1. Introduction

Meridian Water is the largest regeneration priority area identified in the Council’s adopted Core Strategy (2010) where a comprehensive development will take place. The Masterplan expands on that guidance and provides a framework for managing change and development in the area. It was adopted as Planning and Urban Design Guidance on 17th July 2013 and is now a material consideration in the determination of all planning applications in this area.

1.1 Background

Government legislation requires the Council to carry out a Sustainability Appraisal (SA) of Local Plan documents. The main role of the SA is to ensure that the Masterplan achieves the optimal balance of positive social, environmental and economic outcomes.

The Masterplan is a spatial planning document that explains how the key objectives established in the Core Strategy for Meridian Water could be delivered, and provides further detail and guidance about the significant scale of change proposed.

1.2 What is a Sustainability Appraisal?

The SA report investigates the likely significant impacts of the Masterplan in terms of the contribution towards sustainability that might arise from the implementation of the proposals contained within the Masterplan.

SA involves making value judgments about the functioning and appearance of the environment. It is the Council’s task to find a balance between various priorities relating to the quality of the natural environment, the health of the economy and strong communities.

The Council is required under European Directive to undertake a SEA of new plans. Government guidance considers it appropriate to combine the SEA with SA in a single process. The Council’s SA report therefore integrates both SA and SEA and is referred to as a Sustainability Appraisal.

1.3 Sustainability Appraisal and Strategic Environmental Assessment

The findings of the SA process are reflected in the adopted Masterplan. These help to ensure that it maximizes any possible contribution to future sustainability. The SA process incorporates the requirements of European legislation, which requires development plans undergo a SEA.

2. Likely significant effects

The following section sets out information in respect of the likely significant effects.

2.1 Social, environmental and economic effects

Population
The population of the Meridian Water area is likely to increase as new homes are built. It is clear that an increase in population would have a significant cumulative impact on some other sustainability topics. In particular, there would be an effect on the need for facilities, such as health services, school places and jobs.

Health and social infrastructure
The Masterplan proposes the direct provision of health facilities through the housing-led regeneration of the area. The proposals would also have a significant positive effect on the health of future occupants due to requirements for design that incorporates mitigation against air and noise pollution and development proposals that would either contribute towards or directly provide additional open space.
In terms of social infrastructure, the proposals would have a significant positive impact. A number of proposals, such as new health and library facilities would cater for existing and the new community. These would contribute towards or directly provide community facilities as part of any redevelopment.

**Economy**
The Masterplan includes proposals that would seek to provide business accommodation directly, as well as those that would look to improve conditions more generally and, make the area more attractive for businesses. Economic growth, an increase in the number of job opportunities and regeneration in the Meridian Water area would help to address deprivation, and would contribute to towards a reduction in poverty and social exclusion, in this part of the borough. Housing growth is a priority in the Meridian Water area and redevelopment here will involve a partial redistribution of some employment land.

**Employment and skills**
In terms of education, learning and skills, it is considered that the Masterplan would have a significant positive impact. A number of proposals, such as the new primary school, an all-through and a University Technical College would cater for existing and the new community.

In terms of employment, the Masterplan includes proposals that would seek to create and improve business premises, as well as others that would seek to improve environmental conditions and, therefore make the area more appealing to businesses. Some proposals would also promote the development of office accommodation, which could help to increase and create higher paid jobs in the area.

**Transport**
In terms of improvements of the transport network for cyclists and pedestrians, it is noted that the Masterplan’s proposals would have a cumulatively significant positive impact through improved east-west and north-south connections through the creation of a new Causeway and a network of open spaces. These would encourage walking and cycling through providing additional or improved routes.

In terms of improved rail services, the Council has made good progress, supported by the Greater London Authority (GLA), Transport for London (TfL) and Network Rail, in bringing forward new rail infrastructure. This will enable a four trains per hour (tph) service to be provided at Angel Road Station, transforming the passenger experience and unlocking the development potential at Meridian Water. In order to complement this, the introduction of the Gateway Square and the relocation of the station building would have significant positive impacts in terms of encouraging sustainable travel.

The Masterplan’s proposals would have a positive impact in terms of encouraging sustainable travel and reducing reliance of the private car, due to requirements for trip generating and denser forms of development to locate in accessible locations and for a sustainable mix of uses that would reduce the need to travel.

