## Draft Climate Change, Sustainable Design, Construction and Energy SPD Guildford Residents Association (GRA) Response

The draft is welcome and has much good intent with some notable weaker areas – eg provision for Electric Vehicles

The onus is on developers and it is not clear GBC will have leverage to secure actions.

In relation to the energy sections:

There is no analysis of which low carbon technologies are suitable for the environment within Guildford. There is a tick box list of technology without considering the pros and cons. At times this section seems to be lifted from a document drafted for a large city rather than in tune with the most appropriate approaches and opportunities in a Guildford context.

The SPD should include a requirement to achieve much stronger integration between low carbon technology and landscape impact and character.

More attention should be given to the scope for and impact of wind energy. Technologies should not not just be seen as green in terms of emissions but also landscape impact. Wind energy is inappropriate in AONB, especially given impact of associated access roads, but may be appropriate along some parts of the route of the A3.

Solar panels should be integrated into design from outset eg conceal from views when designing roofscape. This is particularly important given Guildford's topography and highly prized views. Glare from conspicuous poorly designed panels would detract from many views and street scenes, including views from the AONB.

Biofuel pellets – need more emphasis on ensuring compatibility with air quality and residential amenity given air quality issues in parts of borough.

Page 10 para 3.5 Should include reference to SUDS layout at Outline stage.

Page 22 para 5.4 2)g should include a requirement that contracts will prevent occupants replacing water efficient showers with water demanding power showers. This has been shown to be a significant issue and frustrates water demand management strategies.

Page 20 para 5.10 after "schemes should be designed to require less energy for heating and lighting by ensuring that they make best use of the surrounding environment". <u>Impact on landscape and amenity should also be factored in at this stage to achieve well-integrated design</u>.

Page 27 para 5.37 Rainwater harvesting should be expected not just set out as something that can be done.

Page 28 para 5.40 This section on greywater re-use is far too half hearted. This guidance will shape the new development that offers more opportunities.

Page 28 para 5.42 We support this approach. GBC needs to enforce it. The Council has been allowing residential development in zone 3 flood risk areas which offer no flood protection beyond a

plan that sufficient notice will be given to avoid residents having to evacuate through deep flood water.

Page 28 para 5.45 This section on the urban heat island effect is far too vague on implementation. This important issue has major implications for urban design and development densities. There is a real danger that the scale of development proposed, current design focus on hard surfaces and loss of green features that have been a valued characteristic of Guildford will result in a deteriorating heat island effect during the life of this Plan. Far stronger encouragement of green space, trees, water features and well-designed gaps between buildings is required to avert overheating as the climate changes. Urban trees will be less resilient due to the stresses of more extreme weather events (eg drought, wind) meaning trees will need greater root zone protection than is often made available to water stressed trees within the urban fabric. Too often trees are shown in planning applications to soften the appearance of high density schemes even though the longevity of any trees planted is questionable because insufficient space is allowed for trees to mature and prosper.

Page 29 para 5.48 The requirement that air conditioning will only be allowed if passive cooling is inadequate is of little value unless some requirement is given that the building has been designed to achieve a high standard of passive cooling and ventilation.

Page 29 para 5.49 addresses an issue that will have a major impact on quality of life and well-being of residents. The reference to glazing systems that minimise heat loss and excessive solar gain is far too vague, especially given the current emphasis on winter heat loss at the expense of excessive summer heat gain.

Page 29 para 5.53 This should refer to "brown roofs" which are being promoted by some developers in Guildford as a cheap alternative to a green roof. These should be strongly discouraged. They offer the negative design and landscape impact of a felted flat roof without the sustainability and amenity benefits of a planted green roof. Also, notably brown roofs do not soften the impact on views as well as green roofs.

Page 29 para 5.54 This paragraph is much too weak to promote the shift to a presumption in favour of permeable surfaces that is required in future design. This is especially important given the speed with which water already runs down steep, developed hillsides in Guildford and accumulates along the river corridor. This paragraph should also refer to an expectation that permeable surfaces will be retained and maintained. For example, permeable paving needs regular maintenance to keep its permeability and many permeable green spaces at the front of properties are replaced by hard standing for vehicles if inadequate space is provided in design and layout for parking (in future electric or hydrogen) and if alternative transport is inadequate.

Page 30 para 5.60

Applies to developers and occupants.

Well-designed space for electric and hydrogen vehicles is essential and, also, well-designed layout for sustainable transport options. A new paragraph is required which:

- sets out electric and hydrogen vehicle space and layout requirements
- and also promotes layout and design to accommodate and encourage a significant shift to car club vehicles.

Page 30 para 5.62 Adequate charge points should be a requirement not simply considered. It is especially crucial charge facilities are provided for car club vehicles, delivery and trade vehicles and

for spaces separated from the curtilage of properties. Guildford has far too few charge points and has a lot of catching up to do.

Page 30 para 5.63 Reference to future provision is necessary but again this does not go far enough. This whole section needs a step change in ambition and expectation. It is written as if making future provision rather than to ensure speedy delivery of what has to become the new normal very swiftly. As soon as the facilities are there, people will have confidence to buy electric. Currently provision in Guildford is limited to minimal charge points in Waitrose car park, Surrey Technology Centre and a site in Ash. This is hardly a platform for behaviour shift! Future proofing should relate to hydrogen powered vehicle requirements.

Page 31 para 5.72 The recycling paragraph should be expanded to ensure well designed space is available for separating materials for both recycling and re-use. Space for this is needed within relevant rooms in properties and also outside properties. The limited separation that occurs at present, which leads to low grade co-mingled recyclables, should not be considered an adequate standard for future development. Also, development layout should provide space for community composting facilities and for larger developments small bio digesters with energy capture.

Page 31 para 5.73 The section on food growing should be expanded to include access to green space and soil for health and wellbeing, an important aspect of sustainability. Children with access to soil enjoy better immunity reducing pressure on the NHS and experiencing fewer allergy issues. All ages have better mental wellbeing if they have access to a safe green space. If society needs to isolate in future, to control the spread of disease, access to a separate space greatly enhances wellbeing. During more frequent heat waves a safe outdoor space also provides many benefits. These multiple benefits of access to private open space have consequences for building design and layout and should sit alongside the benefits of options to grow food.

Page 32 para5.79 Statements on aggregate and primary material sourcing should include an assurance that no primary material has been sourced from a protected area (National Park or AONB). This is very relevant for Guildford which benefits from effective protection of the Surrey Hills AONB. Our borough should ensure its approach to development is compatible with landscape protection of all parts of all AONBs.

Page 35 Para 5.97 The section on Resources, materials and waste is particularly welcome. In addition to the excellent proposals, we consider it is important to add a safeguard. It is important to ensure the desire to avoid transporting waste from a site is not used to justify burying or mounding of waste material on construction sites. Leaving pockets and mounds of construction waste across development sites leaves an unsustainable legacy of scattered waste for future generations to deal with. There are numerous examples of spoil mounds and buried waste. These can also destroy the natural profile of Guildford's downland landscape as developers reprofile the land on prominent ridge top sites to avoid material transport. Landform is a non-renewable natural asset and has a value that should be factored into adopting a sustainable development approach.

Page 35 para 5.101 Yes, GRA has long argued that all developments should pass a test that they will age well. All too often, due to short sighted design, it is the more modern buildings that become eyesores and are replaced whereas older properties are adapted, endure and age gracefully.