

#### **Planning and Transport Scrutiny Committee**



Date: Tuesday, 25 June 2019

Response

**Time:** 5.30 pm

Venue: Committee Room 1 & 2, The Guildhall, Market Square, Cambridge,

CB2 3QJ

Contact: democratic.services@cambridge.gov.uk, tel:01223 457000

#### **Agenda**

Agene	iu	
1	Apologies for Absence	
2	Declarations of Interest	
3	Minutes	(Pages 3 - 10)
4	Public Questions	
Decisi Space	ons for the Executive Councillor for Planning Po s	licy and Open
5	2018/19 General Fund Revenue and Capital Outturn, Carry Forwards and Significant Variances - P&T	(Pages 11 - 20)
6	Greater Cambridge Sustainable Design and Construction Supplementary Planning Document – Draft Document for Consultation	(Pages 21 - 288)
7	Statement of Community Involvement	(Pages 289 - 360)
8	2019 S106 Priority-Setting (Play Areas and Open Spaces)	(Pages 361 - 378)
9	Annual Report of 3C Building Control Service & Planning Shared Service 2018/19	(Pages 379 - 388)
10	To Note Record of Urgent Decision To note the Record of Decision taken by the Executive Strategy and External Partnerships since the last Planning and Transport Scrutiny Committee.	
10a	Draft Mineral and Waste Plan Consultation	(Pages 389 -

398)

Planning and Transport Scrutiny Committee Members: Smart (Chair), Sheil (Vice-Chair), Baigent, Bick, Chadwick, Collis, Green, Hipkin and McGerty

Alternates: Bird, Lord and McQueen

**Executive Councillors:** Massey (Executive Councillor for Transport and Community Safety) and Thornburrow (Executive Councillor for Planning Policy and Open Spaces)

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### Public Document Pack Agenda Item 3

Planning and Transport Scrutiny Committee
Tuesday, 19 March 2019

PInTrn/1

#### PLANNING AND TRANSPORT SCRUTINY COMMITTEE

19 March 2019 5.30 - 7.00 pm

**Present**: Councillors Sargeant (Chair), Smart (Vice-Chair), Baigent, Bick, Green, Hipkin, McQueen and Payne

Executive Councillors for Planning Policy and Transport: Councillor Blencowe

#### Officers:

Director of Planning and Economic Development: Stephen Kelly

Strategic Director: Fiona Bryant

Head of 3C Building Services: Heather Jones

Committee Manager: Claire Tunnicliffe

#### FOR THE INFORMATION OF THE COUNCIL

#### 19/11/PnT Apologies for Absence

No apologies were received.

#### 19/12/PnT Declarations of Interest

Name	Item	Interest			
Councillor Baigent	19/31/PnT	Personal: Ex member of the			
		fire service; Member of the Fire			
		Brigade Trade Union; Fellow of			
		the Institute of Fire Engineers			
		and Fellow of Higher Education			
		Academy occasionally working			
		in the fire industry.			

#### 19/13/PnT Minutes

The minutes of the meeting held on 15 January 2019 were approved as a correct record and signed by the Chair.

#### 19/14/PnT Public Questions

A member of the public asked a question as set out below.

- i. The Accordia estate was a major asset not just for its residents but for the City as a whole. This was demonstrated by Accordia's inclusion in the Brooklands Conservation Area, the Article 4. Direction that applies to it, and by the award of architectural prizes, including the Stirling Prize, the most prestigious in the UK.
- Accordia's design was special in that the housing was densely ii. distributed with most houses directly overlooked by or overlooking many others. Private outdoor space was limited, confined to terraces and balconies and some courtyards which also serve as car ports and bike and bin storage. (So the surrounding green spaces with their mature tree belts serve as the community's communal garden.) There were several house types of different sizes and heights, but the architecture throughout shows a strong stylistic homogeneity both from the street side and the rear, 'private' side. Re-modelling or extending properties is therefore extremely difficult to achieve without compromising the overall impact of the architecture. It was recognised at the original planning stage that infilling of terraces and courtyards would be detrimental to the overall design and this was prohibited by a planning condition (28). Although this condition was overturned in an appeal, this was not related to the requirement about infilling.
- iii. There were pressures for change which make the character of the estate increasingly vulnerable. Individual homes may no longer fully meet the needs of the people who live in them, and as time goes by properties would deteriorate and need updating, with the risk that, without clear guidance, the design concept and homogeneity of the estate will be eroded. A Planning Committee decision on 6 March reflected the sensitivity of the site by adopting a cautious approach to proposed alterations to one of the estate's homes. An authoritative design guide about the kind of alterations that are acceptable would be useful for homeowners contemplating alterations and their advisors, for people seeking reassurance that the essential qualities of the estate will be maintained, and for City Councillors and planning officers.
- iv. We therefore ask the Committee to agree that Officers should launch a process to develop such a design guide, perhaps in the form of a Supplementary Planning Document for Accordia. This would be

produced in consultation with experts including the Design and Conservation Panel and the original architects. As was the case with the Article 4 Direction and the application of the Conservation Area, residents are eager to provide support; residents previously developed a comprehensive manual, (which is available via the Clerk of the Committee) and a similar approach could be taken as part of the development of any new Planning Document. We ask the Committee further to agree that residents should be closely involved in the process.

In response, the Director of Planning and Economic Development said the following:

- i. Expressed thanks for attending the meeting and noted the concerns that had been highlighted.
- ii. Supported and welcomed the work that had been undertaken but could not commit to a request for the production of an additional Supplementary Planning Document.
- iii. There was a prioritisation of staffing resources which had to be considered.
- iv. Had to take into account other conservations areas in and around the City; there were conservation areas which required additional work from Officers to protect the area.

The Executive Councillor advised that it was not just a question of resource but what the additional benefit would be. The published Article 4 had been produced to address resident's concerns on certain conservation issues and safeguard a number of sensitive issues.

The following supplementary points were made by the member of the public.

- i. This was not another step to further safeguard the design features of the Accordia Estate.
- ii. The proposal was for guidance designed to assist residents who wanted to make renovations / changes to their properties and how they could be advised.
- iii. Article 4 identified the sensitive issues of a conservation area but did not offer guidance to residents on how to treat these areas; or what consideration the Planning Committee or Officers would take into account when thinking about making alterations to their properties.
- iv. Appreciated the comment regarding staffing resources but a working group of Accordia residents had produced a comprehensive document the 'Accordia Conservation Review Information Pack' which advised of

- appropriate colour schemes and where suitable materials could be found, as example.
- v. A Supplementary Planning Document would take the guidance a stage further to indicate what was likely to be appropriate whilst maintaining the objectives in Article 4 and the conservation area to ensure compliance.

The Director for Planning and Economic Development stated the following:

- i. Reiterated the need to prioritise staffing resource.
- ii. Was keen to ensure officers had an understanding and level of sensitivity to the way they treated Accordia; this would be in line with the conservation area and the current legalisation.
- iii. Would make sure that Officers were aware of and had sight of the 'Accordia Conservation Review Information Pack' and how they should be applying it.
- iv. Would review whether there could be a further role planning services could undertake when giving advice within the framework of all the controls and measures which were in place.
- v. Needed to ensure that all conservation areas were brought up to the same level and committed to safeguarding all conservation areas appropriately.

The Director of Planning and Economic Development concluded it would be possible to provide a report on the status of each conservation area; which would help to assist the prioritisation of work required.

### 19/15/PnT SHARED SERVICES 2019/20 Business Plans for 3Cs Building Control, and Greater Cambridge Planning Service

#### **Matter for Decision**

The report sought approval for the Building Control Business Plan and Greater Cambridge Planning Services Business Plan 2019/20.

#### **Decision of Executive Councillor for Planning Policy & Transport**

- i. Approved the Business Plans for each of the Shared Services, Building Control Shared Services Business Plan & Greater Cambridge Planning Service Business Plan 2019/20.
- ii. Authorised the Shared Services Management Board to approve final amendments to the Business Plans in line with comments received from all partner councils.

#### Reason for the Decision

As set out in the officer's report.

#### Any Alternative Options Considered and Rejected

Not applicable.

#### **Scrutiny Considerations**

The Committee received a joint report from the Strategic Director, the Director of Planning and Economic Development and the Head of Building Control.

In response to the Committee's comments the Director of Planning and Economic Development said the following:

- i. There had been a total of 27 job vacancies advertised across the shared services since April last year.
- ii. Had recently appointed four planning officers from the process that was started earlier in the year.
- iii. The Shared Planning Services consultation would allow the organisation to make improvements to the personal development and growth of officers; this would allow an additional learning opportunity into the planning service.
- iv. The consultation would also allow development of the induction process and ensure that support was available.
- v. Important to develop staff to enable them to progress, whether inside or outside the organisation; in turn they would promote the level of service experienced to external organisations and members of the public.
- vi. Work had taken place on benchmarking and job evaluations; salary levels were competitive with other local authorities.
- vii. There was a recruitment timeline which was being followed, although there was a slight delay there.
- viii. Lessons had been learnt from the first round of the consultation process as there had been a series of workshops involving staff to discuss ideas and to put forward suggestions
  - ix. Could be possible to include the offer of accommodation in the future as this was an important consideration when looking at job opportunities.
  - x. Research had shown that there was a consistent pattern in the number of planning applications submitted between Cambridgeshire City Council and South Cambridgeshire District Council; 42% and 58% which had allowed previous budget to be based on ratio of work.

- xi. As part of the shared services project a memorandum of understanding has been drafted using planning applications and policy delivery outcomes such as the joint Local Plan, North East Cambridge Area Action Plan and Supplementary Planning Documents. Based on this a resources plan had been designed as it was important to understand the resource allocation for budgetary purposes.
- xii. The budget had been historically based on ratio but in future officers would have the capacity to account for their time to the relevant authority with the implementation of a single ICT system.
- xiii. The benefit of a shared planning service brought resilience; officers should be able to cover both authorities if required. Therefore the way that officers recorded their time was critical.
- xiv. Cambridge City Council had limited areas of geography for development which would have an impact on future income for the Council.
- xv. Important to create a new culture under the shared services so that officers did not see themselves as working for one or the other local authority, there is the opportunity for flexible working and working at various locations.
- xvi. Citizens and businesses required a good, responsive and accessible planning service, wherever they were located, which is what the shared services would offer.
- xvii. The strategy of the business plan would account for the cost of officers and allow the recruitment for a range of specialist officers whose services could be used by outside agencies and charged for their time.

The Committee then received an executive summary on the Business Plan for 3c'S building control.

In response to Members questions the Head of Shared Service said the following:

- i. Post Grenville there was a discussion to be part of a joint competency agency which would only include Local Authority Building Control. Certain buildings in scope would only be dealt with by the Local Authority Building Control Department and not by Approved Inspectors. This model was currently being tested by Central Government.
- ii. Individual local authorities and developers were being encouraged to take forward their own initiatives.
- iii. The Hackett report referred to the introduction of gateways; at planning stages there would be enforced consultations with the Fire Authority and Local Authority Building Control. Further discussion on this matter would be taken forward.
- iv. Looking to ensure tighter communication between Building Control and Planning Services.

The Committee then resolved by 5 votes to 0 to exclude the press and public during the discussion of Appendix 2 of this item by virtue of paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

#### The Committee:

#### The Committee resolved 7 votes to 0 to endorse the recommendations.

The Executive Councillor for Planning Policy and Transport approved the recommendations.

## 19/16/PnT To Note Record of Urgent Decision Taken by the Executive Councillor for Planning Policy and Transport since the last Planning and Transport Meeting.

**19/16a/PnT** East West Rail Bedford to Cambridge Routes Consultation. The Director for Planning and Economic Development informed the Committee the deadline to the consultation response had given a very limited time span; the deadline for a response had been closed the week before the meeting.

There had been some dialogue with Cambridge and Bedford Councillors to determine whether there had been a preference to the options given. There had been an inclination for the route leaving Bedford from the North to Cambourne, then approaching the City from the South. However it was reiterated in the response that the information concerning each route option had been very limited.

In response to Members' questions the Director for Planning and Economic Development said the following:

- i. There would be limited stops between Bedford and Cambridge.
- ii. Alongside the railway was the Oxford to Cambridge Express Way; an announcement of the preferred alignment was via Caxton Gibbet. This would provide infrastructure capacity.
- iii. There had to be an opportunity for economic growth along the railway line to justify the investment from East West Rail; 150,000 additional homes between Bedford and Cambridge.
- iv. Looking at established towns which could support further expansion.
- v. Long way to go to understand expectations and have to take into account local transport projects.
- vi. This was just the beginning of the project.

The Executive Councillor advised the Committee this was a concept plan which lacked detail and was only the beginning of the planning process. The response from Cambridge City Council had not ruled out any options.

The meeting ended at 7.00 pm

**CHAIR** 

#### Item

# Planning & Transport Scrutiny Committee 2018/19 Revenue and Capital Outturn, Carry Forwards and Significant Variances – Planning Policy & Transport Portfolio

#### To:

Councillor Thornburrow, Executive Councillor for Planning Policy & Open Spaces

#### Report by:

Chief Executive, Strategic Directors, Head of Finance

#### Date:

25 June 2019

#### Wards affected:

(All) Abbey, Arbury, Castle, Cherry Hinton, Coleridge, East Chesterton, King's Hedges, Market, Newnham, Petersfield, Queen Edith's, Romsey,

#### **Key Decision**

#### 1. Executive Summary

- 1.1 This report presents, for the Planning Policy & Transport Portfolio:
  - a) A summary of actual income and expenditure compared to the final budget for 2018/19 (outturn position)
  - b) Revenue and capital budget variances with explanations
  - c) Specific requests to carry forward funding available from budget underspends into 2019/20.
- 1.2 This year will be the last year that individual reports are produced for each portfolio for presentation to the relevant scrutiny committee. In line with the revised budget scrutiny process followed for the 2019/20 budget, one combined 2019/20 General Fund outturn report covering all portfolios will be produced for scrutiny at Strategy and Resources Scrutiny Committee.

1.3 As this report is for the 2018/19 outturn the services that were included in the Planning Policy & Transport Portfolio prior to the current year committee restructure are detailed.

#### 2. Recommendations

Members of the Scrutiny Committee are asked to consider and make known their views on the following for consideration by the Executive Councillor for Finance and Resources at the Strategy and Resources Scrutiny Committee on 1 July 2019:

a) Carry forward requests of £995k capital resources from 2018/19 to 2019/20 to fund rephased net capital spending, as detailed in **Appendix D.** 

#### 3. Background

#### **Revenue Outturn**

3.1 The overall revenue budget outturn position for the Planning Policy & Transport Portfolio is given in the table below. Detail, by service grouping, is presented in **Appendix A**.

2017/18 £'000	Planning Policy & Transport Portfolio Revenue Summary	2018/19 £'000	% Final Budget
(1,226)	Original Budget	(1,475)	-
11	Adjustment – Prior Year Carry Forwards	10	-
-	Adjustment – Service Restructure Costs	-	-
-	Adjustment – Earmarked Reserves	592	-
63	Adjustment – Capital Charges	80	-
-	Adjustment – Central & Support reallocations	-	-
(43)	Other Adjustments	(178)	-
(1,195)	Final Budget	(971)	-

(1,202)	Outturn	(1,047)	-
(7)	(Under) / Overspend for the year	(76)	-
10	Carry Forward Requests	0	-
3	Resulting Variance	(76)	-

<sup>\*</sup>Note that the net budget is relatively small (compared to the actual gross spend and income which are much larger) due to spend and income budgets being netted off so percentages are omitted as they are not a useful indicator for these services.

- 3.2 **Appendix A** shows original and final budgets for the year (with the movements summarised in the above table) and compares the final budget with the outturn position for this Portfolio for 2018/19. The original revenue budget for 2018/19 was approved by Council on 22 February 2018.
- 3.3 **Appendix B** provides explanations of the main variances.
- 3.4 **Appendix C** lists revenue carry forward requests. There are no revenue carry forward requests for this portfolio.

#### **Capital Outturn**

3.5 The overall capital budget outturn position for the Planning Policy & Transport Portfolio is given in the table below. **Appendix D** shows the outturn position by scheme and programme with explanations of variances.

2017/18 £'000	Planning Policy & Transport Portfolio Capital Summary	2018/19 £'000	% Final Budget
5,136	Final Budget	1,807	100.0
1,952	Outturn	604	33.3
(3,184)	Variation - (Under)/Overspend for the year	(1,203)	(66.7)
1,410	Rephasing Requests	995	55.0
(1,774)	Variance	(208)	(11.7)

3.6 The majority of the rephasing relates to underspends in Cycleways, Structural repairs to Queen Anne car park and the electric vehicle charging points' project.

#### 4. Implications

- 4.1 The net revenue variance from the final budget (see above), would result in a decreased use of General Fund reserves of £76k.
- 4.2 A decision not to approve a carry forward request may impact on officers' ability to deliver the service or scheme in question and this could have financial, staffing, equality and poverty, environmental, procurement or community safety implications.

#### (a) Financial Implications

Any financial implications are included in the Appendices.

#### (b) Staffing Implications

Any staffing implications are included in the Appendices.

#### (c) Equality and Poverty Implications

Any equality and poverty implications are included in the Appendices.

#### (d) Environmental Implications

Any environmental implications are included in the Appendices.

#### (e) Procurement Implications

Any procurement implications are included in the Appendices.

#### (f) Community Safety Implications

Any community safety Implications are included in the Appendices.

#### 5. Consultation and communication considerations

Public consultations are undertaken throughout the year and can be seen at:

cambridge.gov.uk/current-consultations

#### 6. Background papers

These background papers were used in the preparation of this report:

- Closedown Working Files 2018/19
- Directors' Variance Explanations March 2019
- Budgetary Control Reports to 31 March 2019
- Capital Monitoring Reports March 2019

#### 7. Appendices

The following items, where applicable, are included for discussion:

<b>Appendix</b>	Proposal Type	Included
Α	Revenue Summary for this portfolio	<b>√</b>
В	Revenue Major Variances for this portfolio	✓
С	Carry Forward Requests for this portfolio	<b>√</b>
D	Capital Summary for this portfolio	<u>√</u>

#### 8. Inspection of papers

To inspect the background papers or if you have a query on the report please contact:

Authors' Names: Karen Whyatt

Authors' Phone 01223 - 458145

Numbers: 01223 - 458145

Authors' Emails: <u>karen.whyatt@cambridge.gov.uk</u>

O:\accounts\Committee Reports & Papers\Planning Policy & Transport (until May 2018 Environment)
Scrutiny\2019 June\Planning Policy & Transport\Final\Committee Report 18-19 PP & T Portfolio FINAL.docx

#### Planning Policy & Transport Portfolio / Planning & Transport Committee Revenue Budget 2018/19 - Outturn

Service Grouping / Cost Centre	Original Budget 18/19	Final Budget 18/19	Outturn 18/19	Variation - Increase / (Decrease)	Carry Forward Requests - see Appendix C	Net Variance
	£	£	£	£	£	£
Building Control						
Building Control Other	208,810	208,810	189,019	(19,791)	0	(19,791)
3C Building Control	0	0	0	0	0	0
	208,810	208,810	189,019	(19,791)	0	(19,791)
	200,010	200,010	100,010	(13,731)	Ŭ	(10,701)
Parking Services						
Grand Arcade Car Park	(2,119,830)	(2,121,440)	(2,041,679)	79,761	0	79,761
Park Street Car Park Grafton Centre West Car Park	(395,040) (415,520)	(420,660) (482,730)	(412,923) (553,223)	7,737 (70,493)	0	7,737 (70,493)
Grafton Centre East Car Park	(693,420)	(818,010)	(853,651)	(35,641)	0	(35,641)
Queen Anne Terrace Car Park	(512,630)	(496,680)	(598,288)	(101,608)	0	(101,608)
Adam & Eve Street Car Park	(54,370)	20,470	29,135	8,665	0	8,665
Castle Hill Car Park	(91,830)	44,320	61,318	16,998	0	16,998
Gwydir Street Car Park	(14,790)	80,170	79,714	(456)	0	(456)
Riverside Car Park	3,280	3,380	(981)	(4,361)	0	(4,361)
Other Car Parks	34,100	34,100		76		76
Parking Administration Shopmobility-Grand Arcade	0 89,500	78,320	(73,184) 85,204	(73,184) 6,884	0	(73,184) 6,884
Shopmobility-Grafton	33,310	21,580	28,724	7,144	0	7,144
onopinosing Granon				•		
	(4,137,240)	(4,057,180)	(4,215,658)	(158,478)	0	(158,478)
Planning						
City Development	544,880	594,870	594,870	0	0	0
New Neighbourhoods	0	0	0	0	0	0
Right to Bid/Assets of Community Value	0	10,250	0	(10,250)	0	(10,250)
Cambridge University contract	0	0	0	0	0	0
Planning Policy	152,100	744,090	744,092	2 75 400	0	2 75 400
Shared Director of Planning and Economic Development Urban Design & Conservation	0 189,050	189,050	75,423 189,050	75,423	0	75,423
Greater Cambridge Planning Service	885,980	658,000	769,126	111,126		111,126
Greater Cambridge Flamming Cervice				,		·
	1,772,010	2,196,260	2,372,561	176,301	0	176,301
Streets and Open Spaces						
Highway Schemes General	98,350	98,350	95,310	(3,040)	0	(3,040)
Walking & Cycling Strategy	0	0	0	0	0	0
Flood Risk Management	148,170	148,170	170,055	21,885	0	21,885
	246,520	246,520	265,365	18,845	0	18,845
Transport Services	440.000	440.000	447.504	(00.000)	_	(00.000)
Public Transport Subsidy Taxicard Service	140,900 123,750	140,900 123,750	117,594 60,503	(23,306) (63,247)	0	(23,306) (63,247)
Transport Initiatives for Disabled	45,880	45,880	44,097	(1,783)	0	(1,783)
Transport minutives for Bloadies						
	310,530	310,530	222,194	(88,336)	0	(88,336)
Urban Growth Project Manager						
Urban Growth Project Management	123,900	123,900	119,773	(4,127)	0	(4,127)
	123,900	123,900	119,773	(4,127)	0	(4,127)
	123,900	123,900	119,773	(4,127)	0	(4,127)
				<b>—</b>		
Total Net B	udget (1,475,470)	(971,160)	(1,046,746)	(75,586)	0	(75,586)

Changes between original and final budgets may be made to reflect:

- portfolio and departmental restructuring
   approved budget carry forwards from the previous financial year
   technical adjustments, including changes to the capital accounting regime
- virements approved under the Council's constitution
- additional external revenue funding not originally budgeted

and are detailed and approved:

- in the January committee cycle (as part of the Budget-Setting Report)
   in the June/July committee cycle (outturn reporting and carry forward requests)
   in September (as part of the Medium-Term Financial Strategy, MTFS)
- via technical adjustments/virements throughout the year

#### Planning Policy & Transport Portfolio / Planning & Transport Committee

#### Revenue Budget 2018/19 - Major Variances from Final Revenue Budgets

<b>Service Grouping</b>	Reason for Variance	Amount £	Contact
Parking Services	Grand Arcade Car Park - Usage trends have been monitored and form an integral part of pricing strategy for the following year with the aim of managing demand and delivering budgetary expectations. Conscious of the stress on revenue budgets across service, expenditure has been tightly controlled to deliver a service wide balanced budget.*	79,761	Sean Cleary
Parking Services	Grafton Centre West Car Park – See Grand Arcade Car Park explanation above*	(70,493)	Sean Cleary
Parking Services	Grafton Centre East Car Park - See Grand Arcade Car Park explanation above*	(35,641)	Sean Cleary
Parking Services	Queen Anne Terrace Car Park - See Grand Arcade Car Park explanation above*	(101,608)	Sean Cleary
Parking Services	Parking Administration - The service has deliberately gapped a post as it forms an important part of the in-flow service review, this has driven the majority of this underspend. The remainder is a result of expenditure being tightly controlled to deliver a service wide balanced budget.	(73,184)	Sean Cleary
Transport Services	Public Transport Subsidy - Take up of service has been lower than expected.	(23,306)	Sharon Line
Transport Services	Taxicard Service - Usage of taxi card in year has been lower than predicted.	(63,247)	Sharon Line
Streets and Open Spaces	Flood Risk Management - 26k underachievement in income partly offset by 5k underspend on cleaning. There is £5k debtor for Hobsons Conduit Trust which is not included in the cost centre which will be raised in 2019/20.	21,885	Rachel Veysey
Shared Director of Planning and Economic Development	This is for staffing costs which will be transferred to support service trading balances.	75,423	Stephen Kelly
Greater Cambridge Planning Service	This is due to an income shortfall of £499k is the combined result of the impact of Brexit and that that many of the major schemes are beginning to fall in South Cambs rather than Cambridge City. It is recognised that income budgets need to be reviewed and reset. This shortfall is offset by an underspend due to vacant posts results from the long-standing difficulties in the recruitment and retention of professional planners. This is due to a recognised national shortage of professional planners and the issue is particularly acute in this part of the country. This also leads to the corresponding overspend on non-salary budgets due to the use of contractors to fill resource gaps where we can.	111,126	Stephen Kelly
Other	Miscellaneous	3,698	-
		(75,586)	

### Planning Policy & Transport Portfolio / Planning & Transport Scrutiny Committee

#### **Revenue Budget 2018/19 - Carry Forward Requests**

#### Request to Carry Forward Budgets from 2018/19 into 2019/20

Item	Reason for Carry Forward Request	Amount £	Contact
1	No Carry forwards are requested for this portfolio		
	Total Carry Forward Requests for Planning Policy & Transport Portfolio		

#### Capital Budget 2018/19 - Outturn

С	apital Ref	Description	Lead Officer	Original Budget 2018/19 £'000's	Final Budget 2018/19 £'000's	Outturn 2018/19 £'000's	Variance - Outturn compared to Final Budget £'000's	Rephase Spend 2019/20 £'000's	Over / (Under) Spend £'000's	Variance Explanation
PR	J39	Minor Highway Improvement Programme	John Richards	30	85	10	(75)	40	(,	This is a joint funded programme with the County Council (who lead the identification and delivery of most schemes) – some projects have proven impractical and others have cost less than anticipated. County are again running a programme for 2019-20 and part of the saving is requested to be rephased to meet the city council contribution to the programme.
То	al Program	imes		30	85	10	(75)	40	(35)	
	1025 - 571	Procurement of IT System to Manage Community Infrastructure	Sharon Brown	0	20	0	(20)	20	0	Money was not spent in 18/19 due to slippage in the programme of work. This slipped due to the work required being more detailed than anticipated. The funds should be rolled forward into 19/20 as the work, and therefore the need for the IT system spend, continues.
SC	590	Structural Holding Repairs & Lift Refurbishment - Queen Anne	Sean Cleary	15	208	15	(193)	193	0	Queen Anne Terrace holding repair programme has been extended by a further 4 years. Roll over of remaining capital funding for this project is requested.
	069 - 030j	The Mill Road Railway Legacy (S106)	Alistair Wilson	0	21	21	0	0	0	Completed. Linked to Mill Road Winter Fair
10	074	Grafton East car park essential roof repair	Sean Cleary	0	37	4	(33)	33	0	The project has extended beyond March 2019 due to the requirement for additional works and rephasing of the underspent budget will support these.
	1112 - 645	Electric vehicle charging points	Jo Dicks	170	376	137	(239)	239	0	There have been various delays to phase 1 resulting in the project being behind the predicted timescale by 6 to 9 months. Phase 2 will be worked on this and next year. The Project Board is being kept informed of progress. It is requested that the unspent budget of £239k is rephased to 2019/20.
		Environment and cycling improvements in Water Street and	Alistair Wilson	0	35	0	(35)	0	(35)	The project was completed two years ago. The budget was rephased as it was anticipated that a contribution to County Council was to be requested. This has not happened and is unlikely to do so.
		Grand Arcade and Queen Anne Terrace car parks sprinkler	Sean Cleary	0	382	309	(73)	8	(65)	Project is complete however, there is a retention fee to be paid in Sept 2019. An underspend of £65k can be returned.
	1151 - 635	Grand Arcade car park deck coating and drainage	Sean Cleary	0	117	40	(77)	0	(77)	Project is complete and the underspend of £77k can be returned.
	1160 - 532	Cambridge City 20mph Zones Project	John Richards	0	0	4	4	0	4	Project substantially completed in 2017 but the project is still requiring officer input to deal with significant remedial works issues. There is a dispute with contractor over the additional withheld retention sum, pending satisfactory resolution of the works. Further anticipated costs are expected during 2019/20 circa £15k.This would still keep within the originally allocated £600k budget as savings were offered in previous years. Project substantially completed but defective/ remedial works issues and final account still to resolve.
		Shared Planning Service software and implementation	Stephen Kelly	0	90	31	(59)	59	0	Money was not spent in 18/19 due to slippage in the programme of work. This slipped due to the work required being more detailed than anticipated. The funds should be rolled forward into 19/20 as the work, and therefore the need for the software spend, continues.
То	al Projects			185	1,286	561	(725)	552	(173)	
	1019 - 549	City Centre Cycle Parking	John Richards	0	23	21	(2)	2	0	Project substantially completed but some additional spend is anticipated in 2019/20 to deal with technical issues arising and retention. Re-phasing of remaining unspent budget is requested.
PV	007	Cycleways	John Richards	50	408	11	(397)	397	0	Majority of budget has been committed towards comprehensive improvements at Maids Causeway, the Four Lamps roundabout and Snakey Path. Progress on these is being made but falls short of initial expectations. Re-phasing of funding thus far un-spent is requested.
	1158 - 018	Bus Shelters	John Richards	0	5	1	(4)	4	0	Latest phase of programme substantially completed but some final works will be completed during 2019-20. Re-phasing of un-spent monies is requested.
	al Provisio	ns		50	436	33	(403)	403	0	
To	tal			265	1,807	604	(1,203)	995	(208)	

Changes between original and final budgets may be made to reflect:

- rephased capital spend from the previous financial year
- $\mbox{-}\mbox{ rephased capital spend into future financial periods}$
- approval of new capital programmes and projects

and are detailed and approved:

- in the June/July committee cycle (outturn reporting and carry forward requests)
- in September (as part of the Medium-Term Financial Strategy, MTFS)
- in the January committee cycle (as part of the Budget-Setting Report, BSR)

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#### Item

# GREATER CAMBRIDGE SUSTAINABLE DESIGN AND CONSTRUCTION SUPPLEMENTARY PLANNING DOCUMENT – DRAFT FOR CONSULTATION.

#### To:

Councillor Katie Thornburrow, Executive Councillor for Planning Policy and Open Spaces

Planning & Transport Scrutiny Committee 25 June 2019

#### Report by:

Stephen Kelly, Joint Director for Planning and Economic Development Cambridge and South Cambridgeshire

Tel: 01223 - 457009 Email: stephen.kelly@cambridge.gov.uk

#### Wards affected:

ΑII

#### **Key Decision**

#### 1. Executive Summary

- 1. This report presents the draft Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (SPD) for consultation purposes. The SPD is being prepared to provide guidance on the implementation of policies related to climate change and sustainable design and construction within the adopted Cambridge and South Cambridgeshire Local Plans in order to support the Greater Cambridge growth agenda and delivery of sustainable development.
- 2. The document has been prepared by officers from across the Greater Cambridge Shared Planning Service as well as other services including Streets and Open Spaces, Environmental Health and the Sustainable Communities team at South Cambridgeshire District Council. Where possible guidance from existing documents such as the 2007 Cambridge Sustainable Design and Construction SPD has been reused and updated where appropriate, with new guidance prepared for topics not covered in these documents.
- 3. A public consultation is proposed to take place commencing in July 2019. The statutory minimum period for consultation on an SPD is six weeks, but as this

consultation period runs over the summer holidays it is proposed that it is extended to run until the 23<sup>rd</sup> September so as to allow everyone an opportunity to respond.

#### 2. Recommendations

The Executive Councillor is recommended to agree:

- 1. the draft Greater Cambridge Sustainable Design and Construction SPD (attached at Appendix 1) for consultation purposes;
- 2. that the consultation period will take place between Monday 15 July and Monday 23 September 2019;
- 3. agree that the Joint Director of Planning and Economic Development is granted delegated authority, in liaison with the Executive Councillor for Planning Policy and Open Spaces, and the Chair and Spokes for the Planning Policy and Transport Scrutiny Committee, to make any editing changes prior to publication.

#### 3. Background

- 3.1 The planned growth for Greater Cambridge provides an exciting opportunity to create sustainable and vibrant new communities that contribute to meeting national targets set out in the Climate Change Act and the principles set out in the Cambridgeshire Quality Charter for Growth. Section 4 of the Cambridge Local Plan contains a suite of policies related to climate change mitigation and adaptation and environmental health issues such as air quality and land contamination which, alongside policies in the South Cambridgeshire Local Plan, will help to ensure that new development in the area reduces its environmental impact minimising carbon emissions, flood risk, pollution and pressure on resources such as water. In order to ensure that the policies in the plan are implemented as effectively as possible, guidance is required to ensure that the correct information is submitted alongside planning applications, demonstrating how policy requirements will be met.
- 3.2 The Draft Greater Cambridge Sustainable Design and Construction SPD has been developed with input from officers from across both Cambridge City Council and South Cambridgeshire District Council. It provides technical guidance for developers on the information that needs to be submitted with planning applications to demonstrate compliance with adopted planning policies related to climate change and sustainable design and construction. In providing such guidance, the SPD will ensure that new development contributes to meeting the challenges posed by our changing climate including:
  - Contributing to carbon reduction targets and reducing fuel poverty;
  - Ensuring that new development is adaptable to our changing climate;
  - Ensuring that new development makes efficient use of resources;
  - Ensuring that new development contributes to the health and wellbeing of new and existing residents.
- 3.3 For the Cambridge Local Plan, the SPD will provide guidance on the following policies:

Section 4: Responding to climate change and managing resources

 Policy 28: Carbon Reduction, Community Energy Networks, Sustainable Design and Construction and Water Use;

- Policy 30: Energy Efficiency Improvements in Existing Dwellings;
- Policy 31: Integrated water management and the water cycle;
- Policy 32: Flood Risk
- Policy 33: Contaminated land
- Policy 34: Light pollution control
- Policy 35: Protection of human health from noise and vibration
- Policy 36: Air quality, odour and dust

#### Section 7: Protecting and enhancing the character of Cambridge

- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 63: Works to a Heritage Asset to Address Climate Change
- 3.4 Guidance in the SPD takes the form of details of the documents that need to be submitted with planning applications and the information to be included in those documents. Proformas to be used to provide information such as carbon calculations and air quality information are included alongside a sustainability checklist to be submitted with applications to demonstrate how meeting policy requirements has been integrated into the design of new developments.
- 3.5 The structure of the SPD is as follows:
  - a) Introduction setting the context for the SPD, including relevant national and local policies. While the Council's ambitions for zero carbon development will be included within this introduction, guidance on delivering zero carbon development will not be included in this SPD. In line with national policy, the SPD can only provide guidance on existing policies, and cannot be used to set new policies. Delivery of net zero carbon will be addressed through the development of the Joint Greater Cambridge Local Plan;
  - b) The importance of urban design a section outlining the importance of integrating sustainable design and construction with urban design to ensure the delivery of high quality new development and to maximise the opportunities to enhance the environmental performance of new development.
  - c) Policy implementation technical guidance on the information that needs to be submitted alongside planning applications to demonstrate compliance with the policies listed in paragraph 3.3 above. This includes guidance on how to prepare a Carbon Reduction Statement, the various ways in which new developments can integrate climate change adaptation measures, giving consideration to issues such as the role of green infrastructure, measures to design out the risk of overheating and the role of cool materials. Guidance on biodiversity includes links to various toolkits that have been developed to assist developers in delivering biodiversity net gain, including the Developing Nature Toolkit, developed by the Natural Cambridgeshire Local Nature Partnership, while environmental health guidance will include measures that developments can integrate to reduce the air quality impacts of new developments.
  - d) A section on further approaches to sustainable design and construction. The purpose of this section is to encourage developers to go further than current

- policy requirements, particularly for strategic sites and new settlements that have policy requirements to demonstrate excellence in sustainable development. This section will give developers pointers towards areas that could be considered as demonstrating excellence, for example health and wellbeing, modern methods of construction and supporting low carbon lifestyles by, for example, integrating food growing opportunities into new developments.
- e) Appendices the SPD includes a series of appendices including a sustainability checklist, proformas for the submission of carbon calculations and guidance on environmental health matters such as emissions standards for gas Combined Heat and Power.

#### **Consultation arrangements**

- 3.5 It is proposed that a public consultation takes place running from 15 July 2019 to 23 September 2019. The statutory minimum period for consultation on an SPD is six weeks, as this consultation period runs over the summer holidays it is proposed that it is extended so as to allow everyone an opportunity to respond.
- 3.6 In line with the Councils' adopted Statements of Community Involvement, the proposed consultation arrangements will be as follows:
  - Letters / e-mails including consultation details to be sent to statutory and general consultees.
  - The draft SPD to be made available to view at the following locations:
    - > Online on the council's website:
    - At the council's Customer Service Centre at Mandela House, 4 Regent Street, Cambridge, CB2 1BY from 9am-5.15pm Monday to Friday.
    - South Cambridgeshire Hall, Cambourne Business Park, Cambourne, Cambridge, CB23 6EA;
  - An <u>online consultation system</u> will be available on the Council's website in order for people to respond directly via the internet. Hard copies of the response form will be made available at the Council's Customer Service Centre for those who do not have access to the internet.
  - Alternative formats of the consultation documents will be made available upon request (e.g. braille, translations into other languages and large print).
- 3.7 Sustainability Appraisals and Habitats Regulations Assessment Screening Reports have been carried out and consulted upon for the Cambridge Local Plan 2018 and the South Cambridgeshire Local Plan. These consultations took place between 19 July and 30 September 2013. These documents, along with other supporting documents will also be made available to view during this consultation. As the draft SPD supports the Cambridge Local Plan and South Cambridgeshire Local Plan, there is no further need to undertake a separate Sustainability Appraisal or Habitats Regulations Assessment for this document, although screening reports have been completed and will be made available during the consultation.
- 3.8 Following on from consultation, officers will consider the consultation responses received and whether any changes are needed to the SPD, before the document is

be brought back to committee for adoption, which is currently proposed to take place in January 2020.

#### 4. Implications

#### (a) Financial Implications

The preparation of the Greater Cambridge Sustainable Design and Construction SPD, and the recommended consultation period is within existing budgets.

#### (b) Staffing Implications

There are no significant staffing implications, with development of the SPD being dealt with using existing staff resources.

#### (c) Equality and Poverty Implications

Consultation on planning matters will be undertaken in accordance with Equality legislation as appropriate. An Equality Impact Assessment has been carried out for the SPD (see Appendix B), which notes that given the aim of the SPD to enhance the environmental performance of new homes, including their energy efficiency, there could be positive impacts from a fuel poverty perspective amongst the following protected characteristics:

- Age;
- Disability;
- Pregnancy and maternity;
- · Race; and
- Those on low incomes.

#### (d) Environmental Implications

The Greater Cambridge Sustainable Design and Construction SPD will play an important role in planning for climate compatible development, helping to support the implementation of relevant policies in the adopted Cambridge and South Cambridgeshire Local Plans. While the growth of Cambridge will inevitably lead to an overall increase in carbon and other greenhouse gas emissions, the SPD provides guidance on policies in the Local Plan that seek to reduce these impacts and increase the use of renewable and low carbon energy, sustainable modes of transport, reduce water use in new developments and also ensure that development is able to adapt to our changing climate. In doing so, it seeks to ensure that development is designed to exceed statutory minimum requirements for environmental performance set out in the Building Regulations. As such, it is considered that the project should have a net medium positive effect.

#### (e) Procurement Implications

None

#### (f) Community Safety Implications

None

#### 5. Consultation and communication considerations

None

#### 6. Background papers

No background papers were used in the preparation of this report.

#### 7. Appendices

Appendix A: Greater Cambridge Sustainable Design and Construction SPD (2019) DRAFT FOR CONSULTATION

Appendix B: Equality Impact Assessment

#### 8. Inspection of papers

To inspect the background papers or if you have a query on the report please contact

Emma Davies, Senior Sustainability Officer (Design and Construction)

**Greater Cambridge Shared Planning** 

tel: 01223 457170 email: emma.davies@cambridge.gov.uk

# Greater Cambridge Sustainable Design and Construction Supplementary Planning Document





**Consultation Draft July 2019** 

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#### Forewords

To follow

# **Section 1: Introduction**

#### **Context**

1.1 In the period to 2031, Greater Cambridge has plans to grow significantly, supporting the nationally important economic contribution the area makes. The Cambridge and South Cambridgeshire Local Plans set out proposals for 33,500 new homes and seeks to ensure that sufficient land is available to allow the forecast of 44,100 new jobs. Set against this context of a growing and highly successful area is the need to ensure that growth is implemented as sustainably as possible. This will help ensure that Greater Cambridge reduces its environmental impact – minimising carbon emissions, flood risk, pollution and pressure on resources such as water. In order to achieve this, the Cambridge and South Cambridgeshire Local Plans (2018) set out visions and objectives for the Greater Cambridge area to 2031 for new development to help support the transition to a more environmentally sustainable and successful low carbon economy and respond to the challenges posed by our changing climate.

# What is sustainable design and construction?

- 1.2 Buildings are responsible for almost half of the UK's carbon emissions, half of the water consumption, about one third of landfill waste and one quarter of all raw materials used in the economy. The construction industry therefore has an important role to play in delivering sustainable development, which lies at the heart of the planning system.
- Sustainable design and construction seeks to lower consumption of resources, both in the construction of new buildings and in their use, providing a means of implementing sustainable development at the scale of individual sites and buildings. It takes account of the resources used in construction, and of the environmental, social and economic impacts of the construction process itself and how buildings are designed and used. It is increasingly recognised that one of the most important factors in delivering a successful development scheme is ensuring that the principles of sustainable design and construction form a key part of development briefs, and are therefore integrated into the design from the outset.

# What are the benefits of sustainable design and construction?

1.4 In helping to protect the environment, sustainable construction also has goals of creating a healthier environment. As such, the benefits of sustainable construction run across the three dimensions of sustainable development, as summarised in Table 1.1 below.

**Table 1.1:** Sustainable development and the benefits of sustainable design and construction

SUSTAINABLE DEVELOPMENT ROLE	BENEFITS
Environmental	Sustainable design and construction contributes to the protection and enhancement of the natural, built and

SUSTAINABLE DEVELOPMENT ROLE	BENEFITS
	<ul> <li>bistoric environment by:</li> <li>Using natural resources prudently, ensuring that materials are responsibly sourced, consumption of resources such as energy and water are minimised and enabling the reuse and recycling of resources at the end of a buildings life cycle;</li> <li>Minimising waste and pollution and enhancing air quality;</li> <li>Ensuring the implementation of climate change mitigation measures to reduce greenhouse gas emissions as part of new developments;</li> <li>Ensuring that new and existing communities are capable of adapting to our changing climate.</li> </ul>
Social	<ul> <li>The integration of the principles of sustainable design and construction into construction projects can lead to many social benefits including:</li> <li>Helping to reduce fuel bills and tackle fuel poverty through the construction of highly energy efficient new homes and retrofitting existing buildings, which can have subsequent impacts on peoples' health and wellbeing, overcoming health issues associated with buildings that have inadequate levels of insulation, heating control and ventilation;</li> <li>By ensuring that new and existing communities are capable of adapting to our changing climate, health risks associated with extreme weather events can be minimised.</li> </ul>
Economic	<ul> <li>Ensuring that new development contributes to the development of Greater Cambridge as an environmentally sustainable area will help us make the transition towards a zero carbon economy that is more resilient to energy market fluctuation and our changing climate. The more prudent use of resources will also secure the long term sustainability of growth.</li> <li>Enabling business to improve productivity, enhance the rental and investment value of their buildings and demonstrate performance against Corporate Social Responsibility aims.</li> </ul>

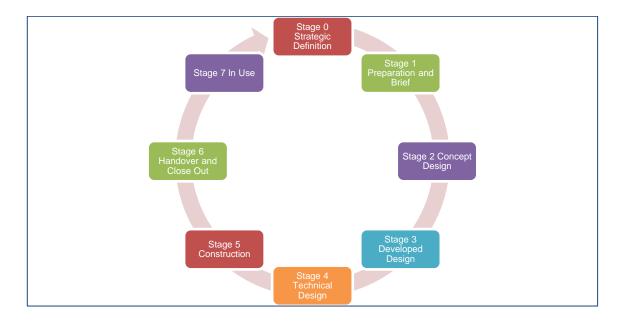
# Sustainable design and construction as part of the holistic design process

1.6 The guidance set out in this Supplementary Planning Document (SPD) should form an integral part of the design process so that minimum policy requirements are met, and where possible exceeded, in the most elegant, timely and cost effective way possible. It is therefore recommended that the guidance set out in this SPD is referred to from the

very start of the design process, including in early discussions with the client. If sustainable design is not fully considered from the outset, then problems, delays and increased costs can result. For example, if overheating analysis is left until late in the design process and the analysis then reveals that overheating will occur, it is often too late to integrate architectural responses into the proposals to mitigate this risk. Subsequent amendments to proposals could lead new planning or design issues. Similarly, meeting the BREEAM requirements outlined in section 3.8 of this SPD requires early consideration in order for a range of credits to be achieved.

1.7 The RIBA Plan of Work 2013 organises the process of briefing, designing, constructing, maintaining, operating and using building projects into 8 key stages, as illustrated in figure 1 below. Within each of these key stages are a series of sustainability checkpoints, helping to ensure sustainable construction is integrated into the design process from Stage 0 (Strategic Definition) through to Stage 7 (In Use). The guidance within this SPD should be used to inform these sustainability checkpoints, particularly in relation to stages 0 through to 4, which are of particular relevance to town planning.

**Figure 1:** Stages in the RIBA Plan of Work 2013 (adapted from RIBA (2013) RIBA Plan of Work 2013 Overview)



# **Legislative and Policy context**

1.8 Climate change is the greatest long-term challenge facing human development. The Stern Review (2006) outlined the economic impacts of climate change and concluded that "the benefits of strong, early action considerably outweigh the costs". Spatial planning can make a major contribution to tackling climate change in shaping both new and existing communities in ways that reduce carbon emissions and enable these communities to adapt to a changing climate. Spatial planning has the potential to deliver the right development in the right place; development that integrates the principles of sustainable design and construction.

- 1.9 The Climate Change Act 2008 contains a statutory target of securing a reduction in carbon dioxide levels of 80% below 1990 levels by 2050, with an interim target of a 34% reduction by 2020. Half of all the country's carbon emissions come from the energy used in constructing, occupying and operating buildings. A high standard of construction is therefore vital if these targets are to be achieved. Section 182 of the Planning Act2008 introduced a duty on local planning authorities to include policies that make a contribution to both climate change mitigation and adaptation in their plans. This sets a clear legal framework for the role of planning and local policy in responding to climate change.
- 1.10 The UN Paris Agreement on climate change sets out that in order to avoid climate change's worst impacts, it is vital to secure climate stabilisation at less than 2°C global temperature increase above pre-industrial levels. However, the latest science indicates that 1.5°C is a more realistic target to avoid these worst extremes, and even then there will still be significant impacts through severe weather incidents and sea level rise. Above all, the latest IPCC report¹ illustrates the vital need to reduce climate change emissions now by transforming our energy systems, reducing emissions by 45% by 2030 and ultimately achieving net zero emissions by 2050. This report has led to the Committee on Climate Change recommending Government adopts a new emissions target for the UK: net zero greenhouse gas emissions by 2050². The built environment has a clear role to play in helping to deliver these national targets.

#### **National Policy**

- 1.11 The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced, with section 14 of the Framework giving consideration to the role of planning in responding to our changing climate. This sets out a clear role for planning in supporting "the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure"<sup>3</sup>.
- 1.12 Crucially, the revised NPPF retains the key link between planning policy and the provisions of the Climate Change Act 2008. This means all local plans have a duty to reduce the carbon emissions associated with new development, contributing to England's carbon reduction targets as set out in the Climate Change Act.

<sup>&</sup>lt;sup>1</sup> IPCC (2018). Global Warming of 1.5°C – Summary for Policymakers. Available online at: <a href="https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/">https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/</a>

<sup>&</sup>lt;sup>2</sup> Committee on Climate Change (May 2019). Net Zero: The UK's contribution to stopping global warming. Available online at: <a href="https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/">https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/</a>

<sup>&</sup>lt;sup>3</sup> MHCLG (February 2019). National Planning Policy Framework. Available online at: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/779764/NPPF\_Feb\_2019\_web.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/779764/NPPF\_Feb\_2019\_web.pdf</a>

1.13 Further guidance on the policies contained in the NPPF is provided in the National Planning Guidance (NPPG), which has been taken into consideration in the production of this SPD.

### **Local Policy**

- 1.14 In order to support the achievement of sustainable development, sections 4 and 7 of the Cambridge Local Plan (2018) and chapters 4, 6 and 9 of the South Cambridgeshire Local Plan (2018) contains a series of policies related to the role of planning in responding to climate change and managing resources. These policies seek to ensure that Greater Cambridge develops in the most sustainable way possible, delivering our social and economic aspirations without compromising the environmental limits of the area for current and future generations.
- 1.15 This SPD specifically provides guidance on the implementation of the following policies: Cambridge Local Plan (2018):

## Section 4: Responding to climate change and managing resources

- Policy 28: Carbon Reduction, Community Energy Networks, Sustainable Design and Construction and Water Use
- Policy 30: Energy Efficiency Improvements in Existing Dwellings;
- Policy 31: Integrated water management and the water cycle;
- Policy 32: Flood Risk
- Policy 33: Contaminated land
- Policy 34: Light pollution control
- Policy 35: Protection of human health from noise and vibration
- Policy 36: Air quality, odour and dust

# Section 7: Protecting and enhancing the character of Cambridge

- Policy 63: Works to a Heritage Asset to Address Climate Change
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 71: Trees

#### **South Cambridgeshire Local Plan (2018):**

# Chapter 4: Climate Change

- Policy CC/1: Mitigation and Adaptation to Climate Change
- Policy CC/3: Renewable and Low Carbon Energy in New Developments
- Policy CC/4: Sustainable Design and Construction
- Policy CC/5: Sustainable Show Homes.
- Policy CC/6: Construction Methods

# Chapter 6: Protecting and enhancing the Natural and Historic Environment

- Policy NH/4: Biodiversity Clause 7 of the policy relates to climate change impacts on biodiversity.
- Policy NH/15: Heritage Assets and Adapting to Climate Change

# **Chapter 9: Promoting successful communities**

- Policy SC/10: Lighting proposals
- Policy SC/11: Noise Pollution
- Policy SC/12: Contaminated Land

- Policy SC/13: Air Quality
- Policy SC/15: Odour and Other Fugitive Emissions to Air
- 1.16 For the full text of the above policies please see:
  - Cambridge Local Plan (2018). Available online at: https://www.cambridge.gov.uk/local-plan-2018
  - South Cambridgeshire Local Plan (2018). Available online at: <a href="https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/the-adopted-development-plan/south-cambridgeshire-local-plan-2018/">https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/the-adopted-development-plan/south-cambridgeshire-local-plan-2018/</a>
- 1.17 In addition to planning policy, both Cambridge City Council and South Cambridgeshire District Council have set out their aspirations for the areas to be net zero carbon by 2050. Corporate policies supporting this aspiration are either in place, or are in the process of being developed and wider policies around issues such as fuel poverty, tackling inequality and protecting and enhancing biodiversity are also in place. The Local Plans (2018) and the guidance contained within this SPD support these corporate policies. On the issue of net zero carbon, while the guidance in this SPD will help to support the transition towards this goal, further detail will be considered as part of work on the Joint Greater Cambridge Local Plan.

# How to use this SPD and submission requirements

- 1.18 The guidance in this SPD should assist applicants in producing their **Sustainability Statement**<sup>4</sup> and associated **Sustainability Checklist** as well as other documents required to support planning applications. Each of the sections of the SPD contains guidance on the integration of sustainable design and construction into the design of new developments and the information that should be submitted with applications to demonstrate compliance with adopted policy in the 2018 local plans. The SPD is divided into the following sections:
  - Section 2 outlines the importance of integrating sustainable design and construction
    with urban design to ensure the delivery of high quality new development and to
    maximise the opportunities to enhance the environmental performance of new
    development. This section is applicable to schemes in both Cambridge and South
    Cambridgeshire. This section also gives consideration to the role of new development
    in promoting sustainable modes of transport.
  - Section 3 policy implementation provides technical guidance on the information that needs to be submitted alongside planning applications to demonstrate compliance with the policies. Colour coding has been applied to this section of the SPD to denote which guidance relates to which area, as detailed in paragraph 1.18 below.
  - Section 4: further approaches to sustainable design and construction The purpose of this section is to encourage developers to go further than current policy requirements, particularly for strategic sites and new settlements that have policy requirements to demonstrate excellence in sustainable development and exceed

<sup>&</sup>lt;sup>4</sup> As required by Policy 28 of the Cambridge Local Plan 2018 and policy CC/1 of the South Cambridgeshire Local Plan 2018

- baseline policy requirements. This section is applicable to schemes in both Cambridge and South Cambridgeshire.
- Appendices the SPD provides a series of appendices including the sustainability checklist, proformas for the submission of carbon calculations and guidance on environmental health matters such as emissions standards for gas Combined Heat and Power.
- 1.19 The **Sustainability Checklist** (see Appendix 1) provides the questions that applicants need to respond to in their **Sustainability Statement** and other relevant documents. Where the scheme is utilising the Councils pre-application discussion service, the **Checklist** will be provided to applicants after the first pre-application meeting in order that the requirements can be integrated into the design of the proposals from the earliest possible stage. It should be submitted alongside the **Sustainability Statement** as part of the planning submission. Applications are unlikely to be registered if these documents have not been submitted.
- 1.20 The Sustainability Statement should take the form of a report with accompanying plans and drawings to illustrate and expand upon the information contained in the Sustainability Checklist. Applicants are advised to:
  - Structure the report in the same order and with the same themes headings as the **Checklist**;
  - Be succinct when describing the nature of technologies or measures being proposed, providing a summary of proposals and cross referencing to information contained in other more detailed technical reports where appropriate;
  - Concentrate on demonstrating and quantifying what impact implementing the proposed measures is likely to have on the overall impact of the development
  - Reference how measures have been integrated into the design of the development.
- 1.21 For developments in Cambridge, the **Sustainability Statement** should be integrated into the **Design and Access Statement** for all major developments. For developments in South Cambridgeshire, the **Sustainability Statement** should form a stand-alone document.
- 1.22 In addition to the Sustainability Checklist and Sustainability Statement, tables 1.2 and 1.3 below provide a summary of the requirements for applications in Cambridge and those in South Cambridgeshire. Where each authorities have similar policies, shared guidance on policy implementation has been provided, denoted by purple sub-headings throughout section 3 of the document. Where guidance only applies to policies in Cambridge, sub-headings are in green, and for guidance for South Cambridgeshire, sub-headings are in orange.

