

RSPB Response to the North East Cambridge Area Action Plan Consultation

Introduction

The RSPB is the charity that takes action for wild birds and the environment. We are the largest wildlife conservation organisation in the country with over one million members. We own or manage 158,725 hectares of land for nature conservation on 220 reserves throughout the UK. The RSPB's policy and advocacy work covers a wide range of issues including planning policy, climate change, energy, transport, marine issues and water. Our casework team is involved in responding to major infrastructure projects where these could result in significant harm to nature. We have also undertaken significant large-scale habitat restoration and nature conservation projects in partnership with major transport infrastructure projects to realise benefits for nature, the environment and society. Locally, we are an active member of Natural Cambridgeshire and own/manage three nature reserves in the Greater Cambridge area.

Overview

In line with the Government's 25 Year Plan for the environment, Natural Cambridgeshire has set an ambition to 'Double Nature' across the county of Cambridgeshire. Its vision to provide '*...a world class environment where nature thrives alongside jobs and housing*' has been acknowledged and supported by the Greater Cambridge Council Partnership.

In doing so, they pledge to ensure all existing and new developments provide opportunity to double the area of wildlife rich green space. A test of this support comes with the North East Cambridge Area Action Plan and if the proposals can meet the expectations of the Doubling Nature ambition.

The RSPB vision for the entire Arc from Oxford to Cambridge is one that protects and restores nature while setting new standards for sustainable development. It requires that the Arc demonstrates best practice across all disciplines whilst aiming to showcase new and exemplar practices.

It proposes all new developments, including infrastructure, aim for a minimum 20% net gain for biodiversity and be carbon neutral. In order to achieve this, economic growth must respect environmental constraints and should put nature first at all stages of planning and delivery, starting with master planning. It requires high standards of nature-friendly green infrastructure design that improves the quality of life for residents by increasing climate resilience, biodiversity and access to nature across the Arc.

Not to waste these efforts and aspirations to meet the aims of the Government's 25 Year Environment Plan, [Natures Arc](#) proposes long-term monitoring and management plans are established for all green infrastructure and new habitats. These should be funded in perpetuity through initial capital investments, making suitably qualified and mandated organisations responsible for delivery.

We reviewed the North East Cambridge Area Action Plan vision against its potential to deliver the aims and objectives outlined above from Doubling Nature and Natures Arc. While the visions are ambitious there are areas, we feel require more attention and the scheme falls far short of being able to champion this as a sustainable low carbon development, that provides public health and wellbeing, quality of life, placemaking and high nature conservation value both on and off site. It is similarly contrary to the aims and image Cambridge strives to set in being a leader of sustainability. The plan should seek to follow leads such as this set by the EU's sustainable energy project SPARCS: <https://finance.yahoo.com/news/shopping-centre-lippulaiva-become-pioneer-064700680.html>

Our key points in response of the ten questions follow, with qualifying notes set out in Appendix 1 at the end of the document.

Responses to the ten key questions

Question 1: The Vision

- The outline vision is ambitious and sets out a series of important principles to deliver a sustainable domestic and commercial community. However, **it is of concern that just 10ha of public parks and squares is to be provided. This is less than 10% of the 182ha indicated of existing area for the site.** This is contrary to delivering the statement of aims for a *'characterful and lively'* community and provides opportunity for a healthy lifestyle with *'access to open spaces, sports and recreational facilities, public rights of way, local green spaces and active travel choices.'*
- We believe there is insufficient evidence to suggest the green infrastructure enables everyone to *'lead healthy lifestyles, protects and enhances biodiversity'*. **There needs to be clear indication on what interventions the remainder of the development intends that will deliver ideally a minimum 40%¹ of green infrastructure (GI), c73ha².** Applying the Urban Greening Factor (UGF) to each phase of development will measure the green infrastructure being provided and should be aiming to achieve higher proportions throughout.^{3,4}

The requirement to maximise the amount of GI for the development is further demonstrated in section **2.1 Context**, specifically, in sub-sections **2.1.2** and **2.1.4**.

In **2.1.2 Area Action Plan Site**, it recognises the environmental constraints from the **proximity to major transport infrastructure which affects health and quality of life through noise and atmospheric pollution.**

While in **2.1.4 Communities**, recognises a localised discourse with a **high proportion of social deprivation compared to the Cambridge area in general. These can only be alleviated with an appropriate amount of green infrastructure** that address issues of climate resilience and social deprivation, while simultaneously connecting people with nature through design that maximises the wildlife potential.

