

North East Cambridge Area Action Plan Proposed Submission

Topic Paper: Open Space & Recreation

Greater Cambridge Planning Service November 2021

Contents

١	lorth East Cambridge Area Action Plan	1
P	Proposed Submission	1
T	opic Paper: Open Space & Recreation	1
В	Background	5
	Introduction	5
	Key Supporting Documents	6
	Policy Framework / Guidance	7
	National Legislation	7
	National Policy (NPPF)	7
	National Guidance (NPPG)	8
	South Cambridgeshire Local Plan 2018	9
	Cambridge Local Plan 2018	11
	Quantum of new provision for a standard residential development in Cambridge	13
	Applicable Public Open Space standards	13
	National and local strategies	14
	National Strategies	14
	County Wide Strategies	15
	Local Council Strategies	16
	Health and Well-Being	21
	The benefits of green spaces in an urban environment	21
	Coronavirus and greenspaces	22
	Children and the Built Environment	23
	'Small is beautiful'	23
١	IEC context	24
	Our Vision	24
	Our Strategic Objectives	24
	Existing spaces/facilities on site	25
	NEC Catchment Analysis	26
١	IEC Open Space Delivery Strategy	38
	Formal Outdoor Sport Provision	38
	Formal Indoor Provision	41
	Swimming Pool Provision	4 1

	Informal open space	42
	Natural Greenspaces	44
	Equipped children's play areas	44
	Allotments/Community Gardens	47
	Private and communal amenity spaces	49
Pr	oposed Public Open Space at NEC	50
	Providing Open Spaces in High Density Developments	50
	Key Principles for NEC Public Open Spaces	52
	Standards Compliance	52
	Design	52
	Phased Delivery Linked to Residential Development	53
	Non-Residential Development	53
	Open Space Resilience	53
	Connectivity with Other Open Spaces	53
	Flexible Usable Spaces: Multi-functional, Multi-seasonal & Multi-generational	54
	Multi-functional	54
	Multi-seasonal	55
	Multi-generational	55
	Promote Social Interaction	56
	Relevant national/City/Area-Wide/Regional Strategies	56
	Supporting Active Healthy Lifestyles	56
	Management & Maintenance	56
	High-Quality Open Spaces Supporting Sustainability	57
	Ecology	58
	Providing Open Spaces at North East Cambridge	58
	Formal Outdoor Sports Provision	59
	Indoor Sports and Swim Provision	62
	Provision for children and teenagers	62
	Informal open space	63
	Allotments / Equivalent Food Growing Spaces	64
	Sustainable drainage systems	64
	Private ancillary sports and, or leisure facilities	65
Αŗ	pendix A – Summary of NEC Open Space Provision Calculation	66
	Population Profile of NEC	66

	Sports England's Sports Facility Calculator	. 66
	Formal Outdoor Sport Provision	. 67
	Formal Indoor Provision	. 68
	Swimming Pool Provision	. 68
	Informal open space	. 68
	Natural Greenspaces	. 69
	Equipped children's play areas	. 69
	Allotments/Community Gardens	. 70
4	ppendix B – Relevant Draft NEC AAP 2021 Policy Listings	. 71
	Policy 8: Open spaces for recreation and sport	. 71
	Policy 14: Social, community and cultural Infrastructure	. 71

Background

Introduction

- Open spaces are a key aspect of high-quality urban environments and are fundamental to the character of an area. Attractive, accessible and welldesigned open space can support and enhance the appearance and quality of an area, creating more desirable places to live and help mitigate the impact of climate change.
- Open spaces and recreation facilities provide people with a place to relax and socialise as well as encouraging healthier lifestyles by providing opportunities for active travel, sport, informal play and daily encounters with the natural environment. A number of publications summarise the benefits that urban greening brings to cities and towns. These include The Benefits of Urban Greening (Creating Sustainable Cities) and A Benefits of Urban Green Space (Leeds Ecosystem, Atmosphere & Forest (LEAF) Centre, University of Leeds).
- 3. An essential part of the character of Cambridge stems from its many green spaces, trees and other landscape features, including the River Cam. These not only play an important role in promoting both active and passive sport and recreational activities but also provide valuable amenity space and support for biodiversity. Urban open spaces can act as "wildlife corridors", linking large green spaces to form a network which can also be linked to rural areas on the outskirts of towns and cities. This not only facilitates the movement of wildlife but also prevents the fragmentation and isolation of wildlife. In terms of direct financial impacts, evidence from UK case studies indicate that proximity to green space is positively linked to both commercial and residential property prices, with properties overlooking a park being valued around 5-7% higher than equivalent properties elsewhere. This can help attract further investment within the local economy which will assist with wider regeneration aims such as job creation as well as the need to maintain and manage these spaces.
- 4. Open spaces not only help support the health, social and cultural well-being of local communities but also help support strategies to mitigate the adverse effects of climate change. In the UK, urban temperatures are typically 1-2 degrees (Celsius) higher than the surrounding rural areas. This is due to the Urban Heat Island (UHI) effect caused by building materials which absorb more of the sun's energy than the natural surfaces they replaced. Urban green spaces reduce the UHI effect by providing shade and by cooling the air through the process of evapotranspiration whereby, the sun's energy is used to transfer water from the leaves of plants into the atmosphere.

5. The North East Cambridge Area Action Plan (NEC AAP) will set out the planning framework that will facilitate the delivery of a well-connected, higher density and high-quality living and working mixed use environment that will contribute positively to the surrounding area and Cambridge as a whole. The area will be a self-sustaining city district that will provide the day to day needs of people living and working in the area. This topic paper explains how new development at North East Cambridge should contribute to the provision of open space and recreation sites and facilities, and how these can be delivered to support the new and existing surrounding communities.

Key Supporting Documents

- National Planning Policy Framework / Guidance
- South Cambridgeshire Local Plan 2018
- Cambridge Local Plan 2018
- Cambridgeshire Green Infrastructure Strategy
- Local Council Corporate/Business Plans (Objectives and Strategies)
- Open Space SPD 2009 (SCDC)
- Open Space and Recreation Strategy 2011 (City)
- Greater Cambridge Playing Pitch Strategy
- Greater Cambridge Indoor Sports Facility Strategy
- Greater Cambridge Green Infrastructure Opportunity Mapping (Nov 2020)
- North East Cambridge A Biodiversity Assessment (June 2020)
- The Benefits of Urban Greening (Creating Sustainable Cities)
- A Brief Guide To The Benefits of Urban Green Space (LEAF University of Leeds)
- Climate Change Strategy 2021 to 2026 (City 2021)

Policy Framework / Guidance

National Legislation

6. The Government is currently progressing the Environment Bill through Parliament. The Bill includes measures to protect nature and mandate net gains for biodiversity. It is expected to become law in 2023. The Bill includes the following key components to mandatory biodiversity net gain (BNG): minimum 10% gain required calculated using Biodiversity Metric and approval of net gain plan; habitat secured for at least 30 years via obligations/ conservation covenant; and habitat can be delivered on-site, off-site or via statutory biodiversity credits.

National Policy (NPPF)

- 7. A revised National Planning Policy Framework was published February 2019. National policy in the NPPF includes the presumption in favour of sustainable development at the heart of the planning system. This sets a clear expectation on planning authorities to plan positively to promote development and create sustainable communities.
- 8. Paragraph 91 explains how the planning policies and decisions should aim to achieve healthy, inclusive and safe places. They should a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other; b) are safe and accessible, and include high quality public space, which encourage the active and continual use of public areas; and c) enable and support healthy lifestyles, including identified local health and well-being needs, examples include the provision of safe and accessible green infrastructure, sports facilities, access to healthier food, allotments and layouts that encourage walking and cycling.
- 9. Paragraph 92 explains how planning policies and decisions should provide social, recreational, and cultural facilities including services needed by the community. It includes the need for: (a) local authorities to plan positively for the provision of community facilities such as meeting places, sports venues, open space and other local services to enhance the sustainability of communities and residential environments; and (b) take account of, and supporting the delivery of local strategies to improve the health, social and cultural well-being of all sections of the community.
- 10. Paragraph 96 highlights the importance of providing access to a network of high-quality open spaces and opportunities for sport and physical activity for the health and well-being of communities. It recommends the need for

planning policies to be based on robust and up-to-date assessments of the need for open space, sport, and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision. Information gained from the assessments should be used to determine what open space, sport and recreational provision is needed, which plans should then seek to accommodate.

- 11. Paragraph 97 states open spaces should not be built on unless one of three exceptions can be satisfied. These exceptions area as follows: the land is surplus to requirements; the loss can be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; the development is for alternative sports and recreational provision.
- 12. Paragraph 98 advises planning policies and decisions to protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.

National Guidance (NPPG)

- 13. National Guidance (NPPG) provides a series of notes about healthy communities explaining its importance in sustainable communities and advising on how it should be integrated with other uses/strategies. Those that have a bearing on open spaces are summarised as follows:
- 14. Positive planning can make a significant contribution to creating a healthy community with the design and use of the built and natural environments, including green infrastructure. These are major determinants of health and wellbeing by creating environments that support and encourage healthy lifestyles. Paragraph: 001 Reference ID:53-001-20190722
- 15. How should open space be taken into account in planning? Open space should be taken into account in planning for new development and considering proposals that may affect existing open space. Open space, which includes all open space of public value, can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure, as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development. It is for local planning authorities to assess the need for open space and opportunities for new provision in their areas. Paragraph: 001 Reference ID: 37-001-20140306

- 16. How do local planning authorities and developers assess the needs for sports and recreation facilities? Authorities and developers may refer to Sport England's guidance on how to assess the need for sports and recreation facilities. Paragraph: 002 Reference ID: 37-002-20140306
- 17. A healthy place is defined as one which supports and promotes healthy behaviours and environments and a reduction in health inequalities for people of all ages. It will provide the community with opportunities to improve their physical and mental health, and support community engagement and wellbeing. It is a place which is inclusive and promotes social interaction. It meets the needs of children and young people to grow and develop, as well as being adaptable to the needs of an increasingly elderly population and those with dementia and other sensory or mobility impairments. Paragraph: 003 Reference ID:53-003-20191101
- 18. The NPPG also provides a series of notes about green infrastructure explaining what types of spaces this can embrace and support a range of environmental strategies. Those that have a bearing on open spaces are summarised as follows: Green infrastructure can include a range of spaces and assets that provide environmental and wider benefits. Examples include woodland, parks, and other areas of open space. Paragraph: 004 Reference ID: 8-004-20190721
- 19. Green infrastructure can help reduce air pollution and noise as well as mitigating climate change and flooding. High-quality networks of multifunctional green infrastructure contribute a range of benefits, including ecological connectivity and facilitating biodiversity net gain. Paragraph: 006 Reference ID: 8-006-20190721

South Cambridgeshire Local Plan 2018

- 20. Policy NH/12: Local Green Space. Local Green Space identified on the Policies Map will be protected from development that would adversely impact on the character and particular local significance placed on such green areas which make them valued by their local community. Inappropriate development, as defined in the NPPF, would not be approved except in very special circumstances and in discussion with the local community.
- 21. Policy SC/2: Health Impact Assessment. New development will have a positive impact on the health and wellbeing of new and existing residents. Planning applications for developments of 20 or more dwellings or 1,000m2 or more floorspace will be accompanied by a Health Impact Assessment to demonstrate this.

- a. For developments of 100 or more dwellings or 5,000m2 or more floorspace a full Health Impact Assessment will be required;
- b. For developments between 20 to 100 dwellings or 1,000 to 5,000m2 or more floorspace the Health Impact Assessment will take the form of an extended screening or rapid Health Impact Assessment.
- 22. Policy SC/7: Outdoor Play Space, Informal Open Space and New Developments.
 - 1. All housing developments will contribute towards Outdoor Playing Space (including children's play space and formal outdoor sports facilities), and Informal Open Space to meet the need generated by the development in accordance with the following minimum standards:
 - a. Outdoor play space, informal open space and allotments and community allotments: 3.2 hectares per 1,000 people comprising:
 - i. Outdoor Sport 1.6ha. per 1,000 people
 - ii. Open Space 1.2ha. per 1,000 people
 - iii. Allotments and community orchards 0.4ha. per 1,000 people
 - b. Subject to the needs of the development the open space requirement will consist of:
 - iv. Formal Children's Play Space 0.4ha. per 1,000 people
 - v. Informal Children's Play Space 0.4ha. per 1,000 people
 - vi. Informal Open Space 0.4ha. per 1,000 people
 - 2. Only family dwellings of two or more bedrooms will be required to contribute to the provision of Children's Play Space.
 - 3. Housing provision consisting of Sheltered housing, Extra Care housing, and residential and nursing homes will not be required to provide Outdoor Play Space except Informal Open Space.
 - 4. Where appropriate, provision will be on-site so that provision is integrated into the development and benefits to the health and wellbeing of new residents are maximised, guided by Figure 10. However, an appropriate contribution will be required for "off-site" provision of the types of space not provided on-site. This may be for new facilities and/or improvements to existing facilities. On individual sites negotiation may take place on the types of space provided on site, taking account of the needs of the area, existing provision and any identified deficiencies in provision.
 - 5. In developments of less than 10 homes, it is expected that only the Informal Open Space element will be provided on-site. Where an individual phase comprises 10 or fewer dwellings but will form part of a larger scheme exceeding that total, a proportional contribution to future on-site provision will be required.

- 6. Depending on the nature of provision, contributions may also be required to meet maintenance and/or operating costs either as pump priming or in perpetuity.
- 7. Where on-site provision is required, the Council may seek the option of a commuted capital sum to construct the facility. In these circumstances, a serviced site (as appropriate for the facility concerned) will be transferred to the Council free of charge by the developer.