Table 1.2: Summary of requirements for applications in Cambridge

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
Energy and carbon	Policy 28:  1. All Residential development –	1. Residential development –	1. Section 3.2, paragraphs 3.2.2
Carbon	44% reduction on Part L 2006	Carbon Reduction	– 3.2.7 plus

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
reduction	(19% reduction on Part L 2013)  2. All Non-residential — mandatory requirements for Ene01 associated with BREEAM 'excellent' Policy 30:  3. Householder application — home energy questionnaire	Statement  2. Non-residential development – BREEAM Pre- Assessment  3. Householder applications – home energy questionnaire	carbon reduction template in Appendix 2.  2. Section 3.2, paragraph 3.2.8  3. Section 3.2, paragraphs 3.2.9  - 3.2.13 plus the Home Energy Questionnaire in Appendix 4
Water	Policy 28:  1. All Residential development – 110 litres/person/day  2. All Non-residential development – maximum BREEAM credits for Wat01	<ol> <li>Residential development – Water Conservation Strategy</li> <li>Non-residential development – BREEAM preassessment</li> </ol>	<ol> <li>Section 3.3,         paragraphs 3.3.2         - 3.3.3</li> <li>Section 3.3,         paragraphs 3.3.4         - 3.3.6</li> </ol>
Climate change adaptation	Policy 28: All development should integrate measures into the design of developments to enable adaptation to climate risks including:  Overheating Flood risk	<ul> <li>Sustainability         Statement     </li> <li>Design and Access         Statement     </li> <li>Surface Water         Drainage Strategy     </li> </ul>	Section 3.4, paragraphs 3.4.6 – 3.4.40
Biodiversity	Policies 69 and 70: All development proposals should seek to conserve and enhance biodiversity	<ul> <li>Preliminary Ecological Assessment; and</li> <li>Protected Species Scoping Survey</li> </ul>	Section 3.5, paragraphs 3.5.3 – 3.5.16
Pollution: light pollution	Policy 34: All development proposals including external lighting or changes to existing lighting should reduce the potential impacts of that lighting	<ul> <li>An Assessment of the Need for Lighting</li> <li>Lighting Impact Assessment</li> </ul>	Section 3.6, paragraphs 3.6.2 0 3.6.36 plus Appendix 6
Pollution: contaminated land	Policy 33: All major development and any development proposals on land subject to contamination or land that is suspected to be contaminated. Developers are responsible for ensuring that a proposed development will be safe and 'suitable for use' for the purposes for which it is intended.	Contaminated land assessment	Section 3.6, paragraphs 3.6.37 – 3.6.42 plus Appendix 7
Pollution: Noise	Policy 35: Development will be permitted	Noise Impact     Assessment or	Section 3.6, paragraphs 3.6.43 –

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
	where it is demonstrated that: a. it will not lead to significant adverse effects and impacts, including cumulative effects and construction phase impacts wherever applicable, on health and quality of life/amenity from noise and vibration; and b. adverse noise effects/impacts can be minimised by appropriate reduction and/or mitigation measures secured through the use of conditions or planning obligations, as appropriate (prevention through high quality acoustic design is preferable to mitigation).	Acoustic Assessment/Report Acoustic Design Statement	3.6.132 plus Appendix 8
Pollution: Air Quality	Policy 36: Development must ensure that it does not adversely impact on air quality or expose sensitive users to poor air quality and does not lead to significant adverse effects on health, amenity and the environment from polluting or malodorous emissions, or dust or smoke emissions to air.	<ul> <li>Air Quality         Statement (for all development other than householder)</li> <li>Air Quality         Assessment</li> </ul>	Section 3.6, paragraphs 3.6.174 – 3.6.173
Pollution: Odour and other fugitive emissions	Policy 36: Development must ensure that it does not adversely impact health, amenity and the environment from polluting or malodorous emissions, or dust or smoke emissions to air	Odour Impact Risk     Assessment or     Detailed Odour     Impact Assessment	Section 3.6, paragraphs 3.6.182 – 3.6.206
Sustainable Drainage Systems and Flood Risk	Policies 31 and 32: All scales of new development needs to utilise SuDS in order to reduce the rate of discharge into watercourses and mitigate the risk of surface water flooding. A Site Specific Flood Risk Assessment is required: For proposals of 1 ha or greater in Flood Zone 1 For all proposals for new development (including minor	<ul> <li>Surface Water         Drainage Strategy     </li> <li>A Site Specific Flood         Risk Assessment     </li> <li>Surface Water         Drainage Pro-forma         (Appendix F) of the         Cambridgeshire Flood         and Water SPD     </li> </ul>	Section 3.7, paragraphs 3.7.1 – 3.7.13 and the Cambridgeshire Flood and Water SPD

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
	<ul> <li>development and change of use) in Flood Zones 2 and 3; or</li> <li>In an area within Flood Zone 1 which has critical drainage problems; or</li> <li>Where proposed development, or a change of use to a more vulnerable class, may be subject to other forms of flooding</li> </ul>		
Construction Standards (BREEAM)	Policy 28: All new non-residential development to achieve BREEAM 'excellent'	BREEAM Pre- Assessment	Section 3.8, paragraphs 3.8.1 – 3.8.7
Heritage Assets	Policy 63: Where works to improve the environmental performance of a heritage asset are proposed, evidence is required to demonstrate that the works will not harm the building's integrity or significance.	Information can be included in the Design and Access Statement or Heritage Statement	Section 3.10, paragraphs 3.10.1 – 3.10.7
Construction waste and occupation phase waste management	Policy 28: All new development should include measures to reduce construction waste and ensure that provision is made for storage capacity for waste, both internal and external	Construction waste: Site Waste Management Plans (secured via conditions) Occupation phase waste management: • Recap Waste Management Design Guide Toolkit (as required by Policy CS28 of the Cambridgeshire Minerals and Waste Core Strategy). • Proposals in Cambridge should also submit Cambridge City Council's Waste and Recycling Provision Checklist.	Section 3.11, paragraphs 3.11.1 – 3.11.10

Table 1.3: Summary of requirements for applications in South Cambridgeshire

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
Energy and carbon	Policy CC/3: 10% onsite renewable or low	Energy Statement	Section 3.2, paragraphs 3.2.14 –

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
reduction	carbon energy for all new residential development and major non-residential development		3.2.38 plus the Energy Statement Form in Appendix 5
Water	Policy CC/4:  1. All residential development – 110 litres/person/day  2. Non-residential development – 2 BREEAM credits for Wat01	<ol> <li>Residential development – Water Conservation Strategy</li> <li>Non-residential development – BREEAM preassessment</li> </ol>	<ol> <li>Section 3.3,         <ul> <li>paragraphs 3.3.2</li> <li>- 3.3.3</li> </ul> </li> <li>Section 3.3,         <ul> <li>paragraphs 3.3.7</li> <li>- 3.3.9</li> </ul> </li> </ol>
Climate change adaptation	Policy CC/1: Integrate measures into the design of developments to enable adaptation to climate risks including:  Overheating Flood risk	<ul> <li>Sustainability         Statement</li> <li>Design and Access         Statement</li> <li>Surface Water         Drainage Strategy</li> </ul>	Section 3.4, paragraphs 3.4.6 – 3.4.40
Biodiversity	Policies NH/4 and NH/5: All development proposals should seek to conserve and enhance biodiversity	<ul> <li>Preliminary Ecological Assessment; and</li> <li>Protected Species Scoping Survey</li> </ul>	Section 3.5, paragraphs 3.5.3 – 3.5.16
Pollution: light pollution	Policy SC/10: All development proposals including external lighting or changes to existing lighting should reduce the potential impacts of that lighting	<ul> <li>An Assessment of the Need for Lighting</li> <li>Lighting Impact Assessment</li> </ul>	Section 3.6, paragraphs 3.6.2 0 3.6.36 plus Appendix 6
Pollution: contaminated land	Policy SC/12: All major development and any development proposals on land subject to contamination or land that is suspected to be contaminated. Developers are responsible for ensuring that a proposed development will be safe and 'suitable for use' for the purposes for which it is intended.	Contaminated land assessment	Section 3.6, paragraphs 3.6.37 – 3.6.42 plus Appendix 7
Pollution: Noise	Policy SC/11: Development will be permitted where it is demonstrated that: a. it will not lead to significant adverse effects and impacts, including cumulative effects and construction phase impacts wherever applicable, on health and quality of life/amenity from	<ul> <li>Noise Impact         Assessment or         Acoustic         Assessment/Report</li> <li>Acoustic Design         Statement</li> </ul>	Section 3.6, paragraphs 3.6.43 – 3.6.132 plus Appendix 8

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
	noise and vibration; and b. adverse noise effects/impacts can be minimised by appropriate reduction and/or mitigation measures secured through the use of conditions or planning obligations, as appropriate (prevention through high quality acoustic design is preferable to mitigation).		
Quality	Policy SC/13: Development must ensure that it does not adversely impact on air quality or expose sensitive users to poor air quality and does not lead to significant adverse effects on health, amenity and the environment from polluting or malodorous emissions, or dust or smoke emissions to air.	<ul> <li>Air Quality         Assessment     </li> <li>Low Emission         Strategy     </li> </ul>	Section 3.6, paragraphs 3.6.174 – 3.6.181
Odour and other fugitive emissions	Policy SC/14: Development must ensure that it does not adversely impact health, amenity and the environment from polluting or malodorous emissions, or dust or smoke emissions to air	Odour Impact Risk Assessment or Detailed Odour Impact Assessment	Section 3.6, paragraphs 3.6.182 – 3.6.206
Drainage Systems and Flood Risk	Policies CC/7, CC/8 and CC/9: Refer to the Cambridgeshire Flood and Water SPD A Site Specific Flood Risk Assessment is required: For proposals of 1 ha or greater in Flood Zone 1 For all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3; or In an area within Flood Zone 1 which has critical drainage	<ul> <li>Surface Water         Drainage Strategy         and Adoption         Statement     </li> <li>Site Specific Flood         Risk Assessment     </li> <li>Surface Water         Drainage Pro-forma         (Appendix F) of the         Cambridgeshire Flood         and Water SPD     </li> </ul>	Refer to the Cambridgeshire Flood and Water SPD
	<ul> <li>problems; or</li> <li>Where proposed development, or a change of use to a more vulnerable class, may be subject to other forms of flooding</li> </ul>		

TOPIC	REQUIREMENT	EVIDENCE REQUIRED	SECTION OF SPD
Show Homes	For residential development where a show home is being provided, measures to enhance the environmental performance of homes should be installed and made available to new home buyers to enhance the specification of their new home	Statement	paragraphs 3.9.1 – 3.9.4
Heritage Assets	Policy NH/15: Where works to improve the environmental performance of a heritage asset are proposed, evidence is required to demonstrate that the works will not harm the building's integrity or significance.	Information can be included in the Design and Access Statement or Heritage Statement	Section 3.10, paragraphs 3.10.1 – 3.10.7
Construction waste and occupation phase waste management	Policies CC/6 and HQ/1: All new development should include measures to reduce construction waste and ensure that provision is made for storage capacity for waste, both internal and external	Construction waste: Site Waste Management Plans (secured via conditions) Occupation phase waste management: • Recap Waste Management Design Guide Toolkit (as required by Policy CS28 of the Cambridgeshire Minerals and Waste Core Strategy).	Section 3.11, paragraphs 3.11.1 – 3.11.10

# Status of this document

- 1.23 This is the draft version of the Greater Cambridge Sustainable Design and Construction SPD, agreed for consultation at Cambridge City Council's Planning and Transport Scrutiny Committee by the Executive Councillor for Planning Policy and Open Spaces on 26 June 2019, and at South Cambridgeshire District Council's Cabinet on the 1 July 2019.
- 1.24 Once adopted, the SPD will be a material consideration in the determination of planning applications.

# Section 2: The importance of urban design

#### 2.1 Introduction

- 2.1.1 Designing and delivering more sustainable forms of development requires consideration at a strategic scale, before moving down to consider the more detailed site specific design and construction elements. Development sites come in a wide variety of sizes and levels of complexity and both are crucial in determining whether proposals fit into existing movement frameworks and can tie into existing services and facilities or whether these need to be provided or improved as part of the development.
- 2.1.2 Good urban design and sustainable design and construction are mutually inclusive. Integrating the two concepts will maximise the opportunities for creating sustainable forms of development, whether it is a new settlement and urban extension or development within an established community. Well considered and integrated movement patterns and land uses with appropriate densities combine to promote sustainable and inclusive patterns of development that ensure, safe, sustainable, liveable and mixed use places are created which provide good access for all to homes, jobs and key services. The layout and form of development also impacts on wider issues such as microclimate and drainage and is crucial in determining the capacity of new and existing communities to adapt to our changing climate.

# 2.2 Achieving more sustainable development forms

2.2.1 Sustainability encompasses social, economic and environmental factors. When considered holistically, good design and planning can help achieve socially inclusive places which promote vitality, ensure the viability of services and decrease energy demands and reliance on car based trips.

## Walkable neighbourhoods

2.2.2 The creation of attractive places in which to live and work lies at the heart of sustainable development practice.

'A successful and sustainable local neighbourhood is a product of the distances people have to walk to access daily facilities, the presence of a sufficient range of such facilities to support their needs, and places and spaces where a variety of activities can take place.<sup>5</sup>'

2.2.3 Historically places developed which had shops and other services within walking distance of the majority of the population, as most movements were pedestrian based. As a result, the density of development in the most 'accessible' parts of the settlement was higher. Such an arrangement provides the basis for a modern interpretation of this traditional form – the 'walkable neighbourhood'. This term describes an area within which it is possible and indeed desirable to walk (and cycle or use of other sustainable means) to access services and facilities. Typically this is based on maximum distances of 400 metre (5 minute) and 800 metre (10 minute) walking catchments. This 'catchment'

<sup>&</sup>lt;sup>5</sup> Llewelyn-Davies (2000) The Urban Design Compendium. www.nationalarchives.gov.uk, p39

area can be used to help structure districts of new settlements or urban extensions or to help work out how development can be successfully tied into existing areas. Research has shown that 'the maximum distance that people are prepared to walk is generally considered to be around 2000 metres although the optimum is 800 metres (a comfortable ten-minute walk)'<sup>6</sup>.

2.2.4 When defining the catchment of an area or planning how new services and facilities can be best integrated to serve development, the actual walking catchment must be defined as opposed to the theoretical one. The accessibility and therefore availability of services and facilities will be influenced by how directly they connect with the rest of the development area and whether any barriers to movement, such as railway lines, main roads etc. exist. In addition, proposals should undertake a comprehensive analysis of the site and surrounding area to establish the proximity of existing services and facilities. This will need to be included in the **Design and Access Statement** required in support of a planning application.

#### **Movement framework**

- 2.2.5 The movement framework describes the way in which the different modes of walking, cycling and public transport, along with private vehicles (including servicing and deliveries) all fit together. The aim should be to make it easy and more attractive to walk, cycle or take the bus through the provision of well integrated, safe and connected routes as well as secure and convenient cycle parking. The way in which routes and associated facilities are planned will inform the location of activity nodes and the appropriate distribution of density. Crucial to creating sustainable development forms is making services and facilities accessible to the widest number of people, whilst reducing dependence on the private car.
- 2.2.6 A thorough understanding of the context of a development and the relationship to existing services and facilities, including public transport connections and links to cycle networks, will be crucial in achieving well-integrated and well-connected sustainable forms of development. This should be demonstrated in the Design and Access Statement required in support a planning application.

## Land use and 'activity nodes'

- 2.2.7 The term 'activity node' describes a location where services and facilities are centred due to good accessibility on foot, by bicycle or public transport and where population density is increased to take advantage of proximity to the services and facilities provided. The location of an activity node is influenced by where movement corridors pass and by how they connect to the wider area.
- 2.2.8 The range of services and facilities that an activity node provides is one of the most important factors in helping to ensure vitality and viability of places. The scale of the node and the range of services and facilities supported is based on the catchment population and numbers of people living in and passing through an area. A more vibrant

<sup>&</sup>lt;sup>6</sup> Rudlin and Falk (1999) Building the 21<sup>st</sup> Century Home, Architectural Press, p220

- and sustainable form of development will result from blurring the distinction between uses and designing places that make walking, or cycling, to the local centre and bus stop as convenient as possible.
- 2.2.9 The activity node will consist of a 'series of interlinked activity generators bus stops, supermarkets, community/religious buildings, cafes, shops and small scale offices'<sup>7</sup>.

### **Density profile**

2.2.10 As with traditional settlements, population densities should increase around key activity nodes and along the main public transport corridors. When considering the development density of a site, it should be remembered that the density will not be uniform across a site but will need to respond to the constraints and opportunities that exist and in particular, increase around key activity nodes and along public transport links and access points.

### **Development blocks**

- 2.2.11 Land use, density and movement are interlinked and thereby form the basic structuring principles of a sustainable community or place. A connected grid essentially allows for the creation of a 'permeable' neighbourhood which offers a choice of route to all users whilst focusing key services and facilities on the main routes.
- 2.2.12 The spaces in between the 'network' formed by the streets are called 'development blocks'. When considering change over time, it is often the street network which remains as the enduring element of places, whilst buildings come and go. It is therefore important to consider the planning and integration of new and existing routes in development proposals.
- 2.2.13 Two aspects of the development block, the size and shape, must be considered which will be dependent on the location of the block in terms of its surrounding context.
- 2.2.15 **Development Block: Size.** Closer towards the centres of towns and cities, and especially in the historic cores of places, block sizes are typically smaller due to the greater frequency of streets brought about by the need to maximise accessibility. In more central areas a robust block size capable of accommodating a range of uses and able to adapt over time will be 60-80m. Further out from the core a block size of between 80-90m represents the more robust size. When considering residential development blocks, a typical dimension of 100m x 200m will create a development parcel capable of accommodating a variety of residential dwelling types and capable of accommodating a variety of residential dwelling types and capable of accommodating a variety of parking, garden spaces and other functions in the block interior. When considering more rural settlements, the overall scale or extent of the settlement will be important in determining how accessible a place it is. The same principles of finer grain and smaller development parcels on high streets and other accessible routes will apply. Many South

<sup>&</sup>lt;sup>7</sup> Barton, Grant and Guise (2003) Shaping Neighbourhoods, A guide for health, sustainability and vitality. Spon Press, London and New York, p198

Cambridgeshire villages have a linear morphology with the main shops and services organised along the principal street with a series of smaller development parcels extending back from this route.

2.2.16 Development Block: Shape. Good urban design principles advocate the creation of a 'deformed grid' to produce a series of connected streets and with buildings orientated to front on to streets and spaces. Whilst uniform rectangular blocks may be the easiest form to plan and develop, in reality and especially when fitting new development into existing settlements, blocks will need to be 'deformed' to meet the constraints of the site such as existing roads, topography and watercourses, as well as to help create a higher degree of visual interest.

#### Mixing uses

2.2.17 Mixed use developments can happen at a variety of scales, from an individual building through to a block or development site. Such mixing of complementary uses can occur horizontally, with complementary uses occurring side by side, or vertically with different uses on different floors of the same building. In the past, planning has tended to 'zone' individual uses rather than the mixed approach of more traditional places, which has resulted in the fragmentation of places and the increased dependence on the private car to access services and facilities. 'Good neighbour principles' need to be adhered to and the servicing requirements of different uses and users needs to be considered. However, when well resolved, the result will be a development that promotes the vitality and viability of places through extending uses throughout the day and which are ultimately more resource and energy efficient.

### Robust and adaptable places and buildings

- 2.2.18 One of the fundamental ingredients of a 'sustainable place' is the ability to accommodate change over time and so reduce the need for demolition and rebuilding.
- 2.2.19 Consideration needs to be given to different scales, from the large-scale such as the overall layout and size of development blocks, through to the small-scale, which considers building depths and internal organisation of dwellings. Consideration will be applicable to both new developments as well as the redevelopment of existing buildings and places.
- 2.2.20 The rate and scale at which places develop is significantly faster today than in the past. The gradual evolution of settlements through the building and rebuilding of plots within development blocks still occurs, but in the case of urban extensions and new settlements, the scale and rate of development means that it is difficult to predict the nature and demand of users into the future. Buildings therefore need to be adaptable to be capable of reuse and conversion to meet the changing social and technological needs of communities as they grow and as places respond to changing market and economic conditions. Buildings and communities also need to be adaptable to our changing climate, giving consideration to issues such as rising temperatures and extreme weather events such as flash flooding and storms.

- 2.2.21 Building size: The depth and width of buildings will have a marked effect on the sustainability of a development in terms of the flexibility of the building and therefore the potential for it to adapt to future needs, as well as the way in which it performs in relation to overall energy efficiency.
- 2.2.22 The depth of a building has direct implications in terms of lighting, ventilation and robustness. A shallow building can reduce the need for artificial lighting and mechanical ventilation, therefore reducing energy demands. In terms of optimum depths of buildings, it is generally acknowledged that 9 to 13m creates the most robust and adaptable form.
- 2.2.23 Increased floor to ceiling heights at ground floor level: In some instances where future needs in terms of services and facilities, such as shops, cannot be accurately predicted or at the time of construction there is insufficient demand to make retail space viable, the design of buildings with increased floor to ceiling heights at the ground floor (typically 3.75m) can allow for the building to be adapted relatively easily to retail uses, with adequate clearance for service provision and other needs.
- 2.2.24 Adaptable internal space: Enabling the internal layout of buildings to be altered with relative ease is an important consideration in making buildings adaptable for different uses in the future. The most important consideration in the design of the structure is to ensure that there is maximum flexibility for the alteration of internal partitions, for example by ensuring that the load bearing elements of the building are in the external frame of the structure.
- 2.2.25 Built form and climate change adaptation: The layout of development from overall block scale down to individual buildings can impact on the microclimate that a site experiences. At the early stages of masterplanning solar orientation, prevailing wind direction, topography and drainage need to be understood to positively inform the scale and massing of development, orientation of private amenity space and location of open spaces.
- 2.2.26 Opportunities for adaptation exist at a range of different scales from conurbation or catchment scale, right down to the scale of individual buildings. The Town and Country Planning Association (TCPA)<sup>8</sup>, describes these opportunities as follows:
  - Conurbation or catchment scale: Climate change adaptation at this scale will potentially serve the whole city and is likely to include a variety of land uses. Opportunities for creating cost-effective and integrated solutions as part of an overarching climate change strategy may be greatest at this scale.
  - Neighbourhood scale: This scale involves developments of discrete groups of dwellings, including a mix of uses, and can vary in size from an individual block to a large estate. Consideration will need to be given to adapting the public realm and spaces between buildings and developments. Solutions can be developed through a site brief or masterplan.
  - **Building scale:** Smaller developments including individual dwellings, apartment blocks or commercial buildings provide opportunities for integrating climate

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<sup>&</sup>lt;sup>8</sup> TCPA (2007) Climate change adaptation by design: A guide for sustainable communities.

change adaptation into or around buildings. Attention will need to be given to the design of the building, its surroundings, and how it is used and managed, in order to maximise current and future climate adaptation potential. Design or building codes provide useful tools.

Further consideration of climate change adaptation is given in section 3.4 of this SPD.

# 2.3 Transport, Movement and Accessibility

- 2.3.1 Transport accounts for 27% of the UK's carbon emissions, making it the largest emitter of carbon by sector<sup>9</sup>. Road transport accounts for 90% of these emissions. Not only does road transport have implications for carbon emissions, but it is also one of the biggest contributors to poor air quality in our towns and cities. The Greater Cambridge area already has three air quality management areas (AQMA) in place, one covering Cambridge city centre, and two in South Cambridgeshire along the A14 and M11.
- 2.3.2 In response to these challenges, Government has launched its Road to Zero Strategy, which sets out its mission to put the UK at the forefront of the design and manufacturing of zero emission vehicles, and for all new cars and vans to be effectively zero emission by 2040. The sale of new conventional petrol and diesel cars and vans will end by 2040, by which time the majority of new cars and vans sold will be 100% zero emission and all new cars and vans to have significant zero emission capability. By 2050 we want almost every car and van to be zero emission. At least 50%, and as many as 70%, of new car sales and up to 40% of new van sales will need to be ultra low emission by 2030.
- 2.3.3 Planning has its part to play in facilitating this transition to zero emissions vehicles, but it also has a wider role to play in facilitating development that makes best use of walking, cycling and public transport to enable people to go about their lives without having to rely on the use of private cars. Within the Greater Cambridge area, the Greater Cambridge Partnership are in the process of delivering a wide range of sustainable transport infrastructure projects to help shift the focus of peoples trips from private vehicles to a greater share of public transport and cycle trips. In many cases these projects are focussed around growth areas such as the new settlements at Waterbeach, Bourn Airfield and Northstowe as well as key employment areas such as the Cambridge Biomedical Campus.
- 2.3.4 Within Cambridge, all major schemes are likely to be close to public transport and cycle networks due to the compact form and scale of development. In South Cambridgeshire many of the existing larger villages also benefit from existing public transport routes, with proposals in place to enhance these as well as enhancing cycle routes to villages surrounding the city via Greater Cambridge Partnerships Greenways project (see figure 2). However, good design is required to ensure the full potential of public transport, walking and cycling will be realised.
- 2.3.5 When considering new development, proposals should structure places around the principles of walkable neighbourhoods, highlighted in section 2.2 above, and so reduce

<sup>&</sup>lt;sup>9</sup> HM Government (July 2018). The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy.

the dependence on private cars. All developments, irrespective of size, create the opportunity to ensure the impacts from trips generated by the development are minimised and to support the patronage of public transport and other more sustainable modes of transport.

"Research suggests net densities of 100 persons per hectare (pph) are necessary to sustain a good bus service (LGMB, 1995). Taking the 800m (10 minute) walking distance as a starting point (generating a walkable neighbourhood of 97.5 ha), this equates to 45 units/ha if the average UK household size of 2.2 is applied." 10

- 2.3.6 Planning applications will need to provide evidence that the design and layout of developments will help to reduce the number of trips generated through development forms that link movement, land use and density, as part of Design and Access Statements, with greater detail provided in Transport Assessments. A thorough understanding of the context of the development and its relationship to existing services and facilities including public transport connections and cycle infrastructure, will be crucial in achieving well integrated and well connected forms of development.
- 2.3.7 Where car free developments or developments with reduced parking allocations (lower than levels suggested by Local Plan policy) are proposed, connectivity to public transport and local amenities based on the walkable neighbourhoods principles (section 2.2 above) will be key. Other measures such as car clubs and off-gauge bikes will be necessary to minimise overspill parking in neighbouring communities.
- 2.3.8 There is much information available on good and best practice measures to enable more sustainable transport modes. Table 2.1 below provides suggestions of some of the possible ways in which more sustainable transport objectives can be met. The table is not intended to be exhaustive and not all measures will be applicable to all sites. Many of these measures will have multiple knock-on effects, many of which should be positive. For example, establishing a car club on a site will help reduce CO<sub>2</sub> emissions, improve air quality and potentially provide a greater developable area or more land for open space through reduced land take for private car parking.
- 2.3.9 Following on from work with the Design Council, South Cambridgeshire District Council is in the process of developing a toolkit to help deliver an increase in active travel as part of new developments. Developers should make reference to this toolkit once it is available.

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 $<sup>^{</sup>m 10}$  Llewelyn-Davies (2000). The Urban Design Compendium. English Partnerships

**Figure 2:** The Greater Cambridge Greenways (image courtesy of Greater Cambridge Partnership)

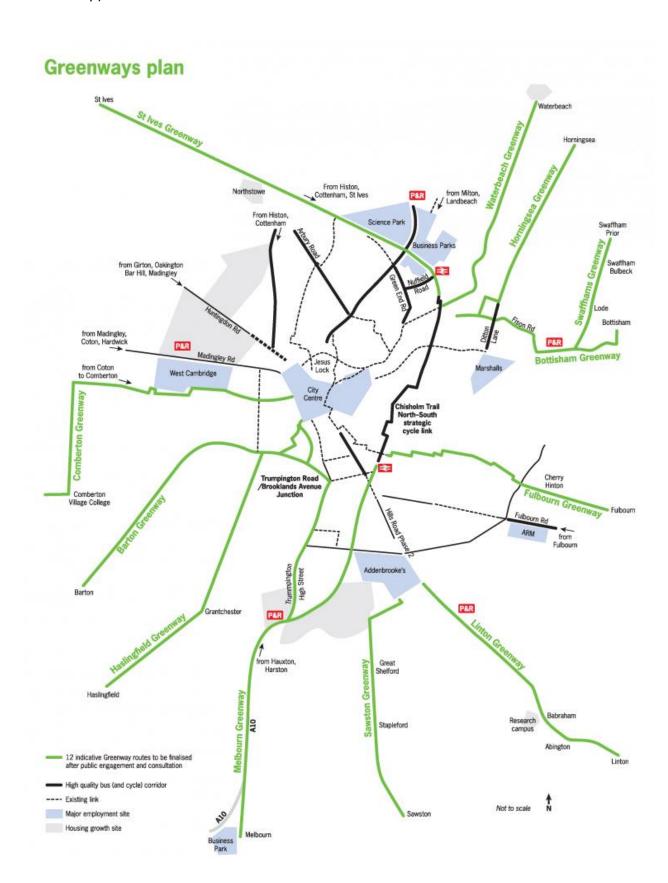


 Table 2.1: Potential measures to meet sustainable transport objectives

OBJECTIVE	POTENTIAL MEASURES
1. Reduce the need for travel by private car	<ul> <li>Mixed use developments;</li> <li>Complementary uses with surrounding area;</li> <li>Ensuring daily needs of occupants can be met within walking and cycling distance;</li> <li>Providing an onsite car club;</li> <li>Provide parking for off gauge bikes</li> <li>Provide travel plans for development;</li> <li>Provide travel information packs for building occupants.</li> </ul>
2. Prioritising walking and cycling	<ul> <li>Cycle and pedestrian infrastructure is ready prior to occupation of dwellings on new developments</li> <li>Designing footpaths and cycle ways along 'desire lines' to principal likely destinations both in the vicinity of the development and the wider area;</li> <li>Locating cycle parking for maximum speed of access from buildings, making it more convenient than car parking;</li> <li>Ensuring cycle parking is safe and secure;</li> <li>Ensuring paths are safe and well lit, with natural surveillance from surrounding buildings;</li> <li>Minimising disruption of footpaths and cycle paths from the road network and car park layouts;</li> <li>Incorporating traffic calming measures;</li> <li>Ensuring that all transport modes are integrated so that there are good walking and cycling routes to and from bus stops and that sufficient safe and secure cycle parking is provided at bus stops.</li> </ul>
3. Integrating new and existing pedestrian and cycle networks successfully	Existing networks should be used as a starting point for design.
4. Retaining and improving existing networks	<ul> <li>Minor upgrading of junctions, signage and/or pavements and cycle ways;</li> <li>Re-routing sections of cycle paths where necessary.</li> </ul>
5. Ensuring these networks are in place prior to first occupation	
6. Developing an appropriate car parking and cycle parking strategy	<ul> <li>For developments in Cambridge:</li> <li>See Policy 82 and Appendix L of the Cambridge Local Plan 2018</li> <li>For developments in South Cambridgeshire:</li> <li>See Policy TI/3 of the South Cambridgeshire Local Plan 2018</li> </ul>

OBJECTIVE	POTENTIAL MEASURES
7. Ensuring both existing and proposed high quality sustainable transport links (both public transport and cycle paths/bridleways) are not inhibited by the development  8. Choosing the most suitable location for sustainable modes (non-residential only)  9. Using the sequential approach to ensure that non-residential development is located in areas easily accessible by sustainable mode  10. Consider freighting options using sustainable modes (e.g. bike couriers)  11. Ensuring accessibility for all	<ul> <li>Locate disabled parking spaces close to the entrances to buildings;</li> <li>Ensure spaces and routes are not obstructed;</li> <li>Provide dropped kerbs, shallow inclines and cambers, flat thresholds;</li> <li>Ensure all housing in urban extensions and new settlements are within 400 metres of high quality public transport networks;</li> <li>Provide seating along key routes to public transport stops and key facilities within developments (Ambulant disabled people can often only travel 100</li> </ul>
12. Ensuring all housing within urban extensions and new settlements are within 400m of public transport networks  13. Ensuring transport infrastructure minimises impact on wildlife, landscape and amenity	<ul> <li>Use of Sustainable Drainage Systems (SuDS) to improve the quality of surface water run-off from roads;</li> <li>Using existing vegetation or planting to reduce long distance views of roads;</li> <li>Use of home zones and other traffic calming measures;</li> <li>Routing transport infrastructure away from known wildlife migration routes or integrating mitigation</li> </ul>

OBJECTIVE	POTENTIAL MEASURES
	measures into schemes to enable continued use of routes (e.g. wildlife crossings underneath and over roads and paths).
14. Supporting the transition to low emission vehicles	<ul> <li>Provision of electric vehicle charging points for all new developments (see section 3.6 Air Quality for further guidance)</li> </ul>

# **Further guidance**

- Ministry of Housing and Local Government and Department for Transport (2007) Manual for Streets. Available online at: https://www.gov.uk/government/publications/manual-for-streets
- Cambridgeshire County Council (2014). Transport Strategy for Cambridge and South Cambridgeshire. Available online at: <a href="https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/cambridge-city-and-south-cambs-transport-strategy/">https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/cambridge-city-and-south-cambs-transport-strategy/</a>
- Cambridge City Council (2010). Cycle Parking Guide for New Residential Development. Available online at: <a href="https://www.cambridge.gov.uk/media/6771/cycle-parking-guide-for-new-residential-developments.pdf">https://www.cambridge.gov.uk/media/6771/cycle-parking-guide-for-new-residential-developments.pdf</a>

# **Section 3: Policy Implementation**

### 3.1 Introduction

- 3.1.1 This section of the SPD provides guidance on the implementation of policies contained within the Cambridge Local Plan (2018) and the South Cambridgeshire Local Plan (2018). It provides guidance on the information that needs to be submitted with applications to demonstrate compliance with policy, the format that this information should take, and guidance on possible approaches to policy compliance. Where appropriate, links to additional guidance will be provided.
- 3.1.2 The guidance contained in this section is split into the following topic areas:
  - Energy and carbon reduction;
  - Water efficiency;
  - Climate change adaptation;
  - Biodiversity;
  - Pollution;
  - Sustainable drainage systems;
  - Construction Standards (BREEAM).
  - Sustainable Show Homes;
  - Climate change and heritage assets;
  - Construction waste and occupation phase waste management

# **Viability considerations**

- 3.1.3 As part of the process of developing the 2018 Cambridge and South Cambridgeshire Local Plans, the viability of all of the policy requirements has been tested as part of the examination process. With regards to the policies considered by this SPD, the requirements set out in these policies were all found to be viable, with some, for example the water efficiency requirements for new residential development, being found to have minimal impact on viability.
- 3.1.4 Integrating sustainability considerations early in the development process can go some way to ensure that policy requirements can be achieved in a cost effective manner. Nevertheless, it is recognised that viability considerations can change and are influenced by many factors. Technical feasibility may also have a bearing on the ability of proposals to fully meet policy requirements in some situations. In such situations, we would strongly recommend that the applicant seek early engagement with the councils in order to consider and agree in principle alternative ways in which the aims of the councils' sustainability policies and objectives can be achieved, even if full policy compliance is not possible. Such an upfront approach can help to minimise delays after the formal submission of planning applications.

# 3.2 Energy and Carbon Reduction

3.2.1 Buildings are responsible for almost half of the UK's carbon emissions, and as such the way in which we design buildings has an important role to play in supporting the transition to a low, and indeed zero carbon society. Across the Greater Cambridge area, the respective 2018 local plans include specific policies to reduce the energy demand and carbon emissions associated with new, and in the case of Cambridge, existing homes.

## Carbon reduction in new development - Cambridge

LOCATION: Cambridge

POLICY: Policy 28: Carbon reduction, community energy networks,

sustainable design and construction and water use

SCALE OF DEVELOPMENT: All new development

TYPE OF DEVELOPMENT: Residential and non-residential development

SUBMISSION REQUIREMENTS: Carbon Reduction Statement (residential development)

BREEAM pre-assessment (non-residential development)

LINK TO SUSTAINABILITY

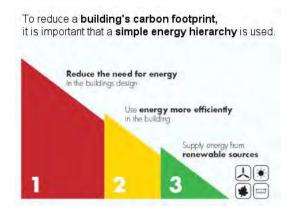
CHECKLIST

En.1, En.2, En.3

#### **Policy overview**

3.2.2 Policy 28 sets carbon reduction requirements for all new development in Cambridge, with separate requirements for residential and non-residential development. All new residential development is required to reduce emissions by 44% compared to a Building Regulations 2006 baseline (equivalent to a 19% reduction on Part L 2013). For new non-residential development, the requirement is to meet the mandatory credits required for achievement of BREEAM 'excellent' under the Ene 01 credit. What these requirements have in common is that they both require new development to follow the hierarchical approach to reducing energy demand and associated carbon emissions, as illustrated in figure 3 below.

**Figure 3:** The energy hierarchy



- 3.2.3 Following the energy hierarchy requires a three-pronged approach, often referred to as Be Lean, Be Clean and Be Green. In essence, this approach:
  - Minimises the energy demand of new buildings through fabric performance and energy efficiency measures;
  - Utilises energy more efficiently in buildings, for example through the use of underfloor heating so only very low return temperatures are needed or through the use of passive design to reduce reliance on mechanical ventilation;
  - Supplies energy from new, renewable energy sources.
- 3.2.4 While policy 28 is focussed on reducing carbon emissions from energy use within buildings themselves, new developments should also strive to reduce carbon emissions from other sources including transport related emissions through the promotion of sustainable modes of transport and low or zero emissions vehicles (see chapter 2), and through utilising construction materials with low embodied energy.

### Submission requirements – residential development

- 3.2.5 For all new residential development, the requirement is for a 44% reduction in carbon emissions compared to a Building Regulations Part L 2006 compliant baseline. For schemes utilising Building Regulations Part L 2013, this is equivalent to a 19% reduction on a Part L compliant baseline. This is equivalent to meeting the energy requirements of level 4 of the now withdrawn Code for Sustainable Homes, and the implementation of this policy follows the methodology for assessing this requirement.
- 3.2.6 In order to demonstrate compliance, applicants should submit a **Carbon Reduction Statement**, setting out how the policy requirements will be met. The Statement should be structured around the Be Lean, Be Clean and Be Green hierarchy, with the levels of carbon reduction achieved at each stage of the hierarchy shown. This Statement can either for part of the Sustainability Statement or can be submitted as a standalone document.
- 3.2.7 Table 3.1 below sets out the information that should be included within the Carbon Reduction Statement, while Appendix 2 contains a carbon reduction template which should be used to provide a summary of the calculations. In some cases, for example at the outline application stage, it may not be possible to provide detailed carbon calculations in line with Building Regulations methodology. In such cases, the Carbon Reduction Statement should outline the general approach using benchmarks where possible, with more detailed carbon calculations being secured through a planning condition requiring the submission of Carbon Reduction Statements at the reserved matters stage.

**Table 3.1:** Carbon Reduction Statement and Calculation requirements

CALCULATION BASIS	NOTES
As the policy requirement is derived from the energy	Where a building contains
requirements of Level 4 of the now withdrawn Code	multiple dwellings (e.g.
for Sustainable Homes, the carbon reduction	apartment blocks or terraced

CALCULATION BASIS	NOTES
The Target Emission Rate (TER) and Dwelling Emission Rate (DER) should be derived from the calculations carried out for Building Regulations compliance (Part L).	housing), it is acceptable to assess this issue based on the average energy performance of all dwellings within the building. The area weighted average DER and TER must be calculated in accordance with the block averaging methodology defined in clauses 2.7 and 2.16 of Approved Document L1A
Sample SAP calculations should be appended to the Carbon Reduction Statement as evidence of compliance in addition to submission of the carbon reduction template.	Applicants will need to be mindful of Government's intention to ban gas boilers in new homes from 2025 in a bid to tackle climate change <sup>11</sup> . Coupled with the proposed changes to the carbon intensity of electricity in SAP 10, which takes into account the decarbonisation of electricity, a long terms view of the carbon emissions associated with gas forms of heating should be taken into consideration. Where possible we would recommend that SAP 10 carbon intensity figures be utilised.
Alongside the carbon reduction template, the main body of the Statement should include a summary of the measures proposed to reduce carbon emissions following the energy hierarchy (be lean, be clean and be green).	See Appendix 2 for the carbon reduction template
Where renewable energy technologies are proposed to meet some of the carbon reduction requirement they should be an integral part of the design, and	See emissions standards for gas CHP set out in Appendix 3

11 HM Treasury (2019). Spring Statement 2019. Available online at: <a href="https://www.gov.uk/government/topical-events/spring-statement-2019">https://www.gov.uk/government/topical-events/spring-statement-2019</a>

the location and indicative layout of	those				
technologies should be shown on relevant drawings					
(for example, roof plans should show the layout of					
any proposed photovoltaic panels). Final layouts					
will be secured by way of a planning condition as					

**CALCULATION BASIS** 

appropriate. Applicants wishing to use Combined Heat and power (CHP) are advised to adhere to the emissions standards set out in Appendix 3 as well as giving consideration to the guidance contained within paragraphs 3.2.28 – 3.2.32 of this SPD on best practice for the specification and use of gas CHP.

#### NOTES

Policy 31 of the Cambridge Local Plan (2018) requires all flat roofs to be green or brown roofs. Solar panels can be combined with green or brown roofs, and there are benefits from doing so. Where solar panels are proposed, biosolar roofs should be incorporated under and in-between the panels. An array layout will be required incorporating a minimum of 0.75m between rows of panels for access and to ensure establishment of vegetation.

Where required, mitigation measures have been proposed to maintain amenity and prevent nuisance

Consideration should be given to whether the proposed technologies will give rise to issues such as noise or air quality impacts as part of relevant assessments, with mitigation measures proposed where required.

Where SAP calculations are yet to be completed, for example at the outline planning application stage, the Carbon Reduction Statement should set out the general approach to meeting policy requirements, with a planning condition used to secure submission of carbon calculations once SAP calculations have been carried out.

#### Submission requirements – non-residential development

3.2.8 For non-residential development, the carbon reduction requirements set out in policy 28 are linked to the requirement for achievement of BREEAM 'excellent'. BREEAM 'excellent' includes mandatory requirements related to carbon reduction and energy efficiency (under Ene 01), which will need to be met for the requirements of policy 28 to be complied with. Compliance with the policy should be demonstrated by submission of a **BREEAM pre-assessment**, completed by an accredited BREEAM Assessor, which clearly demonstrates achievement of the BREEAM 'excellent' standard.

### **Energy efficiency in existing homes in Cambridge**

LOCATION: Cambridge

POLICY: Policy 30: Energy Efficiency Improvements in Existing

**Dwellings** 

SCALE OF DEVELOPMENT: Householder applications

TYPE OF DEVELOPMENT: Works to existing homes that require planning permission

SUBMISSION REQUIREMENTS: Home Energy Questionnaire (see Appendix 4)

### **Policy overview**

- 3.2.9 Policy 30 requires applications for extensions to existing dwellings and/or the conversion of ancillary residential floorspace to living accommodation to be accompanied by cost-effective improvements to the energy efficiency of the existing dwelling. The requirements of this policy will apply where the following measures have not already been implemented:
  - a. cavity wall insulation;
  - b. loft insulation of 150mm or more (in non-converted roof spaces);
  - c. the replacement of F and G rated boilers with an A-rated condensing boiler;
  - d. heating controls upgrade; and
  - e. draught stripping of doors, windows and letter boxes.
- 3.2.10 In order for Cambridge to contribute to meeting national carbon reduction targets, there is a need to reduce energy demand and associated carbon emissions in existing homes as well as new ones. The Council's 2009 Housing Stock Survey found that of a total stock of 41,500 dwellings, there was scope for energy efficiency improvements in 95% of properties, including measures such as loft insulation, cavity wall insulation and cylinder insulation. Energy efficiency improvements typically provide relatively cost-effective carbon reduction, but can also help reduce energy bills for residents, which will become increasingly important in the face of rising energy costs.
- 3.2.11 An ideal time in which to carry out improvements to the energy efficiency of existing homes is when building works such as extensions and loft conversions are being carried out. Policy 30 seeks to take advantage of the opportunity that such works presents for the implementation of cost effective energy efficiency improvements. The measures included within the policy have a simple payback of seven years or less, and are relatively simple to install with limited disruption, as outlined in table 3.2 below. Where the measures listed in the policy have already been undertaken, then no further measures will be required, although we would encourage home owners to consider whether further improvements could be made as part of proposed building works.

**Table 3.2:** Measures for implementation under Policy 30 (Figures based on information from the Energy Savings Trust)

Loft Insulation		
	Loft Insulation	Loft insulation

	(0 to 270mm)	(100 to 270mm)
Approximate saving per year	Up to £180	£25
Installation cost	Around £300*	Up to £300*
Time taken to pay for itself	Up to two years	Up to twelve years
DIY cost	From £250**	From £150**
Time taken to pay for itself	From two years	From five years
Carbon dioxide saving per year	Around 730 kg	Around 110 kg

These are estimates based on insulating a gas-heated, semi-detached home with three bedrooms, showing savings when you insulate an uninsulated loft, and when you top up 100mm of insulation to 270mm. (The recommended depth for mineral wool insulation is 270mm but other materials need different depths).

# **Cavity Wall Insulation**

Measure	Annual saving	Installation cost	Payback time	Carbon dioxide saving per year
Cavity wall insulation	Up to £140	£450 to £500	Under 4 years	Around 560kg

These are estimated figures based on insulating a gas-heated, semi-detached home with three bedrooms. The average installed cost is unsubsidised.

### **Replacement Boilers**

Savings will be dependent on how old and inefficient your existing boiler is:

Old boiler rating	Annual saving	Carbon dioxide saving per year
G ( < 70%)	£310	1,200kg

<sup>\*</sup>Average unsubsidised professional installation costs, loft top up assumed to be up to £300 although these may vary.

<sup>\*\*</sup>DIY costs are based on average retailer costs for insulation up to 270mm or more, based on a 44m<sup>2</sup> loft.

F (70-74%)	£205	810kg

These are estimated figures based on installing a new A-rated condensing boiler and full set of heating controls in a gas-heated, semi-detached gas heated home with three bedrooms.

The costs for replacing a boiler will vary, but a straightforward gas boiler replacement will typically cost around £2,300.

#### **Heating Controls**

Whatever the age of your boiler, the right controls will let you set your heating and hot water to come on and off when you need them, heat just the areas of your home you want, and decide how warm you want each area to be. Here are the average savings you could make in a typical three-bedroom semidetached home, heated by gas:

- Install a room thermostat if you didn't have one before: £70 and 280kg carbon dioxide a year.
- Fit a hot water tank thermostat: £30 and 130kg carbon dioxide a year.
- Fit a hot water tank insulation jacket: £45 and 170kg carbon dioxide a year.

#### DRAUGHT PROOFING

DIY draught proofing typically costs around £100 for materials, while professional draught proofing may cost around £200. Full draught proofing could save an average of £55 per year, although the focus for this policy will be draught proofing of doors and letter boxes.

### **Submission requirements**

3.2.12 Where planning permission is required to undertake works to existing homes, applicants will be required to submit a **home energy questionnaire**, set out in Appendix 4, which will identify suitable measures that will be implemented. Where a property has recently had an Energy Performance Certificate (EPC) prepared, this could also be submitted alongside the questionnaire, and the Council would count measures identified within the EPC towards meeting the requirements of policy 30. A planning condition will then be used to secure the implementation of the identified energy efficiency measure(s).

### **Further guidance**

3.2.13 Cambridge City Council. Greening your home booklet. Available online at:

<a href="https://www.cambridge.gov.uk/media/3242/greening-your-home.pdf">https://www.cambridge.gov.uk/media/3242/greening-your-home.pdf</a>

The Energy Savings Trust website contains lots of information on saving money at home, including renewable energy, home insulation and energy efficiency. Their home improvements guide includes information on how to combine energy efficiency

improvements while undertaking major works to you home such as loft conversions and extensions. For further information go to: <a href="https://www.energysavingtrust.org.uk/home-energy-efficiency/home-improvements">https://www.energysavingtrust.org.uk/home-energy-efficiency/home-improvements</a>

# Renewable and low carbon energy in new developments in South Cambridgeshire

LOCATION: South Cambridgeshire

POLICY: Policy CC/3: Renewable and Low Carbon Energy in New

Developments

SCALE OF DEVELOPMENT: All scales of residential development and new non-

residential buildings of 1,000m<sup>2</sup> or more<sup>12</sup>

TYPE OF DEVELOPMENT: New Residential and non-residential development

SUBMISSION REQUIREMENTS: Energy Statement

LINK TO THE SUSTAINABILITY En.1, En.2, En.3, En.4, En.5, En.6, En.7

CHECKLIST:

#### **Policy overview**

3.2.14 Criterion 1 of policy CC/3 is a Merton rule style policy that seeks at least a 10% reduction in carbon emissions associated with regulated energy use from a development. This is calculated using the baseline for the building as defined by Building Regulations. The reduction in emissions should be provided through the installation of on-site renewable or low carbon technologies, which provide some of the energy needs of the development. The choice of technology should respond to the specific characteristics of the development proposed, and further guidance on the types of technologies that will be considered by the local planning authority is provided in paragraphs 3.2.26 to 3.2.27 below.

- 3.2.15 To meet criterion 1 of the policy a development should be designed to meet Part L of Building Regulations and, once this has been established, the anticipated carbon emissions of the development can be identified. Using this carbon emissions figure as the baseline, a developer should then calculate the amount of carbon emissions that should be met through the provision of renewable or low carbon technologies to deliver at least a 10% reduction calculated by reference to that baseline.
- 3.2.16 Criterion 3 of the policy applies to new settlements and growth areas and seeks to promote site wide approaches to renewable and low carbon energy. An example of this in practice is the district heating network at the University of Cambridge's Eddington development. For this scale of technology to be realised it is important that the feasibility and viability of such systems is considered as part masterplanning and the outline application stage.
- 3.2.17 Applicants are encouraged to consider how they are going to meet this policy as early as possible in the design process. This is to ensure that the proposed renewable or low carbon energy systems are successfully integrated into the layout and design or the

<sup>&</sup>lt;sup>12</sup> Note that for mixed use schemes that include residential development but where the non-residential elements fall below the 1,000m<sup>2</sup> threshold, the policy requirement will apply to the residential units only.

development and that costs are kept to a minimum. Early consideration also enables the applicant to weigh up the potential advantages of increasing the energy efficiency, or be lean stage of the design of their development in order to reduce the size of the 10% requirement. Improving energy efficiency as much as possible should be the aim of all submissions.

3.2.18 The policy also allows for passive solar design measures that reduce the overall energy consumption of the development to be used towards meeting the 10% renewables requirement. Details of what these measures are and how they are treated are dealt in paragraphs 3.2.33 to 3.2.36.

### **Submission requirements**

- 3.2.19 The information required is generally known as an Energy Statement. The information that will need to be submitted will depend on whether an outline, reserved matters or full planning application is being made. The requirements for each are set out in table 3.3 below. Applicants are advised that all on-site energy requirements need to be included. This includes street lights, car park lighting, heating ad lighting of communal areas and lifts.
- 3.2.20 Applicants should use the appropriate Energy Statement form provided in Appendix 5 to provide the information regarding their calculation, along with the other information required set out in tables 3.3 and 3.4 below.

#### **Your calculations**

3.2.21 In order to ensure consistency across all submissions, the information in your Energy Statement and accompanying information will be assessed to ensure that it complies with the information in tables 3.3 and 3.4.

**Table 3.3:** Submission Requirements

### OUTLINE: FULL:

- Establish the 10% CO<sub>2</sub> reduction from energy use on the site that needs to be met using benchmarks (form in Appendix 5) and reasonable estimates for all other on-site energy demands;
- Provide initial feasibility work into which options are relevant to the development.
- 1. Establish the site wide carbon emissions of the proposal, set out in Kg/CO<sub>2</sub>/annum, based on the Part L Building Regulations compliant scheme, using either the Dwelling Emission Rate (DER) for all residential floorspace and/or the Building Emission Rate (BER) for all non-residential floorspace. It is by reference to this baseline figure plus an estimate of all other onsite energy requirements that the minimum 10% reduction from renewable

and/or low carbon energy should be calculated (form in Appendix 5); 2. Provide feasibility work to justify why the option selected has been

chosen;

- Indicate which technology or technologies have been selected and demonstrate how they will meet the agreed minimum 10% CO<sub>2</sub> emissions reduction (including size and predicted system output);
- Provide visual information to show how the technology(s) has/have been successfully integrated into the development and include technology(s) on relevant drawings (e.g. roof plans).

#### **RESERVED MATTERS:**

- 1. Revise the 10% requirement if SAP or SBEM calculations have been carried out, and/or contribution from passive solar design measures have been quantified (optional), including revised estimates for all other energy uses on site;
- 2. Indicate which technology or technologies have been selected and demonstrate how they will meet the agreed minimum 10% CO<sub>2</sub> emissions reduction (including size and predicted system output);
- 3. Provide visual information to show how the technology(s) has/have been successfully integrated into the development and include technology(s) on relevant drawings (e.g. roof plans).

**Table 3.4**: Calculation requirements

CALCULATION BASIS	NOTES
The 10% requirement has been calculated in kg/CO <sub>2</sub> not kWh (please convert all kg/C to Kg/CO <sub>2</sub> ).	This is the common approach of LPAs to this policy, as it is aimed at reducing $CO_2$ emissions, and this varies with fuel type.
All on-site energy requirements such as lighting of car parks, street lights, heating and lighting of communal areas and lifts are included in the calculations.	These can be reasonable estimates of these loads and associated carbon emissions.
If electric heating is going to be specified, SAP 10 carbon intensity figures should be taken into consideration.	At present, SAP calculations include lower carbon intensity figures for gas than electricity, which is not reflective of the real world carbon intensity of gas 'vs' electricity. SAP 10 carbon

	intensity figures should, therefore, be utilised for schemes proposing to utilise electric heating in order to obtain a more accurate prediction of carbon emissions associated with electrical forms of heating.
If gas Combined Heat and Power (CHP) is proposed, a long term view of carbon emissions should be taken into consideration with reference to emissions factors in SAP 10	At present, SAP calculations include lower carbon intensity figures for gas than electricity, which is not reflective of the real world carbon intensity of gas 'vs' electricity. SAP 10 carbon intensity figures should, therefore, be utilised for schemes proposing to utilise gas CHP in order to obtain a more accurate prediction of carbon emissions associated with gas CHP 'vs' electrical forms of heating.
The contribution of passive solar design has been calculated as accurately as possible.	This can be carried out using dynamic thermal modelling.
The feasibility work is reasonable and gives evidence that the most appropriate option will be selected.	
The technology(s) has/have been successfully integrated into the design	
Where required, mitigation measures have been proposed to maintain amenity and prevent nuisance	Consideration should be given to whether the proposed technologies will give rise to issues such as noise or air quality impacts as part of relevant assessments, with mitigation measures proposed where required.

# **Feasibility work**

- 3.2.22 At the outline submission stage, information should be submitted which shows that all options have been considered, including possible measures to improve the energy efficiency of the building.
- 3.2.23 The primary aim is to provide a hierarchy of likely feasible options, in order to demonstrate that a reasonable approach is being taken to selecting options, rather than finally rule out options, unless this is necessary. For an office development, for example, this may mean having technologies such as heat pumps or photovoltaic panels at the top of the list. Solar thermal may be nearer the bottom as hot water demands are so low that this technology alone would not make a substantial contribution to reducing carbon emissions. Indicating likely feasible options does not preclude opting for any later in the design process.
- 3.2.24 However, there may be situations where particular technologies cannot be used on a site. For example, wind access may have been proven to be insufficient to make a wind turbine a feasible option. Likewise, a site may be too small and constrained to permit borehole machinery to install a vertical ground source heat pump. There may not be

- sufficient car parking, landscape, or other open space on site for a horizontal system to be installed.
- 3.2.25 If applicants have concerns about a particular technology or fuel, such as the availability or distance biomass fuel will have to travel, they are encouraged to raise this as part of the pre-application process so that discussions can take place prior to formal submission of a planning application. Such concerns should not necessarily preclude the use of the technology, though, in certain areas, it may push it further down the applicants list of preferred options.

#### **Selection of technologies**

- 3.2.26 In general, the choice of technology will be left to the applicant. However, if there were concerns that the particular option being advocated would not result in the 10% reduction in carbon emissions required, then the applicant would be notified of this at the earliest opportunity. Further information would then be required to demonstrate that it will or if this is not possible, a revised option would need to be submitted.
- 3.2.27 Renewable and/or low carbon systems that will be considered include:
  - Solar thermal hot water systems;
  - Photovoltaic panels (pv);
  - Wind turbines;
  - Heat pumps (ground/air/water source);
  - Geothermal;
  - Gas fired Combined Heat and Power (CHP);
  - Biomass (boilers/stoves/community heating/CHP);
  - Anaerobic digestion.

If you wish to use a technology that is not referenced above you should seek early engagement with officers during as part of the pre-application process to discuss your proposals.

#### Combined Heat and Power (CHP) and heat networks

- 3.2.28 CHP is essentially a technology that produces electricity close to the point of use and captures the waste heat that is ordinarily lost to provide heating, hot water and sometimes even cooling for buildings through a district heating system. As the majority of the cost of this system is in the infrastructure, it is particularly important to ensure that it is installed at the new build or large-scale redevelopment stage.
- 3.2.29 Gas fired CHP is considered a low carbon technology and as such can be counted towards the 10% requirement. Once the infrastructure is installed, the type of fuel used can be altered more easily than the infrastructure being put in later, and therefore has the potential to be changed over to a renewable fuel. However, there are some important considerations that must be factored in to determining whether CHP will be feasible for a particular development. Applicants will also need to be mindful of Government's

intention to ban gas boilers in new homes from 2025 in a bid to tackle climate change<sup>13</sup>. Coupled with the proposed changes to the carbon intensity of electricity in SAP 10, which takes into account the decarbonisation of electricity, a long terms view of the carbon emissions associated with gas CHP should be taken into consideration.

- 3.2.30 Key is to ensure that the proposed development has a consistent year round heat demand as CHP operates more efficiently if it is run constantly. As such it is important to ensure that any CHP is sized to the year round base heating demand and not sized to meet the 10% requirement. For more information on sizing a CHP system see <a href="CIBSE">CIBSE</a>
  <a href="Applications Manual AIM12 Combined Heat and Power for Buildings">CIBSE</a>
  <a href="Applications Manual AIM12 Combined Heat and Power for Buildings">CIBSE</a>
  <a href="Applications Manual AIM12 Combined Heat and Power for Buildings">CIBSE</a>
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  <a href="Applications Manual AIM12 Combined Heat and Power for Buildings">CIBSE</a>
  <a
- 3.2.31 It is also important to ensure that the use of CHP does not impact on air quality. CHP can lead to a localised worsening of air quality as fuel combustion gives rise to air pollutants if not correctly specified, installed and maintained. Applicants wishing to use CHP are advised to adhere to the guidance set out in Appendix 3 of this SPD. The emissions standards referenced in this guidance will normally be secured through the use of a planning condition.
- 3.2.32 CHP and heat networks are complex systems to install and operate, and as such it is imperative to ensure that they are designed and installed by specialist contractors following best practice guidance. It is also important to ensure that pricing for customers is fair and does not contribute to fuel poverty. As such, the Council would recommend that any proposals for heat networks, regardless of whether these are powered by CHP or another technology, are designed in line with <a href="CIBSE/ADE Guide CP1: Heat Networks: Code of Practice for the UK">CODE OF Practice for the UK</a> (2015). By following this Code of Practice this will also help to reduce the risk of heat networks inadvertently contributing to unwanted internal heat gains which can lead to overheating in summer and shoulder months (for further information on overheating see section 3.4).

#### Passive solar design

- 3.2.33 Passive solar design is designing a building to take maximum advantage of the light and heat from the sun and natural ventilation, and can if designed correctly, significantly reduce the overall energy consumption of a building. This can be achieved by the location, grouping, orientation and layout of buildings along with landscape features and the appropriate use of thermal mass and natural ventilation within a building. However, it must be considered early in the design process.
- 3.2.34 Passive solar design measures should not be confused with energy efficiency measures, which are also intended to reduce the energy requirements of the building in use.
- 3.2.35 If at the reserved matters stage or full application stage passive solar design features have been incorporated into the design and their contribution to the overall reduction in the development's energy demands can be robustly demonstrated, for example through the use of dynamic thermal modelling, this can be considered as part of the delivery of

<sup>&</sup>lt;sup>13</sup> HM Treasury (2019). Spring Statement 2019. Available online at: <a href="https://www.gov.uk/government/topical-events/spring-statement-2019">https://www.gov.uk/government/topical-events/spring-statement-2019</a>

- the 10% requirement. These features will be subject to condition, in the same way that active renewable or low carbon energy systems would be.
- 3.2.36 If passive solar design features are agreed to meet part of the 10% requirement at outline application stage and it is subsequently proven that some or all of the measures are no longer feasible at the reserved matters stage, then the requirement to meet the 10% requirement using active renewable or low carbon systems will still apply.

# Site wide approaches to energy

- 3.2.37 Development in growth areas and new settlements offer opportunities to consider site wide approaches to renewable and low carbon energy provision, as recognised by criterion 3 of policy CC/3. For example, in some sites, the mix of uses and densities may enable the use of district heating, or provide opportunities for the development of larger scale renewable energy installations adjacent to new development, such as solar arrays coupled with battery storage and electric vehicle charging provision to create a smart grid approach to energy infrastructure. Such approaches will also assist development in transitioning to a low and zero carbon future as once the infrastructure is in place to support site wide energy approaches, the technologies that sit behind such infrastructure can more easily be upgraded in light of advances in technology.
- 3.2.38 In light of these opportunities, the Energy Statement and associated energy feasibility assessment should give consideration to the technical feasibility and viability of site wide approaches to energy provision. This should not just consider the energy generation technologies that form part of these site wide approaches but also the infrastructure required to support such systems, such as heat networks and smart energy grids, and the phasing of infrastructure delivery. Where appropriate, provision should be included on relevant plans, such as phasing plans. Where heat networks are being considered, the guidance contained within paragraphs 3.2.28 to 3.2.32 of this SPD should be followed.

# 3.3 Water Efficiency

3.3.1 There is a finite supply of water in the Greater Cambridge area, and irrespective of climate change, action is required now to ensure the availability of water for future uses, including potable water supply and food production, without having a detrimental impact on the environment. Water supply in the area is managed by South Staffordshire Water (Cambridge Region). As part of their Water Resource Management Plans a potential deficit in water supplies post 2035 has been identified. While there remains some uncertainty around the full extent and impact of this deficit, there is likely to be less water available and therefore a greater need for demand management and water efficiency in the area. As a result, designing new developments for optimal sustainable water consumption will become even more important. The 2018 Cambridge and South Cambridgeshire Local Plans set out the following requirements for water efficiency in all new developments.

Water efficiency in residential development

LOCATION: Cambridge and South Cambridgeshire

POLICY: • Cambridge Local Plan (2018) Policy 28: Carbon

reduction, community energy networks, sustainable

design and construction and water use

• South Cambridgeshire Local Plan (2018) Policy CC/4:

Water efficiency

SCALE OF DEVELOPMENT: All residential development

TYPE OF DEVELOPMENT: Residential

SUBMISSION REQUIREMENTS: Water Conservation Strategy

LINK TO THE SUSTAINABILITY Wat.1 and Wat.3

CHECKLIST:

### **Policy overview**

3.3.2 Both the 2018 Cambridge and South Cambridgeshire Local Plans include a requirement for all new residential development to meet a minimum water efficiency standard of no more than 110 litres/person/day. This level is in line with the optional water efficiency requirement contained within Part G of Building Regulations, and has the support of South Staffordshire Water (Cambridge Region) and the Environment Agency.

