Northstowe Development Framework Document Addendum An exemplar of sustainable living

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# Northstowe Development Framework Document Addendum An exemplar of sustainable living

This addendum to the Northstowe Development Framework Document was prepared by South Cambridgeshire District Council and the Joint Promoters in response to comments raised by the Northstowe Joint Development Control Committee (NJDCC) at its meeting on 20 July 2012. It was subsequently endorsed by the NJDCC on 4 October 2012.

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## Northstowe – An exemplar of sustainable living

Northstowe is a unique and special, sustainable new town. It is the largest new town to be built in the UK since the 1960's. It will be the third largest market town in Cambridgeshire and will sit at the top of the hierarchy of new settlements in South Cambridgeshire. Foremost amongst its attributes will be the high quality transport infrastructure. It is the only new town in the UK planned around a dedicated public transport system. The exemplar, unique and special aspects that Northstowe aspires to achieve are set out in this paper.

How exemplary status is achieved is described in the adopted Northstowe Area Action Plan, 2007 (NAAP). It notes that Northstowe "will be an example of excellence in the creation of a sustainable settlement and will promote the Cambridge Sub-Region as a leader in technological innovation and high quality built environment" (paragraph B.1).

Policy NS/2(3g) states that the town will be developed "To a flexible design which will be energy efficient, and built to be an exemplar of sustainable living with low carbon and greenhouse gas emissions and able to accommodate the impacts of climate change". The relevant objective in the NAAP seeks to include "projects which are an exemplar in terms of the use of the earth's resources, including energy, water and materials" (D13/a). The Northstowe Joint Development Control Committee (NJDCC) endorsed the Development Framework Document (DFD) on 20th July 2012 subject to confirmation of a number of items, including agreement on what will be the outstanding features of Northstowe that will make it unique and exemplar. This Exemplar list of aspirations is considered essential to achieving the quality of life that will help to set Northstowe apart. It was subsequently endorsed by the NJDCC at their meeting on 4th October 2012.

It was agreed that the DFD together with the proposed exemplary projects would be subject to a three yearly review.

In its pursuit of achieving an exemplar town NJDCC endorsed the ambitions set out within this document which form the framework for the joint aspiration to secure those qualities that make Northstowe 'special'. These qualities are a mix of 'exemplar', examples of pushing the boundaries and demonstrating what might be emulated elsewhere: and of 'excellence', the best in the field at the time and integrated in the Northstowe approach in the pursuit of quality. The ambition is to create a lifestyle and baseline of expectation for new residents, employees and visitors who will 'buy in' to the Vision and to patterns of sustainable living. Each item will need to be developed as the planning process proceeds to joint delivery and will be delivered subject to competing requirements for essential infrastructure and services and the need to achieve a viable scheme of development in the context of financial and technical feasibility.

These qualities are the supporting framework and will be implemented as far as practicable as the town evolves over the next 20 years or so. They are grouped under the sustainable development headings: Environment, Economic and Social.

### Environment

- Building adaptation to the impacts of climate change – building design and construction, block layouts, landscaping, water management.
- 2. Efficient use of water resources including rain water conservation and potential waste water re-use, utilising new technologies where appropriate, aiming for grey water recycling as far as possible and in all non-domestic buildings, and aiming for domestic consumption of 80 litres/day. This means planning for large-scale infrastructure from the beginning to improve on a 33-50% reduction on mains water use compared with conventional housing where this is technically and financially practicable.
- З. The provision of exemplar buildings in relation to renewable resources, energy efficiency and sustainable construction products and methods. This would include Life Time Homes, achieving Code for Sustainable Homes at Levels 4 to 6, or Passivhaus and increased sustainability across the development using a 'fabric first' approach with an exemplar level of passive standards and heat loss reduction through the improvement on µ- Values set out in Part L of the Building Regulations 2012. Provision for Co-housing and Self-Build dwellings should be made. Residents and landlords should be able to purchase a range of sustainable energy products to complement the home at the point of purchase, demonstrated in a show home with energy advisors available at each phase of the development. Community non-residential buildings (schools, sports hubs, waste centre) to achieve a minimum BREEAM standard of 'Excellent'. all others (employment/retail) to achieve 'Very Good' with at least one achieving the 'Outstanding' standard post-2016. The development should achieve excellence in approach to the use of renewable energy by including pipe runs and considering heat loads from the outset where this is technically and financially practicable and viable.

- On and / or offsite renewable energy or very low carbon technologies (solar, biomass and wind) that exceeds the standard 10% on-site creation aiming for the target of 20%.
- A reduction of carbon emissions aiming to exceed the planning policy requirement of a minimum of 10% below building regulation standards (NAAP 2007).
- 6. Activating a sustainable construction methodology through the use of verifiably sustainable, potentially locally sourced materials, including recycled materials, and a Travel Plan for construction labour all contribute towards exemplar projects. The Construction Method statement process will include skills and training opportunities in a variety of techniques and trades, including in the building refurbishment and sustainable energy field, employing a local recruitment and apprenticeship policy. The developer should operate a 'considerate contractor' scheme to achieve excellence in approach and employ the 'Modern Methods of Construction' model.
- Innovative design, provision and delivery of waste and recycling management, including the segregation, storage and collection of domestic and commercial waste and recycling materials, integrated into the street scene. On-site recycling and re-use facilities encouraging a sustainable lifestyle.
- Site wide Sustainable Urban Drainage System (SUDs) to manage surface water drainage flow to mitigate flood risk and integration for irrigation and amenity where achievable.