Cambridge Local Plan 2018

- 23. Policy 7: The River Cam. The River Cam is of considerable importance to the city of Cambridge which Cambridge sweeps in from the rural hinterland to the heart of the city. The River Cam is a key part of the defining character of Cambridge (Cambridge Landscape Character Assessment 2003).
- 24. The River Cam is a designated county wildlife site in recognition of the river's importance in linking semi-natural habitats, including ecologically designated Local Nature Reserves in the city with the wider countryside of South Cambridgeshire. The different aspects of the river are addressed in Policy 7 of the Cambridge Local Plan 2018 (CLP2018).
- 25. Policy 67: Protection of open space. An essential part of the character of the city stems from the spaces and grounds around buildings and their natural features. Policy 67 is the Council's established mechanism for protecting open space within Cambridge's administrative area. The loss or relocation of any formal sports facilities would also need to comply with Policy 73 (Community, sports and leisure facilities), where applicable.
- 26. Policy 68: Open space and recreation provision through new development. Policy 68 requires new residential developments to provide public open space (POS) with provision given early consideration in the design process. The specific requirements are calculated using the Open Space and Recreation Standards (see CLP2018, Appendix I) and will have regard to the Council's adopted Open Space and Recreation Strategy, Playing Pitch Strategy and Indoor Sports Facility Strategy.
- 27. Policy 73: Community, sports and leisure facilities. Policy 73 supports new and improved formal sports facilities where they improve the range, quality and access to facilities both within Cambridge and, where appropriate, in the sub-region. Proposals should have regard to the Playing Pitch Strategy and Indoor Sports Facility Strategy. This policy is relevant to a wide range of facilities from health clubs and tennis courts to an indoor sports complex and swimming pools.

28. Appendix I: Open Space and Recreation Standard. The Council's open space and recreation standards are listed in Table 1 below. They apply to all schemes for new residential developments and the requirement is based on the net number of residents accommodated in the new development.

Table 1: CLP 2018 Appendix I, Table I.1: Open space and recreation standards

Type of	Definition	Standard	CIL ⁺	Onsite
open				or
space				S106*
Outdoor	Playing pitches,	Outdoor pitches: 1.1 hectares	No	Yes
sports	courts and greens	per Courts/Multi-use Games		
facilities		Areas / bowling greens: 1,000		
		people		
		0.1 hectares per 1,000 people		
Indoor	Formal provision	1 sports hall for 13,000 people	Yes	No
sports	such as sports halls	1 swimming pool for 50,000		
provision	and swimming pools	people		
Provision	Equipped children's	0.3 hectares per 1,000 people	No	Yes
for children	play areas and			
and	outdoor youth			
teenagers	provision			
Informal	Informal provision,	2.2 hectares per 1,000 people	No	Yes
open	including recreation			
space	grounds, parks,			
	natural greenspaces			
	and, in town centres			
	or urban locations,			
	usable, high quality,			
	public hard surfaces			
Allotments	Allotments	0.4 hectares per 1,000 people	No	Yes

⁺ Indicative, and subject to the adoption of the Community Infrastructure Levy and associated Regulation 123 list.

29. Guidance on the provision of new indoor and outdoor sports facilities is provided in the Indoor Sport Facilities Strategy and Playing Pitch Strategy, respectively; both of which take into account planned growth to 2031. However, there will be instances where large windfall sites come forward which have not been accounted for in the strategies. Where this is the case, applicants should provide a sports strategy (also known as a facilities development plan) setting out the details of specific facilities to be developed, the rationale and need for these. The process will involve consultation with Sport England and the relevant National Governing Bodies for sport.

- 30. On-site provision for children and teenagers, informal open space, allotments and formal sports facilities and their successful integration into a proposed development should be considered early in the design process. The precise type of on-site provision required will depend on the size and location of the proposal and the existing open space provision in the area. This should consider how best these spaces can be provided on-site in accordance with the requirements of Policy 68 and the recommendations outlined in the council's Open Space and Recreation Strategy.
- 31. The open space standards will be the starting point for counting the basic quantum of open space required. Once more detail is known about the types of dwellings to be provided and the anticipated demographics associated with these, a more refined strategy for the implementation of the different open spaces can be provided. In effect, a detailed population profile will be required to ensure the development provides the types of open spaces needed by the new community. In neighbouring areas where there is a shortage of public open space, all attempts to maximise high quality, low maintenance on-site provision, available throughout the year will be needed to avoid the over dependence on a limited number of existing public open space sites.

Quantum of new provision for a standard residential development in Cambridge

- 32. Appendix I, paragraph I.14 of CLP 2018 explains how the open space standards should be applied for each type of open space or sports provision for new residential proposals. Applicants will need to calculate the number of new residents arising from the development using the number of bedrooms in each unit as a guide.
- 33. Where more detailed knowledge of the dwelling type, size and tenure is known, a more accurate calculation of the anticipated development population should be provided, based upon bedroom numbers and the types of homes being provided e.g. a two bedroom flat will be occupied by two people. This number will need to be provided within Design and Access Statements supporting any development proposal. The specific requirements are then calculated using the Open Space and Recreation Standards (see CLP2018, Appendix I) and will have regard to the City Council's adopted Open Space and Recreation Strategy, Playing Pitch Strategy and Indoor Sports Facility Strategy. The latest version of these documents should be used to calculate the quantum of new provision.

Applicable Public Open Space standards

34. NEC straddles the boundaries of Cambridge City and South Cambridgeshire, each with their own set of Local Plan public open space requirements for new

residential developments. However, when built, North East Cambridge will in effect be an urban extension to Cambridge and be of a higher density which is more typical developments of urban environments. It is therefore considered reasonable to apply the current adopted open space standards detailed in the Cambridge Local Plan 2018 including their recommended application and deficiency tests outlined in Appendix I.

- 35. In relation to the planning for formal indoor sports provision (sports halls and swimming pools) and outdoor artificial pitches, Sport England now recommend the use of their Sports Facility Calculator (SFC) to determine the quantum and cost a residential development will generate, based upon the development's population profile.
- 36. As part of the Greater Cambridge Local Plan (GCLP), the Open Space and Recreation Standards for both Cambridge and South Cambridgeshire will be reviewed along with the Greater Cambridge Playing Pitch Strategy and the Greater Cambridge Indoor Sports Facility Strategy. As these latter two strategies use Sport England's SFC to calculate the demand generated by residential development, it is anticipated that Sport England's SFC will replace the current metric standard for calculating the relevant formal indoor sports provision and outdoor artificial pitch provision. On this basis, the SFC calculations have been used to calculate the need for NEC and not the adopted Cambridge Local Plan standards. A summary of the open space provision calculations is provided in Appendix A. The relevant draft NEC Policies covering open spaces and sports facilities are listed in Appendix B.

National and local strategies

National Strategies

- 37. The Government recently created the Office for Health Promotion with the intention of leading national efforts to improve and level up the health of the nation by tackling obesity, improving mental health and promoting physical activity.
- 38. The National Health Service's (NHS) Healthy New Towns programme, launched in 2015, explored how the development of new places could create healthier and connected communities with integrated and high-quality services. The knowledge gained from this programme is outlines in the NHS' 10 principles for 'Putting Health into Place'.

- 39. Homes England has endorsed new design guidance, called Building for a Healthy Life (July 2020) which encourages healthier lifestyles to be planned into new housing developments. The design toolkit covers the priorities for creating healthier communities, including improved walking, cycling and public transport links, with reduced carbon emissions and better air quality. Master plans should be based on an assessment of local health and care needs, with the creation of integrated neighbourhoods based on 'tenure neutral' housing and well-defined public spaces.
- 40. One of the Strategic Objectives of the North East Cambridge Area Action Plan is to apply these principles used by the NHS Healthy New Towns (Putting Health into Place) and Homes England 'Building for a Healthy Life'.

County Wide Strategies

- 41. The Cambridgeshire Green Infrastructure Strategy was designed to assist in shaping and co-ordinating the delivery of green infrastructure in the county, to provide social, environmental and economic benefits now and in the future.
- 42. This strategy is based on the analysis of public policy and key baseline data grouped into seven themes identified as important elements of green infrastructure, biodiversity, climate change, green infrastructure gateways, heritage, landscape, publicly accessible open space and rights of way. In addition, three cross-cutting/overarching issues were considered: economic development, health and well-being, and land and water management. These issues crossover with many other NEC topic papers.
- 43. A 'Strategic Network' of green infrastructure priorities for Cambridgeshire was identified by mapping these themes and other important factors relating to green infrastructure to show where each theme is most important for green infrastructure in Cambridgeshire. It provides a county-wide framework upon which to provide or enhance green infrastructure in Cambridgeshire up to and beyond 2031. It is designed to offer county-wide connectivity, identify opportunities to support the delivery of the four objectives, and link into green infrastructure provision outside Cambridgeshire. It is this Strategic Network that identifies the need and the opportunities to provide additional provision.
- 44. Cambridgeshire & Peterborough Joint Health & Wellbeing Strategy 2020-24. The Health and Wellbeing Board and Network bring together those who buy and run services across the NHS, public health, social care and children's services, district services, elected representatives and representatives from Health Watch to plan services for Cambridgeshire The Board works collaboratively to decide on Joint Strategic Needs Assessments (JSNA) to

inform the local Health and Wellbeing Strategy (HWBS). These are both owned by the Cambridgeshire Health and Wellbeing Board (also see Health Facilities and Wellbeing Topic Paper).

- 45. The Strategy describes the priorities the Health and Wellbeing Board has agreed in order to tackle the needs identified in the JSNAs. The Cambridgeshire Strategy focuses on the following six priorities to improve the physical and mental health and wellbeing of Cambridgeshire residents. The six priorities are:
 - Ensure a positive start to life for children, young people and their families.
 - Support older people to be independent, safe and well.
 - Encourage healthy lifestyles and behaviours in all actions and activities while respecting people's personal choices.
 - Create a safe environment and help to build strong communities, wellbeing and mental health.
 - Create a sustainable environment in which communities can flourish.
 - Work together effectively.

The Health and Wellbeing Board are currently developing a joint Health and Wellbeing Strategy (2020-2024) across Cambridgeshire and Peterborough with the four priorities: Places that support health and wellbeing; Priority 2: Helping children achieve the best start in life; Priority 3: Staying healthy throughout life; and Priority 4: Quality health and social care.

Local Council Strategies

- 46. South Cambridgeshire Business Plan 2020-25 sets 4 priority areas for the district one of which is Being green to our core we will create a cleaner, greener and zero carbon future for our communities.
- 47. South Cambridgeshire Healthy Communities objectives for Northstowe Area Action Plan, 2007. The Northstowe Area Action Plan makes reference to the Community Strategy's vision which is split into 6 aims one of which is to provide 'Active, Safe and Healthy Communities where residents can play a full part in community life, with a structure of thriving voluntary and community organisations.
- 48. One of the development principles is to ensure that the town of Northstowe will be developed as a balanced, viable and socially inclusive community where people can live in a healthy and safe environment, and where most of their learning needs are met.

- 49. Policy NS/19 Public Open Space and Sports Provision states that Northstowe's residents should be able to find that their sport, leisure and recreational needs are met locally so that they can lead a healthy lifestyle and enjoy a high quality of life and leisure time. The policy also states that recreational facilities and associated landscaping will be delivered early within the development such that the needs of the development are met at all times.
- 50. The Northstowe Healthy Living and Youth and Play Strategy (NHLYP) is informed by the Joint Strategic Needs Assessment (JSNA) (2012-2017). The work was completed on behalf of Homes England as part of the Healthy New Towns Project and is based on existing and emerging evidence that design of the built environment has the potential to reduce the economic impact on NHS England. This significant piece of work supported by public health specialists, health and design professionals and play expert is a policy resource to support the design of places which support community cohesion and the physical and mental health of all age groups.
- 51. South Cambridgeshire Open Space Supplementary Planning Document (SPD) formed part of the South Cambridgeshire Local Development Framework (LDF). The SPD expands on open space policies in the Development Control Policies Development Plan Document (DPD), adopted in July 2007, and provides additional details on how they will be implemented. Policies seek to ensure that provision of open space is addressed comprehensively to meet the needs of all new developments. Where provision cannot be made on site, off site contributions are now sought to enable improvements to the quantity and quality of facilities in the locality.
- 52. South Cambridgeshire District Council Local Development Framework Health Impact Assessment Supplementary Planning Document, Adopted
 March 2011. The extract below identifies an example of a health determinant
 checklist. This particular list has been adapted from 'Watch out for health a
 guide to healthy sustainable communities' (HUDU) (12) Healthy Lifestyles –
 Does the development proposal encourage and promote: Healthy exercise;
 Opportunities for play and exercise; Open spaces; Green space and parks;
 Playing fields; Manage parks and spaces for everyone; Green space within 15
 minutes from any home.
- 53. The Cambridge City Corporate Plan 2019-2022 sets out 5 strategic objectives, one of which is to protect our environment and tackle climate change. This objective is unpinned by a series of actions, initiatives and strategies that look to:

- Make our streets and open spaces and communities more resilient to the impacts of climate change so Cambridge's streets and open spaces can continue to be enjoyed by future generations.
- Manage Cambridge's streets and open spaces for the benefit of both wildlife and people by ensuring that biodiversity protection and enhancement is taken into account in all development decisions and management practices. This will be measures by the % of City Council owned and managed parks and open spaces actively designated and / or managed for biodiversity.
- Keep our streets and open spaces clean, green and safe, including by: supporting communities to assist us in caring for their streets and open spaces. The management of our streets and open spaces is supported by an active band of community volunteers. A High quality, environmentally friendly street and open space environments achieved. This will be measured by % of streets achieving Grade A cleanliness standard, Number of open spaces with active friends' groups, Number of volunteer hours contributed to maintaining streets and open spaces and the number of Green Flag sites.
- Deliver the Streets and Open Spaces service development strategy, 2017-21, including investing in new technologies and ways of working. This will result in our Streets and Open Spaces service being able to respond to the impacts of growth and associated service demands without increasing costs. Our customers are able to raise and track streets and open spaces service requests digitally. This will be measured by Operational unit cost to maintain streets and open spaces.
- 54. Cambridge City Council produced the Open Space and Recreation Strategy (OSRS) 2011 to support the plan-making process. The 2011 strategy reassessed open spaces within the city, which were considered as a part of the previous strategy, evaluated a range of additional sites and included a new quality assessment of all sites surveyed.
- 55. The 2011 strategy assessed around 400 sites across the city for their environmental and recreational importance and subsequent protected from new development. It also explains how some wards have significant open space deficiencies and is used by the Council to ensure on-site delivery in these areas where possible. Paragraph 5.15 explains how the formal outdoor provision. In terms of grass pitches, provision should be made for:
 - One adult football pitch for every 1,026 people, or 0.887 hectares of pitch space per 1,000 people;
 - One cricket field for every 11,580 people, or 0.138 hectares of pitch space per 1,000 people; and

- One adult rugby pitch for every 12,580 people, or 0.095 hectares of pitch space per 1,000 people.
- 56. The OSRS will be updated in 2022, subject to Covid-19 movement restrictions to inform the Joint Local Plan for Greater Cambridge. This will take account of those sites previously assessed and new sites delivered since the 2011 assessment, this will include sites in South Cambridgeshire District Council which adjoin the fringes of Cambridge City Council, south of the A14, such as Orchard Park and east of the M11 such as Eddington and Trumpington Meadows.
- 57. Playing Pitch Strategy and Indoor Sports Facility Strategy for Greater Cambridge. Cambridge City Council and South Cambridgeshire District Council, in partnership with Sport England, developed two sports strategies: a Playing Pitch Strategy 2015-2031 for grass and all-weather pitches covering both areas; and an Indoor Sports Facility Strategy 2015-2031 to guide future provision and management of indoor sports halls, swimming pools and outdoor cycling facilities to serve existing and new communities in Cambridge and South Cambridgeshire. These strategies assessed existing facilities, the future need for sport and active recreation facilities, and opportunities for new provision. The Playing Pitch Strategy and Indoor Sports Facility Strategy take into account planned growth to 2031. These will be updated to support the growth at both North East Cambridge and the proposed growth anticipated in the new Joint Local Plan for Greater Cambridge. These documents have the purpose of identifying strategic sports facilities such as full-size artificial grass pitches and sports halls.
- 58. It should be noted that Sport England advise the use of their Sports Facility Calculator to calculate the quantum of any formal sports provision generated by new large-scale residential developments. More details specific to North East Cambridge are provide below, in the section 'Sports England's Sports Facility Calculator'. It is anticipated that these strategies will be updated in 2021/22 to inform the emerging Joint Local Plan including North East Cambridge and development management decision making.
- 59. Greater Cambridge Green Infrastructure Opportunity Mapping (Nov 2020). A high quality and resilient natural environment is increasingly recognised as a 'must have', rather than 'nice to have'. It helps to mitigate and adapt to climate change, to conserve and enhance biodiversity, to improve health and wellbeing, whilst restoring and maintaining local distinctiveness. The declaration of emissions targets and a climate emergency by both Councils, as well as the 'doubling nature vision', have increased the importance of these issues locally.

- 60. The study assessed Green Infrastructure assets both individually and collectively using a series of thematic maps to provide an indication of how the network is functioning against these GI themes. A desk-based review was undertaken of the non-development related risks posed by climate change, water stress, pests and diseases. Specific consideration was given to the vulnerability of international and national designated sites to recreational pressures, predicted population change and the current condition of Greater Cambridge's lowland peat resource. The desk-based assessment was supported by additional stakeholder engagement comprising an online survey and a series of technical stakeholder workshops.
- 61. The study provides maps of the individual GI theme broad opportunity zones as well as a cumulative view of all of the broad opportunity zones. The cumulative view shows the areas where GI interventions might deliver a number of ecosystem services and related benefits. These broad enhancement zones will be refined in the next stage of this study. Whilst there are locations where enhancement or creation of GI assets to support a single function will be important (for example biodiversity), it is anticipated that the areas where multiple opportunity zones overlap will inform the priority areas of search for more specific, deliverable GI project opportunities.
- 62. The mapping highlights river corridors as key areas where GI interventions could result in multiple benefits. There are large areas of multi-theme opportunity to the south east and south of Cambridge. North east of Cambridge presents multiple opportunities as do areas west of Cambridge around Bourn and Kingston. Opportunities associated with the northern fens, washes and wetlands feature in multiple themes.
- 63. North East Cambridge A Biodiversity Assessment (June 2020). The purpose of this assessment was to provide ecological and biodiversity information to support a developing Area Action Plan (AAP). This report represents the finds of the assessments which were conducted during 2019 through desktop studies and field visits, and which comprised:
 - A Preliminary Ecological Appraisal of the North East Cambridge Area
 - Production of constraints and opportunities maps for the North East Cambridge Area
- 64. The overall aim of the assessment is to provide a biodiversity vision for NEC that can be incorporated into the developing AAP. The biodiversity vision recognises the existing ecological features that are present. It also draws on the surrounding landscape to propose new features which will ultimately create a coherent biodiverse environment in which people can live and work.

Health and Well-Being

The benefits of green spaces in an urban environment

- 65. Increasing access to green spaces in urban areas can improve both the quality of the public realm environment and the health and the well-being of urban residents.
- 66. Green spaces, both public and private, can take a wide variety of different forms such as parks, gardens, playing fields, sports courts, children's play areas, woods and other natural areas, grassed areas and allotments.
- 67. As well as improving public health, greenspaces also have wider environmental benefits such as increasing opportunities for native wildlife, reducing the impacts of air and noise pollution, absorbing excessive rainfall helping to reduce the risk of flooding. They can also play a major role in combatting the impacts of climate change by absorbing carbon emissions and reducing temperatures by providing shade.
- 68. The importance of greenspace has also been recognised within the UK Government's '25-year plan to improve the environment' which acknowledge the essential role that the natural environment and greenspaces play in people's physical and mental health. The report states its aims are to improve population health and wellbeing by forging a closer connection between people and the natural environment.
- 69. Public Health England (PHE), has also highlighted how important greenspaces are to its work particularly with regards to avoidance of diseases associated with inactivity, combatting mental health issues and the restorative benefits contact with greenspaces can have. To this effect, in 2020 PHE released a report entitled, 'Improving access to greenspace A new review for 2020'.
- 70. This report highlights how greenspace, such as parks, woodland, fields and allotments as well as introduced natural elements such as green walls, roofs and incidental vegetation, are increasingly being recognised as an important asset for supporting health and wellbeing. Using these natural assets, can help local authorities address local issues that they face, including improving the wider aspects of health and wellbeing.

Coronavirus and greenspaces

- 71. Following the global pandemic which highlighted the importance of health and well-being, the Government set up the Office for Health Promotion, in March 2021 to improve and level up the health of the nation by tackling obesity, improving mental health and promoting physical activity.
- 72. The Coronavirus pandemic led to the closure of many indoor spaces such as shops, sports centres and hospitality venues with the result that greenspaces across all sectors of society have been the only outlet for public exercise and socially distanced interaction. This situation focused people's attention on their local access to these spaces. Where people have been able to access local green spaces, many have recognised the importance of access to nature during lockdown, finding time in green spaces beneficial for their physical health and mental wellbeing.
- 73. However, long before the Coronavirus pandemic the importance of greenspace had been recognised for the wide range of benefits it brings, from improving human health, providing cleaner air, increasing opportunities for biodiversity to mitigating the negative impacts of climate change. This recognition of the importance of greenspaces means that it is vital to ensure that public green spaces are easily accessible for all population groups and distributed equitably within the city.
- 74. While it is anticipated that employees will return to their place of work following the end to COVID restrictions, it is reasonable to assume that many will be allowed and even encouraged to work from home and or adopt more flexible work patterns. This means for many, the traditional commute to work has gone however the commute often afforded people with some sort of regular physical activity. Many, previously office-based employees who choose to work from home more regularly will need to develop alternative exercise or activity regimes to compensate for their less structured and physically active work patterns in order to avoid illnesses related to predominantly sedentary work lifestyles, hence easy access to green spaces would support this need.
- 75. The Coronavirus pandemic also highlighted the importance of space to play for children and their families. As part of the <u>Uniting the Movement</u> campaign, Sport England have identified five 'big issues' to help England recover from the Covid-19 pandemic. These include positive experiences for children and young people, along with focusing on creating active environments and how the wider built environment influences how much people move.

open spaces for daily exercise, informal gatherings and to support their general well-being, the Area Action Plan sets that these types of informal and play spaces should be prioritised as part of any on-site provision at North East Cambridge. Combined with the higher density nature of the development, it is important that people living and working within the Plan area have easy access to a coherent network of open spaces for leisure and well-being including children for doorstep play provision. It is therefore anticipated that large outdoor sport facilities are expected to be delivered off-site. However, smaller outdoor sports areas are expected to be provided on-site, in particular outdoor court spaces. This highlights the critical importance of North East Cambridge providing new and improved accessibility to existing sports facilities, within the wider area.

Children and the Built Environment

- 77. Research into how boys and girls use public facilities, such as playgrounds identified their equal use, up to the age of seven. However, between the ages of eight and eighteen, 80% were boys. Girls were ten times more likely to feel insecure in these spaces. This is partly because of social norms, but also because parks are not designed or equipped to cater for girls.
- 78. Traditional public play spaces can often be dominated by boys. It is therefore important projects include more young girls in the design of public spaces such as the <u>Urban Girls Movement</u>. This will not just lead to <u>better designed</u> public spaces but will also increase their <u>inclusivity</u>.
- 79. New <u>guidance</u> by the Royal Town Planning Institute has produced advice to expand the scope of what is currently understood as planning for children, beyond planning for play, towards a more inclusive approach that encompasses all aspects of children's lives, highlighting the importance of the sustainable location of development that encourages independent and sustainable mobility.

'Small is beautiful'

80. The Association for Public Service Excellence's (APSE) brief guide to Post Pandemic: Green Urban Spaces explores the value of green urban spaces and the benefits brought to communities throughout the health pandemic. The guide explains how not all attempts to increase greenspace in the public realm need be multi-million-pound projects. Street trees and small pocket parks in between buildings can make urban areas more pleasant and healthier places live, work and invest in. These green features help to act as part of the infrastructure network to foster public well-being, improve air

quality, reduce the impacts of flooding, increase opportunities for biodiversity, bring people closer to nature and mitigate against the wider impacts of climate change.

NEC context

Our Vision

81. "We want North East Cambridge to be an inclusive, healthy, walkable, low-carbon new city district with a vibrant mix of high-quality homes, workplaces, community facilities, and social and green spaces, fully integrated with surrounding neighbourhoods."

Our Strategic Objectives

- 82. There are three strategic objectives to guide redevelopment, out of a total of five for North East Cambridge which are relevant to open spaces and their sub objectives.
- 83. Strategic Objective One: North East Cambridge will be a low environmental impact urban district, addressing both the climate and biodiversity emergencies.
 - Development will support and sustain the transition to renewables, net zero carbon and embed the challenge of climate change resilience.
 - It will be inherently walkable and allow easy transitions between sustainable transport modes (walking, cycling & public transport) with density linked to accessibility.
 - It will be a new model for low private car/vehicle use by maximising walking, cycling and public transport infrastructure, car club provision and EV/alternative fuel vehicle charging provision.
 - Green and blue infrastructure will enable everyone to lead healthy lifestyles, and will protect and enhance biodiversity.
 - Low-tech green solutions will couple with smart city technology in achieving future-proofed and climate adaptable buildings and spaces.
- 84. Strategic Objective Four: North East Cambridge will be a healthy and safe neighbourhood
 - North East Cambridge will apply principles used by the NHS Healthy New Towns (Putting Health First) and Homes England 'Building for a Healthy Life'.

- The health and wellbeing of people will help structure new development and inform decision-making, to create a high quality of life for everyone.
- Healthy lifestyles will be enabled through access to open spaces, sports and recreational facilities, public rights of way, local green spaces and active travel choices.
- North East Cambridge will have a clear urban structure with identifiable centres of activity and a strong sense of community.
- Human health will be at the forefront of design by ensuring that noise, air quality, lighting and odour are key factors in determining the layout and functionality of North East Cambridge.
- 85. Strategic Objective Five: North East Cambridge will be physically and socially integrated with neighbouring communities
 - We will make a welcoming, safe and inclusive place that integrates well with surrounding established neighbourhoods and existing environmental constraints.
 - Development will be planned and designed to improve access to jobs, services and open spaces for existing residents of neighbouring areas, as well as new residents.
 - North East Cambridge will be physically well-connected to its local and wider context, through breaking down existing barriers to movement, and creating new routes for walking and cycling.
 - Existing and planned public transport connections will be integrated into the planning of North East Cambridge, enabling travel to and from the area without the use of the private car.

Existing spaces/facilities on site

- 86. North East Cambridge is a large area of brownfield land with some existing open space within the site boundary. The site boundary is defined to some extent by existing infrastructure like the A14 and the railway line to the east. To the south lies the Cambridgeshire Guided Busway as well as residential communities of Kings Hedges and East Chesterton.
- 87. Existing land uses are dominated by office/research and development employment areas to the west of the site and Milton Road which connects the A14 to the city (and separates the site into two halves) and a mixture of office, light industrial and warehouse/distribution in the south and east of the site. The largest occupier east of Milton Road is the Anglian Water Waste Water Treatment Plant.

