

Chapter 12

Promoting &
Delivering
Sustainable
Transport Infrastructure

CHAPTER 12 – PROMOTING AND DELIVERING SUSTAINABLE TRANSPORT AND INFRASTRUCTURE

- 12.1. Cambridge is a compact city known for its high levels of cycling, with 22% of all trips made by bike, which is the highest in the UK. Walking is also an attractive and popular mode of travel in Cambridge, and there is a well developed public transport network. Bus use within the city has more than doubled since 2001 and the proportion of residents travelling to work by car is relatively low (41% compared to 61% nationally). Despite this, there is still considerable congestion and with it associated costs to businesses, damage to the environment and impacts upon public transport, pedestrians and cyclists. Lifestyle changes and high house prices in the city have led to greater travel demand, which puts more pressure on our transport network.
- 12.2. As the local planning authority, the Council can influence transport conditions through control of development. The Council are committed to promoting sustainable transport by working closely with partners, including Cambridgeshire County Council (the highway authority), to continue to improve public transport, cycling and walking networks and manage the demand for car travel.
- 12.3. Furthermore the delivery of new or improved infrastructure (including transport infrastructure) and services to support new development in a timely and phased manner will be an important element in ensuring the appropriate and sustainable implementation of new growth in Cambridge and the Sub Region.
- 12.4. Planning for infrastructure provision is an ongoing process through the development of an Infrastructure Delivery Study (IDS) and partnership working with stakeholders.
- 12.5. This chapter outlines issues and options relating to networks, including transport, telecommunications, and the promotion and delivery of sustainable physical, social and green infrastructure. The options proposed are consistent with the NPPF and have been drawn up using a number of sources of evidence including the views provided during workshops held in early 2012.

STRATEGIC PRIORITY

Option 182: Timely Provision of Infrastructure

Support development in Cambridge by ensuring that infrastructure is provided in a sustainable, co-ordinated and timely manner to meet the needs of new development and regeneration.

Key Facts

- Traffic in and out of the city has been stable at current levels since 1996;¹
- The number of vehicles observed crossing the River Cam screenline in 2010 was 2% less than in 2009 and 15% less than in 2000;²
- In Cambridge, the private car is used for around 41% of travel for work journeys;³
- The mode share of cycling trips in Cambridge remains the highest in the UK with around 26% of travel for work journeys made by bicycle)⁴
- The number of people using the bus within, and in and out of the city has more than doubled since 2001. In 2011 there were 9.2million journeys on the Citi network, and around 3.8million Park & Ride journeys. In addition, the guided bus was around 40% above opening year forecasts, in terms of passengers carried;⁵
- Cambridgeshire County Council is the highway authority, and is responsible for the maintenance of the roads and pavements in the city, as well as regulating the activities of developers and bus operators in relation to the highway;
- In 2011 there were 18.4 million fixed residential broadband connections in the UK with 76% of adults having access to broadband (fixed and mobile) ^{6,7}; and
- An Infrastructure Delivery Study is being prepared to support the implementation of the Local Plan. This will set out the significant items of infrastructure that will be required to enable development to take place and consider the funding and phasing requirements

Objectives

- To minimise adverse effects of transport on people and the environment;
- To ensure that appropriate infrastructure is provided in the early stages of new developments following agreed phasing plans;

¹ Table 3: Traffic growth on the Cambridge radial cordon screenline (Chapter 3, Traffic Monitoring Report 2010)

² Table 2: Traffic growth on the Cambridge radial cordon screenline (Chapter 3, Traffic Monitoring Report 2010)

³ ONS (2012) UK Census 2001

⁴ Traffic Monitoring Report 2010 (Cambridgeshire County Council)

⁵ Traffic Monitoring Report 2010 (Cambridgeshire County Council)

⁶ <http://media.ofcom.org.uk/facts/>

⁷ <http://media.ofcom.org.uk/facts/>

- To ensure that utilities are developed in a way which minimises their impact on the environment and local amenity; and
- Maximise developer contributions to improve physical, social and green infrastructure.

TRANSPORT

A new Transport Strategy for Cambridge

12.6. Cambridgeshire County Council is in the early stages of preparing a new transport strategy for the Cambridge and South Cambridgeshire area. The transport strategy will:

- Set a longer-term vision for transport and provide a strategy for transport and access for the wider area;
- Facilitate the robust assessment of detailed development proposals;
- Help with securing funding from development towards the transport infrastructure and services needed to accommodate the transport demand of development;
- Provide a clear programme of measures / projects for which bids for funding from any other available funding sources can be made; and
- Help ensure the continued efficient operation of the local transport network.

12.7. The strategy is being developed and will be consulted upon at similar times to both Cambridge City Council and South Cambridgeshire District Council Local Plan reviews to ensure that the transport and planning issues and options are considered in an integrated way.

Accessible, sustainable development

12.8. New development should offer realistic, safe and easy access by a range of transport modes, particularly for pedestrians and cyclists and those using public transport. The Local Plan can help to provide good accessibility and enable people to make sustainable travel choices by shaping the pattern of development and influencing the location, scale, density, design and mix of land uses. Developments which encourage walking and cycling have been shown to promote healthier lifestyles, social inclusion and community well being.

12.9. It is vital that the decisions on the location and scale of all types of development are integrated with the availability of the appropriate infrastructure to cope with the additional travel, and that this travel be of a sustainable nature. Safe and attractive infrastructure for cyclists and pedestrians as well as good connections to the wider walking and cycling network, and good quality public transport are essential to achieving this.

12.10. In accordance with the NPPF, the following option has been put forward as the appropriate way of addressing these issues:

Option 183 – Promote non-car modes of travel

This option would allow for the development of a series of policies, which will help to ensure that all new development in Cambridge promotes alternative modes of transport to the private car, whilst also providing accessible provision for new development. These policies would include:

- Continuing to favour development in locations where there is already an existing walking, cycling and public transport route;
- Making sure that developments are designed to give priority to walking, cycling and public transport over cars, ensure maximum convenience for these modes and to safeguard land for future and existing walking, cycling and public transport routes;
- Helping to provide viable, sustainable alternatives to the car at both the origin and destination of journeys;
- Making sure that there are sustainable non-car travel options available to everyone using the development;
- Ensuring that any commercial and servicing vehicles using the development are sufficiently provided for; and
- Making sure any new roads required as part of a development are designed to give high priority to non-car modes, are of a low design speed, restrict through access for general motor traffic, do not promote additional car usage and be acceptable to the Highway Authority.

These options would be similar to policies 8/1, 8/4, 8/5, 8/7, 8/8, 8/9 and 8/11 held within the current 2006 Local Plan, and give new development in Cambridge the best chance for sustainable travel choices, and thus encourage travel behaviour by modes other than the private car.

Ensuring that development is easily accessed by sustainable modes of travel, such as good quality public transport links, cycle lanes and pedestrian links can sometimes be at the cost of convenience for those travelling by private car. Whilst in some ways this is deliberate, it can have an impact on those with no option but to use cars for journeys.

Questions

- 12.1 Is there a need for a policy addressing these issues?
- 12.2 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.3 Do you think there are any other reasonable alternatives that should be considered?

- 12.11. New development requires specific types of infrastructure to be in place in order to persuade those travelling to, from and within the site to do so in as

sustainable way as possible. This infrastructure also needs to be timed for implementation appropriately, so that the use of sustainable modes of travel is embedded in the development from an early a stage, as it is notoriously difficult to alter travel behaviour and modal choices once people are used to using a car.

- 12.12. Given the above, and in accordance with the NPPF, the following options have been put forward as appropriate ways of addressing this issue:

Option 184 – Appropriate infrastructure

This option would allow for the appropriate transport infrastructure to be in place for a new development, and for this to happen prior the development being in use where possible. This would include:

- Walking, cycling and public transport infrastructure; and
- Safeguarding land used for this type of infrastructure, for example, for extensions to the guided bus and key cycle routes;

This option would include developing policies similar to 8/4, 8/5 and 8/8 from the 2006 Local Plan and would give the new developments in Cambridge the best chance to integrate with a sustainable travel network, and thus promote a shift in travel behaviour away from the private car.

Protecting sustainable transport routes near the development also encourages this. It is considered that this option is in line with national guidance.

It is recognised that it is sometimes difficult to get the appropriate infrastructure in place prior to the development being used, both in terms of cost and practicality.

Option 185 – Low emission vehicle infrastructure

This option would allow for the appropriate infrastructure that is required by low emission vehicles be put in place in new developments. This would include:

- Electric car charging / plug in points; and
- Car club and car share spaces.

This option is considered to be in line with the NPPF, which requires that development incorporate these facilities. It will help to minimise the environmental impact of private vehicle trips, by encouraging people to switch to low emission vehicles.

However, there is still a significant way to go before electric cars and low emission vehicles become widespread in their usage and ownership and this infrastructure can be expensive to install.

Questions

- 12.4 Is there a need for a policy addressing these issues?
- 12.5 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.6 Do you think there are any other reasonable alternatives that should be considered?

Car Parking Standards

- 12.13. Car ownership in the UK has risen steadily in the past 50 years⁸, and despite many transport policies aimed at shifting travel away from the private car, the need to provide appropriate levels of car parking is very important. This is because both under and over provision of parking can lead to a number of problems on or around new developments and also to existing communities. Over-provision can give rise to poorly designed development surrounded by high levels of car parking, whilst under-provision can also cause congestion on local streets, due to fly parking. Often this causes paths, cycleways and roads to be blocked.
- 12.14. Since the Transport White Paper in 1998, reduced parking availability has been seen as a key tool in achieving a shift to more sustainable travel. The continuing decline in car travel for the work commute along with increases in bus, cycle and pedestrian travel suggests that this has been generally successful in Cambridge.
- 12.15. More recent Government guidance has shifted the responsibility of determining car parking standards towards local authorities. This was reaffirmed in the NPPF, which requires Councils to take into account the individual characteristics of each development when setting standards. This includes accessibility, availability and opportunities for public transport, local car ownership levels, the type, mix and use of the development and the overall need to reduce high-emission vehicles.
- 12.16. Therefore, any off-street parking policy and its accompanying standards need to balance providing the right amount of appropriately designed space for cars, whilst also making alternative and more sustainable modes of transport to the car more attractive and convenient. In accordance with the NPPF, the following options have been put forward as possible means of addressing this issue:

Option 186 – Maintain the current level of provision

One option could be to continue to use the parking standards prescribed in Appendix C of the 2006 Local Plan (see Appendix J). This option would involve:

- Keeping parking maximums, on the basis that in Cambridge this

⁸ RAC Foundation – Car Ownership in Great Britain

approach has been generally successful; and

- Continuing to provide less parking in Controlled Parking Zones.

This option would also involve developing a car parking standards policy similar to 8/10 in the 2006 Local Plan that ensures the development is in accordance with the parking standards.

Evidence on modal share of car trips, along with anecdotal evidence, suggests that in most cases, the current standards have worked quite well. Therefore, keeping the standards the same is considered a viable option for Cambridge.

However, the NPPF has called on local authorities to set parking standards, which take into account local circumstances. The current standards are derived from previous national guidance and do not hold Cambridge-specific aspects.

Option 187 – New residential parking standards

A second option could be to develop new parking standards for residential parking only. This would include:

- Working with stakeholders and communities to develop new car parking standards for new residential developments both in the city and on the fringes of the city;
- Potentially removing maximums from the standards for car parking at new residential developments;
- Retaining some of the standards from the 2006 Local Plan, for those developments considered 'trip destinations';
- Maintaining maximums for all new (non residential) development considered a 'trip destination'; and
- Continuing to provide less parking in Controlled Parking Zones.

This option would also involve developing a car parking standards policy similar to 8/10 in the 2006 Local Plan that ensures the development is in accordance with the parking standards.

This option could result in more car parking being provided in residential developments, than is currently the case. It acknowledges the theory that limiting parking availability at trip origins does not necessarily discourage car ownership, and can push vehicle parking onto the adjacent public highway, diminishing the quality of the streetscape and potentially obstructing the emergency and passenger transport vehicles, pedestrians and cyclists. It also keeps parking controls tight at trip destinations. This is considered in line with the NPPF on the basis that if new standards were developed, local circumstances would be taken into account.

However, limiting parking at trip origins can have the effect of limiting car ownership and usage. This option could mean that more space for cars is

provided at residential development, and there is a danger that this would make car travel more convenient than other, more sustainable modes. This could have knock on implications for the environment.

Option 188 – Completely new standards for all development

A third option could be to set completely new parking standards for all types of development. This would include:

- Working with stakeholders and communities to develop new car parking standards for new developments both in the city and on the fringes of the city; and
- Potentially removing maximums from car parking standards.

This option would also involve developing a car parking standards policy similar to 8/10 in the 2006 Local Plan that ensures the development is in accordance with the parking standards.

