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## North Herts Council Sustainability Supplementary Planning Document

### Response to Consultation – February 2024

- 1.1 Consultancies DLA, EAS and twoeighty have collaborated to prepare a joint response to the Councils consultation on the draft Sustainability Supplementary Planning Document. This document contains some overarching comments, with topic specific comments provided by the relevant consultant.
- 1.2 DLA is a town planning consultancy based in St Albans, Hertfordshire, offering assistance with all aspects of the planning process.
- 1.3 EAS is a Civil Engineering Consultancy with offices in Hertfordshire, specialising in Transport Planning and Flood Risk.
- 1.4 TwoEighty Consulting is a Sustainability Consultancy, based in St Albans, Hertfordshire. We offer the following services to support development applications at the planning stage:
- Energy and Sustainability Statements
  - Whole Life-Cycle Carbon Assessments
  - Circular Economy Statements

#### **Scope of Document**

- 1.5 As the draft SPD confirms, the purpose of the document is to provide further guidance and set out expectations for developers when applying Local Plan Policies. In this regard, it is important that the SPD:
- a) Does not require developers to go beyond the requirements of policy in order for developments to be found acceptable.
  - b) Is clear about what comprises policy compliance and what would comprise an exceedance of policy compliance.
  - c) Is clear about how this is measured and assessed.
- 1.3 The SPD follows a bronze, silver and gold system throughout. However, this system is not explained in the document and therefore it is not clear what those terms mean, and how policy compliance fits within the structure. For example, does bronze represent policy compliance, i.e. the minimum requirement, and therefore do silver and gold represent exceedance of those requirements? If this is correct, what incentive is there for developers to achieve silver and gold standards, and what is the purpose of the three tiered approach? This must be clarified if the SPD is to be effective. Clarification of the approach may also necessitate a reconsideration of what requirements constitute “bronze” to ensure these do not go beyond the policy requirements of the newly adopted Local Plan. Examples of where bronze appears to go beyond policy requirements are included below.

#### **Application Requirements - Need for Proportionality**

- 1.6 As the document itself confirms, there is a need to ensure the document does not place unnecessary financial burdens on applicants. As drafted, we consider that the document is very onerous on smaller scale developments, with a huge increase in submission requirements that have not been properly justified. This comes on top of Biodiversity Net Gain requirements, and is likely to represent a significant barrier to small developments coming forward, and/or a reduction in the amount of affordable housing that can be viably delivered on smaller schemes. Potentially onerous requirements include:

- a) A requirement for Design and Access statements for minor residential developments – these are not required as part of national validation requirements for these types of applications and the need for them has not been justified.
- b) A blanket requirement for air quality assessments which are costly and time consuming to prepare, and which for the vast majority of developments is likely to generate a negligible change in air quality. This requirement should be clarified and focussed on particular types of development where it can be justified for compliance with policy.
- c) The requirement for open space enhancement plans is not justified by policy and is onerous on small schemes.
- d) Surface water drainage strategies can and should be required by condition for smaller schemes, as these require significant financial outlay and should not be required before planning permission is granted.
- e) Site waste management plans should not be necessary for smaller scale development and the Council should be guided by County on these matters.

#### **Pre application requirements**

- 1.7 The document links to a template to be used at pre application stage and then throughout the life of an application and its implementation. The template being used is the GLA's template, which presumably relates directly to London Plan policy requirements, The use of this template in the North Hertfordshire policy context has not been explained or justified. A North Herts specific template should be created which is properly linked to the locally applicable policy framework and specifically the requirements of the Local Plan. This could be based on the London Plan but adapted to ensure it does not go beyond the scope of the Local Plan.

#### **Application Process**

- 1.8 The application process on Page 68 does not differentiate between different types and scales of application and does not reference the need for proportionality. Many of this requirements will be inappropriate for all but larger schemes and this should be acknowledged, and the requirements caveated accordingly.

#### **Document Layout**

- 1.9 As an administrative comment, the lack of paragraph numbers is likely to make the document more difficult to navigate and refer to by both applicants and planning officers.

