GREATER CAMBRIDGE
SHARED PLANNING

North East Cambridge Area Action Plan

Proposed Submission

Topic Paper: Strategy

Greater Cambridge Planning Service

November 2021

NEC AAP Spatial Framework

Summary of changes to the Spatial Framework

The Councils consulted on the draft North East Cambridge Spatial Framework in 2020 as part of the publication of the draft Area Action Plan. The comments received during the consultation broadly supported the principles and key moves of the Spatial Framework but more detailed comments were made regarding the locations and proposed uses within specific centres and the broad quantum of development and subsequent building heights and densities. This is set out in more detail in the Proposed Submission North East Cambridge Area Action Plan Consultation Statement.

Following the consultation on the draft Area Action Plan, the Councils commissioned a Heritage Impact Assessment and Townscape Assessment to further understand the potential impacts of development at North East Cambridge on the historic environment and local area. As part of this work, a review of the draft Spatial Framework was then undertaken which has produced a series of recommended changes to the Spatial Framework as well as identified ten Townscape Principles which should inform future updates to the Area Action Plan.

The recommendations from the Spatial Framework and related heritage and townscape studies are set out below. A number of these have been taken into account within the revised Proposed Submission version of the Spatial Framework and wider Area Action Plan policies and figures. However, some recommendations have not been taken forward and these have been set out below alongside the rationale for this.

Summary of recommended changes and rationale

Theme	Recommended changes to the draft Spatial Framework suggested by the Townscape Assessment and Strategy	Council response to recommendations
External connections	1. Move link further east to increase footfall through local centre by connecting into greenway route and allow for circular walks through Milton CP.	Strategic cycle route to connect to Waterbeach Greenway moved further east. A new centre (Greenway Local Centre) identified in the northeast corner of the AAP area to pick up on this new active travel route created.

External connections	2. Better connection between Chesterton and Cambridge North Station.	Policy 7: Legible streets and space identifies the need for better connections beyond the site boundary. Space constraints through Moss Bank are now also set out within Policy 17: Connecting to the wider network to improve this gateway into North East Cambridge which will need to be resolved as part of detailed scheme proposals.
External connections	3. Enhance connection from Orchard Park to Mere Way.	Orchard Park is outside the AAP area but improved connections to Mere Way are identified via a northern connection through Cambridge Science Park.
External connections	4. Safeguard future route from Science Park north under/over the A14.	Improved link under the A14 identified on the framework from Mere Way but no additional routes proposed given no identified facilities or development to connect to.
Milton Road	1. Bridging or tunnelling under Milton Road less desirable than surface level crossing.	New and improved crossing to overcome infrastructure barriers to movement identified on the Spatial Framework and within Policy 17. At this stage, new connections across Milton Road are required to improve movement across and through the AAP. However, given the existing vehicle movements on Milton Road, providing surface level crossing(s) may not be achievable to a satisfactory standard.
Milton Road	2. Providing a tunnel or bridge do not mean that surface level crossings will not be required.	Noted and all user modes in all directions will need to be factored into design proposals. This is also reflected in Policy 17.

Milton Road	3. Transform Milton Road into a civic urban street with 2-3 lanes and 30mph speed limit.	Capacity issues on Milton Road and implications concerning the A14 junction (Highways England) means that it is unlikely that a significant reduction in vehicle flows to enable a 2-3 lane road can be achieved.
Milton Road	4. At grade crossings and generous central reserves.	The specification and design of any crossings will be part of any future improvement scheme, but the principle is supported.
Milton Road	5. Create all direction crossing at intersection of the CGB and Milton Road (to include backfilling the existing subway).	The recommended all direction crossing is supported in Policy 17 of the Area Action Plan. This may result in the existing subway on Milton Road to be surplus to requirements but will be confirmed at detailed design stage.
Public Transport (Bus, CGB and Rail)	1. Bus interchange between CGB and local buses on Milton Road.	The locations of mobility hubs, to include bus provision, has been considered and set out in Policy 16: Sustainable connectivity and provides a good distribution of stops to serve North East Cambridge. It should be noted that the technical challenges of taking Guided Buses on and off the guideway limits the proximity of CGB stops to Milton Road.
Public Transport (Bus, CGB and Rail)	2. Design public transport routes to allow access to bus stops within 5-minute walk of residents.	The identified public transport routes set out in Policy 16 means that the majority of the area is within 5 minutes of a stop or interchange.
Walking and cycling	1. Do not lump walking and cycling together – users have different requirements.	Agree. This is addressed within Policy 21: Street hierarchy.