Under **2.0 Strategic Objectives**, the **five key objectives** and their lists are welcome. However, **such principles are invariably designed out of development during the planning and design process. It must be an imperative this is not the case here and objectives are rigorously adhered to and followed through.**

- We are therefore **sceptical the aims and objectives are robust enough to deliver a tangible benefit to public amenity, health and well-being, biodiversity and climate resilience.**

Questions 2 – 6:

While RSPB have no specific comment to the questions, there are few points of principle we would like to raise.

- While each subject area sets out advanced thinking to promote *sustainable travel, provide social and cultural hubs and facilities*, as well as *achieving the right balance and density of domestic and commercial premises*, these typically generate **large proportions of hard landscape, exacerbating the 'heat island' effect.**^{5, 6, 7}
- To meet the aims and objectives of climate resilience, we feel it important **all flat roofed buildings, have at the very minimum a biosolar green roof**, and ultimately wherever possible a biosolar blue-green roof. We would like to see the landscaped roofs manipulated to benefit biodiversity,

contributing toward net gain and mitigating for loss of brownfield habitat on site.^{8, 9} Where appropriate, some roofs and terraces may also be used for community food growing.

- **We would also encourage and support the use of green walls** wherever possible across all domestic and commercial properties or premises.¹⁰
- We would like to see **all domestic housing fitted with solar panels, ground source heat and water butts** as a core function of their sustainability design.

Question 7: Are we planning for the right mix of public open spaces?

In order to achieve this, we feel more effort and imagination must be made in maximising opportunity to favour green over grey beyond the limitations of what has been proposed.

There appears to be seven areas of identified green space, two being off-site. Of those on-site, three have an association with the First Drain, in effect forming one linear unit. There is reference to one central feature green space and a second reference to an unspecified number of small green spaces throughout which presumably aims to meet the LAP, LEAP and NEAP requirement. Although there is no indication to the proportion of each type being provided to meet population size.

- With an increased population, we question **how can the impacts on local and surrounding wildlife sites be avoided and mitigated for**, when Policy 5 states *'Development shall avoid having any adverse impact on the nature conservation value of...City Wildlife Sites and Country Parks... other areas of natural or semi-natural sites within or adjacent to North East Cambridge'*
- It is of concern **not enough provision has been considered to meet Accessible Natural Green Space Standard (ANGSt) recommendations**. It is noted Milton Country Park and Chesterton Fen are sought to meet the needs through expanded capacity improved public access and nature enhancements. These sites, along with the very small Local Nature Reserves (LNR) and City Wildlife Sites (CiWS) to the south and south east currently do not have the ability to absorb an increase in footfall and any further pressure, already exceeding their carrying capacity. Much work will be needed to address this issue.¹¹
- **The deficit of suitable green space and forecasted population increase of 18,000, risks additional pressure being placed on other strategic statutory conservation sites within easy traveling distance**. Driving to access this additional green space is contrary to the aims this development has for a low carbon community.¹²
- **We would like to see what proposals are intended to increase the extent of green infrastructure, by linking planned areas of green space** through a vegetated road and path network which as such might include street trees and SuDS features such as rain gardens.¹³ We would also like there to be at least 30% tree cover across the site.¹⁴
- We are also concerned the 'Green High Street' seems to propose a considerable amount of hard landscape, seemingly contrary to its name.¹⁵
- **The need in Policy 8 of early integration of open spaces into the design process is welcome. This should be in conjunction with landscape and ecological input** to maximise the amenity and net gain wildlife potential of each development and its linking path and road networks.

- In order to achieve the qualitative aims of Policy 8, we believe for *high quality, low maintenance, water efficient and climate change resilience*, part of the solution will lie in how soils are used.¹⁶
- We would also like clarity on the interpretation in this policy for '*...multi-functionality*'.^{17, 18, 19, 20, 21}
- We welcome protection of existing open space, ensuring any last resort loss is compensated by something equal to or of better quality. It must also include bringing retained places into appropriate conservation management.²²

Question 8: Are we doing enough to improve biodiversity in and around North East Cambridge?