# **Submission requirements**

3.3.3 In order to demonstrate compliance with both the Cambridge and South Cambridgeshire policies, the submission of a **Water Conservation Strategy** is required. This should include a water efficiency specification for each dwelling type, based on the Water Efficiency Calculator Methodology or the Fittings Approach (replicated in Table 3.5 below) set out in Part G of the Building Regulations 2010 (2015 Edition with 2016 amendments) or successor documents.

**Table 3.5:** Extract of Table 2.2 Maximum fittings consumption optional level from Part G of the Building Regulations 2010 (2015 edition with 2016 amendments)

Water fitting	Maximum Consumption
WC	4/2.6 litres dual flush
Shower	8 l/min
Bath	170 litres
Basin taps	5 l/min
Sink taps	6 l/min
Dishwasher	1.25 I/place setting
Washing machine	8.17 l/kilogram

#### Water efficiency in non-residential developments - Cambridge

LOCATION:	Cambridge
POLICY:	Policy 28: Carbon reduction, community energy networks,
	sustainable design and construction and water use

SCALE OF DEVELOPMENT: All non-residential development
TYPE OF DEVELOPMENT: Non-residential development

SUBMISSION REQUIREMENTS: BREEAM pre-assessment

LINK TO THE SUSTAINABILITY

CHECKLIST:

Wat.2

# **Policy overview**

3.3.4 The requirements for all new non-residential development in Cambridge are for full credits related to category Wat 01 of BREEAM to be achieved. This equates to a 55% improvement over baseline water consumption figures. In order to achieve this level of water efficiency, the use of water harvesting or recycling technologies will be required, alongside other water efficiency measures. Early consideration of the implications of this policy requirement is therefore required, and where possible consideration should be given to the integration of water re-use as part of the drainage strategy for sites, in line with the requirements of policy 31 of the Cambridge Local Plan (2018) (see section 3.7).

# **Submission requirements**

3.3.5 In order to demonstrate compliance with the policy, a **BREEAM pre-assessment**, carried out by an approved BREEAM assessor should be submitted as part of the planning application. This will need to demonstrate that maximum BREEAM credits for Wat 01 are being targeted, with compliance secured through the use of a planning condition. The assessment of the efficiency of the building's domestic water consuming components should be undertaken using the BREEAM Wat 01 calculator.

## **Further guidance**

3.3.6 For further guidance on the BREEAM Assessment please see https://www.breeam.com/

# Water efficiency in non-residential development – South Cambridgeshire

LOCATION: South Cambridgeshire

POLICY: Policy CC/4: Water efficiency

SCALE OF DEVELOPMENT: All scales of non-residential development

TYPE OF DEVELOPMENT: Non-residential development SUBMISSION REQUIREMENTS: Water Conservation Strategy

LINK TO THE SUSTAINABILITY Wat.2

CHECKLIST:

#### vvat.2

#### **Policy overview**

3.3.7 Policy CC/4 of the South Cambridgeshire Local Plan (2018) requires all scales of non-residential development to achieve a minimum of 2 BREEAM credits for Wat 01. This equates to a 25% improvement over baseline building water consumption. This level of

water efficiency can be relatively easily achieved using low flow toilets, taps and other fittings.

## **Submission requirements**

3.3.8 In order to demonstrate compliance with the policy, a **Water Conservation Strategy** should be submitted as part of the planning application. This should include an assessment of the building's water efficiency performance using the BREEAM Wat 01 calculator, with implementation of the measures identified secured through the use of a planning condition.

## **Further guidance**

3.3.9 For further guidance on the BREEAM Assessment please see <a href="https://www.breeam.com/">https://www.breeam.com/</a>

# 3.4 Climate change adaptation

- 3.4.1 The global climate is changing, with greenhouse gas emissions from human activity the dominant cause. The global increase in temperature of 0.85°C since 1880 is mirrored in the UK climate, with higher average temperatures and some evidence of more extreme weather events.<sup>14</sup>
- 3.4.2 Climate change adaptation is a term that describes measures that can be put into place to help us adapt the changes in our climate that are now inevitable. These changes range from increased temperatures and drought conditions to extreme weather events such as intense periods of rainfall and subsequent flash flooding.
- 3.4.5 The NPPF is clear that planning has an important role to play in ensuring that new and existing communities are capable of adapting to our changing climate. It sets out that new development should be planned to avoid increased vulnerability to the range of impacts arising from climate change, taking account the long-term implications of issues such as flood risk, coastal change, water supply, biodiversity and landscapes and the risk of overheating from rising temperatures<sup>15</sup>. This section of the SPD provides further guidance on the range of measures that can be integrated into all scales of development in order to comply with policy requirements.

LOCATION:	Cambridge and South Cambridgeshire
POLICY:	Cambridge Local Plan (2018) Policy 28: Carbon
	reduction, community energy networks, sustainable
	design and construction and water use
	<ul> <li>South Cambridgeshire Local Plan (2018) Policy CC/1:</li> </ul>
	Mitigation and Adaptation to Climate Change
RELATED POLICIES	Cambridge Local Plan (2018):
	<ul> <li>Policy 31: Integrated water management and the water</li> </ul>

<sup>&</sup>lt;sup>14</sup> Committee on Climate Change (2016). UK Climate Change Risk Assessment 2017 Synthesis report: priorities for the next five years.

<sup>&</sup>lt;sup>15</sup> HM Government (2018). National Planning Policy Framework (paragraphs 149 and 150)

cycle

Policy 32: Flooding

• Policy 59: Designing landscape and the public realm

Policy 71: Trees

South Cambridgeshire Local Plan (2018):

Policy CC/7: Water quality

• Policy CC/8: Sustainable Drainage Systems

Policy CC/9: Managing Flood RiskPolicy HQ/1: Design Principles

• Policy NH/7: Ancient Woodlands and Veteran Trees

SCALE OF DEVELOPMENT: All development proposals

TYPE OF DEVELOPMENT: SUBMISSION REQUIREMENTS:

Residential and Non-residential development
Sustainability Statement and Design and Access Statement
and other documents as relevant to the proposal (e.g.
Arboricultural Impact Assessments, Surface Water Drainage
Strategy, Site Specific Flood Risk Assessments).

LINK TO THE SUSTAINABILITY CHECKLIST:

Ca.1, Ca.2, Ca.3, Ca.4, Ca.5, Ca.6, Ca.7

### **Policy overview**

- 3.4.6 Both the 2018 Cambridge and South Cambridgeshire Local Plans require climate change adaptation to be embedded into development proposals. The key principle is to ensure that adaptability is designed into all new developments from the outset, so that residents and building occupiers do not have to rely on complex systems and technologies that are expensive to maintain. It is also important to look to measures beyond buildings themselves, seeking opportunities within the landscape setting of new developments for adaptation. This will often require a multidisciplinary approach to design in order to maximise benefits, recognising the role of all members of the design team in responding to climate change.
- 3.4.7 Adaptation measures can be implemented at a variety of scales, and consideration should be given to the following measures:
  - Taking architectural approaches to design out issues such as overheating;
  - The role of green infrastructure;
  - Implementing resilient architecture and construction to minimise impacts;
  - The role of materials in minimising microclimatic effects;
  - The use of Sustainable Drainage Systems (SuDS) and flood resilient architecture (see section 3.7 and the Cambridgeshire Flood and Water SPD).

# **Submission requirements**

3.4.8 Compliance with the policy requirements for both Cambridge and South Cambridgeshire should be demonstrated via the submission of a **Sustainability Statement** alongside other

relevant documents, for example Drainage Strategies, Landscape Strategies and Tree Surveys and Arboricultural Impact Assessments. Where appropriate, adaptation measures should also be shown on relevant drawings, for example where external shading is proposed to help reduce the risk of overheating, this shading should be shown on elevations. Further guidance on possible adaptation strategies is provided below.

3.4.9 When considering adaptation measures it will be important to ensure that they are appropriate for the context in which the development sites and that they do not conflict with other strategies. For example, in areas of poor air quality, careful consideration will need to be given to ventilation strategies to ensure that buildings do not overheat and that good levels of indoor air quality and thermal comfort are maintained. In such circumstances, the importance of designing out the risk of overheating, for example through the use of building overhangs or external shading becomes even more important.

# **Adaptation Strategies – Overheating**

3.4.10 The UK's Climate Change Risk Assessment and the evidence underpinning it identifies the risks to health, wellbeing and productivity from high temperatures as one of the six priority risk areas for action, as illustrated in figure 4 below. Overheating in the built environment is already an issue in relatively cool summers, with research indicating that 20% of homes in England already experience overheating. With temperatures set to rise as a result of our changing climate, this risk is likely to increase unless measures are put in place to mitigate the risk of overheating in buildings.

**Figure 4:** The Adaptation Sub-Committee's assessment of the top six areas of inter-related climate change risks for the UK<sup>16</sup>.



- 3.4.11 Some properties are at a higher risk of overheating than others, for example:
  - Flats with south and west facing facades due to excess solar gains;
  - Flats on top floors due to heat gain through the walls and roof;

<sup>&</sup>lt;sup>16</sup> Image replicated from Committee on Climate Change (2016). *UK Climate Change Risk Assessment 2017 Evidence Report: Synthesis Report* 

- Single aspect flats as there is no allowance for cross ventilation;
- Properties with district heating or other communal heating systems where excess internal gains arise from poorly placed or poorly insulated pipe work;
- Properties with restricted window openings due to noise and air quality issues.
- Buildings with heat recovery systems that are installed without a summer bypass mode leading to inadvertent excess internal heat gains in the summer and shoulder months.
- Buildings with poorly designed thermal mass coupled with insufficient secure ventilation provision to enable night purge to take place.

In these cases it is important that consideration is given to ways in which to mitigate the potential for overheating early in the design process.

- 3.4.12 A common approach to overheating in the past has been a reliance on air conditioning. However, this is energy intensive with high associated levels of carbon emissions. It also places a cost burden on residents and building occupiers, not only in terms of energy bills but also the maintenance of such systems. It is therefore important that the design of all new buildings, and the redevelopment of existing buildings, responds to the issue of overheating by designing out risk as far as possible to reduce the cooling load of buildings. Consideration of overheating should be included in the Sustainability Statement and Design and Access Statement.
- 3.4.13 The Councils' preferred approach to overheating is that the design of developments should follow the cooling hierarchy, illustrated in figure 5 below, to ensure that energy use associated with cooling is minimised. The cooling hierarchy takes the following approach:
  - Passive Design: Minimise internal heat generation through energy efficient design and reduction of the amount of heat entering the building in the summer and shoulder months through consideration of orientation, overhangs and shading, albedo, fenestration, insulation and green roofs. Where heat is to be managed within the building through exposed internal mass and high ceilings, provision must be made for secure night time ventilation to enable night purge to take place;
  - Passive/natural cooling: use of outside air, where possible pre cooled by soft landscaping, a green roof or by passing it underground to ventilate and cool a building without the use of a powered system. This includes maximising cross ventilation, passive stack and wind-driven ventilation and enabling night purge ventilation. Single aspect dwellings should be avoided for all schemes as effective passive ventilation can be difficult or impossible to achieve. Windows and/or ventilation panels should be designed to allow effective and secure ventilation.
  - Mixed mode cooling: with local mechanical ventilation/cooling provided where required to supplement the above measures using (in order of preference):
     i) low energy mechanical cooling (e.g. fan powered ventilation with/without evaporative cooling or ground coupled cooling);
    - ii) air conditioning not a preferred approach as these systems are energy intensive;

• Full building mechanical ventilation/cooling system, ensuring the lowest carbon/energy options and are only considered after all other elements of the hierarchy have been utilised.

**Figure 5:** The cooling hierarchy (adapted from Islington Borough Council (2012) Low Energy Cooling. Good Practice Guide 5)



3.4.14 We would recommend that thermal modelling be undertaken to understand the performance of a proposed new development, with buildings designed and built to meet CIBSE's latest overheating standards<sup>17</sup>. As part of this, consideration should also be given to future climate scenarios, for example using CIBSE future weather data. Where officers have concerns about the potential for overheating, a planning condition may be used to secure overheating analysis, for example for a sample of units on a site.

## **Further guidance**

3.4.15 For further detailed guidance on overheating see:

- Good Homes Alliance (2019). Overheating Toolkit for Planners (to be added once available)
- Islington Borough Council (2012) Low Energy Cooling. Good Practice Guide 5.
   Available online at: <a href="https://www.islington.gov.uk/~/media/sharepoint-lists/public-records/planningandbuildingcontrol/publicity/publicconsultation/20122013/2012122">https://www.islington.gov.uk/~/media/sharepoint-lists/public-records/planningandbuildingcontrol/publicity/publicconsultation/20122013/2012122</a>
   Ogoodpracticeguide5lowenergycooling
- CIBSE Guides (note there is a charge to access these documents for non-members):
  - See GVA/15 CIBSE Guide A: Environmental Design (2015). Available online at: <u>https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q20000008179JAAS</u>
  - CIBSE TM52: The Limits of Thermal Comfort: Avoiding Overheating in European Buildings (2013). Available online at: <a href="https://www.cibse.org/Knowledge/knowledge-items/detail?id=a0q2000000817f5AAC">https://www.cibse.org/Knowledge/knowledge-items/detail?id=a0q2000000817f5AAC</a>
  - CIBSE TM59: Design Methodology for the Assessment of Overheating Risk in Homes (2017). Available online at:

<sup>&</sup>lt;sup>17</sup> See GVA/15 CIBSE Guide A: Environmental Design (2015), CIBSE TM52: The Limits of Thermal Comfort: Avoiding Overheating in European Buildings (2013) and CIBSE TM59: Design Methodology for the Assessment of Overheating Risk in Homes (2017)

# https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q0O0000DVrTdQAL

# Adaptation Strategies – The role of green infrastructure

- 3.4.16 Green Infrastructure is our natural life-support system. It is the network of natural and manmade features such as open spaces, woodlands, landscapes, rights of way, waterways, historic parks and private gardens, which link and serves our communities and countryside. Within an urban context, it includes allotments, cemeteries, and features such as green and brown roofs as well as tree canopy cover. Green infrastructure provides a wide range of social, environmental and economic benefits, including:
  - Improving people's mental and physical health;
  - Reducing air pollution and improving water quality;
  - Protecting against climate change, for example by reducing flood risk, dealing with storm water at source, storing water for times of drought, storing carbon, or preventing soil erosion;
  - Providing jobs and contributing to economic competitiveness;
  - Increasing biodiversity;
  - Encouraging local food growing, healthy eating and healthy food environments;
  - Encouraging active travel and safer roads; and
  - Using limited land efficiently by providing multiple benefits simultaneously<sup>18</sup>.
- 3.4.17 From an adaptation perspective, green infrastructure has the potential to enhance the adaptive capacity of an area, for example through the integration of sustainable drainage features (blue infrastructure) and through enhancing urban cooling. Green spaces and water bodies help to lower air temperatures and are on average one degree cooler than the surrounding urban area <sup>19</sup>. Modelling carried out in Manchester as part of the SCORCHIO project predicted that increasing the area of green infrastructure in the city by 10% would reduce the maximum surface temperature by 2.2°C compared to no change in green space, with similar results found by modelling projects carried out in Birmingham (BUCCANEER project) and London (LUCID project). In a warming climate, finding ways of providing free cooling will become increasingly important, and all new developments, regardless of scale, can play a role in enhancing adaptive capacity through the provision of green and blue infrastructure.

#### **Enhancing the tree canopy**

3.4.18 Trees provide many benefits to the built environment: they sequester carbon, reduce noise, absorb particulate pollution, provide cooling and shade, and reduce surface water runoff. They are also an integral part of the creation of high quality, sustainable development. Trees have psychological benefits in reducing stress and providing spaces for relaxation and contact with nature. From a climate change adaptation perspective it

https://www.mui.manchester.ac.uk/cure/research/projects/past-projects/scorchio/

<sup>&</sup>lt;sup>18</sup> P Massini and H Smith (December 2018). PERFECT Expert Paper 2. Planning for Green Infrastructure – the green space factor and learning from Europe. Published by the Town and Country Planning Association.

- is the role that trees play in shade and cooling through evapotranspiration that is of greatest interest.
- 3.4.19 Both the 2018 Cambridge and South Cambridgeshire Local Plans include policies to encourage the planting of trees as part of new developments, as well as the retention of existing trees. Increasing tree canopy cover is a cost-effective and sustainable remedy to heat stress, storm water attenuation and air pollution that results in improvements to human well-being, as well as the role that trees play in delivering a wide range of other ecosystem services to the Greater Cambridge area as a whole.
- 3.4.20 Heat reduction, energy savings, surface water runoff, air quality, environmental justice, social well-being, or some combination of these and other factors will influence how many trees should be added, what kind of trees, and where to situate them. For example, to cut energy use for cooling a building, large trees must be placed close enough to shade the structure, particularly on the west side; to boost economic development, trees can be added to car parks, which invites more leisurely shopping; to capture surface water runoff, engineered tree pits may be most effective.
- 3.4.21 The quality of the trees to be retained and planted on site is an important consideration. Quality covers:
  - Tree health a healthy tree provides more benefits than a tree in poor condition;
  - Age and species diversity provide long-term resilience;
  - Mature size large trees bring more benefits than small trees;
  - Location to avoid future conflicts and;
  - Other factors all intended to maximise the desired ecosystem services.

# Retention of existing trees – submission requirements

- 3.4.22 Planning policy seeks to ensure the retention of existing trees on development sites wherever suitable, unless there are demonstrable public benefits accruing from the proposal which clearly outweigh the current and future amenity value of the trees. When considered early on in the design of new development, significant removal of existing trees can be avoided. Developments should seek to:
  - a. preserve, protect and enhance existing trees and hedges that have amenity value as perceived from the public realm;
  - b. provide appropriate replacement planting, where felling is proved necessary; and c. provide sufficient space for trees and other vegetation to mature.
- 3.4.23 Where there are trees within an application site, or on land adjacent to it that could influence or be affected by the development, information will be required as to which trees are to be retained/lost, including whether any are ancient or veteran. A Tree Survey should be carried out before any layouts are developed, following the guidance contained within BS 5837: 2012 "Trees in relation to design, demolition and construction Recommendations". In accordance with the British Standard consideration should also be given to safeguarding space for replacement or new planting. The information from this survey should be used to inform a viable and sustainable layout of the proposed development.

3.4.24 Once layouts are fixed, an Arboricultural Impact Assessment should be prepared identifying significant vegetation on and adjacent to the site, the quality and value of that vegetation, the effect that stages of the development could have on individuals, the significance of such impact in landscape terms and any appropriate methods to be adopted in order to mitigate any potentially negative impacts. Depending on the density and complexity of new development it may also be necessary to prepare and submit for approval a methodology for the protection of trees agreed to be retained. This would take the form of an Arboricultural Method Statement.

#### Tree planting in new developments – considerations

- 3.4.25 It is important to ensure that new development provides sufficient space to accommodate a level of replacement and new tree planting appropriate to the size of the development site and in accordance with the right tree right place principle. At its most basic, this means that appropriate space is made available for species that will contribute most to amenity and that the correct species of tree is chosen for the space made available, with consideration given to the final size of the tree at maturity.
- 3.4.26 When considering new planting, soil requirements should be assessed. There is a direct relationship between how well a tree can grow above ground and the health and resources of the root system below. Trees need soil in which to grow and that soil needs to provide for the tree for many years if it is to reach its potential. Too often trees are planted in a small pit which is surrounded by compacted inhospitable soil; as a result many trees barely grow in size, die early or break out of the available rooting volume. The volume and quality of soil, and the way it is provided will dictate the size to which a tree can grow and can reduce conflict between tree roots and adjacent light structures. It is often considered that a tree needs approximately 0.6m<sup>3</sup> of soil for each 1m<sup>2</sup> of canopy projection.
- 3.4.27 The first step when planning to plant a tree is identifying the planting location. This will determine what attributes the selected tree must have and influences all subsequent decisions. This decision ultimately determines whether the tree will thrive and fulfil its true potential and provide all its possible benefits. Tree planting locations should always be one of the first and most important decisions when considering space allocation in the built environment.
- 3.4.28 The urban design of new developments has to take into account many competing constraints, it is imperative that Arboriculturists and Landscape Architects coordinate with Urban Designers from an early stage and throughout the design process to ensure the target can be met in an appropriate manner. Trees are important in streets, gardens, open spaces and other areas. To ensure that their benefits are maximised throughout a development, their distribution must be appropriately balanced, taking account of the effect they can offer in different locations.

**Green/brown roofs** 

- 3.4.29 At an individual building scale, green infrastructure can take the form of features such as green/brown roofs. For new development in Cambridge, all flat roofs are required to be green or brown roofs in line with the requirements set out in policy 31 of the Cambridge Local Plan (2018). Policy CC/8 of the South Cambridgeshire Local Plan (2018) encourages the use of green roofs. A green roof is created when vegetation is established on a roof structure, and can be established at any scale. There are many types of green roof, but they can broadly be placed into two categories; intensive systems or extensive systems.
- 3.4.30 An intensive system includes those type of green roof that are used as recreational spaces. These roofs often include features similar to those found within traditional parks and gardens, such as shrubs, trees, paving, lawns, rooftop allotments and even water features.
- 3.4.31 Extensive green or biodiverse roofs are normally intended to be viewed from another location as visual or ecological features and may not be accessible. However access for maintenance should be incorporated with the introduction of walkways and suitable edge guards. Green roofs using hardy, drought tolerant species of plants such as sedums and wildflowers fall within this category. A brown or biodiverse roof is designed to create a habitat for a specific type of flora or fauna. This may be chosen to replicate or enhance the pre-development surroundings. For instance, particular plant species may be required to attract a specific type of bird, butterfly or insect. Biodiverse roofs in their most extreme scenario, are left without vegetation, with the growing medium selected to allow the indigenous plant species to colonise the area over time.
- 3.4.32 Green roofs offer multiple benefits including reducing storm water runoff and velocity and volumes, providing evaporative cooling and prolonging the life of the roof by preventing the deteriorating effects of UV. The additional insulation provided by green roofs can also help to reduce the internal cooling loads of buildings by up to 2°C. Contrary to popular belief, green roofs can also be combined with renewable energy systems such as solar panels. Solar panels work more efficiently at a set operating temperature. Once there is a deviation either above or below this level, electricity generation becomes less efficient. As a green roof is more able to maintain a more constant temperature around the panels than a traditional flat roof, their combined use can help to maximise the efficiency and power output of solar panels. Where solar panels are proposed, biosolar roofs should be incorporated under and in-between the panels. An array layout will be required incorporating a minimum of 0.75m between rows of panels for access and to ensure establishment of vegetation.
- 3.4.33 The maintenance and management of green roofs is also simple and limited.

  Maintenance is concentrated in the first 5 years of establishment, where bi-monthly checks for unwanted self-seeded species are necessary, with watering also required during establishment at prolonged times of drought. Thereafter, yearly checks are required for unwanted self-seeded species.

Further guidance – green infrastructure

3.4.34 For further guidance on Green Infrastructure, please see:

- Cambridgeshire Green Infrastructure Strategy (2011). Available online at: https://www.cambridge.gov.uk/cambridgeshire-green-infrastructure-strategy
- Planning for Green and Prosperous Places. TCPA (January 2018). Available online at: <a href="https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=db632de1-38cc-468a-9401-0599b0bea52b">https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=db632de1-38cc-468a-9401-0599b0bea52b</a>
- BS 5837:2012 "Trees in relation to design, demolition and construction Recommendations". In accordance with the British Standard consideration should also be given to safeguarding space for replacement or new planting.
- Benefits of Green Infrastructure Report by Forest Research. Available online at: <a href="https://knowledgebase.permaculture.org.uk/resources/books/benefits-green-infrastructure-report-forest-research">https://knowledgebase.permaculture.org.uk/resources/books/benefits-green-infrastructure-report-forest-research</a>
- 3.4.35 When specifying green roofs, we would recommend that applicants follow the guidance contained within the Green Roof Organisation's (GRO) Green Roof Code (2014) or successor document, available online at:

  <a href="https://livingroofs.org/wp-content/uploads/2016/03/grocode2014.pdf">https://livingroofs.org/wp-content/uploads/2016/03/grocode2014.pdf</a>
- 3.4.36 Further guidance is also available in the Greater London Authority (2008) Living roofs and walls technical report, available online at: <a href="https://www.london.gov.uk/sites/default/files/living-roofs.pdf">https://www.london.gov.uk/sites/default/files/living-roofs.pdf</a>

# Adaptation strategies – the role of materials

- 3.4.37 In addition to the role of green infrastructure in helping to cool our environment, there is also a role for the choice of materials in helping to reduce overheating. Roofs and pavements cover about 60 % of urban surfaces, and absorb more than 80 % of the sunlight that contacts them. This energy is converted to heat, which results in hotter, more polluted cities, and higher energy costs. Consideration should be given to specifying new or replacement roofs and pavements with cool materials that are more reflective to help the built environment both mitigate and adapt to climate change.
- 3.4.38 The Global Cool Cities Alliance (GCCA)<sup>21</sup> notes that cool materials are measured by how much light they reflect (solar reflectance) and how efficiently they radiate heat (thermal emittance). A cool roofing surface is both highly reflective and highly emissive to minimise the amount of light converted into heat and to maximise the amount of heat that is radiated away. Increasing the reflectance of our buildings and paved surfaces, whether through white surfaces or reflective coloured surfaces can reduce the temperature of the built environment. By way of example:
  - Most roofs are dark and reflect no more than 20% of incoming sunlight (i.e., these surfaces have a reflectance of 0.2 or less); while a new white roof reflects about 70 to 80% of sunlight (i.e., these surfaces have a reflectance of 0.7 to 0.8).

<sup>&</sup>lt;sup>20</sup> Ibid., and US EPA (October 2008). Reducing urban heat islands: a compendium of strategies.

<sup>&</sup>lt;sup>21</sup> The Global Cool Cities Alliance (January 2012). A practical guide to cool roofs and cool pavements

- New white roofs are typically 28 to 36 degrees Celsius cooler than dark roofs in afternoon sunshine while aged white roofs are typically 20 to 28 degrees Celsius cooler.<sup>22</sup>
- 3.4.39 While the choice of material is influenced by a number of factors, applicants are recommended to give consideration to the role of cool materials alongside wider strategies such as green infrastructure, integration of sustainable drainage systems to help cool the built environment and enable new and existing communities to adapt to our changing climate.

# Further guidance – cool materials

- 3.4.40 For further guidance on cool materials, see:
  - Global Cool Cities Alliance (January 2012). A Practical Guide to Cool Roofs and Cool Pavements. Available online at: <a href="https://www.coolrooftoolkit.org/wp-content/pdfs/CoolRoofToolkit Full.pdf">https://www.coolrooftoolkit.org/wp-content/pdfs/CoolRoofToolkit Full.pdf</a>

# 3.5 Biodiversity

- 3.5.1 Biodiversity is an essential part of sustainable development and the conservation and enhancement of biodiversity should be considered as a key element of good design. Greater Cambridge is one of the fastest growing areas within England, with plans for significant additional development and major infrastructure to provide tens of thousands of new homes and significant new employment opportunities over the coming decades. It is important that, in planning for this growth, steps are taken to ensure the conservation and enhancement of the natural environment, which plays a pivotal role in our economy and well-being, providing wide-ranging benefits such as clean water and air, food, timber, carbon capture, flood protection and recreation.
- 3.5.2 All scales of development offer opportunities to enhance biodiversity, from simple solutions such as the integration of nest boxes through to the opportunities that larger scale developments offer for the integration of green infrastructure with biodiversity enhancement at its heart. Recent changes to national planning policy have placed increasing importance on the role of new development in securing net gains in biodiversity. More widely, government has included this within the 25 Year Environment Plan, with the potential to change national planning policy to make these gains mandatory.

<sup>&</sup>lt;sup>22</sup> Comparing a dark roof with a solar reflectance of 0.2 with a new white roof with a solar reflectance of 0.8 and an aged white roof with a solar reflectance of 0.55.

# LOCATION: Cambridge and South Cambridgeshire POLICY: Cambridge Local Plan (2018) Policy 69: Protection of sites of biodiversity and geodiversity importance Cambridge Local Plan (2018) Policy 70: Protection of priority species and habitats South Cambridgeshire Local Plan (2018) Policy NH/4: Biodiversity South Cambridgeshire Local Plan (2018) Policy NH5: Sites of biodiversity or geological importance. **RELATED POLICIES** Cambridge Local Plan (2018): Policy 7: The River Cam Policy 8: Setting of the City Section Three: City Centre, Areas of Major Change, Opportunity Areas and site specific proposals (various Policy 31: Integrated water management and the water cycle Policy 52: Protecting garden land and the subdivision of existing dwelling plots Policy 57: Designing new buildings Policy 58: Altering and extending existing buildings Policy 59: Designing landscape and the public realm Policy 66: Paving over front gardens Policy 71: Trees South Cambridgeshire Local Plan (2018): Chapter 3: Strategic Sites (various policies) Policy CC/7: Water Quality Policy CC/8: Sustainable Drainage Systems Policy HQ/1: Design Principles Policy NH/3: Protecting Agricultural land Policy NH/6: Green Infrastructure Policy NH/7: Ancient Woodlands and Veteran Trees SCALE OF DEVELOPMENT: All development proposals should seek to conserve and enhance biodiversity. See further detail below for specific submission requirements. TYPE OF DEVELOPMENT: Residential and Non-residential development SUBMISSION REQUIREMENTS: Preliminary Ecological Assessment and Protected Species Scoping Survey. Note that these surveys will also need the outline the approach to securing biodiversity net gain.

**Policy overview** 

LINK TO THE SUSTAINABILITY

CHECKLIST:

Bio.1, Bio.2, Bio.3, Bio.4, Bio.5, Bio.6, Bio.7, Bio.8, Bio.9

3.5.3 Both the 2018 Cambridge and South Cambridgeshire Local Plans, alongside national planning policy in the NPPF, requires new development to protect and enhance biodiversity, giving consideration to the conservation status of species and habitats and recognising the role that a multifunctional approach to the design of developments has to play in helping to enhance biodiversity. The existing ecology of the site will need to be properly understood prior to submitting a planning application otherwise it is not possible to deliver effective species and habitat conservation.

# **Submission requirements**

- 3.5.4 When undertaking development, the majority of sites, whether infill, greenfield or brownfield, will be considered as having potential to support biodiversity. For developments that will either directly or indirectly impact a designated site of biodiversity or geodiversity importance, or a protected species or a priority species or priority habitat, a **Preliminary Ecological Assessment** and **Protected Species Survey** will need to be submitted with the application. This includes refurbishment works which may impact species using the existing building such as bats and swifts. If the application involves any of the development proposals shown in table 3.6 (Column 1), a Protected Species Survey must be submitted with the application, while table 3.7 below lists the sites, habitats and features for which such a survey will be required.
- 3.5.5 Exceptions for when a Preliminary Ecological Assessment and Protected Species Surveys may not be required include:
  - Following consultation by the applicant at the pre-application stage, the LPA has stated in writing that no Protected Species Surveys and Preliminary Ecological Assessments are required.
  - b. If it is clear that no Priority Species are present, despite the guidance in the above table indicating that they are likely, the applicant should provide evidence with the planning application to demonstrate that such species are absent (e.g. this might be in the form of a letter or brief report from a suitably qualified and experienced person, or a relevant local nature conservation organisation).
  - c. If it is clear that the development proposal will not affect any Priority Species present, then only limited information needs to be submitted. This information should, however, (i) demonstrate that there will be no significant effect on any Priority Species present and (ii) include a statement acknowledging that the applicant is aware that it is a criminal offence to disturb or harm protected species should they subsequently be found or disturbed.
  - d. International and National Sites: A survey and assessment will not be required where the applicant is able to provide copies of pre-application correspondence with Natural England, where the latter confirms in writing that they are satisfied that the proposed development will not affect any statutory sites designated for their national or international importance.
  - e. Regional and Local Sites and Priority Habitats: A survey and assessment will not be required where the applicant is able to provide copies of pre-application correspondence with the District Council's Ecology Officer, confirming that they are satisfied that the proposed development will not affect any regional or local sites designated for their local nature conservation importance or any other Priority Habitats or listed features.

- 3.5.6 In some situations, it may be appropriate for an applicant to provide a Protected Species survey and report for only one or a few of the species shown in the table above e.g. those that are likely to be affected by a particular activity. Applicants should make clear which species are included in the report and which are not because exceptions apply.
- 3.5.7 All surveys and assessments should be carried out:
  - By suitably experienced, trained and qualified ecologists;
  - At appropriate times of year, in suitable weather conditions surveys conducted outside optimal times may be unreliable
  - To published guidelines and methodologies
  - To an appropriate level of scope and detail

Appointing an ecologist to survey a site early in the design process will be important in order to avoid costly delays later. They will also be able to advise on enhancement options, working in collaboration with other disciplines including architects, landscape architects and drainage consultants.

- 3.5.8 Assessment should detail the possible impacts upon the application site's wildlife and how the applicant has taken account of such impacts. Where proposals are being made for mitigation and/or compensation measures, full details of how such measures will be effective need to be proved with the application.
- 3.5.9 Where appropriate, accompanying plans should indicate any significant wildlife habitats or features and the location of habitats or any species protected under the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017, or The Protection of Badgers Act 1982.
- 3.5.10 Applications for development that affects areas designated for their biodiversity interest will require special consideration to ensure any impact is not considered significant or detrimental to the sites special interest.

#### **Securing biodiversity net gain**

- 3.5.11 National policy now requires a measurable net gain in biodiversity to be provided by development. Net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. Development that adopts a biodiversity net gain approach seeks to make its impact on the environment positive, delivering improvements through habitat creation or enhancement after avoiding or mitigating harm as far as possible.
- 3.5.12 Net gain can be secured at a variety of different scales, from householder applications right up to new settlements, albeit the scale of improvement will differ. At a householder scale options can include the integration of nest boxes for birds and bats, integration of sustainable drainage systems such as rain gardens and the use of green and biodiverse roofs (see paragraphs 3.4.29 3.4.33).

- 3.5.13 The Partnership for Biodiversity in Planning have developed guidance aimed at householders and small scale developers called the Wildlife Assessment Checklist. This free tool enables users to undertake a simple check at the pre-planning application stage to ascertain whether there are any protected and priority wildlife species and statutory designated sites that might be impacted by a development project. This helps to provide clarification for applicants as to whether a proposed site needs professional ecological advice and further assessment. While the tool does not replace the need to use a qualified professional ecologist, and it does not always pick up local designations and species data, it is a useful tool to ensure early consideration of ecology. The tool can be accessed via the following weblink:
  - https://www.biodiversityinplanning.org/wildlife-assessment-check/
- 3.5.14 Major development offers greater opportunities for delivering biodiversity net gain with options ranging from building scale approaches (nest boxes, green and biodiverse roofs) through to the integration of opportunities for biodiversity into green and blue infrastructure and habitat creation, both on and offsite. The approach to securing net gain in biodiversity should be outlined using the DEFRA Biodiversity Offsetting metric.
- 3.5.15 In addition to the DEFRA Biodiversity Offsetting metric, the Natural Cambridgeshire Local Nature Partnership (LNP) has developed the Developing with Nature Toolkit. Launched in October 2018, the toolkit comprises a simple list of 10 Things to do for Nature, a scoring matrix, guidance notes and links to background information, including a summary map of Greater Cambridgeshire strategic GI and ecological network priorities, plus links to reference materials and publications. Primarily aimed at major developments requiring an EIA, the toolkit is intended for use from the very outset of planning new developments, and ideally at the time of selecting sites to acquire for development. The toolkit, which the Councils' would encourage all promoters of major developments to use, is available online at:

 $\frac{https://naturalcambridgeshire.org.uk/wp-content/uploads/2018/10/nc-developing-with-nature-toolkit.pdf}{}$ 

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**Table 3.6:** Local Requirement for Priority Species: criteria and indicative thresholds (trigger list) for when a Protected Species Survey (and Preliminary Ecological Assessment) is required

Column 1		Species likely to be affected and for which a survey will be required											
Proposals for development that will trigger a Protected Species survey	Bats	Barn Owls	Breeding Birds	Gt. Crested Newts	Otters		Water Vole	Badger	Reptiles	Amphibians	Schedule 8 Plants & Fungi	_	Other BAP species
Proposed development which includes the modification conversion, demolition or removal of buildings and structures (especially roof voids) involving the following:  all agricultural buildings (e.g. farmhouses and barns) particularly of traditional brick or stone construction and/or with exposed wooden beams greater than 20cm thick;  all buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;  pre-1960 detached buildings and structures within 200m of woodland and/or water;  pre-1914 buildings within 400m of woodland and/or water;  pre-1914 buildings with gable ends or slate roofs, regardless of location;  all tunnels, kilns, ice-houses, adits, military fortifications, air raid shelters, cellars and similar underground ducts and structures;  all bridge structures (especially over water and wet ground).	•	•	•										
Proposals involving lighting of churches and listed buildings or flood lighting of green space within 50m of woodland, water, field hedgerows or lines of trees with obvious connectivity to woodland or water.	•	•	•										
Proposals affecting woodland, or field hedgerows and/or lines of trees with obvious connectivity to woodland or water bodies.	•		•			•		•			•		

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F	roposed tree work (felling or lopping) and/or development affecting:  old and veteran trees that are older than 100 years;  trees with obvious holes, cracks or cavities, trees with a girth greater than 1m at chest height;	• • •		•									
F	roposals affecting gravel pits or quarries and natural cliff faces, or caves.	•		•						•			
(	Major proposals within 250m* of a pond or Minor proposals within 100m* of pond  Note: A major proposals is one that is more than 10 dwellings or more than 0.5 hectares or for on-residential development is more than 1000m² floor area or more than 1 hectare)				•								
F	roposals affecting or within 25*m of rivers, streams, lakes, or other aquatic habitats such as eedbeds, or fen.	•		•		•		•			•	•	
_	roposals affecting 'derelict' land (brownfield sites), allotments and railway land.			•	•				•	•	•		
	roposed development affecting any buildings, structures, feature or locations where Priority pecies are known to be present **.	•	•	•	•	•	•	•	•	•	•	•	
t *	Distances may be amended to suit local circumstance on the advice of the local Natural England eam and/or Local Biodiversity Partnership  * Confirmed as present by either a data search (for instance via the Biological Records Centre or s notified to the developer by the local planning authority, and/or by Natural England, the nvironment Agency or other nature conservation organisation.	Bats	Barn Owls	Breeding Birds	Great Crested Newt	Otters		Water Vole	Badgers	Reptiles	Amphibians	Schedule 8 Plants & Fungi	Other BAP species

**Table 3.7:** Local Requirements for Designated Sites and Priority Habitats: criteria (trigger List) for when a Preliminary Ecological Assessment is required

1. **DESIGNATED SITES** (as shown on the Policies Map)

Internationally designated sites Special Protection Area (SPA)

Special Area of Conservation (SAC)

Ramsar Site

Nationally designated sites Site of Special Scientific Interest (SSSI)

National Nature Reserve (NNR)

> Local Nature Reserve (LNR) City Wildlife Site (CiWS)

Protected Roadside Verges (PRSV)

2. PRIORITY HABITATS (Habitats of Principal Importance for Biodiversity under S.41 of the NERC Act 2006)

- Ancient and/or species-rich hedgerows
- Floodplain grazing marsh
- Fen, marsh, swamp and reedbeds
- Purple moor grass and rush pastures
- Lowland beech and yew woodland
- Lowland calcareous grassland (e.g. species-rich chalk and limestone grasslands)
- Lowland heathland and/or dry acid grassland
- Lowland meadows (e.g. species-rich flower meadows)
- Lowland mixed deciduous woodland (ancient woodland)
- Lowland wood-pasture and parkland
- Rivers and streams (e.g. chalk streams)
- Standing open water and canals (e.g. lakes, reservoirs, ponds, aquifer fed fluctuating water bodies)
- Wet woodland

#### 3. OTHER BIODIVERSITY FEATURES

(as identified by the Cambridgeshire and Peterborough Biodiversity Partnership)

- Secondary woodland and mature/veteran trees
- Caves and disused tunnels (e.g. roosts for bats)
- Trees and scrub used for nesting by breeding birds
- Previously developed land with biodiversity interest (i.e. brownfield sites)
- Urban green space (e.g. parks, allotments, flower-rich road verges and railway embankments, mature gardens)

#### **Further guidance**

3.5.16 Further guidance on integrating biodiversity considerations into new developments is available as follows:



- Detailed Greater Cambridge specific guidance will be included in the forthcoming Greater Cambridge Biodiversity Supplementary Planning Document.
- CIRIA (2019). Biodiversity Net Gain Principles and Guidance for UK construction and developments (RP1048). Available online at: <a href="https://www.ciria.org/Research/Projects-underway2/Biodiversity-Net Gain.aspx">https://www.ciria.org/Research/Projects-underway2/Biodiversity-Net Gain.aspx</a>
- Cambridgeshire and Peterborough Biodiversity Action Plan priority species.
   Available online at:
  - http://www.cpbiodiversity.org.uk/biodiversity-action-plans/priority-species
- The British Standards Institute Biodiversity Code of practice for planning and development (BS42020:2013)
- Circular 06/05: Biodiversity and Geological Conservation Statutory Obligations and Their Impact Within The Planning System. Available online at: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/76">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/76</a>
   92/147570.pdf
- Cambridgeshire County Wildlife Site Register. For details of individual sites see
   Cambridgeshire and Peterborough Environmental Records Centre (CPERC), available
   online at: <a href="http://www.cperc.org.uk/">http://www.cperc.org.uk/</a>
- Cambridgeshire Opportunity Mapping (currently in production should be available March 2019)
- CIEEM Guidelines for Preliminary Ecological Appraisal (2013). Available online at: <a href="https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/">https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/</a>
- Action for Swifts. Guidance for including bird boxes in residential developments.
   Available online at:
  - https://docs.google.com/document/d/1J9UBWBtdkV6C5EqyxAJIT-PFAia9g2mMiYHf9YKmBBc/edit
- DEFRA (2012). Technical Paper: The metric for biodiversity offsetting pilot in England. Available online at:
   <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69</a>
   531/pb13745-bio-technical-paper.pdf

# 3.6 Pollution

3.6.1 The planning system has an important role to play in ensuring that new and existing development does not contribute, or be put at risk from, unacceptable levels of pollution. Where possible, development should also help to improve local environmental conditions such as air quality and remediate and mitigate contaminated and unstable land. This section of the SPD provides further guidance in relation to policies on light pollution, contaminated land, noise pollution (including vibration), air quality and odour and other fugitive emissions.

# **Light Pollution**

LOCATION: Cambridge and South Cambridgeshire

POLICY: • Cambridge Local Plan (2018) Policy 34: Light Pollution

Control

• South Cambridgeshire Local Plan (2018) Policy SC/9:

**Lighting Proposals** 

SCALE OF DEVELOPMENT: All development proposals including external lighting or

changes to existing lighting

TYPE OF DEVELOPMENT: Residential and Non-residential development

SUBMISSION REQUIREMENTS: An Assessment of the Need for Lighting

**Lighting Impact Assessment** 

LINK TO THE SUSTAINABILITY

CHECKLIST:

Pol.1, Pol.2, Pol.3, Pol.4, Pol.5 and Pol.6

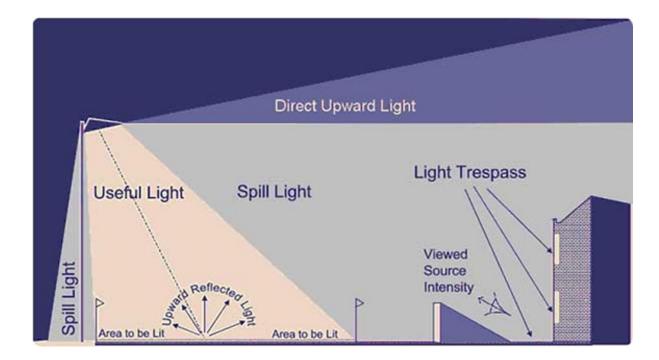
## **Policy overview**

3.6.2 The purpose of the Councils' light pollution policies is to ensure that all external lighting schemes are well designed, reducing the incident of light pollution in both rural and urban areas, maximising energy efficiency and ensuring public safety and perception of public safety.

- 3.6.3 Light pollution is the term used to describe any adverse effect of artificial lighting and includes and can occur as:
  - Sky Glow upward light, the orange glow visible around urban areas resulting from
    the scattering of artificial light by dust particles and water droplets in the sky. Effects
    can be seen many miles from the polluting lights. Streetlights are the main cause of
    sky glow.
  - **Glare** visual source intensity, the uncomfortable brightness of a light source when viewed against a dark sky. It is light shining into the eye preventing a person from seeing the illuminated area properly. For example, an over-powerful 'security' floodlight at the wrong angle.
  - **Light Trespass or Light Nuisance** light spillage beyond the boundary of the property on which a light is located. Light is not only illuminating its target area, but also lighting another area where it is not wanted. This is most commonly found with security floodlights shining over a wide area.
- 3.6.4 Figure 6 below shows a number of examples of light pollution, from upward light, which produces a sky glow effect and obstructs the observation of the night sky, to light trespass into windows that is obtrusive and causes a nuisance. Under the Environmental Protection Act 1990 artificial lighting can be classified as causing a statutory nuisance in certain circumstances when 'artificial light emitted from premises so as to be prejudicial to health or a nuisance'. The cumulative effect of light pollution from a number of sources is known as 'sky glow'. The NPPF paragraph 180 c) states that planning decisions should 'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

- 3.6.5 Impacts from light pollution, that good lighting design seeks to avoid, include:
  - Disruption of natural habitats of a wide range of wildlife, impacting on feeding, breeding and migration patterns;
  - Unacceptable impact to local residential amenity;
  - Wastage of energy leading to an increase in energy consumption and associated carbon emissions;
  - Reduction in the visibility of the night sky.

Figure 6: Light Pollution Pattern and Effects (c) Institute of Lighting Engineers



- 3.6.6 Therefore it is necessary to try to find a balance between the need for lighting and the negative implications associated with it. Lighting in itself may not need planning permission but the Councils will use planning powers where appropriate to manage the effects of lighting to achieve the objective of this part of the SPD which is to reduce excessive, intrusive and unnecessary lighting in both rural and urban areas.
- 3.6.7 The local planning authority (LPA) will therefore expect that the design and layout of artificial light be considered ideally at the design stage of a scheme to prevent potential harmful effects of the development on occupiers and neighbours in terms of visual privacy, outlook and disturbance. Artificial lighting should only illuminate the intended area and not affect or affect the amenity of neighbours. By establishing the objectives of any lighting scheme and agreeing requirements and guidelines a compromise can be met to reduce the impact of any scheme and potentially save energy and expense to the Applicant/Developer.

- 3.6.8 In order to avoid adverse effects on existing businesses with levels of artificial light related to their operation, the Council will apply the 'agent of change principle' where light sensitive uses are proposed in close proximity to them. The agent of change principle identifies that the party responsible for a change should also be responsible for managing the impact of that change.
- 3.6.9 This is particularly relevant in cases where residential development is proposed near to an established sports, leisure, transport / warehouse or entertainment use. New residents moving into the new residential development, for example, have the potential to make complaints with regards to glare or light trespass which could have an impact on the future operation of the existing uses / premises.
- 3.6.10 Development sensitive to high levels of artificial light proposed near to an existing use which generate artificial light that could lead to unacceptable glare or light trespass be accompanied by a lighting impact assessment and shall include necessary measures at the design stage to mitigate the anticipated lighting effects of the existing lighting. The Council may seek to secure mitigation measures through the use of design / layout and or planning conditions if necessary. In some case mitigation may only be practicable or achievable of site at source off-site and in these circumstance S106 obligations may be required.

# Will a Lighting Scheme Require Planning Permission?

- 3.6.11 Planning permission is usually required for lighting structures and equipment that is likely to substantially affect the external appearance of a building. Planning permission is not required for carrying out maintenance that affects only the interior of a building or does not materially affect its external appearance. Temporary lighting schemes also generally do not require planning permission.
- 3.6.12 Large-scale lighting installations such as the floodlighting of external recreational and sporting facilities/pitches are clearly a form of development, which comes within this statutory definition and would require planning permission. Listed building consent is required for lighting schemes if it is deemed that the character of the building would be materially affected by the lighting. Advice should be sought from the LPA prior to installation.
- 3.6.13 Examples of where planning permission is usually required include:
  - illuminated advertisements, although there are some exceptions, such as those indicating medical services and some commercial advertisements on the front of business premises;
  - the erection of columns to support lighting or other similar structures;
  - floodlighting of external recreational and sporting facilities / pitches; and
  - external lighting as part of domestic, industrial or commercial scheme.
- 3.6.14 Some proposals for new development, but not all, may have implications for light pollution. The Councils would advise prospective applicants to check with the planning department before installing any lighting scheme. Applicants are encouraged to submit

details of lighting schemes (nature and extent), including light scatter diagrams, as part of the planning application in order to demonstrate that the proposed scheme is appropriate in terms of its purpose and setting. In so doing, the LPA aims to minimise potential pollution from glare and spillage to neighbouring properties, roads and rural areas.

3.6.15 For further information on land uses/developments with general lighting advice and requirements please see Appendix 6.

#### **Submission requirements**

- 3.6.16 A number of factors will be taken into consideration when determining of planning applications for proposals that include lighting. These are:
  - 1. An assessment of the need for lighting;
  - 2. The location of the proposal in relation to neighbouring uses
- 3.6.17 For all lighting proposals, the applicant should identify the purpose and use of the lights, the potential users of the lighting scheme (e.g. for recreation facilities) and the hours the lights will be in operation (summer-time and winter-time). The hours of operation will be expected to be kept to a working minimum and applicants should demonstrate this in their application. Keeping the use of the lighting to a minimum will reduce the impact the lighting may have on the environment.

#### The Design of the Lighting Proposed (General lighting requirements)

- 3.6.18 To achieve the necessary minimisation of obtrusive light the applicant should adhere to the following general principles taken from the Institute of Lighting Professionals, Guidance Notes for the Reduction of Obtrusive Light, GN01: 2011.
  - Lighting is to be directed downwards wherever possible to illuminate its target. If there is no alternative to up lighting, then the use of shields and baffles will help reduce spill light to a minimum. Up lighting is a particularly bad form of obtrusive light and contributes to sky glow;
  - ii. Lighting is to be designed so as to minimise the spread of light near to, or above the horizontal. Again any light that shines above the horizontal line of the light adds to the sky glow effect;
  - Lighting should be designed to the correct standard for the task and should not over light. 'Over' lighting is a cause of obtrusive light and also represents a waste of money and energy;
  - iv. The main beam angle of all lights proposed directed towards any potential observer is kept below 70 degrees. It should be noted that the higher the mounting height, the lower the main beam angle could be. This will help reduce the effect of glare and light spill on neighbouring dwellings, passing motorists, pedestrians, etc.;
  - v. Lighting should be directed to minimise and preferably avoid light spillage onto neighbouring properties;
  - vi. Wherever possible use floodlights with asymmetric beams that permit the front glazing to be kept at or near parallel to the surface being lit;

- vii. The lights used should be the most efficient taking into account cost, energy use, colour rendering and the purpose of the lighting scheme required. All lighting schemes should meet British Standards.
- viii. Good design, correct installation and ongoing maintenance are essential to the effectiveness of lighting schemes.
- 3.6.19 Artificial lighting should be sited in the most appropriate locations to cause minimal disturbance to occupiers and wildlife, while still illuminating the intended area. This includes considering any occupiers located above the lighting source.
- 3.6.20 Consideration should be given to lighting associated with buildings of special historic and architectural interest in order to protect their special interest and that of the wider area. This applies both to the lighting of such buildings and the impact of the lighting installation when seen by day.
- 3.6.21 Artificial lighting on and off site shall meet the Obtrusive Light Limitations for Exterior Lighting Installations for an appropriate Environmental Zone as set out in table 3.8 below. Any mitigation measures to reduce and contain potential artificial light spill (light intrusion into windows) and glare (luminaire intensity viewed source intensity) as appropriate shall be detailed.

**Table 3.8**: Obtrusive light limitations for exterior lighting installations (taken from the Institute of Lighting Professionals - Guidance Notes for the Reduction of Obtrusive Light - GN01:2011)

Environmental Zone	Sky Glow ULR [Max	ULR [candelas] (3 (into Windows) Ev Max [lux]						
	%](1)	Pre- curfew	Post- curfew	Pre- curfew	Post- curfew	Average, L [cd/m2]		
E1: Natural - Intrinsically dark	0	2	0 ( 1*)	2,500	0	0		
National Parks, Areas of Outstanding								
Natural Beauty etc.								
E2: Rural - Low district brightness	2.5	5	1	7,500	500	5		

Village or relatively dark outer suburban locations						
E3: Suburban - Medium district brightness	5.0	10	2	10,000	1,000	10
Small town centres or suburban locations						
E4: Urban- High district brightness	15	25	5	25,000	2,500	25
Town/city centres with high levels of night-time activity						

**ULR = Upward Light Ratio of the Installation** - is the maximum permitted percentage of luminaire flux that goes directly into the sky.

**Ev = Vertical Illuminance in Lux** - measured flat on the glazing at the centre of the window.

I = Light Intensity in Candelas (cd)

L = Luminance in Candelas per Square Metre (cd/m2)

**Curfew =** the time after which stricter requirements (for the control of obtrusive light) will apply 10pm to 7am

- \* = Permitted only from Public road lighting installations
- 3.6.22 Applicants are encouraged to submitted full lighting design details at the application stage if possible. The level of information should be proportionate to the degree of lighting proposed. However, it is acknowledged that lighting is often a detailed design matter and in many circumstances may not have been finalised for all applications at the submission stage.
- 3.6.23 As lighting design and levels is a relatively precise engineering discipline, when lighting is low to medium level and there is confidence that acceptable lighting levels can be secured a condition will be imposed requiring that prior to the installation of any lighting an artificial lighting scheme or details will be submitted in writing for approval by the LPA.
- 3.6.24 For specific lighting schemes or with large-scale substantial artificial lighting installations such as the floodlighting of external recreational and sporting facilities/pitches or

transport interchanges, the application should be accompanied by that information normally required for any other planning proposal and additionally the information set out below:

- A statement setting out why a lighting scheme is required, the proposed users, and the frequency and length of use in terms of hours of illumination;
- A site survey showing the area to be lit relative to the surrounding area, the existing landscape features together with proposed landscaping features to mitigate the impacts of the proposed lighting;
- The design details of lights and associated infrastructure, including:
  - > the number of lights;
  - details of the make and catalogue number of any luminaires/floodlights lighting levels, lux and lumen details, lamp types, wattage;
  - plans showing the area to be lit and the layout of lights, including orientation of beams of light;
  - the height of lighting columns;
  - the mounting location, height and orientation of the luminaires/floodlights specified;
  - control systems including types and location of sensors, times lighting will be on; and
  - > the need for the lighting, that is, an explanation of what activity the lighting is supporting.
- A technical report prepared by a qualified Lighting Engineer or lighting company setting out the type of lights, performance, height and spacing of lighting columns. Modelled light levels (vertical and horizontal isolux contours) to be achieved over the intended area, at the site boundaries and, for large schemes, 50m outside of the boundary of the site should be superimposed on a plan / map of the site and its surrounding area. Glare luminaire intensity (viewed source intensity at the direction of receptor) calculations should also be included.
- 3.6.25 For further technical advice regarding sports floodlighting, guidance can be obtained from Sport England's 'Design Guidance Note Artificial Sports Lighting Updated guidance for 2012' and also the Chartered Institute of Building Services Engineers (CIBSE) 'Lighting Guide 04: Sports Lighting LG4'. In coming to a decision on the merits of a particular proposal, the Council will take into account the use of the facility and the likely benefits to the general public. Consideration will be given to the relationship between the use of the facility and the interests of conservation, amenity and safety. Where the impact of a proposal is considered to be unacceptable or cannot be mitigated through ameliorative measures, the protection of those recognised interests will prevail.
- 3.6.26 Any proposal for the display of illuminated advertisements should be accompanied by that information normally required for any other planning proposal and additionally the information set out below:
  - Details of the proposed location, positioning and dimensions of the sign face;
  - The sign face maximum luminance in candelas per square metres;
  - The number, size and type of light sources and details of the sign face materials;
  - The type of illumination internal or external; static or intermittent;

- 3.6.27 For certain major and Environmental Impact Assessment (EIA) development outline or full planning applications and in particular where lighting has the potential to have a significant adverse impact, a more detailed **lighting impact assessment** or strategy may be required at the determination stage. If this is the case the lighting impact assessment or strategy should be undertaken having regard to and in accordance with the Institute of Lighting Professionals 'PLGO4 Guidance on Undertaking Environmental Lighting Impact Assessments'.
- 3.6.28 Such applications can be provided with different levels of design detail. Typically there are three stages:
  - 1. Preliminary investigation: without specific lighting design or levels
  - 2. Provisional design: indicative design meeting task lighting requirements and standards
  - 3. Final design: with full details and calculation data isolux contours
- 3.6.29 The preliminary investigation will typically link into an outline planning application, having only general proposals for potential layouts of roads and buildings and so on. It is not possible, therefore, to undertake any actual lighting design, nor assess this fully. The preliminary and final site designs will require the appropriate lighting components to be developed and evaluated.
- 3.6.30 For each of the three planning stages listed in paragraph 3.6.28, the lighting assessment should generally follow the sequence set out below , which in turn follows the structure set out for the overall EIA:
  - Background Site description, in short form
  - Method of assessment, site visit and evaluation procedures
    - ➤ Consideration of national and local planning policy, legislation and industry standards /best practice technical guidance
  - Baseline assessment- what exists prior to any development and its visual impact
    - Environmental zone appropriate for the area, viewpoints
  - Proposed development nature of the associated lighting proposals and designs
  - Residual effects what changes in the lit scene are expected (good and bad) and significance of effects. They will include such elements as:
    - Illumination of roads and accesses, parking areas, buildings and so on
    - Spill light
    - Source intensity
    - Light presence
    - Effects on wildlife and so on
  - Potential mitigation what is proposed to eliminate or limit lighting problems
    - Mitigation strategies should be an inherent part of a professional lighting design. The formulation of a design approach for the development should therefore naturally involve both achieving the target lighting values and limiting spill light, in addition to minimising glare and light presence.
  - Conclusions including identification of any aspects / areas where there is a lack of information at the time of the report
  - Appendices

3.6.31 PLG04 focuses on the lighting assessment aspects of such development applications in a holistic way. While most of the impacts are effects on people and their perception of the surroundings, assessments must also include impact on wildlife. This may involve consultation with specialists producing the ecological sections of the EIA and with the Council's Ecologists.

# The role of planning conditions

- 3.6.32 Where planning conditions are used to secure the submission of a detailed lighting scheme and control lighting levels, these conditions may require:
  - Compliance with an acceptable artificial lighting scheme design that has been submitted;
  - Approval of a detailed lighting scheme, requiring light levels to be in accordance with obtrusive light limitations for exterior lighting installations;
  - Limiting the time of use of the lighting: Lighting schemes could be turned off when not needed ('part-night lighting') to reduce any potential adverse effects e.g. when a business is closed or, in outdoor areas, switching-off at more sensitive night times between 10 or 11pm and 7am or 8am;
  - Limiting the light levels to a designed uniformity;
  - Limiting the use of lighting schemes to identified uses or users;
  - Specifying lamps, luminaires and columns;
  - Specifying the need for full horizontal cut-off;
  - The design, height and position/angle of the lighting;
  - The retention of screening vegetation;
  - The use of planting and bunding to contain lighting effects;
  - The future maintenance of the lighting schemes and post-installation compliance checks in accordance with the original design and planning approval;
  - In exceptional circumstances, the granting of temporary planning permission to enable a review of lighting impacts after installation.
  - It may be necessary to condition a planning approval to allow the LPA to monitor the development and enforce the condition if necessary.
- 3.6.33 For single householder and other minor applications with relatively low level lighting conditions may simply require approval of the location, height and position/angle of the lighting luminaire model / type to be installed.
- 3.6.34 For applications with a higher degree of lighting it is likely that a condition will be imposed to require that prior to the installation of any artificial lighting an external and internal artificial lighting scheme with detailed impact assessment shall be submitted to and approved in writing by the local planning authority. The scheme shall include details of any artificial lighting of the site (external and internal building lighting) and an artificial lighting impact assessment with predicted lighting levels at proposed and existing residential properties shall be undertaken (including horizontal / vertical isolux contour light levels and calculated glare levels).
- 3.6.35 Modelling software can be used for the planning, calculation, modelling and visualisation of outdoor lighting based on the project's architectural drawings. A common software

assessment technique that the Council would recommend the use of is the "outdoor site lighting performance (OSP) method" which is a comprehensive method for predicting and measuring three different aspects of light pollution: glow, trespass and glare.