Walking and cycling	2. High-capacity strategic cycle routes should be clearly provided (Science Park-River Cam-Cambridge North Academy) diagonal from Milton to Station important. Should a similar route to the Waterbeach Greenway be provided?	The strategic cycle routes are located to link between external routes, employment sites and to provide improved connectivity to Cambridge North Station. The revised Spatial Framework seeks to improve the connection to the Waterbeach Greenway through the re-alignment of the Linear Park towards the north east corner of the Plan area.
Walking and cycling	3. Chisholm Trail and GCP Milton Road improvements to be integrated.	Noted and agree. Framework identifies this need.
Walking and cycling	4. Distinguish between cycling for commute, leisure or local access.	The Framework identifies the main links needed to form a comprehensive and connected network of cycling routes as part of the AAP area. Local routes will be provided within the development blocks but are beyond the scope of the Spatial Framework at this stage as this level of detail will need to be considered and address at the planning application stage for each development area. Policies 7 and 21 in the AAP identify route hierarchies and typical street sections to accommodate all modes of travel.
Walking and cycling	5. Walking distance to local centres, parks, public transport stops should be no more than 5 minutes.	Agree – The updated Spatial Framework now ensures that all new homes and the majority of new jobs are within a five minute walk of a District or Local Centre.
Walking and cycling	6. Destination walks to schools, Cambridge North Station and places of employment should be no more than 10–15-minute walks.	Agree – The updated Spatial Framework now ensures that all new homes, jobs, facilities and public transport are largely within a 10-15 minute walk.

Walking and cycling	7. Leisure walks should allow for circular routes with variety and choice.	Agree – route network has been revisited to create well connected circular routes within NEC and to areas outside of the AAP area.
Discouraging car use	1. Combine trip/parking budget across NEC (how to enforce this?).	A very strict trip budget approach is being applied to the NEC area. This results in a high walking and cycling modal share and will be managed during the planning application process as set out in Policy 22.
Discouraging car use	2. Measures needed to limit stress on King's Hedges junction.	Noted. Highway capacity is the one of the reasons for the trip budget approach and the updated Transport Study specifically considers implications on King's Hedges Road.
Discouraging car use	3. Plan for cars being part of a mode share rather than separate them (at a much reduced share).	A very strict trip budget approach is being applied to the NEC area. This results in a high walking and cycling modal share.
Discouraging car use	4. Short term parking at district and local centres to cater for those with mobility issues.	Essential parking for disabled people and to accommodate servicing will be provided as well as doorstep residential parking for Blue Badge holders.
Street hierarchy	1. The plan should propose a clear hierarchy of routes that access the entire area.	The Spatial Framework does this to create a connected movement network across the NEC area and this is set out in Policy 21.
Street hierarchy	2. Movement routes should generally cater for all modes to cater for needs of the neighbourhood 24/7.	The Framework is based around a street-based system that will allow access as required but be very much designed as low speed, pedestrian and cycle friendly spaces.

Street hierarchy	a. Primary streets: Segregated walking and cycling routes.	Agree and part of the intended design approach, set out in Policy 7 and 21.
Street hierarchy	b. Primary streets: Used by public transport.	Agree and part of the design approach where applicable.
Street hierarchy	c. Primary streets: High activity and safe at night.	Agree and part of the intended design approach.
Street hierarchy	d. Primary streets: Access main centres, destinations and employment areas.	Agree and part of the intended design approach, set out in Policy 21.
Street hierarchy	e. Primary streets: Provide access to secondary streets.	Agree and part of the intended design approach, set out in Policy 21.
Street hierarchy	a. Secondary streets: Provide access to main sub areas.	Agree and part of the intended design approach, set out in Policy 21.
Street hierarchy	b. Secondary streets: Designed as connected loops to allow for easy servicing.	Agree and part of the intended design approach. Policy 21 and the Spatial Framework do not support a street network that would encourage rat-running.
Street hierarchy	c. Secondary streets: Could be conventional street or with traffic calming measures.	All secondary streets will be designed to place pedestrians at the top of the user hierarchy.
Street hierarchy	d. Secondary streets: Primary access to residential front doors, parking areas and servicing points.	Agree and part of the intended design approach.
Street hierarchy	a. Tertiary streets: Shared lanes and courtyards.	Agree and part of the intended design approach. This should be set out in development proposals as part of planning applications.

