as a catalyst for regeneration) provides for maximum flexibility, enabling the site to be opened up on several fronts simultaneously. This is particularly important for potential employment opportunities. "Gateway" employment areas are accessible at each end of the application site on Southwell Road West and on Nottingham Road. Centrally, the Adamsway (A6117) roundabout provides access to the Firs Farm employment site, the new local centre and, to the south of Sherwood Way, the leisure/hotel opportunity which overlooks the proposed Forest Stone Community Park.
- 2.9.5 If the regeneration opportunities on offer are taken up, then all of these areas could come forward as early phases, stimulating competition and providing distinctive variety. Essential community uses required to support the new mixed use urban extension will also come forward in the early phases.
- 2.9.6 The entire principle Green Infrastructure framework for the whole development will be implemented at the outset, thus establishing new routes and native broadleaved woodland at the earliest opportunity. The structure of both the Forest Stone Community Park and the new Cemetery will be similarly established at the outset. As a result the buffer zones to the existing urban edge of Mansfield and Berry Hill, the isolated properties by the Community Park and Harlow Wood will begin to establish immediately. Screening alongside the Sherwood Way will also be reinforced as soon as is practicable.
- 2.9.7 The strategic sustainable drainage and attenuation network will be installed at the same time as the Green Infrastructure, maximising early biodiversity opportunities.
- 2.9.8 Residential neighbourhoods will commence in parallel with the opening up of the employment sites. It is expected that between 100 and 120 new homes per year may be completed, spread across the site in discrete parcels operated by different house builders or registered social landlords. The intention is to commence in the centre of the site (either side of Adamsway and in conjunction with the new local

centre) and then progress to both the east and the west. Land south of Sherwood Way would only come forward for residential development in the second phase of the construction programme.

Management and Maintenance

2.9.9 It is envisaged that the open space resources created by the Proposed Development would be managed and maintained by the local authority and/or an independent management trust/company.

2.9.10 The Proposed Development will provide public open space as well as play and sports facilities as described in 2.5.2. A commuted sum will be agreed with Mansfield District Council in accordance with Interim Planning Guidance Note 3 'Recreational Provision on New Residential Developments'.

2.9.11 The Proposed Development also includes a 15.15 hectare Community Park. Appropriate arrangements will be made for the provision and maintenance of recreation areas and open space within the site and if these are transferred to the local planning authority, a commuted sum will be agreed. It has yet to be determined at this stage whether the District Council will wish to adopt this publicly accessible facility or whether the Park would be maintained privately through a Management Agreement set up by the Developers.

2.9.12 Partnership working arrangements might be entered into with relevant environmental stakeholders who have an interest in the Green Infrastructure, including the Nottinghamshire Wildlife Trust and local schools.

2.10 **Potential Effects of Lindhurst Wind Farm**

2.10.1 A planning application lodged with Newark and Sherwood District for the construction of a windfarm at Lindhurst, incorporating 5no. turbines was granted approval on 16th December 2008. Construction is currently commencing on the scheme, and RWE npower renewables (the applicant) state that the windfarm will be operational by the end of 2010. Each turbine will be 125m in height with a blade diameter of approximately 82 metres. Below is a summary of the likely effects on the proposed development at Lindhurst, Mansfield.

Noise

2.10.2 The Noise Assessment undertaken as part of the Environmental Statement for Lindhurst Windfarm states that there will be no significant impact on nearby

residences during operation; therefore it can be assumed that there will be no significant impact on proposed dwellings which are further away from the proposed turbines.

Traffic and Transport

- 2.10.3 Once the windfarm is operational, there will be no impact on traffic.

Visual Impact

- 2.10.4 The visual impact from two existing receptors within the site (Sherwood Way and Old Newark Road) has been judged as moderate. Visual impact upon the existing residential receptors, including Rainworth, Bellamy Road and Lindhurst Cottages, has been assessed as major. In summary, the effects upon the assessed receptors within the site are less than the effects upon existing residential receptors outside the site boundary. The assessment highlights that it will depend in part on the sympathies of the viewer, whether the impacts are perceived as positive or negative. Although the turbines are tall and will be clearly visible, they are slender structures that would not obscure views across the landscape. The turbines will have been constructed before any new homes are occupied. New residents will buy or rent properties in full knowledge of their presence.

Shadow Flicker

- 2.10.5 Flicker is caused when the sun passes behind the rotor of a wind turbine and casts a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off. Planning for Renewable Energy (2004) (The Companion Guide to PPS 22) states that if turbines have blade diameters of 80m or more, potential shadow flicker could be felt up to 800m from a turbine. Plot J is the only proposed residential area which lies within this 800m radius. Existing mature tree planting on the south side of Sherwood Way combined with proposed planting immediately north of Sherwood Way will help to screen the turbines from view. The wind turbines will operate below levels that can trigger epilepsy.

Cumulative Impact

- 2.10.6 An eco-suburb, such as the proposed development, would have a natural affinity with the proposed Lindhurst Windfarm, as the Wind Turbines will generate renewable energy.