- We welcome the use of the net gain metric **but in line with our 'Nature's Arc' vision, we would like Greater Cambridge to aim for 20% net gain** from such an ambitious development boasting high credentials.
- It is appreciated with a high-density development, achieving just 10% will be difficult without **imaginative and achievable on-site thinking and off-site mitigation**.
- **Where off-site habitat creation is required, we would encourage you to start evaluating where this might be best implemented now to contribute towards the Doubling Nature target which the Greater Cambridge Partnership have signed up to.**
- **It is very important that each development phase follows the recommendations laid down in the Biodiversity Assessment in order to meet any chance of achieving at least the minimum 10% net gain on the site.**²³
- We welcome the opportunity the development provides to restore Chesterton Fen. However, this is a small site which is unlikely to meet the requirement of a significant net gain. It will also need careful access measures and zoning to minimise negative impacts of recreation on wildlife.
- Plans are also intimated to improve access and capacity for Milton Country Park. However, as with Chesterton Fen, this will not achieve significant net gain and is already over capacity.²⁴
- We note some existing ponds are concrete in construction with vertical sides. We would like to see measures implemented that modifies and enhances them to be of benefit to wildlife and contribute toward on-site net gain.
- The Assessment references the use of SuDS to be incorporated into the green-blue infrastructure. We **remain sceptical** as it is all too often the case **poor design fails to deliver any biodiversity or amenity benefit**.^{25, 26, 27}
- **The use of green roof mitigating measures for the loss of Open Mosaic Habitat (brownfield) is welcome.** The Assessment report (Appendix 3) estimates there to be approximately 4.74ha of 'good' condition OMH. **To deliver a minimum 20% net gain requires 5.7ha of biodiverse green roof.**²⁷

- In addition to, and where this target cannot be fully met on roofs, we **would also like to see extensive areas of eco-mimicry in landscaping at ground level across the site**, particularly in areas of existing brownfield, such as the railway sidings and water treatment plant, will be lost.²⁸
- **Green roofs should also be provided on all covered street furniture**, such as bin stores, bike sheds, car parking and bus shelters.
- The recommendations made by the Biodiversity Assessment, for **long-term landscape and ecological management plans are welcome**. All levels of work should be **undertaken by competent and suitably qualified operatives**. Furthermore, all short and long-term **landscape maintenance contracts should not use herbicide**.

Question 9: Are we doing enough to discourage car travel into this area?

While we have no specific comment, we **reiterate the concerns expressed in answer to Question 7, that inadequate provision of green space will encourage car usage to travel to other areas**.

Question 10: Are we maximising the role that development at North East Cambridge has to play in responding to the climate crisis?

The policies to address climate resilience and change are welcome although we feel they fall some way short and are underachieving, with some obvious gaps.

- **The BREEAM 'excellent' set as a minimum standard only delivers a 25% carbon reduction**, with an Energy Performance Ratio (EPR) ranging between 0.36 and 0.54. **The Natures Arc Vision is for zero carbon emissions**, therefore an **ambitious and deliverable minimum BREEAM standard must be applied** for an EPR of 0.90 to deliver zero net CO₂ emissions.
- **Reference is made to green roofs, however the term '....must contain an element of green roof...' is open to provide as little as possible**. For example, 5m² of sedum matting can be interpreted as '*an element*'. **This policy would benefit from a challenging target for green roof provision of 3.2m² of green roof/person.**^{29, 30, 31}
- **Blue roofs are not referenced at all**. These we would like to see included within the climate resilient measures if this scheme is to attain anywhere near its potential. **A biosolar blue-green roof would be the ultimate level of climate resilient design.**⁸
- There is **no reference to the use of green walls** as an additional technique for thermal regulation of buildings, absorption of atmospheric pollutants or attenuating run-off.
- **Solar panels are but inferred** in Policy 2C and Policy 3 links to the Cambridge and South Cambridge Plans which make passing reference in Policies 29 and CC3, paragraph 4.17,
- We would like to see **all forms of street lighting be solar powered** to ensure it contributes to reductions in carbon. Also, in respect of the impacts lighting has on wildlife as identified in the Biodiversity Assessment, the amount of **lighting should be minimised and dark corridors for wildlife provided.**³²

- **Water consumption and deficit is a national issue, the Cambridge area being no exception. We believe the proposed minimum 110ltr/person/day is totally unacceptable.** There must be **greater emphasis on an achievable target of 80ltr/person/day** with all private and commercial dwellings using grey water recycling and increasing the capacity of rainwater harvesting. To this end, use of blue roofs would also contribute in accordance with Policy 4a of Water Efficiency.³³
- **We are sceptical of the term ‘...reasonably practicable...’** in respect of source control management at the surface. Knowledge and design of SuDS source control is such there is seldom justifiable cause to send water below ground often into crates or through pipes to basins.³⁴
- **The same ‘...reasonably practicable...’ terminology has also been used for off-setting potable water demand, which is liable to lead to under achieving.**
- While welcoming the use of **future proofing we treat this with caution.** Unless fully costed and justifiable as a last alternative, **this leaves developers with a ‘get-out’ on delivering sustainability and climate resilience.** While **future proofed capacity to retrofit is helpful the costs,** potentially more than at time of construction, **can be limiting for a future occupier to meet,** for example in green roof provision.