#### **Materials and Embodied Carbon**

- 1.10 **Carbon Footprint:** Figure 4 listed on page 18 is an extract from Passivhaus – whilst principles of Passivhaus are good to adopt, requiring developers to seek certification as stated in the diagram, will result in significant additional build cost that might impact site feasibility. Instead, reference to Passivhaus targets and principles should be promoted, but encouragement for certification should be carefully reviewed before publishing. There are also helpful diagrams contained in the [GLA's guidance note on Embodied Carbon](#), and [LETI's Embodied Carbon Primer](#), that may be more appropriate for inclusion.
- 1.11 **Zero Waste: Pre-Demolition / Refurbishment Audits:** To support reuse of existing buildings and materials on site, the SPD could promote the adoption of pre-demolition and pre-refurbishment audits so that the applicant identifies existing materials on site suitable for re-use in any proposed scheme.
- 1.12 **Zero Waste: Embodied Carbon:** the integration of embodied carbon into local policy is supported as a principle but it is noted that there is no reference to embodied or whole life carbon in the Local Plan. Pages 18 – 19 discuss embodied carbon (forming part of whole life carbon) but there is no heading to state this. Additionally, whilst the principles stated are

sound, it would be helpful to have some form of table for aspirational kgCO<sub>2</sub>e/ m<sup>2</sup> (A1-A5) and (A-C, excl. B6 & B7) in the text (noted that this is included in the appendices). It appears in this case that the requirements of the SPD go beyond Local Plan policy compliance.

- 1.13 The diagram on Page 21 is useful, but perhaps some annotations on what is 'embodied' what is 'operational' and what is 'whole life cycle' carbon would be helpful.
- 1.14 There is reference to the GLA reporting sheet for whole life cycle carbon emissions on page 20. Note that this is only currently required for use in London for major schemes, and it is regarded that sustainability policy in London is generally at the most onerous of the scale for developers, which in part may be a reflection of land values in that location. This is likely to be too detailed and financially onerous to achieve within North Hertfordshire, particularly for smaller schemes. Additionally, if the GLA reporting sheet is used, there should also be reference to the methodology provided by the GLA to complete this document (link above). Finally, are North Herts requesting applicants follow RICS or GLA methodology? They are similar but can have a notable impact on overall results. Details of the methodology required should be stated.
- 1.15 As a note on cost, to complete all stages of this spreadsheet for a small scheme (c. 5 houses, the associated consultancy fees to calculate the embodied carbon would likely be in the region of £4-10k. At each design stage, an additional embodied calculation is required so there is a fair amount of work involved. Additionally, if TM54 operational energy modelling is required as opposed to standard SAP and SBEM (as stated in some methodologies) additional energy modelling costs might also be in the region of £2-6k. This level of increased cost is very significant for small developers.

### **Passive Design and Energy Efficiency**

- 1.16 **Carbon offset:** No details of the carbon offset arrangements are stated. Are these to be secured through S106? What is the proposed cost per tonne CO<sub>2</sub>? Are you seeking offset for regulated and unregulated (As computer use is considered unregulated)? What is the proposed offset period in years? Have carbon offset projects been identified to spend money received? Do developers have the option to specify how they would like to offset their carbon or will this be managed by North Herts? Hertsmere recently proposed a cost of £115 per tonne x 30 years; £3,450 per tonne. This figure was index linked, but worth noting that the GLA rate is £95 per tonne x 30 years, so careful consideration should be given to price, and potential impact on scheme viability.
- 1.17 **Building fabric:** As noted on page 34, there is a reference to utilising energy efficient materials. This is good but without target U-Values it is difficult to define what 'energy efficient materials' look like. Perhaps a table of acceptable U-Values as set out in Part L (2021) BR and then a target set of U-Values to encourage developers to exceed Part L requirements? This could utilise Appendix R of [SAP 10.1](#) guidance, or [LETI target values](#) for NZ buildings. The same approach could also be used for air tightness.
- 1.18 **Ventilation:** Page 37, Figure 15 references 'wind-driven ventilation' which is technically sound, but it may make more sense to align passive ventilation definitions with [Part O \(2021\) BR](#), which refers to wind-driven as 'cross-ventilation' – this would also then encourage developers to refer to the Part O guidance note and support overheating mitigation methods.
- 1.19 **Energy Saving Measures:** Two methods of energy reduction referred to in Part L (2021) but not referenced in this document are Wastewater Heat Recovery Systems (WWHRS) and Mechanical Ventilation with Heat Recovery (MVHR). It would be useful to include reference to these as they are very useful methods to achieve regulated carbon reduction.

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- 1.20 **Ventilation:** Page 40 – mixed mode cooling should also reference MVHR with summer bypass functions.
- 1.21 **Water efficiency:** 110lpp/pd is a good target for residential use. Most local planning documents do not ask for a water efficiency standard less than this, however worth noting that, subject to clarifying what the bronze, silver and gold standards mean, perhaps as a higher level aspiration you could request 105 lpp/pd, as is required in the London Plan for residential development.

