

**Examination into the Joint Core Strategy for Broadland,  
Norwich and South Norfolk.  
Matters for Examination - Outstanding Matters from Week Two**

Response by: Barratt Strategic

1. This note has been provided in response to a question raised by the Inspectors in Document RF61.

*"5. Barrett Strategic to state what are the unique circumstances about Rackheath (compared with the other major growth locations) that would enable the development to viably support the full provision of affordable housing, code 6 standards, provision for rail or tramtrain infrastructure, 40% green infrastructure and proportionate contributions to BRT, schools and all other necessary social and physical infrastructure."*

2. We address the question in two parts. Firstly, we consider **what are the unique circumstances about Rackheath (compared with other major growth locations) that would enable development**. We then address issues of viability.
3. Land ownership is considered a key factor in relation to the deliverability of an Eco-Community at Rackheath, in that almost all of the 293ha site is in a single ownership and a development agreement is in place between the owner and Barratt Strategic. Compared to other locations, where multiple ownerships are believed to be involved, this will confer significant advantages in terms of delivery.
4. Unlike other growth locations, it is intended that the Eco-Community will be delivered through a partnership approach with key stakeholders, notably Broadland District Council. Extensive discussions have already taken place between Barratt Strategic and Broadland District Council and it is anticipated that a formal joint venture agreement will be in place by the end of 2010 to ensure the effective management of this relationship.
5. As noted at the Examination, surveys have demonstrated that the site has few environmental constraints (see also Rackheath Eco-Community Concept Statement). Following its use as an airfield in World War II, the site has been used for large-scale agriculture. There is no significant visual interest and the heritage potential of the site is low. There is no risk of flooding. Overall the site may be described as poor in terms of biodiversity, and provides the opportunity to establish a variety of enhanced habitats across and around the development, restoring the function of the landscape as a link between the Norwich-fringe parklands to the south and the Broads landscape to the north. This can make a key contribution to the green infrastructure strategy for the area. Other

major growth locations are known to be constrained by, for example, woodland and features of heritage or ecological interest.

6. The site at Rackheath has characteristics that allow a variety of options for the delivery of renewable energy to be considered which provides flexibility and also means that they can be delivered cost effectively. The site has higher than national average wind speeds which means that wind turbines provide a viable energy solution. Discussions with Norwich Airport have confirmed that the use of turbines would be acceptable, provided that the location and height of turbines is sensitive to aircraft activity in the area particularly on the approach to Norwich International Airport. This is achievable.
7. The site lies adjacent to an existing railway line. This will allow rail freight delivery of biomass to a proposed energy centre which will be capable of providing for the energy needs of the community. The railway also represents an invaluable opportunity to enhance the already established public transport facility. According to National Express, its operators, the current timetable would permit an improved service of four passenger trains per hour between Rackheath and Norwich (a 12-minute journey each way). By creating a new spur off the existing line, northbound passenger trains are enabled to "turn round" and return to Norwich. This potential, discussed in greater detail in a separate paper, is not available to other major growth locations, with the exception of Wymondham.
8. The site has an underground aquifer that is beneficial for ground source heat pumps and can also provide potable water (using existing licenses) to help to achieve water neutrality, a proposal which has the support of the Environment Agency.
9. Rackheath already contains a working industrial estate, well established as an employment destination. Commercially, it is generally considered easier to attract new businesses into an existing work environment, expanding its infrastructure as required, than to create a wholly new employment area. The zone designated for some of the Eco-Community's employment-related activities is therefore located beside the existing Rackheath Industrial Estate and will link up with the employment zone around the proposed energy centre.
10. Part of the site contains aggregates which could be used for the development of its infrastructure, reducing the need to import material from long distances away and thus reducing the carbon footprint for the development. By planning the extraction sites carefully, the framework for a multi-functional landscape will be created, with significant new features such as lakes, providing visual interest and variety in what is currently a relatively flat and open landscape.