- 9. The development of a low emission strategy (LES) relating primarily to a package of measures to help mitigate transport impact on local air quality and public health that applies both through the construction and occupation stages together with air quality monitoring in and around the development. Promote technology and / or infrastructure to mitigate impacts on local air quality, reduce carbon emissions by encouraging low-emission / non-fossil fuelled transport and promote a modal shift away from car travel. The LES would complement other design and mitigation options such as travel planning and provision of public transport infrastructure.
- 10. The provision of a public realm and block structure that provides walkable and convenient cycle access for all residents to local facilities, services and employment areas creating an environment for healthy living, and encouraging easy movement to facilities and services in surrounding villages.
- Integration of CGB through the provision of a dedicated busway serving as the primary public transport spine with early provision of local bus services to optimise access to employment and recreation uses offered by Cambridge and beyond.
- 12. Strong landscape and accessible green infrastructure that integrates amenity, recreation, drainage, biodiversity and food production through allotments, community orchards and gardens, and smallholder food growing, creating an environment for healthy living, and provided early in the development.
- 13. Northstowe will be an exemplar in its demonstrable use of latest technologies and where appropriate, emerging technologies. These include broadband cabling, eco-housing to minimise net energy consumption and space saving technologies. Travel time information will be provided in employment, community and public areas.









- 14. An economic development strategy that identifies the Unique Selling Point (USP) and markets a clear enterprising and economic role for Northstowe, complementing regional initiatives, capitalising on its locational advantages and addressing the need for business support, local employment opportunities and skills training. Consideration will be given to the provision of an exemplar shared commercial space that can accommodate a range of business needs: accommodation, shared support services, training, advice, and sets a precedent in terms of the highest environmental standards.
- 15. The facilitation of ultra-fast **fibre cable** to the home and business.

## Social

- 16. Innovative approach to the architectural design and delivery of affordable homes and the private rental market, including a range of flexible house styles, tenure-types, live-work and self-build. Consideration will be given to selected plots being made available to independent developers to allow visual diversity to develop within an agreed Design Code to promote architectural identity. Quality is the mantra – whether that is design, building standards or environmental standards
- 17. The early delivery of essential community and social infrastructure e.g. schools, community centres, retail, health, road adoption, access to public transport, local centres and a 'town centre' in parallel with house building to promote social inclusiveness and create a sense of place with a multi-use High Street which is 24/7 in its vitality. Specialist and high achieving secondary education provision with community access to sports, arts and other facilities.
- 18. Excellence in our approach to the creation of high quality and healthy living environments for housing and residential layouts that are designed with the utmost regard for occupants' comfort, health and wellbeing, function, resource consumption, easy storage for cycles and waste, play and good architecture designing for flexible use and lifetime homes standard. Streets may aim to accommodate shared space where practicable. Building styles need to be distinctive and depict a character that will be defined by careful attention to the production of Design Codes.

- 19. Community-based management and governance, established from early on to help foster a sense of ownership by the proposed new Town Council, and defining the boundaries of Northstowe to give it identity in its own right and as a neighbourly asset, by offering an attractive leisure, education, employment and shopping environment.
- 20. Our approach to conceiving and building the new town will achieve excellence in generating a shared vision, setting high aspirations, which it will meet or exceed. The Vision will underpin the 'character' of the place, its unique qualities and shared aspirations that will give Northstowe its individual and confident identity well before the first approvals are issued or work gets underway. Exemplar status will as much be defined by the way that Northstowe is developed with a cohesive and practical phasing plan, embedded in the involvement of the local communities as community, public and private sectors together create the whole exemplar town.





## Relevant references in the Northstowe Area Action Plan

### Energy

Policy NS/23 'An Exemplar in Sustainability' (and paragraphs D13.2) refers to exemplar projects in sustainable development, including energy efficiency measures. This could be achieved by providing an increased level of sustainability across the development as a whole which is higher than could normally be required of the development or building a proportion of the development to advanced practice by pushing at the boundaries of the proven technology available at the time of the development. Paragraph D13.7 quantifies the degree of energy efficiency by seeking significant improvements above the 10% reduction in CO2 emissions required by Policy NE/1 of the Development Control Policies DPD (DCP DPD).

In the case of renewable energy provision, Northstowe should seek to do better than Policy NE/3 of the DCP DPD (which requires at least 10% of predicted energy requirements to be provided by renewable energy) where possible, aiming towards a target of 20% subject to wider economic, viability and social testing.

### Water

NS/21(6) requires Northstowe to achieve between 33% and 50% reductions on mains water use compared with conventional housing. Improvements on this would contribute towards exemplar projects.

#### Materials

The use of sustainable building materials, locally sourced and recycled materials and the inclusion of a travel plan to address the needs of labour during construction would contribute towards exemplar projects (paragraph D13.9).