This is considered in line with the NPPF on the basis that if new standards were developed, local circumstances would be taken into account.

Completely revising and setting new parking standards could lead to both increases or decreases in parking provision, depending on the consultation carried out. This could lead to particular impacts at trip destinations, where any increase in provision may lead to more car based journeys and thus more congestion, or a decrease in parking provision may prevent businesses and commercial industries from wanting to locate to Cambridge.

Questions

- 12.7 Is there a need for a policy addressing these issues?
- 12.8 Which of the options do you prefer?
- 12.9 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.10 Do you think there are any other reasonable alternatives that should be considered?

- 12.17. In addition to having parking standards for new developments, it is also important to understand and gauge the level of support for having car free developments in Cambridge. In car free developments, there is no on-site car parking, or on-street parking permitted, except for disabled drivers. A policy like this could be encouraged in places easily accessible by public transport, near a range of amenities, including shops and leisure activities and within a Controlled Parking Zone (which is the responsibility of Cambridgeshire County Council). Spaces for car clubs, car sharing and electric vehicle charging points would be embedded into a policy such as this, to

complement the availability of public transport, cycling and pedestrian routes.

12.18. The following options have been proposed to deal with this issue:

Option 189 – Car free development

One option could be to follow cities such as London, Amsterdam, Berlin and Bremen in developing a policy that permits car free residential developments in appropriate circumstances.

A policy like this could make Cambridge a more pro-actively car free place to live, work and visit, help reduce traffic congestion and pollution, improve the quality of the environment and encourage yet more travel on foot, by cycle and by public transport.

However, there are issues with the fact that in order for car free development to work, it needs an excellent public transport, cycling and pedestrian network to be in place. It is clear that this is not the case in many areas of Cambridge, and thus the policy could make some development unviable or unattractive to developers and those looking to locate to the city. It is also the case that if the surrounding streets to a car free development were not rigorously enforced as Controlled Parking Zones, then indiscriminate parking on neighbouring streets is a likely consequence.

Option 190 – Incorporate car free development into existing policy

A second option could be to continue with the current practice of incorporating the possibility of having areas of car free development into the car parking policy. This would involve adding specific wording to a policy which encourages car free development where appropriate

This option may be more appropriate as it allows for negotiations between officers and developers to instead identify car free locations through a car parking policy such as one similar to 8/10 in the 2006 Local Plan. This would help ensure that only new developments thought suitable by both the City and County Councils and the developer would be considered to be car free.

However, it would be harder to implement car free development without a specific policy.

Questions

12.11 Is there a need for a policy addressing these issues?

12.12 Which of the option do you prefer?

12.13 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?

12.14 Do you think there are any other reasonable alternatives that should be considered?

Cycle Parking

- 12.19. Levels of cycling in Cambridge are the highest in the UK. This means that in order to accommodate those that wish to cycle, and indeed promote it further, the appropriate facilities and infrastructure need to be in place. Secure cycle parking provision remains a big issue in Cambridge, despite two large cycle parks being delivered in recent years. The 2006 Local Plan includes Cycle Parking Standards in Appendix D.
- 12.20. Evidence of cycles parked around residential developments, often at the front of houses and attached to street furniture suggest that changes may be needed to the current cycle parking standards and policy. In addition, since the 2006 Local Plan was adopted, there have been advances in understanding of the need and quality of cycle parking, culminating in the adoption of the Cambridge City Council Cycle Parking Guide for New Residential Development as material consideration in the planning process. Anecdotal evidence from Local Plan workshops in early 2012 has highlighted particular issues with the location and quality of the cycle parking that had been provided.
- 12.21. It is also apparent that there can be a conflict between design and provision of cycle parking. On occasions, the quality and convenience of cycle parking provided has been hindered by design requirements and the constraints of a new development site.
- 12.22. National guidance states the need for sustainable modes of travel, such as cycling, to be given a high priority in order to help ensure development is sustainable. The options below, when combined, set out a reasonable means of achieving this:

Option 191 – Location, design and quality

This option would allow for a policy to be developed that ensures that the quality, design and location of cycle parking meets users needs, particularly residents in terms of space, security and convenience. This would involve:

- Providing cycle parking in accordance with the Council’s Cycle Parking Guide for New Residential Development, or any subsequent updated version of this document. This document is currently material consideration in the planning process;
- Ensuring that all cycle parking is as easy, if not easier to access than a car. This could mean locating cycle parking close to the front of houses, where possible;
- Ensuring that visitor cycle parking is provided close to the main entrances of new buildings; and
- Providing some space for trailers / cargo-bikes in appropriate developments.

This option would also involve developing a cycle parking standards policy similar to 8/6 in the 2006 Local Plan that ensures the development is in accordance with the cycling standards prescribed.

This option would help ensure cycle parking is at least as convenient as car parking, which can help make cycling the first choice of travel for short journeys, rather than a car. This option is considered to be in line with guidance in the NPPF as it gives priority to sustainable modes of travel.

There may however be design issues arising from this option, especially on small or constrained sites. This could impact upon viability and attractive design.

Option 192 – Update the cycle parking standards in the 2006 Local Plan

This option would allow for an update to the standards in Appendix D of the 2006 Local Plan (see Appendix K) to take place. This would involve:

- Working with stakeholders to develop new cycle parking standards for new developments both in the city and on the fringes of the city.

The standards would be updated to reflect the most recent thinking regarding cycle parking. These standards would be based on past experiences in Cambridge, and best practice from around the country and abroad.

Questions

12.15 Is there a need for a policy addressing this issue?

12.16 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?

12.17 Do you think there are any other reasonable options that should have been considered?

Minimising the transport impact of development

12.23. As part of new development coming forward, it is vital to ensure that there is no unacceptable impact on the transport network in Cambridge.

12.24. The Council, as the local planning authority, must therefore ensure that development happens in the 'right places', whilst also stipulating that the full and likely impacts of any development must be demonstrated. Any likely impacts must be mitigated against so that development does not significantly worsen the surrounding transport network, and indeed strives to improve the situation where possible.

12.25. The NPPF states that a Transport Statement or Transport Assessment should support all developments that generate significant amounts of movement. It also states that plans and decisions need to take into account how the opportunities for sustainable modes of travel have been utilised, whether the site is safe and has suitable access for all, and also whether improvements can be undertaken within the transport network that would limit the impacts of the development in a cost effective way.

- 12.26. The NPPF considers that development should only be prevented or refused on transport grounds where the residual cumulative impact is found to be 'severe'.
- 12.27. The option below gives a reasonable method of aligning to national guidance regarding the transport impact of development, in relation to mitigation:

Option 193 – Development only where the impact on the network is able to be mitigated against

One option could be to have a policy that only permits development where the transport impact is shown to be acceptable, and can be mitigated or managed. This could include:

- Requiring sufficient information that the impact upon the network is not unacceptable (in the form of Transport Statements or Transport Assessments);
- Explicitly mention highway safety as well as highway capacity when creating a policy similar to 8/2 (Transport Impact) in the 2006 Local Plan;
- Allowing for the City and County Council to stipulate, where necessary, that in areas of already high traffic congestion, new development would only be permitted if traffic generation in the area is shown to have zero increase or be can reduced;
- For development likely to place demands on the network, ensuring that mitigating measures are identified and, where appropriate, in place prior to the development being used; and
- Identifying the financial contributions needed to provide such mitigation.

This option appears to be in line with the advice given in the NPPF, which presumes that new development should not be blocked on transport grounds if mitigation can minimise the impact to the network.

However, it should be noted that all new development is likely to place some impact on the transport network, even with mitigation as Cambridge suffers from significant congestion.

Questions

- 12.18 Is there a need for a policy addressing this issue?
- 12.19 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.20 Do you think there are any other reasonable options that should have been considered?

- 12.28. In addition to mitigating any development related impacts on the transport network, another option is to set a new development a target, which specifies how many trips to, from and within should be made by private car. This is known as a modal split target. The two options below cover whether setting a modal split target is something that should be inherent in all new development, or whether it should be covered on a site by site basis:

Option 194 – Modal split targets for new development

One option could be to ensure that new development is inherently less dependent on car usage, by setting a modal split target within the policy. A policy such as this would require:

- Working closely with Cambridgeshire County Council as highway authority to set a target for modal split. This target is most likely to come through the Transport Strategy for Cambridge (TSC). A modal split target of no more than 40% of work related trips to be made by car was set in the Area Action Plan for North West Cambridge;
- Close links with any Transport Assessment, Transport Statement or Travel Plan, which will help set the target for each new development and set out how it can be achieved;
- Monitoring of the results, and possible enforcement; and
- Potentially tight parking controls.

This policy option could have significant benefits to the immediate transport network surrounding a new development, and also on the wider area if a shift in travel behaviour can be achieved citywide. It could also allow more intensive/high density development, as impacts from car traffic and car parking would be less significant.

It may be the case that any target set would require a change in travel behaviour in order for it to be achieved. Currently, 41% of travel for work journeys in Cambridge are made by car and it is likely that any target would aim for car use to be lower than this. Furthermore, monitoring would need to take place in order to measure the modal split and test whether the target is being met. In addition, any failure to meet the target would require enforcement action.

Option 195 – Do not set a city wide modal split target for new development

A second option could be not to set a citywide modal split target for new developments, and instead negotiating a target on a site-by-site basis. Any targets set would be drawn from the modelling results from the Transport Assessment and officer advice.

This is similar to the current practice, which resulted in Policy NW11: Sustainable Travel, in the North West Cambridge Area Action Plan. This stipulates that no more than 40% of work-based trips should be made by

private car.

This option is flexible and allows an appropriate target to be set, based on the conditions of the surrounding transport network and access available to sustainable modes of travel for each new development.

Not setting a target for all development may mean some new development may create more car based trips than is necessary. Modelling carried out as part of the Cambridge North West Transport Strategy suggested that an 8% reduction in the modal share for journeys to work by car drivers (reducing the modal share from 45% to 37%) is achievable, if the right conditions are created as part of the development.

Questions

12.21 Is there a need for policy addressing this issue?

12.22 Which do you prefer?

12.23 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?

12.24 Do you think there are any other reasonable options that should have been considered?

Travel Plans

- 12.29. Travel Plans are a tool to help change travel behavior. Travel Plans set out a package of measures and initiatives that aim to reduce car travel by informing and encouraging people to use alternative, more sustainable modes where possible. Evidence from the 2010 Department for Transport's Sustainable Travel Towns project⁹ has shown the importance of travel plans, as part of a package of 'smarter choice' measures, in influencing travel behavior and increasing the take up of walking, cycling and public transport. Previous national guidance placed emphasis on the use of Travel Plans, mostly for workplaces, as a tool for Local Authorities to use to help guide modal choice. More recently, the NPPF has stated that all development, which generates significant amounts of movement should be required to provide a Travel Plan.
- 12.30. Currently, any development that is likely to place demand on the transport network is required to provide information as to the likely scale of the impact, in the form of a Transport Statement or Transport Assessment. These cover the need for mitigation of the impacts and may result in developments requiring Travel Plans. However, given the requirement in the NPPF, there is scope to require travel plans for all developments that create a certain amount of movement or reach a certain size.

⁹ The Effects of Smarter Choice Programmes in the Sustainable Travel Towns (DfT 2010)

- 12.31. The NPPF suggests local authorities should use Travel Plans to help mitigate the transport impact of development. The options below are consistent with this and suggest a reasonable approach:

Option 196 – Set a Travel Plan threshold

One option is to have a policy specifically requiring Travel Plans for all sites, which meet a certain threshold. A policy on this would involve:

- Setting a threshold, for example, all ‘major developments’ (see glossary for definition) will require a travel plan;
- Monitoring Travel Plans and their outcomes; and
- Enforcing against any breaches to the plans.

This option appears to be in line with the advice given in the NPPF, which states that all developments that generate significant amounts of movement should be required to provide a travel plan.

The issue with setting a threshold is that it is relatively inflexible, and could result in developments being planned to be just under the threshold in order to avoid the requirement. In addition, it may be necessary for small developments in areas of already high congestion to produce travel plans, even if they are well under the threshold agreed. The policy would need to account for this, so that a Travel Plan could be developed in these cases.

Option 197 – Do not set a Travel Plan threshold

A second option is to continue with the current approach and not set a specific threshold for new development to require a travel plan.

This option could result in developers having less certainty as to whether or not they would need to provide a travel plan for a new development, unlike Option 196, where it is clear from the outset.

Questions

- 12.25 Is there a need for policy addressing this issue?
- 12.26 Which option do you prefer?
- 12.27 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.28 Do you think there are any other reasonable options that should have been considered?