Street hierarchy	b. Tertiary streets: Primary routes for pedestrians and cycles to filter through neighbourhoods.	Agree and part of the intended design approach.
Street hierarchy	c. Tertiary streets: Safe and calm.	Agree and part of the intended design approach.
Street hierarchy	d. Tertiary streets: Allow access for emergency vehicles.	Agree and part of the intended design approach.
Street hierarchy	e. Tertiary streets: Connecting role for open spaces.	Agree and part of the intended design approach.
Street design	1. Street design should reflect the role of the street in the network.	The proposed hierarchy and indicative street sections establish the role and function of the various street types as set out in Policy 7 and Policy 21.
Street design	2. Add social dimension to streets – opportunities for social interaction.	This is picked up through the distribution of land uses and open spaces to create the right conditions for active streets and places. Policy 6a and Policy 7 also deliver the expectations for the design of new buildings and places.
Street design	3. Consider how the area will be used at night and how busy routes will be.	Agree - the delivery of safe routes is identified through Policy 7. In addition, the connected route network which connects key destinations will help create the right conditions for well used and active streets and spaces.
Street design	4. Consider pocket spaces away from moving traffic.	A network of green spaces is proposed which deliver the informal open space and children's play space within the AAP area. In addition, within each development block, there will be a need to deliver space for

		further neighbourhood green spaces and SuDS as part of a comprehensive design to the public realm (as required by Policy 23). Whilst no specific areas are identified as 'traffic free', it is likely that the Spatial Framework and Connectivity diagrams within the AAP will enable this to come forward as part of detailed planning applications.
Street design	5. Provide appropriate space for cyclists.	Agree. Space is indicated in the indicative street sections and the proposed route networks.
Street design	6. Prepare a street network plan that sets out the principal routes across the NEC area.	The proposed street and space network is indicated on the revised Spatial Framework and within Policy 21.
Open Space	1. Centrally located large open space (ideally close to the district centre).	Review of Informal Open Space and overall floorspace amounts has allowed for the creation of a significantly sized central informal open space as part of total 27.6 hectares of Informal Open Space and Children's Play Space to be delivered as part of NEC. The location of the largest open spaces has been informed by a number of factors including their distribution across the site close to the proposed new homes, existing and proposed infrastructure constraints such as the undergrounding of the Overhead Electricity Power Cables as well as the existing biodiversity assets on the site such as the Cowley Road Hedgerow.
Open Space	2. Linear green and blue corridors to connect open	The green space network has been revised to increase the amount of informal open space and the creation

	spaces (accommodate fitness trials etc).	of a better-connected network that can accommodate SuDS as part of a well-integrated drainage system.
Open Space	3. Smaller neighbourhood green spaces at a maximum of 5 minutes from home.	All homes will be within 5-minute walk of informal greenspace. In addition, there are opportunities for doorstep play, growing spaces, etc. that will complement the broader greenspace network.
Open Space	4. Smaller pocket parks and informal open space.	All homes will be within 5-minute walk of informal greenspace. In addition, there are opportunities for doorstep play, growing spaces, etc. that will complement the broader greenspace network.
Open Space	5. Local play facilities for children and teenagers.	All homes will be within 5-minute walk of informal greenspace. In addition, there are opportunities for doorstep play, growing spaces etc that will complement the broader greenspace network.
Open Space	6. Development could use or more actively embrace Chesterton Fen and Milton Country Park as leisure and recreation destinations.	Connections to Milton County Park, River Cam Corridor and Chesterton Fen will be provided as part of the Spatial Framework. However, development at NEC will not require these spaces to meet informal open space and children play space requirements and it is also important that development doesn't have an adverse impact on these spaces due to an increase in visitor numbers creating recreational and habitat pressures.

Open Space	7. Identify sites for allotments nearby.	The ability to provide growing spaces as part of the district is important and more urban solutions in the form of community gardens, micro plots and orchards will be part of the provision made available to those living and working in the area. Example of this are set out in the NEC Typologies and Development Capacity Assessment and Policy 8.
Open Space	8. Quality as well as quantity to be considered.	Policy 7 identifies the quality requirements for streets, spaces and landscape in the NEC area.
Open Space	9. Take a creative approach to provision of open space (e.g. rooftops).	Agree. These spaces will provide private amenity spaces and communal green spaces. They are not required to meet the informal open space and children's play space requirements and therefore will supplement these publicly accessible spaces providing a range of open space types across the AAP area.
Land uses	District Centre: Move district centre to edge of Milton Road.	The District Centre is located to best serve the majority of the new homes within the AAP area and is anchored by key cycling and walking routes and served by public transport stops. The District Centre is to serve the development, as part of an internalised trips approach to the planning of the neighbourhood, and not to rely on passing trade on Milton Road. In addition, flexibility is needed regarding the crossing of Milton Road which could require a bridge or underpass if an at grade solution is not possible.