Appendix 1: Qualifying points to responses

¹This was originally proposed for the Ecotown concept. Although not widely adopted in local authority green infrastructure policies and plans, [Worcestershire Green Infrastructure Strategy](#) being an exception. It is supported by Town & Country Planning Association in several of their documents, eg: [planning for a healthy environment – good practice guidance for green infrastructure and biodiversity, 2012](#)

²**Meeting the deficit of on-site green infrastructure could, but not exclusively, derive from: private gardens, green roofs and walls, street trees, rain gardens and other Sustainable Drainage (SuDS) features and minimising the amount of ‘dead areas’ in paved hard landscape.** If designed with nature in mind, such features **can collectively make a considerable contribution to meet the aims and objectives to doubling nature as set out by Natural Cambridgeshire.** While acknowledging the Barratt Kingsbrook development at Aylesbury is not a high-density urban setting, it exceeds 40% GI without including gardens. Similarly, other sites in the local environs of Cambridge have higher proportions of on-site GI per area and capita.

³The UGF tool has been adopted by Greater London Authority as part of the London Plan. It is used successfully by Boroughs to assess whether planning applications meet acceptable levels of green infrastructure provision. <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/urban-greening>

⁴<https://www.landscapeinstitute.org/blog/urban-greening-factor-london/>

⁵**We would urge every effort is made to maximise opportunities for green space. We would like to see a reduction of ‘dead space’ in paved and hard landscaped areas and given over instead to soft landscape, including rain gardens.**

⁶Where appropriate, **hard landscape must double additionally as flood storage facility and be used innovatively, where appropriate, to convey water as part of any SuDS management train. Such measures will add value to climate resilience and placemaking.**

⁷We would also expect **all hard surfaces**, from foot and cycle paths to roads, to **be permeable and remove the need for costly and environmentally damaging gully pots and other traditional outdated techniques.**

⁸**Green roofs help alleviate heat island effect**, absorb atmospheric pollutants, provide summer and winter thermo-regulation of building temperature, acoustic insulation and reduce rates of run-off. **Blue-green roofs provide protracted water storage** which can either be released more slowly back into the system or for other purposes that will reduce the impacts on potable water supplies. This might also include the irrigation of green wall systems.

⁹**Solar panels will work more efficiently when used in conjunction with the vegetation of a green roof**, helping maintain a constant ambient working temperature of around 25^oc.

¹⁰**Green walls will improve climate resilience** by thermo regulating the temperatures of buildings, improve acoustic insulation, trap airborne pollutants and help cool the atmosphere. In addition, they will provide amenity value.

¹¹In order to provide greater public access to green space, improved ANGSt targets and better contribute toward a 20% net gain target, **Milton Country Park would require substantial expansion east toward the River Cam, to link south with Chesterton Fen and north toward Waterbeach.** In

addition, **improved access and provision might be considered at Fen Drayton which is easily accessible via a short ride on the guided busway running through Cambridge North East.**

¹²**Local sites of high nature conservation value** include several fens, such as Wicken which is part of the Fenland Special Area of Conservation (SAC) and several nearby woodland SSSI sites. **Acute disturbance and habitat degradation at these sites are a real problem. There is a serious risk this development will exacerbate the situation and gives cause for concern.** An indicative measure of the area required **to reduce these pressures**, Natural England's Suitable Accessible Natural Green Space (SANGS) guidance recommends **8ha per 1,000 new residents, equating to 144ha of green space being required** for NE Cambridge to provide residents with the variety of green space needed for exercise and dog walking without the need to travel.

¹³These will **contribute to the objectives of climate resilience**, with evaporative cooling provided by trees and SuDS.

¹⁴<https://www.woodlandtrust.org.uk/media/47692/emergency-tree-plan.pdf>

¹⁵We would like to see **more greening measures incorporated to ameliorate the heat island effect and meet the otherwise shortfalls of green space provision.** Furthermore, consideration needs giving to SuDS source control in order to prevent contaminated run-off entering the First Drain, throughout the whole site but in this instance with reference to the proposed hard landscaped 'Green High Street'.

¹⁶**Topsoil should be limited to areas requiring fertility such as sports pitches and other high impact grass areas and areas where growing might take place.** Nutrient poor substrates for informal and formal landscape, and flower rich grass areas will reduce maintenance costs of weeding – creating inhospitable conditions for nitrogen hungry dominant plants, while **choice of drought tolerant plants and seed mixes adapted to grow in poor nutrient substrates will deliver water efficiency and climate resilience.**

¹⁷This should include opportunity for **temporary water storage in extreme flood events using hard and soft landscape** that simultaneously provides wildlife habitat and contribute to on-site net gain.