Cambridge Airport – Aviation Development

- 12.32. Whilst Cambridge Airport remains in operation, consideration needs to be given to airport activity and the approach that would apply to any future aviation development proposals coming forward at Cambridge Airport in

order to ensure that any development would not have a significant adverse effect on the environment and residential amenity. Whilst airports have permitted development rights which mean that some types of development in connection with the provision of services and facilities do not need planning permission, other proposals such as the construction or extension of a runway, or new passenger terminal above 500 square metres or increasing the size of the existing building by 15% or more would need planning permission and a policy to deal with any such proposals would be appropriate reasonable option for consultation. This is also consistent with the current policy approach in the Cambridge Local Plan.

Option 198 – Cambridge Airport – Aviation development

This option is to include a policy that would not permit aviation development at Cambridge Airport where it would have a significant adverse effect on the environment and residential amenity.

Whilst this approach will only apply where certain types of airport development need planning permission, it would allow for due consideration of the impact of any proposals on the surrounding environment and residential amenity.

Questions

- 12.29 Is there a need for policy addressing this issue?
- 12.30 Which option do you prefer out of Option 14 and Option 15?
- 12.31 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.32 Do you think there are any other reasonable options that have been considered?

Telecommunications

- 12.33. New communications technology is continually developing and it is important that residents and businesses have the best access to new technology (for example mobile phones and broadband IT) and make the most of the resulting implications on lifestyle change, such as reducing the need to travel. It is important that the Council supports the growth of telecommunications systems while keeping the environmental impact to a minimum. The Council supports the provision of broadband in new developments.
- 12.34. The NPPF also supports this aspiration.¹⁰ It also notes that sites for telecommunications should be kept to a minimum, existing sites used where possible and where new sites are required they should be sympathetically designed and camouflaged.

¹⁰ NPPF para 42 - 46

- 12.35. The Council is aware of public concerns regarding the visual and health impacts of telecommunications development. However, according to the NPPF, it is not the responsibility of the local planning authority to consider further health aspects if a proposal meets the International Commission on Non-Ionizing Radiation Protection's (ICNIRP) guidelines for public exposure. Furthermore, according to the NPPF, local planning authorities should not implement their own precautionary policies e.g. by way of imposing a ban or moratorium on new telecommunications development or insisting on minimum distances between new telecommunications development and existing development.
- 12.36. A policy is required to support and guide telecommunications development. Only one option has been put forward as it is not a reasonable alternative not to have a policy that supports and guides telecommunications development:

Option 199 – Telecommunications policy criteria based

This option would allow a criteria based policy to guide new communications development, similar to the current Local Plan policy 8/14. The criteria could include:

- That applications should not cause significant interference with other electrical equipment, air traffic services or instrumentation operated in the national interest;
- That applications should minimise visual impact through design and location, equipment should be sympathetically designed and camouflaged where appropriate;
- That developers should provide evidence on:
 - The purpose and need for the development;
 - That alternative solutions have been considered including mast / site sharing;
- That consultation should be undertaken with anyone with an interest in the proposed development, particularly where a mast is to be installed near a school or college or within a statutory safeguarding zone surrounding an aerodrome or technical site; and
- That an application for an addition to a new or existing mast or base station be accompanied by a statement of self-certifies that the cumulative exposure, when operational, will not exceed ICNIRP guidelines.

The advantages of this policy are that it seeks to guide the siting, design, appearance and mitigate any potential public health impacts of telecommunications development.

Questions

- 12.33 Is there a need for a policy addressing this issue?
- 12.34 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.35 Do you think there are any other reasonable alternatives that should be considered?

Mullard Radio Astronomy Observatory, Lord’s Bridge

- 12.37. The Mullard Radio Astronomy Observatory contains radio and optical telescopes which are of international importance. It is operated by the University of Cambridge and the University of Manchester / Jodrell Bank. The telescopes are highly susceptible to many forms of interference including electrical waves, microwaves, light pollution and mechanical vibration. The observatory is located within South Cambridgeshire District Council’s administrative area at Lord’s Bridge, however there are two consultation areas which fall within the city boundary.
- 12.38. Policy 8/15 of the current Local Plan relates to the safeguarding of the observatory. This requires that applications falling within the consultation areas which could have an adverse effect on the observatory are subject to consultation with the University of Cambridge and will not be granted permission unless any harm can be mitigated.
- 12.39 It is proposed to carry this policy forward. No other policy option is suggested as it is not a reasonable option not to protect the observatory:

Option 200 – Mullard Radio Astronomy Observatory, Lord’s Bridge – Consultation Areas

This option would require that any development proposal which could affect the operation of the Observatory, be subject to consultation with the University of Cambridge. It would also not be granted planning permission if it would cause harm which could not be overcome by condition or planning obligation.

This would be similar to Policy 8/15 of the current 2006 Local Plan.

Questions

- 12.36 Is there a need for a policy addressing this issue?
- 12.37 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.38 Do you think there are any other reasonable alternatives that should be considered?

Waste Infrastructure

- 12.40 Cambridgeshire County Council is responsible for minerals and waste planning in Cambridge. The Cambridgeshire and Peterborough Minerals and Waste Plan was recently adopted, the Core Strategy in July 2011 and Site Specific Proposals Plan in February 2012. There is also an adopted Proposals Map, which shows allocated sites and areas of search for future minerals and waste facilities, and safeguarding areas for existing and future facilities.
- 12.41 The Site Specific Proposals Plan includes two areas of search for waste recycling and recovery facilities within Cambridge, at Northern Fringe East and Cambridge East (the airport site and North of Newmarket Road). The draft plan had an allocation for a household recycling centre (HRC) south of the Addenbrooke's Road. However, following the examination into the plan, the Inspector recommended removal of this site due to its impact on the Green Belt and the historic environment and lack of conformity with the Cambridge Local Plan 2006. The City Council will be working with the County Council and South Cambridgeshire District Council during the review of the Local Plan to try to identify a suitable site for a HRC to serve the south of Cambridge. However, this remains the responsibility of the County Council.

Provision of Infrastructure and Services

- 12.42 National guidance requires local planning authorities to plan positively for the development and infrastructure required in the area.¹¹ It also requires that Local Plans include policies to deliver:
- The provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat); and
 - The provision of health, security, community and cultural infrastructure and other local facilities;¹²
- 12.42 The delivery of new or improved infrastructure and services to support new development in a timely and phased manner will be an important element in ensuring the appropriate and sustainable implementation of new growth in Cambridge and the Sub-region. Planning for infrastructure provision is an ongoing process through the development of an Infrastructure Delivery Study (IDS) and partnership working with stakeholders. The IDS is being produced in collaboration with South Cambridgeshire District Council and will form part of the Councils case at submission and examination of the Local Plan. The IDS examines three infrastructure categories, physical (transport, energy, water and drainage, waste), social (education, health care, leisure and recreation, community and social and emergency services) and green (open space).
- 12.43 The NPPF also states that in drawing up Local Plans, local planning authorities should identify priority areas for the provision of infrastructure.¹³ The

¹¹ NPPF para 157

¹² NPPF para 156

Infrastructure Delivery Study (IDS) will set out when and where infrastructure will need to be provided, the scale of funding needed to achieve this and potential sources of funding. The IDS will also identify infrastructure critical to the delivery of the Local Plan.

Funding Infrastructure and services

- 12.44 Infrastructure provision will be funded through a number of sources. Mainstream funding, such as Council capital programmes, service providers investment programmes, and Government grant, will continue to provide for the bulk of infrastructure spending. However, other initiatives such as planning obligations and the Community Infrastructure Levy can provide a substantial resource for locally determined priorities.
- 12.45 As part of planning for infrastructure provision the Council needs to consider the role that developers can play in helping to provide the physical, social and green infrastructure that is required as a result of new growth. When planning permission is granted for new development the Council can seek contributions from developers towards a range of infrastructure – for example, school places, affordable housing and open spaces.
- 12.46 Traditionally, infrastructure funding has been secured from developers through legal agreements known as ‘planning obligations.’ Planning obligations (Section 106 Agreements or S106) are voluntary legal obligations attached to planning applications. A local planning authority normally requests a developer to enter into an obligation to mitigate the impacts of the development being proposed. Any S106 planning obligation must be:
- Necessary to make the development acceptable in planning terms;
 - Directly related to the development; and
 - Fairly and reasonably related in scale and kind to the proposed development.
- 12.47 More recently the Government has introduced the Community Infrastructure Levy (CIL). The CIL was introduced in the Planning Act 2008 and put into force by the Community Infrastructure Regulations 2010 on 6th April 2010. It replaces planning obligations for many forms of infrastructure, although planning obligations can still be used for site-specific mitigation measures and for affordable housing provision. The Government considers that the CIL is a more transparent and simple method of collecting funds for infrastructure to support development than the current system of planning obligations. The CIL Regulations restrict the use of planning obligations post 2014 to encourage local planning authorities to introduce a CIL.
- 12.48 From April 2014 planning obligations will be restricted to:
- Site-specific mitigation – for example local improvements/infrastructure necessary to enable the grant of planning permission. For example,

¹³ NPPF para. 21

access roads, on-site open space, archaeology, and some off-site requirements directly related to support individual sites.

- Affordable housing - Under the current CIL Regulations, planning obligations will continue to be used to secure affordable housing.
- Development-specific infrastructure on large development sites – Large strategic sites often necessitate the provision of their own development-specific infrastructure, such as primary schools.

12.49 The CIL takes the form of a standardised charge applied per square metre of new development. CIL allows local authorities in England and Wales to raise funds from developers via a charging schedule for a wide range of infrastructure. This includes transport schemes, flood defences, schools, hospitals and other health and social care facilities, parks, green spaces and leisure centres. CIL is intended to supplement (not replace) other funding streams. As outlined above a number of contributions will still be acquired through planning obligations. This Council is committed to taking CIL forward in parallel with the Local Plan.

12.50 The infrastructure needed to support new development must be provided in a timely and phased manner. As such, the policy option proposed continues the policy of seeking funding from developers for the provision of infrastructure requirements related to new developments. No other options have been presented, as it is not a reasonable alternative not to deliver infrastructure to support new development:

Option 201 – Provision of infrastructure and services

This option would allow for the development of a policy that requires that new development is supported by the provision of infrastructure and continue the policy of seeking funding from developers for infrastructure requirements related to new developments. This will be by means of either planning obligations and/or a future CIL.

Planning permission for new developments would only be granted where there are suitable arrangements for the improvement or provision and phasing of infrastructure, services and facilities necessary to make the scheme acceptable in planning terms.

Planning obligations and/or a future CIL could be required for the following:

- Transport infrastructure;
- Public transport;
- Drainage and flood protection;
- Waste recycling facilities;
- Education;
- Health care;
- Leisure and recreation facilities;

- Community and social facilities;
- Cultural facilities including public art;
- Emergency services;
- Green Infrastructure;
- Open space; and
- Affordable housing (currently excluded from CIL).

The above list is not exhaustive and there may be scope for requiring developer contributions towards a wider range of infrastructure measures. Contributions could also be used to secure ongoing maintenance where this is deemed appropriate.

Questions

- 12.39 Is there a need for a policy addressing this issue?
- 12.40 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?
- 12.41 Do you think there are any other reasonable alternatives that should be considered?