## **Further guidance**

3.6.36 For further guidance on designing lighting proposals please see:

- Institute of Lighting Professionals, Guidance Notes for the Reduction of Obtrusive Light, GN01: 2011. Available online at: https://www.theilp.org.uk/documents/obtrusive-light/
- Professional Lighting Guide PLG04: Guidance on Undertaking Environmental Lighting Impact Assessments. For further information please see: <a href="https://www.theilp.org.uk/resources/ilp-general-reports/plg04/">https://www.theilp.org.uk/resources/ilp-general-reports/plg04/</a>
- BRE Digest 529 Obtrusive light from proposed developments, BRE 2013. For further information please see: <a href="https://www.brebookshop.com/details.jsp?id=327145">https://www.brebookshop.com/details.jsp?id=327145</a>
- BS EN 12464-2:2014- Light and lighting. Lighting of work places. Outdoor work places. Available from BSI: <a href="https://shop.bsigroup.com/">https://shop.bsigroup.com/</a>
- Guide on the limitation of the effects of obtrusive light from outdoor lighting installations. Vienna, Commission Internationale de l'Eclairage (CIE 150 -2003, International Commission on Illumination).
- PLG 05: Brightness of Illuminated. For further information please see:
   Advertisements. For further information please see:
   <a href="https://www.theilp.org.uk/resources/ilp-general-reports/plg05-the-brightness-of-illuminated-advertisements/">https://www.theilp.org.uk/resources/ilp-general-reports/plg05-the-brightness-of-illuminated-advertisements/</a>
- Guidance Note 8/18 Bats and artificial lighting (ILP, 12 September 2018). Available online at:
  - https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/
- Sport England's Design Guidance Note Artificial Sports Lighting Updated guidance for 2012. Available online at: <a href="https://www.sportengland.org/facilities-planning/design-and-cost-guidance/artificial-sports-facilities/">https://www.sportengland.org/facilities-planning/design-and-cost-guidance/artificial-sports-facilities/</a>
- CIBSE Lighting Guide 04: Sports Lighting LG4 and other guides and publications. For further information please see: <a href="https://www.cibse.org/Society-of-Light-and-Lighting-SLL/Lighting-Publications">https://www.cibse.org/Society-of-Light-and-Lighting-SLL/Lighting-Publications</a>

## **Contaminated Land**

LOCATION: POLICY:	<ul> <li>Cambridge and South Cambridgeshire</li> <li>Cambridge Local Plan (2018) Policy 33: Contaminated</li> <li>Land</li> </ul>
	<ul> <li>South Cambridgeshire Local Plan (2018) Policy SC/11:</li> <li>Contaminated Land</li> </ul>
SCALE OF DEVELOPMENT:	All major development and any development proposals on land subject to contamination or land that is suspected to be contaminated
TYPE OF DEVELOPMENT: SUBMISSION REQUIREMENTS:	Residential and Non-residential development Contaminated Land Assessment

#### **Policy overview**

- 3.6.37 Land contamination is a material consideration for the purposes of planning. Developers are responsible for ensuring that a proposed development will be safe and 'suitable for use' for the purposes for which it is intended. A **Contaminated Land Assessment** is required for all major developments as well as any development where there has been a previous potentially contaminative use.
- 3.6.38 The contaminated land regime in Part IIA of the Environmental Protection Act 1990 was introduced specifically to address the historical legacy of land contamination. It focuses on the identification and remediation of land which is in such a condition by reason of contamination that it gives rise to significant harm or the significant possibility of significant harm to certain named receptors, or gives rise to pollution of controlled waters or the likelihood of such pollution. It applies where there is unacceptable risk, assessed on the basis of the current use (including any use that already has the benefit of planning permission but might not yet be implemented, including development permitted under the General Permitted Development Order) and the relevant circumstances of the land.
- 3.6.39 The Part IIA regime extends to natural contamination, that is, naturally occurring substances in the ground that might pose a risk to the receptor. In the context of Cambridge and South Cambridgeshire this is usually limited to carbon dioxide, which is frequently found above the chalk.

# **Submission requirements**

- 3.6.40 A phased approach to site investigation and risk assessment is required to ensure that resources are targeted to the areas most likely to be contaminated. Not all sites will require all of these phases to be carried out. A general overview of submission requirements is presented below, with further and more detailed guidance provided in Appendix 7, which incorporates the Joint Cambridge City Council and South Cambridgeshire District Council Developers Guide to Contaminated Land. Early consultation with the LPA is recommended to ensure that site investigation strategies and remediation proposals are acceptable.
- 3.6.41 To summarise, the submission requirements related to contaminated land are as follows:
  - The contaminated land assessment must include a desk study and must be submitted to the LPA for approval. The desk study must detail the history of the site's past land use and must propose a site investigation strategy based on the information presented by the desk study. This strategy must be approved by the LPA prior to investigations commencing on-site.
  - The site investigation, including all of the relevant and necessary soil, gas, and water (surface and groundwater) sampling, must be carried out by a competent person with the relevant qualifications, accreditation, and experience in accordance with a quality assured sampling and analysis methodology.

- A site investigation report detailing all of the investigative works and sampling, together with the results of all analyses, risk assessment to relevant receptors, and a proposed remediation strategy must be submitted to the LPA. The LPA will approve the remediation works as required prior to any remedial work commencing on-site. The works must be of such a nature as to render harmless the identified contamination with respect to the proposed end use and the surrounding environment (including controlled waters).
- The approved remediation works must be carried out in full under a quality assurance scheme in order to demonstrate compliance with the approved methodology and current best practice.
- If during the works contamination is encountered which has not previously been identified then all site works must cease immediately and the LPA notified as soon as possible. The newly discovered contamination must be fully assessed and a remediation scheme agreed with the LPA. Site work can only restart with the consent of the LPA.
- Upon completion of the works a closure report must be submitted to the LPA for approval. The closure report must include full details of the remediation works undertaken and must include all relevant quality assurance certificates to show that the works have been carried out as agreed with the LPA. Details of any postremediation sampling and analysis must be included in the closure report together with the necessary documentation detailing what waste materials have been removed off-site.

### **Further guidance**

- 3.6.42 Please note that this list is a summary list only of the key guidance documents that are available.
  - British Standards Institution (2011) Investigation of Potentially Contaminated Sites,
     Code of Practice, BS: 10175:2011
  - British Standards Institution (2010) Amendment 2: Code of Practice for Site Investigation, BS5930:1999+
  - British Standards Institution (2007) Specification for Topsoil and Requirements for Use, Code of Practice, BS: 3882:2007
  - British Standards Institution (2002) Soil quality. Sampling. Guidance on sampling techniques, Code of Practice, BS: 10381:2002
  - Chartered Institute for Environmental Health (2008), The Local Authority Guide to Ground Gas
  - CIRIA Report C665 (2007) Assessing Risks Posed by Hazardous Ground Gases to Buildings
  - CIRIA Report C685 (2009) The VOCs Handbook
  - CL:AIRE and Chartered Institute for Environmental Health (2008) Guidance on Comparing Soil Contamination Data with a Critical Concentration
  - CL:AIRE (2011) Definition of Waste: Development Industry Code of Practice
  - Department of the Environment (1989) Waste Management Paper No 27, Landfill Gas
  - Department of the Environment (1995) Industry Profiles
  - Environment Agency (2010) Guiding Principles for Land Contamination

- Environment Agency (2004) Model Procedures for the Management of Land Contamination (CLR 11)
- Environment Agency (2006) Remedial Targets Methodology, Hydrogeological Risk Assessment for Land Contamination
- Environment Agency (2010) Petroleum Hydrocarbons in Groundwater: Supplementary Guidance for Hydrogeological Risk Assessment
- Environment Agency (2002) Technical Advice to Third Parties on Pollution of Controlled Waters for Part IIA EPA 1990
- Environment Agency (2005) Science Report P5-080/TR3, The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons for Soil
- Environment Agency (2003) MCERTS Performance Standard for Laboratories Undertaking Chemical Testing of Soil
- Environment Agency (2009) Science Report SC050021/SR2, Human Health
- Toxicological Assessment of Contaminants in Soil, Background to the CLEA Model
- Environment Agency (2009) Science Report SC050021/SR3, Updated
- Environment Agency (2009) CLEA Software Handbook version 1.04
- Environment Agency, National House Building Council and Chartered Institute for Environmental Health (2008) Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D Publication 66:2008
- Health and Safety Executive (1991) Protection of Workers and the General Public during the Development of Contaminated Land
- Raybould JG, Rowan DL and Barry DL, 1995, CIRIA Report C150, Methane Investigation Strategies
- Welsh Assembly Government (2006) Statutory Guidance on Contaminated Land
- Welsh Local Government Association (2012) Requirements for Chemical Testing of Imported Materials for Various End Uses
- Wilson S, Oliver S, Mallett H, Hutchings H and Card G, 2007, CIRIA Report C665, Assessing Risks Posed by Hazardous Ground Gases to Buildings

# **Noise Pollution (including vibration)**

LOCATION:	Cambridge and South Cambridgeshire
POLICY:	<ul> <li>Cambridge Local Plan (2018) Policy 35: Protection of human health and quality of life from noise and vibration</li> </ul>
	<ul> <li>South Cambridgeshire Local Plan (2018) Policy SC/10: Noise Pollution</li> </ul>
SCALE OF DEVELOPMENT:	All noise sensitive and noise generating developments
TYPE OF DEVELOPMENT:	Residential and Non-residential development
SUBMISSION REQUIREMENTS:	Noise Impact Assessment or Acoustic Assessment/Report with an Acoustic Design Statement where required
LINK TO THE SUSTAINABILITY CHECKLIST:	Pol.8. Pol.9, Pol.10, Pol.11, Pol.12, Pol.13 and Pol.14
CHECKLIST:	

**Policy overview** 

- 3.6.43 Noise in society is defined as unwanted sound, which is unpleasant and causes disturbance/annoyance. It is an unavoidable part of everyday life and is commonly caused by environmental noise originating from various sources including transportation (road traffic, railway and aircraft), leisure/recreational and industrial, trade/commercial and business premises.
- 3.6.44 Noise can have a significant effect on the environment, human health and wellbeing including sleep disturbance, the amenity/quality of life experienced and enjoyed by individuals and communities and the utility of noise sensitive land uses. Consequently, noise can be a material planning consideration when new developments have the potential to create noise and when new developments would be sensitive to the existing noise conditions. Noise within the living and working environment is a key aspect of sustainable development.
- 3.6.45 The planning process is the primary mechanism for local authorities to prevent serious conflicts between different land uses. Many developments can generate significant amounts of noise or are sensitive to the impact of noise. It is the responsibility of LPAs to ensure that developments are appropriately located and designed so that they do not have an unacceptable impact on local communities and that noise sensitive developments are not subjected to unacceptably high levels of noise.
- 3.6.46 It is important that good acoustic design is considered at an early stage in the development management process. This guidance is intended to help protect occupiers of new or existing noise sensitive buildings from existing or introduced noise sources respectively and to seek to protect and improve the residential amenity of the area overall. It is government policy that noise should not be considered in isolation or separately from the economic, social and other environmental dimensions of proposed development.
- 3.6.47 Appendix 8, Annex A summarises the types of development and instances when an acoustic assessment/report is likely to be required for both (i) New Noise Sensitive Development (NSD) and (ii) Noise Generating Development (NGD). Appendix 8, Annex B details what a typical report should include and where details of acoustic consultants (Suitably Qualified and Competent Persons) may be obtained from.
- 3.6.48 NPPF policies are supplemented by additional advice contained in the NPPG. The NPPG does not provide numerical values for the different noise effect levels, instead recognising that 'the subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation'.
- 3.6.49 It therefore remains for local authorities to consider the NPPG noise exposure hierarchy and seek to align it with significance criteria, having regard to national and industry standards, codes of practice and best practice technical guidance such as British Standards, World Health Organisation guidance and other relevant sources of information.

- 3.6.50 The long term vision and aims of the Government's policy on noise is contained in the Noise Policy Statement for England (NPSE) (March 2010) which is to "promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development". With regard to acoustic design and noise control, the NPPF provides a set of overarching aims and broad principles for the consideration of noise (and vibration) in accordance with the NPSE to be applied in the planning process as follows:
  - Avoid significant adverse effects of noise on people living and working in the LPAs;
  - Mitigate and reduce to a minimum the adverse effects of noise within the context of sustainable development;
  - Prevent development which is unacceptable in terms of noise
  - Encourage good acoustic design as far as is reasonably practical;
  - Improve living and working conditions where the acoustic environment already has a significant adverse effect on people's quality of life; and
  - Improve and enhance the acoustic environment and promote soundscapes that are
    appropriate for the local context, including the promotion of a vibrant acoustic
    environment where this is appropriate and the protection of relative tranquillity and
    quietness which have remained relatively undisturbed by noise and are prized for
    their recreational and amenity value for this reason, and are valued.
- 3.6.51 The NPSE and NPPG uses the following 'noise exposure observed effect level' terms when determining the significance of any noise impact NOEL, LOAEL and SOAEL:
  - **NOEL No Observed Effect Level**: The level of noise exposure below which no effect can be detected. In simple terms, no effect on health and quality of life detectable due to noise.
  - **LOAEL Lowest Observed Adverse Effect Level**: The level of noise exposure above which adverse effects on health and quality of life can be detected.
  - **SOAEL Significant Observed Adverse Effect Level**: The level of noise exposure above which significant adverse effects on health and quality of life occur.
- 3.6.52 In terms of planning, increasing noise exposure results in a corresponding increasing 'observed effect level' and the likely planning actions and outcomes of these, based on the likely average response are explained in detail in NPPG and are summarised in table 3.9 'Noise Exposure Effect Level Hierarchy' below.

**Table 3.9:** - Noise Exposure Level Hierarchy (NOELs, LOAELs, SOAELs and Unacceptable Adverse Effect)

Perception	Examples of effects / outcomes	Increasing effect level	Planning Action
	No Effect		
Not noticeable	No Effect	No Observed Effect	No specific measures required

No Observed Effect Level (NOAEL)					
Noticeable and not intrusive  Noticeable and not intrusive  Noticeable and not cause any change in behaviour or attitude.  Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.		No Observed Adverse Effect	No specific measures required		
	Lowest Observed Adverse Effect L	evel (LOAEL)			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum		
	Significant Observed Adverse Effect	Level (SOAEL)			
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid		
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent		

3.6.53 In determining whether noise is a material planning consideration the LPA will take account of the impact and effect on the acoustic environment and quality of life and in doing so will require that developments aim for:

1. A noise level between the **No Observed Effect Level** (**NOEL** - this is the level of noise exposure below which no effect at all on health or quality of life can be detected) and the **Lowest Observed Adverse Effect Level** (**LOAEL** - this is the level of noise exposure above which adverse effects on health and quality of life can be detected). Conditions may be attached.

#### If 1 cannot be achieved then:

2. If the assessment results in a level between the **Lowest Observed Adverse Effect Level** and the **Significant Observed Adverse Effect Level** (**SOAEL** - this is the level of noise exposure above which significant adverse effects on health and quality of life occur), mitigation will be necessary to reduce to a minimum the adverse effects of noise and therefore conditions will be attached.

#### If 1 and 2 cannot be achieved then:

- 3. If the assessment results in a **Significant Observed Adverse Effect Level (SOAEL)** after mitigation, it is likely that the application will be recommended for refusal.
- 3.6.54 In summary following the SPD guidance will lead to the choice of one of four possible planning recommendations regarding the acoustic acceptability of the development proposal, as follows:

### **Planning Outcome**

- A. Planning consent may be granted without any need for noise conditions where a
  potential residential development site poses no or a negligible risk from a noise
  perspective, the GCPS will typically not require any specific measures ("Grant Consent
   No Objection on Noise Grounds");
- B. Planning consent may be granted subject to the inclusion of suitable noise conditions in order to mitigate and reduce to a minimum the adverse effects of noise for example to address specific acoustic design aspects of a particular site or require a noise insulation scheme ("Grant Consent No Objection Minimise Noise");
- C. Planning consent should be refused on noise grounds in order to avoid significant adverse effects of noise ("Refusal / Object Avoid on Noise Grounds");
- D. Planning consent should be refused on noise grounds in order to prevent unacceptable adverse effects of noise ("Refusal / Object Prevent on Noise Grounds").

# **Existing Business and Agent of Change Principle**

- 3.6.55 Existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because future noise sensitive uses are subsequently permitted (including by a change of use) and where people may object to the inevitable noise that is produced.
- 3.6.56 This is particularly important for existing industrial, trade/commercial or business premises that generate noise, where the introduction of noise sensitive receptors such as residential premises could result in complaints from future occupiers, which could be considered a statutory noise nuisance under the Environmental Protection Act 1990. If a statutory nuisance was ever witnessed as a result of the introduction of new residents being exposed to unacceptable noise from commercial activities/plant, the local authority would have a duty to serve a legal notice on the offending premises responsible for any

- statutory noise nuisance, requiring abatement. If abatement works or restrictions were required this may result in unreasonable restrictions being placed on the existing business and/or substantial abatement of the noise adding to the costs and administrative burdens.
- 3.6.57 In order that existing businesses do not have unreasonable restrictions put onto them because of changes in nearby land uses, the LPA will apply the 'agent of change' principle which identifies the person or business responsible for the change is also responsible for managing the impact of the change.
- 3.6.58 It is important to note that the statutory nuisance regime is not intended to secure a high level of amenity but is a basic safeguarding standard intended to deal with excessive emissions. Nuisance does not equate to loss of amenity/quality of life. Significant loss of amenity will often occur at lower levels of emission than would constitute a statutory nuisance. It is therefore important for planning authorities to consider properly, loss of amenity from emissions in the planning process in its wider context and not just from the narrow perspective of statutory nuisance. Where statutory nuisance arises from commercial or industrial uses, the defence of best practicable means is also available together with reasonable excuse. Thus, it follows that a LA may not be able to require the complete abatement of a statutory nuisance. Broader amenity issues therefore need to be considered under the planning regime when considering individual applications.
- 3.6.59 The LPA will therefore expect proposed new noise sensitive developments to follow good acoustic design principles and to incorporate adequate mitigation measures and to work with existing businesses to ensure appropriate acoustic standards in the new developments and to ensure a statutory noise nuisance does not arise.
- 3.6.60 In certain exceptional circumstances if significant and unacceptable adverse noise impacts cannot be avoided on noise sensitive development sites as a result of existing industrial commercial or business noise sources off-site and relating to land not in control of the applicant then a Grampian condition or \$106 agreement may be required with a third party for mitigation measures to reduce these noise sources to an acceptable level. This may allow delivery of otherwise unacceptable development. However, this approach is only likely to be acceptable where there is a reasonable degree of certainty and prospect of securing and delivering between all parties concerned.

# **Submission requirements: Noise Sensitive Development (NSD)**

3.6.61 This includes any proposed NSD located in a noisy environment or near to a specific existing or reasonable foreseeable future noise generating source e.g. near to a busy road, railway line, noisy commercial/industrial premises including building services plant/equipment, Licenced Premises and general activities associated with the night time economy. NSD include residential properties, residential institutions, educational establishment (schools/libraries), hospitals, offices, workshops, laboratories, hotels as well as noise sensitive land valued for their amenity such as local green open spaces, certain parks and gardens.

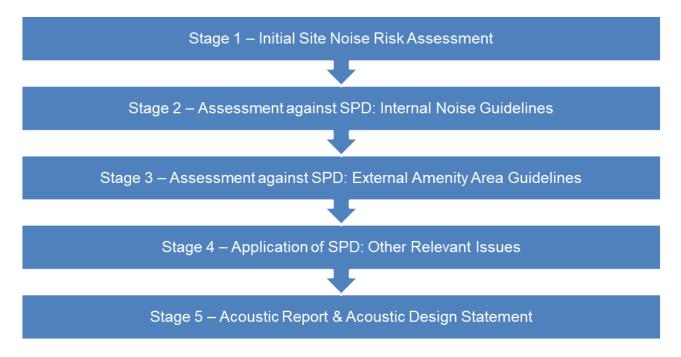
- 3.6.62 The LPA will consider carefully in each case whether proposals for new NSD, including by a change of use would be incompatible with existing activities. Such new NSD will not normally be permitted in areas which are, or are expected to become, subject to high levels of noise or an otherwise unacceptable acoustic environment. When determining planning applications for development which will be exposed to an existing noise source, the LPA will consider both the likely noise exposure at the time of the application and any change that may reasonably be expected in the foreseeable future e.g. from future intensification of transportation noise sources or future changes in commercial/industrial activities or positive regeneration effects. Where the application site is considered to be otherwise suitable then the principle requirement will be to secure and achieve appropriate acoustic standards through the application of good acoustic design.
- 3.6.63 There will be a general presumption against new NSD that is likely to experience significant adverse effects from noise unless it can be demonstrated that the economic and/or social and/or environmental benefits associated with the proposed development outweigh the adverse effects.
- 3.6.64 For NSD the noise assessment shall follow the general approach detailed into the document 'ProPG: Planning and Noise Professional Practice Guidance on Planning and Noise New Residential Development, May 2017'
  <a href="https://www.ioa.org.uk/publications/propg">https://www.ioa.org.uk/publications/propg</a> as summarised in the process diagram figure 7 below.

# Stage 1 - Initial Site Noise Risk Assessment

- 3.6.65 An initial **noise risk assessment** of the proposed development site should be conducted by a competent acoustic/noise consultant and practitioner at the earliest opportunity, before any planning application is submitted to determine the noise climate of the site when considering "anonymous noise", without proposed mitigation, prior to development. The noise levels apply to steady relatively constant external noise as it affects the internal acoustic environment from sources without a specific character, commonly termed "anonymous noise". Occupants are usually more tolerant of noise without a specific character than, for example, that from neighbours which can trigger complex emotional reactions. For simplicity, only noise without character is considered.
- 3.6.66 The noise risk assessment should provide an indication of the likely risk of adverse noise effects in terms of NOELs, LOAELs and SOAELs as a result of the existing noise climate with no subsequent noise mitigation or control to take place as part of the development proposal.
- 3.6.67 The risk assessment should not include consideration of any new or additional mitigation measures that may subsequently be included in development proposals for the site and proposed as part of a subsequent planning application. In other words, the risk assessment should include the acoustic effect of any existing site features that will remain (e.g. retained buildings, changes in ground level) and exclude the acoustic effect of any site features that will not remain (e.g. buildings to be demolished, fences and barriers to be removed) if development proceeds.

3.6.68 The noise risk assessment may be based on measurement or prediction (or a combination) as appropriate, and should aim to describe noise levels over a "typical worst case" 24 hour day either now or in the foreseeable future having regard to weekdays and weekends. Among other considerations, diurnal patterns can have a major influence on sound levels and, for example, the middle of the night can be distinctly different (and potentially of lesser importance) compared to the start or end of the night-time period for sleep purposes. Furthermore, in this general context it can also be necessary to separately assess weekends and weekday periods. Care should be taken so that the risk assessment includes the combined external free-field noise level from all relevant sources of transport noise that affect the site.

Figure 7: Noise Sensitive Development - Noise Assessment Process



- 3.6.69 The assessment may also include industrial/commercial noise where this is present but is "not dominant" (i.e. where the effect would not be rated as adverse if a BS4142:2014 assessment was to be carried out). Where industrial/commercial noise is considered to be "dominant" and is considered "non-anonymous", due regard should be had to the guidance in BS4142:2014.
- 3.6.70 The indicative noise levels at the Initial Site Noise Risk Assessment are considered to be appropriate in most circumstances as they should give a broad indication of the extent of the noise challenge at a potential residential development site. The approach is intended to give the developer, the noise practitioner, and the decision maker an indication only of the likely suitability of the site for new residential development from a noise perspective.
- 3.6.71 It should be noted, however, that these levels could be varied (by local agreement) to suit local and project context without undermining the overall approach. In the final column, the initial noise risk assessment is aligned with pre-planning application guidance that reflects the increasing importance of good acoustic design as the noise risk increases.

Initial Site Noise Risk Assessment - Guideline "Absolute" Sound Levels for "anonymous noise"

3.6.72 For sites affected by relatively' anonymous noise' such as transport noise the LPA will consider the noise effect levels and planning consideration/advice given in table 1 titled Guideline "Absolute" Sound Levels for "anonymous noise" in Appendix 8, Annex C.

Initial Site Noise Risk Assessment - Guideline "Relative" Sound Levels for "non-anonymous noise"

3.6.73 For sites affected by dominant 'non-anonymous noise' such as industrial, commercial or business noise the LPA will consider the noise effect levels and planning consideration/advice given in table 2 titled 'Guideline "Relative" Sound Level Standards for "non-anonymous noise' in Appendix 8, Annex C

# Stage 2 - Internal Design Noise Levels

- 3.6.74 For steady external "anonymous" noise sources the LPA will normally expect applicants to achieve the design internal ambient noise levels contained in BS8233:2014 Guidance on sound insulation and noise reduction for buildings (recreated as table 3.10 below and to consider the impact and effect of any noise events) in all noise-sensitive rooms. It should be noted that the acoustic performance of the building envelope will be reduced in the event windows are opened for ventilation or cooling and thermal comfort control purposes, therefore reducing attenuation/insulation, as the noise reduction across an openable window (outside to inside) is typically no more than 10 to 15 dB(A).
- 3.6.75 Most residents value the ability to open windows at will at the occupant's choice, for a variety of reasons at any time, and the LPA normally requires that designers principally aim, through the use of good acoustic design, to achieve the internal noise level guidelines in noise-sensitive rooms with windows open.

**Table 3.10:** Internal Ambient Noise Levels for Dwellings

Situation / Activity	Location	07:00 – 23:00 hrs.	23:00 – 07:00 hrs.
Resting, listening and communicating	Living room	35 dB LAeq,16 hour	
Dining	Dining room/area	40 dB LAeq, 16 hour	
Sleeping (daytime resting)	Bedroom	35 dB LAeq,16 hour	30 dB LAeq, 8 hour
Sleeping	Bedroom		45 dB LAMax (several times in any one hour)

#### Notes:

(i) Table 3 provides recommended levels for overall noise in the design of a building. These are the sum total of structure-borne and airborne noise sources. Groundborne noise is assessed

- separately and is not included as part of these targets, as human response to groundborne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity.
- (ii) The levels shown in Table 3 are based on the existing guidelines issued by the WHO and assume normal diurnal fluctuations in external noise. In cases where local conditions do not follow a typical diurnal pattern, for example on a road serving a port with high levels of traffic at certain times of the night, an appropriate alternative period, e.g. 1 hour, may be used, but the level should be selected to ensure consistency with the levels recommended in Table 4 of BS8233.
- (iii) These levels are based on annual average data and do not have to be achieved in all circumstances. For example, it is normal to exclude occasional events, such as fireworks night or New Year's Eve.
- (iv)Regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or LAmax,F, depending on the character and number of events per night. Sporadic noise events could require separate values.
- (v) If relying on closed windows to meet the guide values, there needs to be appropriate alternative ventilation provision that does not compromise the façade insulation or the resulting noise level. If applicable, any room should have adequate ventilation (e.g. trickle ventilators should be open) during assessment. If there is noise from a mechanical ventilation system, the internal ambient noise levels should be reported separately with the system operating and with it switched off.
- (vi)Where development is considered necessary or desirable, despite external noise levels above WHO guidelines, the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions still achieved. The more often internal LAeq levels start to exceed the internal LAeq target levels by more than 5 dB, the more that most people are likely to regard them as "unreasonable". Where such exceedances are predicted, applicants should be required to show how the relevant number of rooms affected has been kept to a minimum. Once internal LAeq levels exceed the target levels by more than 10 dB, they are highly likely to be regarded as "unacceptable" by most people, particularly if such levels occur more than occasionally. Every effort should be made to avoid relevant rooms experiencing "unacceptable" noise levels at all and where such levels are likely to occur frequently, the development should be prevented in its proposed form
- (vii) The noise levels apply to steady external noise as it affects the internal acoustic environment from sources without a specific character, previously termed "anonymous noise". Occupants are usually more tolerant of noise without a specific character than, for example, that from neighbours which can trigger complex emotional reactions. For simplicity, only noise without character is considered in Table 3.
- (viii) Noise has a specific character if it contains features such as a distinguishable, discrete and continuous tone, is irregular enough to attract attention, or has strong low-frequency content, in which case lower noise limits might be appropriate.

### Stage 3 – Design Noise Levels for External Amenity Spaces

3.6.76 The sound level within a residential building is not the only consideration and most residents will also expect a reasonable degree of peaceful enjoyment of their gardens or balcony and adjacent amenity areas. The acoustic environment of external amenity areas shall always be assessed and noise levels should ideally not be above the range 50 to 55 dB LAeq, 16hr for "anonymous noise". It may be necessary to carefully locate and design amenity areas and/or to provide acoustic screening in order to meet this aim.

3.6.77 Developers are encouraged to enter into pre application discussion where noise levels in proposed amenity spaces are likely to be above 55 dB LAeq,16hr. In such cases development should be designed to achieve the lowest practicable levels in these external amenity spaces and the availability of reasonable access to an outdoor recreational area away from but close to the development site, that meets the above target external levels will be taken into account in deciding whether the scheme is acceptable in noise terms. Soundscape management techniques, including psychological masking, may also help to provide a suitable outdoor acoustic environment in otherwise noisy locations. It is accepted that, in some circumstances it may be appropriate to vary, or not to apply, these goals in order to meet wider planning objectives.

# Stage 4 – Assessment of Other Relevant Issues

- 3.6.78 The fourth element of the preferred process is an assessment of other relevant issues. For this element the SPD reflects and extends the advice contained in Government policy and guidance documents such as the NPSE and Noise Action Plans. Government guidance in the NPPG Noise already lists examples of acoustic factors that influence whether noise could be a concern these include:
  - the source and absolute level of the noise;
  - the time of day noise occurs;
  - the number, frequency and pattern of noise events;
  - the spectral content of the noise (i.e. whether or not the noise contains particular high or low frequency content);
  - the character of the noise (i.e. the presence of tones or other features such as impulsiveness),
  - possible cumulative impacts from several sources as well as local topology and topography.
- 3.6.79 The NPPG also mentions some wider acoustic-related factors such as the planned character of the area (this should include consideration of the acoustic environment); the possible need to keep windows closed "most of the time" to keep out the noise; the possible need to provide acoustically suitable outdoor amenity space; and the potential effect on an existing business.
- 3.6.80 It is recommended that these factors and the following additional issues should always be included as part of a systematic assessment of other relevant issues before making a judgement about the noise aspects of a particular planning proposal for new residential development. Not all of the issues discussed will arise in each and every planning application and some may already have been addressed as an inherent part of good acoustic design. In addition, the LPA may add other relevant issues depending on local circumstances and priorities.
- 3.6.81 Design measures taken to reduce intrusion by noise may have unintended adverse consequences for the building or the nearby environment and may affect the attractiveness of the living environment for the occupants. Examples include sealed up balconies that result in a lack of connection with the external environment, environmental noise fences/barriers that remove views or prevent crossing roads and

- create significant visual impacts or secured by design issues, specialist ventilation/thermal comfort measures that affect personal control over the internal environment etc. Such unintended consequences should normally be avoided by good acoustic design.
- 3.6.82 Some wider planning objectives may have unforeseen acoustic implications. For example, the encouragement of 'active frontages' that overlook public footpaths etc. to promote natural surveillance and ensure 'safe by design' could result in some residential units facing recreational areas (MUGAs), noisy streets/roads or railways. The encouragement of active outdoor lifestyles may require the careful protection of amenity spaces from sources of transport noise. The creation of vibrant mixed use commercial and residential neighbourhoods can introduce particular challenges that will need to be overcome by careful acoustic design.

### **Ventilation and Cooling Design**

- 3.6.83 Ideally, the internal design noise levels in table 3.10 should be met with windows open. Where the LPA accepts that there is a justification that the internal target noise levels can only be practically achieved with windows closed, which is likely to be the case in some areas, special care must be taken to design the accommodation so that it provides good standards of acoustics, ventilation and thermal comfort without unduly compromising other aspects of the living environment.
- 3.6.84 It is often necessary to open windows during the warmer months of the year to achieve comfortable internal temperatures and to facilitate effective thermal comfort control. Windows might need to remain open for extended periods to cool the internal habitable rooms including bedrooms. This is often referred to as summer cooling and essentially means an increased flow of air through habitable rooms to cool these spaces and is a form of thermal comfort control. This is not discussed in detail in BS8233 or Approved Documents E or F of the Building Regulations which do not consider external noise impacts. However the requirements related to "purge ventilation" and the purpose of purge ventilation are comparable to the purpose of opening windows for reasons of cooling i.e. the internal environment is not comfortable and rapid air changes should serve to improve that comfort.
- 3.6.85 When windows are provided there is also a reasonable expectation by occupiers that they can open them for any reason at any time. Where the internal noise levels cannot be achieved with windows open, alternative ventilation such as mechanical ventilation heat recovery system (MVHR) or an acoustically treated passive free area of sufficient size should be provided. It is important to note this is not a request for air conditioning. It is a requirement to offer the option of alternative adequate ventilation with windows closed due to the local noise climate and for anonymous noise only. These arrangements will not be acceptable when there is a potential for a statutory noise nuisance to arise due to noise from industrial trade or business premises.
- 3.6.86 This ventilation system must:

- Be capable of providing air changes at volumes equivalent to an open window for the purposes of rapid cooling and ventilation. A ventilation rate of 2 - 4 air changes per hour (ACH) is required to achieve effective thermal comfort control.
- Not compromise the façade insulation or the resulting internal noise level.
- Operate at a level to comply with a noise rating curve NR25 or lower so as not to dissuade use.
- Have full operational controls for occupants.
- If whole house MVHR the system should have a Summer Bypass to ventilate and provide good levels of fresh air, without the heat recovery by physically bypassing the heat exchanger for at least 90% of air volume flow.

## **Submission requirements: Outline Planning Permission for NSD**

- 3.6.87 Details submitted as part of an outline application for NSD must be treated by the LPA as forming part of any subsequent "full" application. If material planning considerations, conditions cannot be used to reserve consideration of these details for subsequent approval unless the applicant has made it clear that they were only illustrative. It is therefore recommended that an initial site noise risk assessment should be undertaken and that LPAs should not grant outline planning permission for new residential developments at sites considered to pose a medium or high noise risk (LOAEL to SOAEL) without first being satisfied with a reasonable degree of confidence that good acoustic design can be secured to overcome the acoustic challenges.
- 3.6.88 In particular, where a site is considered medium or high risk (LOAEL to SOAEL) following an **initial site noise risk assessment**, it is recommended that the examination of acoustically critical design issues such as site layout, building heights, materials, landform contouring, detailed design and landscaping, the location of vehicle and pedestrian access, boundary treatments, amenity spaces etc. should not be left for agreement at a later stage as these are important fundamental design issues. Any changes in acoustically critical issues following grant of outline consent should be fully assessed in an updated **noise assessment** and **acoustic design statement**.

# **Other Noise Sensitive Development**

- 3.6.89 New housing is the most common type of residential development in the LPA. However, the general principles outlined above will be applied to other types of residential development such as residential institutions, care homes etc. However there are other types of noise sensitive development.
- 3.6.90 Schools and other Educational Establishments: Many, but not all, activities undertaken at schools (including "free schools"), and other educational establishments are considered to be noise sensitive. The sound insulation criteria for schools formulated for the prevention of noise break-in is set out in Building Bulletin 93, Acoustic Design of Schools, Performance Standards, February 2015. Developers should adhere to these criteria. For schools due regard should also be given to 'Acoustics of Schools: a design guide, November 2015' published jointly by the Institute of Acoustics (IOA) and the Association of Noise Consultants (ANC).

- 3.6.91 Because some activities at educational establishments are also likely to generate noise then any such applications will be assessed on a case by case basis. Ancillary noise sources such as plant, air extraction, entertainment noise and the provision of MUGAs for school/after-school or community use should be considered using the appropriate guidance set out in this document.
- 3.6.92 **Hospitals and other Healthcare Buildings:** Advice on the acoustic design of and requirements for hospitals and other healthcare buildings is contained in Health Technical Memorandum 08-01: Acoustics.
- 3.6.93 **Hotels and Guesthouse:** The LPA does not prescribe noise and vibration standards for hotel bedrooms although it is recommended that hotels are designed to meet the criteria provided in BS 8233:2014. Other types of noise sensitive development will be dealt with on a case by case basis using similar principles and with reference to any authoritative specialist acoustic design guidance.

**Submission requirements: Noise Generating Development (NGD)** 

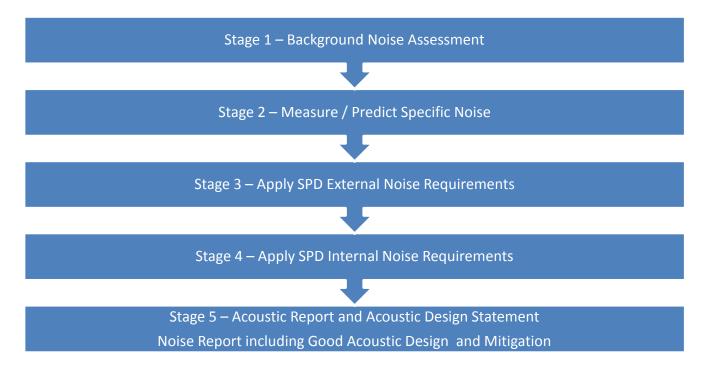
### 3.6.94 NGD includes:

- new heating, ventilation, and air conditioning (HVAC) including combustion appliance / exhaust stacks and flues and air handling/refrigeration / chiller units, machinery, plant and equipment and extractor fans at new and existing premises;
- uses likely to create significant noise such as food/drink/entertainment and leisure uses, industrial uses, day nurseries, gyms, places of worship, schools and colleges and agricultural users / buildings;
- uses likely to generate a significant amount of traffic (defined as road traffic movements greater than 5% of Annual Average Daily Traffic); and
- developments emitting low frequency noise (e.g. electricity substations and wind turbines / farms).
- 3.6.95 The LPA recognises the contribution of industrial, trade/commercial or business developments in helping to achieve wider sustainable development goals. However, there are many kinds of industrial and commercial developments that have the potential to generate noise. The LPA will consider carefully in each case whether proposals for new NGD that may generate or lead to an increase in noise (including by a change of use) would be incompatible with existing noise sensitive activities and any noise sensitive activities that may reasonably be expected in the foreseeable future. The applicant will be expected to demonstrate, as part of the planning application, that noise has been mitigated and reduced to a minimum and that the principles of good acoustic design have been followed.
- 3.6.96 For schemes that may generate noise, developers must consider the cumulative noise impact from their proposed scheme and the existing acoustic environment and where appropriate the future cumulative impact of any already permitted or proposed noise generating development in the vicinity.

- 3.6.97 There will be a general presumption against noise generating development which gives rise to significant adverse effects from noise unless it can be demonstrated that the economic and/or social and/or environmental benefits associated with the proposed development outweigh the adverse effects.
- 3.6.98 Some of the most commonly occurring noise issues with commercial developments are associated with building services plant / equipment, usually air-conditioning equipment or kitchen ventilation / extraction systems. In addition to operational plant/equipment noise, noise associated with deliveries or collections and an increase in traffic noise levels may also impact on local residents.
- 3.6.99 An assessment of the impact of noise from these types of development will be required. Applicants should be aware that the LPA will always seek to encourage good acoustic design and will prevent development where unacceptable acoustic conditions are anticipated at nearby noise sensitive premises as a result of noise from new or intensified industrial, trade / commercial or business development. The process diagram in figure 8 below describes the stages that the assessment of noise for NGD should follow.
- 3.6.100 All industrial and commercial development with the potential to generate noise will need to be assessed and, where relevant, controlled by planning conditions in order to protect residential amenity/quality of life. Conditions may be used, for example for a noise insulation scheme to restrict noise levels and to control hours of operation. The most relevant standard for assessing new industrial, trade/commercial or business development is BS4142:2014 Methods for Rating and Assessing Industrial and Commercial Sound. The methods described use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident.
- 3.6.101 The standard is applicable to the determination of the following:
  - rating levels for sources of sound of an industrial and/or commercial nature;
  - ambient, background and residual sound levels, for the purposes of:
    - (i) assessing sound from proposed, new, modified or additional source(s) of sound of an industrial and/or commercial nature;
    - (ii) assessing sound at proposed new dwellings or premises used for residential purposes.
- 3.6.102 The significance of sound of an industrial and/ or commercial nature depends upon both the margin by which the rating level (LAr,Tr) of the specific sound source exceeds the background sound level (LA90) and the context in which the sound occurs. The greater this difference, the greater the magnitude of the impact as follows:
  - A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context
  - A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context
  - The lower the rating level is relative to the measured background sound level the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact

3.6.103 As NPPG does not provide numerical values for the different noise effect levels table 3.11 below details the approach and noise criteria requirements that will be adopted for assessing NGD that is industrial and/or commercial nature typically "non-anonymous noise" in external private residential amenity areas.

Figure 8: Noise Generating Development – Noise Assessment Process



- 3.6.104 The LPA will not impose unreasonable restrictions on businesses but applicants should be aware that it is usually simpler and less expensive to be proactive and design in noise management and noise control measures at the planning stage rather than wait for complaints to arise.
- 3.6.105 In addition to an assessment of NGD external noise as detailed above, in some cases it will also be necessary to predict internal noise levels at the closest and/or worse affected noise sensitive premises and to demonstrate the means of achieving suitable internal noise levels within noise sensitive rooms (with windows partially open for ventilation where this is the norm for the building likely to be affected, with windows closed where this is part of the mitigation of the existing noise climate and the potentially affected noise sensitive building is provided with adequate alternative means of ventilation). This is particular important during night-time periods when external amenity areas are not in use.

**Table 3.11:** New Noise Generating Development - External Noise Standards for "non-anonymous noise"

	Noise	BS4142 Outcome	Planning Advice
Noise	Significance		
Significance	of Effect	rating level (LAr,Tr)	
Risk		minus (-) background	
		level (LA90)	
None	NOEL	LA,Tr – LA90,T ≤ -10	Sound is likely to be inaudible and have no
			discernible impact on health or quality of
			life. No objection from a noise perspective
D.d.inima al	NOEL to	LA T# LACO T :0 > 10	and no specific noise measures required.
Minimal	NOEL to LOAEL	LA,Tr – LA90,T is > -10 & ≤ -5	Where the rating level of noise is below the background noise level by at least 5dB, this
	LOAEL	α ≥-5	indicates that the proposed NGD is likely to
			be acceptable from a noise perspective. The
			LPA will seek this level of compliance in
			most noise sensitive areas and/or where
			there is a requirement to mitigate creeping
			background effects.
Low	NOEL to	LA,Tr – LA90,T is > -5 &	Where the rating level of noise is equal to,
	LOAEL	≤ 0	or below the background noise level by up
			to 5dB, this indicates that the proposed
			NGD may be acceptable from a noise
			perspective but will be more context
			dependent, i.e. extent and effect on noise
			sensitive receivers (externally and
			internally). Compliance within this range is more applicable to less sensitive sites or
			where there is no requirement to mitigate
			creeping background effects.
Medium	LOAEL to	LA,Tr – LA90,T is > 0 & ≤	Where the rating level of noise is equal to,
	SOEL	+5	or above the background noise level by up
			to 5dB, this indicates that the proposed
			NGD is less likely to be acceptable from a
			noise perspective and will be context
			dependent, i.e. extent and effect on noise
			sensitive receivers (externally and
			internally). Compliance within this range is
			typically only applicable to non-sensitive
			sites or where there are overriding other
			reasons why development should be
			considered. It will typically be necessary for the applicant to confirm how adverse
			impacts from the NGD will be mitigated and
			minimised. It is less likely that planning
			minimised. It is less likely that planning

Noise Significance Risk	Noise Significance of Effect	rating level (LAr,Tr) minus (-) background level (LA90)	Planning Advice
			consent will be granted. Acceptable only if there are overriding economic or social reasons for development to proceed
High	SOEL	LA,Tr – LA90,T is > + 5 & +10	Where the rating level of noise is above the background noise level by more than 5dB, this indicates that the proposed NGD is unlikely to be acceptable from a noise perspective and planning consent is likely to be refused on noise grounds.
Very High	SOEL and unacceptable	LA,Tr – LA90,T is > +10	Where the rating level of noise is above the background noise level by more than 10dB, this indicates that the proposed NGD is unacceptable from a noise perspective and planning consent shall be refused on noise grounds.

#### Note:

- (i) Certain acoustic features e.g. Tonality, Impulsivity, Intermittency or sound features characteristics that are otherwise readily distinctive against the residual acoustic environment, can increase the significance of impact over that expected from a basic comparison between the specific sound level and the background sound level. For example sound with prominent impulses has been shown to be more annoying than continuous types of sound (without impulses or tones) with the same equivalent sound pressure level.
  - Where such features are present at the assessment location, a character correction may need to be added to the specific sound level to obtain the rating level. Full justification for selecting and not selecting character corrections will need to be provided.
- (ii) All terms as defined in BS4142
- 3.6.106 In some cases, e.g. for steady continuous noise without a specific character, the guidance on suitable internal noise levels found in table 4 of BS8233 may be relevant. The application should demonstrate that these levels can be complied with. In other cases, it may be necessary to seek to achieve better standards in nearby dwellings, for example where the proposed industrial or commercial development may emit noise with tonal, impulsive or other discrete characteristics the LPA may consider it appropriate to apply a character correction penalty for internal noise standards. In such circumstances the advice given in table 3.10 of this SPD should be considered.

### **NGD** and Creeping Background / Ambient Noise Levels

3.6.107 Creeping outdoor background and ambient noise levels may occur in situations where there are an increasing number of NGD/sources in an area, each of which makes a small contribution to an overall deteriorating and locally unacceptable situation.

Typically, this may occur, where there are multiple mechanical services e.g. HVAC installations on a number of industrial/commercial premises in close proximity to residential development. Furthermore, it may also be necessary to prevent creeping outdoor background noise levels affecting any specially designated quiet and/or tranquil areas in the LPA.

3.6.108 To limit such creeping ambient noise levels the LPA has the following general requirement for operational noise from all operational plant and equipment:

'the rating level (in accordance with BS4142:2014) from all plant, equipment and vents etc. (collectively) associated with this application should be less than or equal to the existing background level (L90) at the boundary of the premises subject to the application and having regard to noise sensitive premises.

Tonal/impulsive sound frequencies should be eliminated or at least considered in any assessment and should carry an additional correction in accordance with BS4142:2014. This is to prevent unreasonable disturbance to other premises. This requirement applies both during the day (07:00 to 23:00 hrs over any one hour period) and night time (23:00 to 07:00 hrs over any one 15 minute period).

It is recommended that the agent/applicant submits an acoustic prediction survey/report in accordance with the principles of BS4142: 2014 "Methods for rating and assessing industrial and commercial sound" or similar, concerning the effects on amenity rather than likelihood for complaints. Noise levels shall be predicted at the application site boundary having regard to neighbouring premises.'

3.6.109 The LPA would also welcome the use of long-term maintenance agreements to ensure that equipment maintains acceptable noise levels over its lifetime and the use of timers to limit any unnecessary operation of the equipment.

Specific Noise Generating Development Uses - Industrial, Trade / Commercial or Business

- 3.6.110 Common sources of NGD include the following:
  - Sound Insulation between Commercial and Residential Development General
  - Delivery and Collections
  - Places of Entertainment (Food Restaurants, Clubs, Pubs and Bars)
  - Multi Use Games Areas and Artificial Grass Pitches
  - Gyms
  - Nurseries / Childcare Facilities
  - Wind Turbines
  - Agricultural buildings
- 3.6.111 Further detailed technical advice including the noise requirements, typical good acoustic deign and noise mitigation measures relating to these specific noise sources are included in Appendix 8 Annex D.

# **Good Acoustic Design**

- 3.6.112 Following the principles of good acoustic design can deliver good acoustic conditions that can greatly increase the overall comfort level of a space, while poor acoustics can result in unhealthy living conditions and environments. Acoustic design can be applied to almost every design project with obvious benefits, including functionality. Building and design professionals can apply to and integrate good acoustic solutions into all projects. Considering acoustics is paramount to the collective health and safety and quality of life of those who live, work and play within the spaces created by building and design professionals.
- 3.6.113 It should be remembered that good acoustic design is a process that begins as soon as land is under consideration for development. The timeline for good acoustic design stretches from the conceptual design stage, through quality control during construction, and beyond to post construction performance testing.
- 3.6.114 Both internal and external spaces should be considered in the acoustic design process. Care should be taken to ensure that acoustic mitigation measures do not result in an otherwise unsatisfactory development. Good acoustic design must be regarded as an integrated part of the overall design process and sustainable development.
- 3.6.115 There should be a commitment to good acoustic design and a hierarchy of noise management should be followed to reduce noise impacts, including the following (but not limited to), in descending order of preference:
  - Maximising the spatial separation of noise source(s) and receptor(s).
  - Investigating the necessity and feasibility of reducing existing noise levels and relocating existing noise sources (possible S106 agreement if noise sources off site).
  - Using existing topography and existing structures (that are likely to last the expected life of the noise-sensitive scheme) to screen the proposed development site from significant sources of noise.
  - Incorporating noise barriers as part of the scheme to screen the proposed development site from significant sources of noise such as landscaping, fencing and solid balconies to reflect/shield sound.
  - Using the layout of the scheme to reduce noise propagation across the site.
  - Creating setbacks.
  - Using the shape and orientation of buildings to reflect and or shield noise to protect the most sensitive uses
  - Locating noise sensitive areas/rooms away from the parts of the site most exposed to noises and careful internal configuration of internal rooms to reduce the noise exposure of noise-sensitive rooms.
  - Stacking similar room use (such as kitchens and living rooms) above each other.
  - Positioning non-residential uses closer to the noise source in mixed use developments
  - Anti-vibration foundations/vibration reducing separation trenches
  - Incorporating 'sound proof' construction/cladding materials e.g. absorptive materials/finishes to soffits

- Using the building envelope to mitigate noise to acceptable levels insulating and soundproofing doors, walls, windows, floors and ceilings with an appropriate level of acoustic performance
- Alternative forms of ventilation if internal noise levels exceeded with a partially open window to negate the need to ventilate passively e.g. mechanical ventilation systems and acoustically attenuated free areas
- 3.6.116 In instances where noise mitigation measures and noise insulation schemes are necessary in addition to good acoustic design, proposals will be expected to include appropriate attenuation to alleviate or mitigate the impact of noise and vibrations to an acceptable level. Where noise mitigation has not been proposed adequately, but is considered necessary, the LPA will consider the use of planning conditions or a legal agreement to secure.
- 3.6.117 Examples of mitigation as part of a noise insulation scheme include:
  - reducing the noise emitted at its point of generation (e.g. by using quiet machines and/or quiet methods of working);
  - containing the noise generating equipment (e.g. by insulating buildings which house machinery and/or providing purpose-built barriers around the site);
  - use of acoustic enclosures / silencers
  - protecting any surrounding noise-sensitive buildings (e.g. by improving sound insulation in these buildings and/or screening them by purpose-built barriers);
  - ensuring an adequate distance between source and noise-sensitive buildings or areas;
  - screening by natural barriers, buildings, or non-critical rooms in the development.
  - limiting the operating time of the source;
  - restricting activities allowed on the site;
  - specifying an acceptable noise limit;
  - use of noise management plans;
  - restricting window openings;
  - sound proofing internal and external walls; and
  - using cladding specifically designed for sound reduction.
- 3.6.118 Further advice on good acoustic design for NSD and NGD is given in Appendix 8, Annex E.

### **Vibration**

- 3.6.119 Vibrations transmitted through the structure of a building can be detected by its occupants and can result in adverse effects. Depending on the timing and the nature of the vibration, occupants may have disturbed sleep or struggle to work efficiently. Vibration at higher magnitudes can even act to damage a building over time.
- 3.6.120 Human response to vibration varies with the magnitude, the frequency and duration of exposure. Significant vibration within the LPA (apart from temporary construction works) is most likely to be generated by railways and possibly certain industrial uses that incorporate impact driven processes or activities such hydraulic and mechanical presses or forging processes. Road traffic is unlikely to generate significant

vibration where the road surface is in reasonable repair. Consequently, the LPA will normally require a vibration assessment where railways, either surface or underground, are within 30m of a proposed development site or close to industrial uses with impact driven processes. The need for a vibration assessment at other sites will also be assessed on a case by case basis.

3.6.121 Apart from construction, raw vibration acceleration (ms-2 rms) shall be measured at foundation level in each of the three orthogonal directions x, y and z in better frequency resolution than 1/3 octave. The Vibration Dose Values (VDV measured in ms-1.75) should be calculated and assessed from the measured acceleration levels in accordance with 'BS6472-1:2008 - Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting.' For residential development, the VDV vibration thresholds after any required mitigation should not exceed the levels in table 3.12 below (taken from Table 1 of BS 6472-1:2008).

**Table 3.12:** Residential Development – Vibration Dose Values

07:00 – 23:00 16 hour day	23:00-07:00 8 hour night
< 0.2 ms-1.75	< 0.1 ms-1.75

- 3.6.122 The VDVs given above are for in-property levels of exposure. Measurements made on an undeveloped site should allow for transfer functions from the ground into foundations, and amplification of vibration magnitudes in suspended floors. Where a site has existing buildings, vibration should, if possible, be measured on the foundations, ground beams or pile caps, as well as on the ground. Measurements made within existing buildings need to be corrected to derive VDV which would apply to the new buildings on the same site.
- 3.6.123 Ground / structural borne vibration which can result in re-radiated noise, as a result of vibration from adjacent railways and other sources, shall not exceed 30 dB LAmax(slow) within habitable residential rooms. Where it is predicted that noise from this source will exceed 30dB LAmax(slow), proposals to mitigate re-radiated noise to acceptable levels shall be submitted to and approved in writing by the LPA. However, due to the high cost of mitigating vibration effects, this should be subject to early discussion with the LPA.
- 3.6.124 All building services plant and equipment such as air conditioning and air handling plant can generate vibration which in turn can re-radiate as noise within buildings. All services and equipment plant shall be supported on proprietary anti-vibration mounts. Any permission granted for the installation of services and equipment plant will normally contain a condition necessary to control plant vibration.
- 3.6.125 The content of a vibration assessment report shall follow the format suggested in Annex A (informative) of BS 6472-1:2008.

#### **Construction and Demolition Work**

3.6.126 The Control of Pollution Act 1974 is primary legislation which can deal with the control of noise from construction sites. However in certain situations, for instance where there is a proposal for a substantial development or infrastructure project, a Noise and Vibration Demolition and Construction Environmental Management Plan, detailing the management and control of noise and vibration, will be required as part of planning consent.

### **Noise and Vibration Demolition and Construction Environmental Management Plans**

- 3.6.127 The Noise and Vibration Demolition Environmental Management Plan (DMP) and Construction Environmental Management Plan (CEMP) or a combined Demolition and Construction Environmental Management Plan (DCEMP) will typically include an acoustic report undertaken by a suitably qualified and experienced consultant. They are expected for major developments and the LPA will assess the need for them for smaller developments on a case-by-case basis.
- 3.6.128 These documents should be undertaken in accordance with:
  - BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise
  - BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Vibration
- 3.6.129 These documents set out the measures that a contractor will take both on-site and off-site, in order to reasonably minimise the detrimental effects of construction and incorporate mechanisms that overlap with other regulatory regimes (particularly highways and environmental protection). Most are 'umbrella' documents managing all impacts of the demolition, excavation and construction processes.
- 3.6.130 Besides ensuring that measures under these different service areas are coordinated in one document, DCEMPs represents a proactive approach to addressing construction issues. Their purpose is to encourage developers to work with the LPA and local people in managing the construction process with a view to ensuring that problems are foreseen and addressed with appropriate mitigation.
- 3.6.131 They should include all the information below:
  - **Baseline Noise Assessment** undertaken for a least 24-hours under representative conditions to determine the pre-existing ambient noise environment against which to judge any impact.
  - Noise predictions and the significance of noise effects Predictions should be
    included for each phase of the demolition, and construction, vehicle movements and
    an assessment of the significance of noise effects must be included based on the
    guidance in BS 5228 and best practical means shall be used to mitigate noise.
  - **Piling** Where piling forms part of the construction process, a lower noise and vibration method such as continuous flight auger (CFA) or press-in piling must be utilised wherever possible, particularly in built-up and environmentally sensitive

areas. Good practice guidelines including best practical means to mitigate vibration should be followed. **Vibration Predictions and the significance of vibration effects** – Predictions should be included for each phase of demolition, and construction, and an assessment of the significance of vibration effects must be included e.g. as per BS 5228.

- Noise and Vibration Monitoring Permanent real time web enabled and/or periodic noise and vibration monitoring should be undertaken for the duration of the demolition and construction phases which may result in a significant impact and at request of the LPA following substantiated complaints. The location, number of monitoring stations and the measurement data must be agreed in advance with the LPA prior to the start of construction.
- **Community relations / engagement** The steps that will be taken to notify and update residents and businesses that may be affected by the construction of the proposed development.
- Provision of additional mitigation —If best practicable means mitigation applied, i.e.
   all reasonable measures have been taken to reduce the noise/vibration levels but
   levels are still such that widespread community disturbance or unacceptable
   interference with activities or sleep is likely to occur for a prolonged period, then
   consideration of noise insulation to affected properties or temporary or permanent
   re-housing (TRH).