**Crime and safety**
The proposals would create environments that are safer due to better design.

**Housing**
The proposals would have a significant impact in terms of providing both additional and better quality housing. The Masterplan plans for up to 5,000 new homes that are to be well-designed, to use high quality materials and finishes, and to incorporate best practice in terms of sustainability.

**Climate change**
The housing-led regeneration of the area would mean that new homes are more energy and resource efficient. The proposals would also have positive impacts in terms of meeting the challenge of climate change, through the connection to the new city-scale decentralised energy network, this is Lee Valley Heat Network, encouragement of sustainable travel and a reduction in reliance of the private car.
Air
The Masterplan’s proposals would have a significant cumulative effect in ensuring that new residents are not exposed to undue levels of air pollution. It would also have a significant cumulative impact in terms of improving air quality through either the encouragement of sustainable travel and/or the reduction of congestion and reliance of the private car.

Water
The proposal to upgrade Deephams sewerage treatment works is likely to improve the water quality of Enfield's rivers and streams over the medium term.

Flood risk may increase as a consequence of climate change and continued developments in flood risk areas. Balanced against this are the potential for flood alleviation works to mitigate risk to flood risk zones, and the careful planning of major new developments in the borough, including Meridian Water, which will see flood prevention measures built into the plans for new housing.

The regeneration of Meridian Water would set out measures to avoid and reduce flood risk, reduce the usage of water, and allow for the introduction of SUDs, which would have positive impacts.

Biodiversity
The proposals would have a cumulatively significant positive impact on biodiversity through requiring existing green spaces to be improved and connected.

Waste
No significant impacts have been identified in relation to waste management as a result of the Masterplan.

2.2 Avoiding adverse effects
No likely adverse effects have been identified through the SA process. This is largely due to the fact that the Masterplan expands on the guidance provided in the Core Strategy, which has already been subject to a separate SA process.

2.3 Monitoring of significant effects
It will become necessary to monitor the effects of the Masterplan once it is adopted. The basis of a monitoring framework is outlined in the SA and it is expected that this will be implemented through the Council’s Local Plan monitoring procedures.

3. Impact of the Sustainability Appraisal process
The SA process has ensured a thorough review has taken place of the Masterplan’s proposals in terms of social, economic and environmental sustainability and has had a guiding influence over their final content.

It should be noted that a number of amendments to the Masterplan have been made during the course of its preparation in light of the iterative process of review, consultation and appraisal. The SA process has played a role in agreeing these changes and amendments alongside the significant progress made on a number of key policy and initiatives.

The main changes can be summarised as follows:

- Review of the outline approach to and structure of the Masterplan – the structure of the Masterplan has been revised in view of the greater emphasis now given to neighbourhood planning in the National Planning Policy Framework. This emphasis has seen a revised structure from that employed in the draft Masterplan (2012). The changes have been driven by the need to establish a framework for each of the neighbourhoods, which takes a design-led approach. These “neighbourhood” specific proposals are
guided by an area-wide framework, which responds directly to the issues associated specifically with this area. Planning issues are left for the relevant policies of other Local Plan documents to address.

- Progress made, supported by the Greater London Authority (GLA), Transport for London (TfL) and Network Rail, in bringing forward rail infrastructure. This will enable a four trains per hour (tph) service to be provided at Angel Road Station, transforming the passenger experience and unlocking the development potential of Meridian Water. This progress has seen a revised approach set out in the draft Masterplan (2012), which the Council therefore expects to see a high density housing scheme on land adjacent to the station and east of the railway line. Proposals that do not reflect this requirement will be strongly resisted.

- Inclusion of an Energy framework to the Masterplan – this emphasis has seen a revised structure from that set out in the draft Masterplan (2012). It sets out priorities to improve energy efficiency, connect or contribute towards an existing or planned decentralised energy network. The implementation of the Lee Valley Heat Network will help to achieve significant environmental improvements across the area.

4. Conclusions and next steps

The Meridian Water Masterplan has evolved over the long period of time and has been revised and updated to take full account of the rapidly changing environmental and policy context in the area.

The SA has found that the Masterplan would have a significant positive effect through the promotion of social, economic and environmental sustainability in the area. It would have a particularly strong focus on providing for housing, employment and community opportunities, enhancing accessibility and encouraging sustainable travel, design and construction.

The SA is published alongside the Meridian Water Masterplan.