Appendix A: List of Evidence Studies

Completed Evidence Base

- 2012 Appraisal of the Inner Green Belt (March 2012)
- Annual Monitoring Reports (2005-2011) [here](#)
- Buildings of Local Interest [here](#)
- Cambridge Area Transport Study [here](#)
- Cambridge City and County Wildlife Sites Register – 2005 [here](#)
- Cambridge City Council – Sports Strategy 2009–2013 – 2009 [here](#)
- Cambridge City Council (2006) Nature Conservation Strategy [here](#)
- Cambridge Cluster Study 2011 [here](#) (& committee report [here](#))
- Cambridge Landscape Character Assessment 2003 [here](#)
- Cambridge Northern Fringe East Viability Study 2008 [here](#)
- Cambridge Sub Region Study 2001 [here](#)
- Cambridge Sub-Regional Retail Study 2008 [here](#)
- Cambridgeshire County Council Archaeology including the Historic Environment Record [here](#)
- Cambridgeshire Development Study 2009 [here](#)
- Cambridgeshire Gypsy & Traveller Needs Assessment 2011
- Cambridgeshire Horizons - An Arts and Culture Strategy For The Cambridge Sub Region – 2006 [here](#)
- Cambridgeshire Horizons - Major Sports Facilities Strategy – 2006 [here](#)
- Cambridgeshire Horizons, Investing in Zero Carbon Public Buildings 2011 (hard copy only)
- Cambridgeshire Renewable Infrastructure Framework 2012 [here](#) (& committee report [here](#))
- Cambridge Sub-regional Gypsy & Traveller Accommodation Needs Assessment (March 2012) [here](#)
- Conservation Area Appraisals, including Historic Core Appraisal and other information [here](#)
- Consultation and Community Engagement Strategy Committee Report November 2011 [here](#)
- Decarbonising Cambridge Study 2010 [here](#) (& committee report [here](#))
- Eastern Gate SPD 2011 [here](#) (& committee report [here](#))
- Economic Forecasts – Cambridge Econometrics (May 2012) [here](#)
- Economic & Population Forecasts Update – run of the East of England Forecasting Model (March 2012) [here](#)
- Employment Land Review 2008 [here](#)
- English Heritage At Risk [here](#)
- Genesis for Sport England – Cambridge City Council and South Cambridgeshire District Council: Sports Hall Assessment, Facilities Planning and Model Final Report – 2008a
- Genesis for Sport England – Cambridge City Council and South Cambridgeshire District Council: Swimming Pools Assessment, Facilities Planning Model Final Report – 2008b

- Green Infrastructure Strategy 2011 [here](#) (& committee paper [here](#))
- Gypsy & Traveller Provision in Cambridge – Site Assessment (2012)
- Informal Planning Policy Guidance on Foodstore Provision in North West Cambridge 2011 [here](#) (& committee paper [here](#))
- Inner Green Belt Boundary Study 2002 [here](#)
- Joint Statement on Strategic Planning in Cambridgeshire (2010) [here](#) (& committee report [here](#))
- Joint Working Committee Report February 2012 [here](#)
- Leisure and the Environment for Cambridge City Council: An Assessment of Open Space in Cambridge, Volume 1: Pitch Sports – 1999
- Leisure and the Environment for Cambridge City Council: Sports Provision in Cambridge – 2004 [here](#)
- Local Economic Assessment 2011 [here](#) (& committee report [here](#))
- Local Plan Review Committee Report March 2011 [here](#)
- Local Transport Plan 3 2011 [here](#) (& committee paper [here](#))
- Mill Lane SPD 2010 [here](#)
- North West Cambridge Supplementary Retail Study 2010 [here](#) (& committee paper [here](#))
- Open Space & Recreation Assessment 2011 [here](#) (& committee report [here](#))
- PMP for Cambridgeshire Horizons - Cambridge Community Stadium Feasibility Study – 2007 [here](#)
- Project Cambridge 2009 (committee report [here](#))
- South Cambridgeshire District Council Green Belt Study 2002 [here](#)
- Sport England – Planning Policy Statement: A Sporting Future for the Playing Fields of England – undated [here](#)
- Strategic Flood Risk Assessment 2010 [here](#) (& committee report [here](#))
- Strategic Housing Land Availability Assessment (end March 2012) draft report and committee report [here](#)
- Strategic Housing Market Assessment 2008, with annual updates [here](#)
- Suburbs & Approaches Studies [here](#):
 - Barton Road - March 2009
 - Huntingdon Road - March 2009
 - Madingley Road - March 2009
 - Newmarket Road - October 2011
- Sustainability Appraisal Scoping Report (out for consultation [here](#)) & committee report [here](#)
- Water Cycle Strategy Phase 1 & 2 2011 [here](#) (& committee report [here](#) & [here](#))
- Workshop Reports [here](#)

Evidence base – Ongoing

Estimated Completion dates are in parentheses

- A14 Headroom Study (Spring / Summer 2012)
- A14 Highways Agency Study (Spring / Summer 2012)
- Cambridge Public House Study (2012)
- Carbon Offset Fund (2012)
- Canopy Cover Project
- Density work (2012 ongoing)
- Gypsy & Traveller Provision in Cambridge – Site Assessment (2012)
- Hotel Needs Assessment (2012)
- Infrastructure Study (June 2012)
- Language Schools Survey
- Local, District & City Centre Surveys (October 2012)
- Merton Rule Study (Summer 2012)
- Review of Cycle & Car Parking Standards (2012)
- Space Standards Assessment (2012 ongoing) - Technical in house information
- Update to Cambridge Landscape Character Assessment
- Update to the Employment Land Review (2012)
- Update to the Retail Study

Appendix B: Current Hierarchy of Centres

1 - City Centre

2 - District Centres

- Mill Road East
- Mill Road West
- Mitcham's Corner

3 – Local Centres

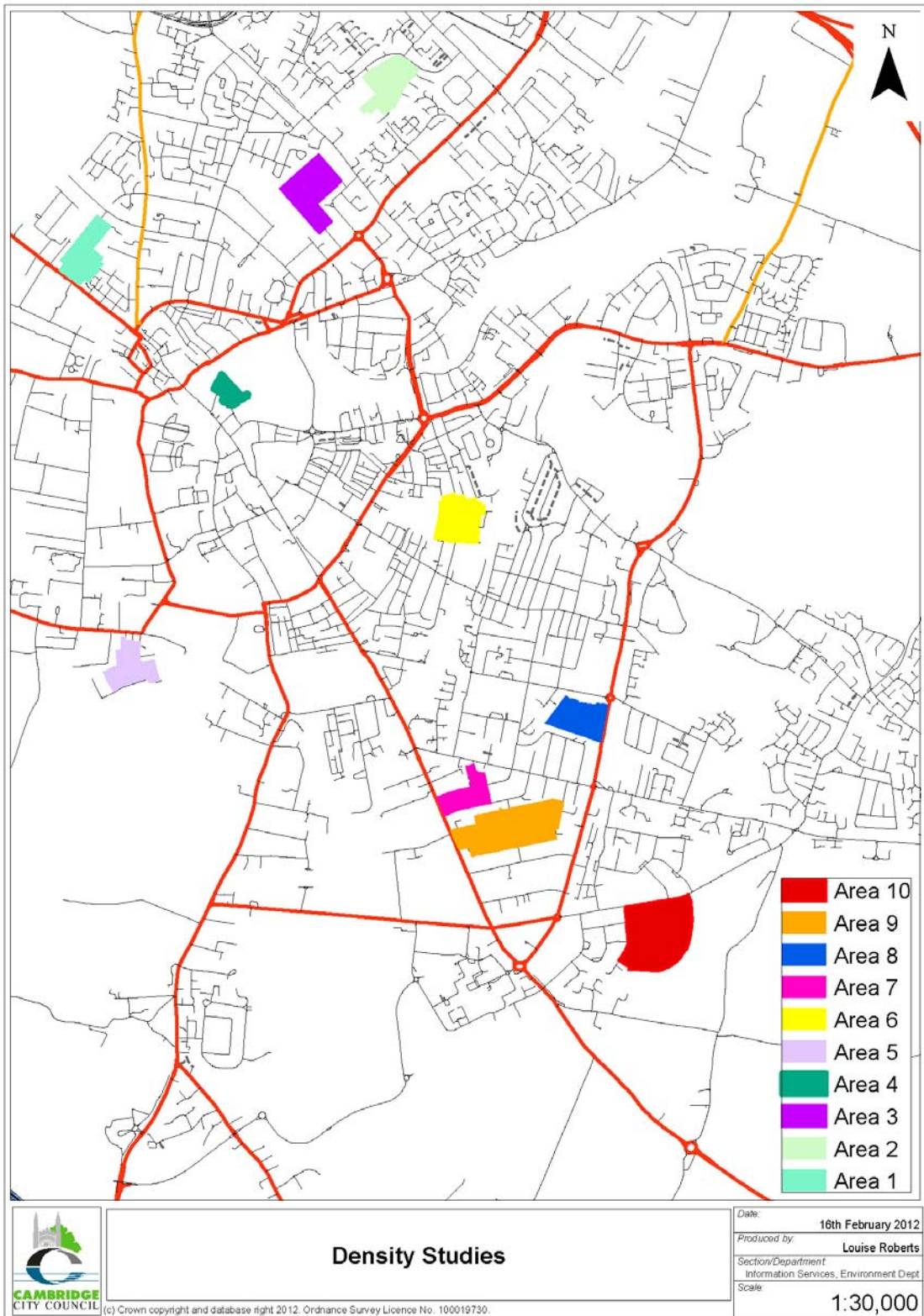
- Adkins Corner
- Akeman Street
- Arbury Court
- Arbury road / Milton Road
- Barnwell Road
- Campkin Road
- Cherry Hinton High Street
- Cherry Hinton Road East
- Cherry Hinton Road West
- Chesterton High Street
- Ditton Lane
- Fairfax Road
- Grantchester Street
- Green End Road
- Hills Road
- Histon Road
- King's Hedges Road
- Newnham Road
- Norfolk Street
- Trumpington
- Victoria Road
- Wulfstan Way

Appendix C: Urban Densities

Table C.1: Density study areas

Area (see Figure C.1 overleaf)	Location	Description	Dwelling numbers	Area (Ha)	Net Density – dwellings per hectare
1	Castle Ward – Richmond Road area	Victorian Terraces	349	7.48	47
2	Kings Hedges Ward – Hawkins Way area	1960s Terraces	268	8.15	33
3	West Chesterton Ward – Orchard Avenue area	1930s semi-detached	178	9.3	19
4	Market Ward – Portugul Street area	Victorian terraces	133	2.95	63
5	Newnham Ward – Granchester Street	Victorian terraces	332	6.62	50
6	Petersfield Ward – Sturton Street area	Victorian terraces	507	8.39	60
7	Queen Ediths Ward – Hartington Grove area	Victorian terraces and semi-detached	200	5.58	36
8	Coleridge Ward – Langham Road area	Inter-war semi-detached	190	7.14	27
9	Queen Edith Ward – Hills Avenue area	Inter-war terrace and detached	217	16.45	14
10	Queen Edith Ward – Netherhall Way area	1950/1960s semi, terraced and detached	251	17.76	14

Figure C.1: Density study areas



Appendix D: Space Standards

Homes and Communities Agency (HCA) Housing Quality Indicators (HQIs)

The space standards below are taken from the Housing Quality Indicators (HQI) Form

Version 4 updated April 2008, which is available to download from

http://www.homesandcommunities.co.uk/sites/default/files/our-work/721_hqi_form_4_apr_08_update_20080820153028.pdf

Table D.1 Unit Size by Bedspace

Dwelling Type		Min (m ²)	Max (m ²)
1 Bedspace		30	35
2 Bedspace		45	50
3 Bedspace		57	67
4 Bedspace		67	75
5 Bedspace	1 Storey	75	85
5 Bedspace	2 Storey	82	85
5 Bedspace	3 Storey	85	95
6 Bedspace	1 Storey	85	95
6 Bedspace	2 Storey	95	100
6 Bedspace	3 Storey	100	105
7 Bedspace	2+ Storey	108	115
7+ Bedspace (add 10 sq m per bedspace)			

Bedspace - defined as the number of occupants the dwelling was designed to accommodate. For example, a three-bedroom house with one double bedroom, one twin bedroom and a single bedroom has 5 bedspaces. A 5 bedroom house with two double bedrooms, one twin bedroom, and two single bedrooms has 8 bedspaces.

Units by living spaces

New residential units to provide at least the number of rooms required for each unit size as set out in the table below.

Required Living Spaces	Bedspaces							
	1	2	3	4	5	6	7	8+
Bedroom	1	1	2	2	3	3	4	4+
Bathroom	1	1	1	1	1	1	1	1+
WC#	1	1	1*	1*	2	2	2	2+
Kitchen	1	1	1	1	1	1	1	1
Living Room	1	1	1	1	1	1	1	1
Dining Space	1	1	1	1	1	1	1	1

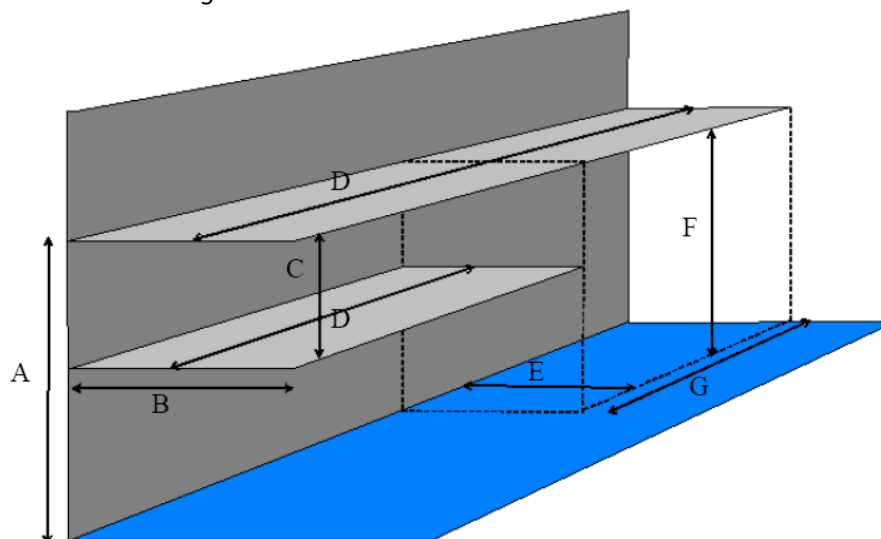
Separate of within a bathroom

* Two Wcs required for 3 bedspace or 4 bedspace when on two floors

Internal Storage Requirements

All new residential units to meet the internal storage requirements below:

General Normal Storage



1. Shelf width (B) should be a minimum of 0.3m.
2. The height between shelves © should be a minimum of 0.3m.
3. B x D (D being the total length of shelving in the unit) should be at least the minimum shelf area identified for the number of bedspaces (see table below)
4. Height A (i.e the height of the highest shelf should be no grater than 1.5m

General normal storage minimum shelf area by bed space (m ²)	1bs	2bs	3bs	4bs	5bs	6bs	7bs	8+bs
	1.5	1.5	2.25	3.0	3.75	4.5	5.25	+0.75 for each additional bedspace

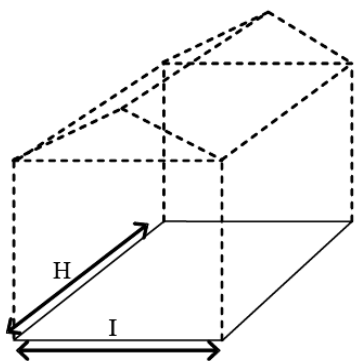
Tall storage – to be provided in addition to General Normal Storage

1. Height F (i.e the height of the lowest shelf in the area designated for tall storage) should be at least 1.5m.
2. The floor area (E x G) should be at least 0.5m².