# **Further guidance**

3.6.132 For further guidance on noise, please see:

- BS 4142:2014 Methods for rating and assessing industrial and commercial sound
- BS 8233:2014 Guidance on sound insulation and noise reduction for buildings
- BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise
- BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Vibration
- BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings.
   Vibration sources other than blasting
- BS 5502-32:1990 Buildings and structures for agriculture. Guide to noise attenuation. All available online at: <a href="https://www.bsigroup.com/en-GB/">https://www.bsigroup.com/en-GB/</a>
- Noise Policy Statement for England (NPSE, March 2010). Available online at: <a href="https://www.gov.uk/government/publications/noise-policy-statement-for-england">https://www.gov.uk/government/publications/noise-policy-statement-for-england</a>
- World Health Organisation (WHO):
- 'Guidelines for Community Noise', 1999
- 'Night noise guidelines for Europe', 2009
- 'Environmental Noise Guidelines for the European Region, 2018'. All available online at: <a href="http://www.euro.who.int/en/health-topics/environment-and-health/noise">http://www.euro.who.int/en/health-topics/environment-and-health/noise</a>
- ProPG: Planning and Noise Professional Practice Guidance on Planning & Noise -New Residential Development, May 2017 with Supplementary Document 1 (Policy and Guidance) and 2 (Good Acoustic Design). Available online at: <a href="https://www.ioa.org.uk/publications/propg">https://www.ioa.org.uk/publications/propg</a>

- Sport England Design Guidance Note 'Artificial Grass Pitch (AGP) Acoustics -Planning Implications, New Guidance for 2015'. Available online at: <a href="https://www.sportengland.org/media/4515/agp-acoustics-planning-implications.pdf">https://www.sportengland.org/media/4515/agp-acoustics-planning-implications.pdf</a>
- Acoustic design of schools: performance standards Building bulletin 93
   (Department for Education (DfE), February 2015). Available online at:
   <a href="https://www.gov.uk/government/publications/bb93-acoustic-design-of-schools-performance-standards">https://www.gov.uk/government/publications/bb93-acoustic-design-of-schools-performance-standards</a>
- Acoustics of Schools: a design guide (IOA / ANC, November 2015). Available online at: https://www.ioa.org.uk/publications/schools-acoustics-guide
- Health Technical Memorandum 08-01: Acoustics. Available online at: <a href="https://www.gov.uk/government/publications/guidance-on-acoustic-requirements-in-the-design-of-healthcare-facilities">https://www.gov.uk/government/publications/guidance-on-acoustic-requirements-in-the-design-of-healthcare-facilities</a>
- IEMA Guidelines for Environmental Noise Impact Assessment (IEMA, 2014).
   Available online at: <a href="https://www.iema.net/event-reports/2016/01/07/Launch-Webinar-IEMA-Guidelines-for-Environmental-Noise-Impact-Assesment-2014/">https://www.iema.net/event-reports/2016/01/07/Launch-Webinar-IEMA-Guidelines-for-Environmental-Noise-Impact-Assesment-2014/</a>
- 'The Assessment and Rating of Noise from Wind Farms' and 'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine – Noise, 2013 with Supplementary Guidance Notes 1 to 6 (Institute of Acoustics, various dates). Available online at: <a href="https://www.ioa.org.uk/publications/wind-turbine-noise">https://www.ioa.org.uk/publications/wind-turbine-noise</a>
- Guide B4: Noise and Vibration Control for Building Services Systems (GVB4/16, CIBSE 2016). Available online at: <a href="https://www.cibse.org/">https://www.cibse.org/</a>

# Air Quality - Cambridge

LOCATION: Cambridge

POLICY: Policy 36: Air quality, odour and dust

SCALE OF DEVELOPMENT: All scales of development (apart from householder)

TYPE OF DEVELOPMENT: Residential and Non-residential development

SUBMISSION REQUIREMENTS: Air Quality Statement (see templates below)

Air Quality Assessment (where one or more of the criteria

set out in the Sustainability Checklist are met)

LINK TO THE SUSTAINABILITY Pol.15, Pol.16, Pol.17, Pol.18, Pol.19, Pol.20, Pol.21, Pol.22,

CHECKLIST: Pol.23, Pol.24, Pol.25 and Pol.26

### **Policy overview**

3.6.133 Every new development will have an impact on air quality, usually (but not always) by increasing emissions from buildings or from traffic generation. There is no safe level of air pollution; Cambridge City Council's policy is to reduce pollution wherever possible.

- 3.6.134 The planning system has an important role to play in driving forwards improvements in local air quality, minimising exposure to pollution, and improving the health and well-being of the population. Whilst land-use planning and development controls rarely provide immediate solutions to improving air quality, they can ensure that future problems are prevented or minimised. Consideration of air quality in the development design will lead to lower emissions and an improved environment. Good design at the outset is the most effective and straightforward way to a low emission development.
- 3.6.135 The National Planning Policy Framework (NPPF) 2019 states that planning policies and decisions should contribute to and enhance the natural and local environment. Development should, wherever possible, help to improve local environmental conditions such as air quality. Planning decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local Air Quality Action Plan. An Air Quality Action Plan is a legal requirement for councils with an Air Quality Management Area, which sets out the councils' planned actions to meet the National Air Quality Objectives.
- 3.6.136 The 2018 Cambridge Air Quality Action Plan<sup>23</sup> has three key priorities. These are in line with the principles of the NPPF and re-iterate Cambridge City Council's continued commitment to improve air quality now and in the future.
  - Priority 1 Reduce emissions in the central areas of Cambridge. Source
    apportionment shows that traffic emissions are the main source of air pollution in the
    city and that a reduction in emissions is required to meet the National Air Quality
    Objectives.
  - Priority 2 Reduce emissions across Cambridge. The planned growth in population and economic activity in the Greater Cambridge area could threaten the success of an Air Quality Action Plan if just considering short term objectives.
  - Priority 3 Keep emissions low in the future. Keeping emissions low and reducing emissions further will improve public health for all who live, work and visit Cambridge.

Planning for new development has a key role to play in achieving these priorities.

- 3.6.137 Pollution to air can arise from many sources and activities, including traffic and transport, industrial processes, domestic and commercial premises, energy generation, agriculture, waste storage/treatment and construction sites. This section relates to air pollution from all potential sources, in any potential form and includes temporary dust pollution.
- 3.6.138 The primary local impacts on air quality in Cambridge are from road transport, as well as some contribution from domestic, commercial and industrial heating sources.

  One of the most effective ways to improve air quality or to reduce the impact of new developments is to reduce the need to travel, as well as rule out the use of solid fuels or

<sup>&</sup>lt;sup>23</sup> https://www.cambridge.gov.uk/air-quality-action-plan

oil for heating, and to encourage non-emitting heating sources or optimised gas systems where appropriate<sup>24</sup>.

- 3.6.139 There is no safe level of air pollution (COMEAP, 2018)<sup>25</sup>; developments coming forwards should be assessed for air quality impact and ensure that effective mitigation will be in place. Developers should aim for an 'air quality neutral'<sup>26</sup> development; air quality positive developments will be welcomed.
- 3.6.140 Applicants should consider air quality issues as early as possible in the design process to ensure that appropriate measures are integrated into the development in line with the requirements set out in the Cambridge Air Quality Action Plan, which has been produced in line with the requirements of Part IV of the Environment Act 1995; Local Air Quality Management.
- 3.6.141 Theme 5 of the Cambridge Air Quality Action Plan (Maintaining Low Emissions) introduced the requirement for installation of electric vehicle charge points and low emission boilers to mitigate the impact of additional development in Cambridge, as well as the provision of car clubs where appropriate. The development management measures are listed in table 3.13 below.

Table 3.13: Development Control measures to improve air quality

# **Electric Vehicle Charge Points Provision**

- Any new or replacement car park will have EV Charge Points
- Any increase in vehicle trip generation related to the intensification of use at a site will require additional EV Charge Point provision at an appropriate scale
- A site-wide EV charging strategy for large-scale Major sites detailing the location and phasing of the charge point installations
- One slow EV Charge Point for each dwelling with allocated parking
- At least one slow EV Charge Point for every two dwellings with communal parking (at least half of all non-allocated parking spaces to have electric vehicle slow charging points)
- At least one slow EV Charge Point for every two parking spaces in non-residential developments
- At least one rapid EV Charge Point for every 1,000m<sup>2</sup> non-residential floor space (as per Institute of Air Quality Management guidance) or one fast EV Charge Point for every 1,000m<sup>2</sup> non-residential floor space (if the installation of a rapid charge point is technically Impossible due to grid supply constraints (evidence must be provided)
- At least one rapid EV Charge Point for large-scale Major developments, or at least one fast EV Charge Point (if the installation of a rapid charge point is technically impossible due to grid supply constraints (evidence must be provided)
- Installation of passive charge points electric vehicle charging infrastructure for

<sup>&</sup>lt;sup>24</sup> See Appendix 3, which sets out emissions standards for schemes looking to utilise Combined Heat and Power.

<sup>&</sup>lt;sup>25</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/734799/CO MEAP\_NO2\_Report.pdf

<sup>&</sup>lt;sup>26</sup>https://www.london.gov.uk/sites/default/files/gla migrate files destination/Sustainable%20Design%20%26%20Construction%20SPG.pdf

future activation - at all vehicle parking spaces without active charge points (to provide 100% coverage)

Combinations of provision can be proposed, depending upon the requirements of the future site users.

# Car Club provision, where appropriate

- A minimum of one car club vehicle per 500 parking spaces in new residential developments; a minimum of one vehicle per 10,000 m<sup>2</sup> in non-residential developments
- A site-wide car club strategy for large-scale Major sites detailing the location and phasing of the charge point installations.

There may be other sites where car club provision is appropriate, for example, major development sites with little or no parking.

# **Energy sources**

- Encourage the installation of zero-emission heating sources, such as electric heating, ground-source and air-source heat pumps
- All gas boilers to have low NOx emissions (boilers that meet a dry NOx emission rating of 40mg/kWh)
- Minimum emission standards for CHP emissions (Spark ignition engine: less than 150 mgNOx/Nm<sup>3</sup>, Compression ignition engine: less than 400 mgNOx/Nm<sup>3</sup>, Gas turbine: less than 50 mgNOx/Nm<sup>3</sup>)
- 3.6.142 The Cambridge Air Quality Action Plan is a flexible document and will evolve to respond to funding and policy changes. However, the national policy background may change shortly after publication of this SPD. The UK Government is considering tightening UK standards to match World Health Organisation standards<sup>27</sup> in the forthcoming Environment Bill<sup>28</sup> and as set out in the Clean Air Strategy 2019<sup>29</sup>, with a change in focus towards prevention of pollution. The intention is to improve public health and the environment. Therefore, the applicant should always refer to the Cambridge City Council's Air Quality Guidance for Developers web page<sup>30</sup>, which will be updated as changes are made. Early engagement with the Development Management and Environmental Quality and Growth teams as part of the pre-application process is, therefore recommended.

#### **Submission requirements**

3.6.143 The developer has the responsibility for providing information to enable the local planning authority to make a decision. Where uncertainty exists over the likely impact upon air quality or the expected levels of pollution, the Local Planning Authority will take a precautionary approach.

<sup>&</sup>lt;sup>27</sup> https://www.who.int/airpollution/publications/agg2005/en/

<sup>&</sup>lt;sup>28</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/766849/draf t-environment-bill-governance-principles.pdf

29 https://www.gov.uk/government/publications/clean-air-strategy-2019

https://www.cambridge.gov.uk/air-quality-guidance-for-developers

- 3.6.144 Any air quality issue may be a material planning consideration. However, air quality will be a material consideration where any of the following apply:
  - there is an adverse effect on air quality in an Air Quality Management Area
  - pollution levels within the Air Quality Management Area will have a significant adverse effect on the proposed use/users
  - the development will lead to the declaration of a new Air Quality Management Area
  - the development will interfere with, or not be consistent with the implementation of the current Air Quality Action Plan (or any future Air Quality Strategy)
  - any sources of emissions to air, odours and fugitive dusts generated by the development are not adequately mitigated
  - any impacts on the proposed use from existing poor air quality, odour and emissions are not appropriately monitored and mitigated by the developer.

### What air quality information is required to support a planning application?

3.6.145 Figure 9 below sets out the air quality information required to support applications of different scales, from householder through to major developments.

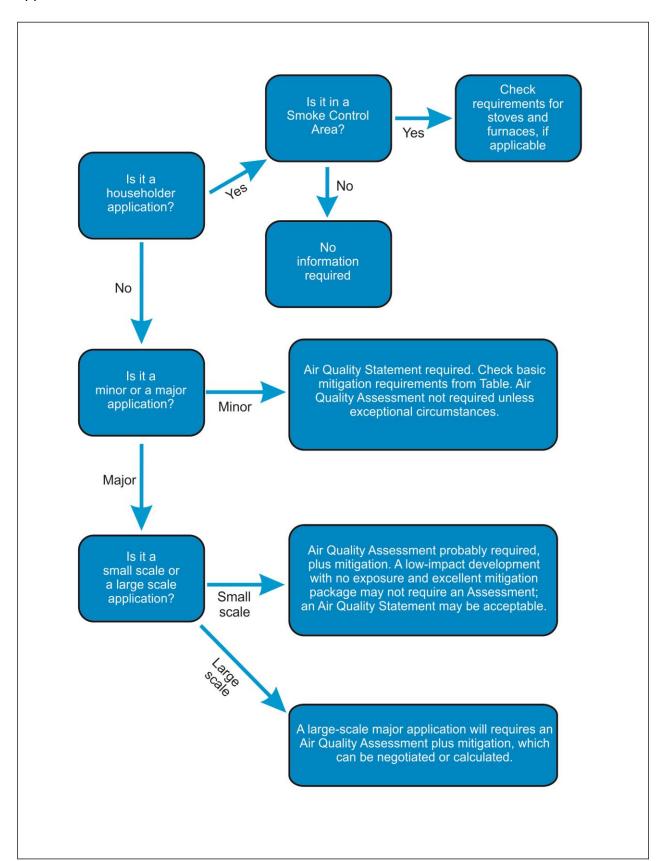
# **Air Quality Statements**

- 3.6.146 To establish whether air quality impacts are acceptable, all large-scale major, small-scale major and minor planning applications (but not householder developments) are required to identify sources of emissions to air from the development in the form of an **Air Quality Statement**. Tables 3.14 and 3.15 provide Air Quality Statement Templates for completion and submission with all minor and major applications.
- 3.6.147 An Air Quality Statement sets out the existing air quality at the site, qualitatively identifies sources of emissions to air arising from the proposed development with any likely impact on air quality and confirms that basic and appropriate mitigation measures will be in place. The Statement will require approval by the Local Planning Authority. A template is provided below and a downloadable version is available from the website<sup>31</sup>.
- 3.6.148 Details of air quality mitigation should be provided at the point of application.

  Development will only be permitted if the impact on air quality is acceptable and mechanisms are in place to mitigate adverse impact and prevent further exposure to poor air quality. Pre-application discussions are recommended so that the developer can be confident that their application includes all relevant information.
- 3.6.149 Consideration of air quality and air pollution will be relevant during both the operational and the development phase. Development may give rise to air pollution as well as, for example, air quality issues associated with demolition, construction and remediation of contamination.

<sup>&</sup>lt;sup>31</sup> https://www.cambridge.gov.uk/air-quality-guidance-for-developers

**Figure 9:** Flow Diagram – what air quality information do I need to submit to support my application?



**Table 3.14:** Air Quality Statement template for minor developments

Name and address of site	
<ul> <li>Description of proposed development</li> <li>Size (e.g., number of units or area in Ha)</li> <li>Type (e.g., residential or commercial)</li> <li>Proximity to pollution sources, such as roads, industrial areas</li> </ul>	
<ul> <li>Additional information about the proposal</li> <li>Parking arrangements including reserved spaces for EV/car clubs/disabled; comparison of current and proposed provision</li> <li>Heating provision, type and fuel, location of flue vent</li> <li>Is the site in the Air Quality Management Area?</li> <li>Is the site in a Smoke Control Area?</li> <li>Layout if site adjacent to busy road</li> </ul>	
Basic Mitigation Proposed	If yes, provide details  If no, state reason why not
1. Electric heating or low NOx <sup>32</sup> boilers	Yes/No
<ol> <li>low emission standards for CHP<sup>33</sup>, where appropriate</li> </ol>	Yes/No
EV charge points where there are car parking spaces (number, type)	Yes/No
<ol> <li>Dust Management Plan (see template below – ref to figure)</li> </ol>	Yes/No

**Table 3.15:** Air Quality Statement Template for major development

Name and address of site	
Description of proposed development	
Small-scale or large-scale Major site	
GFA compared with existing	

Low NOx boilers - ., individual gas fired boilers that meet a dry NOx emission rating of ≤40mg/kWh

33 CHP - Spark ignition engine: less than 150 mgNO<sub>x</sub>/Nm³, Compression ignition engine: less than 400 mgNO<sub>x</sub>/Nm³, Gas turbine: less than 50 mgNOx/Nm<sup>3</sup>

Type (residential, commercial,	
academic, research, other)	
Proximity to pollution sources	
Additional information	
AADT trip generation	
Parking arrangements including	
reserved spaces for EV/car	
clubs/disabled; comparison of current	
and proposed provision	
Heating provision, type and fuel,	
location of flue vent	
Is the site in the Air Quality  Management Area?	
<ul><li>Management Area?</li><li>Is the site in a Smoke Control Area?</li></ul>	
<ul><li>Is the site in a Smoke Control Area?</li><li>Is a detailed Air Quality Assessment</li></ul>	
provided?	
Layout if adjacent to busy road	
, , ,	Please provide details about the design
Design Features	features selected to deliver no/very low air
	quality impact (see examples in Table 3.17).
	Please provide details about the mitigation
Mitigation Proposed	features selected to deliver no/very low air
	quality impact (see examples in Table 3.18).
Electric heating or low NOx boilers	Yes/No
Low-emission standards for CHP,	Yes/No
where appropriate	1es/No
3. EV charge points where there are	
car parking spaces (number, type)	Yes/No
or EVCP strategy	
4. Demolition and construction or	Yes/No
Dust Management Plan	I ES/ INU
	Please provide details about the design
	features selected to deliver no/very low air
5. Other Mitigation Measures	quality impact if the air quality impact cannot
	be designed out.
	Please provide details about the features
Offset offered	selected to offset the remaining air quality
onset offered	impact (see examples in Table 3.19).
	part (see champles in Table 3.13).

3.6.150 Developers of all major planning applications should also complete the air quality questions within the Sustainability Checklist (See Appendix 1). If one or more of these criteria are met a detailed **Air Quality Assessment** including dispersion modelling may be

required. Further guidance should be sought from the Environmental Quality and Growth team. Given the time required for dispersion modelling and monitoring of air quality for a detailed assessment as well as collection of traffic data to support the planning application, discussions should be sought with the local authority well before submission of a planning application.

### **Detailed Air Quality Assessment**

- 3.6.151 If a detailed **Air Quality Assessment** with dispersion modelling is required, it should be carried out in line with the best practice guidance set out in the latest industry-prepared best guidance documents. At present, these are the IAQM document "Planning for Air Quality" (2017)<sup>34</sup> and the Defra document "Local Air Quality Management; Technical Guidance TG16" (2018). The latest available emission factors, background maps and conversion factors shall be used. Guidance may be updated to reflect changes in Government policy; the latest version of the relevant guidance should be consulted. The assessment may be incorporated into the full Environmental Statement if required for an Environmental Impact Assessment.
- 3.6.152 An Air Quality Assessment might not be required if the mitigation package (see below) is comprehensive and demonstrates that it will adequately offset any additional emissions produced by the development, or preferably lower emissions from the footprint of the site. In this case an Air Quality Statement may be sufficient. An example template is provided below and a downloadable version is available from the website<sup>35</sup>. Early discussion with the Environmental Quality and Growth team is strongly recommended.

# **Cumulative Impact**

- 3.6.153 A single development may have a very small impact on air quality, but many developments will, together, have a larger impact. For this reason it is important that:
  - All developments, including minor developments, do not contribute to air pollution
  - The cumulative impact of all developments is considered
- 3.6.154 Air quality assessments are required to consider the cumulative impact of known future developments within an area. With considerable growth planned for the Cambridge sub-region, most large developments will need to consider the traffic impact from those developments contained in the Local Plan. These scenarios will have to be quantified with the same level of traffic flow.

### Dust

3.6.155 Temporary emissions of dust during the construction phase are of concern as they add to the overall exposure of particulate matter to residents, visitors and site workers. Cambridge City Council, in association with the Cambridge Forum for the Construction

<sup>&</sup>lt;sup>34</sup> Land-Use Planning & Development Control: Planning for Air Quality, IAQM and EPUK, 2017

<sup>35</sup> https://www.cambridge.gov.uk/air-quality-guidance-for-developers

Industry, runs a 'Considerate Contractor Scheme'<sup>36</sup> designed to ensure that construction can progress without making life unpleasant for people who live and work nearby.

3.6.156 Each site and operation will need its own separate consideration and the amount of detail required will depend upon the type and scale of the development. For Minor applications, details in simple terms of the operations to be undertaken and the dust control and mitigation measures to be adopted shall be submitted by the applicant. Each stage should be considered through demolition, site preparation, ground works, construction as well as materials storage, transport and handling, both on and off site. This could be in the form of a written statement or a table of activities and mitigation, and will be included in the Air Quality Statement if there will be demolition or earthworks. The activities should be selected from the table 3.16 below.

**Table 3.16:** Example of approach to consideration of dust as part of Minor applications

Operation / Activity	Site Control Methods
All dust generating activities on-site	<ul> <li>All site operatives to be made aware of the requirements to minimise airborne dust</li> <li>Site hoarding and screening to be erected</li> <li>Consideration of weather conditions –activities and mitigation to be reviewed on dry and windy days</li> </ul>
Demolition	<ul> <li>Consideration of demolition methodology</li> <li>Minimise drop heights</li> <li>Watering / spraying of the structures during demolition</li> </ul>
Stockpiles	<ul> <li>Stockpiles to be located away from most sensitive boundaries</li> <li>Stockpiled materials to be covered and / or damped down</li> <li>Stockpiled materials to be below the height of the site hoarding</li> </ul>
Vehicles	<ul> <li>Vehicle engines to be switched off when not in use and not left running unnecessarily</li> <li>Vehicle maintenance in accordance with the manufacturer's specifications</li> </ul>
Plant and equipment	<ul> <li>Choice of plant and equipment and method of work to reflect best practicable means for control of dust</li> <li>Cutting and grinding: use of water sprays or local extraction</li> <li>Equipment to be maintained in accordance with the manufacturer's specifications</li> </ul>
Handling of waste materials	<ul> <li>Use of enclosed chutes and covered skips</li> <li>Minimise drop heights from chutes</li> <li>Use of fine water sprays during waste handling activities</li> <li>Material leaving the site to be loaded onto covered wagons or skips</li> </ul>
Burning of waste	The burning of waste will be prohibited on site

<sup>&</sup>lt;sup>36</sup> https://www.cambridge.gov.uk/considerate-contractor-scheme

General	•	Internal access routes and hard-standing will be cleaned /
housekeeping		damped down on a regular basis

- 3.6.157 For Major applications, a detailed dust management plan may be required to ensure that temporary emissions of dust are minimised. This may form part of a Construction Environmental Management Plan (CEMP). The risk of dust emissions from a demolition/construction site is assessed on a site-by site basis and the need for a detailed Dust Risk Assessment or a Dust Management Plan is judged based on various factors, including:
  - the activities being undertaken (demolition, number of vehicles and plant etc.)
  - the duration of these activities
  - the size of the site
  - the proximity of receptors to the activities
  - the adequacy of the mitigation measures.
- 3.6.158 A dust management plan should reference and have regard to national and industry best practical technical guidance.
  - The document 'Guidance on the assessment of dust from demolition and construction<sup>37</sup> (IAQM, 2014)' includes Dust and Air Emissions Mitigation Measures in section 8.2 for consideration including measures specific to demolition, earthworks, construction and track out.
  - The GLA document 'Control of dust and emissions during construction and demolition<sup>38</sup>' (2016) provides details of undertaking a dust risk assessment which identifies suitable mitigation measures to be implemented. For major developments, we may require a risk assessment in accordance with this document.
  - Guidance on dust monitoring is given in the document Guidance on Monitoring in the Vicinity of Demolition and Construction Sites<sup>39</sup>, version 1.1 (IAQM, 2018). A commitment to undertake dust monitoring is also required for major sites. Whilst it may not be necessary to undertake continuous dust monitoring, agreement should be reached on when it will be undertaken. For example, spot checks could be undertaken on a regular basis at site boundary locations closet to sensitive receptors.
- 3.6.159 Longer term continuous monitoring of dust may need to be undertaken when agreed target levels are likely to exceeded, or upon the receipt of substantiated complaints.
- 3.6.160 It will be essential that the control methods prevent a statutory nuisance and any offence under Part III of the Environmental Protection Act 1990. However it is expected that controls should go beyond that minimal level of compliance and be more in line with the provisions of the Considerate Contractor Scheme.
- 3.6.161 It will be essential to detail if mobile crushing and screen equipment is used and if so to confirm that it will be used in accordance with the manufacturer's instructions. In

38 https://www.london.gov.uk/sites/default/files/gla migrate files destination/Dust%20and%20Emissions%20SPG% 208%20July%202014 0.pdf

<sup>&</sup>lt;sup>37</sup> http://iagm.co.uk/text/guidance/construction-dust-2014.pdf

https://iaqm.co.uk/text/guidance/guidance\_monitoring\_dust\_2018.pdf

most cases such plant will need to be permitted for use by the Pollution Prevention and Control Act 1999. Such plant is usually hired. A copy of the permit from the local authority home base for the plant should be provided to the City Council prior to it being used on site.

## **Smoke**

- 3.6.162 Open fires and wood-burning stoves have risen in popularity over recent years, however, smoke from burning causes particulate air pollution. The Clean Air Act 1995<sup>40</sup> is the legislation that regulates emissions from stoves. There are currently three Smoke Control Areas in Cambridge<sup>41</sup>. New legislation and/or guidance is expected from Defra in 2019. Developers are recommended to:
  - Ensure that any applications are compliant which the Clean Air Act 1995 if their site is in a Smoke Control Area and
  - Check our website 42 to ensure adherence with the latest guidance

## How to approach improving air quality in Cambridge

3.6.163 In line with NPPF, which states that development should contribute to and enhance the environment, there is a hierarchy within the approach to air quality improvements that should be followed, as illustrated in figure 10 below.

Figure 10: Hierarchical approach to air quality improvements as part of new development



3.6.164 The role of integrating the air quality impacts into a good development design at the outset of the design process cannot be understated. Effective planning can reduce the need to travel by car to the workplace, schools, shopping and leisure facilities by ensuring new dwellings are located in areas where such facilities are readily available, or where alternative transport modes are available. Careful consideration to building design and layout can assist in minimising exposure to future occupants. Policies that enforce high building standards can play an important role in reducing emissions from services that provide heating and hot water. Some examples of design features that can be incorporated are provided in table 3.17 below. The lists in these tables are not exhaustive and additional measures may be proposed for consideration. The standard mitigation measures required for both minor and major developments are highlighted in bold.

<sup>40</sup> https://www.legislation.gov.uk/ukpga/1993/11/contents

<sup>41</sup> https://www.cambridge.gov.uk/smoke-pollution

<sup>42</sup> https://www.cambridge.gov.uk/smoke-pollution

**Table 3.17:** Design measures to help reduce air quality impacts

- Installation of electric vehicle charge points<sup>43</sup>
- Car free development
- Reduced car parking provision/parking restrictions
- Reserved parking for EV/car clubs
- Design/layout of the development to promote walking, cycling and public transport
- Design and layout of infrastructure to increase separation, for example, set buildings back from the roadside
- Locate habitable spaces away from busy roads
- Arrange site to separate polluting and sensitive uses
- Arrange site to centrally locate trip attractors
- Ensure high quality walking and cycling routes
- Plan mixed-use developments where appropriate
- Home Zones
- Consider impact on local road network
- Avoid creation of non-dispersive canyons
- Install combined heat and power (CHP) to the emissions standards set out in Appendix 3
- Provision of efficient electric heating, low or ultra low NOx boilers only
- Incorporation of solar thermal and/or PV technology to reduce emissions
- Incorporation of air source or ground source heat pumps to reduce emissions
- 3.6.165 Initially the development design and location should be looked at in terms of air quality impacts. If design cannot fully reduce the impact to an acceptable level then mitigation measures may be used to either protect receptors or minimise the need for vehicle use. Cambridge City Council recommends that a mitigation package is submitted for approval as part of an Air Quality Statement or Air Quality Assessment in support of the planning application. Some examples of mitigation features that can be incorporated are provided in table 3.18 below. The standard mitigation measures required for both minor and major developments are highlighted in bold.

**Table 3.18:** Mitigation measures

- Dust Management Plan, where appropriate (for major sites, this may be incorporated into a Construction and Environmental Management Plan)
- Support access to a car share scheme, with financial incentives and promotion
- Provision of bike hire scheme, including E-bikes and off-gauge bikes
- Travel planning
- Mechanical ventilation with clean air intake, if appropriate
- Eco-driving training, where appropriate
- Low emission fleet strategy
- Large-scale major developments could consider:
  - Support measures to reduce the need to travel:

<sup>&</sup>lt;sup>43</sup> The UK Electric Vehicle Supply Equipment trade association has useful information. <a href="http://ukevse.org.uk/">http://ukevse.org.uk/</a>

- Alternative working practices flexitime, teleworking, homeworking, videoconferencing, compressed work periods.
- Local sourcing of staff, products and raw materials.
- Development and use of hub distribution centres employing low emission deliveries.
- o Provision of discounted on-site shopping, eating, child-care, banking facilities.
- Support measures to reduce polluting motorised vehicle use:
  - Use of pooled low emission vehicles cars, vans, taxis, bicycles.
  - Provision of dedicated low emission shuttle bus including managed pick-up and drop-off.
  - o Contribution to the emerging low emission vehicle refuelling infrastructure.
  - o Contribution to site low emission waste collection services.
  - o Incentives for the take-up of low emission vehicle technologies and fuels.
- Measures to support improved public transport:
  - o Provision of new or enhanced public transport services to the site.
  - Shuttle services to public transport interchange, rail station or park and ride facilities.
  - Support improving information systems for public transport.
  - Supporting city free bus expansion schemes.
  - o Promoting low emission bus service provision.
  - Support air quality monitoring programmes.
  - Subsidised bus passes
- Further measures to promote walking and cycling:
  - Improvements to district walking and cycling networks including lighting, shelters, and information points and timetables.
  - o Support cycle training and awareness schemes.
  - o Guaranteed ride home in emergencies.
  - Support secure and safe cycle parking facilities.
  - Installation of charge points for EV bikes
  - Provision of pool EV bikes
- Measures to promote sustainable travel plans:
  - Support local travel to school and school travel plans initiatives.
  - Marketing aimed at persuading a switch to sustainable modes with incentives
  - Promotion of subsidised/sponsored travel plan measures
  - Supporting community/local organisation groups to promote sustainable travel
- 3.6.166 Many developments will require a mix of design and mitigation measures that have been tailored to be appropriate for the site. The design and mitigation package should be presented with the planning application. Standard mitigation is required for minor sites and highlighted in bold in the boxes above. The design and mitigation measures can be secured by relevant planning conditions.
- 3.6.167 Offsetting by providing money for schemes that improve overall air quality should be a last resort but may need to be combined with good design and mitigation in some circumstances. Appropriate contributions can be negotiated or contributions can be

calculated using Defra's damage cost approach<sup>44</sup>. Table 3.19 below provides some examples of possible offsetting measures. Early discussion with the Development Management team and the Environmental Quality and Growth Team is recommended if offsetting/contributions will be required.

**Table 3.19:** Possible offsetting measures

- Financial contribution towards traffic management measures
- Financial contribution towards improvements in public transport facilities and/or support for new services
- Financial contribution towards improvements in walking and cycling facilities
- Financial contribution towards air quality improvement projects
- 3.6.168 Framework developer contribution procedures provides clarity for developers and planners, speeds up the negotiation process, and is considered to be a fair and transparent process for all types of development. This approach has the added advantage of being able to ensure that mitigation is in place for the cumulative impacts of a number of smaller developments, which can jointly lead to a slowly increasing air pollution baseline. The basic concept of the approach is that best practice is to reduce emissions and exposure and that this is incorporated at the outset, at a scale commensurate with emissions.
- 3.6.169 One approach that has been widely used to quantify the costs associated with pollutant emissions from transport is:
  - Identify the additional trip rates generated by proposed development (trips/annum)
  - Assume an average distance travelled of 10km/trip
  - Calculate the additional NOx and PM emissions, based of emission factors in the Emissions Factor Toolkit at 35 kph
  - Multiply the calculated emissions by 5 (for 5 year total)
  - Use HM Treasury and Defra IGCB damage cost approach<sup>45</sup> to provide a valuation of the excess emissions, using the currently applicable values for each pollutant<sup>46</sup>
  - Sum the NOx and PM costs
- 3.6.170 The cost calculated by these means provides a basis for defining the financial commitment required for offsetting the emissions reductions or the contribution provided by the developers as 'planning gain'.
- 3.6.171 Air Quality emissions from buildings can also be significant if the energy demand is high, for example high tech research facilities. Building emissions can and should be designed out at the initial development design phase, with consideration to site-wide approaches to energy.
- 3.6.172 This is an approach that can be used for Cambridge planning applications.

45 https://www.gov.uk/guidance/air-quality-economic-analysis

<sup>44</sup> https://www.gov.uk/guidance/air-quality-economic-analysis

<sup>46</sup> https://www.gov.uk/guidance/air-quality-economic-analysis#damage-costs-approach

## **Further guidance**

- 3.6.173 For further guidance on air quality please see:
  - Cambridge City Council (2018). Air Quality Action Plan. Available online at: <a href="https://www.cambridge.gov.uk/media/3807/air-quality-action-plan.pdf">https://www.cambridge.gov.uk/media/3807/air-quality-action-plan.pdf</a>
  - IAQM and EPUK, (2017). Land-Use Planning and Development Control: Planning for Air Quality. Available online at: <a href="http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf">http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf</a>
  - Defra (2018). Local Air Quality Management; Technical Guidance TG16. Available online at: <a href="https://laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf">https://laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf</a>
  - IAQM (2014). Guidance on the assessment of dust from demolition and construction. Available online at: <a href="http://iaqm.co.uk/text/guidance/construction-dust-2014.pdf">http://iaqm.co.uk/text/guidance/construction-dust-2014.pdf</a>
  - GLA (2016). Control of dust and emissions during construction and demolition. Available online at:
    - https://www.london.gov.uk/sites/default/files/gla migrate files destination/Dust%2 Oand%20Emissions%20SPG%208%20July%202014 0.pdf
  - IAQM (2018). Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, version 1.1. Available online at: <a href="https://iaqm.co.uk/text/guidance/guid

#### Air Quality - South Cambridgeshire

LOCATION: South Cambridgeshire POLICY: Policy SC/12: Air Quality

SCALE OF DEVELOPMENT: All major development requiring a Transport Assessment

and a Travel Plan

Any development where air quality is likely to be a

significant issue

TYPE OF DEVELOPMENT: Residential and Non-residential development

SUBMISSION REQUIREMENTS: 
• Air Quality Assessment

Low Emission Strategy

LINK TO THE SUSTAINABILITY

CHECKLIST:

Pol.15 and Pol.16

#### **Policy overview**

3.6.174 Policy SC/12 seeks to ensure that new development does not exacerbate, or be impacted by air pollution and pollution from odour and other fugitive emissions to air. Air quality issues within South Cambridgeshire have been linked directly to the volume of traffic that runs through the district, specifically along the A14. The A14 is congested on a regular basis between Bar Hill (to the west of Cambridge) and Milton (to the north northeast of Cambridge). This has resulted in the declaration of an Air Quality Management

Area (AQMA) for nitrogen dioxide (NO2) and PM10 along a stretch of the A14 between Bar Hill and Milton. The Joint Air Quality Action Plan for Huntingdonshire, Cambridge City and South Cambridgeshire incorporates priority actions for tackling air quality issues through the land use planning process. Cambridge has also recently adopted its new Air Quality Action Plan, covering the period from 2018 to 2023<sup>47</sup>, which will need to be taken into consideration for cross boundary applications. The requirements set out in these documents, along with successor documents, will need to be taken into consideration when developing planning proposals.

#### **Submission requirements**

- 3.6.175 A Low Emission Strategy (LES) will need to be submitted alongside planning applications for major developments requiring a Transport Assessment and a Travel Plan and developments with significant transport implications as follows:
  - In particularly congested locations and/or generating large number of trips;
  - Where there are particular travel problems; or
  - That will have an adverse impact on an existing, or will result in the declaration of a new, Air Quality Management Area, or an unacceptable adverse impact on local air quality.
- 3.6.176 An LES provides a package of measures to help mitigate the transport impacts of development on local air quality and on climate change. They complement other design and mitigation options, such as travel planning and the provision of public transport infrastructure. Strategies are often secured through a combination of planning conditions and planning obligations. They may incorporate policy measures and/or require financial investments in and contributions to the delivery of low emission transport projects and plans, including strategic monitoring and assessment activities.
- 3.6.177 Table 3.20 below sets out the Council's preferred sustainable transport measures to be included within any LES to support planning applications for Major developments. These measures are taken from South Cambridgeshire District Council's emerging Air Quality Strategy.

**Table 3.20:** Sustainable Transport Measures to be included in Low Emission Strategy

CATEGORY	MEASURES
Electric and Low Emission Vehicles Uptake	
Residential developments	Charging Point (standard or fast where possible)     for all private and allocated parking spaces     Charging Point (East or Papid where possible ) for
	<ol><li>Charging Point (Fast or Rapid where possible ) for every 10 communal parking spaces</li></ol>

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<sup>&</sup>lt;sup>47</sup> Available online at: <a href="https://www.cambridge.gov.uk/air-quality-action-plan">https://www.cambridge.gov.uk/air-quality-action-plan</a>

CATEGORY	MEASU	JRES
Commercial Developments	1.	1 Rapid Charging Point/station
		Per 1000m <sup>2</sup> of floorspace or per 20 parking
		spaces
		or
	2.	Allocated fast Charging Point for 50% of propose
		parking spaces
Supporting Infrastructure	1.	Provision of infrastructure to facilitate additional
		charging points
	2.	Support for other Low Emission technologies is
		welcome and considered on site-by-site basis
Behavioural Change and Trav	el Plan	
Modal Shift Facilities and	1.	Phasing of the cycling/pedestrian infrastructure
Incentives	2.	Membership for Car Share and Car Hire schemes
	3.	Subsidised Bus and Rail Pass
	4.	Discount Vouchers/arrangements for shops
		(local) to assist with cycling uptake i.e. purchase
		servicing , repairs and training
		Promoting non-idling
	6.	Electric Shuttles, or other low emission
		alternative, to local facilities i.e. schools & public
	_	transport hubs (funded long-term)
		Sheltered bus stops
		Provision of Car Share Scheme
	9.	
		Provision of Bike-sharing schemes
		Secure bike storage facilities (site wide)
	12.	Sufficient blke storage within housing and
	12	apartment blocks Parking enforcement for non-allocated spaces
		Personalised Active Travel Plans
Parking Provision	14.	reisolialiseu Active Travel Flatis
(In line with cycle parking red	quireme	ents set out in policy TI/3)
Parking Allocation and	1.	Non-idling policy
Facilities	2.	Priority Parking Bays for Low Emission Vehicles
		(with provision of Charging Points)
	3.	Priority Parking Bays for Car Share Schemes
	4.	Secure and sheltered parking area for cycles
	5.	Provision of charging points for electric bikes and
	٦.	Provision of charging points for electric bikes and

**Public Transport** 

CATEGORY	MEASURES
Support for Sustainable and Low Emission Public	<ol> <li>Participation in district wide public transport schemes</li> </ol>
Transport	<ol> <li>Contributions for sustainable transport infrastructure enhancement, such as new guided busways, cycle routes, train stations etc.</li> </ol>
	<ol><li>Contributions for Low Emission Buses or Retro- fitting the existing fleet (serving the area of the development)</li></ol>
	<ol> <li>Participation in Greater Cambridgeshire         Partnerships projects near the development     </li> </ol>
	<ol><li>Sheltered bus stops</li></ol>
	6. Local Shuttles to public transport hubs
Offsetting Emissions	
Financial contributions	Appropriate mitigation contributions can be calculated using Defra's damage cost approach (Guidance).  Offsetting should be a last resort and will be considered on site-by-site basis.

3.6.178 In addition to the measures outlined in table 3.20 above, there are a range of additional measures that can be incorporated into new developments that will have additional benefits in terms of improving air quality as well as meeting other policy requirements set out in the South Cambridgeshire Local Plan (2018). Some of the measures which could be included are outlined in table 3.21 below. Note that this table is not exhaustive.

Table 3.21: Additional measures which can assist with improving air quality

CATEGORY	MEASURES	LINKS TO LOCAL PLAN POLICY AND/OR RELEVANT GUIDANCE IN THIS SPD WHERE APPROPRIATE
Renewable and low carbon energy	At least 10% of the buildings carbon emissions through the use of on-site renewable and/or low carbon energy	South Cambridgeshire Local Plan (2018) Policy CC/3 Section 3.2 (paragraphs 3.2.14 – 3.2.38)
Combined Heat and Power (CHP) – emissions standards	Any gas fired CHP should meet an emissions standard of:	Section 3.2 (paragraph 3.2.31) and Appendix 3
Gas boiler efficiency	<ul> <li>Spark ignition engine: less than less than 150</li> </ul>	

CATEGORY	MEASURES	LINKS TO LOCAL PLAN POLICY AND/OR RELEVANT GUIDANCE IN THIS SPD WHERE APPROPRIATE
	<ul> <li>mgNO<sub>x</sub>/Nm<sup>3</sup></li> <li>Compression ignition engine: less than 400 mgNO<sub>x</sub>/Nm<sup>3</sup></li> <li>Gas turbine: less than 50 mgNO<sub>x</sub>/Nm<sup>3</sup></li> </ul>	
	A low NOx boiler would meet a dry NOx emission rating of 40mg NOx /kWh	
Biomass boilers	A standalone checklist should be obtained from Environmental Services for all biomass boilers	South Cambridgeshire Local Plan (2018) Policy SC/12
Optimised design	New development should be designed to minimise public exposure to pollution sources by	
	<ul> <li>Locating habitable rooms away from busy roads</li> <li>Avoiding building configuration along busy roads that inhibits effective pollution dispersion (street canyons),</li> <li>Considering the proximity of sensitive receptors such as schools to busy roads.</li> <li>Introducing green infrastructures and barriers to reduce pollutants</li> </ul>	
Construction standards	Many measures to enhance the sustainability and energy efficiency of the built environment also have the additional benefit of delivering mutually beneficial	South Cambridgeshire Local Plan (2018) – Chapter 3 Strategic Sites. Can assist with those sites that have policy criteria related to exceeding baseline policy

CATEGORY	MEASURES	LINKS TO LOCAL PLAN POLICY AND/OR RELEVANT GUIDANCE IN THIS SPD WHERE APPROPRIATE
	air quality objectives. Construction standards such as BREEAM and Home Quality Mark (HQM) include consideration of air quality. While not specifically required by policy in the South Cambridgeshire Local Plan (2018), use of these construction standards is fully supported.	requirements set out in the climate change chapter of the Local Plan (2018).
Building ventilation	The preference should be for buildings to be naturally ventilated wherever possible.	Section 3.4 (Climate change adaptation, paragraphs 3.4.10 – 3.4.15)
	Sealed fascia's with active ventilation or active air filtration should only be used in cases where other options are not available, for example in areas around AQMA's or areas that could suffer from excessive noise. Care must be taken in designing such systems that the thermal comfort of building users can be guaranteed, with consideration given to future climate scenarios. Note that this should not preclude mechanical extract systems in bathrooms and kitchens, and the Council would be supportive of the use of Mechanical Ventilation with Heat Recovery (MVHR) to supplement natural ventilation, where systems are correctly specified, installed and maintained.	

CATEGORY	MEASURES	LINKS TO LOCAL PLAN POLICY AND/OR RELEVANT GUIDANCE IN THIS SPD WHERE APPROPRIATE
Construction Phase		
Construction dust monitoring	Monitoring will be requested on a site by site basis. In line with best practice guidance (see further guidance below).	South Cambridgeshire Local Plan (2018) policy SC/12)
Construction vehicles	Any diesel-powered machines used on, or otherwise serving the site, must be run on ultra-low sulphur diesel (also known as ULSD 'cleaner diesel' or 'green diesel'). "Ultra-low sulphur diesel" means fuel meeting the specification within BS EN 590.	
Construction road layout	Using design measures including speed restrictions and traffic management.	South Cambridgeshire Local Plan (2018) Policy CC/6: Construction Methods
Construction Environmental Management Plan (CEMP)	A CEMP will cover impacts to air quality mainly associated with dust and odour. The CEMP will also cover more general environmental health issues such as noise and light pollution.	South Cambridgeshire Local Plan (2018) Policy CC/6: Construction Methods
	Site activities include plant emissions – measures could include switch-off policy, plant maintenance and alternative fuel use.	

- 3.6.179 An **Air Quality Assessment** will be required for applications where air quality is likely to be a significant issue. This could either be from:
  - Emissions to the air arising from the proposed development including changes in traffic generation / distribution / composition, combustion appliances or other point

- sources of air pollution and the potential effect on local air quality, public health, the environment or amenity.
- Where a development would adversely affect air quality in a designate AQMA, or lead to the declaration of a new or increase an existing AQMA, or render unworkable elements of the Council's Air Quality Action Plan.
- Proposed introduction of a sensitive use (e.g. residential) into an area of poor air quality.
- Proposed introduction of a sensitive use (e.g. schools and care homes) near busy roads where pollution from traffic is of concern.
- 3.6.180 The exact level of assessment to be included in the Air Quality Assessment will need to be discussed with officers from the Air Quality team on a case by case basis. These discussions will need to take place at an early stage in the design of the development to ensure that all possible mitigation measures are integrated into the scheme.

## **Further guidance**

- 3.6.181 For further guidance on the assessment of air quality as part of the planning application process see:
  - Land-Use Planning and Development Control: Planning for Air Quality, January 2017 -Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM). Available online at:
    - http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf
  - Guidance on the assessment of dust from demolition and construction, v1.1 June 2016 - Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM). Available online at: https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf
  - Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, October 2018 - Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM). Available online at: https://iaqm.co.uk/text/guidance/guidance monitoring dust 2018.pdf
  - National Planning Practice Guidance (NPPG) Air Quality. Available online at: https://www.gov.uk/guidance/air-quality--3
  - National Clean Air Strategy 2019. Available online at: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach</a> ment data/file/770715/clean-air-strategy-2019.pdf
  - Department for Environment, Food and Rural Affairs (Defra) Damage Cost Guide:
     <a href="https://www.gov.uk/guidance/air-quality-economic-analysis#damage-costs-approach">https://www.gov.uk/guidance/air-quality-economic-analysis#damage-costs-approach</a>
  - Greater Cambridgeshire Partnership <u>https://www.greatercambridge.org.uk/</u>
  - <u>Cambridgeshire Local Transport Plan</u>
  - South Cambridgeshire Community Transport Strategy

## **Odour and Other Fugitive Emissions to Air**

LOCATION: Cambridge and South Cambridgeshire

POLICY: Cambridge: Policy 36: Air quality, odour and dust

South Cambridgeshire: Policy SC/14: Odour and Other

**Fugitive Emissions to Air** 

SCALE OF DEVELOPMENT: All Major Development (add details),

TYPE OF DEVELOPMENT: Residential and Non-residential

SUBMISSION REQUIREMENTS: • Odour impact risk assessment or detailed odour impact

assessment

LINK TO THE SUSTAINABILITY

CHECKLIST:

For applications in Cambridge see Pol.27, Pol.28 and Pol.29 For applications in South Cambridgeshire see Pol.17, Pol.18

and Pol.19

## **Policy context**

- 3.6.182 Potential odour impacts/effects associated with new development can be a material planning consideration, as odours can have an unacceptable adverse impact/effect on amenity, quality of life and living conditions. Impact on amenity as a result of odour annoyance can occur when a person exposed to an odour perceives the odour as unwanted and it detracts from the overall character or enjoyment of an area. Odours can give rise to unpleasantness, annoyance, nuisance or complaints. Due to chemical complexity and smell variety, it is difficult to completely eliminate all odour / smells. The odour effect that the planning process needs to be concerned with is the negative adverse appraisal by and effect on a human receptor as a result of odour exposure.
- 3.6.183 Odours arising from industrial, trade or business premises can also be considered a statutory nuisance by local councils under the Environment Act 1990, if they unreasonably and substantially interfere with the use or enjoyment of a home or other premises. It is important to note that loss of amenity or disamenity does not equate directly to nuisance and significant loss of amenity will often occur at lower levels of odour exposure than would constitute a statutory nuisance. Nuisance is not intended to secure a high level of amenity but is a basic safeguarding standard intended to deal with excessive emissions. It is therefore important for the planning authorities to consider properly, loss of amenity from emissions in the planning process in its wider / broader context and not just from the narrow perspective of statutory nuisance.
- 3.6.184 Odour is a complex issue that air quality professionals are frequently required to assess, particularly in respect to planning. Potential odour impacts may need to be assessed when considering a new development planning application for:

- Odour Generating Development a source, process, activity or use that may generate / release odours (odorous activities) and in particular when near exiting sensitive uses / premises, or
- ii. **Odour Sensitive Development** a new sensitive use / premises that is being proposed near to an existing / established odorous source, process, activity or use (often referred to / known as 'encroachment').
- 3.6.185 The planning system should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.
- 3.6.186 Ideally, significant sources of odour generating development should be separated from odour sensitive users of the neighbouring land (sensitive receptors). If this is not practicable or achievable, it may be possible to employ odour abatement / control and mitigation measures and other design solutions to make a proposed development acceptable in principle from a land-use perspective.

#### **Submission requirements**

- 3.6.187 New proposals for odour generating developments may require an odour impact risk assessment statement or detailed odour impact assessment to be submitted, either as a stand-alone assessment or as part of an Environmental Statement if 'Environmental Impact Assessment' development, to accompany the planning application to determine if the proposals are acceptable. Odours can be associated with a wide range of activities. Typical examples of potentially odorous activities are:
  - sewage / wastewater and sludge treatment works
  - intensive livestock and animal rearing / farming
  - processing / rendering of animals / animal by-products
  - landfill and waste disposal and recycling sites
  - solid waste management, handling and treatment plants (for example compost windrows turning)
  - biofuels and anaerobic digestion facilities
  - food production and manufacturing sector
  - pet food processing
  - foundry emissions
  - some industrial processes such as B2 General industrial
  - 'sui generis' uses such as launderettes and nail bars
  - the majority of hot food premises
- 3.6.188 An odour impact assessment may also be required for any development that will introduce new receptors to an area that may be subject to odour. In all cases where the generation of odours from the development can be readily anticipated, the LPA shall expect to be provided with objective evidence that demonstrates that odour emissions will be adequately controlled to prevent any significant loss of amenity to neighbouring sensitive land uses. The degree of detail provided in such assessments should be proportionate to the risk of odour impact, taking account of factors including the

proximity of receptors, the scale of the proposed activity and the nature of the proposed development.

- 3.6.189 Careful consideration should be given to the location of new odour sensitive developments such as residential developments, schools and hospitals near to existing odour sources at industrial type premises / activities. Encroachment of odour sensitive development around such odour sources may lead to problems with the site becoming the subject of complaint, essentially creating a problem where there was not one before. In order to avoid adverse effects on existing businesses with odour generation the LPA will apply the 'agent of change principle' where odour sensitive uses are proposed in close proximity to them. The agent of change principle identifies that the party responsible for a change should also be responsible for managing the impact of that change. The LPA may seek to secure mitigation measures through the use of design / layout and or planning conditions if necessary. In some case mitigation may only be practicable or achievable off- site at source and in these circumstance s106 obligations may be required.
- 3.6.190 Ideally a robust screening process at the application submission stage should help to identify new developments where adverse odour impacts may arise. Screening should aim to identify applications where odours are a potential issue, whether the application site is the source, or the application site is close to potential odour sources. At the preapplication stage, sources of odour from or near to proposed developments need to be identified and assessed for potential impact.

#### Content of an odour impact assessment for planning

- 3.6.191 An assessment of the impact and resulting effects of an odour source, process, activity or use on surrounding users of the land should usually seek to identify and contain the following key elements:
  - A description of existing baseline odour conditions (including complaints history) where relevant.
  - A description of the location of receptors (either existing or proposed) and their relative sensitivities to odour effects. Sensitivity to odours is based upon the level of expected amenity and the length of time users would be exposed to odour (Uses such as residential, hospitals, schools are classified as high sensitivity because users would expect enjoyment of a high level of amenity and would be present for extended periods of time. Places of work and retail premises are classified as medium sensitivity and industrial and farm use, roads / footpaths are low sensitivity.
  - Details of potential odour sources (whether existing or proposed), including the
    activities and materials involved (including a brief outline of quantities, durations,
    methods of handling and storage, etc.) and the resulting potential for generating
    odours, covering fugitive sources, diffuse sources and point sources as applicable.
    Undertake odour source- evaluation, management, treatment and control.
  - A description of control/mitigation and design measures incorporated into the scheme proposals (including: management controls and, where appropriate, odour abatement engineering controls).

- Depending on the nature of the proposals prediction or observation (or combination of both), using appropriate assessment tools, of the likely odour impact and resulting effects at relevant sensitive receptors, and taking into account:
  - the likely magnitude of odour emissions (after control by measures incorporated into the scheme, if applicable);
  - o the likely meteorological characteristics at the site;
  - the dispersion and dilution afforded by the pathway to the receptors and the resulting magnitude of odour that could result;
  - o the sensitivity of the receptors either existing or proposed; and
  - the potential cumulative odour effects with any odours of a similar character, (e.g. if odours from kitchen waste are in addition to an existing municipal solid waste throughput.)
  - o consideration and justification for any odour benchmark/odour assessment acceptability criteria used
- Where odour modelling has been used the report should contain full details of the input data and modelling options used to allow a third party to reproduce the results.
- Where odour effects are assessed as significant, details of appropriate further design, mitigation and odour abatement control measures that could allow the proposal to proceed without causing significant loss of amenity.
- The residual odour impacts and their effects on a receptor of a particular sensitivity.
- A conclusion on the significance of the residual effect, i.e. whether "significant" or "not significant" and whether there is likely to be an unacceptable adverse impact on amenity / quality of life.
- 3.6.192 Assessing the odour impact of particular activity can be a complex process and is dependent on the complexity of the activity and the systems in operation concerned. We would therefore recommend that applicants and their consultants to consult with the environmental health as part of the pre-application process to gain agreement on the approach and methodology that will be used and what elements should be included.

Submission Requirements - Level of Odour Assessment / Risk Assessment Required: Low to Medium Risk Developments - Hot Food Premises

- 3.6.193 For small scale developments such as a new hot food takeaway, a relatively simple risk assessment based approach is likely to be appropriate, providing it is carried out in a thorough manner. An example of an Odour Risk Assessment Protocol for commercial kitchens is provided in the document 'Control of Odour and Noise from Commercial Kitchen Exhaust Systems An update to the 2004 report prepared by NETCEN for DEFRA (EMAQ, 5-9-2018)'.
- 3.6.194 A simple risk assessment approach is suggested as a means of determining odour control requirements based on the height of flue discharge, proximity of sensitive receptors, size of kitchen and type of cooking (odour and grease/smoke loading). Odour controls systems will need to include an adequate level of odour control and stack dispersion or a combination. The equipment installed to remove cooking odours from the extract air will depend upon the level of control required and will need to deal with the two main phases of contaminants within cooking emissions: the particulate (grease,

small food and smoke particles) and gaseous (odour vapour/volatile organic compounds). The aim of any ventilation/extraction is to ensure that no nuisance, disturbance or loss of amenity is caused by odour or smoke/fumes, food droplets to nearby properties. A suitably qualified and experienced person with specialist knowledge of ventilation schemes should undertake the design and installation of a ventilation system. Designing and installing appropriate ventilation systems may involve considerable expense. In circumstances where the end user of the premises is unknown, or where the specific type of food to be cooked is unknown, the installation should be designed to achieve the highest level of odour control in order to cater for a worst case scenario.

- 3.6.195 Additionally, the visual appearance of the flue may be important and the flue itself may require a separate planning permission. This is important not least because possible odour mitigation measures could in themselves impact on other land use planning requirements and amenity or quality of life implications. The installed systems must not appear as an incongruous feature in the street scene and this could be a constraining factor. To be acceptable the proposed extraction system will have to be:
  - Located preferably to minimise its visual impact on the street scene
  - Of a colour, finish and design to blend in with the buildings to which it is attached, incorporating cladding where appropriate; and
  - Installed within the building where practicable and particularly where the proposal is within a conservation area or within the setting of a listed building.
- 3.6.196 To enable the LPA to assess the suitability of a ventilation scheme, the following information should be provided:
  - Information on premises: the following information should be supplied:
    - i. the number of meals to be served per day;
    - ii. the method(s) of preparation and cooking;
    - iii. the types of meal served; and
    - iv. proposed hours of operation of the business and any ventilation plant.
  - Plans and drawings: a scaled plan showing the internal arrangement of the premises and the dimensions/location of the ventilation system should be provided. The plan must contain external elevations of the buildings showing the dimensions, route; and exhaust termination characteristics (i.e. appearance) of the ductwork in relation to the building. The location of all filters and the fan must be clearly marked. Where the location of a filter is shown the type must be clearly identified and crossreferenced to the detailed product specification.
  - Pre-filters A copy of the manufacturer's product data sheet should be supplied
  - Electrostatic precipitators (where proposed) A copy of the manufacturer's product data
  - Carbon Filters (where proposed) The details and type of carbon filter units should be identified
  - Odour counteractant or neutralising system (where proposed) The details and type of counteractant or neutralising system should be identified
  - Cooker hood characteristics dimensions, dwell time of the gases in the carbon filtration zone, efflux velocity
  - System Operation extract rate, dwell time of the gases in the carbon filtration zone, efflux velocity

- Flue Design: the height and velocity of the final discharge stack are the two important factors. Generally, the greater the flue height, the better the dispersion and dilution of odours. The discharge stack should:
  - discharge the extracted air not less than 1 m above the roof ridge of any building within 15 m of the vent serving the commercial kitchen. Additional odour control measures may still be required depending on cooking type and frequency.
  - ii. If (i) cannot be complied with for planning reasons, then the extracted air shall be discharged not less than 1 m above the roof eaves or dormer window of the building housing the commercial kitchen. A high level of odour control measures than those required in part (i) may be required.
  - iii. If (i) or (ii) cannot be complied with for planning reasons or ownership or structural constraints, then an exceptionally high level of odour control measures than those required in part (i) or (ii) may be required order to reduce odours, such as an increase in efflux velocity and additional filters, etc. The final discharge should be vertically upwards with a jet cowl or similar, unimpeded by flue terminals, such as rain cowls/caps. The number of bends in the ducting should be minimised and the ducting should have a smooth internal surface.
- Maintenance schedule for all systems.

# Submission Requirements - Level of Odour Assessment / Risk Assessment Required: Medium to Higher Risk Developments

- 3.6.197 For higher risk odour generating uses, such as a new sewage treatment works or when odour sensitive uses are proposed near such uses, a more rigorous approach to evaluating odour impact may be appropriate. For such proposals odour assessment should be undertaken in accordance with the Institute of Air Quality Management document 'Guidance on the assessment of odour for planning (IAQM, Version 1.1 July 2018)' and Environment Agency 'H4 Odour Management Guidance, March, 2011'.
- 3.6.198 Environmental health officers must be contacted prior to any odour assessment for agreement on the most suitable method.
- 3.6.199 The odour impact information, statement and assessment as appropriate, that has been submitted will be assessed and relative weight given to the significance of any odour impacts/effects. If unacceptable odours cannot be prevented by means of an effective design and mitigation planning permission will not normally be granted.
- 3.6.200 If it is concluded that odour/fume generation can be abated to an acceptable level then a planning condition may be imposed requiring the submission of the final design and specific details of an odour mitigation scheme and odour management plan (odour overview, source identification, control/mitigation including maintenance, monitoring, complaints handling and review) as necessary, in writing for approval by the LPA.