- 88. NEC is accessed via Cambridge North station to the south east of the site, the Cambridgeshire Guided Busway which runs along the south of the site via Cambridge North railway station and passing Cambridge Science Park and Cambridge Regional College. The Jane Costin foot/cycleway bridge also links NEC to Milton and beyond to the north. There are also numerous footpaths/cycleways through the site most notably the path that runs along the First Drain and connects the Science Park with Cowley Road and Cambridge North station.
- 89. In terms of current open space, sport and recreation provision in NEC, these are concentrated in Cambridge Science Park and Cambridge Regional College:
 - The Trinity Centre a modern multimedia, exhibition and event complex includes a restaurant, bar and the fitness club.
 - Revolution Health & Fitness Club
 - <u>Cambridge Golf Driving range</u>, on Cowley Road
 - Cambridge Regional College grounds include approximately 0.5 hectares
 of open space. The on-site sports facilities include two squash courts, two
 large sports halls, a climbing wall, fitness suite, an exercise studio and a
 floodlit outdoor 5-a-side all weather pitch adjacent to the Science Park
 - RP Fitness gym on Nuffield Road
- 90. These facilities are private and require some form of membership to access them. There are however green spaces at Cambridge Science Park (approximately 12.37 hectares) and at St John's Innovation Park (approximately 1.46 hectares) where people can walk during the day however these green spaces aren't perceived as being accessible to the wider public.

NEC Catchment Analysis

91. For context, NEC has good transport accessibility and this will improve significantly over the coming decades. Figure 1 below illustrates the site is a 15-minute cycle ride from Cambridge city centre, with access to Cambridge railway station facilitated by the soon to be complete Chisholm Trail and the existing Cambridge North railway station. The Waterbeach Greenway will also improve walking and cycling accessibility towards the north of the site.

Figure 1: Cycle Catchment Map



- 92. In terms of access to public open space immediately beyond NEC, Figure 2 illustrates the areas of public open space within a 3-kilometre distance (10-minute cycle ride) and an 800-metre (10-minute walk), as-the-crow-flies from the site's boundary. The existing railway station, line and A14 motorway are also annotated along with the Chisholm Trail which will provide access to several large semi-natural green spaces including Ditton Meadows, Stourbridge Common and Coldhams Common.
- 93. Tables 2, 3, 4, 5 and 6 below provides a summary of the formal outdoor sports facilities, indoor sports halls, swimming pools, park spaces and natural and semi-natural spaces within a 10-minute cycle ride, 3-kilometre distance from the proposed North East Cambridge residential areas, respectively. These lists are not exhaustive. Those that are also within a 10-minute walk (800 metres) are also indicated.

Table 2: Summary of Outdoor Sports Facilities within a 10-minute cycle ride from NEC

Site Name	Ward / Village	Sports Facility
Barnwell Road	Abbey	Tennis Courts

Site Name	Ward / Village	Sports Facility
Barnwell Road	Abbey	Bowling Green
Coldhams Common	Abbey	Netball Court
Coldhams Common	Abbey	Skateboard Park
Coldhams Common	Abbey	Artificial Pitch
Ditton Fields	Abbey	MUGA
Peverel Road	Abbey	MUGA
Thorpe Way	Abbey	MUGA
Alexandra Gardens	Arbury	Bowling Green
St Albans Road Recreation Ground	Arbury	MUGA
Fitzwilliam College	Castle	Playing Field
Chesterton Bowls Club	East Chesterton	Bowling Rink
Fen Ditton Recreation Ground (10-minute walk)	Fen Ditton	Recreation Ground
Impington Recreation Ground	Impington	Bowling Green
Impington Recreation Ground	Impington	Recreation Ground
Impington Recreation Ground	Impington	Tennis Courts
Impington Village College	Impington	Playing Field
Impington Village College	Impington	Tennis Courts
North Cambridge Academy	Kings Hedges	MUGA
North Cambridge Academy	Kings Hedges	Playing Field
North Cambridge Academy	Kings Hedges	Tennis Courts
Christs Pieces	Market	Bowling Green
Christs Pieces	Market	Tennis Courts
Jesus College	Market	Playing Field
Jesus College	Market	Tennis Courts
Jesus Green	Market	Tennis Courts
Jesus Green Lido	Market	Outdoor Swimming Pool
Bowling Green (10-minute walk)	Milton	Bowling Green
Milton Recreation Ground, Coles Road (10-minute walk)	Milton	Recreation Ground
Milton Recreation Ground, Coles Road (10-minute walk)	Milton	Tennis Courts

Site Name	Ward / Village	Sports Facility
Milton Recreation Ground, Coles Road (10-minute walk)	Milton	MUGA
Milton Recreation Ground, The Sycamores (10-minute walk)	Milton	Recreation Ground
North Lodge Park	Milton	Recreation Ground
Orchard Park – Neal Drive	Orchard Park	Playing Field
Orchard Park – Ring Fort Road	Orchard Park	Artificial Pitch
Orchard Park – Ring Fort Road	Orchard Park	Playing Field
Orchard Park – Ring Fort Road	Orchard Park	Skateboard Park
Orchard Park – Ring Fort Road	Orchard Park	Tennis Courts
Orchard Park – Ring Fort Road	Orchard Park	MUGA
Chesterton Community College	West Chesterton	Artificial Pitch
Chesterton Community College	West Chesterton	Playing Field
Chesterton Community College	West Chesterton	Recreation Ground
Chesterton Community College	West Chesterton	Tennis Courts

Table 3: Summary of Indoor Sports Facilities within a 10-minute cycle ride from NEC

Site Name	Ward / Village	Sports Facility
North Cambridge Academy	Kings Hedges	Sports Hall
Chesterton Sports Centre	West Chesterton	Sports Hall

Table 4: Summary of Indoor Swimming Pools within a 10-minute cycle ride from NEC

Site Name	Ward / Village	Sports Facility
Abbey Leisure Complex	Abbey	Swimming Pool
Kings Hedges Learner Pool	Kings Hedges	Learner Swimming Pool

Table 5: Summary of Park Spaces within a 10-minute cycle ride from NEC

Site Name	Ward / Village	Area (Hectares)
Coldhams Common	Abbey	42.53

Site Name	Ward / Village	Area (Hectares)
Ditton Fields Recreation Ground	Abbey	0.45
Dudley Road Recreation Ground	Abbey	0.75
Thorpe Way Recreation Ground	Abbey	0.94
Alexandra Gardens	Arbury	0.77
Jubilee Garden	Arbury	0.56
St Albans Road Recreation Ground	Arbury	2.04
St Catharine's Square	Arbury	0.40
Sunset Square	Arbury	0.17
The Meadows Community Centre	Arbury	0.73
Castle Mound	Castle	1.17
Histon Road Recreation Ground	Castle	1.80
Magdalene College Grounds	Castle	1.30
Murray Edwards College Gardens	Castle	2.69
St John's College Gardens	Castle	11.39
Causeway Park (10-minute walk)	East Chesterton	0.68
Chesterton Recreation Ground	East Chesterton	2.30
Green End Road Recreation Ground (10-minute walk)	East Chesterton	0.86
Arbury Town Park	Kings Hedges	1.66
Circus Drive	Kings Hedges	0.35
Edgecombe Flats Green (10-minute walk)	Kings Hedges	1.39
King's Hedges Recreation Ground	Kings Hedges	3.90
Nun's Way Recreation Ground (10-minute walk)	Kings Hedges	4.65
Unwin Square	Kings Hedges	0.12
Woodhead Drive (10-minute walk)	Kings Hedges	0.51
Christ's College Gardens	Market	3.09
Christs Pieces	Market	3.64
Jesus Green	Market	10.77
Midsummer Common	Market	13.80
New Square	Market	0.77
Parker's Piece	Market	9.63
Sidney Sussex College Gardens	Market	1.52

Site Name	Ward / Village	Area (Hectares)
Buttercup Road	Orchard Park	0.02
Engledow Drive	Orchard Park	0.10
Newingham Crescent	Orchard Park	0.10
Orchard Park Community Centre	Orchard Park	0.48
Topper Street	Orchard Park	0.20
St Matthew's Gardens - North Pocket Park	Petersfield	0.04
St Matthew's Gardens - South Pocket Park	Petersfield	0.05
St Matthew's Piece	Petersfield	0.76
Romsey Recreation Ground	Romsey	2.81
Mitcham's Park	West Chesterton	0.15

Table 6: Summary of Natural and Semi-Natural Spaces within a 10-minute cycle ride from NEC

Site Name	Ward / Village	Area (Hectares)
Barnwell East LNR	Abbey	2.20
Barnwell Junction Pasture and Disused Railway (10-minute walk)	Abbey	1.11
Barnwell Pit (Lake)	Abbey	19.38
Barnwell West LNR	Abbey	2.45
Disused Railway North of Ronald Rolph Court (10-minute walk)	Abbey	2.97
Ditton Meadows (10-minute walk)	Abbey	15.85
Stourbridge Common (10-minute walk)	Abbey	0.70
Former Landfill Site West of Norman Way	Cherry Hinton	26.72
Lakes adjacent to Cherry Hinton Brook	Colerdige	3.09
Bramblefields Local Nature Reserve (10-minute walk)	East Chesterton	3.26
Grayling Close & Thrifts Walk	East Chesterton	4.02
Land Between River And 7 To 11 Capstan Close	East Chesterton	11.59

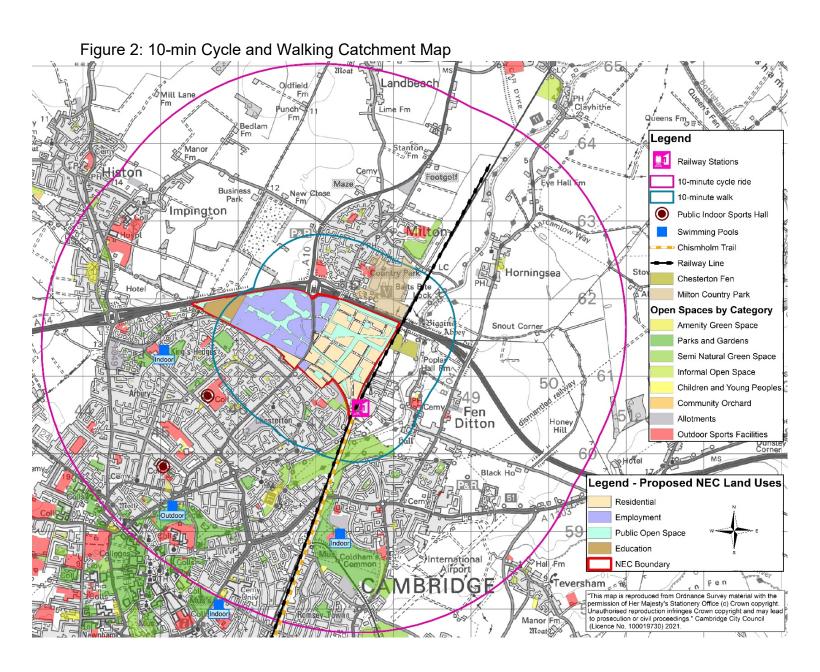
Site Name	Ward / Village	Area (Hectares)
Logans Meadow	East Chesterton	2.08
River Cam Residential Gardens	East Chesterton	0.54
Cambridge Road	Impington	0.18
East of New Road Wood	Impington	1.50
Homefield Park	Impington	1.58
Emmanuel College Gardens	Market	8.35
Land South of North Lodge Park	Milton	1.45

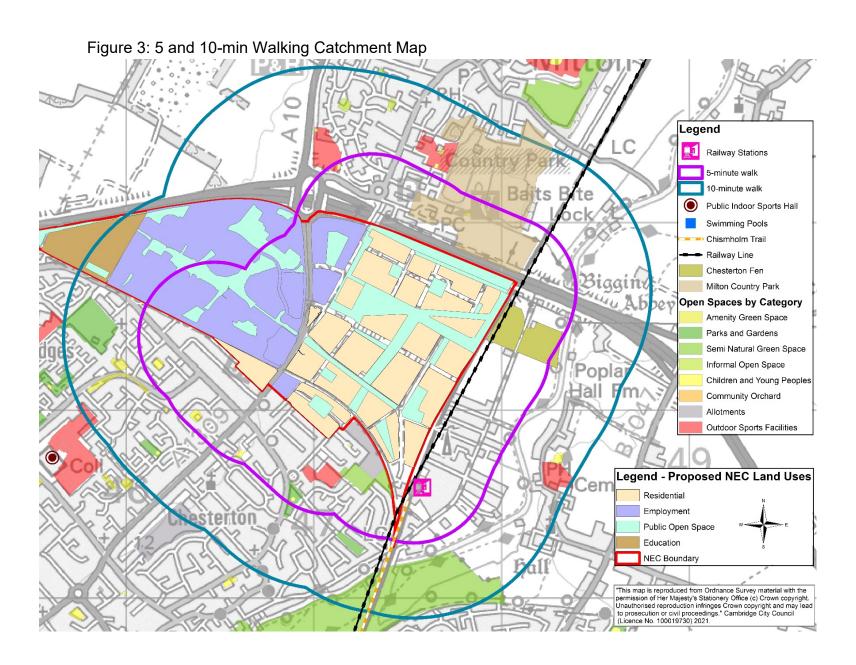
94. Table 7 below provides a summary of allotments within a 10-minute cycle ride, 3-kilometre distance from the proposed North East Cambridge residential areas. The total area of these sites totals 32 hectares. Of these, Kendal Way, Nuffield Road and Pakenham Close are within a 10-minute walk (800 metres), covering 7.5 hectares.