Airing Cupboard

1. There should be shelving located inside an airing cupboard where the shelf area (B x D - where D is the total length of airing cupboard shelving) should be at least 0.4m²
2. This may be counted towards general normal storage.

External Storage Requirements (not applicable to flats without gardens)



All new residential units to meet the external storage requirements set out below.

1. This storage should be lockable
2. For units with 1-4 bed spaces floor area ($H \times I$) should be equal to or greater than 2.2m²
3. For units with greater than 4 bed spaces the floor area ($H \times I$) should be equal to or greater than 3.0 m²
4. Where a garage is provided the external storage requirement may be deemed satisfied.
5. This cannot be counted towards the internal storage requirements.

Greater London Housing Design Guide - Dwelling Space Standards

Dimensions derive from an inventory of required furniture as well as space needed for activities, access around furniture and Lifetime Homes Standards. These standards are currently only applicable to publically funded housing.

The London Housing Design Guide is available to download from

http://www.lda.gov.uk/Documents/London_Housing_Design_Guide_interim_August_2010_9460.PDF

The new mandatory minimum space standards are intended to ensure that all new homes in London are fit for purpose and offer the potential to be occupied over time by households of all tenures. The minimum gross internal floor area (GIA) required for any given dwelling type relates to the following variables:

- The number of people for whom the home has been designed (equivalent to the number of bedspaces it provides - typically 2-8)
- The number of bedrooms it provides (typically 1-5)
- The number of storeys it contains (typically 1-3)

To ensure that all future homes will be comfortable when occupied to their full potential under any tenure, four principals apply:

- Each home of for two of more people should contain at least one double/twin bedroom.

- Each single bedroom should provide one adequate bedspace (a floor area of 8 sq m is considered the desirable minimum).
- Each double/twin room should provide one adequate bedspace (a floor area of 12 sq m is considered the desirable minimum).
- All bedspaces should be counted when declaring the potential occupancy level of the dwelling.

The following table forms a summary of the space standards outlined in the London Housing Design Guide from Chapter 4.

Note - 'Priority 1' standards must be met in full, while 'Priority 2' standards are strongly recommended as best practice but not required

4.0	London Housing Design Guide - Dwelling Space Standards	Priority 1	Priority 2																																						
4.1	Internal floor area																																								
4.1.1	<p>All developments should meet the following minimum space standards.</p> <table border="1" data-bbox="236 902 1075 1697"> <thead> <tr> <th data-bbox="236 902 483 1014"></th> <th data-bbox="483 902 727 1014">Dwelling type (bedroom/persons)</th> <th data-bbox="727 902 1075 1014">Essential GIA (sq.m)</th> </tr> </thead> <tbody> <tr> <td data-bbox="236 1014 483 1339" rowspan="7">Single storey dwelling</td> <td data-bbox="483 1014 727 1055">1b2p</td> <td data-bbox="727 1014 1075 1055">50</td> </tr> <tr> <td data-bbox="483 1055 727 1095">2b3p</td> <td data-bbox="727 1055 1075 1095">61</td> </tr> <tr> <td data-bbox="483 1095 727 1135">2b4p</td> <td data-bbox="727 1095 1075 1135">70</td> </tr> <tr> <td data-bbox="483 1135 727 1176">3b4p</td> <td data-bbox="727 1135 1075 1176">74</td> </tr> <tr> <td data-bbox="483 1176 727 1216">3b5p</td> <td data-bbox="727 1176 1075 1216">86</td> </tr> <tr> <td data-bbox="483 1216 727 1256">3b6p</td> <td data-bbox="727 1216 1075 1256">95</td> </tr> <tr> <td data-bbox="483 1256 727 1339">4b5p</td> <td data-bbox="727 1256 1075 1339">90</td> </tr> <tr> <td data-bbox="236 1339 483 1552" rowspan="5">Two storey dwelling</td> <td data-bbox="483 1339 727 1379">4b6p</td> <td data-bbox="727 1339 1075 1379">99</td> </tr> <tr> <td data-bbox="483 1379 727 1420">2b4p</td> <td data-bbox="727 1379 1075 1420">83</td> </tr> <tr> <td data-bbox="483 1420 727 1460">3b4p</td> <td data-bbox="727 1420 1075 1460">87</td> </tr> <tr> <td data-bbox="483 1460 727 1500">3b5p</td> <td data-bbox="727 1460 1075 1500">96</td> </tr> <tr> <td data-bbox="483 1500 727 1541">4b5p</td> <td data-bbox="727 1500 1075 1541">100</td> </tr> <tr> <td data-bbox="236 1552 483 1697" rowspan="3">Three storey dwelling</td> <td data-bbox="483 1541 727 1581">4b6p</td> <td data-bbox="727 1541 1075 1581">107</td> </tr> <tr> <td data-bbox="483 1581 727 1621">3b5p</td> <td data-bbox="727 1581 1075 1621">102</td> </tr> <tr> <td data-bbox="483 1621 727 1662">4b5p</td> <td data-bbox="727 1621 1075 1662">106</td> </tr> <tr> <td data-bbox="483 1662 727 1697">4b6p</td> <td data-bbox="727 1662 1075 1697">113</td> </tr> </tbody> </table> <p data-bbox="236 1733 1166 1803">For dwellings designed for more than 6 people, at least 10 sq m gross internal area should be added for each additional person.</p>		Dwelling type (bedroom/persons)	Essential GIA (sq.m)	Single storey dwelling	1b2p	50	2b3p	61	2b4p	70	3b4p	74	3b5p	86	3b6p	95	4b5p	90	Two storey dwelling	4b6p	99	2b4p	83	3b4p	87	3b5p	96	4b5p	100	Three storey dwelling	4b6p	107	3b5p	102	4b5p	106	4b6p	113	✓	
	Dwelling type (bedroom/persons)	Essential GIA (sq.m)																																							
Single storey dwelling	1b2p	50																																							
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	2b4p	83																																							
	3b4p	87																																							
	3b5p	96																																							
	4b5p	100																																							
Three storey dwelling	4b6p	107																																							
	3b5p	102																																							
	4b5p	106																																							
4b6p	113																																								

4.1.2	Dwelling plans should demonstrate that dwellings will accommodate the furniture, access and activity space requirements relating to the declared level of occupancy. Refer to appendix 3 for design standards for wheelchair accessible housing.	✓													
4.2 Flexibility and adaptability															
4.2.1	Dwelling plans should demonstrate that dwelling types provide flexibility by allowing for alternative seating arrangements in living rooms and by accommodating double or twin beds in at least one double bedroom.	✓													
4.3 Circulation in the home															
4.3.1	<p>The minimum width of hallways and other circulation spaces inside the home should be 900mm. This may reduce to 750mm at 'pinch points' e.g. next to radiators, where doorway widths meet the following specification:</p> <table border="1" data-bbox="236 837 1031 1057"> <thead> <tr> <th data-bbox="236 837 647 943">Minimum clear opening width of doorway (mm)</th> <th data-bbox="652 837 1031 943">Minimum approach width when approach is not head on (mm)</th> </tr> </thead> <tbody> <tr> <td data-bbox="236 949 647 983">750</td> <td data-bbox="652 949 1031 983">1200</td> </tr> <tr> <td data-bbox="236 990 647 1023">775</td> <td data-bbox="652 990 1031 1023">1050</td> </tr> <tr> <td data-bbox="236 1030 647 1064">900</td> <td data-bbox="652 1030 1031 1064">900</td> </tr> </tbody> </table> <p>Where a hallway is at least 900mm wide and the approach to the door is head-on, a minimum clear opening door width of 750mm should be provided [Lifetime Homes Criterion 6].</p>	Minimum clear opening width of doorway (mm)	Minimum approach width when approach is not head on (mm)	750	1200	775	1050	900	900	✓					
Minimum clear opening width of doorway (mm)	Minimum approach width when approach is not head on (mm)														
750	1200														
775	1050														
900	900														
4.3.2	The design of dwellings of more than one storey should incorporate potential for a stair lift to be installed and a suitable identified space for a through-the-floor lift from the entrance level= to a storey containing a main bedroom and an accessible bathroom [Lifetime Homes Criterion 12].	✓													
4.4 Living / kitchen / dining															
4.4.1	<p>The following combined floor areas for living / kitchen / dining space should be met:</p> <table border="1" data-bbox="236 1583 1153 1877"> <thead> <tr> <th data-bbox="236 1583 695 1688">Designed level of occupancy</th> <th data-bbox="700 1583 1153 1688">Minimum combined floor area of living, dining and kitchen spaces (sq m)</th> </tr> </thead> <tbody> <tr> <td data-bbox="236 1695 695 1729">2 person</td> <td data-bbox="700 1695 1153 1729">23</td> </tr> <tr> <td data-bbox="236 1736 695 1769">3 person</td> <td data-bbox="700 1736 1153 1769">25</td> </tr> <tr> <td data-bbox="236 1776 695 1809">4 person</td> <td data-bbox="700 1776 1153 1809">27</td> </tr> <tr> <td data-bbox="236 1816 695 1850">5 person</td> <td data-bbox="700 1816 1153 1850">29</td> </tr> <tr> <td data-bbox="236 1856 695 1890">6 person</td> <td data-bbox="700 1856 1153 1890">31</td> </tr> </tbody> </table>	Designed level of occupancy	Minimum combined floor area of living, dining and kitchen spaces (sq m)	2 person	23	3 person	25	4 person	27	5 person	29	6 person	31	✓	
Designed level of occupancy	Minimum combined floor area of living, dining and kitchen spaces (sq m)														
2 person	23														
3 person	25														
4 person	27														
5 person	29														
6 person	31														
4.4.2	The minimum width of the main sitting area should be 2.8m in 2-3 person dwellings and 3.2m in dwellings designed for four or more people.	✓													

4.4.3	Dwellings with three or more bedrooms should have two living spaces, for example a living room and a kitchen-dining room. Both rooms should have external windows. If a kitchen is adjacent to the living room, the internal partition between the rooms should not be load-bearing, to allow for reconfiguration as an open plan arrangement. Studies will not be considered as second living spaces.		✓
4.4.4	There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchairs elsewhere [Lifetime Homes Criterion 7].	✓	
4.4.5	A living room, living space or kitchen-dining room should be at entrance level [Lifetime Homes Standard 8].	✓	
4.4.6	Windows in the principal living space should start 800mm above finished floor level (+/- 50mm) to allow people to see out while seated. At least one opening window should be easy to approach and operate by people with restricted movement and reach. [Lifetime Homes Criterion 15].	✓	
4.5	Bedrooms		
4.5.1	The minimum area of a single bedroom should be 8 sq m. The minimum area of a double or twin bedroom should be 12 sq m.		✓
4.5.2	The minimum width of double and twin bedrooms should be 2.75m in most of the length of the room.		✓
4.5.3	In homes of two or more storeys with no permanent bedroom at entrance level=, there should be space on the entrance level that could be used as a convenient temporary bed space [Lifetime Homes Criterion 9].	✓	
4.5.4	Structure above a main bedroom and an accessible bathroom should be capable of supporting a ceiling hoist and the design should allow for a reasonable route between this bedroom and bathroom [Lifetime Homes Criterion 13].	✓	
4.6	Bathrooms and WCs		
4.6.1	Dwellings designed for an occupancy of five or more people should provide a minimum of one bathroom with WC and one additional WC.		✓
4.6.2	Where there is no accessible bathroom at entrance level=, a wheelchair accessible WC with potential for a shower to be installed should be provided at entrance level ∞ [Lifetime Homes Criterion 10].	✓	
4.6.3	An accessible bathroom should be provided in every dwelling on the same storey as a main bedroom [Lifetime Homes Criterion 14].	✓	
4.6.4	Walls in bathrooms and WCs should be capable of taking adaptations such as handrails †† [Lifetime Homes Criterion 11].	✓	
4.7	Storage and utility		
4.7.1	Built-in general internal storage space free of hot water cylinders and other obstructions, with a minimum internal height of 2m and a minimum area of 1.5 sq m should be provided for 2 person dwellings, in addition to storage provided by furniture in habitable rooms. For each additional occupant an additional 0.5 sq m of storage space is required.	✓	
4.8	Study and work		
4.8.1	Dwelling plans should demonstrate that all homes are provided with adequate space and services to be able to work from home. The Code for Sustainable Homes guidance on working from home is recommended as a reference.	✓	

4.8.2	Service controls should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner [Lifetime Homes Criterion 16].	✓	
4.9	Wheelchair user dwellings		
4.9.1	Ten percent of new housing should be designed to be wheelchair accessible or easily adaptable for residents who are wheelchair users in accordance with the GLA Best Practice Guide, for Wheelchair Accessible Housing. Refer to appendix 3 for design standards for wheelchair accessible housing.	✓	
4.10	Private open space		
4.10.1	A minimum of 5 sq m of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sq m should be provided for each additional occupant.	✓	
4.10.2	Private outdoor spaces should have level access from the home ‡ [Lifetime Homes Criterion 4].	✓	
4.10.3	The minimum depth and width of all balconies and other private external spaces is 1500mm.	✓	

* In the Lifetime Homes Criteria a stair providing easy access is defined as one having maximum risers of 170mm, minimum goings of 250mm and a minimum width of 900mm measured 450mm above the pitch line.