**Odours – Planning and Industrial Pollution Prevention and Control Regimes** 

- 3.6.201 Following the granting of planning consent, some potentially odorous new developments e.g. industrial or waste activities may be required to operate under separate pollution control regimes such as an Environmental Permit, whereby on-going pollution control of many (though not always all) of the operations will be regulated by the Environment Agency or other agencies. Therefore the council should be contacted prior to any planning application or permit application being submitted for an agreement on the type and scale of any assessment that maybe required. Even with effective operational pollution regulation in place some residual odour can remain and there may be some situations where such residual effects would make a development an unsuitable use of land at its proposed location. For sites that will be subject to an Environmental Permit it is still necessary, therefore, for the Planning Authority to consider at the planning stage whether the proposed development at the site will be a suitable use of the land in particular, with regard to the likely residual effects of odour on nearby sensitive users.
- 3.6.202 Where a development requiring planning permission will also require a permit, it is recommended that the operator makes both applications in parallel, whenever possible, to allow a consistent approach. This will allow the council to begin its formal considerations early on, thus allowing it to co-ordinate both the planning process and permit application process. Joint pre planning discussions with the Environment Agency, the planning authority and the developer are also recommended in order that all interrelated issues can be considered at an early stage. This is particularly important where fundamental issues exist which may affect whether the development is acceptable. Guidance for developments requiring planning permission and environmental permits, October 2012, is available on the Environment Agency website: <a href="https://www.gov.uk/government/organisations/environment-agency">https://www.gov.uk/government/organisations/environment-agency</a>

#### **Odour Control Mitigation**

- 3.6.203 Before an adverse effect (such as disamenity, annoyance, nuisance or complaints) can occur, there must be odour exposure. For odour exposure to occur all three links in the source-pathway-receptor chain must be present:
  - a. an emission source a means for the odour to get into the atmosphere
  - b. a pathway for the odour to travel through the air to locations off site
  - c. the presence of **receptors** (people) that could experience an adverse effect, noting that people vary in their sensitivities to odour.
- 3.6.204 The option of preventing and controlling odours relies on an ability to intervene effectively at one or more stages of the 'Source-Pathway-Receptor' process, as follows:
  - Preventing the release of odorous air to the atmosphere by containment and odour control
  - Preventing the formation of odorants in solid and liquid material within a process;
  - Preventing the transfer of odorants from a mixture to gas phase [air] and reducing concentration by abatement and control;
  - Preventing the transportation of odorants from the source reaching receptors: anything that increases dilution and dispersion of an odorous pollutant plume as it

- travels from source to receptor will reduce the concentration at the receptor, and hence reduce exposure.
- Influencing the quality of the odour to reduce the perception of odours as a nuisance by receptors;
- Implementation of an odour management plan (ongoing odour overview, source identification, control / mitigation including maintenance, monitoring, complaints handling and review)
- Prevent or reduce exposure to odour at receptor location, and
- Ensuring effective communication
- 3.6.205 Table 3.22 below provides examples of odour control and mitigation measures. Where mitigation measures ae required, these should be detailed within the Odour Impact Assessment.

Table 3.22: Examples of odour control measures

Odour Source	Proactive / Planned Measures
Sewage treatment	Closed-containment process over high emission areas  Odour control systems / filters
Paints and solvents	Ventilation design  Solvent extraction and recovery systems  Vents located away from residents
Animals, livestock and poultry	Site assessment and building design for odour control; Stocking density planned and agreed
Storage and spills	Design of containment and covered areas for moving liquid
Hot food takeaways, food processing and commercial kitchens and; Industrial/chemical processes	Ventilation design – high level of discharge to facilitate the adequate dispersion and dilution of odours;  Extraction and filtration / odour abatement and control systems;
	Vents located away from residents

#### **Further guidance**

- 3.6.206 For further guidance please see:
  - Institute of Air Quality Management. Guidance on the assessment of odour for planning (IAQM, Version 1.1 - July 2018). Available online at: <a href="http://www.iaqm.co.uk/text/guidance/odour-guidance-2014.pdf">http://www.iaqm.co.uk/text/guidance/odour-guidance-2014.pdf</a>
  - Environment Agency H4 Odour Management Guidance. Available online at: <a href="https://www.gov.uk/government/publications/environmental-permitting-h4-odour-management">https://www.gov.uk/government/publications/environmental-permitting-h4-odour-management</a>
  - Control of Odour and Noise from Commercial Kitchen Exhaust Systems An update to the 2004 report prepared by NETCEN for DEFRA (EMAQ, 5-9-2018). Available from: <a href="https://ee.ricardo.com/downloads/air-quality/control-of-odour-and-noise-from-commercial-kitchen-exhaust-systems">https://ee.ricardo.com/downloads/air-quality/control-of-odour-and-noise-from-commercial-kitchen-exhaust-systems</a>
  - DW 172: Specification for Kitchen Ventilation Systems Building Engineering Services
    Association (BESA, Second Edition 2018). Available from:
    <a href="https://www.thebesa.com/knowledge/shop/products/dw-172-specification-for-kitchen-ventilation-systems/">https://www.thebesa.com/knowledge/shop/products/dw-172-specification-for-kitchen-ventilation-systems/</a>
  - Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for farmers, growers and land managers (Defra, updated 27 July 2018). Available online at: <a href="https://www.gov.uk/government/publications/protecting-our-water-soil-and-air#history">https://www.gov.uk/government/publications/protecting-our-water-soil-and-air#history</a>
  - Technical Guidance Note IPPC SRG 6.02 (Farming) 'Odour Management at Intensive Livestock Installations', (Environment Agency, May 2005. Available online at: <a href="https://www.gov.uk/government/publications/intensive-farming-introduction-and-chapters">https://www.gov.uk/government/publications/intensive-farming-introduction-and-chapters</a>

# 3.7 Sustainable Drainage Systems and flood risk

- 3.7.1 Sustainable drainage systems (SuDS) re-create the benefits of natural drainage systems by integrating water management into the design of new developments to create and enhance the public realm, streets and open spaces that we all value. SuDS allow for the delivery of high quality surface water drainage whilst at the same time supporting the growth of the Greater Cambridge area and enabling the area to cope with severe rainfall, enhancing the adaptive capacity of the area. Policies within the 2018 Cambridge and South Cambridgeshire Local Plan place the emphasis on the use of SuDS over traditional underground piped drainage systems.
- 3.7.2 This section of the SPD focuses on guidance for the implementation of SuDS policy in the Cambridge Local Plan (2018). This guidance supplements the wider guidance on flooding and drainage provided for in the <u>Cambridgeshire Flood and Water SPD</u>. For applications in South Cambridgeshire, further guidance on policy implementation, alongside drainage checklists, is provided in the <u>Cambridgeshire Flood and Water SPD</u>.

LOCATION:	Cambridge
POLICY:	Policy 31: Integrated water management and the water
	cycle
	Policy 32: Flood risk (criterion a. and b.)

SCALE OF DEVELOPMENT: All scales of development

TYPE OF DEVELOPMENT: Residential and Non-residential development

SUBMISSION REQUIREMENTS: 1. Surface Water Drainage Strategy; and

2. A Site Specific Flood Risk Assessment is required:

• For proposals of 1 ha or greater in Flood Zone 1

 For all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3; or

 In an area within Flood Zone 1 which has critical drainage problems; or

 Where proposed development, or a change of use to a more vulnerable class, may be subject to other forms of flooding (for example if a proposed development is in an area of significant surface water flood risk)<sup>48</sup>.

LINK TO THE SUSTAINABILITY CHECKLIST:

SuDS.1

## **Policy context**

- 3.7.3 Policy 31 of the Cambridge Local Plan (2018) was developed in response to the high level of surface water flood risk facing Cambridge. Evidence contained in the Surface Water Management Plan<sup>49</sup> and Strategic Flood Risk Assessment for Cambridge<sup>50</sup> has found there is little or no capacity in our rivers and watercourses that eventually receive surface water run-off from Cambridge and that it needs to be adequately managed so that flood risk is not increased elsewhere. As a result all scales of new development needs to utilise SuDS in order to reduce the rate of discharge into these watercourses and hence mitigate the risk of surface water flooding. This approach differs from national policy in that it applies the requirement for SuDS to all scales of development, recognising the cumulative impact that development in an urban context has on flood risk.
- 3.7.4 Chapter 6 of the Cambridgeshire Flood and Water SPD sets out further guidance on how to integrate SuDS into the design of new developments. The purpose of this section of the Sustainable Design and Construction SPD is to provide additional guidance on implementation to supplement the Cambridgeshire Flood and Water SPD in light of the specific requirements set out in policy 31, including:
  - A requirement for all flat roofs to be green or brown roofs (see section 3.4 of this SPD);
  - there is no discharge from the developed site for rainfall depths up to 5 mm of any rainfall event (Interception);

<sup>&</sup>lt;sup>48</sup> For further guidance on Site Specific Flood Risk Assessments see: <a href="https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications">https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications</a>

<sup>49</sup> Cambridge and Milton Surface Water Management Plan (2011), Cambridgeshire Flood Risk Partnership

<sup>&</sup>lt;sup>50</sup> Cambridge and South Cambridgeshire Level 1 Strategic Flood Risk Assessment (2010)

- the run-off from all hard surfaces shall receive an appropriate level of treatment in accordance with Sustainable Drainage Systems guidelines, SUDS Manual (CIRIA C753), to minimise the risk of pollution;
- All hard surfaces are to be permeable where practical.
- 3.7.5 In addition to the above, policy 32 (flood risk), includes the following requirements:
  - a. the peak rate of run-off over the lifetime of the development, allowing for climate change, is no greater for the developed site than it was for the undeveloped site;
  - b. the post-development volume of run-off, allowing for climate change over the development lifetime, is no greater than it would have been for the undeveloped site. If this cannot be achieved then the limiting discharge is 2 litre/s/ha for all events up to the 100-year return period event<sup>51</sup>;
  - c. the development is designed so that the flooding of property in and adjacent to the development would not occur for a 1 in 100 year event, plus an allowance for climate change and in the event of local drainage system failure;
  - the discharge locations have the capacity to receive all foul and surface water flows from the development, including discharge by infiltration, into water bodies and into sewers;
  - e. there is a management and maintenance plan for the lifetime of the development, which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime; and
  - f. the destination of the discharge obeys the following priority order:
    - firstly, to ground via infiltration;
    - then, to a water body;
    - then, to a surface water sewer.

Discharge to a foul water or combined sewer is unacceptable.

3.7.6 In order for these requirements to be met, it will be important to ensure that the drainage requirements of a site are considered from the outset of the design of new developments. The layout and scale of development should be informed by the surface water drainage requirements and not vice versa.

## **Submission requirements**

3.7.7 In order to demonstrate compliance with the requirements of policy 31, a **Surface Water Drainage Strategy** will need to be submitted. This document will then be assessed by Cambridge City Council's sustainable drainage engineers and/or Cambridgeshire County Council in their role as Lead Local Flood Authority. A Flood Risk Assessment will also be required for some sites, and further detail on the requirements related to this can be

<sup>&</sup>lt;sup>51</sup> Where the pre-development peak rate of run-off for the site would result in a requirement for the post-development flow rate to be less than 5 litre/s at a discharge point, a flow rate of up to 5 litre/s may be used where required to reduce the risk of blockage. If discharge is to be pumped then this allowance does not apply.

found in Chapter 4 of the <u>Cambridgeshire Flood and Water SPD</u> or the government website: https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications.

- 3.7.8 The Surface Water Drainage Strategy should set out how the proposed surface water scheme has been determined following the drainage hierarchy (see figure 11), and should include the following information:
  - Pre-development runoff rates;
  - Post development runoff rates with associated storm water storage calculations in line with the requirements set out in paragraph 3.7.6 above;
  - Discharge location(s);
  - Drainage calculations to support the design of the system;
  - Drawings of the proposed surface water drainage scheme including sub catchment breakdown where applicable;
  - Maintenance and management plan of surface water drainage system (for the lifetime of the development) including details of future adoption;
  - Completed drainage proforma included within the <u>Cambridgeshire Flood and Water SPD</u> the applicant must ensure that the surface water strategy contains the appropriate level of information in relation to the points covered in the proforma.
  - For householder applications, a more simplified summary of the information that needs to be submitted with applications is provided in the Government's standing advice for flood risk assessment, available online at: <a href="https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#what-to-include-in-your-assessment">https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#what-to-include-in-your-assessment</a>.
- 3.7.9 SuDS must be shown on all relevant plans submitted, in order to demonstrate how SuDs integrate with planned public open spaces, landscaping, roads, trees and buildings. Plans should identify multifunctional SuDs, for example those which enhance biodiversity or improve water quality.

**Figure 11:** Surface water drainage hierarchy (adapted from the Cambridgeshire Flood and Water SPD)



Note: in all instances adequate stormwater storage will need to be provided in order that no properties are flooded at the 100 year event (with climate change) and the there is no runoff from site from rainfall events less than 5mm depth.

- 3.7.10 All surface water drainage schemes should be underpinned by the following design principles in order to ensure that they offer effective drainage and are capable of being maintained for the lifetime of the development:
  - 1. PERFORMANCE
    - Reduce flood risk taking climate change into account. All development proposals in Cambridge should apply a 40% climate allowance to drainage calculations.
    - Improve water quality
    - Deliver biodiversity benefits to contribute to a net gain in biodiversity (see section 3.6)
    - Provide amenity for residents
  - 2. HIGH QUALITY DESIGN
    - Micro managed bespoke design
    - Integration with wider landscape setting
    - Use of robust, low impact materials
    - Designed to be attractive all year round
  - 3. EASE OF MAINTENANCE
    - Simple surface features
    - Minimise use of grills and other engineered features
    - Shallow gradients
    - Robust appropriate planting for ease of maintenance but not at the expense of biodiversity (unless erosion prevention if a priority)
    - A preference for outfalls to be gravity led unless certain site conditions apply. A
      pumped solution will only be considered acceptable if it can be clearly
      demonstrated that all other options are unfeasible. Where a pumped outfall is
      required, evidence will need to be submitted alongside the Surface Water
      Drainage Strategy to clearly demonstrate that the pumped system will be
      maintained, and where appropriate adopted by the relevant statutory undertaker,
      in perpetuity. The use of a pumped outfall should not prevent the use of
      upstream SuDS.
  - 4. INTEGRATED APPROACH TO HEALTH AND SAEFTY
    - Easily identifiable features and risk
    - Shallow gradients
    - Planting and design used to create barriers where necessary
- 3.7.11 Use of these principles will form part of the Council's assessment of the proposed Surface Water Drainage Strategy.
- 3.7.12 While the primary overriding function of SuDS is to provide effective drainage, a SuDS design team should be multi-disciplinary and have:
  - A strong landscape and urban design influence to guide the form and shape of the SuDS, especially in the early stages of the developments design;
  - Drainage engineers with the expertise to ensure that the proposed design will provide effective drainage;
  - Ecologists providing advice on how to maximise biodiversity benefits.

An effective SuDS team will work through these issues from early in the schemes development to find the most appropriate wat to deal with any conflicting design aims.

## **Further guidance**

- 3.7.13 For further guidance on the use and design of SuDS please see:
  - Cambridgeshire Flood and Water SPD. Available online at: https://www.cambridge.gov.uk/cambridgeshire-flood-and-water-spd
  - Cambridge City Council. Sustainable Drainage: Cambridge Design and Adoption Guide. Available online at:

https://www.cambridge.gov.uk/sustainable-drainage-systems-suds

- CIRIA (2016). The SuDS Manual C753. Available online at: https://www.ciria.org/Resources/Free publications/SuDS manual C753.aspx
- For more information on sustainable drainage systems, including case studies and a link to the <u>Benefits EST</u>imation Tool (B£ST) for blue-green infrastructure see: <a href="https://www.susdrain.org/">https://www.susdrain.org/</a>
- For the Susdrain developers hub see:
   <a href="https://www.susdrain.org/community/Developers Hub">https://www.susdrain.org/community/Developers Hub</a>

## 3.8 Construction Standards (BREEAM)

LOCATION: Cambridge

POLICY: Policy 28: Carbon reduction, community energy networks,

sustainable design and construction, and water use

SCALE OF DEVELOPMENT:

All scales of development

Non-residential development

SUBMISSION REQUIREMENTS: BREEAM Pre-Assessment demonstrating achievement of

BREEAM 'excellent'.

LINK TO THE SUSTAINABILITY

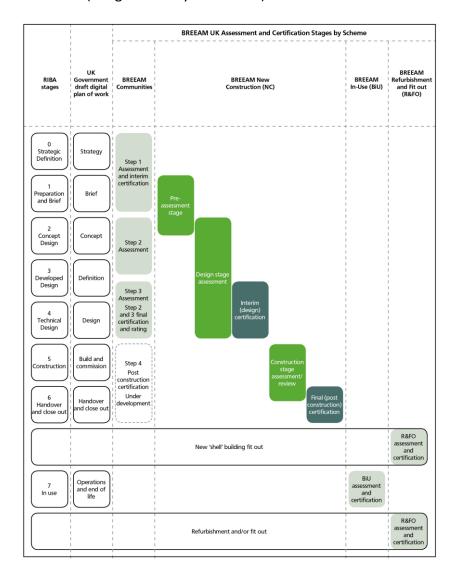
CHECKLIST:

Cs.1, Cs.2

#### **Policy context**

3.8.1 Policy 28 of the Cambridge Local Plan (2018) sets construction standards for all new non-residential development, utilising the Building Research Establishment's (BRE) Environmental Assessment Methodology (BREEAM). The requirement is for all new non-residential development to achieve the BREEAM 'excellent' rating. Achievement of this rating will require early integration of the BREEAM requirement into the design of proposals in order to optimise cost effective means of achieving the 'excellent' rating. The integration of BREEAM into the RIBA Plan of Work 2013 is illustrated in figure 12 below.

**Figure 12:** The integration of BREEAM assessment and certification stages and the RIBA Plan of Work 2013 (image courtesy of the BRE)



- 3.8.2 The use of BREEAM helps designers and clients measure and reduce the environmental impacts of their buildings, creating high value, lower risk assets. The BREEAM methodology has the following aims:
  - To mitigate the lifecycle impacts of buildings on the environment;
  - To enable buildings to be recognised according to their environmental benefit;
  - To provide a credible, environmental label for buildings; and
  - To stimulate demand and create value for sustainable buildings, building products and supply chains.
- 3.8.3 The BREEAM requirements set out in policy 28 apply to new build development only. For projects involving the re-use of existing buildings, the policy supports the development of bespoke assessment methodologies to assess the environmental impact of the proposals. Early engagement with the Council's Sustainability Consultant is recommended in such cases in order that the scope of the bespoke assessment methodology can be agreed prior to the submission of a planning application. The Council will also be open to

approaches to deliver high standards of sustainable construction in new non-residential development other than BREEAM, for example use of the Passivhaus standard. For schemes wishing to use alternative standards, early engagement with the Council as part of pre-application discussions is strongly recommended.

## Submission requirements - new build non-residential development

- 3.8.4 Proposals for new build development should be assessed using the latest version of the BREEAM New Construction scheme available at the time of development. For all full and reserved matters applications a **BREEAM pre-assessment**, carried out by a BRE Accredited BREEAM Assessor should be submitted with the planning application to demonstrate that the required BREEAM 'excellent' rating can be achieved. Formal BREEAM certification will then be secured via the use of planning conditions. For outline applications, submission of a BREEAM pre-assessment as part of future reserved matters applications will be secured via a planning conditions.
- 3.8.6 Where full achievement of the policy requirements is not possible due to technical feasibility or viability considerations, early engagement with the Council's Sustainability Consultant is strongly recommended in order that alternative approaches to delivering the aims of the policy can be agreed ahead of submission of a planning application.

**Further guidance** 

3.8.7 For further guidance on BREEAM please see <a href="https://www.breeam.com/">https://www.breeam.com/</a>

#### 3.9 Sustainable Show Homes

LOCATION: South Cambridgeshire

POLICY: CC/5: Sustainable Show Homes

SCALE OF DEVELOPMENT: All residential development where a show home is being

provided.

TYPE OF DEVELOPMENT: Residential

SUBMISSION REQUIREMENTS: Sustainability Statement

LINK TO THE SUSTAINABILITY SuSh.1

CHECKLIST:

#### **Policy context**

3.9.1 Policy CC/5 requires that where a show home is being provided, measures to enhance the environmental performance of homes should be installed and made available to new home buyers to enhance the specification of their new home. The measures must be offered at a price, including cost of delivery and/or installation that reflects the same profit margin to the developer as other standard buyer's options or extras.

## **Submission requirements**

- 3.9.2 In order to demonstrate compliance with the policy, the Sustainability Statement should include an outline of the measures proposed to be installed as part of the Show Home as well as details of how these features will be marketed to home buyers. The requirements will be secured through the S106 agreement for the development.
- 3.9.3 Previous Enhanced show homes at Trumpington Meadows and the Cambourne 950 development included the following measures:
  - renewable technologies such as solar panels;
  - rainwater harvesting and greywater recycling devices;
  - windows and doors from sustainably sourced materials, with significantly improved 'u' values (e.g. triple glazing);
  - mechanical ventilation and heat recovery;
  - smart energy metering and management systems;
  - low energy internal and external light fittings;
  - water efficient toilets and other sanitary ware fixtures or fittings;
  - white goods with high energy efficiency ratings and low water consumption;
  - raised growing beds, composting and enhanced recycling bins;
  - sustainably sourced and low embodied energy flooring and wall finishes, kitchens and furniture.
- 3.9.4 The exact measures will need to be agreed on a case by case basis, with consideration given to the baseline specification for the development. Consideration should also be given to how these additional features will be marketed to new home buyers, ensuring that sales staff are able to answer queries about the options being offered. In some cases, where the level of sustainable construction is already quite high, it may be more appropriate for the sustainable show home to be used to provide guidance to residents on how to use the technologies within their home.

## 3.10 Works to a heritage asset to address climate change

LOCATION: Cambridge and South Cambridgeshire POLICY: Cambridge: Policy 63: Works to a heritage asset to address climate change South Cambridgeshire: Policy NH/15:Heritage assets and adapting to climate change SCALE OF DEVELOPMENT: Any application involving works to heritage assets to enhance their environmental performance TYPE OF DEVELOPMENT: Residential and non-residential SUBMISSION REQUIREMENTS: Information can be included in the Design and Access Statement or Heritage Statement

#### **Policy context**

- 3.10.1 Both the 2018 Cambridge and South Cambridgeshire Local Plans include policies that are supportive of works to heritage assets to enhance their environmental performance where those works safeguard the heritage significance of those assets. Historic buildings and settlements often have sustainable forms of construction and design, and they can inform and inspire the best modern, sustainable development. Their survival reflects their success and adaptability. The Councils aim, therefore, is to ensure that a heritage asset's significance and its continued potential for adaptability is maintained by ensuring that alterations to address climate change or reduction of carbon emissions are sensitive.
- 3.10.2 Due to the nature of construction of historic buildings, it would be difficult to match the performance of modern structures. However, vernacular design and traditional construction have evolved over time and deal with local conditions. Adaptive re-use of a building gives significant carbon savings in terms of embodied energy in the fabric of the building, so the focus will be on enhancing the performance of traditional buildings as much as practicable without damaging their significance. Acceptable levels of intervention will vary dependent upon the impact on the significance of the heritage asset in question. Works should avoid harm to a building's integrity or significance.

## **Submission requirements**

- 3.10.3 When considering ways to reduce a building's carbon footprint, it is important that the energy hierarchy (see Section Four, figure 3) is adopted. Prior to looking at alternative means of generating energy, it is important to investigate and put into practice all possible means of conserving energy. The Chartered Institution of Building Services Engineers' (CIBSE) guidance on building services in historic buildings sets out four principal aims when seeking to enhance the sustainability of heritage assets:
  - Aim 1 preserve historic fabric;
  - Aim 2 extend the beneficial use of older buildings;
  - Aim 3 reduce carbon emissions, using the hierarchical approach; and
  - Aim 4 specify environmentally conscious materials.
- 3.10.4 Applications for works to heritage assets will need to demonstrate a thorough understanding of the building in question via the submission of the following information:
  - surveys of existing construction, to include walls, floors, ceilings and roofs;
  - submission of baseline energy consumption data before and after improvements have taken place (submission of data post improvement would be secured via a planning condition);
  - measured data of existing environmental performance of the building's fabric;
  - an indication of any national performance standards being targeted as a result of works; and

• recommendations on the environmental performance measures to be implemented in order to achieve the standard.

This information can be submitted as part of the Design and Access Statement for the proposal or as part of the Heritage Statement.

## **Further guidance**

- 3.10.5 The Historic England website has a range of guidance on how to approach environmental improvement projects in heritage assets. For further detail, please see:

  <a href="https://historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/">https://historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/</a>
- 3.10.6 If your home is a heritage asset, further guidance from English Heritage is available via: https://historicengland.org.uk/advice/your-home/saving-energy/
- 3.10.7 Further guidance is also available from CIBSE:
  - CIBSE (2002). HIST Guide to Building Services for Historic Buildings. Available online (for a fee) at: <a href="https://www.cibse.org/Knowledge/knowledge-items/detail?id=a0q2000000817ocAAC">https://www.cibse.org/Knowledge/knowledge-items/detail?id=a0q2000000817ocAAC</a>

## 3.11 Construction waste and recycling and waste facilities

LOCATION:	Cambridge and South Cambridgeshire
POLICY:	Cambridge:
	Policy 28: Carbon reduction, community energy
	networks, sustainable design and construction, and
	water use
	Policy 57: Designing new buildings
	South Cambridgeshire:
	Policy CC/6: Construction methods
	<ul> <li>Policy HQ/1: Design principles</li> </ul>
	,,
COALE OF DEVELOPMENT.	All development (everytheverbleden)
SCALE OF DEVELOPMENT:	All development (except householder)
TYPE OF DEVELOPMENT.	Decidential and non-vacidential
TYPE OF DEVELOPMENT:	Residential and non-residential
SUBMISSION REQUIREMENTS:	Construction waste:
	Site Waste Management Plans (secured via conditions)
	Occupational phase waste management:
	Recap Waste Management Design Guide Toolkit (as  On the Control of the Contr
	required by Policy CS28 of the Cambridgeshire Minerals
	and Waste Core Strategy).
	Proposals in Cambridge should also submit Cambridge
	City Council's Waste and Recycling Provision Checklist.
LINK TO THE SUSTAINABILITY	M/r 1 M/r 2 M/r 2
CHECKLIST:	Wr.1, Wr.2, Wr.3
CHECKLIST.	

#### **Policy context**

- 3.11.1 One third of all waste in the UK is generated by the construction and demolition sector, making it the largest contributor to waste nationally. All new development should be designed to reduce construction waste and to make it easier for future occupants to maximise levels of recycling and reduce waste being sent to landfill. Storage capacity for waste, both internal and external, should be an integral element of the design of new developments.
- 3.11.2 Cambridgeshire County Council are responsible for detailed planning policy related to waste, in their role as the Minerals and Waste Local Planning Authority<sup>52</sup>. However, both the 2018 Cambridge and South Cambridgeshire Local Plans include policies to support the minimisation of construction waste and to ensure that waste facilities are integrated into the design of new developments in order to enable residents and building occupants to maximise levels of recycling and reduce the amount of waste being sent to landfill.

#### Submission requirements - Construction waste

- 3.11.3 The Sustainability Statement should outline the measures that will be taken to reduce construction waste and to maximise the amount of construction waste that is recycled. For schemes utilising construction methodologies such as BREEAM, reference can be made to credits being targeted under the waste section of the methodology. In some cases, notably for major developments, planning conditions may be used to secure the submission and implementation of Site Waste Management Plans.
- 3.11.4 There are a range of methods that can be implemented to reduce construction waste. WRAP (Waste and Resources Action Programme) have identified five key principles that design teams can use during the design process to reduce waste:
  - Design for reuse and recovery;
  - Design for off-site construction;
  - Design for materials optimisation;
  - Design for waste efficient procurement; and
  - Design for deconstruction and flexibility
- 3.11.5 These are principles that should be applied to all scales of development and to all disciplines within the built environment, not only considering the construction of new buildings but also wider infrastructure including landscape design (including sustainable drainage) and civil engineering projects.

#### **Further guidance**

3.11.6 WRAP has produced a number of guides for the construction sector, including:

 Designing out waste: landscape opportunities, available online at <a href="http://www.wrap.org.uk/sites/files/wrap/Designing">http://www.wrap.org.uk/sites/files/wrap/Designing</a> out Waste landscape opportunities.pdf

<sup>&</sup>lt;sup>52</sup> https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan/

- Designing out waste: A design team guide for civil engineering, available online at <a href="http://www.wrap.org.uk/sites/files/wrap/Designing">http://www.wrap.org.uk/sites/files/wrap/Designing</a> out Waste landscape opportu nities.pdf
- Designing out waste: A design team guide for buildings, available online at: <a href="https://www.modular.org/marketing/documents/DesigningoutWaste.pdf">https://www.modular.org/marketing/documents/DesigningoutWaste.pdf</a>
- 3.11.7 Further guidance is available from:
  - UK Green Building Council (2019). Circular construction guidance for construction clients: How to practically apply circular economy principles at the project brief stage. Available online at: <a href="https://www.ukgbc.org/wp-content/uploads/2019/04/Circular-Economy-Report.pdf">https://www.ukgbc.org/wp-content/uploads/2019/04/Circular-Economy-Report.pdf</a>
  - For further guidance on BREEAM please see https://www.breeam.com/

## Submission requirements: occupational phase waste management

3.11.8 In line with the requirements of the Cambridgeshire Minerals and Waste Core Strategy, all new development is required to follow the guidance set out in the RECAP Waste Management Design Guide SPD, and applicants should submit the associated RECAP Waste Management Toolkit as part of their planning proposals. For applications in Cambridge, developers should also refer to Cambridge City Council's guidance on household waste and recycling facilities in new developments, which supplements and, in some cases, includes requirements that are additional to the RECAP Waste Management Design Guide. The City Council's Waste and Recycling Provision Checklist should also be submitted.

#### **Further guidance**

- 3.11.9 For the RECAP Waste Management Design Guide SPD and RECAP Waste Management Toolkit, please see: <a href="https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/recap-waste-management-design-guide/">https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/recap-waste-management-design-guide/</a>
- 3.11.10For Cambridge specific information, please see:
  - Waste and recycling guide for new developments, available online at:
  - <a href="https://www.cambridge.gov.uk/waste-and-recycling-guide-for-developers">https://www.cambridge.gov.uk/waste-and-recycling-guide-for-developers</a>
  - Waste and recycling checklist for developers, available online at: <a href="https://www.cambridge.gov.uk/media/2795/waste-and-recycling-provision-checklist.pdf">https://www.cambridge.gov.uk/media/2795/waste-and-recycling-provision-checklist.pdf</a>

# Section 4: Further approaches to sustainable design and construction

- 4.1.1 In addition to meeting the policy requirements as set out in Section 3 of this SPD, there are many other ways in which developments can contribute to sustainable development and enhance the health and wellbeing of residents and building users. These approaches are considered to be an important aspect of high quality, sustainable new development and in cases where policies require proposals to exceed Local Plan requirements, for example policies for new settlements in South Cambridgeshire, some of these elements could be considered as demonstrating best or exemplar practice in sustainable design. They are also well related to the Cambridgeshire Quality Charter for Growth<sup>53</sup> and can be considered as ways in which the 4 C's of this charter, community, character, connectivity and climate, can be met, as well as having relevance to wider corporate priorities around tackling fuel poverty and health and wellbeing.
- 4.1.2 Applicable to schemes across Cambridge and South Cambridgeshire, it is recommended that consideration of the following issues should be included within the Sustainability Statement:
  - Health and wellbeing;
  - The role of modern methods of construction;
  - Measures to encourage low carbon lifestyles such as integrating opportunities for food growing into new developments;
  - The integration of smart technologies; and
  - Responsible sourcing of building materials and embodied carbon.

# 4.2 Health and wellbeing

- 4.2.1 The design of the built environment has a significant role to play in the health and wellbeing of residents and workers. High quality developments, built to be future-proofed and enhance the local environment can deliver multiple benefits for new and existing residents. Many of the policies contained within the 2018 Cambridge and South Cambridgeshire Local Plans seek to ensure that new developments enhance the health and wellbeing of those who live and work in the Greater Cambridge Area. More specifically, Policy SC/2 of the South Cambridgeshire Local Plan (2018) requires the submission of a **Health Impact Assessment** for proposals of 20 or more dwellings or 1,000m² or more of new floorspace, and further guidance will be contained in an update to the South Cambridgeshire Health Impact Assessment SPD and updates to both Councils Affordable Housing SPDs.
- 4.2.2 This section is divided into the external environment of healthy neighbourhoods and internal spaces of healthy homes. A large number of factors influence and improve health and wellbeing, not only how neighbourhoods and the buildings in them (particularly homes) are designed and constructed. However is clear that poor design and construction quality can have a direct impact on ill health.

https://www.cambridge.gov.uk/media/2950/cambridgeshire\_quality\_charter\_2010.pdf

- 4.2.3 In a neighbourhood, the built environment plays a significant role in whether or not a person becomes socially isolated. Public Health England note that social isolation can cause a range of mental and physical health impacts<sup>54</sup>. Our built environment plays a significant role in whether or not a person becomes socially isolated. Physical access to friends and family, health services, community centres and shops, open spaces and other places and spaces enable individuals to build and maintain their social relationships. Poor transport links create barriers to social inclusion, whereas effective transport links benefit social cohesion, enabling individuals to play a more active role in their community. In designing new developments, we need to be aware of the elements that can create barriers to social inclusion and maximise opportunities for people to build social relationships to create healthy neighbourhoods, as illustrated in figure 13 below. This can include:
  - Designing the built environment to make streets conducive to walking and cycling, whilst also ensuring that those with limited mobility are catered for, to help encourage social connectivity;
  - Engaging with the local community in the design of public spaces to ensure that they
    meet the needs of residents is important in building a sense of ownership and
    belonging;
  - Designing the public realm for safety with consideration given to natural surveillance, appropriate lighting and good visibility of key routes so that users of spaces feel safe;
  - Giving consideration to the role that community development officers can play in helping to assist with community development, particularly in large new developments.
- 4.2.4 Where new communities are being built, facilities and amenities need to be in place to support new residents early on in the development, as well as enabling surrounding communities to access facilities. However, planning for new infrastructure alone will not build a community and new residents need to be supported to ensure they are able to integrate well to create a sustainable community.
- 4.2.5 Access to a range of open spaces, both private and communal, is an important element of well-designed new developments that help to create healthy communities with a good quality of life. It is well documented that people's experience of their local green space can affect their physical, mental and social health. All scales of development present opportunities to create and improve the public realm, open space and landscaped areas that that are dispersed throughout the development and equitable to all residents, respond to their context and the development as a whole and are designed as an integral part of the scheme. These spaces can take many forms, including:
  - Private amenity spaces gardens, balconies, terraces and roof terraces/gardens;
  - Formal and informal space, with consideration given to these spaces being multifunctional, seeking not just to provide residential amenity but also biodiversity enhancement and the integration of sustainable drainage;

<sup>&</sup>lt;sup>54</sup> PHE (2015). Local action on health inequalities. Reducing social isolation across the lifecourse. Practice resource: September 2015. Available online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/461120/3a\_So\_cial\_isolation-Full-revised.pdf

 Spaces that can become a focal point for communities that encourage social interaction and recreation, for example shared spaces and play areas. Consideration should be given to ways in which residents can be engaged in the upkeep of communal green spaces, for example areas that are set aside for food growing.

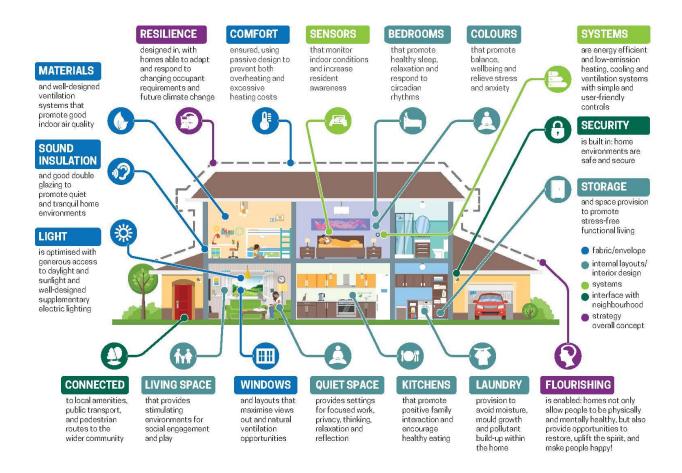
**Figure 13**: What makes a healthy neighbourhood (Infographic developed by PRP for UK-GBC)



- 4.2.6 The distinction between the public and private realms should be clear, with careful consideration to boundary treatments and the role of materials and landscape features in delineating these spaces e.g. the use of Sustainable Drainage Systems (SuDS) such as rills to mark the boundary between the public and private realm.
- 4.2.7 In flatted schemes, the aim should be to ensure that all flats have access to communal space that:
  - Is overlooked by surrounding development;
  - Is accessible to all residents of the block;
  - Is designed to take advantage of direct sunlight;
  - Has suitable management in place.

- 4.2.8 Biophilic design is another approach that can enhance health and wellbeing. Biophilic designs are those that connect people to nature and natural processes, enabling them to act in more productive ways. Examples of biophilic design, which can take place at a building or site wide scale, include:
  - Providing natural space with naturalised or planted areas around buildings and ensuring that windows overlook these areas;
  - Routing access paths through planted areas;
  - Bringing nature and planting inside buildings, including the use of green roofs;
  - The use of natural materials.
- 4.2.9 Moving on to the internal spaces of buildings, given we spend around 65% of our time at home<sup>55</sup> and around 90% of our time inside buildings<sup>56</sup> the quality of the internal environment can have a significant impact on health and wellbeing. Numerous research studies have shown the effects on mental health, social wellbeing and physical health. figure 14 below provides an illustration of the various factors that go into making a healthy home. All of these factors are worth considering, but focus is given below to a few examples felt to be of particular significance in Cambridge homes.

Figure 14: What makes a healthy home (infographic developed by PRP for UK-GBC)



https://www.ashrae.org/resources-publications/free-resources/10-tips-for-home-indoor-air-quality

<sup>56</sup> APPG for Healthy Homes and Buildings. Building our future. Laying the foundations for healthy homes and buildings. White Paper. October 2018. Available online at: <a href="https://healthyhomesbuildings.org.uk/">https://healthyhomesbuildings.org.uk/</a>

- 4.2.10 The quality of the air we breathe whether outside or inside the home can have significant health implications, but air pollution is usually associated with the external environment. However internal air quality can be of poor quality due to infiltration of external pollutants (e.g. nitrogen dioxide and particulates from vehicles) and build-up of internal contaminants such as cleaning products, VOCs and formaldehyde given off by furnishings and building materials, and the carcinogenic acetaldehyde from fabric softeners in drying laundry. Increasing levels of moisture is also an air quality issue as it results in levels of spores and dust mites that exacerbate health conditions such as asthma and allergies. There are a number of recommendation for the design of homes that ensure the maintenance of good air quality, such as dedicated laundry drying spaces, accessible windows (or other ventilation means) to allow trickle as well as purge ventilation, a home user guide to simply explain and advise how to operate and maintain the property, etc. Much of this good practice will also reduce energy use (see more information on moisture below). More examples are given in UK Green Building Council's Health and Wellbeing report<sup>57</sup>.
- 4.2.11 The ability to use and control natural light in our homes has a huge beneficial effect on wellbeing. Good levels of daylight and sunlight are shown to improve sleep, reduce anxiety and limit conditions like SAD (seasonal affective disorder). But designs should ensure problems of glare and overheating are not created, or that shading with curtains or blinds is essential. The use of as much natural light as possible during daylight hours will reduce the need for artificial light and thereby lower energy use. The design of artificial lighting should be carefully considered to enhance the home and be adaptable, adjustable and low energy.
- 4.2.12 Thermal comfort is a key factor in maintaining good health. The impact of cold housing specifically was estimated to cause a fifth of excess deaths in winter 2014-15 in England and Wales and at the other end of the scale overheating poses significant health risks (this is dealt with in other sections of this SPD). The fabric of buildings, insulation levels, orientation, glazing size and position and design of heating systems are all critical elements that will effect thermal levels in a home. In addition, the provision of comprehensive but simple information on how heating, ventilation and hot water systems operate should enable residents to easily make adjustments to suit their needs and keep energy consumption reasonable.
- 4.2.13 Moisture is produced from a range of sources in the home. Cooking, washing, showering, drying clothes, even breathing, add significant quantities of moisture to the indoor air. The increased airtightness of homes has reduced the ability of this moisture to escape, leading to problems with damp, condensation and mould. All these cause direct health problems with the increases in mould spores, bacteria, dust mites as well as the indirect effects of damage to furnishings and fittings. Minimising the production of moisture and then controlling ventilation and air circulation is key allowing moisture-filled air to escape outside, especially in areas like kitchens and bathrooms. Drying clothes indoors can add the equivalent of 10-15 litres of water to the air in the average home, so it is recommended to provide space to dry clothes outside, removing this source of moisture. Reducing moisture levels will also reduce energy consumption as damper air takes more

<sup>&</sup>lt;sup>57</sup> https://www.ukgbc.org/ukgbc-work/health-wellbeing-homes/

energy to heat. Clear information on the operation of ventilation systems and devices is recommended and any ongoing maintenance requirements clarified, as well as guidelines for maintaining adequate heating levels etc.

- 4.2.14 The same can be said of the buildings in which we work, and the impacts of 'sick building syndrome' have been well documented and recognised by the NHS. Data compiled and published by the UK Green Building Council notes that there are 570,000 hours lost to workplace absence caused by poor building design, and 30.7% or people do not consider that the design of their workplace enables them to work productively<sup>58</sup>.
- 4.2.15 For schemes utilising the BREEAM standard, credits are available under the health and wellbeing section, covering issues such as visual comfort, thermal comfort and indoor air quality. The WELL Building Standard, developed by the International WELL Building Institute also provides an approach that explores how design, operations and behaviours within the places we live, work, learn and play can be optimised to advance human health and wellbeing.
- 4.2.16 The Councils will be supportive of the integration of measures into the design of new developments that seek to enhance health and wellbeing, and we would recommend that consideration of some of the approaches referenced above be included with Sustainability Statements and Design and Access Statements.

## **Further guidance**

- UK Green Building Council (July 2016). Health and wellbeing in homes. Available online at: <a href="https://www.ukgbc.org/sites/default/files/08453%20UKGBC%20Healthy%20Homes%">https://www.ukgbc.org/sites/default/files/08453%20UKGBC%20Healthy%20Homes%</a>
  - 20Updated%2015%20Aug%20%28spreads%29.pdf
- For further information on the International WELL Building Institute and the WELL Standard, see: <a href="https://www.wellcertified.com/">https://www.wellcertified.com/</a>
- For information on Biophilic design and the BRE's Biophilic Office research project,
   see: <a href="https://www.bregroup.com/services/research/the-biophilic-office/">https://www.bregroup.com/services/research/the-biophilic-office/</a>
- South Cambridgeshire District Council (2011). Health Impact Assessment Supplementary Planning Document. Available online at: <a href="https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/health-impact-assessment-spd/">https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/health-impact-assessment-spd/</a>

## 4.3 Modern Methods of Construction

4.3.1 Modern Methods of Construction (MMC) utilises a range of approaches, such as off-site manufacturing and improvements to the supply-chain, and is intended to produce more, better quality homes in less time. Compared to more traditional forms of house building, MMC can improve predictability of work and costs, mitigate material shortages and the impact of developments on the local area. According to the Government's Industrial Strategy, MMC has the potential to reform the residential construction sector so as to meet its target of 300,000 new homes each year, and 1 million between 2017 and 2020.

<sup>58</sup> Data from: https://www.ukgbc.org/health-and-wellbeing/

- 4.3.2 From a sustainable design and construction perspective, some of the potential benefits of modern methods of construction include:
  - Improved energy performance;
  - Reduced construction waste, with some research suggesting off-site construction can generate up to 80% less waste compared to site-based building methods.
- 4.3.3 The Councils' will be supportive of the use of modern methods of construction as part of new developments, particularly where these deliver high quality design that exceeds baseline policy requirements for carbon reduction and helps to speed up the delivery of homes in the Greater Cambridge area.

## 4.4 Food growing as part of new developments

- 4.4.1 Policies in both the 2018 Cambridge and South Cambridgeshire Local Plans make recommendations for allotment provision as part of open space standards for new developments<sup>59</sup>. In many cases where provision of allotment on-site is not possible, planning contributions are sought. However, in addition to formal allotment provision, new developments offer the opportunity to think more creatively about incorporating opportunities for food growing into design.
- 4.4.2 The inclusion of food growing areas extends beyond conventional provision of gardens and allotments in that it can also include the creative use of roofs, balconies, atriums and courtyards where external space is limited. It could also include the use of edible plants as part of the landscaping of new developments, rather than the use of ornamental trees and shrubs.
- 4.4.3 There are many benefits associated with food growing as part of new developments, including:
  - Improving the physical and mental wellbeing of residents;
  - Increasing biodiversity;
  - Supporting low carbon lifestyles by reducing carbon emissions associated with long distance food transportation; and
  - Greening the urban landscape.
- 4.4.4 Provision of food growing will need to be considered and integrated with other uses for open space, for example provision of sport and play facilities and access to open space. Consideration will also need to be given to the on-going management of the growing space and who will harvest the produce.

## **Technical and practical considerations**

- 4.4.5 The following technical issues need to be taken into consideration as the starting point for food growing whatever the scale or circumstances or features being considered:
  - Land: how much external land, if any, is available on the site, or can be made

<sup>&</sup>lt;sup>59</sup> Cambridge Local Plan (2018) Policy 68: Open space and recreation provision through new development. South Cambridgeshire Local Plan (2018) Policy SC/7: Outdoor play space, informal open space and new development.

- available through the design process?
- Use of building: is there potential to incorporate growing spaces within, around and on the building? Design of balconies can provide small spaces for individuals to grow a limited selection of plants and are particularly suited to high density residential developments. It is critical to consider aspect. North facing balconies overshadowed by other high density buildings are unlikely to be suitable for food growing. Planting containers / window boxes can be incorporated into balcony design. Railings and structures joining neighbouring balconies can also be designed to support climbing / espaliered plants. Loading capacity for containers should be addressed at the design stage. Designing buildings with atriums or courtyards with adequate exposure to sunlight can create deliberate opportunities for food growing. Such situations will often create micro-climates allowing high value tender plants such as tomatoes and citrus fruits to be cultivated. Ground level beds or planters can be used. Care must be given in internal spaces to providing irrigation systems and allowing for water run-off.
- Aspect and light: Ideally growing spaces should be south facing. Food plants require
  exposure to direct sunlight during the growing period. If this is limited it may not
  prohibit food growing but it may restrict the choice of plants to those which require
  less light.
- Water: Any food growing will need a reliable water supply. Incorporating rainwater
  collection into any design is desirable, but easy access to mains water may also be
  necessary. Consideration should also be given to water delivery and storage systems
  to ensure risk of Legionella is controlled.
- **Wind**: Exposure to salty sea wind can damage plants and hinder their growth. Adequate protection needs to be planned into any growing space to allow crops to thrive.
- **Soil/growing medium**: An essential component for growing food which will vary according to the setting. Rooftop or container growing may require a more lightweight growing medium.
- **Compos**t: All food growing requires on-going inputs to maintain the fertility of the growing medium. Provision of on-site composting is one option to provide this and will also help manage organic 'waste' generated within the development.
- Contaminated Land: Soil in urban settings may need to be checked for contamination and quality. Any site must be made safe for its existing use. The suitability of the land for growing food should be assessed as previous or current land use could have created contamination of the soil. It is the developer's responsibility to ensure any risks posed are appropriately managed. Depending on the circumstances, soil contamination can be overcome by use of containers or raised beds.
- Access: Depending on who the site will be used by (elderly people, children, etc.)
  adequate access must be planned for. In addition, heavyweight materials such as
  compost and tools may need to be taken to the site a particular issue for rooftop or
  balcony growing.
- **Storage**: Adequate provision for the storage of tools and associated equipment will need to be integrated into the design.
- Management and Maintenance: Who will be growing the food and will there be a need to provide on-going management of the growing areas by a caretaker or external contractor?

4.4.6 Where creative approaches to food growing are proposed as part of new development, we would recommend early engagement with the local planning authority to ensure that all the above considerations are taken into account.

## 4.5 Smart technologies

- 4.5.1 Digital technology now underpins almost all aspects of modern living in every sphere across work, travel, leisure and health; and increasingly it impacts on the economic strength, sustainability and quality of life of all parts of the UK and beyond. Emerging "smart cities" technology, which is set to have an even greater economic impact in future, builds on this to utilise digital connectivity, sensors and data in innovative ways to support: efficient resource management; environmental management, traffic congestion and other city/town management challenges.
- 4.5.2 As new developments are planned and built within the Greater Cambridge area, there is an opportunity to embed technology into the way developments are planned, built and managed, helping to ensure that they can meet their sustainability objectives and help create better places to live. There are a number of areas identified where technology can play a role. Although separated out, it is important that different 'systems' within a development are considered as a whole e.g. electric vehicles are part of the mobility system but can also be part of the smart grid and impact on air quality. The key areas to consider are;
  - Planning/construction Advances in data collection, analysis and modelling can help
    in the planning and construction phases of developments. New concepts such as
    digital twins can support better understanding of the impacts of developments.
    Monitoring of sites, particularly transport (movement of cars, bikes, pedestrians etc.)
    can support the planning authority in understanding the impact of the development
    and performance against set thresholds. This can create a more dynamic relationship
    where data can support development phases being brought forward if impacts are
    less than anticipated or early intervention where thresholds are being missed.
  - Future Mobility New advances in mobility are supporting a move away from the car. New mobility models are emerging with shared and on-demand vehicles giving more flexibility than traditional public transport. Autonomous Vehicles are beginning to operate on campuses and segregated environments supporting first/last mile journeys. Micromobility models including shared bike schemes and in the future shared scooters make it easier for residents to access and use sustainable modes. To help residents use public transport new 'mobility as a Service', platforms are being developed which make the booking and payment for multi modal journeys easy as well as giving travellers information in real time. These technologies can reduce car movements and support increased trips by sustainable modes.
  - Smart Grids Smart cities can use technology to intelligently provide low or zero carbon areas by supplying carbon-free public transport, smart grids, green infrastructure and more energy efficient homes. Technology is instrumental in transitioning to a low carbon economy and in doing so contributing to climate adaptation and mitigation. Close to 70% of energy gets wasted before reaching the pace of consumption. ICT enabled solutions in smart cities in the form of smart grids and meters have the potential to deliver energy more efficiently while also making

- better use of existing grid infrastructure, which is already highly constrained in Greater Cambridge. Smart technology can also be used to target congestion and bolster the use of electric and hybrid vehicles.
- Environment Environmental sensors can be deployed to measure a number of
  environmental factors across a development. They can measure water levels and
  flows, measure waste and have been deployed particularly in underground bins and
  they can measure the air quality and noise impacts of a development. All this data
  can be used to support mitigation works and give a much better understanding of the
  performance of buildings and development.
- 4.5.3 Smart city concepts are not just applicable to cities but to communities on a variety of scales, helping these communities become Smart Places. The Smart Places Initiative, which forms part of the Connecting Cambridgeshire Programme led by Cambridgeshire County Council, is looking at how smart solutions can be used in areas of Cambridgeshire. Working with communities, local authorities, town councils, businesses and academia, the project is seeking to use data from sensors and other devices in villages, towns and cities to provide the local area with information to help influence behaviours and improve economic strength, sustainability and quality of life for local residents.
- 4.5.4 The Councils will be supportive of schemes that look to integrate smart technologies into the design of transport and energy infrastructure, smart home technologies and other technologies that will help to enhance the quality of life of those living and working in the Greater Cambridge area as well as improving the environmental performance of new development. Collaboration with the Smart Cambridge Initiative at Cambridgeshire County Council would also be supported.

## **Further guidance**

4.5.5 For further guidance on smart technologies and the Smart Places and Smart Cambridge Initiative see: <a href="https://www.connectingcambridgeshire.co.uk/smart-places/smart-cambridge/">https://www.connectingcambridgeshire.co.uk/smart-places/smart-cambridge/</a>

## 4.6 Responsible sourcing of building materials and embodied carbon

- 4.6.1 The construction industry is the single largest user of materials in the UK. 420 million tonnes of materials are consumed in construction annually. In addition to this, about 10% of national energy consumption is used in the production and transport of construction products and materials.
- 4.6.2 There are a wide range of environmental impacts associated with material production, use and waste. These include:
  - Climate change as a result of greenhouse gas emissions;
  - Acid deposition;
  - Ozone depletion;
  - Air pollution (including smog);
  - Low-level ozone creation;
  - Water eutrophication;

- Habitat loss and deforestation;
- Fossil fuel depletion;
- Minerals extraction;
- Water wastage.
- 4.6.3 Certification schemes exist to increase both public and industry confidence that risks are being minimised or avoided and their use ensures that specifiers are able to demonstrate the responsible nature of their selection decisions. Areas for consideration include:
  - The use of legally harvested and traded timber and the use of recognised certification schemes for other construction materials, with reference to the BRE's Green Guide;
  - Development of sustainable procurement plans to guide developer teams towards the specification of responsibly sourced materials;
- 4.6.4 An emerging area for consideration in selecting construction materials is the embodied carbon locked within those materials. Embodied carbon refers to carbon dioxide emitted during the manufacture, transport and construction of building materials, together with end of life emissions. Consideration of embodied carbon is likely to become increasingly important as we transition to a low and indeed zero carbon society.
- 4.6.5 The UK Green Building Council<sup>60</sup> has highlighted that there remains a significant, and still largely untapped, opportunity to address the embodied carbon of a building or project, alongside its operational efficiency, of a building. The greatest opportunity for impact on embodied carbon comes at the design stage, in particular in the building structure. If opportunities are not taken at this early stage, the embodied carbon savings are lost for the entire lifetime of the building.
- 4.6.6 The Councils' will be supportive of measures to consider the embodied carbon of materials used within the built environment, including the specification of building materials with lower embodied energy. We would recommend early engagement as part of the pre-application process for schemes looking to utilise materials with low embodied carbon.

## **Further guidance**

- 4.6.7 For further guidance on the responsible sourcing of materials and embodied carbon, please see:
  - Green book live. Available online at: <a href="http://www.greenbooklive.com/">http://www.greenbooklive.com/</a>
  - RICS professional standards and guidance, UK. Whole life carbon assessment for the built environment, 1st edition, November, 2017. Available online at: <a href="https://www.rics.org/globalassets/rics-website/media/news/whole-life-carbon-assessment-for-the--built-environment-november-2017.pdf">https://www.rics.org/globalassets/rics-website/media/news/whole-life-carbon-assessment-for-the--built-environment-november-2017.pdf</a>
  - WRAP Embodied Carbon Database: http://ecdb.wrap.org.uk/Default.aspx

https://www.ukgbc.org/sites/default/files/Tackling%20embodied%20carbon%20in%20buildings.pdf

## **Appendix 1: Sustainability Checklist**

## 1a -Sustainability checklist for applications in Cambridge

CODE	CHECKLIST	SUMMARY OF APPROACH	
TRANSPORT – SPD SECTION 2			
T.1	Have you demonstrated that the development is in the most suitable location for access by public transport, walking and cycling, reducing the need to travel by private car?		
Т.2	Have you demonstrated how the development proposals give priority for walking and cycling over cars, linking the development with the surrounding walking and cycling network including planned projects?		
Т.3	Will the proposed walking and cycling provision be in place by first occupation of the development so that sustainable travel patterns can be established at an early stage?		
T.4	Where car parking is provided, has provision been made for electric vehicle charging?		
T.5	Have any 'softer' measures been included, to encourage uptake of more sustainable modes of transport?		
T.6	Does the development inhibit the expansion of high quality public transport/cycling and walking routes?		
ENERGY A	ENERGY AND CARBON REDUCTION – SPD SECTION 3.2		
En.1	For residential schemes have you followed the energy hierarchy in order to achieve the 44% reduction on Part L 2006 (19% reduction on Part L 2013) requirement set out in policy 28?		

CODE	CHECKLIST	SUMMARY OF APPROACH
En.2	For non-residential development, have you carried out a BREEAM pre-assessment and met the mandatory energy requirements for BREEAM 'excellent' within Ene 01?	
En.3	How will you ensure that where renewable/low carbon technologies have been included in the approach to meeting the above carbon reduction requirements, these will be successfully integrated into the design of the development?	
WATER EF	FICIENCY – SPD SECTION 3.3	
Wat.1	For residential development have you prepared a Water Conservation Strategy setting out how your proposal will meet the requirement for potable water use of no more than 110 litres/person/day?	
Wat.2	For non-residential development have you included information to demonstrate that your proposal will be able to meet the requirement for achievement of 5 credits from Wat01 of the BREEAM assessment?	
Wat.3	Have you given consideration to water re-use as part of the sustainable drainage strategy for the site as part of an integrated approach to water management?	
CLIMATE (	CHANGE ADAPTATION – SPD SECTION 3.4	
Ca.1	Have you integrated measures to design out the risk of overheating, giving priority to architectural approaches in line with the cooling hierarchy?	
Ca.2	Have you undertaken overheating analysis following the CIBSE methodology and utilising future climate scenarios?	
Ca.3	Have you considered the role of green infrastructure and cool materials in enhancing the adaptive capacity of your proposal?	

