1 Introduction

1.1 The purpose of this statement is to demonstrate that the proposed development at Land West of Norwich Road, Rackheath, will consider the most appropriate energy efficiency and water usage measures in accordance with the development plan.

1.2 This statement supports an outline planning application for the proposed development which comprises redevelopment of the site for 95 dwellings, public park and associated infrastructure. The scheme includes provision of car parking, cycle storage and amenity space.

1.3 The application has been subject to pre-application advice and meetings with Norwich City Council development management officers and other statutory consultees. This statement should be read in conjunction with the relevant planning application drawings, submitted alongside this application.

1.4 The Greater Norwich Joint Core Strategy policy 3 on energy and water requires schemes of 10 or more dwellings to provide sources of decentralised or low carbon energy providing at least 10% of the schemes expected energy requirements. This policy also requires all new housing developments to achieve Code for Sustainable Homes level 4 for water.

2 Site Layout and Building Design

2.1 The energy efficiency of a building can be influenced by the layout and how the space within a building is used and the levels of insulation and materials used.

2.2 The design for the site has focused on ensuring that the orientation of buildings will maximise the amount of natural daylight or passive solar gains available.

2.3 All building work will be designed and built in accordance with Building Regulations Part L. This will ensure a suitable level of energy efficiency for the dwellings.

2.4 In order to optimise energy efficiency and reduce the amount of energy used, the following has been considered:

- The dwellings will be designed to achieve the best building thermal performance, i.e. glazing type and thermal transmission values;
- Use of as much natural light as feasible for occupants to minimise the use of artificial lighting;
- Use of materials which maximise passive solar gain;
- Installation of energy monitoring systems to determine further energy saving measures and improve targeting and performance;
- Commissioning systems for effective programming and management to ensure that systems are installed and operate as designed.

3 Water and Energy

Water

3.1 The applicants are committed to meeting Code for Sustainable Homes level 4 for water efficiency in terms of the standard of water efficient fitments to be specified within the proposed 4 apartments. Details of this can be agreed via a planning condition.

Energy

3.2 Whilst the detailed assessment of energy requirements will be subject to a planning condition, all options for on-site renewable energy contributions will be considered against a base case of gas heating and hot water, with electrical cooking and other small power loads.

3.3 Possible options for on-site renewable energy generation may include:

- Central Air-Source Heat Pump; or
- Solar PV.

3.4 It is considered that either option, or the options in combination, will provide the opportunity to deliver either a policy compliant renewables contribution or exceed the policy.

4 Sustainable Materials

4.1 Selection of appropriate materials will be undertaken and determined at the detailed design stage in agreement with the local planning authority.

4.2 In order to meet Building Regulation requirements, and to prove cost effective, it will not necessarily be feasible to source all materials used in the construction phase locally. Even sustainable materials such as insulation, timber or even recycled material may have to be sourced from farther afield through local builder’s merchants and suppliers as required items may simply not be available locally. Bulk buying policies of construction companies offering reduced cost may also dictate this.