= In the Lifetime Homes Criteria the entrance level of a dwelling is generally deemed to be the storey containing the main entrance door. Where there are no rooms on the storey containing the main entrance door (e.g. flats over garages or shops and some duplexes and townhouses) the first storey level containing a habitable or non-habitable room can be considered the entrance level, if this storey is reached by a stair providing 'easy access', as defined above.

‡ Balconies and terraces over habitable rooms which require a step up to increase slab thickness / insulation are exempt from the Lifetime Homes level access standard.

∞ Dwellings over more than one storey with no more than two bedrooms may instead be designed with a Part M compliant WC at entrance level. The WC should provide a floor drain to allow for an accessible shower to be installed at a later date.

†† Adequate fixing and support for grab rails should be available at any location on all walls within a height band of 300mm - 1800mm from the floor.

Mid Sussex Dwelling Space Standards Supplementary Planning Document

The Mid Sussex Dwelling Space Standards are based on the standards originally adopted by English Partnerships and include space standards for the minimum Internal floor areas for whole dwellings and minimum floor areas for storage. The standards apply to both affordable and market housing.

The Space Standards SPD can be downloaded from the following link
http://www.midsussex.gov.uk/media/Space_Standards_SPD_v2.pdf

Minimum Internal Floor Area for Whole Dwelling and Minimum Floor Area for Storage (Net)

Number of bedrooms/type of dwelling	Minimum internal floor Space Standards (sq m)	Minimum Storage Space Standard within or adjacent to the dwelling (sq m)
Studio Flat	32.5	1.5
One Bedroom Flat	51	2.5
Two Bedroom Flat	66	3.5
Two Bedroom Wheelchair Flat	71	3.5
Two Bedroom House	77	3.75
Three Bedroom Dwelling	93	4.5
Four Bedroom Dwelling	111	5.5

Note – Minimum standards for storage space apply for the provision of waste and recycling storage.

Subdivision and Conversions

‘The Council will require all dwellings created through subdivision and conversion to meet the standards set out above. However, in exceptional circumstances, where it can be argued that the existing building is suitable for subdivision/conversion but that its internal form or special features prevent some of the requirements being met, some flexibility will be given’. (para 3.3)

Private Amenity Space

‘The planning authority will normally require the provision of useable private amenity space (excluding parking and turning areas) in new residential development. In considering the amount of amenity space, the planning authority will take into account front gardens, back gardens, roof terraces, balconies and, in flatted developments, communal gardens’. (para 3.4)

English Partnerships (now part of the HCA) Quality Standards November 2007 (Space Standards, p16)

English Partnerships introduced minimum space standards for homes so that they appeal to and meet the needs of different generations and be more sustainable in future housing markets.

The standards set minimum acceptable internal floor area (MIFA) in relation to bedrooms and occupancy as shown in the table below.

Bedrooms/Bedspaces	MIFA (metre square)
1 bed/2 person dwelling	51
2 bed/3 person dwellings	66
2 bed/4 person dwellings	77
3 bed/5 person dwellings	93
4 bed/6 person dwellings	106

In addition, English Partnerships stipulate the following should be provided:

- A single bedroom in 3 and 5 person dwellings without compromising the functionality of living space;
- A minimum of 5% of the MIFA to be devoted to storage, within or adjacent to the dwelling;
- Access to a private outdoor space that enhances the use of the dwelling (including gardens, terraces and balconies);
- Rooms of a sufficient size to allow each to function in relation to its defined use, and the ability to sub-divide multifunctional rooms (where they are provided);
- Other requirements concern exploiting volume in dwellings through increased floor to ceiling heights and coplanar ceilings, and the variety of housing opportunities/dwelling types to be provided.

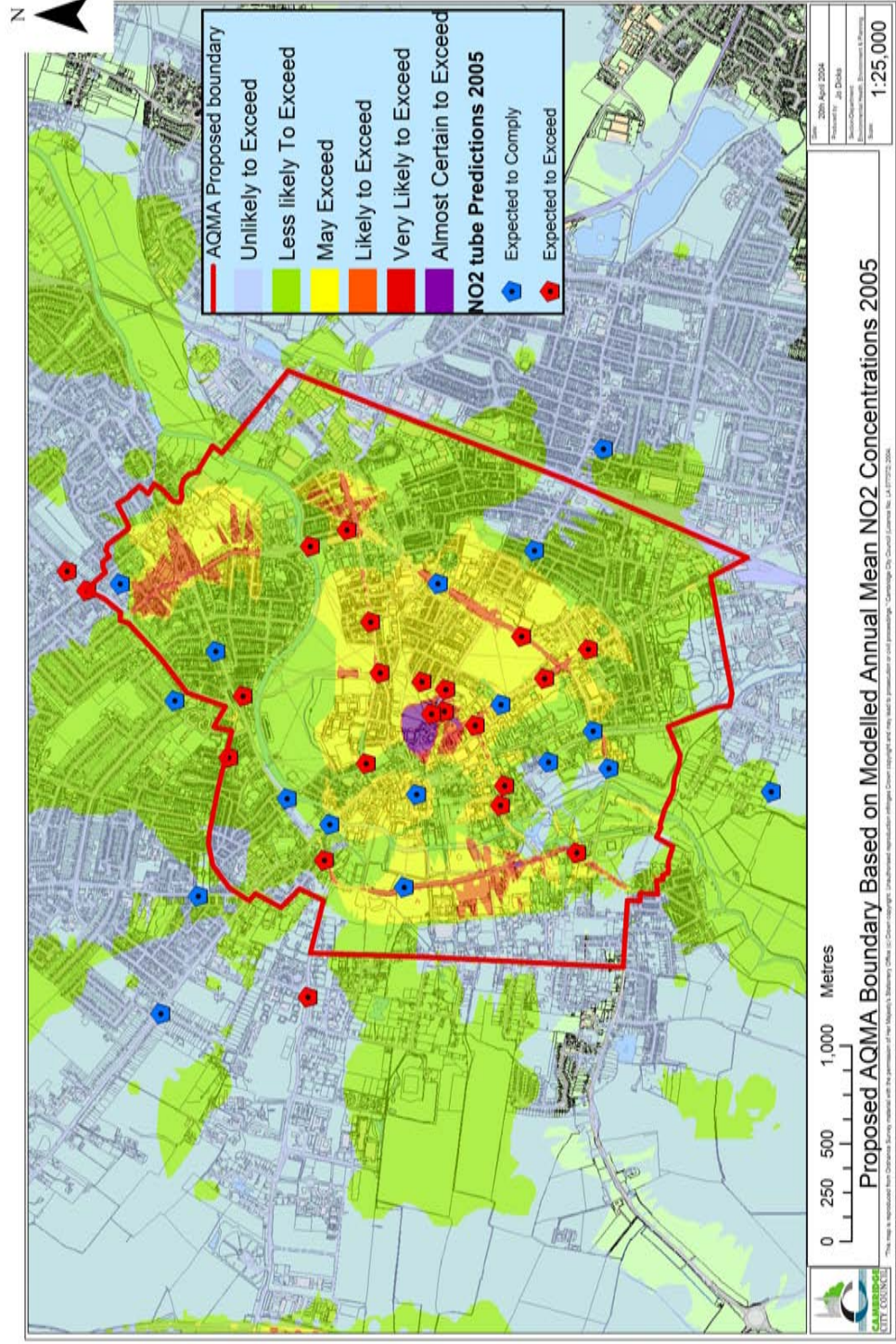
Ashford Borough Council Residential Space and Layout SPD

The table below summarises the minimum space standards for individual private open space from page 28 of the Ashford Borough Council Residential Space Standards SPD. The SPD can be downloaded from the following link http://www.ashford.gov.uk/pdf/ADOPTED%20VERSION%20Residential_Space_and_Layout_SPD.pdf

Minimum sizes for individual private open spaces (not overlooked from the road or other public spaces) – Flats and Houses – Essential minimum Standards.			
Number of occupants	Minimum depth of balconies	Minimum area of private outdoor space per flat (Balcony or roof garden)	Minimum depth of private garden area for houses of ground floor flats (the width would normally be the width of the dwelling)
2 person	1.5m	5m ²	10m
3 person	1.5m	6m ²	10m
4 person	1.5m	7m ²	10m
5 person	1.5m	8m ²	10m
6 person	1.5m	9m ²	10m

Appendix E: Figure E.1 Air Quality Management Area

Figure E_1 Air Quality Management Area



Appendix F: Criteria for Protecting Open Spaces

Historically, the Council has protected open spaces for environmental and/or recreational importance. In addition to assessing all sites against the established criteria for environmental and recreational importance, the recent audit work also includes a quality assessment of all sites. The criteria for both parts of the assessment are detailed in the following paragraphs. In visiting over 350 sites in Spring and Summer 2011, the four officers involved in the site visits assessed every site against the criteria listed below.

Environmental Importance

For a site to be important for environmental reasons, it must meet one of the criteria a to c below. The questions under each are used to assess whether open space meets that criterion.

a. Does the site make a major contribution to the setting, character, structure and the environmental quality of the City?

- i Does it make a major contribution to the setting of Cambridge?
- ii Does it have positive landscape features and/or a sense of place sufficient for it to make a major contribution to the character of the City?
- iii Is the site an important green break in the urban framework?
- iv Does it have significant historical, cultural or known archaeological interest?

b. Does the site make a major contribution to the character and environmental quality of the local area?

- i Does it have positive features such as streams, trees, hedgerows or meadowlands which give it a sense of place sufficient to make a major contribution to the character of the local area?
- ii Is it an important green break in the framework of the local area?
- iii Does it form part of a network of open spaces in the local area?
- iv Is it enjoyed visually on a daily basis from public places (e.g. footpaths, vantage points)?
- v Does it have local historical or cultural interest?

c. Does the site contribute to the wildlife value and biodiversity of the City?

- i Does it have any nature conservation designation?
- ii Is it adjacent to or an important link to sites with nature conservation designation?
- iii Does it contain important habitats or species sufficient to make it worthy of consideration for any nature conservation designation?
- iv Is it an important wildlife oasis in an area with limited wildlife value?

Recreational importance

For a site to be important for recreational reasons, it must meet criteria d. or e. below. The questions under each criteria are used to assess whether open space meets that criterion.

- d. Does the site make a major contribution to the recreational resources of the City as a whole?**
- i Is it of a size, quality and accessibility such that people would travel to use it for recreational purposes, no matter where they live, work or study in the City?
 - ii Is it an important part of the network of significant recreational open spaces?
 - iii Is it part of the sports provision which helps to meet demand from people throughout the City, no matter where they live, work or study?

Recreational resources of the City include playing fields used by colleges or sports clubs, school playing fields which are also used by sports clubs, commons and other recreation grounds which people would go out of their way to visit. Sites meet this criterion if they are part of the sports provision, which helps to meet demand from people throughout the City. An assessment of the supply and demand of sports pitches was carried out in 1999. This found that the supply of pitches in secure public use to be 0.8 hectares per 1,000 population. This is significantly below that required under the adopted open space standards. The assessment was updated in 2004 and this found that there had been very little change in participation rates. There has also been little change in the supply of pitches. The significant deficit is not always as problematic as would be expected due to the fact that some of the additional demand is met through the use of pitches not subject to community use agreements, particularly through the University sector. Therefore, all pitches not in secure public use, excluding those associated with primary schools which are not used by outside clubs, would meet this criterion and are still protected, as they help to meet demand from people throughout the City.

