



## **Wirral Waters**

East Float Outline Planning Application

# Energy and Waste

**Sustainability Statement Addendum**

June 2010

## 1.0 BACKGROUND

On 14th December 2009 an Outline Planning Application was submitted for the redevelopment of East Float. East Float forms the heart of the Wirral Waters regeneration project, launched by Peel Holdings in 2006.

The planning application proposes up to 13,521 new homes, together with new offices, shops, restaurants, cafes, bars, hot food takeaways, hotel and conference facilities, culture, education, leisure and community.

The application will establish a series of five different quarters within East Float each with its own character and approach to design. These quarters are SkyCity, Northbank West, Four Bridges, Marina View and Vittoria Studios.

As part of the submission three documents were included that set out the aspirations in terms of energy and waste. These documents are also all available on the Wirral Waters website on the following links.

1. The Infrastructure Statement

[http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/Infrastructure\\_Statement.pdf](http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/Infrastructure_Statement.pdf)

2. The Sustainability Statement:

[http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/Sustainability\\_Statement.pdf](http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/Sustainability_Statement.pdf)

3. The Sustainability Guiding Principles (Stage 3 document):

[http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/3\\_Sustainability\\_and\\_Physical\\_Infrastructure.pdf](http://www.wirralwaters.co.uk/pdf/PlanApps/20091214/3_Sustainability_and_Physical_Infrastructure.pdf)

Following the submission of the planning application on 14<sup>th</sup> December 2009, the Council wrote to Peel suggesting that there are several areas where further information and details are required to enable the officers to make an informed recommendation to the planning committee. The responses were split into two appendices, A and B. Appendix A set out the essential list of requirements that are necessary to enable officers to progress their consideration of the application. An additional document (Appendix B) detailed less urgent requirements and issues.

Section 2 of this document sets out the officers' comments as received by Peel on 10<sup>th</sup> February 2010 followed by Peel's responses to those comments

A telephone call was made by Cara Tissandier (CT) of Hoare Lee to Paul Slinn (PS) on the Merseyside Environmental Advisory Service on Tuesday 9<sup>th</sup> March. As key adviser to the Council on waste and energy issues we understand that PS was the main author of the comments and requests for further information/ clarification in respect of these matters. In that telephone discussion CT ran through the essence of the responses set out below and confirmed to PS the commitments that have been by Peel made in terms of energy and waste management. PS seemed reassured by the call and accepted that a lot of the detail he seeks is not realistically deliverable at this stage and conditions will be drawn up (which is the standard procedure for projects of this scale and programme). He agreed that the waste commitments highlighted in the comments will be highly dependent on the council's own implementation of its Waste targets. Hoare Lee consider that the telephone discussion was very helpful in clarifying issues and hope that this has provide MEAS with a good degree of reassurance with regard to Peel's commitment and approach to achieving a highly sustainable development at East Float.

## 2.0 Additional Information Requested by LPA 10<sup>th</sup> February 2010

(Wirral Council's response in italic, HL response in non-italic)

### Appendix A

#### Waste and Energy

- Proposals for Waste management and the treatment of Energy issues form, in our view, part of the essential infrastructure of the development and we accordingly feel that the application should provide a more detailed and practical programme for the development of this infrastructure alongside wider development phasing so as a clear picture is available of how the high aspirational standards of the scheme will be achieved. Our view is that if too much of the detail of these areas is deferred to subsequent reserved matters applications, there is a risk that opportunities that exist for early intervention will be lost and that as a result it will be necessary to adopt compromise solutions piecemeal at later development stages which may lead to lower than expected sustainability of the scheme. Additionally, the Council will be mindful of the requirements of PPS10 on Waste and the Regional Spatial Strategy policies on Energy and will wish to ensure that they are addressed at the point of decision. Accordingly, we recommend that the Council asks the applicant to develop comprehensive strategy documents on these issues indicating how these issues will be integrated into the development as it moves forward. Clearly on a scheme of this nature a degree of flexibility will be required, but strategies available to the Council to be kept under review could help to ensure that planning for waste and energy are taken forward in an integrated way.*

#### Response by Peel

Peel is in full agreement with the Council that waste management and efficient energy provision will form part of the essential infrastructure for the East Float development. Indeed Peel's vision of establishing Wirral Waters as a world class waterfront location for working living and leisure will not have been achieved unless workable solutions for such provision are put in place in the right location and at the right time. However what is workable and optimal for each phase of the development will strongly be influenced by the form and content of that phase and by the constantly changing and emerging technologies over the 35+ years, over which the development is expected to be built out.