¹⁸In addition, **multi-functionality can be achieved through a more fluid landscape** that also facilitates food growing. We note and appreciate in **Appendix 1 of the Local Plan, that 1.9 Allotments** recognises high density developments such as N E Cambridge have little space for allotments. This however is restrictive, and **more thought should be given to provide the opportunity for communities to grow food in appropriate areas of planned landscape adjacent to their home.** This will further reduce maintenance costs providing a fall-back plan is agreed within maintenance contracts to intervene should the community member move away or stop.

¹⁹[The Poppy Estate \(video\)](#)

²⁰[Social housing \(webpage and video\)](#)

²¹**Pride and community cohesion will increase, along with associated and well documented health benefits.** This will **support the recognised objective of the step changes needed for effective use of open green space beyond the broad requirements of the Cambridge City Council standards.** It also **diversifies the aim and potential to provide communities with the opportunity to spend time outdoors.**

²²**Where S106 agreements are drawn up with developers for future management and maintenance of open space, it is important to include existing planting and open space being brought into restorative conservation management where necessary.** Often tree planting lacks any post establishment maintenance and matures into stands of overcrowded canopies, with no scrub or flora understory and of sub-optimal wildlife value.

²³**In addition to habitat recommendations made by the Biodiversity Assessment, if undertaken correctly to meet net gain they must also benefit the identified priority species of local, regional and national interest across all taxa.** As advised by the assessment this **must extend to built-in features such as integral bat and swift bricks** of the right product, located in the right places and in the right quantities.

²⁴As outlined in our response to Question 7, **Milton Country Park** would require a substantial habitat expansion to and along the River Cam, as the Park **is already at footfall capacity and it will be very difficult to balance the needs of access and recreation alongside biodiversity.**

²⁵To be effective and **contribute to net gain all SuDS must be designed and landscaped appropriately to provide sources of nectar for pollinators through native flower rich grasslands, to diverse mixes of native and non-native planting.** In addition, to maximise biodiversity and amenity benefit **all run-off must be treated at source before being allowed to enter any existing aquatic features,** particularly the First Drain. **Appropriate source control, including permeable road surfaces, kerbside rain gardens (bio-retention beds) and filter strips will also remove need for gully pots. Gully pots were highlighted in the Biodiversity Assessment as cause of high amphibian mortality.**

²⁶<https://www.rspb.org.uk/globalassets/downloads/documents/positions/planning/sustainable-drainage-systems.pdf>

²⁷The **benefits of green roofs and SuDS in high density urban areas are well documented and researched.** One such example being Monitoring Report 3 of the Sustainability Research Institute 'Climate Proofing Housing Landscapes':

https://www.researchgate.net/publication/323749977_London_Borough_of_Hammersmith_and_Fulham_Climate_Proofing_Housing_Landscapes_Monitoring_Report_3/download

²⁸**Eco-mimicry is well researched:** <https://www.thenatureofcities.com/2018/01/09/blandscaping-erases-local-ecological-diversity/> and trialled, https://www.grassroofcompany.co.uk/brownfield-landscapes_including_at_Bramblefields <https://lnr.cambridge.gov.uk/projects/bramblefields-ceramic-mound/> within the development area. They are a **cost-effective way to provide rich biodiverse, climate resilient habitat.** They use nutrient poor substrates such as crushed concrete, brick, ceramics, glass and sands, for which there should be no shortage from any demolition undertaken on site. **The use of such techniques ensures all landscaping is climate resilient and will contribute to both biodiversity net gain and sustainability.**

²⁹Based on the area required **to meet Net Gain and estimated from the 18,000-population given. This is reasonably comparable to the area of green roofs/per person in the City of London.** which is approximately 100ha larger, with less than half the resident population forecasted for NE Cambridge and where there are 5.47ha of green roof at 6.21m²/PP.

³⁰https://livingroofs.org/wp-content/uploads/2019/05/LONDON-LIVING-ROOFS-WALLS-REPORT_MAY-2019.pdf

³¹<https://livingroofs.org/london-map-green-roof-boroughs/city-of-london/>

³²The **guidance published by Bat Conservation Trust will additionally benefit other mammals, birds and invertebrates** affected by street lighting: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

³³**Unequivocal evidence shows aquifers are suffering acutely from over abstraction**, resulting in low flows across the catchment and impacting on rivers and wetland SSSI's. **This needs to be addressed by an ambitious policy that sets stringent targets for water efficiency.**

³⁴**Pipe to basin and or crates solutions compromise the opportunity to create hard and soft landscape features that manages surface water in a way contributory to placemaking as one of the objectives outlined in the policy.**