#### **On-Site Low Carbon and Renewable Energy**

- 1.22 **Solar Thermal:** Page 42 – there is reference to Solar Thermal and Solar Photovoltaic – Thermal; the latter might be an error, as PV and Thermal are two separate panel types. The section titled ‘Solar Photovoltaic – Thermal’ is superfluous to the paragraph on ‘Solar Thermal Heating’ above.
- 1.23 **Air Source Heat Pumps:** This section on Page 43 states that ‘ASHPs are designed to work in combination with other heating systems’ – from our experience, this would only be in a commercial setting, where you are using an air-to-air system. In residential applications, an air-to-water system is more than sufficient for supplying both space heating and domestic hot water to a well-insulated building with no additional heating systems required – it may be worth clarifying this as it could deter applicants from using this strategy, which would be a shame as they are fantastic for reducing operational carbon emissions.
- 1.24 A summary table of all measures listed in this section would be useful to illustrate what each measure can achieve. It might also be helpful to have a section in the table that sets out constraints, i.e. are ASHPs / PV allowed in all developments in North Herts, even if in conservation areas?

#### **Transport**

- 1.25 There doesn't appear to be mention of HCC's Local Transport Plan 4. HCC's LTP4 was published in 2018 and HCC are more confidently relying on the policies therein which support a stronger case for modal shift away from car dominance than previous documents. We have found failing to consider LTP4 at an early stage poses a risk of hindering later planning progress on all development types and so we suggest that clear reference is made at the start of the Transport Section to HCC LTP4.
- 1.26 It should be noted that by referencing Roads in Hertfordshire, North Herts are referencing a design guide that will be considered obsolete very soon. HCC ended their consultation on their emerging ‘Place & Movement Planning and Design Guidance’ document in June 2023 and we are taking into account the new design guidance contained within this document in every project we work on in Hertfordshire as directed by Hertfordshire. We would recommend North Herts do the same. Amongst other matters it provides cross-sections of ideal street layouts and dimensions to accommodate active travel modes which HCC will require.
- 1.27 Whilst it is beyond the scope of our required comments, we feel that preparing a new SPD where the transport element relies on a 2011 Parking policy is counter productive and would recommend that the Parking SPD is also updated and changed from minimum to maximum standards in line with all/most other Hertfordshire authorities. This will also more closely align with HCC's LTP4.
- 1.28 The draft SPD states: *“Parking provision with development proposals should link in with a Sustainable Travel Strategy and include EV charging points.”* This statement seems somewhat contradictory of the 2011 parking policy which is minimum rather than maximum numbers for residential development.
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- 1.29 With regard to refuse collection, deliveries and removals, the draft SPD reads: '*Development should consider access for servicing such as refuse collection, deliveries, and removals. Further guidance is provided in the National Design Guide*'. We believe that the National Design Guide is not particularly detailed regarding servicing vehicles. We would suggest that a more applicable document to reference would be the Manual for Streets (1), which the National Design Guide references and which provides far more detailed and technical information for layout in regards to servicing, reversing distances, bin carry distances, etc. HCC generally fully support/align with the MfS guidance.

#### **Appendix A – Passive Design and Energy Efficiency**

- 1.30 It would make more sense to have an energy and sustainability statement to accompany all applications of over 10 units, as opposed to capturing elements in the Design and Access Statement, as CO2 reductions are not calculated in the DAS.
- 1.31 The 'Bronze' standard here would enable major developments to utilise gas boilers, as they are still permissible under Part L (2021), provided WWHRs and PV are installed. Does this align with the ambition of the SPD?
- 1.32 The future homes standard is not yet adopted and still likely to change, or be scrapped. It might be worth considering omitting or future proofing the reference as a requirement for 'Silver' standard.

#### **Appendix A – On-site Low Carbon and Renewable Energy**

- 1.33 The Silver and Gold standard need clarifying here (as they do throughout the document); generally planning documents request a carbon reduction over building regulations, rather than a % of renewable energy generation. Is the % of renewable energy relevant to the SAP calculation's estimate of annual energy consumption? Is the % reduction per dwelling, or site wide? The Gold Standard might be very difficult to achieve, as most dwellings do not have sufficient roof space to accommodate solar that would generate 50%. By using 'Renewable Energy' and not including 'Low Carbon' in the categories, measures such as ASHPs are excluded, as Solar PV and Solar Thermal are classed as renewable, but ASHPs rely on grid-electricity and so are 'low-carbon'. Finally, this wording could be interpreted to require occupants to purchase renewable energy, rather than installing measures on site to achieve this reduction.
- 1.34 Instead of renewable energy %, we propose that the SPD requires development to achieve % carbon reductions over the BR notional dwelling at staggered percentages, e.g. Bronze: a 10% carbon reduction at the 'Be Green Stage', Silver: a 15% carbon reduction at the 'Be Green Stage' and Gold: a 20% carbon reduction at the 'Be Green Stage'. Such carbon reductions can be calculated in any accompanying Energy and Sustainability Statements. This would make this section more quantifiable and easier to demonstrate compliance.