If a Protected Open Space is only important for the contribution it makes to the recreational resources of the City (criterion d), development of the site may be acceptable if an improvement to open spaces, sports and recreational facilities would be achieved through replacement provision. The new land or facility should be at least as accessible to current and potential new users and at least of equivalent size, usefulness, attractiveness and quality. Planning obligations should be used to secure the replacement provision and ensure public access to this land. It can prove difficult to achieve replacement provision within Cambridge's administrative boundaries, due to constraints on the availability and cost of large sites. The onus is on the applicant to show that the options for acceptable replacement provision have been thoroughly investigated. This evidence should form part of the planning submission.

- e. Does the site make a major contribution to the recreational resources of the local area?**

- i Is it of a size and accessibility such that people who live, work or study in the local area do or could use it for recreational purposes?
- ii Is it an important part of the network and hierarchy of recreational facilities in the local area?
- iii Is it a significant linkage between recreational areas?

Appendix G: Application of the Open Space and Recreation Standards

The standards are applicable to all new residential units created as a result of development regardless of whether they result from new-build or conversions. Where the proposal relates to the conversion of existing residential properties to create additional bedrooms or the redevelopment of an existing residential site, the open space standards will be applied to the number of additional bedrooms created.

The number of people is taken to be the same as the number of bedrooms, except for one-bedroom units, which will be assumed to have 1.5 people. Certain types of housing will not always need to meet the full standard, as shown in Table F.1.

Example 1, for a residential conversion:

Original development 1 x 4 bedroom house, converted to create 4 x 1 bedroom flats
 The number of gross bedrooms created = 4 x 1.5 people = 6 bedrooms
 = 6 bedrooms minus 4 bedrooms = 2 net additional bedrooms are created and applicable to the Open Space and Recreation Standards.

Example 2, for a residential redevelopment:

Original development 1 x 4 bedroom house, demolished and 4 x 2 bedroom houses built
 The number of net units 4 – 1 = 3 net units x 2 bedrooms = 6 bedrooms
 = 6 net additional bedrooms are created and applicable to the Open Space and Recreation Standards.

Table F.1: Application of the Open Space and Recreation Standards

	Private Residential/ Housing Association	Retirement housing ⁺	Non family Student housing	Family student housing
Outdoor Sports Facilities	Full provision	Full provision	Full provision *	Full provision *
Indoor Sports Facilities	Full provision	Full provision	Full provision *	Full provision *
Provision for Children and Teenagers	Full provision [#]	No provision	No provision	Full provision ^{**}
Informal Open Space	Full provision	Full provision	Full provision ^{**}	Full provision ^{**}
Allotments	Full provision	Full provision	No provision	No provision

[#] Children's Play Areas will not normally be sought for those parts of developments consisting of one bedroom units.

+ Retirement housing is any accommodation in Class C3 where there is an age restriction of over 55. The standards do not apply to nursing homes within Class C2.

* Full Provision will not be sought if the accommodation is directly linked to a College by a Section 106 agreement and it can be shown that adequate provision of outdoor or indoor sports facilities is made by that college. Although such provision will not meet the definition of public space, it is accepted that if adequate provision is made by the College, students will be unlikely to use public sports facilities.

** Full provision will not be sought if the development is on a college campus and it can be shown that adequate appropriate open space is provided by the college such that students are unlikely to make significant use of other informal open space.

The open space requirement for other specialist housing will be considered on its merits, taking into account the needs arising from that development. When considering how to apply the standards, consideration should first be given to how much provision can be made on site for each type of open space. Guidelines for this are set out in Table H.1, in Appendix H.

For each type of open space or recreation provision, the following factors should be taken into account:

- a. the size and character of the proposed development;
- b. townscape considerations;
- c. its location in relation to adjacent housing and existing open space; and
- d. opportunities for creating or improving open space and recreation provision nearby.

The standards are based on specific types of open space. However, consideration should be given to including other types of open space and recreation provision and these could help to meet the standards. The maintenance of any open space provided by developers should be secured through the Section 106 agreement for the site.

Any shortfall in on site provision should be met through a financial contribution, based on the cost of providing and, where appropriate, maintaining that type of open space or recreation facility. This will be spent to benefit residents of the new development using the accessibility standards for the different types of provision given above. This will ensure that additional housing contributes towards improving existing provision to meet the additional demands put on them.

Contributions can be spent on new provision or improvements to existing facilities. The urban extensions provide opportunities to include a significant level of publicly accessible open space, which could not be achieved through individual developments in the existing built-up area of the City.

Appendix H: Location guidance for different types of open space provision

There are opportunities for new provision of and improvements to existing open space, within new housing sites and within and associated with urban extensions, including within the Green Belt.

The table below gives an indication of where provision should be made and opportunities sought for the different types of provision. This shows whether they should be located within smaller housing sites, within established open space, within existing built up areas, in urban extensions or within the Green Belt.

In new development, the standards should guide the amount of land given over to the different types of open space. Flexibility should be used in considering the layout and design of the spaces to ensure they will meet the needs of potential users in the best way. Consideration should also be given to providing different types of recreation provision if it is considered that there is a demand for facilities not specifically mentioned in the standards.

Table H.1: The provision of open space and recreation facilities

Type of provision	Guidance
Outdoor Sports Facilities	
Grass Pitches	Provision should be within urban extensions and/or in the Green Belt. Pitches should be grouped to allow flexibility of use. More intensively used pitches and floodlit pitches should be either in the built up area or close to the built up area. Sites should be planned to encourage shared use, and biodiversity at the edges. Pitches should have access to ancillary facilities on site in order to improve levels of use.
Artificial Turf Pitches	At least one fully serviced ATP will be required to serve the expanding City, likely to be located in Cambridge East or the Southern Fringe. New ATPs should be located within the urban extensions, unless there is also scope to enhance an existing pitch within the City without unacceptable impacts on the local environment. ATPs should have access to ancillary facilities on site in order to improve levels of use.
Tennis Courts	These should be provided on existing open spaces, included within larger housing developments, or within urban extensions.
Bowling Green	At least one new bowling green will be required to serve the expanding City, likely to be located in Cambridge East. This should be located within the urban extensions.
Indoor Sports Facilities	At least one new swimming pool will be required to serve the expanding City. Sports halls should be incorporated within the urban extensions and other major housing development as appropriate.

Where more than 1 hectare of formal outdoor space is provided it is important that sufficient ancillary facilities are provided (e.g. changing rooms and car parking) and clustered together. In the example of an urban extension, one large changing facility close to all pitches is preferred rather than several single changing room facilities for each pitch spread around an urban area.

Provision for Children and Teenagers	
Toddler Play Area (LAP)	These should be provided on existing open spaces within housing areas to meet existing deficits, included within housing developments over approximately 25 units, on existing open space and as part of other open space provision within urban extensions.
LEAP	These should be provided on existing open spaces within housing areas to meet existing deficits, included within larger housing developments over approximately 100 units and within other open spaces as above.
NEAP	These should be provided on existing open spaces to meet existing deficits, included within urban extensions.
Youth provision	These should be provided on existing open spaces to meet existing deficits, included within larger housing developments, and within urban extensions. Although a site area of 0.3 hectares is required for a full suite of facilities, where this is not possible consideration should be given to including facilities on smaller areas.
Informal Open Space	
Informal Activity Area	These should be provided on existing open spaces, included within housing developments over 10 units, and as part of other open space provision within urban extensions and in the Green Belt. They should often be provided in association with Toddler Play Areas.
Informal Playspace	These should be provided within housing developments over 25 units. In the urban extensions, it may be appropriate to locate them to be on the edge of the Green Belt.
Urban Parks	These should be provided within urban extensions.
Natural and Semi natural Greenspaces	Opportunities should be sought to increase the provision of these on existing open spaces. Small areas should be included within most housing developments. Larger areas should be provided within urban extensions and in the Green Belt.
Allotments	These should be provided within the urban extensions and within the existing built-up area.

Appendix I: List of Safeguarded Public House Sites

The following is a list of all of those existing and former public houses to be safeguarded. The addresses of these public houses are listed in the Cambridge Public House Study (2012) and in the Interim Planning Policy Guidance on The Protection of Public Houses in the City of Cambridge (2012).

Public house sites that provide an important Local Community Facility in Suburban Areas

The Unicorn (Trumpington)	Milton Arms	The Brook
Red Bull	Jenny Wren	The Ranch
Six Bells	Carlton Arms	The Unicorn (Cherry Hinton)
Dobblers Inn	Green Man	Royal Standard
Earl of Beaconsfield	The Med	Haymakers
The Corner House	Seven Stars	Queen Edith
Green Dragon	Red Lion	Golden Pheasant
Portland Arms	The Tally Ho	The Grove
The Tivoli	The Ship	Rose & Crown
Robin Hood	Golden Hind	Five Bells (Newmarket Road)
The Rock	Panton Arms	
	The Alma	

Pub Sites within edge of city clusters providing an important city-wide economic and local community function

Maypole	The Empress	Salisbury Arms
County Arms	Live & Let Live	Waterman
The Emperor	Sir Issac Newton	The Grapes
Castle Inn	The White Swan	Panton Arms
St Radegund	Hopbine	The Alma
Baron of Beef	The Old Spring	The Brook
Champion of the Thames	The Geldhart	The Ranch
King Street Run	Devonshire Arms	The Free Press
The Flying Pig	Cambridge Blue	Zebra
Osbourne Arms	Kingston Arms	Carpenters Arms
Burleigh Arms	Tram Depot	St Johns Chophouse
The Bakers	Alexandra Arms	Meghana (former Blackamoors Head)
Snug (East Road)	The Punter	Tang (former Ancient Druids)
The First & Last	The Mitre	
	Elm Tree	

City centre or riverside pubs and bars providing an important economic and tourist function

The Bath House	The Cow	Pickerill Inn
The Mill	Eagle	Revolution Bar
Baroosh	The Castle	Slug & Lettuce
Earl of Derby	The Jolly Scholar	d'Arry's Cookhouse
Prince Regent	Regal	Japas (former Cross Keys)
The Fountain	The Anchor	Henry's
The Snug (Lensfield Road)	Great Northern	Old Orleans
All Bar One	Fort St George	
Boathouse	The Avery	
	The Granta	

Pubs not included within the above and why

Penny Ferry – appeal allowed for redevelopment
Greyhound – severed from local catchment
Rosemary Branch – small local catchment
Fleur de Lys – permission for redevelopment
Hat & Feathers – redeveloped
Jubilee – redeveloped
Cow & Calf – redeveloped
Duke of Argyle – redeveloped
Five Bells (Cherry Hinton) – permission for redevelopment
Travellers Rest – small local catchment

Appendix J: Car Parking Standards

1. Introduction

The standards set out in this document define the maximum levels of car parking that Cambridge City Council, as a Local Planning Authority, will permit for various types of development in different areas of the City. These levels should not be exceeded but may be reduced where lower car use can reasonably be expected.

Car parking standards are defined for most uses. However for some land use types whose transport patterns are difficult to generalise (for instance hospitals) it is not possible to establish general parking standards. For these very specific uses car parking provision will be approved on merit, on the basis of a Transport Assessment and negotiation.

Application of the Standards

Parking for disabled people will be required for their exclusive use at all sites by applying the ratios set out in Section 6. It should be noted that under the Disability Discrimination Act, it is the responsibility of site occupiers to ensure that adequate provision is made for the needs of disabled people.

The standards make a clear distinction between sites inside of and outside of the Controlled Parking Zone (CPZ). Within the CPZ, parking controls exist on all streets, and new developments will not usually be eligible for permits for on-street parking. It should be noted that near the CPZ boundary a site is deemed to be within the CPZ if its access point to the existing highway is within the CPZ.

Some developments may have an exceptional need for vehicle parking in addition to that specified in the standards. Where this can be shown to be necessary, either by the applicant or the Planning Authority, such parking should be provided in addition to that stated in the following sections. Such additional parking may be necessary where there will be shift-working staff and non-car travel options are not viable, for example. Preliminary discussions and/or Transport Assessments (when these are required by the Local Authority) will play a key role in demonstrating the need for any such additional parking.

The redevelopment of a site with an existing authorised level of car parking much higher than that specified in the following standards may be proposed. In such cases, the Planning Authority may consider allowing a level of car parking for the redevelopment that is higher than the standards, on the condition that parking is significantly reduced from the previous level.

Where reference is made to staff numbers, this relates to the typical number of staff working at the same time.

2. Residential Uses

A. RESIDENTIAL DWELLINGS

Table J.1 gives the car parking standards for residential uses. In addition to these ratios, provision should be made for visitors at the ratio of one space for every four units, provided that off-street car parking spaces resulting from the development would not be above 1.5 car parking spaces per dwelling, which is the maximum level permitted by PPG3. Visitor parking should be marked appropriately.

