

## Cambridge City Council - Local Plan Consultation July 2012:

Smith and Wallwork comments on 'CAMBRIDGE LOCAL PLAN TOWARDS 2031 – ISSUES AND OPTIONS REPORT' submitted 27 July 2102.

## **CHAPTER 6 – SUSTAINABLE DEVELOPMENT, CLIMATE CHANGE, WATER AND FLOODING**

### **A holistic approach to sustainable development**

#### Materials and construction waste:

It would be good to have some targets/bench-marking and also data collection and publication in the area of construction materials and waste (resource efficiency). Perhaps this may only relate to key materials and products used (ie structure, cladding etc).

It would also be useful to ask where these key materials/products are coming from. I would like to see a policy which considers local materials and products or even local skills and services.

#### Adaptability/re-use of buildings:

Keeping good records of building designs is key to assessing adaptability and re-use at a later stage in the life. In particular structural engineering drawings and design criteria.

### **Setting targets for sustainable construction**

The use of materials with low environmental impact will not be achieved just through BREEAM or CfSH rating. Further policy would be required linking to embodied carbon calculation perhaps through the emerging EPD route?

It would be worth considering Hackney Council proposal for a Wood First policy (also support by DEFRA's recent independent panel report on forestry:

<http://apps.hackney.gov.uk/servapps/newspr/NewsReleaseDetails.aspx?id=2437>

Such a policy could help reduce the environmental impact of construction and help boost low carbon construction skills.

BREEAM just deals with design and construction. Consideration should be given to how the building performs in occupation. We have this for vehicles (MoT) and the mechanism is there for buildings EPC's and then DEC's. Post occupancy evaluation is something that should be carried out on all major new buildings and developments.

### **Climate change adaptation**

Regarding urban landscaping and the role of trees reference should be made to DEFRA's recent independent panel report on forestry:

<http://www.defra.gov.uk/forestrypanel/>

The use of 'cool' building materials to reduce the impact of higher temperatures needs to be better explained. Heavy materials retain heat and act as a radiator (good in winter, bad in summer). In extended periods of hot weather thermal mass can be counter-productive. Also the colour of materials needs to be considered, ie lighter coloured materials for roofs and walls can help reduce the effect of the urban heat sink effect.

## **Beyond Sustainable Drainage Systems (SuDS) - an integrated approach to water management**

With the integration of multi-use green spaces and their use as water storage areas, it is essential that the drainage system philosophy is well documented to ensure any future development cannot alter this space, which would render the initial design useless. The maintenance of SUDS is vitally important and this should therefore be considered to ensure it is not disproportionate to the risks of failure.

Policy is required to ensure surface water is managed in a sustainable and appropriate way. However, with the introduction of the Flood and Water Management Act and subsequent SUDS Approving Bodies (part of CCC) there is a risk of unnecessarily duplicating elements of the planning process.

Clarity is required stating if this policy is relevant to extensions and refurbishments, and if so, to what degree. A reiteration of the Flood and Water Management Act preference for above ground surface water conveyance and storage would be beneficial.

## **Water efficiency in residential development**

Yes this policy is required to encourage developers to consider rainwater and grey water re-use. This is often one of the first elements to be value engineered out of a project despite its clear benefit to property owners (bills) and the environment.

Option 53 is the most workable solution in the short term taking into account current technology. However, the clear intention of option 52 being implemented in (say) 5 years' time should be stated to encourage innovation.

## **Flood risk**

It is agreed that discharge on previously developed sites should ideally have flow rates restricted to greenfield run-off rates. However, clarity is required as to when this policy is implemented in relation to extensions/refurbishment/part new build works.

Yes this policy is required. The current Environment Agency guidelines of a flood risk assessment only being required in a fluvial flood zone, or if a developable area is in excess of 1Ha, enables flooding from various other sources to be ignored. Policy should require that flooding from all sources is considered.

Although there is a requirement to control discharge flow rates, there is no mention of controlling discharge volumes.

## **Enhancing the quality of water bodies**

There is no mention of the 'first flush' (5mm) rainfall event being retained and cleansed on site. This is generally the most contaminated element of discharging water. Reference should be given to compliance with the relevant SUDS treatment trains for surface water discharge from developments.

### **Green roofs**

The strict use of green roofs appears excessive. Although providing significant benefits there are alternative options which may be preferential for a specific scheme, as long as the approach taken can be justified.