Hence, although Peel is very clear as to the aspirations and the level of commitment in achieving the highest levels of sustainability, Peel is also very aware that the bringing forward of detailed proposals at this outline planning stage, when the detailed layout and content of the various development phases is unknown, carries with it a risk both of getting the solutions wrong and of missing out on the opportunities which the scale and nature of the development provides for adopting new technology and options. Peel's approach is therefore to seek to achieve the best balance at this stage between adopting clear and transparent commitments and outline strategies so that the level of aspiration is understood and agreed by all parties but without closing down options unnecessarily, before they can be fully explored and assessed as part of the detailed planning stages.

As part of this approach Peel has set out a very clear commitment to the achievement of BREEAM Excellent and Code for Sustainable Homes Level 4 standards in the East Float development. Even at the current standards this represents a commitment to achieve very high levels of energy efficiency from the outset and this level of achievement can only increase with time as, for example, the requirements to achieve Levels 5 and 6 standards are brought into effect nationally.

The submitted Infrastructure Statement, Sustainability Statement and the Sustainability & Physical Infrastructure Guiding Principles documents include a timeline which sets out Peel's minimum level of commitment against current planning policies and emerging legislation. As recognised in the officers' comments above, the development of the infrastructure is intrinsically linked with the phasing itself. At the present time that phasing remains flexible as the site lends itself to being phased in a number of different ways and the phasing will be subject to market and occupier demands. As a more detailed programme for phasing is developed it will incorporate proposed solutions to the infrastructure development, as one cannot come without the other. Peel is confident that opportunities for early intervention will not be missed because the scheme infrastructure has, to date, been developed to be a 'loose fit' meaning that solutions have not been discounted where there is no good reason for them to be discounted at this stage and that there is room within the layout and design of the development phases for the final and agreed solutions to be incorporated without major changes to the proposals as currently set out in the masterplanning for the various quarters. Also it is worth noting that technologies and local council schemes/ proposals will develop and be refined over the next few years and that this approach allows for the East Float development to adopt the best approach at each stage of the project.

The requirements of PPS 10 have been considered in the development of the waste strategy so far and reference is made to this in the Sustainability Statement and the Infrastructure Statement submitted as part of the planning application.

The Regional Spatial Strategy (RSS) EM10 requires plans, strategies and proposals to promote the provision of sustainable new waste management infrastructure systems that contribute to the development of the North West by reducing harm to the environment (including reducing impacts on climate change). It also promotes the improvement in the use and efficiency of resources, the stimulation investment and the maximisation of economic opportunities. This has been acknowledged in the design so far with reference to the use of low carbon waste movement (potential use of waterways or vacuum collection systems and/or electric vehicles) and the re-use of waste as a fuel source for the development's heating and electricity requirements. The final solution as to location and technology will be highly dependent on the Council's own initiatives in this area and therefore Peel is committed to working with the Council and other partners as appropriate in order to identify and take forwards the optimum solutions for both waste management and energy provision across the site.

In line with the North West Sustainable Energy Strategy, Policy EM17 requires that, by 2010 at least 10% (rising to at least 15% by 2015 and at least 20% by 2020) of the electricity supplied in the North West should be provided from renewable energy sources. This has been responded to by the identification within the East Float proposals of two potential offsite wind turbine locations as well as the use of combined heat and power plant on site that will provide low carbon (and later zero carbon) electricity.