CODE	CHECKLIST	SUMMARY OF APPROACH
Ca.4	Where your proposal has flat roofs, have these been designed as green or brown roofs in line with the requirements of policy 31?	
Ca.5	Where there are existing trees on your site, including ancient and veteran trees, how has the retention of these trees informed the layout of your development?	
Ca.6	How have you integrated the planting of new trees into your proposals, giving consideration to the right tree in the right place principle?	
Ca.7	Where you are proposing to utilise thermal mass to help regulate internal temperatures, has this thermal mass been designed to be exposed and what is the strategy to enable night purge ventilation?	
BIODIVERS	SITY – SPD SECTION 3.5	
Bio.1	Has a Preliminary Ecological Assessment and Protected Species Scoping Survey <sup>61</sup> been conducted, with sufficient detail given the nature and size of the site and the proposed development?	
Bio.2	If a protected or priority species and/or habitats have been identified, has a specialist been engaged to conduct a detailed survey? <a href="https://events.cieem.net/ProfessionalDirectory/ProfessionalDirectory.aspx">https://events.cieem.net/ProfessionalDirectory/ProfessionalDirectory.aspx</a>	
Bio.3	Has/will all the relevant information from these surveys been provided?	
Bio.4	Has the Mitigation hierarchy been followed, demonstrating how	

<sup>&</sup>lt;sup>61</sup> Surveys should be carried out in accordance with CIEEM guidance: <a href="https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/">https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/</a>

CODE	CHECKLIST	SUMMARY OF APPROACH
	existing habitats and species have been protected in the proposed	
	ecological and landscape strategy?	
	http://www.csbi.org.uk/our-work/mitigation-hierarchy-guide/	
Bio.5	Has the mitigation hierarchy been followed, demonstrating how any	
	potentially adverse effects have been mitigated?	
Bio.6	Has the mitigation hierarchy been followed, demonstrating that	
	adequate compensation measures have been proposed on or	
	offsite, where it is agreed that damage is unavoidable?	
Bio.7	Has it been demonstrated that the proposals will deliver	
	biodiversity net gain, with use of the DEFRA Biodiversity Offsetting	
	metric?	
Bio.8	For major development, has the Natural Cambridgeshire Local	
	Nature Partnership (LNP) Developing with Nature Toolkit been	
	adopted?	
Bio.9	Has a suitable biodiversity management and monitoring strategy for	
	the site been proposed?	
POLLUTIO	ON – SPD SECTION 3.6	
LIGHT PO	LLUTION	
Pol.1	For all development with artificial lighting has a statement of the	
	need for lighting been submitted and have the principles of an	
	external lighting strategy that meets the requirements of the local	
	plan policy/SPD been set out?	
Pol.2	Will the final detailed external lighting design / scheme be in	
	accordance with the guidance and principles set out in the light	
	pollution section of the SPD?	
Pol.3	Has the development taken measures to reduce light pollution	

CODE	CHECKLIST	SUMMARY OF APPROACH
	impacts on character, residential amenity and biodiversity?	
Pol.4	For substantive large-scale lighting installations such as the floodlighting of external recreational and sporting facilities/pitches or transport interchanges has a detailed lighting assessment been undertaken by a qualified Lighting Engineer or lighting company in accordance with Section 3.6.24 of the SPD?	
Pol.5	For Environmental Impact Assessment (EIA) development has a lighting impact assessment been undertaken having regard to and in accordance with the Institute of Lighting Professionals 'PLG04 - Guidance on Undertaking Environmental Lighting Impact Assessments'?	
Pol.6	For any proposal for the display of illuminated advertisements has the relevant information been provided?	
CONTAMI	INATED LAND	
Pol.7	Is the development site's land use history known? Is the site potentially affected by land contamination (including ground water contamination) that could result in unacceptable risks e.g. a previous potentially contaminative industrial or similar use on site or ground gases?  If yes, as a minimum, has a land contamination desk top study with	
	risk assessment and site walk-over been undertaken and included with the application?	
NOISE		
Pol.8	For major Noise Sensitive Development (NSD) located in a noisy environment or near to a specific existing noise generating source e.g. near to a busy road, railway line, noisy commercial/industrial	

CODE	CHECKLIST	SUMMARY OF APPROACH
	premises including building services plant/equipment has an	
	appropriate acoustic assessment /report been undertaken in	
	accordance with the noise assessment process and submission	
	requirements set out in the noise section of the SPD?	
Pol.9	For Noise Generating Development (NGD) such as industrial	
	commercial/trade or business premises and uses including plant	
	and equipment has an appropriate acoustic assessment/report	
	been undertaken in accordance with the noise assessment process	
	and submission requirements set out in the noise section of the	
	SPD?	
Pol.10	Has an 'Acoustic Design Statement' been included demonstrating	
	that the principles of good acoustic design and noise mitigation will	
	be followed for both NSD and NGD?	
Pol.11	Has the development taken measures to reduce existing noise and	
	enhance the existing soundscape of the site?	
Pol.12	For all development has the impact of demolition construction	
	noise/vibration been assessed and mitigation proposed?	
Pol.13	For substantial development or infrastructure projects has a Noise	
	and Vibration Demolition and Construction Environmental	
	Management Plan been provided?	
Pol.14	If the proposals are likely to generate a significant amount of traffic	
	(defined as road traffic movements greater than 5% of Annual	
	Average Daily Traffic) has a noise impact assessment of any increase	
	in local traffic noise been undertaken?	
AIR POLLU	TION - If the answer to any of the questions below is yes, then an	Air Quality Assessment is likely to be required and
further gu	uidance should be sought from the Environmental Quality and Gro	owth team
Pol.15	Will the development require an Environmental Impact	

CODE	CHECKLIST	SUMMARY OF APPROACH
	Assessment?	
Pol.16	Will the proposals interfere with the Air Quality actions stated in the Local Transport Plan <sup>62</sup> or Local Air Quality Action Plan <sup>63</sup>	
Pol.17	Is the development part of a large scale major redevelopment that might result in long-term construction generating HGV flows more than 100 movements per day and/or demolition and construction dust?	
Pol.18	<ul> <li>Will the development significantly alter the road or rail network?</li> <li>For example,</li> <li>realign roads, i.e. changing the proximity of receptors to traffic lanes</li> <li>Introduce a new road</li> <li>Introduce a new junction</li> <li>Remove an existing junction near to relevant receptors.</li> <li>Change/introduce a junction that causes traffic to significantly accelerate or decelerate, e.g. traffic lights, or roundabouts.</li> <li>Introduce or change a bus station</li> </ul>	
Pol.19	Will the development significantly alter flows or speeds on busy roads greater than 10,000 vehicles per day or any road within an AQMA? Where 'significantly' is defined as including any of the following:  • Change in average vehicle speed of 5kph or a significant increase in congestion  • A change in the modal split to a greater percentage of	

<sup>62</sup> Currently in preparation
63 https://www.cambridge.gov.uk/air-quality-action-plan

CODE	CHECKLIST	SUMMARY OF APPROACH
	<ul> <li>Heavy Duty Vehicles (HDVs)</li> <li>A change of PSV and/or HDV flows of more than 25 AADT within or adjacent to an AQMA, more than 100 AADT elsewhere.</li> <li>Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors. (LDV = cars and small vans &lt;3.5t gross vehicle weight). A change of LDV flows of more than 100 AADT within or adjacent to an AQMA, more than 500 AADT elsewhere.</li> </ul>	
Pol.20	Does the development provide more than <b>50</b> new parking spaces or more than <b>25</b> if it is within an existing AQMA?	
Pol.21	Does the development have an underground car park with extraction system where the ventilation extract for the car park will be within 20 m of a relevant receptor and coupled with the car park having more than 100 movements per day.	
Pol.22	Is the development within an AQMA and a sensitive development (Residential, school, healthcare, childcare etc.)?	
Pol.23	For commercial development, does the development include a prescribed industrial process under the PPC regulations <sup>64</sup> , including MCPD <sup>65</sup> ?	
Pol.24	Is the development a sensitive development close to an existing prescribed process or other source of air pollution, such as a busy road?	
Pol.25	May the development create a street canyon or reduce dispersion of pollutants?	

https://www.gov.uk/government/publications/local-authority-pollution-control-general-guidance-manual https://www.gov.uk/government/consultations/improving-air-quality-reducing-emissions-from-medium-combustion-plants-and-generators

CODE	CHECKLIST	SUMMARY OF APPROACH
Pol.26	Does the energy strategy for your proposal introduce Combined Heat and Power (CHP) plant, other centralised boilers, or generators? Do these conform with the emissions standards set out in Appendix 3 of this SPD?	
ODOUR ANI	O OTHER FUGITIVE EMISSIONS TO AIR	
Pol.27	For all industrial, commercial or business uses that generate odours or if substantial ventilation or extraction equipment is proposed has an overarching outline ventilation statement/strategy been provided?	
Pol.28	For low to medium odour risk generating developments such as hot food premises/commercial kitchens has an appropriate odour risk assessment been undertaken including the provision of the information requested in paragraphs 3.6.193 – 3.6.196 of the SPD?	
Pol.29	For higher risk odour generating uses, such as a new sewage treatment works or when odour sensitive uses are proposed near such uses, has a detailed odour assessment been undertaken in accordance with the Institute of Air Quality Management document 'Guidance on the assessment of odour for planning (IAQM, Version 1.1 - July 2018)'?	
SUSTAINAB	LE DRAINAGE SYSTEMS – SPD SECTION 3.7	
SuDS.1	Have you completed the pre-application Checklist (Appendix E) and Surface Water Drainage Pro-forma (Appendix F) of the <a href="Cambridgeshire Flood and Water SPD">Cambridgeshire Flood and Water SPD</a>	
CONSTRUCT	TON STANDARDS (BREEAM) – SPD SECTION 3.8	
Cs.1	If your proposal involves the re-use/re-development of existing buildings, have you developed a bespoke approach to sustainable construction standards and what form does this bespoke approach	

CODE	CHECKLIST	SUMMARY OF APPROACH
	take?	
Cs.2	Where BREEAM has been used, has a BREEAM pre-assessment been	
	prepared for submission with your planning application?	
HERITAGE	ASSETS AND CLIMATE CHANGE – SPD SECTION 3.10	
Ha.1	Where works to a heritage asset to address climate change are	
	proposed, have you undertaken studies to ensure that your	
	proposals are based on a thorough understanding of the building's	
	historic evolution and construction (where these matters relate to	
	the heritage significance of the asset), architectural and historic	
	significance?	
Ha.2	Have you undertaken an assessment of the building's existing	
	environmental performance, and how have your proposals been	
	informed by this work?	
Ha.3	Have you developed a building monitoring and management	
	strategy in order to assess the ongoing impact of the implemented	
	measures on the asset's historic fabric?	
Ha.4	How have you factored in the potential for remediation works	
	should ongoing monitoring identify that measures are leading to	
	harm to the heritage asset?	
RECYCLIN	G AND WASTE FACILITIES CONSTRUCTION WASTE – SPD SECTION 3.11	
Wr.1	Has the size and location of recycling and waste facilities, both for	
	storage and collection, been factored into the design of the	
	proposals using the requirements set out in the RECAP Waste	
	Management Design Guide SPD and associated Toolkit?	
Wr.2	Have you completed Cambridge City Council's Waste and recycling	
	checklist for developers?	
Wr.3	Have measures been put in place to:	

CODE	CHECKLIST	SUMMARY OF APPROACH
	<ul> <li>Reduce the amount of construction waste generated by the proposals, including the use of single-use plastics where</li> </ul>	
	alternative options exist; and	
	<ul> <li>Re-use and recycle remaining construction waste</li> <li>(Non-residential schemes should refer to the BREEAM assessment)</li> </ul>	
OTHER SU	JSTAINABILITY CONSIDERATIONS – SPD SECTION 4	
Osc.1	Has a target been set for improving the environmental impact of materials used in constructing the development, with consideration given to the embodied carbon of materials?	
	Non-residential schemes should refer to the BREEAM assessment. Residential schemes should give consideration to use of the Green Guide to Specification, certification schemes for specific materials with further information available at: <a href="http://www.greenbooklive.com/">http://www.greenbooklive.com/</a>	
Osc.2	Has consideration been given to providing food growing opportunities as part of the development, in the form of a private amenity space of the appropriate size and aspect? Have long term management and maintenance arrangements been considered in the design of these spaces?	
Osc.3	Have measures been integrated into the design to create healthy indoor environments, given consideration to issues such as daylight, ventilation and humidity control and the use of materials with low toxicity?	
Osc.4	For non-residential development, has consideration been given to creating a healthy indoor working environment, giving consideration to elements such as biophilic design?	

CODE	CHECKLIST	SUMMARY OF APPROACH
Osc.5	Has consideration been given to the role of smart technologies in	
	the design of your proposals, giving consideration to the role that	
	such technologies could play in both the construction and	
	operational phases of the development?	

## **1b** – Sustainability checklist for applications in South Cambridgeshire

CODE	CHECKLIST	SUMMARY OF APPROACH		
TRANSPO	TRANSPORT – SPD SECTION 2			
T.1	Have you demonstrated that the development is in the most suitable location for access by public transport, walking and cycling, reducing the need to travel by private car?			
T.2	Have you demonstrated how the development proposals give priority for walking and cycling over cars, linking the development with the surrounding walking and cycling network including planned projects?			
Т.3	Will the proposed walking and cycling provision be in place by first occupation of the development so that sustainable travel patterns can be established at an early stage?			
T.4	Where car parking is provided, has provision been made for electric vehicle charging?			
T.5	Have any 'softer' measures been included, to encourage uptake of more sustainable modes of transport?			
T.6	Does the development inhibit the expansion of high quality public transport/cycling and walking routes?			
ENERGY A	ND CARBON REDUCTION – SPD SECTION 3.2			
En.1	Has the 10% CO₂ reduction required been established using SAP/SBEM calculations or other appropriate benchmarks?			
En.2	Have other on-site energy requirements such as lighting of car parks, street lights, heating and lighting of communal areas and lifts been included in the calculations?			
En.3	Has the Energy Statement form been completed (see Appendix 5)?			
En.4	Has initial feasibility work into renewable options for the			

	development been provided?	
En.5	Has the contribution that passive solar design will make to the	
	energy requirements of the development been provided (optional)?	
En.6	Has it been clearly indicated which technology(s) has been chosen	
	and demonstrated how this/these meet the 10% CO <sub>2</sub> reduction	
	requirement?	
En.7	Has visual information been provided to show the technology(s)	
	has/have been successfully integrated into the development?	
En.5	Have you demonstrated how any adverse impacts on residential	
	amenity (e.g. air quality impacts or noise) can be mitigated in	
	accordance with Section 3.5 of this SPD? Where gas CHP is	
	proposed, evidence will need to be provided to demonstrate that it	
	meets the emissions standards set out in Appendix 3 of this SPD.	
En.6	For large scale development likely to take place over a number of	
	years, have you taken into consideration Government proposals to	
	stop new housing from having gas boilers from 2025?	
En.7	For growth areas and new settlements, has consideration been	
	given to site-wide approaches to renewable and low carbon energy	
	provision?	
WATER EF	FICIENCY – SPD SECTION 3.3	
Wat.1	For residential development have you prepared a Water	
	Conservation Strategy setting out how your proposal will meet the	
	requirement for potable water use of no more than 110	
	litres/person/day?	
Wat.2	For non-residential development have you included information to	
	demonstrate that your proposal will be able to meet the	
	requirement for achievement of 2 credits from Wat01 of the	
	BREEAM assessment?	

Wat.3	Have you given consideration to water re-use as part of the	
	sustainable drainage strategy for the site as part of an integrated	
	approach to water management?	
CLIMATE CH	HANGE ADAPTATION – SPD SECTION 3.4	
Ca.1	Have you integrated measures to design out the risk of overheating,	
	giving priority to architectural approaches in line with the cooling	
	hierarchy?	
Ca.2	Have you undertaken overheating analysis following the CIBSE	
	methodology and utilising future climate scenarios?	
Ca.3	Have you considered the role of green infrastructure and cool	
	materials in enhancing the adaptive capacity of your proposal?	
Ca.4	Where there are existing trees on your site, including ancient and	
	veteran trees, how has the retention of these trees informed the	
	layout of your development?	
Ca.5	How have you integrated the planting of new trees into your	
	proposals, giving consideration to the right tree in the right place	
	principle?	
Ca.6	What other measures have been incorporated into the	
	development to enable it to cope with predicted climate change	
	impacts, without increasing the use energy consuming ventilation	
	and cooling?	
Ca.7	Where you are proposing to utilise thermal mass to help regulate	
	internal temperatures, has this thermal mass been designed to be	
	exposed and have you developed a strategy to enable night purge	
	ventilation?	
BIODIVERSI	ITY – SPD SECTION 3.5	

Bio.1	Has a Preliminary Ecological Assessment and Protected Species Scoping Survey <sup>66</sup> been conducted, with sufficient detail given the nature and size of the site and the proposed development?	
Bio.2	If a protected or priority species and/or habitats have been identified, has a specialist been engaged to conduct a detailed survey? <a href="https://events.cieem.net/ProfessionalDirectory/ProfessionalDirectory.aspx">https://events.cieem.net/ProfessionalDirectory/ProfessionalDirectory.aspx</a>	
Bio.3	Has/will all the relevant information from these surveys been provided?	
Bio.4	Has the mitigation hierarchy been followed, demonstrating how existing habitats and species have been protected in the proposed ecological and landscape strategy? <a href="http://www.csbi.org.uk/our-work/mitigation-hierarchy-guide/">http://www.csbi.org.uk/our-work/mitigation-hierarchy-guide/</a>	
Bio.5	Has the mitigation hierarchy been followed, demonstrating how any potentially adverse effects have been mitigated?	
Bio.6	Has the mitigation hierarchy been followed, demonstrating that adequate compensation measures have been proposed on or offsite, where it is agreed that damage is unavoidable?	
Bio.7	Has it been demonstrated that the proposals will deliver biodiversity net gain, with use of the DEFRA Biodiversity Offsetting metric?	
Bio.8	For major development, has the Natural Cambridgeshire Local Nature Partnership (LNP) Developing with Nature Toolkit been adopted?	

<sup>&</sup>lt;sup>66</sup> Surveys should be carried out in accordance with CIEEM guidance: <a href="https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/">https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/</a>

Bio.9	Has a suitable biodiversity management and monitoring strategy for		
	the site been proposed?		
POLLUTION	– SPD SECTION 3.6		
LIGHT POLI	UTION		
Pol.1	For all development with artificial lighting has a statement of the need for lighting been submitted and have the principles of an external lighting strategy that meets the requirements of the local plan policy/SPD been set out?		
Pol.2	Will the final detailed external lighting design / scheme be in accordance with the guidance and principles set out in the light pollution section of the SPD?		
Pol.3	Has the development taken measures to reduce light pollution impacts on character, residential amenity and biodiversity?		
Pol.4	For substantive large-scale lighting installations such as the floodlighting of external recreational and sporting facilities/pitches or transport interchanges has a detailed lighting assessment been undertaken by a qualified Lighting Engineer or lighting company in accordance with Section 3.6.24 of the SPD?		
Pol.5	For Environmental Impact Assessment (EIA) development has a lighting impact assessment been undertaken having regard to and in accordance with the Institute of Lighting Professionals 'PLG04 - Guidance on Undertaking Environmental Lighting Impact Assessments'?		
Pol.6	For any proposal for the display of illuminated advertisements has the relevant information been provided?		
CONTAMIN	CONTAMINATED LAND		
Pol.7	Is the development site's land use history known? Is the site potentially affected by land contamination (including ground water		

	contamination) that could result in unacceptable risks e.g. a previous potentially contaminative industrial or similar use on site or ground gases?	
	If yes, as a minimum, has a land contamination desk top study with risk assessment and site walk-over been undertaken and included with the application?	
NOISE POI	LLUTION	
Pol.8	For major Noise Sensitive Development (NSD) located in a noisy environment or near to a specific existing noise generating source e.g. near to a busy road, railway line, noisy commercial/industrial premises including building services plant/equipment has an appropriate acoustic assessment /report been undertaken in accordance with the noise assessment process and submission requirements set out in the noise section of the SPD?	
Pol.9	For Noise Generating Development (NGD) such as industrial commercial/trade or business premises and uses including plant and equipment has an appropriate acoustic assessment/report been undertaken in accordance with the noise assessment process and submission requirements set out in the noise section of the SPD?	
Pol.10	Has an 'Acoustic Design Statement' been included demonstrating that the principles of good acoustic design and noise mitigation will be followed for both NSD and NGD?	
Pol.11	Has the development taken measures to reduce existing noise and enhance the existing soundscape of the site?	
Pol.12	For all development has the impact of demolition construction noise/vibration been assessed and mitigation proposed?	

Pol.13	For substantial development or infrastructure projects has a Noise and Vibration Demolition and Construction Environmental Management Plan been provided?	
Pol.14	If the proposals are likely to generate a significant amount of traffic (defined as road traffic movements greater than 5% of Annual Average Daily Traffic) has a noise impact assessment of any increase in local traffic noise been undertaken?	
<b>AIR QUAL</b>	ITY	
Pol.15	Air Quality: How have you incorporated practical measures to mitigate the transport impacts of development on local air quality into the development (i.e. Low Emission Strategy for major developments)?	
Pol.16	Have you undertaken an air quality impact assessment if the development is in particularly congested location or where there are particular travel problems, if generating large number of trips, if near or within the Air Quality Management Area?	
ODOUR A	ND OTHER FUGITIVE EMISSIONS	
Pol.17	For all industrial, commercial or business uses that generate odours or if substantial ventilation or extraction equipment is proposed has an overarching outline ventilation statement/strategy been provided?	
Pol.18	For low to medium odour risk generating developments such as hot food premises/commercial kitchens has an appropriate odour risk assessment been undertaken including the provision of the information requested in paragraphs 3.6.193 – 3.6.196 of the SPD?	
Pol.19	For higher risk odour generating uses, such as a new sewage treatment works or when odour sensitive uses are proposed near such uses, has a detailed odour assessment been undertaken in	

	accordance with the Institute of Air Quality Management document	
	'Guidance on the assessment of odour for planning (IAQM, Version	
	1.1 - July 2018)'?	
SUSTAINA	BLE DRAINAGE SYSTEMS – REFER TO THE CAMBRIDGESHIRE FLOOD AND	WATER SPD
SuDS.1	Have you completed the pre-application Checklist (Appendix E) and	
	Surface Water Drainage Pro-forma (Appendix F) of the	
	Cambridgeshire Flood and Water SPD	
SUSTAINA	BLE SHOW HOMES – SPD SECTION 3.9	
SuSh.1	For residential developments that will include a show home, have	
	you given consideration to the range of measures that will be	
	incorporated into the Show Home to enable home buyers to	
	purchase additional options to enhance the environmental	
	performance of their new home?	
HERITAGE	ASSETS AND CLIMATE CHANGE – SPD SECTION 3.10	
Ha.1	Where works to a heritage asset to address climate change are	
	proposed, have you undertaken studies to ensure that your	
	proposals are based on a thorough understanding of the building's	
	historic evolution and construction (where these matters relate to	
	the heritage significance of the asset), architectural and historic	
	significance?	
Ha.2	Have you undertaken an assessment of the building's existing	
	environmental performance, and how have your proposals been	
	informed by this work?	
Ha.3	Have you developed a building monitoring and management	
	strategy in order to assess the ongoing impact of the implemented	
	measures on the asset's historic fabric?	
Ha.4	How have you factored in the potential for remediation works	
	should ongoing monitoring identify that measures are leading to	
	, , , , , , , , , , , , , , , , , , , ,	

	harm to the heritage asset?	
RECYCLIN	IG AND WASTE FACILITIES – SPD SECTION 3.11	
Wr.1	Has the size and location of recycling and waste facilities, both for storage and collection, been factored into the design of the proposals using the requirements set out in the RECAP Waste Management Design Guide SPD and associated Toolkit?	
Wr.2	Has it been shown that the average and maximum distances for building users to move their waste to the storage/collection points is within the guidelines set out in the relevant guidance? If these targets are exceeded, have justification and mitigation measures been proposed?	
Wr.3	<ul> <li>Have measures been put in place to:         <ul> <li>Reduce the amount of construction waste generated by the proposals, including the use of single-use plastics where alternative options exist; and</li> <li>Re-use and recycle remaining construction waste</li> </ul> </li> </ul>	
OTHER SU	JSTAINABILITY CONSIDERATIONS – SPD SECTION 4	
Osc.1	Has a target been set for improving the environmental impact of materials used in constructing the development, with consideration given to the embodied carbon of materials?	
	Non-residential schemes should refer to the BREEAM assessment. Residential schemes should give consideration to use of the Green Guide to Specification, certification schemes for specific materials with further information available at: <a href="http://www.greenbooklive.com/">http://www.greenbooklive.com/</a>	
Osc.2	Has consideration been given to providing food growing opportunities as part of the development, in the form of a private	

	amenity space of the appropriate size and aspect? Have long term management and maintenance arrangements been considered in the design of these spaces?	
Osc.3	Have measures been integrated into the design to create healthy indoor environments, given consideration to issues such as daylight, ventilation and humidity control and the use of materials with low toxicity?	
Osc.4	For non-residential development, has consideration been given to creating a healthy indoor working environment, giving consideration to elements such as biophilic design?	
Osc.5	Has consideration been given to the role of smart technologies in the design of your proposals, giving consideration to the role that such technologies could play in both the construction and operational phases of the development?	
Osc.6	For new settlements covered by policies within Chapter 3 of the Local Plan, how do you plan to meet policy requirements to exceed baseline sustainable design and construction requirements established by the Local Plan? This could include the use of the BREEAM Communities certification scheme in light of the supporting text to policy CC/1	

# Appendix 2: Carbon reduction template for inclusion in Carbon Reduction Statement for residential development – Cambridge developments only.

### Notes:

- 1. The table should be completed for each unit proposed as part of a development in line with the methodology for calculating compliance with EneO1 of the withdrawn Code for Sustainable Homes. Where a building contains multiple dwellings, it is acceptable to assess this issue based on the average energy performance of all dwellings within the building (e.g. for apartments or terraced housing). The area weighted average DER and TER must be calculated in accordance with the block averaging methodology defined in clauses 2.7 and 2.16 of Approved Document L1A. For dwellings where area weighting does not apply, the carbon reduction requirement should be achieved for each unit.
- 2. The Target Emission Rate (TER) and Dwelling Emission Rate (DER) should be derived from the calculations carried out for Building Regulations compliance (Part L).
- 3. Sample SAP calculations should be appended to the Carbon Reduction Statement as evidence of compliance in addition to submission of the table.
- 4. Alongside the table below, the main body of the Statement should include a summary of the measures proposed to reduce carbon emissions following the energy hierarchy (be lean, be clean and be green). Where renewable energy technologies are proposed to meet some of the carbon reduction requirement, the location and layout of those technologies should be shown on relevant drawings (for example, roof plans should show the layout of any proposed photovoltaic panels).
- 5. Where SAP calculations are yet to be completed, the Carbon Reduction Statement should set out the general approach to meeting policy requirements, with a planning condition used to secure submission of carbon calculations once SAP calculations have been carried out.

Unit number/address	Target Emission Rate (TER)	Dwelling Emission Rate (DER)	% Improvement on Part L 2013

# Appendix 3: Gas Fired Combined Heat and Power (CHP) Advice note for developers in Cambridge and South Cambridgeshire on reducing the impact on Air Quality

## **Background**

- 1. Combined Heat and Power (CHP) is the co-production of electricity and heat and is considered to be a low carbon technology.
- 2. Policies 28 and 29 of the Cambridge Local Plan (2018) and policy CC/3 of the South Cambridgeshire Local Plan (2018) are committed to sustainable design and construction with all developments being designed to minimise carbon and other greenhouse gas emissions. Gas fired CHP is a low carbon technology and may be a viable solution for meeting these policy requirements. However despite these benefits, CHP can lead to a localised worsening of air quality as fuel combustion gives rise to air pollutants if not correctly specified, installed and maintained.
- 3. The city has an Air Quality Management Area (AQMA) for nitrogen dioxide (NO<sub>2</sub>) as levels exceed health based standards as agreed with the EU. The AQMA extends across much of the central part of the city<sup>67</sup>. The Air Quality Action Plan (AQAP) 2018 2023<sup>68</sup> outlines measures to improve and maintain air quality across the city despite pressures from continued growth. Some of these measures will be delivered via the planning process. Air quality issues within South Cambridgeshire have been linked directly to the volume of traffic that runs through the district, specifically along the A14. The A14 is congested on a regular basis between Bar Hill (to the west of Cambridge) and Milton (to the north northeast of Cambridge). This has resulted in the declaration of an Air Quality Management Area (AQMA) for nitrogen dioxide (NO2) and PM10 along a stretch of the A14 between Bar Hill and Milton.
- 4. There is no single piece of legislation that covers the installation of CHP systems and their associated emissions. This advice note assumes that the installations discussed fall outside the scope of wider regulatory control such as Part 'A' and 'B' permitted industrial process (>20MW<sub>th</sub>)<sup>69</sup>. The Medium Combustion Plant Directive (MCPD) came into force in 2018. All existing and new plant between 1-50 MW<sub>th</sub>; will need to be registered and meet set emission limits. Although this is regulated through the Environment Agency impact on air quality will continue to be assessed through the planning process.

<sup>67</sup> www.cambridge.gov.uk/air-pollution

<sup>68</sup> www.cambridge.gov.uk/air-quality-action-plan

<sup>&</sup>lt;sup>69</sup> www.cambr<u>idge.gov.uk/industrial-licences-and-permits</u>

- 5. As part of the planning process it is important to consider impacts on air quality not only within and near the boundary of the AQMA but also in areas undergoing extensive development. The emissions from CHP should be considered alongside the wider emissions associated with the development such as plant installation, traffic impacts and where relevant the potential for cumulative impact of multiple CHP plants in a small geographical area, which could lead to localised hotspots of poor air quality.
- 6. This advice note focusses solely on gas fired CHP and therefore assumes that the pollutants of interest are nitrous oxides ( $NO_x$ ). If fuel sources other than gas are being considered please contact the Environmental Quality & Growth team at Cambridge City Council or the Air Quality Team at South Cambridgeshire District Council 70 as soon as possible to discuss the implications. In these cases installations may fall under other regulatory regimes and other pollutants such as particulate matter (PM) and sulphur dioxide (SO2) may need to be considered.
- 7. The use of biomass CHP should be very carefully considered due to the potential impact on air quality within the local area. The use of biomass combustion is unlikely to be supported within an AQMA or where it may impact on residents unless it can be clearly demonstrated that there will be <u>no adverse impact</u> on air quality. Consideration will also need to be given to the responsible sourcing of biomass fuel and of the transportation impacts of fuel delivery.

## **Minimising Emissions**

- 8. It is important to give thought to the design and specification of the system including potential emissions early in the design phase. This will minimise the conflict that gas fired
- 9. CHP can have with wider air quality issues on the area and help overcome any concerns regarding the health impacts of the proposed development. This advice note has been developed to assist with this process.
- 10. All CHP installed will meet the following emission standards. This will be secured through a planning condition:
  - Spark ignition engine: less than 150mgNO<sub>x</sub>/Nm<sup>3</sup>
  - Compression ignition engine: less than 400mgNO<sub>x</sub>/Nm<sup>3</sup>
  - Gas turbine: less than 50 mg NO<sub>x</sub>/Nm<sup>3</sup>

<sup>70</sup> Email: eqg@cambridge.gov.uk; Tel: 01223 457900, Email: Air.quality@scambs.gov.uk; Tel: 03450 450063

- 11. Giving thought to the wider environmental impacts of the system early on and ensuring the system is optimised for the proposed use not only helps reduce issues later on, but also helps minimise costs. The retrofitting of abatement equipment at a late stage is likely to be far more costly than giving time and consideration at the planning stage.
- 12. The impact on air quality will depend on many factors including emissions, size and type of plant, flue design and dispersion, what it is replacing, whether it represents intensification of site and whether abatement equipment will be installed. The emissions from CHP should be considered alongside other emissions associated with the development including additional plant installation and traffic impacts.

## Type and Design of the Plant

- 13. The plant consists of the prime mover which provides the power for the system, electrical generator and heat recovery equipment (this captures waste heat from the prime mover most often for use as heating and hot water (HHW)). CHP can also include cooling. In this case it is known as combined cooling, heat and power (CCHP) and the design will then include absorption chillers.
- 14. The type of prime mover has a major impact on the emissions of a system with standards applying to this and not the CHP system as a whole. The two most common prime movers used for gas fired CHP are the internal combustion engine and the gas turbine. Gas turbines produce the lowest emissions and are the most electrically efficient of the two, with modern gas turbines typically incorporating low NO<sub>x</sub> burners as standard. They are therefore unlikely to require further abatement features to be in line with emission standards. The combustion engine typically has higher NO<sub>x</sub> emissions and should be specified with lean burn technology. Catalytic converters can be installed to reduce NO<sub>x</sub> emissions but require further capital outlay. Figure 1 below gives an indicative look at common prime movers and relative NO<sub>x</sub> emissions.

Figure 1: Indicative Relative NO<sub>x</sub> Emissions Performance of Common CHP Prime mover Technology/Fuel Combinations<sup>71</sup>

Best

- Natural gas / gas turbines
- Natural gas / boilers with steam turbines
- Coal and biomass / boilers with steam turbines
- · Liquid gas / gas turbines

Worst

- Natural gas and liquid fuel / internal combustion engines
- 15. CHP is typically sized to meet base loads; over-specified systems run less efficiently and produce higher emissions. How the system will deal with variable heat loads is also an important part of the design which again will influence emissions. Will it have a heat store or will peaking plant be used? Where peaking plant is installed, emissions should also be considered; and low NO<sub>x</sub> boilers in line with BREEAM should be installed to minimise the emissions of the wider development.<sup>72</sup>

## **Dispersion of Emissions**

- 16. Consideration should be given at an early stage to the location and the height of the chimney or flue serving the CHP plant. Ideally the chimney should be designed as high as possible to aid dispersion and consideration should be given to the height of surrounding buildings and the impact they may have on dispersion.
- 17. Under the Clean Air Act (CAA) 1993 details of all new 'furnaces' installed should be submitted to the Local Authority. In some cases a chimney height calculation will need to be completed. For further information visit the Cambridge City Council website at:

www.cambridge.gov.uk/chimney-height-approval.

<sup>&</sup>lt;sup>71</sup> CHP: Air Quality Guidance for Local Authorities; EPUK 2012

<sup>&</sup>lt;sup>72</sup> Appliances that meet a dry NOx emission rating of 40mg/kWh – BREEAM (www.breea,org)

18. Dispersion modelling may be required for some developments; particularly those within or adjacent to the AQMA or larger developments outside the AQMA. This may form part of an Air Quality Assessment or be standalone depending on the scale and wider air quality impacts of the development over and above those of the CHP installation. Please see both the Air quality in Cambridge: Developer's Guide<sup>73</sup> and 'Land Use Planning and Development Control: Planning for Air Quality'; IAQM 2017 (or as superseded) for further information on when an Air Quality Assessment will be required.

#### Conclusion

- 19. It is important to consider the design of the proposed CHP system at an early stage. This should include:
  - Consideration for the type of prime mover and system design to minimise emissions
  - Will further abatement equipment be required to meet emission standards?
  - Has consideration been given to the flue design and dispersion of emissions?
  - Depending on the scale and location of the development will dispersion modelling be required?
- 20. This information is typically available in the manufacturer's specification and as part of the plant design.
- 21. The recommended emission standards have been established to minimise the impact of wider development on air quality within the local area. These emissions should be considered alongside other emissions from the development, for example plant and associated traffic. In some cases an Air Quality Assessment may be required; see the Developers Guide for further information.

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<sup>&</sup>lt;sup>73</sup> Available online at: <a href="https://www.cambridge.gov.uk/media/3453/air-quality-developers-guide.pdf">https://www.cambridge.gov.uk/media/3453/air-quality-developers-guide.pdf</a>

## **Appendix 4: Home Energy Questionnaire**



## Greater Cambridge Shared Planning Service Home Energy Questionnaire

This form should be completed for any planning application involving works to an existing home in Cambridge, in line with the requirements of policy 30 of the Cambridge Local Plan 2018. This policy aims to promote the application of energy efficiency to existing homes as part of wider works to extend properties, taking advantage of the opportunities that such works present to make your home warmer and helping to reduce your energy bills. You'll also be helping the environment by reducing greenhouse gas emissions. The information in this questionnaire will be used by officers in the planning service to ensure that, where applicable, you are able to meet the requirements of the policy, delivery of which would be secured by a planning condition. If you have a recently completed Energy Performance Certificate, you can submit this along with the questionnaire to indicate the recommended measure you are planning to implement as part of the works.

Proper	ty address:						
•	•						
•••••		••••••	••••••	• • • • • • • • • • • • • • • • • • • •	1 0310000	••••••	••••••••
Email:							
Planni	ng application r	eference	number (if kno	wn):			
1.	Property type:						
	House		Bungalow		Flat		Maisonette
2.	Built form:						
	Detached		Semi-		Mid Terrace		End terrace
			detached				

3.	Property age:					
	Pre 1921		1930-1990		1991-2007	2007 onwards
4.	Does your prope	erty have	cavity walls?		Don't know	
5.	If you answered	yes to Q	uestion 6, is the	cavity insu	ılated?	
	Yes		No		Don't know	
-	have un-insulated in order to meet t Do you have a lo	the requi	rements of polic		is one of the me	asures that you could
	Yes		No			
8.	If you answered	yes to Q	uestion 7, how d	leep is the	insulation in you	ur loft space?
	No insulation		Less than 150mm		More than 150mm	
If you answered less than 150 mm, adding more insulation to your loft is one of the measures that you could implement in order to meet the requirements of policy 30.						
9.	Do you have a g	as boiler	?			
	Yes		No			

10. If you answered yes to Question 9, what is the efficiency of your boiler? You can find this out on the following website: <a href="https://www.homeheatingguide.co.uk/efficiency-tables">https://www.homeheatingguide.co.uk/efficiency-tables</a> (see the
find my boiler option)
Response:
If your boiler is F or G rated. Replacing your boiler with an A-rated boiler is one of the measures that you could implement in order to meet the requirements of policy 30.
11. What are the main heating controls in your home (tick all that apply)?
None
Room thermostat (temperature control)
Programmer (time clock)
Thermostatic radiator valves (TRV's)  Image of a TRV
Full zone control (multiple room thermostats)
If you answered none to this question, heating controls are one of the measures that you could implement in order to meet the requirements of policy 30.
12. Does your home benefit from draught proofing?
Yes No
If you answered no to this question, draught proofing of doors, windows and letterboxes are one of the measures that you could implement in order to meet the requirements of policy 30
In light of your answers to questions 5 – 12 above, which of the following measures do you intend to install in line with the requirements of policy 30? Where all measures have already been implemented, no further measures will be required. Note that a planning condition will be used

to secure implementation of recommended measures. If you would like to suggest alternative

measures than those listed below (e.g. hot water cylinder insulation (at least 80mm thick) or replacing old storage or electric heaters (10 years or older) with new more efficient models) please contact your case officer to discuss alternative options.

MEASURE	ALREADY INSTALLED	WILL BE INSTALLED
Cavity wall insulation		
Loft insulation (above 150mm)		
Replacement of F and G rated boiler with an A-rated boiler		
Heating controls		
Draught proofing to doors, windows and letter boxes		

Your completed form should be submitted as part of your planning application to:

Planning Application Support Cambridge City Council PO BOX 700 Cambridge CB1 0JH

# **Appendix 5: Carbon Reduction Proformas for applications in South Cambridgeshire**

**Carbon Calculation Proforma (Outline Application)** 

Applicant name:

Use Class:

(Please use a separate sheet for each use if there is more than one)

Proposed Floor area:

(For each use)

## Calculation of carbon emissions for buildings:

1	2	3	4	5	6	7
Development type:	kWh per m² per annum	Proposed area (m²)	Total kWh per annum	kWh conversion factor to Carbon Dioxide	Total CO <sub>2</sub> per annum	10% minimum kg/CO <sub>2</sub> /annum
Electricity						
Gas						
Total (kg CO <sub>2</sub> f	or electricit	1				

## **Carbon Calculation Proforma (Reserved Matters/Full Application)**

Applicant name:

Application type (Reserved Matters/Full):

Use Class:

Proposed floor area:

Part 1: Part L Compliant Carbon Emissions for Buildings from SAP/SBEM Calculations

1	2	3	4	5
Development	SAP/SBEM	Proposed Area	Total	10% minimum
Туре:	Kg/CO <sub>2</sub> /m <sup>2</sup> )	(m <sup>2</sup> )	Kg/CO <sub>2</sub> /annum	Kg/CO <sub>2</sub> /annum

Level of carbon reduction associated with proposed renewable/low carbon energy technology (ies) (Kg/CO <sub>2</sub> /annum):	
Technology 1:	Kg/CO₂/annum
Technology 2:	Kg/CO₂/annum

## **Appendix 6: Requirements for Specific Lighting Schemes**

1. Below is a list of land uses/developments with general lighting advice and requirements. This been adapted from the Department of the Environment and the Countryside Commission publication, Lighting in the Countryside: Towards Good Practice, 1997.

### **Advertisements**

- Paragraph 2 of Part 2 of Schedule 3of the Town and Country Planning (Control of Advertisement Regulations 2007) states that "the permitted levels of luminance for advertisements where the illuminated area is not more than 10 square metres, should be 600 candela per square metre and where the illuminated area is more than 10 square metres, 300 candela per square metre".
- 3. Acceptable lighting levels for illuminated advertisements / signs are also given in PLG05 THE BRIGHTNESS OF ILLUMINATED ADVERTISEMENTS 'Brightness of Illuminated.
- 4. Signs should not be positioned where they may affect the clarity of traffic signs or disturb those living close by;
- 5. Position promotional lighting/signs so that they are not visible from the open rural areas i.e. concentrate at public.

## **Security Lighting**

- Passive infrared detectors should control lighting. Avoid sensors that can be tripped by road or footway users. Lamps of higher intensity create too much light, more glare and darker shadows;
- 7. For all-night lighting at low brightness use a compact fluorescent porch light of 9W (600 lumen);
- 8. Lighting should be directed downwards to illuminate its target and mounted below the property boundary height so as to reduce light spill;
- 9. Develop an integrated approach to security lighting, balancing levels of light with other lighting in and around the site to avoid glare and light spill as well as dark spots.

## **Commercial and Industrial Developments**

10. Avoid use of lights simply to create a 'presence' at night;

11. Concentrate lights where they are needed and establish a clear hierarchy, with minimum lighting around the outer, perimeter of the complex.

## **Decorative Building Lighting**

- 12. Keep lighting understated and aim to enhance rather than swamp architectural character;
- 13. Ensure light is directed only at the structure, re-siting lights and using baffles and shielding where possible;
- 14. Minimise up-lighting where it distorts architectural detailing;
- 15. Consider timing of lighting to maximise the visual beauty of the building to the public at night-time but not to floodlight the building at dusk or nightfall;
- 16. Consider the choice of surface materials being illuminated, the reflectance value may be high causing reflected light to generate excessive sky glow.

## **Agricultural/Horticultural Uses**

- 17. Mount lights below the roof height of buildings and direct light downwards, to where it is needed reducing light spillage;
- 18. Avoid use of sensors that can be tripped by animals;
- 19. As far as possible, position lights so that they are shielded by buildings and are not visible from the surrounding countryside;
- 20. The potential impact of light from glasshouses will be considered as part of the planning application.

## Lighting railway stations and road/rail Interchanges

- 21. Design the lights for the station as a whole, balancing the need for lighting in different areas and considering the impact of light in views from the surrounding countryside;
- 22. Concentrate on lighting to enhance the architectural character of the station building rather than on creating an'urban'level of light on the platform and in the station forecourt;
- 23. Direct car park and security floodlights downwards and to where the light is required.

#### **Mineral Extraction**

- 24. Mount lights below the roof height of buildings, and perimeter fencing, and direct light downwards, to where it is required;
- 25. Position lights so that they are shielded by buildings or permanent plant and are not visible from the surrounding rural areas;
- 26. Avoid lights mounted on the side of the buildings that shine directly out, dazzling users of the facility.

## **Petrol Filling Stations**

- 27. Canopy lights should be positioned to avoid light spill from the sides of the canopy;
- 28. Avoid the use of dish diffusers, which cause additional glare;
- 29. Reduce lighting or avoid it during daylight hours;
- 30. Integrate design for promotional signage with that of the canopy;
- 31. Avoid lighting internal fascia around canopy;
- 32. Design and position signs so that they are visible only from the carriageway and not from the surrounding landscape.

#### **Car Parks**

- 33. Direct lighting downwards and design equipment to control levels of light spill and glare;
- 34. Site lighting equipment carefully, making use of the backdrop provided by any existing vegetation and introducing new planting within the car park to help integrate the lighting structures and minimise the visual impact of both equipment and lighting;
- 35. Use new hedgerows or tree planting to help minimise the impact of car park lights around the car park boundaries;
- 36. All vegetation needs to be maintained and trimmed once it has been established otherwise it will block out the light.
- 37. All of the above lighting schemes should be balanced with securing safe and efficient operation of the proposed facility especially where external guidance expresses the need for defined illumination levels for Health & Safety reasons. Lighting installations

which require higher illumination levels for Health and Safety reasons can still be designed following the spirit of the guidance from the Institute of Lighting Professionals.

# Appendix 7: The Development of Potentially Contaminated Sites in Cambridge and South Cambridgeshire: A Developers Guide

#### Introduction

- 1. Land contamination is often the unintended result of past industrial/commercial land use and, since it can negatively impact upon human health, property, and/or the wider environment, land contamination is a material planning consideration.
- 2. This guidance document has been prepared jointly by the Environmental Health Departments of Cambridge City Council and South Cambridgeshire District Council (the Greater Cambridge Councils) for developers and other organisations who are involved in the redevelopment of potentially contaminated sites. The purpose of this guide is to provide developers, planning agents, and other relevant parties with an overview of the information required by the Greater Cambridge Shared Planning Service when assessing potentially contaminated sites in the planning and development control system across the Greater Cambridge area.
- 3. Please note that this guidance is not an exhaustive list of requirements and developers are encouraged to speak with the Contaminated Land Officers at the relevant Council.
- 4. Important note Legislation, guidance, and practical methods are all subject to change and it is the responsibility of the developer to follow the latest good practice and legislative requirements. All reasonable precautions have been taken to ensure that the information contained within this document is accurate at the time of publication. However, the Greater Cambridge Councils cannot assume legal responsibility for any loss or damage caused to person, land, or property for persons relying on this information.
- 5. This document replaces all developers contaminated land guidance notes previously issued by Cambridge City Council and South Cambridgeshire District Council.

## **Planning Policy**

- 6. There is a range of national, regional, and local planning policies that, along with other legislation, set out requirements for dealing with contaminated land.
- 7. At the national level, the overarching national planning policy document is the National Planning Policy Framework (NPPF, 2018) whose purpose is to encourage sustainable development, including the reuse of brownfield land. Under the NPPF the potential for land contamination is a material planning consideration intended to ensure that land is made suitable for its proposed use.

8. At the local level, Local Plans have been adopted by both <a href="Cambridge City Council">Cambridge City Council</a> and <a href="South Cambridgeshire District Council">South Cambridgeshire District Council</a> that set out policies and proposals for future development and land use in the Greater Cambridge area. The Plans set out a vision for Greater Cambridge and objectives for its achievement. These Plans provide a means of guiding change over long periods of time and establishes a framework against which planning applications can be assessed. Land contamination is specifically referenced by Policy 33 Contaminated Land in Cambridge City Council's Local Plan 2018 and by Policy SC/11: Contaminated Land in South Cambridgeshire District Council's Local Plan 2018 (see Appendix 1 for policy wording).

## **The Planning Procedure**

## **Role of the Developer**

- 9. The developer is responsible for ensuring that any proposed development is safe and suitable for use for the purpose for which it is intended. In order to fulfil this responsibility the developer will be required to undertake a process of risk assessment in order to determine the severity of any contamination and the degree of harm that it poses to future site users and to the wider environment. The NPPF requires this site investigation has to be prepared by a 'competent person'. Whilst the term 'competent person' has not been defined further, the developer must consider the full range of technical expertise that is likely to be required when sourcing consultants or advisors to undertake the risk assessment process. It is highly recommended that the selected consultants should have professional indemnity insurance.
- 10. A development is more likely to be successful, and considerable effort and expense spared, if appropriately qualified experts with relevant environmental experience are used at appropriate stages.
- 11. After the completion of the risk assessment process, which may include remediation, the development site, as a minimum, should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990 (see Table 1 below).

**Table 1**: Definition of Contaminated Land under Part 2A of the Environmental Protection Act 1990)

Part 2A of the Environmental Protection Act 1990 requires Local Authorities to inspect their areas for potentially contaminated land and, if necessary, to ensure that any contamination is remediated. Part 2A introduced a legal definition of *contaminated land* whereby contamination is assessed and defined in the context of a site's current use and where the contamination must be capable of causing either significant harm, or the significant possibility of significant harm, to human health and/or to other specified receptors. Where contaminated land is identified, details of the contamination and any

remediation undertaken are placed on a Public Register. The narrow definition of the term *contaminated land* means that the number of sites that will be determined as legally defined contaminated land by Local Authorities is likely to be very small.

A site that contains contaminants which, in its current use, <u>do not</u> have the potential to cause significant harm will fall outside of Part 2A. It is government policy that these sites will be dealt with through the planning and development control system as and when they are brought forward for development. In such circumstances the developer must provide the Council with enough information to enable it to decide that the site will be suitable for use. For some sites that are identified as contaminated land under Part 2A, redevelopment of the land may be a cost effective solution for securing remediation. In such circumstances action taken under the planning regime to ensure that land is suitable for use would also satisfy the Part 2A regime and turn a liability into an asset.

The Greater Cambridge Councils' Part 2A strategies may be viewed on their respective websites – <u>Cambridge City Council</u> and <u>South Cambridgeshire District Council</u>.

## **Role of the Greater Cambridge Shared Planning Service**

- 12. On any site where there is the potential for contamination to exist, the Greater Cambridge Shared Planning Service will work in consultation with the Environmental Health Department from the relevant Council to ensure that application sites are appropriately investigated, managed, and, if required, remediated.
- 13. When considering planning applications on sites where land contamination is a reasonable possibility, or known to exist, the Greater Cambridge Shared Planning Service has to be satisfied that the proposed development will remove all unacceptable risks to human health, property, ecosystems, and water quality, and will not introduce new risks. In doing this, full consideration will be given to both the historical and existing use of the site, the current circumstances of the land, the proposed end use, and the potential for contamination to be encountered during development works. The Greater Cambridge Shared Planning Service, through the imposition of planning conditions, will ensure that the developer undertakes the appropriate risk assessment and, if deemed necessary, the remediation of land contamination in line with all good practice procedures and guidance.

## **Role of the Environment Agency**

14. The Environment Agency (EA) are a statutory consultee in the planning process and they provide expertise to the Greater Cambridge Shared Planning Service on the issues of flooding and the potential for land contamination to pollute surface waters and groundwater (controlled waters).

15. It is important to note that for sites where contamination poses a risk to controlled waters, planning conditions will not be discharged until both the Council's Contaminated Land Officer and the Environment Agency have recommended approval for all appropriate contamination risk assessment reports.

#### The Contaminated Land Risk Assessment Procedure

- 16. The site investigation procedure aims to identify the potential for contamination and aims to identify areas that may require remediation to make the site suitable for use. In order to achieve these aims the site investigation procedure is sub-divided into distinct phases that are intrinsically linked together with the results from each phase being used to inform and to design the next subsequent phase of site investigation. Typically these sub-divisions comprise of a Phase 1 desk study, a Phase 2 intrusive site investigation, a Phase 3 remediation proposal, and a Phase 4 verification report.
  - The Phase 1 desk study establishes whether there have been any former contaminative uses on the site or adjacent properties which could impact upon the development;
  - The Phase 2 intrusive site investigation determines the nature, extent, and severity of contamination using risk-based criteria.
  - The Phase 3 remediation proposal uses the results from Phase 2 to inform remedial options, health and safety issues, potential impacts on the environment, and a remediation work plan;
  - The Phase 4 verification report provides a summary of remediation work carried out together with relevant documentary evidence and, if required, post-remediation test results.
- 17. The site investigation procedure involves specialist technical knowledge and it is essential that all phases of the site investigation procedure are conducted by competent and experienced persons (who should hold recognised and appropriate qualifications). It is essential that developers conduct their site investigations in accordance with the latest good practice.
- 18. Examples of current good practice may be found in the following documents:
  - Environment Agency (2004). Model Procedures for the Management of Land Contamination CLR 11
  - BS 10175:2001 British Standard Institute (2001) Investigation of Potentially Contaminated Sites Code of Practice, British Standard Institute, London.
  - Environment Agency (2001) Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination. R&D Technical Report P5-066/TR. Water Research Centre, Swindon.
  - Environment Agency (2000) Technical Aspects of Site Investigation (2 Vols.).
     Research and Development Technical Report P5-065/TR. Water Research Centre, Swindon.

- Environment Agency (2000) Guidance for the Safe Development of Housing on Land Affected by Contamination. The Stationary Office, London.
- 19. Please note that good practice is constantly evolving and the onus is on the developer to use the most up to date version of any relevant document.

## The Phase 1 Desk Top Studies

## Purpose and scope

- 20. The purpose and scope of the Phase One desk study has to be clearly defined. A map of the site must be included showing its location, as well as plans of the current and planned layouts of the site.
- 21. The desk study must describe the condition of the land and uses of the site (both past and present) and its immediate environment (again both past and present). The aim is to establish whether there have been any potentially contaminative uses of the site or nearby land. All documentary evidence must be referenced and summarised where appropriate.
- 22. There are many former land uses that are potentially contaminating and some sites may have had more than one use, either simultaneously or separated in time. Lists of potentially contaminative land uses are available, some of which also have 'profiles' indicating the possible contaminants that might be present. Such understanding is crucial in defining the need for, and scope of, any subsequent review, investigation, and remediation. Experience and consideration of site histories must be used to predict the principal contaminants associated with each particular industry (see Annex A).
- 23. A site is evaluated initially by compiling a site history (see Annex B) with a view to determining the possibility of soil and groundwater contamination (including by gases). The Councils expect to be provided with such information in full and may require it in advance of a planning decision or as a condition of a grant of permission.

## Assessment of environmental setting

- 24. A traceable assessment of the environmental setting must include:
  - Information on geology, hydrogeology and hydrology.
  - Information from the Environmental Agency on controlled waters, abstractions, pollution incidents, water quality classification, landfill sites within 250m.
  - Information on ecosystems, heritage, and other interests.

### Review of earlier studies

25. A review of any previous studies, ongoing monitoring, remediation work etc. should be provided for both the site and for any adjacent sites.

#### Reconnaissance

26. A site walkover should be undertaken wherever possible (and safe) to confirm the information in the desk study, to locate and record the position and condition of relevant site features, and to plan further site investigation works (if appropriate). Anecdotal evidence from local interviews may provide additional useful information.

## Conceptual Site Model

- 27. A Conceptual Site Model (CSM) of the site must be produced which provides a clear interpretation of all plausible pollutant linkages discovered at the site. Receptors include humans, controlled waters, wildlife, and buildings. Pathways include direct contact, inhalation, and off-site migration into watercourses etc. The CSM will largely depend upon the previous site use(s) and the proposed end-use of the site. In some circumstances there may be a large number of plausible pollutant linkages whilst in others there may only be a small number.
- 28. The CSM should provide a working description of the relevant physical, chemical, and biological characteristics of the site including:
  - Geology, Hydrogeology, and Hydrology.
  - Ecology.
  - Land use historic, current and proposed (including adjacent land).
  - Identifying potential Sources of contamination, Pathways and Receptors (i.e., significant pollutant linkages).
- 29. The CSM that is developed as part of the Phase 1 desk study must provide sufficient detail to determine what will be needed as part of the Phase 2 intrusive site investigation. Documentary evidence such as historical maps, photographs, and former site layouts etc. must be appended to the desk study in order to demonstrate how the CSM has been formulated.

## Recommendations for Phase Two (where appropriate)

- 30. Aims and objectives for Phase Two of the investigation must be clearly stated and any health and safety issues must be highlighted.
- 31. It is recommended that developers consult with the relevant Environmental Health Department regarding the scope and the content required of Phase 1 assessments. Failure to demonstrate familiarity with a site's former uses and published information on their potential for contamination during Phase 1 will be regarded as a significant failing by the developer/consultant.

## The Phase 2 Intrusive Site Investigation

## Objectives, scope and execution

- 32. If site history or other information from the Phase 1 desk study indicates that contamination is possible, the developer/site owner must engage the services of an appropriately experienced environmental consultant to undertake further site assessment the Phase 2 intrusive site investigation. It is expected that the objectives, scope, and execution of the Phase 2 investigation be agreed in advance with the relevant Environmental Health Department and the resulting report(s) submitted in full. The expected contents of such reports are provided in Annex C for reference.
- 33. The Phase 2 investigation must be guided by the CSM produced by the Phase 1 study with the aim of further characterising the suspected contamination on the site. Each site is unique and must be dealt with on a site specific basis.
- 34. The Phase 2 investigation may consist of targeted sampling of suspected 'hot-spots' of contamination, randomised sampling using a statistically valid sampling strategy across the whole site, or a combination of the both. Every precaution must be taken to ensure that site investigations do not mobilise contaminants or create new pathways. All visibly contaminated or odorous material encountered during a site investigation must be investigated and fully documented.
- 35. The Phase 2 report must include full descriptions of all surface and intrusive ground investigations, an assessment of ground conditions and its implications for contaminated land, the source, distribution, and concentration of contaminants. This information must then be used to re-evaluate the CSM. Further investigative work may be required.

## **Quality Assurance Quality Control**

- 36. Good quality assurance and quality control procedures must be followed during the collection of soil samples. After the samples have been collected they must be sent for the appropriate analytical testing at a laboratory that holds MCERTS accreditation for each contaminant. The quality assurance, quality control data, and limits of detection for all tests carried out must be included with the results of the chemical analysis and appended to the Phase 2 report.
- 37. Whilst many organisations are capable of undertaking some or all parts of a site assessment, the Councils will rigorously assess the report's contents and an assessment will be made as to the authority of the compiling organisation(s), their professional affiliations, and their demonstrable expertise. Submitted reports must contain a sufficient level of detail that is presented in a rational, ordered, and efficient manner such that accurate judgements can be made on the risk posed by land contamination.

## Assessing the Risks

- 38. When a Phase 2 investigation is required at a site, a risk assessment must be performed. In the first instance the significance of each contaminant must be compared against the most up-to-date and appropriate Generic Assessment Criteria (GACs), e.g. LQM/CIEH Suitable 4 Use Levels, Defra Category 4 Screening Levels, WHO/Drinking Water Guidelines, Environment Agency Environmental Quality Standards (EQS).
- 39. The use of particular (site specific) GACs, especially 'in-house' GACs, must be fully justified in the Phase 2 report.
- 40. Following the initial risk assessment against the appropriate GACs, a decision must be taken about the next course of action. This may be to either design an appropriate remediation scheme on the basis of the available data, or to carry out a more comprehensive site-specific risk assessment using an industry standard model.

## Types of risk assessment model

- 41. The CLEA model uses probabilistic techniques to assess the risks to human health from a contaminant, taking into account long-term exposure, ground conditions etc. There are a number of other risk assessment tools that have been developed for assessing risk to different receptor groups (e.g. SNIFFER, RBCA, RiscHuman, Landsim). The Environment Agency has developed a site-specific model that assesses the risk posed to groundwater by leaching contaminants known as CONSIM.
- 42. It should be noted that not all contaminants may be covered by the most commonly used GACs and that certain GACs may not always be appropriate for assessing potential risks to human health and the wider environment in conditions found in the UK. Some allowance may have to be made to reflect assumptions that were made when the GACs were derived in order to make them more appropriate for UK conditions.
- 43. These models are not appropriate for all circumstances and clear explanation of the choice, type, and limitations of any risk assessment model must be included in the Phase 2 report. The risk assessor must justify each of the input parameters and effectively communicate their output.
- 44. The Councils will require further information where there is not sufficient confidence in the conclusions presented in a report (for example where an investigation has not been carried out in accordance with current good practice).

## **Phase 3 Remediation Strategy**

## Selection of options

- 45. The Phase 2 investigation may confirm possible pollutant linkages, and if so, must propose an appropriate remediation (scheme/selection of potential schemes) that will ensure safe redevelopment. The remediation options proposed must be related to the significant pollutant linkages that have been identified and must indicate the receptor(s) being protected.
- 46. There may be a number of remediation options, for example:
  - To remove or treat soil or groundwater with contaminant levels above certain concentrations.
  - To biodegrade hydrocarbons to acceptable levels.
  - To block the pathway between the source and a receptor.
  - To cap the site, limiting the potential for contact with contaminated soil.
- 47. The selection of the remediation strategy must be discussed in full with the advantages and disadvantages of each option outlined and reasons given for the chosen option, or combination of options.

#### Other factors

- 48. It should be noted that the remediation works might also require a waste management licence or mobile plant licence. When designing the remediation strategy, the Phase 3 report must also cover details such as the measures proposed to protect workers and the public and to ensure effective dust and odour control.
- 49. On larger or complex sites, an off-site impact assessment, monitoring, and a risk communication strategy will be required. Remediation strategies on such sites will need to include consideration and control of impacts during the remediation programme as well as the site situation post-remediation.
- 50. During remediation works, if any unsuspected contamination is identified then the relevant Environmental Health Department must be contacted immediately in order to agree a suitable strategy for the treatment or removal of the contaminated material.
- 51. The Councils will require that an environmental consultant, or an appropriately qualified project manager, must supervise any agreed required remediation of a contaminated site, including the documented identification, handling, and fate of contaminated material. The appointed persons or organisations will be responsible for the certification of the site remediation work and for its compliance with the agreed remediation plan, the recommendations of the consultant, and the requirements of other regulatory agencies, such as the Environment Agency.