11. Turning to the question of **viability**, the first point to note is that DCLG was provided with a full development appraisal of Rackheath as part of the Eco-Towns assessment process. The scheme was allocated as an Eco-Town based on a rigorous assessment of our appraisal. DCLG therefore accepted that Rackheath was viable and deliverable. In its Location Decision Statement of July 2009, DCLG concluded that "the location has demonstrated that it can meet the sustainability and deliverability requirements to be successfully developed as an Eco-town".
12. The Inspector will appreciate that it is not possible to provide the appraisal to the enquiry for reasons of commercial confidentiality. However it should be noted that Barratt Strategic has already invested heavily in developing its proposal and would not have done so were it not confident that it can deliver a viable scheme over the course of the development programme. It has determined this in the light of its strategic priorities and experience gained on the delivery of large scale housing schemes and low carbon developments elsewhere in the country.
13. There are economies of scale and critical mass in the size of the Rackheath Eco-Community. Barratt was the first national house builder to build a code level 6 home at BRE and the first to construct an estate which is entirely code 6. Their experience has created knowledge in providing properties that meet the Code for Sustainable Homes Levels and the planning for Rackheath includes work on identifying alternative manufacturers that could set up on site with alternative construction of SIPS and other design solutions. Such a facility will provide cheaper solutions manufactured in the UK which will reduce cost.
14. Rackheath Eco-Community will adopt the principles of Material Resource Efficiency. The Government's Sustainable Buildings Task Group has identified three key areas where the development and construction industry needs to increase its efficiency: energy, water and use of materials. The efficient use of materials is considered a key component of sustainable construction and will involve sustainable material and product selection ('materials in') and how materials are used on-site and the management of any resulting waste ('materials out').
15. Major improvements in materials efficiency are possible by:
  - reducing the quantity of material sent to landfill during the design and construction process through designing out waste and effective waste management;
  - recycling and recovering waste material;
  - utilising more recycled materials and mainstream products with higher recycled content, including recycled content not necessarily sourced from construction and demolition waste.

16. Barratt Developments have previously demonstrated the benefits of using Modern Methods of Construction (MMC) for sustainable, low-cost housing. Based upon a steel frame system provided by their part-owned supply-chain partner Advance Housing Ltd, Barratt's construction techniques involved factory-produced closed-panel technology (fully insulated and weatherproofed units), complete with windows, doors, first-fix mechanical and electrical services, and internal lining. It has shown that MMC could be useful in reducing build-time, increasing efficiency and decreasing cost (also significantly reducing waste on site).
17. Further cost savings may be achieved by utilising on-site aggregates and importing materials by rail.
18. Barratt Strategic therefore believes that it can build out the development economically and that unit costs will reduce over the lifetime of the project with the introduction of these methods and the wider adoption of new technologies nationally as part of a roll out of low carbon development.
19. The precise contribution which Rackheath will need to make to physical, social and environmental infrastructure will become clearer with the formulation of the Area Action Plan for the North East Sector and the development brief/masterplan for Rackheath itself. It is anticipated that this will be based on the Rackheath Eco-Community Concept Statement, the content of which also informed the initial viability appraisal, and will be the subject of legal agreement to ensure delivery within an agreed phasing strategy.
20. Not all the items noted by the Inspector at the Examination would be funded from the housing budget and it is not possible therefore to draw direct comparisons, concerning viability, with other pure housing schemes.
21. The previous government supported the development and has already provided £10.2 million to Broadland District Council to support some of the infrastructure associated with the development. Broadland District Council have a breakdown of items that have been authorised by their cabinet which include contributions to infrastructure including Bus Rapid Transit, Green Infrastructure, Affordable Housing and the retrofitting of energy saving measures to existing housing in the community.
22. Other items, including for example the provision of secondary education, public transport services and community facilities may be funded jointly with other elements of development in the North East Sector.
23. The site characteristics allow innovation in delivery of infrastructure so that it can be financially viable. An example is the rail facility which

provides a tram train, biomass and rail freight and potential manufacturing linked to rail. As a result the entire infrastructure cost is not allocated to housing but spread between alternative uses. This helps the development viability.

24. The renewable energy generation which forms a key part of the Rackheath Eco-Community will also provide an income stream from its surplus generating capacity.
25. The draft Local Investment Plan and Programme, presented by GNDP, provides further information on funding sources for infrastructure and services in the North East Sector in general and Rackheath in particular.
26. In summary, Barratt Strategic is committed to the delivery of Rackheath Eco-Community using experience gleaned on other low carbon sites and is satisfied that such a development, in the form set out in its Concept Statement, meets all the requirements of a viability test. It is also worth noting that progress is already being made on several fronts :
  - Production of, and consultation on, the Exemplar Design Brief by Broadland DC;
  - Proposals for electric cars as part of the 'Plugged-in Places' application for funding;
  - Design of the BRT corridor along Salhouse Road;
  - Estimating the carbon footprint of the existing community at Rackheath
  - Commencement of the programme to retro-fit existing houses at Rackheath with energy saving measures
  - Planning permission granted for an education centre on Rackheath Industrial Estate