EM18 requires strategies that encourage the use of decentralised and renewable (or low-carbon) energy generation in new development. New non-residential developments above a threshold of 1,000m<sup>2</sup> and all residential developments comprising 10 or more units should secure at least 10% of their predicted energy requirements from decentralised and renewable or low-carbon sources (unless it can be demonstrated by the applicant that this is not feasible or viable). Given the scale of the project, it will be likely that from the outset the use of low carbon combined heat and power will be a viable solution and therefore will form the basis of the East Float decentralised low/zero carbon offer.

Given the integral link between council and developer in terms of energy and waste provision a solution will need to be developed that involves both parties committing to proposals that will meet their long term sustainable goals. With that in mind a set of workshops managed through the projects Working Groups will be established. The Working Group will include the developer, the local authority as well as all relevant stakeholders. This will provide a forum within which options will be explored and solutions tested in depth to arrive at a consensus to ensure that opportunities are maximised. By way of confirming Peel's commitment and ability to deliver the highest levels of sustainability in its projects it should also be noted that the developer benefits from a renewable energy division in house and has pioneered the BREEAM Communities

approach towards its development at MediaCity in Salford which includes a Tri-gen power system.

- .2 *The Council may need to play an additional role in facilitating this aspect of scheme infrastructure development. The Wirral Waters masterplan indicates 4 sites around the West Float area that may have uses for waste management. However, none of these sites have been taken forward for Waste DPD purposes and the Council may wish to consider whether it has a role to play in helping to ensure the delivery of the sustainable waste management infrastructure and a high degree of self-sufficiency within the scheme that we would hope to see.*

**Response by Peel**

Peel are keen to liaise with the Council in producing more detailed strategies on both waste and energy strategy solutions, post outline consent but prior to the development of any reserved matters applications. These documents will be produced through ongoing consultation with relevant council officers and relevant consultees/stakeholders to ensure the strategies are in line with local policy and respond to the concerns raised with respect to integration with the Waste DPD.

- .3 *There are a number of concerns relating to waste management. These issues here are not necessarily immediate red flags, but are of concern nonetheless. The LPA's advisors MEAS' view is that the documents don't fully reflect the scale of the waste management challenge facing the development, on its own or as part of the completed WW masterplan. Currently, there is no suggestion of a strategy being in place to address the issues effectively even if only in outline. The LPA's advisors MEAS' view is that the later these issues are left, the more difficult it will be to produce a solution appropriate to Wirral and Merseyside's Waste Management aspirations. Waste, and for that matter the linked issue of energy, should ideally be treated as part of the essential infrastructure of the site and planned for accordingly. Further evidence should be supplied as to the Energy and Waste Strategy to be adopted for the development, with a mechanism to be prepared to govern its implementation.*

**Response by Peel**

Peel is committed to working with MEAS in devising the detail of the waste management strategy and to ensuring that the agreed waste management strategy maximises the opportunities for being able to address the project holistically. This includes both construction waste and waste generated during the operation phase.

The Infrastructure Statement confirms that, during construction, the Wirral Waters development will divert significant proportions of its construction waste from landfill and ensure that it follows best practice measures wherever possible. This will be achieved by sorting waste at source and sending as much as possible to be recycled, using techniques such as cut and fill to minimise the volume of waste material and using recycled materials within the construction where feasible.

Section 7 of the Infrastructure Statement sets out the strategy for waste management during the operational phase of development. The scheme will target a reduction in the amount of waste generated in line with regional NWDA policy requiring zero net waste by 2020. The infrastructure needed to manage the waste that will be generated on-site, will be developed in the most effective way in line with phasing. In order to minimise and manage waste generated on-site, a waste management strategy will be developed that will follow the waste hierarchy as set out below:

- **Avoid**

*Example:* Employing strategies such as not printing a document unless completely necessary or using hand driers instead of paper towels avoids waste generation and these are often the simplest and most effective ways to reduce waste.

*Action:* Peel will provide educational information on waste avoidance techniques to ensure that during the operation of the completed buildings, the actual waste generated

will be reduced. This will be managed by providing a set of guidelines to tenants/buildings owners to implement as part of the overall management guidelines for the development. Peel is considering setting performance targets for waste reduction to further encourage users to waste less.