Table 7: Summary of Allotment Sites within a 10-minute cycle from NEC

Site Name	Ward / Village	Area (Hectares)
Elfreda Road	Abbey	4.29
New Street	Abbey	0.47
Peverel Road	Abbey	1.08
Chesterton	Arbury	5.74
Kendal Way (10-minute walk)	East Chesterton	0.10
Maple Close	East Chesterton	0.06
Nuffield Road (10-minute walk)	East Chesterton	2.58
Pakenham Close (10-minute walk)	East Chesterton	4.84
Horningsea Road - North	Fen Ditton	0.19
Horningsea Road - South	Fen Ditton	1.16
Land west of Priory Road	Horningsea	0.35
Land north of Clay Close Lane	Impington	1.67
Auckland Road	Market	0.30
North Milton, east of A10	Milton	2.55
Fairfax Road	Romsey	1.64
Stourbridge Grove	Romsey	3.47
Vinery Road	Romsey	1.48

Site Name	Ward / Village	Area (Hectares)
Bateson Road	West Chesterton	0.12
Hawthorne Way	West Chesterton	0.15





95. Table 8 below provides a summary of the open spaces within a 5-minute walk, 400 metre walking distance from the proposed North East Cambridge residential areas, excluding children's play areas, which is provided separately in Table 9.

Table 8: Summary of Open Spaces within a 5-minute walk from NEC, excluding play spaces

Site Name	Ward / Village	Area (Hectares)
Nuffield Road Allotments	East Chesterton	2.58
Outdoor Sports Facilities		
St Andrews Primary School	East Chesterton	1.52
Milton Recreation Ground, The Sycamores	Milton	2.66
Green End Road Recreation Ground	East Chesterton	0.86
Bramblefields Local Nature Reserve	East Chesterton	2.20

Table 9: Summary of Children Play Spaces within a 5-minute walk from NEC

Children and Young Peoples Areas	Ward / Village	Play space Type
Discovery Way Children's Play Space	East Chesterton	LAP
Green End Road Play Area	East Chesterton	LEAP
Brownsfield Recreation Ground - Pump Track	East Chesterton	Youth Space
Beales Way Play Area	Kings Hedges	NEAP
Ramsden Square Play Area	Kings Hedges	NEAP
Milton Recreation Ground, The Sycamores	Milton	LEAP
Milton Country Park	Milton	LEAP

Local area for play (LAP)

Locally equipped/ landscaped area for play (LEAP)

Neighbourhood equipped/ landscaped area for play (NEAP)

96. South of NEC, there are a number of large recreation grounds within a 10-minute walking distance. These include Nun's Way and Green End Recreation Ground. A further 200 metres beyond the 800-metre catchment area is North Cambridge Academy providing public access to playing fields, tennis courts and an indoor sports centre.

97. Adjacent to the site, there are a number of opportunities to support off-site access to nearby open spaces. These include: Bramblefields Nature Reserve; Milton Country Park; Chesterton Fen; and accessibility to the River Cam including pedestrian/cycle bridge crossing over railway. Figure 4 below sets out the proposed connectivity enhancements as proposed by the Area Action Plan to the wider area.

Figure 4: Map of proposed improved connections across the Area Action Plan area



98. With planned access improvements to connect NEC with communities north of the A14 as well as east and south over the railway line and Guided Busway, NEC residents would be able to access a number of open spaces at Milton Village and within the existing urban area of Cambridge. These include Milton Recreation Ground, on Coles Road with tennis courts and a Bowls club nearby, the cricket ground at Milton Recreation Ground, The Sycamores and Nun's Way Recreation Ground. This raises the possibility of investing some off-site formal outdoor sports contributions, from NEC at these locations. A further 200 metres beyond the 800-metre catchment area is North Lodge Park recreation ground.

NEC Open Space Delivery Strategy

99. This section provides a summary of the amount of open space that NEC will generate and will therefore need to provide or financially contribute towards. A summary of the open space provision calculations is provided in Appendix A.

Formal Outdoor Sport Provision

100. Table 10 below provides a summary of the amount of formal outdoor sports facilities that should be provided for grass pitches, artificial pitches and smaller formal court spaces.

Table 10: Summary of Open Space Requirement for Formal Outdoor Sports

Formal outdoor provision	Quantum needed	
- Grass pitches	18 Hectares	
- Artificial pitches	0.7 Artificial pitches	
- Courts / Rinks / Multi-Use Games Areas	1.64 Hectares	

- 101. Given the unique high-density nature of NEC, it is not envisaged large, strategic outdoor pitches will be provided on-site that have been traditionally provided in developments such as those at Trumpington Meadows and Clay Farm. Instead, these will focus on providing a wide variety of innovative courts spaces providing flexible, all-weather, multi-functional, surfaced areas and other recreational surfaces to encourage regular activity and sports participation in both a formal and informal environment to support healthy lifestyles. These areas would be separate to cycling lanes and walking trails.
- 102. In terms of grass pitch provision, the Greater Cambridge Playing Pitch Strategy will be updated to take account of planned growth to 2041, to inform how formal outdoor sports provision should be delivered across the area, taking account of current supply and demand for facilities as well as projected future demand. It will identify the key issues and set out strategic priorities and actions for the Playing Pitch Strategy to address. Table 2 indicates there are a number of large outdoor sports facilities within a 10-minute cycle ride and walk which could potentially benefit from off-site contributions from NEC to help meet future demand from this development. As outlined in Figure 4 above, improved access links will provide enhanced accessibility to some of the large existing outdoor sports facilities such as at Milton Village, north of the A14. Some off-site outdoor sport contributions could be invested in these existing spaces and facilities. Again, the updated Playing Pitch Strategy will consider this option.

- 103. Sports England's Sports Facility Calculator indicates the development will only generate demand for 0.7 artificial pitches. Normally, this might be provided as part of secondary school which can manage the site. As there will be no secondary school on-site, it will need to be provided off-site. The Greater Cambridge Playing Pitch Strategy will consider how best to provide this need.
- 104. In terms of on-site delivery for formal outdoor court spaces, approximately 1.64 hectares is expected to be provided, adopting innovative format. These may include:
 - Smaller football pitches 5/6-a-Side (Artificial), see Image 1.
 - MUGAs (outdoor court spaces), see Images 2 & 3.
 - tennis/basketball/netball/futsal courts, see Images 2 4 & 21-22.
 - maximise roof/podium area at District and Indoor Sports Centres
 - include some 2-storey high covered court spaces, at ground-floor spaces in residential blocks
 - Outdoor gyms in Local & Neighbourhood Activity Spaces at ground level, see Image 5 and in podium spaces, see Image 6.

Image 1 (left): Perse School, Cambridge, © Perse School Images 2 (right): Dickens Yard, London, ©Kingston Landscape Group





Image 3: Examples of Multi-Use Games Areas, ©KOMPAN





Image 4: Example of how a Multi-Use Games Area could be integrated with a small running track, ©KOMPAN



Image 5: Example of a 'destination area' providing a combination of different spaces for sports, exercise, social and recreation purposes to suit all ages, ©KOMPAN



Image 6: Example of a podium rooftop gym, ©KOMPAN



- 105. In terms of off-site delivery for formal outdoor artificial pitch provision, this may include off-site contributions towards artificial pitches, including improvements to North Cambridge Academy or to existing capacity at sites within Milton Village, accessible with connections under and over the A14. Relevant formal outdoor sports strategies include:
 - An updated Playing Pitch Strategy will plan for both on and off-site pitch provision along with other planned growth to 2041. This update may change the quantum of formal outdoor provision required by North East Cambridge.
 - Outdoor Courts & Rinks Strategy to inform the approach towards formal courts and other smaller, formal sports areas.

Formal Indoor Provision

- 106. Sports England's Sports Facility Calculator indicate the proposed North East Cambridge residential development will generate a need for 4.75 indoor courts. This equates to a need for a 5-court sized indoor sports hall. It is anticipated that a public indoor sports hall (minimum 4-court) will be provided on-site and will form the central focus for community life, along with other community providers and services to help people meet their health and well-being needs. Relevant formal indoor sports facility strategies include:
 - An updated Indoor Sports Facility Strategy will plan for a sports hall, on-site along with other planned growth to 2041.

Swimming Pool Provision

- 107. Sports England's Sports Facility Calculator indicate the proposed North East Cambridge residential development will generate a need for 166 sq m of water space, the equivalent of 0.78 of a 4-lane swimming pool. Given the site cannot support the delivery of a whole swimming pool, it is recommended that development at North East Cambridge secures financial contributions towards off-site swimming pool provision, accessible to NEC residents, at West Cambridge where the University of Cambridge has a long-term project to deliver a new swimming pool. Relevant swimming pool strategies include:
 - Swimming Pool Delivery Strategy for Greater Cambridge. This will analyse the demand for swimming pools in NEC and the wider Cambridge area, using Sport England's Facilities Planning Model.

Informal open space

- 108. Based on the Cambridge Local Plan (2018) standards and the population forecasts for the development, North East Cambridge would generate a need for 36 hectares of informal open space. In terms of on-site delivery, the full requirement for 36 hectares is expected to be provided on-site, in different formats. These may include:
 - New large park spaces
 - Pocket and Neighbourhood Parks in residential areas (Images 7-10) with children's play space, and
 - New Civic, Meeting & Amenity Green Spaces.
- 109. In terms of ensuring that the benefits of North East Cambridge are felt beyond the area boundary, additional off-site enhancements may also be sought to sites including Bramblefields Local Nature Reserve; Chesterton Fen; and access to the River Cam including a pedestrian/cycle bridge crossing over railway. This will create a comprehensive open space and green infrastructure network across North East Cambridge which will be of benefit to the existing and new local residents. The new bridge into Chesterton Fen would also open up this area for potential biodiversity enhancements, as part of the net gain requirements set out in Policy 5, as well as provide safe and direct access to the River Cam and public footpath which continues south into Cambridge City Centre and north towards the wider countryside. This is therefore an important new connection for a variety of reasons and its delivery should be phased accordingly.

Images 7 (top left), 8 (top right), 9 (bottom left) & 10 (bottom right): Dickens Yard, London, ©Kingston Landscape Group









110. The existing informal open space sites at NEC, to be retained and enhanced, totals 14.3 hectares and are listed in Table 11.

Table 11: List of Informal Open Spaces to be retained and enhanced at NEC

Existing open space	Hectares
Cambridge Science Park	12.37
St John's Innovation Park	1.46
Cambridge Regional College	0.47
Total	14.30

111. The Spatial Framework for North East Cambridge sets out the following informal open space provision for each landownership parcel within the Plan area. This will ensure that informal open space is well distributed across the AAP area to enable good levels of accessibility for both new residents and employees.

Table 12: New Informal Open Space Requirements by Site

Open Space provision by landowner	No. of units	Informal Open Space requirement (in hectares)
Chesterton Sidings: Brookgate	1,250	3.25
Cowley Rd Ind Estate	450	0.95
Core Site: AW/CCC	5,500	15.31
St Johns Innovation Park	0	0.00
Merlin Place	125	0.05
Cambridge Business Park	500	1.40
Nuffield Road	450	1.17
Trinity Hall Farm Ind Estate	0	0.00
Milton Road Car Garages	75	0.19
Cambridge Science Park	0	0.22
Cambridge Regional College	0	0.00
Total	8,350	22.54

112. NEC should also provide improved access to local open spaces and the wider countryside through the key interventions shown on Figure 4. Relevant informal open space strategies include:

- Greater Cambridge Green Infrastructure Study 2020
- Typologies and Development Capacity Assessment 2020
- Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Natural Greenspaces

- 113. There is no specific standard requirement for natural greenspaces at North East Cambridge. However, on-site delivery of additional natural greenspaces may include spaces providing SUDS in natural form e.g., ponds but not basic drainage infrastructure. Some examples are provided in NEC's Typologies and Development Capacity Assessment, including: Sonder Boulevard, p50; Kidbrooke Village, p51; and Tassinge Square, p53.
- 114. In terms of off-site delivery, access improvements to neighbouring informal areas may also be suitable. These sites may include Chesterton Fen and access to River Cam through the provision of a new pedestrian/cycle bridge crossing over railway.
- 115. The Green Infrastructure Opportunity Mapping Study includes the recommendation, on page 178 for a new strategic open space north of Cambridge. This would provide for a +3-kilometre corridor linking the North East Cambridge with the new town of Waterbeach. This development will double biodiversity in an area of low habitat value agricultural land and create a space for wildlife and people as well as taking the impact pressures off Milton Country Park. The Spatial Framework for North East Cambridge and proposed new and enhanced connections into the area will allow for safe and convenient access to this open space if it is delivered in the future. Relevant natural greenspace strategies include:
 - Greater Cambridge Green Infrastructure Study 2020
 - Typologies and Development Capacity Assessment 2020
 - Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Equipped children's play areas

- 116. North East Cambridge generates a need for 4.91 hectares of equipped children's play space. In terms of on-site delivery for children's play areas, the full requirement for 4.91 hectares is expected to be provided on-site, in different formats. These may include:
 - Local Area of Play (LAP); Local Equipped Area for Play (LEAP)

- Neighbourhood Equipped Area for Play (NEAP); Space for Imaginative Play (SIP)
- Youth space and Skate parks (including run-off)
- These spaces will form part of a network of open spaces and linked with the larger green park spaces at North East Cambridge.
- The play spaces will be high quality and suited to the needs of children of all ages and abilities. They should be versatile, see Image 11, provide progressive play opportunities, see Image 12 and provide a range of play experiences for numerous children, of all ages playing at the same time, see Image 13.
- 117. The new residential sites therefore need to provide, no less than a total of 4.9 hectares of children's play space. Through the Spatial Framework process, the additional children's play space requirements have been apportioned to the proposed residential sites, as listed in Table 13.