Land uses	a. District Centre: More prominent.	A proposed landmark on the Merlin Place site is proposed to help signify the new district as well as policy requirements to ensure that new development addresses the street in which it sits and broader local context.
Land uses	b. District Centre: Served by CGB and local buses.	The relocation of a transport interchange to this junction creates significant challenges in terms of knock-on impacts to the A14. Nevertheless, there may be opportunities for Mobility Hubs to serve this part of the AAP area as part of future development proposals.
Land uses	c. District Centre: Main cycle route goes through it.	Noted. Cycle provision will be a key part of the planning of the District Centre irrespective of location.
Land uses	d. District Centre: Establishes a strong character to Milton Road.	Agree that it could potentially establish a strong character to Milton Road. However, the challenges of delivering the level of change needed are considerable including land ownership constraints on Cambridge Science Park that would be required to balance out provision in this location. Existing local examples of centres being located on main arterial roads, such as Mitcham's Corner District Centre, emphasise the challenge of trying to balance a significant amount of vehicle movements alongside good placemaking principles to create vibrant and people-focused places.
Land uses	e. District Centre: Gateway into Cambridge and front door to NEC area.	A proposed landmark on the Merlin Place site is proposed to help signify the new district.

Land uses	a. Local centres: Create more balanced provision within 5-minute walk of homes.	A new Greenway Local Centre provided to better serve the north-east corner of the NEC area.
Land uses	b. Local centres: Move Cowley Road LC to the east to serve north-east corner of the site.	As above but noting that Cowley Road Local Centre is proposed to remain as per the draft Spatial Framework to ensure good coverage of services and facilities within the main residential areas.
Land uses	c. Local centres: Move Cambridge North LC northwards up along Milton Avenue to be more accessible from Chesterton.	The Local Centre occupies street frontage along Milton Avenue. Flexibility at ground floor will be needed to allow the centre to expand as demand increases in line with Policy 10d and Policy 15.
Schools	1. Locate schools near local centres.	Agree and this is reflected in the updated Spatial Framework.
Schools	2. Local secondary school near A14 or railway where it doesn't rupture the urban fabric.	A Secondary School is no longer needed to be provided as part of the development based on the Education Topic Paper.
Schools	3. Locate schools near public spaces for shared use.	All local centres, which include the primary schools are well served by the informal open space network.
Schools	4. Promote smaller footprint/higher density urban school solutions.	The Typologies Study includes higher density, multi-level primary schools to identify this expectation for such provision as part of the NEC development.
Leisure	1. Beneficial to support NEC with a new Leisure Centre that if centrally located could generate footfall to the District Centre.	The infrastructure needs of the AAP area has been considered by the Infrastructure Delivery Plan. The study suggests that a new Indoor Sports Hall is provided within the

		AAP area and this is proposed to be located within the District Centre.
Leisure	2. Otherwise improve walking and cycling routes to existing facilities.	The review of Informal Open Space has resulted in greater provision on the site and with improved connectivity/networks to supporting areas and existing facilities.
Leisure	3. Maximise offer from CRC.	Cambridge Regional College contains a number of existing facilities such as a five-a-side football pitch and indoor sports hall. The Open Space Topic Paper sets out how the college could help support the formal sporting requirements generated from development at North East Cambridge.
Land Use Distribution	1. Clear plans and polices in the AAP with land use designations and access routes.	Figure 11 in the AAP identifies the land uses and their locations across the NEC AAP area.
Land Use Distribution	2. Consider introducing a mix with housing on the Cambridge Science Park.	Whilst Cambridge Science Park do not want to pursue residential uses within their site, the policy wording in Policy 10c allows for this to happen should circumstances change during the plan period.
Industrial Co-Location	1. Is co-location viable?	The Overcoming Barriers to Mixed Use Development paper (2020) and the Commercial Advice and Relocation Strategy (2021) both consider the concept of co-located and/or intensified industrial uses and how they could be delivered as part of comprehensive development.
Industrial Co-Location	2. Use more conventional but compact industrial layouts.	The Overcoming Barriers to Mixed Use Development paper (2020) and the Commercial Advice and