- **Reuse**

*Example:* Using reusable products e.g. packaging, boxes etc, instead of disposable ones will reduce the need to throw away materials.

*Action:* Peel will provide educational information to all tenants/occupiers on methods of reducing waste through better re-use. Peel is considering setting performance targets for waste reduction to further encourage users to re-use materials where possible. It is of particular significance in the retail/food sectors where a lot of packaging and food waste is generated. Below are some initiatives that will be suggested and developed with the local council to encourage re-use:

- 1) Encouraging businesses to collect and re-use or re-cycle bottles via motivating customers through money deposit;
- 2) Possibility of restaurant composting cooperative;
- 3) Map / Directory and sticker campaign:
  - a. To give to recycling / reuse / repair businesses and services to show in their shop window;
  - b. To direct people to a website to raise awareness;
  - c. Comments on map could include charity shops, libraries (reusing books) and encourage businesses to not use disposable packaging etc; and
  - d. To direct people to local places where awareness activities take place.

- **Recycle**

*Example:* When waste is generated, recycling materials such as paper, glass, metal and plastics will help to minimise the amount of refuse which will need to be taken to landfill sites. Recycling has been taken into account at neighbourhood masterplanning stage and Peel is committed to facilitating a high level of recycling through the following measures:

- 1) Provide guidelines at detailed design to ensure adequate space is allowed for in all buildings for the location of recycling collection points;
- 2) Provide all building tenants with information on the collection streams available to them and highlight the benefits of recycling;
- 3) Develop a coherent strategy with the local authority to ensure residential waste recycling is facilitated. This will include establishing community awareness from day one with educational information available; and
- 4) Consider setting performance targets for recycling rates to further encourage users to recycle more.

- **Waste to Energy**

*Example:* As an alternative to being taken to a landfill site, waste can be used to fuel power generation and help to reduce the use of fossil fuels in energy generation.

*Action:* The energy requirements of the site will facilitate the use of Refuse Derived Fuel in order to complete the recycling circle. Waste that is not recyclable can be converted to useful energy rather than sending it to landfill. Peel will be commissioning an 'Energy to Waste' feasibility study as part of the energy and waste strategies for the site. It will investigate the various options for energy recovery (in the form of electricity and heat) and provide a recommendation as to the best solution to be carried forward. The relationship between the waste and energy strategy developments is key and Peel is committing to carrying out this study early in the programme so as not to preclude any options available

to them. The council will be part an important part of this study to ensure that the overall approach is developed in line with its strategies.

- **Disposal of waste**

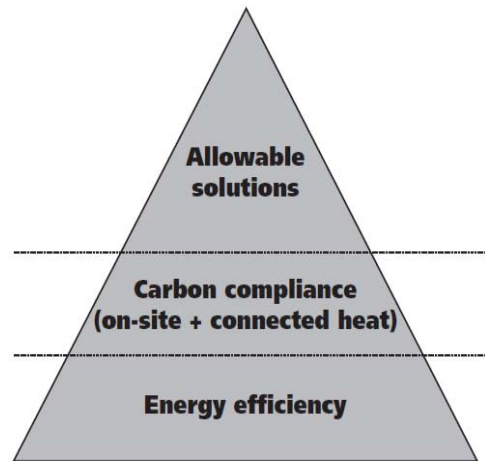
*Example:* When refuse has been generated and it is not able to be reused, recycled or converted to energy, the final stage would be to dispose of it in a landfill site.

*Action:* In delivering a zero waste development the following steps will be followed as set out in the infrastructure statement:

- 1 Investigate the use of the existing Waste Recycling, Recovery, Composting and Transfer Facility at Bidston in order to minimise the environmental costs of transporting the waste. If it is at full capacity, develop further local opportunities in conjunction with the local council.
- 2 Utilise Peel's Ince Waste to Energy facility when available and develop further local opportunities in conjunction with the local council.
- 3 Implement waste reduction strategies:
  - During construction, avoid waste generation through standardisation of rooms, prefabrication of building elements and building services.
  - During operation – see previous notes on waste management strategy and the waste hierarchy.
- 4 Collaborate with WRAP (Waste and Resource Action Programme)
  - Develop targets and strategies to minimise waste to landfill
  - Maximise recycled content in all construction materials.