Table 13: New Play Space Requirements by Site

Open Space provision by landowner	No. of units	Play Space requirement	
Chesterton Sidings: Brookgate	1,250	0.74	
Cowley Rd Ind Estate	450	0.22	
Core Site: AW/CCC	5,500	3.46	
St Johns Innovation Park	0	0.00	
Merlin Place	125	0.00	
Cambridge Business Park	500	0.31	
Nuffield Road	450	0.26	
Trinity Hall Farm Ind Estate	0	0.00	
Milton Road Car Garages	75	0.05	
Cambridge Science Park	0	0.00	
Cambridge Regional College	0	0.00	
Total	8,350	5.04	

Image 11: Example of how a Play Area can provide a combination of versatile play activities on a compact footprint, ©KOMPAN



Images 12: Example of how a Play Area can provide a range of play experiences on both the inside and outside of the structure, allowing progressive play opportunities and supporting a child's development, ©KOMPAN



Image 13: Example of how a Play Area can provide a range of play experiences for numerous children, of all ages playing at the same time. Playing side by side in an imaginative world helps children develop both social and cognitive creative skills. ©KOMPAN



118. Relevant play spaces strategies will include the Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Allotments/Community Gardens

- 119. North East Cambridge generates a need for 6.5 hectares of allotment / community gardens space. Given the unique high-density nature of NEC and the amount of allotment provision required by the adopted policy, it is not envisaged allotments can be provided on-site in a traditional format. Traditional allotments also require semi-private gated areas which do not lend themselves to the objectives of the Area Action Plan and Policy 8 to create spaces that are accessible and inclusive. Nevertheless, there are a variety of ways food growing spaces can be provided on-site in different formats, including:
 - Rooftop (not top floor), terrace, podium and courtyard food growing spaces and spacious balcony areas will be more accessible to residents than new/existing ground floor allotment spaces.
 - Raised beds and planters to provide food growing areas at ground level within public spaces
- 120. These spaces should be provided as an alternative to traditional allotments to support local food production. Design led and community guided, they can

also become much more that simply community gardens but also landmarks of pride for local people as well as means of supporting ecological projects.

Image 14 (left): Printworks, Manchester, ©aboutmanchester.co.uk Image 15 (right): City Gardens project, Manchester, ©placenorthwest.co.uk





- 121. At Printworks, Manchester, see Image 14, in addition to a wild flower meadow, orchard, herb garden and the most recent addition, the Beetle Hotel a bespoke insect biome installation that provides shelter and habitat for around 100 common ground beetles the urban ecosystem now boasts many other elements whose produce is either being donated straight to charity or sold to raise money.
- 122. The latest phase of the City Gardens project includes extensive roof top gardens and balconies, see Image 15.
- 123. In terms of on-site delivery for allotment gardens, there are, feasible options for providing rooftop food growing spaces. Rooftop allotments will normally be in planters and subject to hotter and drier conditions than ground level ones. They will need access to water critically which can be provided with roof rainwater harvesting systems. The planters will need some shading, a good depth of quality soils and good drainage layers to provide natural situations. They will need to be set in-between different building roof-levels, to provide some protection from the climatic conditions experienced at higher levels to that normally experienced at ground level. Their orientation should avoid north facing elevations. Some examples are provided in NEC's Typologies and Development Capacity Assessment. Other useful links include:
 - Supermarket rooftop gardens: an exercise in community building? https://theecologist.org/2011/jul/26/supermarket-rooftop-gardens-exercise-community-building
 - Singapore Urban Farm Design Looks to Engage Active Seniors http://seedstock.com/2015/04/05/singapore-urban-farm-design-looks-to-engage-active-seniors/

- 124. Allotments are normally secured areas and therefore rooftop allotments would be managed on the same way. Residents living in the same building could have priority over those not living in the same building, to operate an allotment. These would provide convenient access for allotment holders without having to travel far.
- 125. Assuming overall NEC rooftop coverage covers approx. 30ha, the aim to provide a substantial amount of food growing spaces above ground floor level is realistic. Allotment gardens and food growing spaces would not be counted as private amenity space.
- 126. Relevant allotment and food growing strategies will include the Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Private and communal amenity spaces

- 127. Whilst they do not form part of the open space provision as required by the adopted Cambridge Local Plan standards, it is important that residents within North East Cambridge have access to a wide range of amenity spaces to supplement the public open space provision. This is expected to be delivered through a variety of ways including private balconies, communal rooftop and podium gardens, ground level courtyards as well as private gardens for houses. These types of spaces are important for socialising, fostering community interaction, food growing and enabling people to have immediate access to open spaces for wider well-being benefits.
- 128. The Area Action Plan sets out how these spaces should be designed as a crucial component of the development. Generally, communal spaces tend to be successful when they are accessible to all residents within a development block, provide communal facilities such as children's play equipment and BBQ areas and form part of the daily movements people undertake through or around the building. Therefore, communal areas are preferably located close to entranceways or accessed from main corridors. Isolated rooftop gardens in this context tend to be less successful in terms of creating a sense of ownership with residents, ensuring regular use, safety due to a lack of natural surveillance and being integrated within the development. Images 17 and 18 provide some examples of how these spaces can successfully be delivered as part of a new higher density development.

Proposed Public Open Space at NEC

Providing Open Spaces in High Density Developments

- 129. Delivering open spaces in high-density developments, where there is a limited amount of space available, requires alternative, high-quality means of providing open spaces which achieve the same outcomes as those provided in traditional residential developments. Quality and availability are often more important that the actual quantum provided. The challenge is to incorporate as much as possible on-site with innovative types of spaces which encourage active and healthy lifestyles which are available, throughout the year.
- 130. Whilst there are limited examples of public open spaces set within higher-density developments in Greater Cambridge, completed developments from elsewhere in the UK and Europe demonstrate that open space provision within higher density developments can be high quality and well valued places by those that use them. These can be achieved in a number of ways including:
 - Children's play spaces being closer to homes than a more traditional housing development (i.e. 300m walking catchments rather than 400m).
 - Community gardens and allotments (including smaller allotment pitches and food growing areas/spaces). Examples include communal raised beds for food growing and private balcony spaces, <u>National Design Guide</u>, pages p27 & p38.
 - Trim-trails and off-road trail circuits which allow organised running events set amongst active public/communal social gathering open spaces, podium and doorstep activity areas facilitating a variety of uses for all ages, throughout the day. Examples include Canal Corridor, at King's Cross waterside public realm providing an informal seating area and a focal point for activity and social gathering as well as providing a series of walking and cycling routes, see Image 16.

Image 16: Canal Corridor King's Cross, © John Sturrock



Other examples may include podium spaces such as airborne parks with herbaceous planting, trees, benches and playgrounds, see Images 17 & 18.

Images 17 (left) & 18 (right): Example podiums at Ram Quarter in London.

©SkyGarden





- 131. There is often a high demand for swimming pools and social court sports and gyms in higher density areas because of the relatively high proportion of young adults living in in this type of housing. However, apart from sports courts, it is not desirable that every development has a small gym or swimming pool as these have risk management issues and are often too small to deliver the quality of service sought.
- 132. Similarly, a range of formal sports facilities could be provided on-site, these could include 5-a-side pitches, tennis, netball and other artificial court surfaces which can also support a range of other active pursuits rather than full sized football pitched which can be inefficient uses of open space as they only serve one particular sport.
- The proximity of housing to new and existing public spaces may also 133. exacerbate conflict between residents and sports and recreation activities due to, for example, the noise of children or sports or the provision of floodlighting. Careful design will therefore be required to ensure these spaces avoid conflict with adjacent sensitive uses. This may require some of these formal spaces to be provided inside to minimise noise and light pollution. Internal courtyards, podium and roof gardens may therefore require additional sound and vibration proofing and privacy screening to help reduce any potential conflict with local amenity for residents.
- 134. Opportunities to provide accessible food growing spaces on balconies and other raised areas such as podiums are a suitable alternative to traditional allotment spaces. Normally allotments are semi-public spaces, managed by the local authority with keys allocated to allotment holders to access these spaces. Providing the alternative spaces in raised areas such as a podium

may also follow a similar form of management. Food growing can also take place at street level, and examples from elsewhere in the UK have shown that public spaces, raised flower beds and even vertical green spaces can be used for food production at a local level. It is often these types of food growing spaces and initiatives that help encourage community interaction as well as bring people and especially children closer to nature and learn new skills.

135. It is therefore quite feasible for higher density developments to contribute positively towards open space, delivering innovative and well managed facilities that provide opportunities for physical activity, public realm, landscaping, sustainable urban drainage and biodiversity. The examples provided in this topic paper and the NEC Typologies and Development Capacity Assessment (2021) demonstrate how they have been successfully delivered elsewhere. New open spaces and facilities should be provided onsite, at NEC. However, it is essential that nearby opportunities that are easily and conveniently accessible to NEC through the day and evening and throughout the year are also considered to provide some of these facilities. This will also have the benefit of helping to integrate new and existing communities.

Key Principles for NEC Public Open Spaces

136. This section will outline a series of key principles that should be given full consideration at the outset and incorporated into the planning and design for NEC open spaces. Given the ambition of providing high-quality open spaces which will be available and usable year-round for a range of different uses for all ages, the approach to delivering the various types of open spaces will need to be tailored accordingly, to make the best use of the site. Notwithstanding this, it is recommended that outdoor courts areas and informal open space provision to serve the NEC area is met, in the first instance on-site and only through off-site contributions as an exceptional circumstance through the provisions set in the existing Cambridge Local Plan 2018 Policy 68 (and any future policy in the Greater Cambridge Local Plan).

Standards Compliance

137. Proposals that require the delivery of open space through new development should explain how the proposed on-site provision and off-site contributions comply with the applicable open space standards.

Design

138. Open spaces need to be inviting, robust and help foster a sense of ownership by encouraging their use for a range of activities including restful inactivity and

physical activity in and around the site. Site specific design for open spaces should reflect good practice, such as Sport England's 'Active Design' guidance.

Phased Delivery Linked to Residential Development

139. Unless otherwise agreed with the Local Planning Authority, where relevant, the S106 agreement should ensure the delivery of on-site provision is linked and effectively phased to the delivery of new residential units.

Non-Residential Development

140. Open space provided by non-residential schemes form an important part of area's open space provision, such as at Cambridge Science Park. It is important that non-residential development meets the needs of their employees in terms of places to gather, relax, do informal/formal sports and which can also be used by the wider community e.g. not gated/sealed off from the public. It is important that these spaces are well managed to cater for different user needs throughout the day, beyond the traditional hours of 9 to 5.

Open Space Resilience

141. There is a need to build in community resilience and capacity into the existing open space provision for NEC. Alongside any on-site provision, opportunities to use S106 contributions outside the city on large-scale green infrastructure should be considered. This will avoid pressure building up on existing parks, open spaces and cycleways, which might otherwise lose their biodiversity and other qualities. For example, undertaking negotiations for specific S106 contributions, for growth sites straddling the Cambridge/South Cambridgeshire boundary. These could explore opportunities for improving existing or creating new parks beyond the city which are easily accessible by foot and cycle, in order to avoid over-investment in, and over-use of popular or environmentally sensitive sites.

Connectivity with Other Open Spaces

- 142. It is essential that new and existing spaces are integrated within the area's urban form and connected with footpaths, running trails and cycle routes. They should also be linked to surrounding green spaces to form an extensive green network which supports active and healthy lifestyles.
- 143. Given the area's high-density urban character, it is important that development proposals facilitate improved access to important neighbouring green spaces, including Milton County Park and other facilities in North

- Cambridge, including Nun's Way, Green End Road and Ditton Meadows (see Spatial Framework and Transport Topic Paper).
- 144. NEC provides an opportunity to create a new biodiversity hotspot at Chesterton Fen which can deliver a suite of priority habitats and species that reflect the local landscape This site could also provide an off-site area of informal amenity space. This feature would also serve as a green gateway on the edge of the city which connects to wider schemes such as the National Trust's 'Wicken Vision' as well as the River Cam corridor. This offers greater opportunities for public engagement with nature, and the subsequent health and well-being benefits that this brings. These spaces should help encourage wildlife by supporting their habitats, where practical to deliver the site's vision for a coherent biodiverse environment as outlined in the relevant Ecology Study (A Biodiversity Assessment) 2020 (as amended).

Flexible Usable Spaces: Multi-functional, Multi-seasonal & Multi-generational

145. All open spaces need to be designed to maximise their use and ability to cater for different community needs throughout the year, where practical based upon their type, size and location. A site's flexibility and usability can be assessed according to its multi-functional capabilities, multi-seasonal availability and multi-generational utility. Where practical, these spaces should be designed to support a range of activities, examples of which may include hosting a range of 'occasional' events that support community activities and cultural development and, or sporting events. It is essential that communities can use spaces to foster community interaction and allow people to follow a healthy, active lifestyle, for all ages throughout the year.