		Relocation Strategy (2021) both consider the concept of co-located and/or intensified industrial uses and how they could be delivered as part of comprehensive development.
Custom Build	1. Small sites – 'oven ready' infill or gap sites, pre-prepared building platforms.	Based on the scale of the AAP area and broadly large ownership parcels, it is unlikely that small or gap sites are likely to be identified. Nevertheless, the AAP now seeks to increase the provision of Custom homes as set out in Policy 13e.
Custom Build	2. Co-housing – likely strong interest in Cambridge.	Co-housing is an increasingly popular form of housing provision in the UK and this is addressed within Policy 13e.
Building Heights	1. Set more definitive heights for each character/sub-area.	Policy 9 regarding building heights has been revised as part of the Proposed Submission AAP.
Building Heights	2. Clearly define the rules for exceptional taller buildings.	The need to adhere to the Cambridge Local Plan (2018) Appendix F (or successor) is now written into Policy 9 of the AAP.
Building Heights	3. Tall buildings should mark places of functional or visual importance.	The Spatial Framework identifies locations for landmark buildings and Figure 21 identifies the height ranges for development parcels across the AAP area.
Building Heights	4. Heights to be proportionate to location and function.	Heights have been reduced across the AAP area with taller buildings to perform landmark roles at key locations in the framework. These have been informed by the NEC Heritage Impact Assessment and NEC Townscape Strategy.

Net Densities	1. Density should be an outcome of design, not a determinant.	Agree. However, the Development Capacity Study undertaken to support the AAP is needed to demonstrate what the site can deliver and inform open space provision, services and facilities, viability and the IDP. All of these require a good understanding of what densities for development are needed to help deliver regeneration at NEC.
Net Densities	2. Don't require densities but set other parameters for good design.	The development of NEC will be at higher densities to make efficient use of this brownfield site and is consistent with the NPPF (2021). Denser forms of development create additional challenges in terms of achieving high quality and well-designed places. The framework is therefore supported by a range of policies that set out such expectations and combine to create a framework for good design.
Net Densities	3. Use density to establish the need for open spaces and other infrastructures.	The Development Capacity Study has informed densities and open space and amenities/services provision.
Net Densities	4. Highest density areas with most people living in them have highest need for public open space.	Agree and the proposed large central open space is well located to serve the densest part of the development area.
Gross densities (plot ratio)	1. Review underlying assumptions on development numbers.	Site capacity and land use amounts have been reviewed following the draft NEC AAP and a revised floorspace has emerged that has reduced commercial floorspace by 25% alongside other changes to the land use and mix proposed. This work and the development assumptions have also been

		informed by other evidence studies such as the IDP.
Gross densities (plot ratio)	2. Distribution of housing across the site – provide west of Milton Road and reduce densities to the east.	Policy wording allows for residential development to the West of Milton Road but at present, Cambridge Science Park has no wish to pursue this option, so it is therefore not deliverable, which is a test of soundness of the AAP. If built, hosing to the west would be additional to the 8,350 units proposed as part of the NEC AAP area development.
Character and Townscape	1. Development at NEC to respond to wider (international) image of Cambridge.	Will be further explored through a site-wide design code.
Character and Townscape	2. Learn from existing morphology of the City to inform character of streets, spaces, relationship to the river, signature buildings etc.	The sequence of greenspaces continues the intrinsic character of historic Cambridge. AAP policy requirements identify the delivery of human scale, plot driven and finer grain development forms.
Development Approach	1. Establish street network plans of strategic routes that development needs to reserve / implement.	The Spatial Framework does this.
Development Approach	2. Provide design guide to cover:	The need for a site wide design code to be led by the LPA is identified in the Proposed Submission NEC AAP.
Development Approach	· Street and public realm design;	Noted.
Development Approach	· Block layout, typologies, height;	Noted.

Development Approach	· Access and parking;	Noted.
Development Approach	· Open space standards; and	Noted. Policy 8 covers Open Space provision at NEC and framework now delivers the required Informal Open pace and Children's Play Space within the NEC area.
Development Approach	· Character.	Noted.
Development Approach	3. Potential to accept off-site open space allocation.	This is not required for informal open space or children's play space. Formal open space provision is likely to be made off site.
Development Approach	4. Ensure rigorous design review process.	The AAP makes specific reference to the Cambridge Quality Charter for Growth and review by the Cambridgeshire Quality Panel.
Development Approach	5. Outline planning applications should confirm parameter principles.	It would be expected for planning applications to demonstrate and be in accordance with the AAP, site wide design code and any other approved design frameworks ahead of submission.