The background energy strategy work carried out (but not submitted as part of this planning application) has been very detailed and focuses on the delivery options for (ultimately) achieving a zero carbon development. The development of the detail for the phased approach is highly dependent on the programme for when buildings come on line and what mix of uses these buildings comprise. It is also dependent on the carbon content of grid electricity, availability of other fuels and conclusions from the waste to energy study. In order to ensure that the plant selection and fuel sources are best matched to maximise energy and carbon savings this detailed work cannot sensibly be carried out before a more developed programme is established and further work is carried out on the strategic solutions to waste.

Peel recognises the need to meet planning policy and the challenging targets set by building regulations leading to zero carbon (still to be defined by government) across all uses by 2019. The current lack of definition of the term “zero carbon” and, as importantly, what “allowable solutions” can be used to achieve it, make it difficult for Peel to commit to a more detailed breakdown of the energy strategy at this stage.



Taken from the CLG's Zero carbon consultation document. .

However Peel will commit to achieving a minimum of current building regulations requirements (revision in place at the time of construction) and providing a proportion (minimum 10%) of the remaining carbon emissions from a low or zero carbon source. Peel also commit to the following overarching objectives:

- to provide a stable supply of competitively-priced, low-carbon energy via a decentralised renewable and low-carbon energy network and, where possible, energy-from-waste. All on-site and off-site options will also be considered to achieve compliance with the emerging zero carbon policies;
- to empower and enable residents and other building occupiers to use less energy through clear communication and easy-to-use infrastructure;
- to maximise the carbon-saving potential of energy within the context of overall commercial viability and a 'total carbon footprint' approach to understanding and reducing carbon emissions; and
- to embrace the potential for offsetting and other carbon mitigation measures to benefit the wider community around Wirral Waters.

Peel are keen to liaise with the Council in producing more detailed documents on both waste and energy strategy solutions post outline consent, but prior to the development of any reserved matters applications. These will set out how the site wide energy strategy will meet the planning targets in place at the time the buildings become occupied and how this approach fits with the overall target of having an infrastructure in place to deliver a zero carbon development by 2020.

## Appendix B

### **Guiding Principles: 3. Sustainability and Physical Infrastructure/ Sustainability Statement**

*7.1- 7.2 Ecology and Landscaping are identified as a sustainability issue but guiding principles are not included. We will require an explanation for this.*

The Sustainability Objectives in the Appendix state how these fit with Wirral Sustainability Objectives. As set out in the Sustainability Statement, different sources have been considered for establishing a bespoke set of sustainability objectives for Wirral Waters. These include the **Northwest Sustainability Toolkit**, which includes the following for ecology and landscaping:

#### **Ecology**

- Maintain and enhance biodiversity
- Improve and strengthen the ecological value of the site and existing habitats
- Support the viability of species by linking populations and habitats
- Ensure that the planting specified contributes to the ecological value of the site

#### **Place-making**

- Landscaping appropriate to the local environment
- Achieve visual and physical links
- Create a place with a clear identity
- Responding to local character whilst reinforcing project identity

In addition the **objectives of the Wirral Core Strategy Sustainability Appraisal** have been reviewed. These include:

- To provide sufficient opportunities for outdoor recreation, sport and to protect and enhance the Borough's natural environment
- To protect and enhance the Borough's biodiversity and geological resources
- To protect and enhance the character and local distinctiveness of the urban environment

This review led to the identification of **bespoke objectives for Wirral Waters**, including:

- Creation of new visual experiences / landmarks / improved visual amenity
- Appearance of materials, façade treatment and relationship with existing historic and townscape environment
- Relationship with / impact upon Townscape Character Areas (TCAs), natural topography, existing scale, massing building heights, proportions and urban grain
- Relationship with / impact upon primary and strategic views, secondary views, sequential views, view composition, landmark and skyline features
- Overall extent of visual influence