Multi-functional

- 146. Facilities and spaces will be able to support a range of different sports activities; or a mix of sports and community/cultural activities. Facilities may need to include superior artificial surfaces to support a wider range of activities than normal or be covered yet open on three sides. A flexible, covered space at ground level may spill out onto adjacent open space or have direct visibility to outdoor open play space. The covered area may also include playable elements within common outdoor space and, or flexible furniture which can be configured in different ways, Designing Child-Friendly High Density Neighbourhoods, p64.
- 147. As discussed earlier, artificial courts can also be located at ground floor and in podium locations, as part of a residential block. Their design should support a range of sports and community activities. With satisfactory floor surfaces, sound proofing and downward facing ceiling lights, their regular use for a

range of activities should improve rather than undermine local amenity for residents. These active, communal spaces will contribute to the area's level of safety, for everyone. Ceiling lighting that illuminates nearby public grounds and spaces will also have a positive effect on local security (also see Community Safety Topic Paper).

Multi-seasonal

- 148. Facilities and spaces will be able to be used for long periods of the day including early morning, before sunrise and long after sunset, throughout the year. This may require some of these spaces to be provided with landscape treatments and, or shielded lighting to minimise noise and light pollution, respectively to help reduce any potential conflict with local amenity for residents. Covered, artificial courts, located at ground floor and in podium locations, will allow their continued use throughout the year, regardless of the weather.
- 149. These spaces also need to be appealing to encourage their use, this means they must be designed to: avoid anti-social behaviour; provide a sense of security when in use, especially when daylight is limited; and provide some shelter from inclement weather. Facilities may need to include some form of roof covering (permanent or retractable) and, or side boards (which can be removed) to support a wider range of activities than normal.
- 150. In Spring, they should encourage people to spend time outdoors. In Summer, they should provide sufficient shade to allow play and minimise localised solar heating, e.g. they should allow some respite from excessive heating during long hot summer days. In Autumn, they should be sufficiently sheltered to allow their continued use, e.g. they should not be located in exposed areas that discourage their use in windy conditions. In Winter, these areas should also be usable spaces e.g. they should not be subject to surface water flooding due to prolonged bouts of rain or snow.

Multi-generational

151. Facilities and spaces can be used by a wide range of users from different age groups with different levels of accessibility. Providing exercise equipment for older people, game-based zones for younger people and open playgrounds for children adjacent to one another will allow residents to be active together. This has the benefit of making residents feel that they are part of a larger community, Designing Child-Friendly High Density Neighbourhoods, page p48.

Promote Social Interaction

152. Open spaces should be equipped with a variety of seating options, suitable for different age groups to encourage people to stop and socialise within these spaces. A neighbourhood "box" containing shared toys or equipment, often supported by volunteers can provide opportunities for parents and children to meet and socialise, throughout the year and participate in a variety of different activities. This not only gives people the opportunity to meet residents they might otherwise not meet but play with a range of toys or participate in extracurricular activities, they might otherwise not experience, Designing Child-Friendly High Density Neighbourhoods, pages p31.

Relevant national/City/Area-Wide/Regional Strategies

153. All forms of new open space should support relevant national/local/regional strategies, where possible, such as the Cambridgeshire Green Infrastructure Strategy (as amended) and the Cambridgeshire and Peterborough Joint Health and Wellbeing Strategy (2020-24 and as amended). As previously mentioned, it is the intention of the NEC to provide as much open space onsite, where practical and subject to viability. However, given the site's higher-density character, space should be used as effectively as possible to optimise the opportunities of the site. This is applicable to all land uses, including open space provision. This means they may need to take a more innovate form to deliver the same outcomes of those normally provided in a traditional Cambridge development.

Supporting Active Healthy Lifestyles

154. Public open spaces should enable and encourage residents, local workers and those visiting NEC to lead an active and health lifestyle regardless of age or ability, throughout the year.

Management & Maintenance

- 155. A site-wide management & maintenance strategy will be needed at the planning application stage to explain set out who is responsible for both the long-term management and maintenance of the publicly accessible sports and communal facilities. This will very much depend on ownership, but consideration will also need to be given to the appropriate way to address the multiple ownership within NEC and this may help inform future NEC wide project governance structures.
- 156. It is anticipated that a public indoor sports hall (minimum 4-court) will be provided and will form the central focus for community life, along with other community providers and services to help people meet their health and well-

being needs. Their central location will reduce the need for travel and maximise accessibility to a range of services and facilities, in a single journey. This management option should allow for the day-to-day management of publicly accessible, formal sports areas/facilities, subject to their ownership being transferred to the City Council.

- 157. As part of the Greater Cambridge Local Plan, the cost and duration of the management and maintenance of open spaces will be reviewed. However, given the size and range of open spaces to be provided at NEC, and the number of landowners involved, it is not expected that either the City Council or relevant Parish Council will adopt any of these spaces. As a condition of any future planning permission, a management plan must be submitted and agreed in writing by the Councils to ensure that appropriate maintenance and safety inspections regimes are carried out, so the facility remains safe for members of the public to use.
- 158. A developer will be able to transfer responsibility for the maintenance of an open space facility to a private management entity which will be responsible for long term maintenance as well as maintaining public access to the open space facility, provided that the Council is satisfied that the entity is sufficiently well resourced, or will be so, to ensure that the facilities are capable of being managed and maintained to the appropriate standard, in perpetuity or, for a period agreed by the Councils. Any open space that includes footpaths/cycleways with lighting should be dealt with as a section 278 highways adoption and the specifications will need to reflect this.
- 159. The areas which may require a shared strategy for management and maintenance will be often shared and publicly active/communal/civic spaces which include a combination of highway routes, pedestrian and cycleways connected with trees and other important biodiverse areas, in particular SUDs/drainage systems which are formed using (semi-) natural spaces such as ponds. This will require a more detailed technical knowledge and understanding due to their interconnected nature. The Local Authority may therefore be unwilling to take on this responsibility for these responsibilities unless sufficient S106 monies can be secured to ensure the site is properly managed and maintained. An alternative approach may involve a more specialist property management company, to take on these responsibilities on behalf the site developer.

High-Quality Open Spaces Supporting Sustainability

160. All on-site communal open spaces will need to be high quality and low maintenance. Where possible they should be designed to take account of

other relevant strategies, such those supporting biodiversity and mitigating climate change and implement these, where possible to nurture the area's overall sustainability. This may, for example include the use of drought tolerant species for landscaping or plant types which will encourage ecosystems to develop. Further specific details on the AAP's requirements can be found in the NEC APP, Policy 2: Designing for the climate emergency, Policy 5: Biodiversity and Net Gain and Policy 25: Environmental Protection. All open spaces, where possible should support the site's vision for creating and sustaining a coherent biodiverse environment as outlined in the relevant Biodiversity Assessment.

Ecology

161. It is important for open spaces to help bring people closer to nature especially for residents in urban environments. Green spaces within an urban area can be home to many of the same species that are more commonly associated with rural settings, including those that are rare or threatened. For some species, urban areas can provide a more favourable habitat than intensively farmed countryside, suggesting that towns and cities could make an important contribution to national conservation efforts. Spaces should help encourage wildlife by supporting their habitats, where practical in order to deliver the site's vision for a coherent biodiverse environment as outlined in the relevant Ecology Study (A Biodiversity Assessment) 2020.

Providing Open Spaces at North East Cambridge

- 162. This section explains how the various types of new and existing open spaces could be integrated with the proposed higher density development at NEC. It employs a range of traditional and innovative spaces to achieve the vision and objectives of NEC. It is not a blueprint but rather a high-level guide to explain how NEC could deliver a considerable quantum of high-quality multi-functional and multi-seasonal spaces for a range of ages, on-site and nearby. The range and availability of these spaces should encourage people, of all ages and interests to lead healthy and active lifestyles. They will also help support and develop a sense of community as well as community resilience. Further examples are set out in the North East Cambridge Typologies Study and Development Capacity Assessment (2021).
- 163. The guidance is based upon a few assumptions, as follows:
 - No on-site secondary school (this means there will not be anyone to manage and therefore maximise the utility of large, outdoor sports suitable for football/rugby/hockey).

- Management of any indoor/outdoor courts to be provided via on-site community sports facility.
- Opportunities to support access to nearby open spaces through improved connections, as illustrated above, in Figure 4.

Formal Outdoor Sports Provision

- 164. Given the priority to deliver informal open space and children's play space onsite, large outdoor sport facilities are expected to be delivered off-site. However, smaller outdoor sports areas are expected to be provided on-site, in particular outdoor court spaces. This highlights the critical importance of NEC providing new and improved accessibility to existing sports facilities, within the wider area.
- 165. New on-site, publicly available formal sports facilities could include 5-a-side pitches, futsal (football played on a hard court with a smaller, harder, low-bounce ball than football), tennis, netball and other artificial court surfaces which can also support a range of other active pursuits. These should multifunctional and multi-seasonal.
- 166. Natural/grass pitches are generally more prone to flooding as well as general wear and tear from regular use. These factors will limit their utility and capacity to support play. A more longer-term solution which should be applied at North East Cambridge would be to provide an artificial pitch which can support routine use for both training and play, with very little risk of play being cancelled due to flooding or inclement weather. Anecdotally, three grass pitches are needed to support the same amount of play and training capacity as one artificial pitch. This is one example of how an artificial pitch can provide the same playing and training capacity as three grass pitches.
- 167. Further land-use efficiency can also be derived from the installation of smaller artificial pitches e.g. for 5-a-side football on a roof-top location such as a community hub or the proposed indoor sports hall. Retractable flood lighting and low mounted LED arrays to provide various optics for optimum court lighting spread could also be provided to extend play into the evening and should also improve the area's general sense of safety encouraging people to use these areas.

Image 19 (left): Retractable flood lighting, ©Sportslightinguk.co.uk & Image 20 (right): Low mounted LED arrays, ©Sportslightinguk.co.uk





168. Futsal courts (see Images 21 and 22) provide sports spaces that can be both multi-functional and multi-seasonal. Unlike many of the traditional open space provided in Cambridge & South Cambridgeshire, these spaces could be used for both sports and community activities, throughout the year. They could support music and cultural activities including occasional markets and other community activities.

Images 21 (left) & 22 (right): Examples of Futsal Courts





Artificial pitches can also be located at ground floor and in podium locations within developments. At ground level, these could fit under a two-storey high space with wire mesh, like any normal outdoor sports court. Images 23 and 24 provide an example of a single-storey, ground floor space. At North East Cambridge, these two-storey spaces could be protected from direct sunlight and rain, throughout the year. Transparent wind shields can also be fitted to these courts to provide added protection from the wind. The ceiling of the court area could be sound proofed from noise and vibration and fitted with lighting to allow for play when there is no or limited daylight. These spaces could also be used for a range of community activities with less chance of cancellation due to inclement weather. The open, covered spaces would also provide improve community resilience if, for example, outdoor spaces were needed as a vaccination location in response to future pandemics or mass vaccination campaigns.

Images 23 (left) & 24 (right): Sidgwick Site, University of Cambridge





- 170. Trim trails, pedestrian paths and cycle routes can also contribute to formal outdoor space if they are of a sufficient size and standard (which is maintained) to allow for sports events and informal use by joggers. These routes should be of sufficient width to avoid conflict between pedestrians, runners and cyclists and of sufficient length to support regular activities such as '5km' park runs and parts of a triathlon circuit.
- 171. The trail/route should be paved with high quality landscaping, public art, park benches, lighting and trees etc. weaving itself through the development. This will both support and encourage walking as well as running. Ideally, the route is linked to other open spaces including ancillary trim trails on and off-site, outdoor gyms, children's play areas, civic areas and park spaces. These routes would be available all year-round throughout the day and night, for use by people of all-ages to support an active and healthy lifestyle. Examples of which, are provided in Images 25 and 26.

Images 25 (left): Holborough Lakes, Maidstone ©berkeleygroup.co.uk Image 26 (right): Trumpington Meadows, Cambridge ©Bruce Waller





172. Opportunities to make existing NEC facilities publicly available, at certain times such as those at the employment parks and Cambridge Regional College should be explored. Given the specific constraints of the land available, a small portion of the formal outdoor spaces may need to be provided inside to minimise noise and light pollution as well as facilitating their availability throughout the year.

- 173. With improved access to Milton Village's existing sport and leisure facilities (with a new underpass under the A14) comes the opportunity of providing additional formal sports provision at this location, to help meet the needs of NEC. This will require careful consideration to ensure the needs of both the new and existing communities are met. Due to the potential for flooding, the Chesterton Fen area will not be considered as part of any calculation for formal recreational provision.
- 174. Potential sports improvements may include artificial cricket wickets at Nun's Way Recreation Ground and at Milton Recreation Ground, as well as an additional Artificial Pitch at Milton Recreation Ground.

Indoor Sports and Swim Provision

- 175. NEC is expected to generate sufficient demand for a new indoor sports hall and will be provided on-site, mostly likely in the new District centre as part of a new community, sports, leisure hub. This type of facility will ensure both new and existing communities can benefit from a range of accessible, social activities and services across the wider northern Greater Cambridge area.
- 176. NEC is not expected to generate sufficient demand for a swimming pool and therefore is not expected to deliver a pool on-site. Following the completion of the Chisholm Trail, future residents at NEC will be able to cycle to Abbey Pools and Parkside in approximately 10 and 12 mins, respectively. However, both swimming pools are extremely busy and therefore not in a position to absorb the additional demand generated by NEC. It therefore follows that NEC should collect S106 contributions towards alternative off-site provision.
- 177. There are already a number of other proposed swimming pools in Greater Cambridge including West Cambourne, Northstowe and Waterbeach. There is also a long-term proposal to deliver a swimming pool at West Cambridge by the University of Cambridge. Given the West Cambridge site will be accessible to NEC's residents, approximately a 15-minute cycle ride away, the NEC development should collect monies for swimming pool provision at West Cambridge.