New developments do not qualify for residents' parking permits within the existing on-street parking scheme and an informative would be attached to any planning approval.

Table J.1: Residential Development

Dwelling Size	Inside CPZ	Outside CPZ
Up to 2 bedrooms	1 car parking space	1 car parking space
3 or more bedrooms	1 car parking space	2 car parking spaces

B. OTHER RESIDENTIAL DEVELOPMENTS

In addition to the application of the parking standards defined in Table I.2, covering the needs of residents, visitors and staff, developers should demonstrate that their proposal provides for any particular exceptional needs, such as service vehicles.

It is recognised that there is a functional difference between a development which is entirely or largely for student residential accommodation, and the non-residential elements of Colleges where there may be a variety of other uses including administrative and teaching activities. In these circumstances it may be appropriate to make additional car parking provision commensurate with the relevant standards for such uses as "offices" and "higher and further education".

Table J.2: Other Residential Developments

Type of Development	Inside CPZ	Outside CPZ
Guest houses and hotels	1 space for every 4 bedrooms and 1 space per resident staff.	2 spaces for every 3 bedrooms and 1 space per resident staff.
	Off-street coach parking to be conveniently located in relation to developments of 40 or more bedrooms. Where there are rooms specifically designed for people with disabilities, disabled parking of at least 1 space for each room so designed should be provided.	

Type of Development	Inside CPZ	Outside CPZ
Nursing homes	1 space for every 10 residents, 1 space for every 2 members of staff.	1 space for every 8 residents, 1 space for every 2 members of staff.
	Provision must be made for ambulance parking.	
Retirement homes/ sheltered houses	1 space for every 6 units, 1 space for every 2 members of staff.	1 space for every 4 units, 1 space for every 2 members of staff.
	Provision must be made for ambulance parking. A covered, enclosed area with electricity sockets needs to be provided for electric buggies.	
Student residential accommodation where proctorial control or alternative control on car parking exists	1 space for every 10 bed spaces. A pickup and drop-off area could also be included if appropriate to the particular proposed development.	1 space for every 10 bed spaces. A pickup and drop-off area could also be included if appropriate to the particular proposed development.
	1 space for every resident warden/staff.	1 space for every resident warden/staff.
	Where there are rooms specifically designed for people with disabilities, disabled parking of at least 1 space for each room so designed should be provided.	
Student residential accommodation where proctorial control does not exist or where control exists but the development will house conference delegates	1 space for every 5 bed spaces.	1 space for every 3 bed spaces.
	1 space for every resident warden/staff.	1 space for every resident warden/staff.
	Where there are rooms specifically designed for people with disabilities, disabled parking of at least 1 space for each room so designed should be provided. Controls will be necessary to limit use of car parking outside conference times.	
Residential schools, college or training centre	1 space for every 3 non-resident staff plus 1 space per resident warden/staff	On merit
	Where there are rooms specifically designed for people with disabilities, disabled parking of at least 1 space for each room so designed should be provided.	
Hospitals	On merit	On merit

3 Retail, Culture, Leisure and Sports Uses

Limited car parking will be allowed in the Controlled Parking Zone (CPZ) for these types of uses. Access will primarily rely on public transport, cycling and walking. Car journeys will be accommodated through public parking, including Park and Ride.

Outside the CPZ, Transport Assessments will play a key role in determining the optimal level of car parking, in particular for mixed use developments and retail parks where linked trips might lead to a level of parking below Cambridge City Council's standards.

A picking up and dropping off point for taxis and mini-buses will need to be provided for uses in Table J.4.

Table J.3: Retail, Culture, Leisure and Sports Uses

Retail Use Inside	Inside CPZ	Outside CPZ
Food retail	Disabled car parking only.	1 space for every 50 m ² GFA ¹ up to 1,400 m ² and 1 per 18 m ² thereafter, including disabled car parking.
Non-food retail	Disabled car parking only.	1 space for every 50 m ² GFA, including disabled car parking.
Financial and professional services	1 space for every 100 m ² GFA to include customer parking, plus disabled car parking.	1 space for every 40 m ² GFA, including disabled car parking.
Food and drink takeaways	1 space for proprietor resident.	1 space for every 20 m ² drinking/dining area, including disabled car parking. 1 space for proprietor when resident.

¹ Gross Floor Area

Table J.4: Assembly, Culture, Leisure and Sports Uses

Use	Inside CPZ	Outside CPZ
Museums, exhibition venues	Disabled only	On merit
Sports & recreational facilities, swimming baths	1 space for every 3 staff plus disabled car parking	2 spaces for every 3 staff, plus 1 space for every 4 seats, including disabled car parking
Cinema	Disabled and 1 space for every 2 staff	1 space for every 5 seats, including disabled car parking
Stadia	Disabled car parking only	1 space for every 15 seats, including disabled car parking
Places of assembly including, theatre, auditoria and concert hall	Disabled car parking and 1 space for every 2 staff	1 space for every 4 seats, including disabled and staff car parking
Place of worship	1 space per 100 m ² floor area, plus disabled car parking	1 space for every 8 seats, including disabled car parking
Public halls/ community centres	1 space per 100 m ² floor area, plus disabled car parking	1 space per 20 m ² of public space, including disabled car parking

4 Office Use

Limited car parking will be allowed in the Controlled Parking Zone. Access will primarily rely on public transport, cycling and walking.

Table J.5: Business and Industrial Uses

Use	Inside CPZ	Outside CPZ
Offices, general industry	1 space per 100 m ² GFA plus disabled car parking	1 space per 40 m ² GFA, including disabled car parking
Storage	1 space per 300 m ² GFA plus disabled car parking	1 space per 100 m ² GFA, including disabled car parking

5 Non-residential Institutions

Table J.6: Non-residential Institutions

Use	Inside CPZ	Outside CPZ
Clinics and surgeries	1 space for every 2 professional members of staff plus 1 space per consulting room	1 space for every professional member of staff plus 2 spaces per consulting room
Non-residential schools	1 space for every 3 staff	2 spaces for every 3 staff
Non-residential higher and further education	1 space for every 4 staff	2 spaces for every 3 staff
Crèches	1 space for every 3 staff	2 spaces for every 3 staff

6 Provision for People with Disabilities

Generally, at least 5% of the total number of car parking spaces, as given by the standards for outside the CPZ, should be reserved for disabled people, rounded up to the nearest whole space. Where parking provision is below the standards for outside the CPZ (including on sites within the CPZ) the required proportion of spaces reserved for disabled people will therefore be higher than 5%.

Higher ratios than the 5% given above may be required in some cases by the Planning Authority, for example at medical facilities, residential care homes, community facilities and any other uses where a higher proportion of disabled users/visitors will be expected. It should be noted that provision at the above levels or any required by the Planning Authority does not guarantee that the requirements of the Disability Discrimination Act will be met, which is the responsibility of the building occupier or service provider.

Spaces for disabled people should be located adjacent to entrances, be convenient to use and have dimensions that conform to Part M of the Building Regulations. If it is impossible to accommodate car parking spaces within the site, disabled car parking spaces should not be located at a distance more than 100 metres from the site.

Disabled car parking spaces should be marked either 'disabled' or with a wheelchair marking.

Appendix K: Cycle Parking Standards

1. Introduction

The standards in the tables below set out Cambridge City Council's minimum requirements in terms of cycle parking for new developments and changes in use.

In addition to the application of these standards, new developments will have to comply with the following principles:

- Cycle racks or stands should conform to the design and dimensions as set out at the end of these standards.
- For residential purposes cycle parking should be within a covered, lockable enclosure. For individual houses this could be in the form of a shed or garage. For flats or student accommodation either individual lockers or cycle stands within a lockable, covered enclosure are required. The cycle parking should be easily accessible and convenient to use.
- Cycle parking for employees should be in a convenient, secure location and, where practical, covered.
- Short stay cycle parking, e.g. for visitors or shoppers, should be located as near as possible to the main entrance of buildings and covered by natural surveillance or CCTV. For large developments the cycle parking facility should be covered.
- Reference to staff should be taken to mean the peak number of staff expected to be on-site at any one time.
- All cycle parking should minimise conflicts between cycles and motor vehicles.
- Some flexibility will be applied to applications where it can be demonstrated
 - a) that strict adherence to the standards for a multi-purpose site is likely to result in a duplication of provision; and
 - b) for the Historic Core Area of the City where land constraints may make application of the standards difficult for change of use or refurbishment.

Table K.1: Residential Use

Type of Development	Number of Spaces
Residential dwellings	<ul style="list-style-type: none">• 1 space per bedroom up to 3 bedroom dwellings• then 3 spaces for 4 bedroom dwellings, 4 spaces for 5 bedroom dwellings etc• some level of visitor cycle parking, in particular for large housing developments

Type of Development	Number of Spaces
Guest houses and hotels	1 space for every 2 members of staff and 2 spaces for every 10 bedrooms
Nursing homes	1 visitor space for every 10 residents and 1 space for every 2 members of staff
Retirement homes/sheltered houses	1 space for every 6 residents and 1 space for every 2 members of staff
Student residential accommodation	<ul style="list-style-type: none"> • 1 space per 2 bedspaces within Historic Core Area • 2 spaces per 3 bedspaces for the rest of the City. • 1 visitor space per 5 bedspaces
Residential schools, college or training centre	(as above)
Hospitals	On merit

Table K2: Retail, Culture, Leisure and Sports Uses

Type of Development	Number of Spaces
Food retail	1 space per 25 m ² GFA ² up to 1,500 m ² thereafter 1 per 75 m ²
Non-food retail	1 space per 25 m ² GFA up to 1,500 m ² thereafter 1 per 75 m ²
Financial and professional services	1 space per 30 m ² GFA to include some visitor parking
Food and drinks	1 space for every 10 m ² of dining area
Museums, Exhibition venues	1 space for every 2 members of staff Visitors: on merit
Sports and recreational facilities and swimming baths	1 space for every 25 m ² net floor area or 1 space for every 10 m ² of pool area and 1 for every 15 seats provided for spectators
Places of assembly including cinema, theatre, stadia, auditoria and concert halls	1 space for every 3 seats
Place of worship, public halls and community centres	1 space per 15 m ² of public floor area

² Gross Floor Area

Table K.3: Office Uses

Type of Development	Number of Spaces
Offices	1 space for every 30 m ² GFA to include some visitor parking
General industry	1 space for every 40 m ² GFA to include some visitor parking
Storage and other B use classes	On merit

Table K.4: Non-Residential Institutions

Type of Development	Number of Spaces
Clinics and surgeries	2 spaces per consulting room and 1 space for every 3 professional members of staff
Non-residential schools	Cycle spaces to be provided for 50% of children between 5 and 12 and 75% of children over 12 years
Non-residential higher and further education	Cycle parking for all students using the site and 1 for every 2 members of staff
Crèches and Nurseries	1 space for every 2 members of staff 1 visitor space per 5 children

CYCLE PARKING

DESIGN OF RACK

A Sheffield Stand is acceptable but a rounded A design is recommended as it provides additional support, particularly for smaller bicycles.

Sheffield Stand:

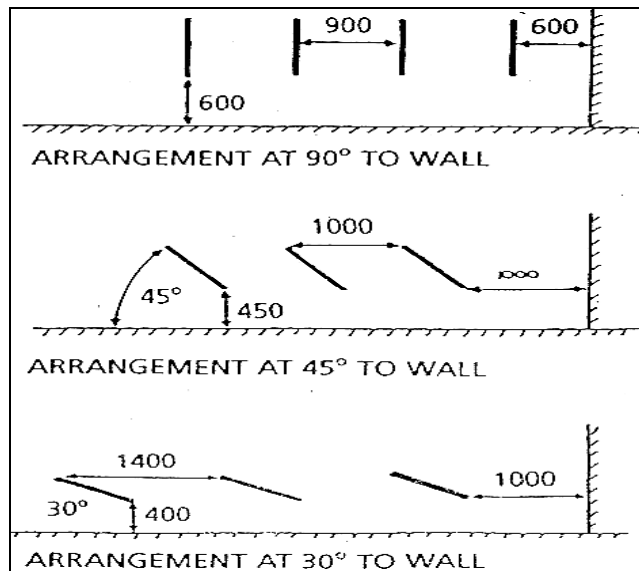


Rounded A Stand:



LAYOUT

This diagram shows the spacing required for cycle stands. There should be a 1200mm space between a double row of stands. All measurements shown are in millimetres.



HIGH CAPACITY

For increased capacity racks can be arranged at alternative heights with the type of rack that holds the front wheel in place. These racks are only acceptable if a support post is provided between each rack to which the frame for the bicycle can easily be locked. This type of rack also ensures a straight row of bicycles, which is useful where space is a premium