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- Relationship with / impact upon Designated Wildlife Sites (Ramsar, SPA, SSSI and LNR), protected wildlife and habitats, Biodiversity Actions Plans (BAPs) and Species Action Plans (SAPs)
- Protect and enhance habitats linkage / green corridor creation / ecological and biodiversity design

These factors have shaped the evolution of the Wirral Waters Strategic Regeneration Framework and Masterplan for East Float, as evidenced in the following documents:

- Design & Access Statement Appendix 1 City Structure: Landscape & Public Realm (Landscape Projects, December 2009)
- Infrastructure Statement (section named Transport, Movement & Public Realm) (Martin Stockley Associates, December 2009)
- Guiding Principles for Landscape, Waterfront & Public Realm (Turley Associates, December 2009)
- East Float Development Specification (Turley Associates, December 2009)
- East Float Environmental Impact Assessment, Townscape & Visual (WSP, December 2009)
- East Float Appropriate Assessment Extended Screening Report (WSP, February 2010)
- East Float Ecological Impact Assessment (WSP, December 2009)

Each of these documents takes account of relevant ecology and landscape considerations, informed by the review of objectives.

Ecology and landscape issues are addressed at an outline level, reflecting the nature of the planning application. A number of impacts and mitigation/design requirements cannot yet be identified in full detail; however the mechanisms are to be established by the outline planning permission to ensure the objectives are met and that ecological and landscape impact is minimised and potential benefits maximised.

Given the stage and scale of the development further detail can only be developed within the reserved matters applications.

*7.3 Sustainable energy – aiming to achieve Part L (CSH level 3 equivalent) until 2013 is not adequate enough for an exemplar scheme, and appears to contradict the Infrastructure Statement, which outlines that CSH Level 4 will be sought in the earlier stages of WW.*

To clarify the statement made in the submission, in terms of energy only, there is a commitment to achieve the mandatory minimum required for Code for Sustainable Homes Level 4 which equates to a 44% carbon reduction compared to 2006 standards. This carbon emission saving is in line with the proposed changes to Part L expected in 2013. After 2013 the infrastructure and buildings will be developed such that a zero carbon energy rating can be achieved (in line with Code for Sustainable Home level 6) for all homes.

*7.4 BREEAM Communities standards –if this is to be the adopted standard, we need to discuss the optional parts of this standard further to determine what should and shouldn't be used as part of the assessment.*

This is an option for Peel to use, and is the best currently recognised measure of overall sustainability available, however Peel does not wish to be restricted to using this system from the outset. The commitment is to meeting relevant adopted national, regional and local targets, through a holistic approach.

7.5 *It doesn't appear that you intend to meet RSS Policy EM18 in the earlier stages of the development, and provide 10% predicted energy requirements from decentralised and renewable or low-carbon sources (though some parts of the document do seem to contradict this again). It appears that the intention is to implement the energy hierarchy in a phased manner and not at each stage of the development as should be the case (e.g. see paragraph 3.11 of the Sustainability Statement). This is not considered acceptable. Understandably it will take time to implement an operational community energy network etc, but you should still be seeking to provide 10% renewables at the first stage after following the other steps in the hierarchy first.*

Peel recognises the need to meet planning policy as a minimum and the inclusion of 10% of renewable/low carbon energy sources will be met throughout all stages of the development. This is further strengthened by the target to meet 44% carbon reduction compared to Part L 2006 standards which will inevitably mean a proportion of the energy will be from a low or zero carbon source. Peel can not however commit to this proportion coming from a purely renewable energy source as it may be in conflict with the objective of a decentralised low carbon energy network delivering a zero carbon development (definition to be defined) by 2020. Often carbon reductions through low carbon means are a more commercially viable solution that 'bolt on' renewable energy technologies that will not ultimately help develop a centralised low carbon network. The approach will be defined in more detail as the scheme progresses and Peel welcome the input of the council and NWDA in this process.