Provision for children and teenagers

178. On-site, a range of spaces should be provided to cater for all ages including teenagers. They should also be near residential areas. Due to the apartment housing proposals at NEC, the time between individual front doors to the buildings main entrance should be considered when calculating the travel and time distance to play equipment and spaces. To compensate for this, open spaces close to higher-density flatted dwellings should be no more than 300

metres away in actual walking distance rather than the norm of 400 metres for a house. Examples of different play spaces include nature and informal doorstep play, common outdoor amenity for play and socialising, Design Guide, pages p27 & p36.

179. It is also worth noting that unsupervised play is important and is an indicator which demonstrates how successful a place is for young people. Active, unsupervised play often reflects a safe environment. Spaces for young people at NEC will need to be designed based upon good practice, examples of which may include Northstowe's Phase 2 Youth and Play Strategy and https://rethinkingchildhood.com/

Informal open space

- 180. The informal open space requirements will be provided on-site. These spaces will be very high-quality comparable to an established park area which are able to cater for all-ages throughout the year. These need to be provided with good drainage, lighting and landscaped to encourage their use, with places to meet and encourage social interaction as well as informal activities and usage.
- 181. These park areas will be flexible, highly accessible and multi-functional spaces, where practical to do so and allow for a range of 'occasional' events that will help support community activities and sporting events. It is essential that communities can use these spaces to foster civic pride, community interaction and allow people to follow a healthy lifestyle, for all ages throughout the year.
- 182. They should also support regional/city/area-wide strategies, where practical such as mitigating flood risk and the effects of climate change as well as supporting ecological initiatives and enhancing the area's biodiversity.
- 183. Several specific off-site opportunities that will benefit NEC by providing access to informal spaces have been identified. In addition to the requirement to provide high quality on-site informal open space, specific contributions will be sought towards improving access to both off-site recreational and natural spaces. The River Cam will also be made more accessible through new pedestrian and cycling routes. These will provide access to informal recreation space and serve wider needs.

Allotments / Equivalent Food Growing Spaces

184. A variety of on-site food growing spaces can be provided on-site, including communal raised beds, shed spaces and garden pocket parks along with private balcony spaces. These can be provided as an alternative to traditional allotments to support local food production. Design led and community guided, they can also become much more that simply community gardens but also landmarks of pride for local people. These could be also form part of suitable meanwhile uses which helps support community development.

Sustainable drainage systems

- 185. Sustainable drainage systems (SuDS) have long been promoted by local authorities as a sustainable way of reducing run-off to greenfield rates, plus climate change allowance, where feasible.
- 186. The density of the proposed development in the AAP is high and so spaceefficient SuDS which intercept rainwater close to where the rain falls will be the most appropriate, such as the following:
 - Green/brown roofs
 - Permeable paving
 - Rainwater harvesting to maximise water re-use (see below)
 - Rain gardens and bio-retention tree pits
- 187. Maintaining and enhancing water quality of both water courses and groundwater within North East Cambridge is crucial to water supply as well as for amenity, biodiversity and recreational purposes.
- 188. Land used for SuDS will be discounted from formal open space calculations to ensure the functionality of the SuDS system does not reduce the amount of useable formal open space provided on-site. SuDS should form an integral part of informal open spaces, to deliver additional biodiversity and amenity benefits. However, these must be designed in such a way that their provision is balanced with the wider amenity and biodiversity requirements and they do not compromise these other aspects. SuDS can therefore only be included within the calculations if it can be demonstrated there is no detriment to the wider amenity, biodiversity or other key functions of the open space. Any proposals should comply with the North East Cambridge Area Action Plan's surface water 'Drainage Core Principles'.

- 189. The <u>Cambridgeshire Flood and Water SPD</u> provides guidance on the approach that should be taken to design new developments to manage and mitigate flood risk including SuDS along with their adoption and maintenance.
- 190. In addition, the NEC AAP Surface Water Drainage Core Principles: Key Parameters (2021) provides further guidance on the type of SuDS that would be suitable at the site. All SuDS schemes will need to be considered early in the design of the site and include both features on a plot level close to where the rain falls and a site-wide scheme across the whole of the AAP area. It also recognises that SuDS can be provided within informal open space and should form an integral part of the open spaces to deliver additional biodiversity and amenity benefits. Guidance is provided on the further steps that will need to be taken by developers in consultation with the Councils to develop a successful SuDS scheme at the site.

Private ancillary sports and, or leisure facilities

- 191. This relates to any private ancillary sports and, or leisure facilities incorporated into an employment centres or single, large employment developments. Employment centres and, or large, single employment developments may want to include some sports and leisure facilities for use by their employees. It is important that these facilities are commensurate in size to the number of people expected to use them. These should also not have an adverse impact on other similar sports and leisure facilities or reduce the publicly accessible informal open space.
- 192. Proposals for ancillary corporate sports and leisure facilities, as part of an employment centre and, or large employment development should therefore use Sport England's Sports Facility Calculator, where possible to calculate the quantum of sports provision generated by the number of people expected to be employed on-site, in new large-scale employment centres incorporating their own sports and leisure facilities.

Appendix A – Summary of NEC Open Space Provision Calculation

- A.1 This section provides a summary of the estimated amount of open space and sports facilities residential development at North East Cambridge will generate and will therefore need to provide or financially contribute towards. The calculations apply the CLP 2018 Open Space & Recreation Standards to the total population listed in NEC's Population Profile (see Table A.2) with further refinement for formal indoor and outdoor sports provided using Sports England's Sports Facility Calculator.
- A.2 An indicative approach with practical examples to delivering the different types of spaces is also provided.

Population Profile of NEC

A.3 The projected/estimated population figures provided by Cambridgeshire County Council are provided in Table A.1 below.

Table A.1: Population Age Profile for North East Cambridge

Age	Population
0-3	1,363
4-10	794
11-15	207
16+	13,998
Total residential population	16,362

A.4 Based on the planned housing numbers, mix and tenure, the population forecast for NEC has been undertaken by Cambridgeshire County Council and has projected that the average number of residents per dwelling will be 1.95 people per dwelling.

Sports England's Sports Facility Calculator

A.5 Sport England treat the standards for both outdoor and indoor formal sports provision as an indicative measure of what should be provided for these typologies. This means they can be used for high-level master planning when there is limited detail about the future population's profile. However, once this is known, it should be applied to Sports England's Sports Facility Calculator (SFC). Applying the population profile of NEC (in Table A.1 above) to Sports

England's SFC, the demand generated for formal outdoor artificial pitches, indoor sports halls and swimming pools by the new residential development is listed in Tables A.2, A.3 and A.4, respectively. The SFC looks at a specific area of population growth and what is needed there to meet the needs of that specific population.

Formal Outdoor Sport Provision

A.6 Tables A.2-A8, below provides a summary of the amount of open space and sports facilities that should be provided, based upon the current standards and population profile and how these types could be provided on or off-site.

Table A.2: Summary of Open Space Provision Calculation for Formal Outdoor Sport Provision

Open Space Typology	Quantum needed		
Formal outdoor provision: Grass & artificial pitches	(16,362 people @ 1.1 ha/1000) 18 hectares		
Grass pitches:	Hectares		
- Football pitch: 0.88 ha/1,000 people	14.4		
- Rugby pitch: 0.13 ha/1,000 people	2.13		
- Cricket field: 0.09 ha/1,000 people	1.47		
Total	18		
Artificial pitches (Sport England's SFC)	0.7 Artificial pitches		
	Cost in 2020: £0.73m		
Formal outdoor provision: Tennis Courts / Multi- Use Games Areas (MUGA) / Bowling Greens	(16,362 people @ 0.1 ha/1000) 1.64 hectares		

A.7 Relevant formal outdoor sports strategies include:

- An updated Playing Pitch Strategy will plan for both on and off-site pitch provision along with other growth to 2041. This update may change the quantum of formal outdoor provision required by North East Cambridge.
- Outdoor Courts & Rinks Strategy to inform the approach towards formal courts and other smaller, formal sports areas.

Formal Indoor Provision

Table A.3: Summary of Open Space Provision Calculation for Formal Indoor Sports Hall Provision

Open Space Typology	Quantum needed
Formal provision of sports	4.75 courts (1.19 sports halls, 4 courts)
halls	Cost in 2020: £3.13m
	Sports England's Sports Facility Calculator

- A.8 On-site delivery: 1x 4.75 court sized indoor sports hall (minimum). Relevant formal indoor sports facility strategies include:
 - An updated Indoor Sports Facility Strategy will plan for a sports hall, on-site along with other growth to 2041.

Swimming Pool Provision

Table A.4: Summary of Open Space Provision Calculation for Formal Swimming Pool Provision

Open Space Typology	Quantum needed
Formal provision of	166m2 (0.78 of a 4-lane pool)
swimming pools	Cost in 2020: £3.153m
	Sports England's Sports Facility Calculator

- A.9 NEC development should collect S106 contributions for off-site swimming pool provision, accessible to NEC residents. Relevant swimming pool strategies include:
 - Swimming Pool Delivery Strategy for Greater Cambridge.

Informal open space

Table A.5: Summary of Open Space Provision Calculation for Informal Open Space Provision

Open Space Typology	Quantum needed
Informal open space	(16,362 people @ 2.2 ha/1000) 36 hectares

- A.10 Relevant informal open space strategies include:
 - Greater Cambridge Green Infrastructure Study 2020
 - Typologies and Development Capacity Assessment 2020
 - Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Natural Greenspaces

Table A.6: Summary of Open Space Provision Calculation for Natural Greenspaces Provision

Open Space Typology	Quantum needed
Informal provision of natural	There is no specific standard
greenspaces	requirement for this category.

A.11 Relevant natural greenspace strategies include:

- Greater Cambridge Green Infrastructure Study 2020
- Typologies and Development Capacity Assessment 2020
- Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Equipped children's play areas

Table A.7: Summary of Open Space Provision Calculation for Equipped Children's Play Area Provision

Open Space Typology	Quantum needed
Equipped children's play areas	(16,362 people @ 0.3 ha/1000) 4.91 hectares

Table A.8: Play space Typology

Play space type	Description	Minimum activity area
Local area for play (LAP)	 A landscaped space including engaging play features for young children, and places for carers to sit and talk 	100 sq m
	 Landscaping may include raised beds with fruit-bearing vegetation 	
Locally equipped/ landscaped area for play (LEAP)	 A landscaped space with landscaping and equipment so that children aged from birth to 11 can play and be physically active and they and their carers can sit and talk Flexible use 	400 sq m

Play space type	Description	Minimum activity area
Neighbourhood equipped/ landscaped area for play (NEAP)	 A varied natural space with secluded and open areas, landscaping and equipment so that children aged from birth to 11 can play and be physically active and they and their carers can sit and talk, with some youth facilities Flexible use May include youth space 	1,000 sq m
Youth space	 Social spaces for young people aged 12 and over to meet, hang out and take part in informal sport or physical recreational activities 	200 sq m

A.12 Relevant play spaces strategies will include the Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Allotments/Community Gardens

Table A.9: Summary of Open Space Provision Calculation for Allotment & Community Gardens Provision

Open Space Typology	Quantum needed
Allotments / Community Gardens	(16,236 people @ 0.4 ha/1000)
	6.5 hectares

A.13 Relevant allotment and food growing strategies will include the Open Space & Recreation Strategy for Greater Cambridge, to be produced in 2022 to support the Draft Joint Local Plan.

Appendix B – Relevant Draft NEC AAP 2021 Policy Listings

Policy 8: Open spaces for recreation and sport

- B.1 Policy 8 requires development to provide new or enhanced opens space and recreational facilities in accordance with the open space standards. The integration of open spaces must be an early consideration in the design process to provide these, where practical on-site.
- B.2 Provision will be made in accordance with Cambridge City Council's open space standards and open space and sports strategies, where applicable.
- B.3 It is expected that all informal open and children's play space requirements will be met within the Area Action Plan area as identified on the Spatial Framework. Provision of outdoor sports facilities will be met through a combination of on-site provision, and funding towards new or improved off-site facilities.
- B.4 Opportunities to provide food growing spaces for residents on-site are also expected and should be delivered in innovative ways that are easily accessible to residents and the wider community. Development proposals should demonstrate how opportunities for food growing have been considered and incorporated into the design of both buildings and their surrounding public realm and open spaces. These spaces may include innovative forms and layouts allowing for a variety of activities that promote health and well-being.
- B.5 The policy also protects sites from development involving the loss of a sport, open space, recreation or play facility except where it can be demonstrated that there is an excess of provision, or where alternative facilities of equal or better quality will be provided as part of the development or provided off-site with enhanced accessibility.

Policy 14: Social, community and cultural Infrastructure

B.6 Policy 14 supports development proposals supported by the necessary and timely delivery of community, cultural and leisure facilities to support the needs of the development. Proposals should provide high-quality, multifunctional spaces for different ages and abilities which encourage inclusivity and social cohesion. They should seek to take full advantage of opportunities to maximise flexible spaces that are accessible not just in terms of physical distance and location but also in terms of availability. Proposals should ensure early provision of operational facilities in the development process, allowing

for a range of uses and users (including workers not just residents). Facilities should be available throughout the day and outside of normal working hours, year-round.

- B.7 Opportunities to co-locate complementary social facilities such as health centres, libraries, day care and nurseries which provide flexible floorspaces should be maximised. These should ensure all buildings make the best use of land and reduce the need for people to have to travel to access a variety of different but related services.
- B.8 Proposals for all formal facilities should conform with any relevant sports strategies for the Councils. Ancillary uses for sports or leisure facilities provided within an employment development will be supported, subject to any relevant amenity issues being addressed. The size of these facilities should be commensurate to the demand generated by the employment development to avoid undermining the long-term economic sustainability of equivalent public facilities. Such spaces should also explore the opportunity to offer these spaces to other users within and outside of normal working hours.