#### **Appendix A – Materials Reclaimed Materials, Low Carbon Alternatives, Locally Sourcing**

- 1.35 This section could be included to support the WLCA section below, as to achieve the relevant embodied carbon targets, the applicant would need to follow the methodology listed in this category. Definition to the 'silver' and 'gold' standard could also be reviewed, to include % of material replacements, rather than using terminology such as 'significant proportion'.

#### **Appendix A – Whole Life Carbon Assessment**

- 1.36 This section could be included to support the WLCA section below, as to achieve the relevant embodied carbon targets, the applicant would need to follow the methodology listed in this category. Definition to the 'silver' and 'gold' standard could also be reviewed, to include % of material replacements, rather than using terminology such as 'significant proportion'.
- 1.37 Again, we'd iterate that requiring all developments to complete all stages of the GLA WLCA reporting spreadsheet will incur significant financial cost to schemes in the remit of around ~£4-10k.
- 1.38 The 'Silver' scores are extracted from the GLA benchmark targets – as benchmarks, most developments achieve these without any consideration for embodied carbon reduction. Consider reviewing targets in line with the aspirational targets – achieving embodied carbon reductions beyond aspirational GLA targets is currently not achievable owing to the wider material industry not yet being able to decarbonise the A1-A5 module of their own carbon footprint.

#### **Appendix B – Minor Residential Applications**

- 1.39 The same principles mentioned above are applicable to this set of appendices. The only additional point to note is that requiring minor applications to follow the GLA's methodology on Whole Life Cycle Carbon reporting would significantly increase the costs associated with planning submission and construction. Instead, perhaps one embodied carbon assessment should be completed in conjunction with any Energy and Sustainability statement submitted.

#### **Appendix C & D – Minor and Major Non-Residential Applications**

- 1.40 The same principles mentioned above are applicable to this set of appendices. Requesting BREEAM Outstanding needs further clarification and investigation as part of the Gold Standard. Will developments be required to obtain BREEAM certification? Or is the purpose to achieve as many BREEAM credits as possible with regard to energy? If the SPD is requesting development here to achieve BREEAM Outstanding, then it must be noted that the BREEAM consultancy fees will be in the region of £15-30k and this would likely increase build costs by around 5% to build to the appropriate standard.

#### **General Comment**

- 1.41 As a consultant team we think that the principles of the SPD are to be fully supported, however at the moment it is not clear enough how compliance can be achieved, and the burden on small developers is likely to be disproportionate and discourage investment. Clarification and adjustment is required to ensure that the document can be complied with and easily followed, without view for any conjecture. Additionally, it might be useful to consider structuring the elements around energy efficiency and renewables using the energy hierarchy, with a section for 'Be Lean', 'Be Clean' and 'Be Green' with targets set in each chapter relevant to the appropriate stage of the energy hierarchy, as opposed to having the targets and requirements relating to energy being contained at various different sections. This could then be relayed in the appendices table.

#### **Example scheme of 5 residential units – financial implications**

- 1.42 If a development of 5x detached C3 dwellings (total GIA: 1000sqm) were to be proposed and follow the requirements of this SPD, then indicative additional costs that would be incurred relevant to energy and sustainability are set out below – these are significant additional costs that could have significant impacts for scheme viability and small site delivery, as well as discouraging investment in such smaller sites going forward:

Energy and Sustainability Statement: (to calculate % renewable energy generation) **~£1,500 - £2,500 + VAT.**

Whole Life Cycle Carbon Assessment: (covering all iterations at each design stage): **~£4,000-£8,000 + VAT.**

Carbon Offset Payment: (excluding costs associated with S106 and based on average dwelling emission rate (DER) of 5kgCO<sub>2</sub>e/m<sup>2</sup> and assuming carbon price of £100 per tonne over 30 years): **£15,000.**

Total (approximate): **~£20,500 - £25,500.**