52. It is expected that the means for demonstrating compliance will be agreed in advance and would typically require an agreement on the appropriate means of inspection, testing, and quality assurance. Compliance with an agreed remediation strategy or materials management plan will be expected before any planning conditions can be discharged.

## **Phase 4 Verification/Validation Report**

- 53. It is important that remediation is undertaken in accordance with the approved remediation strategy and that accurate documentary evidence is maintained so that it can be summarised and appended to a Phase 4 Post-Remediation Verification Report. This report must identify actions carried out during the remediation works and the methods of validation testing, together with documentary records of implementation. This report must provide an accurate summary of the:
  - Types of measures testing (in-situ/lab), monitoring, inspection etc.
  - Number of samples/rate of testing/monitoring/locations.
  - Supervision during the remediation.
- 54. The documentary evidence must include copies of waste transfer notes, photographs, and results of chemical analysis of soils/groundwater undertaken during remediation (including each batch of soils and materials to be tested prior to being brought onto the site, from off-site sources). The Phase 4 report must be submitted at the end of any remediation work.

## **Unexpected Contamination**

55. During development it is not uncommon for previously unidentified and unexpected contamination to be discovered. The Councils will typically use a planning condition to cover this scenario that specifies the actions to be taken should such contamination be discovered. However unexpected contamination can also occur on sites where no such condition has been put in place. Upon the discovery of unexpected contamination all site works must stop immediately and the Councils must be notified as soon as possible. The Councils will then require that the contamination be assessed in full and a remediation strategy drawn up if required. Site works must only be restarted once the Councils have given written consent.

## **Materials Management Plan**

56. Imported/recycled materials for backfill and capping - In order to ensure the quality assurance of imported/recycled material to be used for piling, engineering, and landscaping purposes, the Councils expect that a Materials Management Plan is submitted. This will need to detail proposals on the source, quantity and independent verification of all such material. The Councils expect that the materials are

independently tested for a full suite of contaminants (including metals and petroleum hydrocarbons) prior to importation. Material imported for landscaping should be tested at a frequency of 1 sample every  $20m^3$  or one per lorry load, whichever is greater. Material imported for other purposes and/or material that originates from a clean (virgin) source can be tested at a lower frequency subject to justification and prior approval from the relevant Contaminated Land Officer. For further information please refer to the Material Management Plan Explanatory Note in Annex D

## **Key Points**

#### 57. To summarise

- It is important to identify the potential for contamination to be present at an early stage in order that unexpected costs and delays can be avoided later should a potential problem be identified during development works.
- Specialist advice from a suitably qualified consultant is required to assess contaminated land issues.
- The Phase 1 investigation should produce a 'conceptual model' that characterises all plausible pollutant linkages. This will form the basis of any subsequent work undertaken as part of a Phase 2 investigation.

#### **Contacts**

## Contaminated Land Officer Cambridge City Council

Environmental Health Mandela House 4 Regent Street Cambridge CB2 1BY

Tel: 01223 457900

Email: EQG@cambridge.gov.uk

## Contaminated Land Officer South Cambridgeshire District Council

Environmental Health
South Cambridgeshire Hall
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## **Annex A: Examples of Potentially Contaminating Site Uses**

Please note that this list is not exhaustive and other potentially contaminating activities must be considered.

- Analysis laboratory sites.
- Any area where persistent pesticide treatments may have been applied.
- Areas where biological materials have been bred, used or stored.
- Agricultural: fertilisers, garden sprays, pesticides, herbicides, cat and dog dusting powders.
- Battery manufacturers including any site where lead cell accumulators were destroyed for scrap.
- Brake lining manufacturers or repairers.
- Chemical Manufacturers
- Defence works
- Dry cleaning establishments
- Electroplaters
- Fuel depots
- Galvanisers
- Gas works
- Gun clubs
- Industrial cleaners
- Industrial: glues, paints, household cleaners, bleaches, sprays, pool chemical, bitumen, oils and greases, petroleum, petrochemicals, stores.
- Landfills
- Lime burners
- Market gardens, other areas where agricultural chemicals may have been used.
- Metal foundries
- Metal spraying
- Metal treatment, heat treatment, picklers
- Mining and extractive industry
- Patent medicine producers and stores.
- Pest controllers in particular chemical stores and area where vehicle and tanks are washed.
- Petroleum and petrochemical industries
- Pharmaceutical drug manufacturers
- Plasters manufacturers and moulders
- Printers
- Railway yards
- Scrap yards
- Service stations (including mechanical repairers)
- Stock dipping (e.g. sheep, cattle)

- Tanners, curriers and fellmongers
- Transport depots
- Underground storage tanks for fuel, chemical storage and liquid waste
- Warehousing and storing
- Waste storage
- Wood treatment
- Wool hide and skin merchants (e.g. drying, scouring)

## **Annex B: Information for Compiling a Site History**

Please note that this list is not exhaustive and other sources of information may be available.

## **Include in Site History**

- proposed, present and past land uses
- processes carried out on site (and location if applicable)
- waste disposal practices and chemical spills
- earthmoving activities, including filling, carried out on site
- site description, and legal identifiers
- past and present land use, zoning per Development Plan

## **Sources of Information**

- past and current owners of the site
- past and current employees of the site and neighbouring sites
- aerial and ground level photographs of the site
- past involvement with Government authorities
- past involvement with consultants
- trade and street directories
- local literature, including street directories
- technical literature, including building and related permits
- local knowledge of residents
- previous land uses
- products manufactured
- raw materials used
- waste produced
- chemical storage and transfer areas
- disposal locations
- product spills and losses
- geological survey maps
- sewer and underground service plans

## **Site Inspection**

Indicators of the possible presence of contaminants are:

- · disturbed of discoloured soil
- disturbed or affected vegetation
- presence of chemical containers or holding tanks
- chemical odour

• quality of surface water

## Annex C: Contaminated Site Assessment Reports – suggested content/format

## Phase 1 – Desk Study:

#### Site identification

- Purpose and aims of study
- Scaled map showing position of site relative to sheets and adjoining properties
- Details of surface features and existing structures above and below ground
- Photographs, where appropriate

## **Ownership**

As listed on title documents

## Party requesting assessment

• Owner or occupier of land (developer)

## Party conducting assessment

Environmental consultant

## Proposed use

- Map of proposed development (if known)
- Type: residential/recreational/industrial

## **History of site (See Appendix Three)**

- Full history
- Sources of information
- Map (s) detailing past activities

## Site Inspection – walkover

- Relevant geological factors
- Local topography
- Soil types
- Evidence of possible contamination
- Potentially contaminating features and installations

## Site Inspection – research

- Information from the Environmental Agency on abstractions, pollution incidents, water quality classification, landfill sites, soil leaching potential, water resource status, current and future use of local groundwater, hydrogeology including depth and distribution of aquifers.
- Information from South Cambridgeshire District Council on former landfill sites, private water supplies, contaminated land, pollution incidents.
- Information from other bodies e.g. BGS, Landmark etc.
- Review of previous studies.
- Preliminary assessment on likely risks and recommendations for intrusive works if appropriate.
- Conceptual site model

## Phase 2 – Intrusive Investigations:

## **Initial comments**

Review of previous studies

## **Investigations**

- Rationale for sampling methodology (e.g. screening knowledge of previous land use)
- Rationale for choice of analytes
- Scaled map of sampling locations
- Methods of investigation (e.g. number of boreholes, depths, pattern)
- Sampling methods, storage, maintenance of sample integrity
- Field measurements, instruments, and methods
- Laboratories used
- Analytes and analytical techniques (including extraction methods)
- Quality assurance methods for specific analytes
- Table of results
- Map displaying significant results
- Borehole log and soil profile (including description of fill)

## **Conclusions**

- Discussion of ground conditions, (soil, gas, water, made ground)
- Discussion of soil/gas/water contamination
- Preliminary conclusions (e.g. most significant results, dispersion of contaminants, properties of contaminants that may affect health or environmental risk such as volatility or water solubility)

- Uncertainties relating to conclusions (e.g. adequacy of site characterisation, likelihood of missing significant contamination)
- Changes to site conceptual model from initial study
- Risk assessment, justifying choice of model if used
- Recommendations for further investigations if required
- Recommendations for remediation

## Annex D: Material Management Plan (MMP) Explanatory Note

The Councils use the following condition with respect to the submission of a MMP:

Prior to importation or reuse of material for the development (or phase of) a Materials Management Plan (MMP) shall be submitted to and approved in writing by the Local Planning Authority. The MMP shall:

- a) Include details of the volumes and types of material proposed to be imported or reused on site.
- b) Include details of the proposed source(s) of the imported or reused material.
- c) Include details of the chemical testing for ALL material to be undertaken before placement onto the site.
- d) Include the results of the chemical testing which must show the material is suitable for use on the development.
- e) Include confirmation of the chain of evidence to be kept during the materials movement, including material importation, reuse placement and removal from and to the development.

All works will be undertaken in accordance with the approved document.

## Q: Why has this condition been attached to the planning permission?

A: This condition is used to ensure that no unsuitable (i.e. contaminated) material is brought onto the development site.

## Q: Is this condition 'prior to commencement'?

A: No, this condition is prior to the importation of any soils and/or aggregates. In other words, prior to discharge of this condition, development can proceed except the spreading of imported materials.

## Q: What material does the condition relates to?

A: The term material refers to any material used for piling, engineering, and landscaping purposes. This could include (but is not limited to):

- Topsoil/Subsoil
- Crushed Concrete
- Limestone
- Sands and Gravels
- 6F2 Material
- Type 1 and Type 2 Material

The condition does not refer to construction materials (bricks, stones etc.).

## Q: I am not importing or reusing any material for landscaping/engineering/piling purposes. Do I still need to submit a MMP?

A: In this case you do not need to submit a MMP. You should apply for the discharge of the condition after the development has been completed and will need to demonstrate in writing that no material was imported or reused on site.

## Q: What are the sources of material?

A: The term 'sources' refers to the suppliers of the material that will be used for piling/engineering/landscaping purposes.

## Q: Can we discharge parts of the condition if we have some of the information?

A: The condition cannot be partially discharged. All the information required by the condition need to be included in the MMP.

## Q: When do I need to provide the information and discharge this condition?

A: You need to provide the information and discharge this condition before any material (associated with this condition) is placed around the development. We would therefore advise the applicant that they apply for the discharge of the condition once they have ALL the information available.

## Q: I have already undertaken chemical testing in line with BS3882:2015 and know that the material is suitable for landscaping. Do I need to do additional testing and why?

A: Yes you need to do additional chemical testing. Chemical testing in line with BS3882: 2015 relates only to the suitability of the imported material for plant growth (nutrient content) and often overlooks many contamination parameters. In order to comply with this condition you need to undertake chemical testing to show that the material is free from contamination with respect to human health. That includes testing for substances such as polycyclic aromatic hydrocarbons, petroleum hydrocarbons, and the full list of heavy metals.

#### Q: What testing frequency is required?

A: All soils imported for gardens and/or landscaping must be tested at a frequency of 1 sample per 20m³ or 1 sample per lorry load, whichever is greater. This testing must include a full suite of contaminants including metals and petroleum hydrocarbons prior to importation. Material imported for other purposes may be tested at a lower frequency subject to prior approval from the Councils.

#### Q: Do I need to test materials from a clean source?

A: If the material originates from a reliably clean and/or natural source (such as British Sugar or from a virgin quarry) the developer must contact the Councils so that a less onerous way forward can be agreed, such as the submission of delivery notes and proprietary testing certificates in lieu of further testing.

## Q: How much detail should I include in the Material Management Plan?

A: The amount of detail included presented in the Material Management Plan will depend on the size of the development and volume of material brought into the site. For small developments it may be sufficient to include details of the suppliers of the material, the volumes of the material and the proposed chemical testing. For large developments it may be more appropriate to submit a Material Management Plan in line with the CL:AIRE Definition of Waste Code of Practice.

## **Appendix 8: Further technical guidance related to noise pollution**

Annex A: Quick reference guides – When is an acoustic report required?

(i) NEW NOISE SENSITIVE DEVELOPMENT (NSD) / USES				
		Noise		
Type of development		Report	Comm	ents
	T	required?		
New residential development and extensions to existing residential dwellings	Close to a major highway (motorways,		Noise report will normaresidential development major or busy road.	•
(C3 –Dwellinghouses and C4 - Houses in multiple occupation use classes)	A-class & major or busy B roads)	YES	A noise report is unlike when noise levels fall b LAeq16hr.	•
	Near to a railway	YES	Noise report will normany property within semeters from a major ra	veral hundred
		5	A noise report is unlike when noise levels fall b LAeq16hr.	•
	Within the predicted 57dB contour of an airport with both a single or twin wide spaced runway	YES	Noise report will normal Noise reports can be for website.	
	Close to existing or proposed NGD such as agricultural, industrial, trade, commercial or business premises		Noise report will norm	ally be required.
	10+ houses in a rural/ suburban environment	MAYBE	In certain circumstance be required. Please cor Environmental Health	nsult with
Change of use to residential		MAYBE	Noise report may be re if there are existing no proximity. Please const	equired, for example ise sources in close
Hotels, guest houses, etc (C	1 uses)	MAYBE		
Residential institutions:  C2 uses (care homes, hospitals, nursing homes, residential colleges, etc), and C2a uses (secure residential institutions including prisons, secure hospitals)		МАҮВЕ	It is the responsibility of the developer to ensure hotel rooms meet reasonable noise standards. However, if the hotel/ guest house includes long term	Hotels, guest houses and residential institutions can also present a new noise source.  Consequently, if

	residential accommodation for staff or is an aparthotel, a noise report may be required.	such a development is proposed in close proximity to existing residential uses, a noise report may be required.
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(ii) NEW / ADD	ITIONAL NOISE GE	NERATING DEVELOPMENT (NGD) SOURCES
Type of development	Noise Report required?	Comments
INDUSTRIAL TYPE USES  (e.g. B2 general industrial uses, B8 storage or distribution uses, Waste management sites, Minerals development, access roads & haul roads)	YES	Noise report will normally be required. Please consult with LPA if there are no existing noise sensitive premises in close proximity.  However noise may need to limit creeping background noise levels in the general area.
		Includes new development and changes of use. Also includes changes in operations or layout, extensions or new equipment at existing sites.
ENTERTAINMENT/ FOOD & DRINK, ETC  (e.g. A3 uses - restaurants/ cafes, A4 - drinking establishments, A5 - hot food a takeaway, D2 uses e.g. cinemas, concert halls, swimming baths, skating rinks, gymnasiums, sports halls. Also dance halls, casinos, theatres, amusement centres).	YES	Noise report will normally be required. Please consult with LPA if there are no existing noise sensitive premises in close proximity.  However noise may need to be limit creeping background noise levels in general area.  Includes new heating, ventilation, and air conditioning (HVAC) including combustion appliance / exhaust stacks and flues and air handling/refrigeration / chiller units, machinery, plant and equipment and extractor fans at new and existing.  The noise impact of car parking / vehicular movements should also be considered
OUTDOOR SPORTS AND RECREATION Including some D2 class uses, also multi-use games areas, motor sports and shooting ranges.	YES	Noise report will normally be required.
COMMERCIAL USES A1 and A2 uses (shops and financial/ professional services, etc)	MAYBE	Noise report will normally be required in the following circumstances:  - The application involves the introduction of new
OFFICES, ETC B1 uses (including offices, light industry)	MAYBE	uses and the development is greater than small scale (e.g. a new supermarket or several shops, a new office block/ industrial estate, a new school/

NON-RESIDENTIAL INSTITUTIONS D1 uses (non-residential institutions, e.g. day centres, schools, libraries, places of worship, training centres)  OTHER Other Sui Generis uses, e.g. theatres, scrap yards, petrol filling stations, car / vehicle washing facilities, launderettes, taxi businesses scrap yards, retail warehouse clubs, nightclubs and casinos, beauty salons and Nail Bars	MAYBE	library), or  - The application includes heating, ventilation, and air conditioning (HVAC) including combustion appliance / exhaust stacks and refrigeration / chiller machinery, plant and equipment and extractor fans at new and existing sites etc, or  - The development would involve activities during unsociable hours (including deliveries), or  - The development would involve particularly noisy processes, activities and sources (including during construction) or is proposed in proximity to noise-sensitive premises.
transport schemes e.g. new roads, rail, port and airport development, including extensions / alterations to existing schemes	YES	Early consultation with the Local Planning Authority/Environmental Health department would be expected.
WIND TURBINES	YES	Early consultation with the local planning authority/ environmental health department would be expected. Micro wind turbines may not require planning permission, however in some cases they may cause a statutory noise nuisance to neighbours. Please contact the Environmental Health Department

## **Annex B: General Requirements for Acoustic Reports and Assessments**

- Developers should also seek guidance from the Council's Environmental Health team
  prior to any acoustic survey work being carried out in order so they can advise on the
  best methodology for the proposed development and any bespoke reporting for
  developments.
- 2. Assessments should be carried out and produced by a suitably qualified and competent consultant and conform to the standards in *BS7445 1-3:2003 Description and measurement of environmental noise* (or any later replacement guidance).
- 3. Noise surveys on site should be carried out for appropriate duration to ensure representative noise levels are ascertained. They should be undertaken for typically 5 to 7 days and should include weekends.
- 4. Monitoring locations should be agreed in advance.
- 5. As assessment and guidance for noise and vibration control is always evolving, applicants must ensure that they consider amendments or updates to existing noise guidance.
- 6. The appropriate amount and detail of information required will depend on the specific circumstances of a proposal.
- 7. It should be noted that noise assessment and report writing is a skilled operation and should be undertaken only by competent persons. Notwithstanding the inevitable technical content of the subject matter the best acoustic reports are written using plain English and should be possible for a lay person to understand. The acoustic report should be well structured and precise in its use of language and presentation of data.
- 8. A typical acoustic report should include the following information.

## (i) Introduction

- a. Outline the scope, aims and objectives of the report.
- b. Include the site address or other location details.
- c. Include a brief description of the development proposal it relates to (with the correct case reference number).
- d. Clearly identify the client and/or person who commissioned the survey(s).

## (ii) Executive Summary

This should contain the summary of the whole report and a clear statement regarding delivery of the aims and objectives.

## (iii) Title Page

Shall have a title page identifying the person and organisation undertaking the survey and writing the report and their qualifications and contact details, the date of

the report, and shall be signed by the author and quality control reviewers. Document references i.e. revision and version numbers should be included to indicate the development of the report and its status e.g. draft for comment, final etc.

## (iv) Contents Page

Here the contents of the report shall be listed.

## (v) Methodology

- a. Clearly identify applicable guidelines and standards from this SPD.
- b. Detail any other standards / policies to be used and give a brief outline of why they have been chosen.
- c. Provide detail and justification where accepted standards have not been used.
- d. Outline the process to be followed.

## (vi) Site Description and Noise Measurements

- a. A brief qualitative description of the site and its surroundings is useful here.
- b. Labelled and annotated photographs are often very useful in communicating the nature and character of the site and its environs.
- c. Details of how any noise survey was carried out and any observations made during the survey e.g. on typical or unusual noise sources making up the acoustic environment.
- d. Detail the location, dates and times of all measured data and provide suitable summaries of results obtained. Clearly state the height above ground, ground conditions and proximity of any acoustic reflecting surfaces (i.e. façade, free-field or reverberant conditions). Photographs of noise measuring equipment in-situ may be useful here.
- e. Clearly state the reasons for the chosen measurement positions.
- f. Provide clear explanations for any unusual or anomalous results.
- g. Provide details of the equipment used i.e. make model and serial numbers of sound level meters, field calibrators etc.; details of equipment calibration history; details of field calibration.
- h. Detail the weather conditions during the survey period. Include wind speed, wind direction, temperature and precipitation. Average wind speeds above 5 m/sec and persistent heavy rain are not conducive to effective noise measurements, although intermittent light rain and gusts over 5 m/sec can be tolerated.

## (vii) Noise Predictions

Where it has been necessary to predict noise levels, then a brief explanation of how this has been undertaken, the data used, the software used, the prediction standards used, and any assumptions made are required. Details of any validation checks should be included.

## (viii) Noise Source Emission Levels

Whether the scheme is noise sensitive or is likely to generate noise the report should include the following:

 Details of the type, number, location and spatial relationship of noise sources and receptors

- Details of the noise emission from each noise source, at and/or within each noise sensitive receiver
- Details of how the noise emission levels were derived.

#### (ix) Assessment

- a. Give details of the assessment made based on measured and/or predicted data.
- b. State any assumptions made.
- c. Show any calculations to sufficient detail that they could be checked for accuracy (possibly in an Appendix).

### (x) Outcome of Pre-Survey Discussions with the LPA, Including Potential Noise Conditions

Here the report should discuss the outcome of any pre-survey discussions with the LPA, including any acoustic standards the LPA wishes to see used on the scheme; and the details and justification of any alternatives the applicant may wish to propose.

### (xi) Mitigation

The report should clearly identify any mitigation measures that may be required in order to comply with the guidance and standards in this SPD.

All proposed noise management measures that have been considered and their effectiveness should be presented and discussed so as to enable informed recommendations on suitable mitigation measures.

#### (xii) Recommendations and Conclusions

This section should clearly reflect the scope, aims and objectives of the report. Where the report is supporting a planning application then it should normally recommend what noise management measures should be taken by the developer in order to demonstrate that:

- a. The adverse effects of noise as a consequence of the new development have been mitigated and minimised in accordance with the guidance in this SPD.
- b. Good acoustic design principles have been considered and applied given the particular circumstances of the proposed development in accordance with the guidance in this SPD.

#### (xiii) Appendices

The amount of material included in any Appendices should be proportionate to the assessment and may typically include the following:

- a. Plans, maps, photographs showing site location and monitoring/prediction locations,
- b. Unabridged details of noise monitoring where critical to recommendations and conclusions,
- c. Details of any calculations relied upon,
- d. Copies of equipment calibration certificates.

#### 9. Note:

Further practical guidance on undertaking and reporting environmental noise and vibration measurements can be found in the "ANC Green Book" - Environmental Noise Measurement Guide and the "ANC Red Book" - Measurement and Assessment

of Groundborne Noise and Vibration: both available from the Association of Noise Consultants.

#### **Assessment by Suitably Qualified and Competent Person**

- 10. The assessment of noise is a complex task requiring specialist training, experience, techniques and equipment. Consequently, noise surveys, impact assessments, mitigation design and report writing is best carried out by suitably qualified and competent persons with appropriate knowledge, skills and experience. The LPA is not able to endorse or recommend the services of individual consultants.
- 11. However, details of acoustic consultants may be obtained from:

#### The Institute of Acoustics

Silbury Court, 406 Silbury Boulevard, Milton Keynes, MK9 2AF

Tel: +44 (0) 300 999 9675 Email: <u>ioa@ioa.org.uk</u>

#### The Association of Noise Consultants

19 Omega Business Village, Thurston Road, Northallerton, DL6 2NJ

Tel: +44 (0)20 8253 4518 Email: info@theanc.co.uk

### The Chartered Institute of Environmental Health

Chadwick Court, 15 Hatfields, London, SE1 8DJ

Tel: +44 (0)20 7827 5800

Annex C: Summary of Noise Effect Levels and Planning Outcomes / Advice for "Absolute anonymous noise" and "Relative non-anonymous noise"

			Table 1: Guidelin	ne "Absolute" Soun	d Levels for "anon	ymous noise" <sup>1</sup>		
	Absolute Level:	≤40dB	41 - 45dB	46 - 50dB	51 - 55dB	56 - 60dB	60-69dB	>69+dB
	Daytime Effect: <sup>2</sup>	NOEL	NOEL	NOEL	LOAEL	SOAEL	SOAEL+	Unacceptabl Adverse Effe
	Evening Effect: <sup>3</sup>	NOEL	NOEL	LOAEL	SOAEL	SOAEL	SOAEL+	Unacceptable Adverse Effe
Sound Level	Night-time Effect: <sup>4</sup>	NOEL	LOAEL	SOAEL	SOAEL	SOAEL	SOAEL+	Unacceptable Adverse Effec
Absolute Sound	Effect / Impact Description:	No observed effect on health or quality of life.	Sleep disturbance in bedrooms with window open.	Speech intelligibility within living areas with windows open resulting in moderate annoyance.  Greater potential for sleep disturbance and adverse health impact.	Increased potential for sleep disturbance, including significant adverse health effects. Gardens and amenity spaces affected.	Noticeable and disruptive  Significant adverse health effects likely to all habitable rooms. Occupants unable to open windows due to noise ingress and unable to enjoy garden / amenity areas.	Noticeable and disruptive  High risk of significant adverse health impact. Unable to use garden and amenity space or have windows open for ventilation.	Extensive ar regular changes in behaviour and/or an inability to mitigate effe of noise leading to psychologica stress or physiological

								effects
	Mitigation Considerations:	A1	A2	А3	A4	A5	A6	Unavoidable and/or an
		Use design, layout and landscaping (DLL) to create and preserve areas of amenity and tranquillity to enhance	Protect bedroom facades from noise through DLL.	Protect habitable room facades from noise through DLL with greater protection for bedrooms.	Bedroom facades to be protected through DLL to bring below LOAEL.	Bespoke assessment of noise mitigation needs, including consideration of:	Bespoke assessment of noise impact and mitigation, including:	inability to mitigate effect of noise leading to psychological stress or
Р		the noise environment.	Provide minimum double-glazing with trickle vents to bedrooms.	Provide higher spec double-glazing with trickle-vents to all habitable rooms.	Provide higher spec double-glazing with trickle vents to all habitable rooms.	alternative to open window ventilation provision to protect internal noise environment.	DLL, protection of building envelope and provision of alternative amenity space	physiological effects
age 256					Protection of gardens and amenity space through DLL and acoustic barriers / fencing.	Protection of garden / amenity areas through DLL to bring below LOAEL.		
-	Planning Consideration:	"Grant Consent - No Objection on Noise Grounds"	"Grant Consent - No Objection – Minimise Noise"	"Grant Consent - No Objection – Minimise Noise"	"Grant Consent - No Objection – Minimise Noise"	"Refusal / Object - Avoid on Noise Grounds"	"Refusal / Object - Avoid on Noise Grounds"	"Refusal / Object - Prevent on Noise Grounds"
		No specific measures required	No objection in principle subject to the inclusion of suitable noise conditions:	No objection in principle subject to the inclusion of suitable noise conditions mitigating and	No objection in principle subject to the inclusion of suitable noise conditions mitigating and	Possibly Object - Should avoid but may be possible to mitigate and reduce noise to a minimum.	Possibly Object - Presumption against planning permission being granted. Avoid	Object: Prevent - Planning consent
			Approved Plans and/or conditions to include satisfactory	reducing noise to a minimum.	reducing noise to a minimum.	Details of noise mitigation to be included as part of planning approval process.	Unless detailed noise impact assessment and approved noise mitigation control	should be refused on noise grounds regardless of

	window acoustic performance specification to bedrooms with facades exposed to LOAEL noise.	Approved Plans and/or conditions to include satisfactory window acoustic performance specification to all habitable rooms with facades exposed to LOAEL to SOAEL noise.	Details of noise mitigation to be included as part of planning approval process.  Conditions required to secure implementation of mitigation / acoustic control measures within the noise report.	Conditions required to secure implementation of mitigation / acoustic control measures within the noise report.  Refusal if noise report is inadequate.	measures implemented through conditions.  Possible post completion verification of mitigation measures required.	other consideration s ("prevent").
Page 25 Notes:			Refusal if noise report is inadequate.	f transport noise and may also	Refusal if noise report is inadequate.	

- The absolute sound level dBLAeq(T), includes the combined external free-field noise level from all sources of transport noise and may also include industrial/commercial noise where this is present but not "dominant". T of dBLAeq(T)is the reference time period for the relevant Day, Evening or Night-time period see notes 2 to 4 below. <sup>2</sup>Day is from 07:00 to 19:00 and the reference time period (T) is 8 hours.
  - <sup>3</sup>Evening is from 19:00 to 23:00 and the reference time period (T) is 4 hours.
  - <sup>4</sup>Night is from 23:00 to 07:00 and the reference time period (T) is 8 hours.
- For the specific purposes of the assessment, industrial/commercial noise should be taken as "dominant" where the effect would be likely to be rated as adverse if a BS4142:2014 assessment was to be carried out. The judgement on whether or not to undertake a BS4142 assessment should be proportionate to the level of risk. In low risk cases a subjective judgement of dominance, based on audibility, would normally be sufficient.
- It should always be clearly stated whether an industrial/commercial noise contribution has been included or excluded from the assessment.
- LAeq,16hr is for daytime 0700 2300, LAeq,8hr is for night-time 2300 0700.
- LAmax, F criteria will place the site in SOEL, regardless of other acoustic criteria, if the maximum noise level is likely to be exceeded more than 10 times a night (2300 0700).

Table 2: Guideline "Relative" Sound Level Standards for "non-anonymous noise" 5

		Relative (Rating) Level:	< -10dB	-10dB to -5dB	-5dB to 0dB	+1dB to +5dB	+6dB to +10dB	> +10dB
Pe	evel.	Effect:	NOEL	NOEL	NOEL	LOAEL	SOAEL	Unacceptable Adverse Effect
Page 258	Relative Sound L	Effect / Impact Description:	Sound is likely to be inaudible and have no discernible impact on health or quality of life.	Sound will become audible, although should not cause a change in behaviour or have an adverse impact on health or quality of life.	Sound will become more noticeable, particularly if the sound has characteristics which make it distinguishable from general environmental noise. However this should not result in a change in behaviour or adverse impact on health, although the context and attitude to the noise source could influence the subjective response to the sound.	Sound from the source is likely to be noticeable and can give rise to an adverse response, such as annoyance and behaviour change, for example having to close windows to cut out unwanted noise.	Sound is increasingly likely to be noticeable and intrusive resulting in significant adverse impacts such as sleep disturbance, annoyance and have an adverse health impact.	Sound is very likely to be very noticeable and intrusive resulting in unacceptable significant adverse impact on health and quality of life.
-	_	ation siderations:	R1	R2	R3	R4	R5	R6
			Use good design, layout and landscaping (DLL) principles to create and preserve areas of amenity and tranquillity to enhance the noise environment and	Use principles outlined in R1	Use principles outlined in R1, with particular emphasis on protecting bedrooms and other habitable rooms from the noise, for example by	Use principles in R1 and additional structural mitigation such as an acoustic barrier6, or other structure and higher spec double glazing to	Bespoke assessment of noise mitigation needs, including consideration of alternative to open window ventilation provision to protect	Bespoke assessment of noise impact and mitigation, including DLL, protection of building envelope and provision of

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	consider if sound reduction at source can be achieved within the design of the development.		separation from noise source, orientation of buildings and by the provision of higher spec double glazing with trickle vents to habitable rooms.	habitable rooms with trickle ventilation.	internal noise environment and protection of garden / amenity areas through DLL to bring below LOAEL.	alternative amenity space
Planning Consideration:	"Grant Consent - No Objection on Noise Grounds"  No objection and no specific noise measures required.	"Grant Consent - No Objection – Minimise Noise"  No objection, but developers should consider good design principles to preserve and enhance the noise environment.	"Grant Consent - No Objection - Minimise Noise"  Consider good design principles to preserve and enhance the noise environment, with particular emphasis on protecting habitable rooms.	Approved Plans and/or conditions to include structural noise mitigation and satisfactory window specification to all habitable rooms with facades exposed to LOAEL noise. Potential refusal if noise mitigation not included.	Details of noise mitigation to be supplied as part of planning approval process.  Conditions required to implement control measures within the noise report.  Refusal if noise report is inadequate.	Presumption against planning permission being granted, unless detailed noise impact assessment and approved mitigation measures implemented through conditions. Post completion verification of mitigation measures required.

5 The relative sound describes the difference between a specific and identifiable sound source compared to the background noise when the specific noise is not present. The methodology in BS4142:2014 - Method for Rating Industrial and Commercial Sound should be used to determine the relative sound level and is comparable to the Rating level within the Standard.
6 Acoustic barriers for R4 mitigation should break the line of sight between the noise source and receiver, be of solid construction with no gaps and with a minimum superficial density of 4kgm-1. Acoustic barriers for R5 mitigation or above should be tailored to achieve the specific noise mitigation for the site.

# Annex D: Specific Noise Generating Development Uses - Industrial, Trade / Commercial or Business - Noise Requirements

- 1. Common sources of NGD include the following:
  - Sound Insulation between Commercial and Residential Development General
  - Delivery and Collections
  - Places of Entertainment (Food Restaurants, Clubs, Pubs and Bars)
  - Multi Use Games Areas and Artificial Grass Pitches
  - Gyms
  - Nurseries
  - Wind Turbines
  - Agricultural buildings

#### Sound Insulation between Commercial and Residential Development - General

- 2. The requirements of the Building Regulations are usually deemed to be adequate for the control of sound insulation internally between dwellings. However, the LPA encourages applicants to adopt higher standards. In particular, the requirements of the Building Regulations can be inadequate where certain types of commercial use adjoin residential use.
- 3. The level of sound insulation performance required will be dependent upon the use type, for example a higher level of airborne sound insulation performance will typically be required for a proposed commercial catering unit located below a residential flat than will be required for a small café. Higher standards would also be appropriate when D1 and D2 use classes, such a dental surgery, a day nursery or a gym adjoins residential premises. The examples in Table 1 demonstrate the typical range that may need to be applied dependent on the circumstances (more stringent values may apply in some cases).

Table 1: Sound Insulation Examples - Commercial to Residential

Performance Standards for sepa function	arating walls, separating floors an	d stairs that have a separating
Commercial to Residential	Airborne Sound Insulation Performance DnTw + Ctr dB	Impact Sound Transmission Performance LnTw + Ctr dB
Walls	48-60	

- 4. If, as a result of a planning application, a situation arises where a residential use and a commercial use will share a separating floor or wall then an assessment of the required sound insulation performance of the floor or wall should be submitted together with the construction details proposed to achieve the required standard of sound insulation.
- 5. In certain circumstances airborne and impact sound insulation tests may also be required by the LPA in order to demonstrate that the sound insulation performance standard has been achieved.
- 6. A high level of airborne and impact sound insulation, often only achievable by complex design methods that structurally isolate the noise generating and noise sensitive premises, will be required in situations such as where music and dancing or gym or health and fitness activities adjoin a residential use. Each case will take into account the specific circumstances of the proposed development, and the example limits in Table 5 may not be appropriate for assessing performance as they do not take account of the full extent of low frequency noise transmission. The following type of information would be considered in such applications:
  - Establish the noise and vibration transfer paths from source to noise sensitive receiver.
  - Establish the potential airborne and impact noise and vibration transfer magnitudes from source to noise sensitive receiver.
  - Design sound isolation and insulation treatment such as a totally isolated
    /floating floor on a resilient underlayment or spring-isolated floor and wall
    treatment which mitigates and minimises adverse noise and vibration effects and
    is appropriate for the types of activity being undertake within the proposed
    development. An acoustic floating floor, isolated internal walls and ceiling results
    in a room that is completely decoupled from the surrounding building structure.
  - Undertake post completion testing to demonstrate how noise and vibration has been controlled adequately.

#### **Delivery and Collections**

7. In certain situations the noise impact from deliveries and collections will need to be determined and form part of the noise assessment. The GCPS recognises that there is sometimes a need to reduce congestion and air pollution and the retiming of deliveries is one method to assist with this sustainability objective. The LPA will therefore apply a risk based approach to applications where vehicle delivery-noise may be a source of disturbance. Where applications are for retiming of deliveries, the use of quiet technology is also encouraged in the context of wider sustainability aims.

- 8. The Council expects that deliveries and refuse collections to be carried out between the daytime hours 07:00-23:00hrs. Developments requiring deliveries outside of these times should provide an acoustic report to demonstrate there will be no adverse impact in relation to noise, with particular reference to residential occupiers as a result of these activities. When preparing the assessment, regard should be given to *BS4142 Method for rating and assessing industrial and commercial sound*. Developers are however encouraged to discuss their proposals with the Council's Noise team before conducting their acoustic report.
- 9. It is possible that restrictions on operating hours will be imposed and these will reflect the sensitivity of the area and be in the context of wider sustainability aims.
- 10. Where Sunday or late night and early morning deliveries/collections or retiming of deliveries are proposed, the applicant should specifically demonstrate the need for this and what measures will be implemented to prevent undue disturbance to neighbours. Further guidance on managing noise from deliveries and collections is also available at: 'Noise Abatement Society's Silent Approach™ Quiet Night Time Delivery Scheme' and 'Freight Transport Association Guidance Delivering the Goods a toolkit for improving night-time deliveries'.
- 11. A Delivery Noise/Service Yard Management Plan may also be required and should include details of:
  - Times and frequency of deliveries and collections;
  - Effective enclosure and sealing of loading bays and service areas and/or locations away from noise sensitive premises;
  - Vehicle movements, including forklift vehicles;
  - Quiet reversing methods; preference will be given to broadband reversing alarms or alternative quiet safety methods for reversing;
  - Good practice working methods to minimise noise from the use of cages, trolleys, pallets and forklift vehicles - mitigation measures, such as barriers, low noise wheels on cages, low noise surfaces on tail lift decking and delivery routes for trolleys, silent electronically operated shutters etc.

#### Places of Entertainment (Food Restaurants, Clubs, Pubs and Bars)

12. It is recognised that clubs, public houses, bars and other places of entertainment help to achieve wider sustainable development goals. However, places of entertainment can also cause significant levels of noise disturbance and pose particular noise issues, not least because associated activities are often at their peak in the evening and late at night. Developers will need to bear in mind not only the noise that is generated within the premises from music but also the attendant problems of noise that may be made by customers arriving, leaving and congregating

outside the venue including external smoking areas, deliveries and collections and the use of car parks and access roads. Developers will need to bear in mind and incorporate noise mitigation at the design stage.

- 13. It is expected that all applications for this type of premises should properly address noise issues. As a general principle, music and noise from customers activity (talking, shouting and applauding) emanating from entertainment premises (including external areas such as balconies, gardens and smoking areas) should not be audible within any noise sensitive premises. Developers should assess the likely impact of the new entertainment premises upon the noise environment. The premises must be designed so to ensure that music and associated noise is controlled, so as to be inaudible inside any residential premises within the vicinity.
- 14. Inaudibility is defined by the Institute of Acoustics' Good Practice Guide on the Control of Noise from Pubs and Clubs 2003 as:
  - Entertainment Noise Level, LAeq (1 minute) should not exceed Representative Background Noise Level, LA90.
  - Entertainment Noise Level, L10 (5 minutes) should not exceed Representative Background Noise Level, L90, in any 1/3 octave band from 40Hz to 160Hz.

or:

The use of Noise Rating (NR) curves, as discussed in the DEFRA document, 'Noise from Pubs and Clubs, Phase I' (2005), is an alternate way of establishing acceptable levels in noise sensitive premises where low frequency noise may be an issue. The following NR curves should be achieved:

- NR 20 in bedrooms (23:00 to 07:00 hours).
- NR 25 in all habitable rooms (07:00 to 23:00 hours).
- Noise rating curves should be measured as a 15 minute linear Leq at the octave band centre frequencies 31.5 to 8 KHz.
- 15. All noise levels shall be taken with windows open or closed (whichever makes the music seem louder), or with alternatively provided acoustic ventilation over and above "background" ventilation. Other noise sources from these developments, such as air conditioning plant and kitchen odour extraction systems shall be treated as industrial type NGD.
- 16. Proposed developments will be assessed on a case by case basis and the design criteria may be modified depending on the nature of the business, frequency, time, duration and number of entertainment events and sensitivity of the area. It is expected that any likelihood of structure borne sound (and vibration) transmission problems will be separately assessed and that effective control measures will be included in proposals. Developers are encouraged to enter into pre-application discussions with the LPA to discuss these issues at an early stage.

17. Some commercial developments including fast food restaurants, night clubs and public houses can have particular impacts, not least because activities are often at their peak in the evening and late at night.

#### Multi Use Games Areas and Artificial Grass Pitches

- 18. Both Multi Use Games Areas (MUGA's) and Artificial Grass Pitches (AGP's) are becoming a more common feature in school and community redevelopments and play a key role in developing sporting opportunities for school children and the wider community. However, if inappropriately located and operated they can cause noise and other forms of disturbance to residents and businesses located in the vicinity of the development.
- 19. Outdoor MUGAs generally consist of one or numerous floodlit all-weather, or 3G pitches upon which football, rugby, hockey etc. is played. Where an outdoor MUGA is to be considered, the planning authority should consider its operating times, its frequency of use, the MUGA's orientation and line of sight to dwellings.
- 20. Recent guidance has been produced by Sports England 'Design Guidance Note Artificial Grass Pitches Acoustics Planning Implications, New Guidance for 2015' <a href="https://www.sportengland.org/media/4515/agp-acoustics-planning-implications.pdf">https://www.sportengland.org/media/4515/agp-acoustics-planning-implications.pdf</a>
- 21. This guidance provides information on the application of appropriate noise criteria as detailed below in Table 2 below, assessment methods as well as examples of noise mitigation measures that can be implemented.

Table 2: MUGA & AGP - External Noise Standards

Noise Impact From MUGA or AGP	Development Outcome
50dB(A) LAeq, 1 hour	Normally acceptable

22. The LPA would expect that in most cases for any new or modified MUGAs or AGPs the Sports England guidance is applied and the application should demonstrate that these levels can be complied with. In other cases, it may be necessary to seek to achieve better standards due to particular sensitivity of the location or hours of

- proposed use. In such cases it is recommended that early discussions are undertaken between the applicant and the LPA.
- 23. Developers should assess the likely impact of the new MUGA upon the noise environment. The MUGA must be designed so to ensure that noise associated with it is controlled, so as to be inaudible inside any residential premises within the vicinity.
- 24. The external noise level should not exceed 50 dB LAeq,T. at the boundary of the nearest noise sensitive premises, in accordance with World Health Organisation Guidelines of Community Noise 1999 and Sports England guidance. It is recognised, however, that the detrimental noise impact of a MUGA often may only become significant over a lengthy period of time; and that sound measurement data compiled over a relatively short time period may not accurately reflect the impact of a noise that will recur day upon day throughout the year and in particular the impact of peak noise occurrences such as loud voices / shouting, referee whistles and the impulsive noises such as ball impacts on fencing and backboards.
- 25. This being the case the measured or predicted sound level of < 50 dB LAeq,T will not necessarily be accepted as a *de facto* demonstration that noise from a proposed MUGA will not have an adverse noise impact.
- 26. This being the case, the MUGA Noise Level, LAeq (1 minute) should not exceed Representative Background Noise Level, LA90 to mitigate the impact of Lmax / peak noise occurrences such as loud shouting, referee whistles and the impulsive noise such as ball impacts on backboards.
- 27. Developers must also consider the following noise mitigation measures:
  - The use of bunds and environmental acoustic barriers to remove any direct line of sight and to reduce noise levels;
  - The provision of perimeter netting to prevent impact noise;
  - Use of neoprene dampeners on welded mesh fencing;
  - Padding and other dampening to backboards
  - Restrictions on hours and days of use;
  - User-management controls & codes of conduct;
  - Maximising any distances to nearby noise-sensitive premises.

#### **Gyms**

28. In recent years the popularity of leading a healthy lifestyle and the demand for gyms to be convenient and with 24 hours access locally, has led to an unprecedented development of commercial gyms, personal training gyms and specialist gyms. Whilst this is a positive the level of noise pollution generated by gyms, including

- amplified music, structure borne sound from weights and plant equipment, has the potential to give rise to noise complaints.
- 29. Therefore, the presence of gyms in the built environment must be considered to ensure that they can mutually co-exist alongside the existing and future residential demand on city centres. Each type of gym comes with its separate issues related to noise impact and should be assessed against what activities are proposed to be undertaken within the gym.
- 30. Gyms should ideally be located away from residential units. However, this is not often possible and gyms are increasingly being located in mixed-use developments adjacent to habitable areas. In these cases high acoustic performance separating wall and floor constructions will normally be required to ensure that neighbouring residents are adequately protected
- 31. The noise that gyms generate can be broadly separated in to a number of categories;
  - Noise Breakout This includes noise breaking out of the façade of the building from amplified music, patrons and general operations of a gym.
  - Plant Noise Gyms will commonly require some sort of heat recovery system to regulate the temperature within the premises so external air conditioning units are common. The air handling units will be externally mounted and will generate noise that requires assessing.
  - Structure-borne Impact Noise Transfer (structurally reradiated high impulsive noise) – Fixed Weight Machines and Weight Drops can be from free weights, typically ranging up to a max of 45 - 50kg but also heavier weights from deadlifting activities which can range up to 50kg – 200kg.
  - Airborne Noise Transfer Amplified music breaking through an adjoining partition floor or wall to neighbouring <u>residential dwellings</u> or commercial premises.
- 32. To appropriately mitigate the risk of complaints in relation to noise from gyms it is imperative that appropriate acoustic design targets are implemented. Minimum standards within the Building Regulations Part E are not suitable for gyms adjacent to commercial or residential premises and an increased level of sound insulation is required.
- 33. It is recommended that early discussions are undertaken with the Environmental Health Department to discuss the specific application and the sound insulation between commercial and residential development. Where gym premises structurally adjoin dwellings, ideally any airborne and structure borne noise shall be 'inaudible' inside the closest sensitive dwelling. Inaudibility is difficult to quantify as it dependent on the background sound level at the receptor, which cannot be

- accurately assessed if the development is not yet constructed. In this scenario the following design criteria inside neighboring rooms are normally recommended:
- Daytime (07:00 23:00): NR15 L<sub>Max</sub> for 31.5Hz, 63Hz and 125Hz / NR20 L<sub>Max</sub> for 250 Hz 8kHz
- Night (23:00 07:00hrs): NR10 L<sub>Max</sub> for 31.5Hz, 63Hz and 125Hz / NR15 L<sub>Max</sub> for 250 Hz – 8kHz
- Noise Breakout The building envelope needs to be appropriately soundproofed, this will include the appropriate specification of the façade build up, glazed areas and doors.
- Plant Noise Plant equipment needs to be located in an appropriate location and may also need acoustic enclosures or screening to mitigation the noise emissions.
- Structure Borne Noise Free weights areas will need appropriate acoustic gym flooring to mitigate the impact from weights being dropped. Cardio machines will need appropriate isolation from the floor slab to mitigate vibration transfer (these are typically built into the machine). Specialist weights areas, that use greater than 50kg weights, will likely require helical spring systems in order to mitigate the weights being dropped from head height.
- Noise Breakthrough Adjoining walls will need to be appropriately designed to mitigated airborne sound transference to adjoining residential and commercial spaces.

### **Nurseries / Childcare Facilities**

- 34. Developers should assess the likely impact of any new nursery upon the noise environment and in particular in close proximity to residential premises. Nursery and similar uses can have large numbers and groups of children present and internal and external activities and external play areas can generate high levels of noise including regular individual peak noise occurrences such as loud voices, shouting and screaming.
- 35. Developers must consider the following noise mitigation measures:
  - Restrictions on hours and days of use;
  - Restrictions on the number of children using the nursery and its external play areas;
  - The use of acoustic barriers to remove line of sight and adsorptive barriers to reduce reflected noise;
  - The implementation of sound airborne and impact sound insulation measures where the proposed nursery adjoins noise-sensitive premises;
  - The layout of external play areas in relation to neighbouring noise-sensitive premises;
  - User-management controls;

36. Certain developments may be comprised of mixed residential and commercial / business uses. If nurseries and similar are proposed with residential units above then careful consideration should be given to good acoustic design to separate noisy activities such external play areas from noise sensitive uses. Residential habitable rooms and private external amenity areas should not be located directly above or in the direct line of sight of such noise sources. Also a high level of airborne sound insulation will be required for intervening walls and ceilings / floors and stairs between different floor levels for different uses structurally adjoined / connected.

#### **Wind Turbines / Farms**

#### Small to Medium Sized Wind Turbines (up to and including 50kW)

- 37. The Applicant/Developer must ensure that the assessment methodology used should demonstrate the following operational noise limits:

  Daytime:
  - The predicted daytime level of noise arising from the operating turbine should not exceed 35 dB LA90, 10 min at the façade of the nearest noise sensitive premises (free-field conditions).

or

 The predicted daytime level of noise arising from the operating turbine should not be >5 dB above background noise level (LA90) at the façade of the nearest noise sensitive premises; whichever is the greater (free-field conditions). The expected noise levels arising from an operating turbine should be compared with notional background noise levels that are considered representative of rural areas.

#### Night Time:

• The predicted night time level of noise arising from the operating turbine should not exceed 43 dB LA90, 10 min at the façade of the nearest noise sensitive premises (free-field conditions).

or

 The predicted night time level of noise arising from the operating turbine should not be >5 dB above background noise level (LA90) at the façade of the nearest noise sensitive premises; whichever is the greater (free-field conditions). The expected noise levels arising from an operating turbine should be compared with notional background noise levels that are considered representative of rural areas.

#### Intermediate to Large Turbines (>50kW)

38. For applications for wind turbines greater than 50kW, the assessment procedures detailed in ETSU-R-97 'The Assessment and Rating of Noise from Wind Farms', and

the Institute of Acoustics' "A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise" (2013) should be followed.

- In the case of single turbines, or where large separation distances are involved, it will permissible to show compliance with a noise level of 35 dB LA90, 10 min at the nearest noise sensitive premises (free-field conditions).
- It will be deemed acceptable if the daytime noise level is no more than 5 dB above the background level (LA90), or 35 dB (LA90, 10 min), at the façade of the nearest noise sensitive premises (free-field conditions); whichever is the greater.
- It will be deemed acceptable if the night time noise level is no more than 5 dB above the background level (LA90), or 43 dB (LA90, 10 min), at the façade of the nearest noise sensitive premises (free-field conditions). Whichever is the greater.
- It will be deemed acceptable if the daytime or night time noise level is no more than 5 dB above the background level (LA90), or 45 dB (LA90, 10 min), at the façade of any dwelling occupied by person(s) having a financial interest in the wind turbine(s) (free-field conditions); whichever is the greater.
- In certain circumstance the potential for amplitude modulation (AM) of the aerodynamic noise from turbine blades, sometimes referred to as "swish" or "thump" may also require specific consideration. This may require an acoustic character correction to be applied to noise limits.

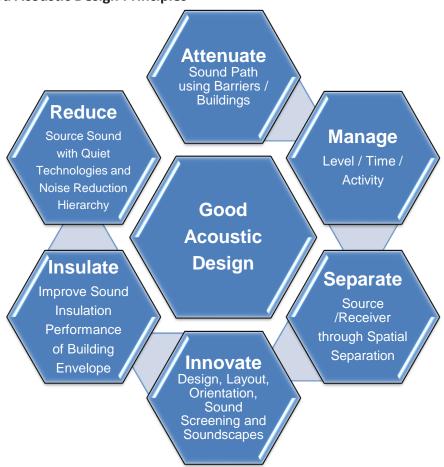
#### **Agricultural buildings**

39. For buildings and structures for agricultural use noise attenuation should be in accordance with 'BS 5502-32 Buildings and structures for agriculture. Guide to noise attenuation'.

### **Annex E: Good Acoustic Design**

1. The use of good acoustic design is an inherent part of the recommended approach that is described in the SPD and will help to deliver planning and noise policy objectives. Good acoustic design should help produce sustainable buildings that provide healthy and quality living conditions for future occupants, that are sensitive to the likely expectations of future occupants and to the acoustic characteristics of the location, that are efficient in the use of resources and energy both during construction and subsequent occupation, and that are matched by an appearance that demonstrates good aesthetics as far as possible. Good acoustic design is about more than the numbers. It is a holistic design process that creates places that are both comfortable and attractive to live in, where acoustics is considered integral to the living environment. Figure 1 below presents the areas that should be considered when applying good acoustic design.

**Figure 1: Good Acoustic Design Principles** 



#### Noise Sensitive Development - Good Acoustic Design

- 2. In the context of this SPD, good acoustic design is that which will achieve good acoustic standards, as far as is reasonably practicable, both internally (inside noise sensitive parts of the building(s) and externally (in spaces to be used for amenity purposes). Consideration of what is reasonable will include the practicability and availability of technical solutions as well as the associated costs and financial implications, legal requirements and health and safety issues.
- 3. Good acoustic design must also provide an integrated solution whereby good acoustic design principles are aligned with, or do not otherwise conflict with, other design aspects that will affect living conditions and the quality of life of the inhabitants or other sustainable design objectives and requirements. Solely relying on sound / noise insulation scheme for the building envelope to achieve acceptable acoustic conditions in new residential development, when other means may be available to achieve good acoustic standards or to reduce the need to rely on sound insulation of the building envelope is not regarded as good acoustic design.

#### **Good Acoustic Design Critical Steps**

- 4. The following questions illustrate the types of consideration that will help to achieve the good acoustic design of a noise sensitive scheme:
  - Has noise from the surrounding area been taken into consideration in arranging the site layout? For example, have residential units been located as far away as practicable from an adjacent noise source?
  - Is it practicable to use screening by existing structures or methods incorporated into the proposal to reduce noise levels affecting the sensitive facades and parts of the scheme?
  - Where practicable has the surrounding acoustic environment been taken into account in relation to the internal layout of residential units? Are bedrooms located on the quieter facades? Are gable ends and non-noise sensitive facades orientated towards the dominant source in preference to noise sensitive facades?
  - Will there be part of the habitable space in each unit which does not overlook the significant noise source? Have sensitive rooms been placed on the quietest façade?
     NB: Single aspect units where all the habitable space overlooks the significant noise source should be avoided.
  - Has consideration been given to suitable noise insulation of the external building envelope to mitigate unacceptable external noise? Remember that this is not currently covered by Building Regulations and can be overlooked if not considered at the planning stage. How will this affect the residential amenity and utility of the proposed scheme?
  - Has consideration been given to the acoustic quality of private or communal outdoor spaces within the scheme? What measures have been included to enhance the

acoustic quality of any outdoor amenity spaces? Where access to private or communal quiet outdoor amenity space cannot be, or has not been, provided within a scheme then is there ready access to a suitable quiet outdoor amenity space nearby?

- 5. The LPA will consider the use of Section 106 agreements to contribute to the improvement and enhancement of the acoustic environment; including, engagement by developers with the owners and operators of existing noise generating land uses to explore how noise emissions at source or on the transmission pathway beyond the proposed noise sensitive site boundary may be reduced or better managed. It is recognised that it may not always be possible to achieve good acoustic standards in all rooms within noise sensitive developments or at all external amenity spaces associated with new residential development. Where it is not possible to achieve good standards in every respect, the acceptability of the proposed development will be considered having regard to:
  - The degree (extent and magnitude) to which good acoustic standards cannot be achieved and whether acceptable acoustic standards can be achieved instead;
  - Measures which may help to off-set adverse impacts on certain parts of the dwelling or building. For example, whether there is access to a habitable room/s on a relatively quiet façade (i.e. a façade where noise is at least 15 dBA lower than the most exposed façade) or access to a relatively quiet external amenity space1; and
  - Whether the achievement of good acoustic standards will give rise to undesirable
    consequences for other aspects of the living or working environment. For example,
    having to keep windows closed may result in adverse consequences on the comfort
    and health of occupants, and having to provide acoustic barriers or screens may
    result in significant visual impacts.

### Noise Generating Development – Good Acoustic Design and Noise Control Measures

- 6. A mitigation hierarchy should be used as part of the design process. Noise control measures applied at source will be preferred to noise control on the transmission path from source to receiver. Façade protection measures represent the least preferred method of noise control. Noise control measures should be proportionate and reasonable and may include one or more of the following:
  - Engineering: reduction of noise at point of generation / source (e.g. by using quiet machines and/or quiet methods of working); containment of noise generated (e.g. by insulating buildings which house machinery and/or providing purpose-built barriers around the site);
  - Lay-out: adequate distance between source and noise-sensitive building or area and/or incorporating good design to minimise noise transmission through the use of screening by natural barriers, other buildings, or non-critical rooms in a building;
  - Administrative: limiting operating time of source; restricting activities and noise limits.

- 7. Early consultation between the applicant and the LPA about the possible use of noise control measures is desirable and may enable the measures to be incorporated into the design of the proposal before it is formally submitted for determination. This is likely to reduce costs in the long run and will help facilitate quicker decision making. The LPA may, otherwise, or in addition, seek further clarification on noise control measures which may introduce delays, and they may ensure that adequate noise control measures are included by applying planning conditions.
- 8. The NPPF places emphasis on good design in managing and mitigating the environmental impacts both from and on new development. This SPD recognises the importance of good acoustic design and noise problems can often be prevented or resolved through the careful design of noise sensitive and noise generating development at an early stage in the planning process.
- The overall goal of this SPD is to encourage and reward good acoustic design and to
  ensure that noise is appropriately taken into account and that the measures used to
  mitigate and manage the impact of noise do not unacceptably compromise other
  planning objectives.

#### **Good Acoustic Design Critical Steps**

- 10. The following questions illustrate the types of consideration that will help to achieve the good acoustic design of a noise generating scheme:
  - Has the noise sensitivity and the typical existing acoustic environment of the surrounding area been taken into consideration in arranging the site layout? Have noise generating activities and/ or plant been located as far away as possible from noise sensitive receptors?
  - Is it practicable to use screening by existing structures or are other methods incorporated into the proposal to reduce noise from the scheme affecting the sensitive façades and other parts of nearby noise sensitive land uses?
  - Has consideration been given to including appropriate noise insulation of the building envelope to parts of the scheme that will generate noise? Are any doors and windows in sensible locations as regards noise impact on any neighbours? What about the roof or ceiling construction, it's often an acoustic weak point in commercial buildings?
  - Has the need to appropriately manage noise emissions from the site been taken into account in selecting plant and equipment?

### **Acronyms**

AGPS Artificial grass pitches

AQMA Air Quality Management Area

BREEAM Building Research Establishment Environmental Assessment Method

CEMP Construction Environmental Management Plan

CFA Continuous flight auger
CHP Combined Heat and Power

DCEMP Demolition and Construction Environmental Management Plan

DER Dwelling Emission Rate

EIA Environmental Impact Assessment EPC Energy Performance Certificate

EV Electric vehicle HQM Home Quality Mark

IPCC Intergovernmental Panel on Climate Change

LES Low Emission Strategy

LOAEL Lowest Observed Adverse Effect Level

LPA Local Planning Authority

MMC Modern Methods of Construction

MUGA Multi Use Games Area

MVHR Mechanical Ventilation with Heat Recovery

NGD Noise Generating Development

NOEL No Observed Effect Level

NPPF National Planning Policy Framework
 NPPG National Planning Policy Guidance
 NPSE National Policy Statement England
 NSD Noise Sensitive Development

PV Photovoltaic panel

SAP Standard Assessment Procedure

SOAEL Significant Observed Adverse Effect Level

SPD Supplementary Planning Document

SuDS Sustainable Drainage Systems

TER Target Emission Rate VDV Vibration Dose Value

VOC Volatile Organic Compound

### Glossary

**Acid deposition** Also known as acid rain, this is caused by emissions of sulphur

dioxide and nitrogen oxides from fossil fuel use which can be

converted into nitric and sulphuric acid once in the

atmosphere. Often carried long distances by prevailing winds, these cause great harm to water bodies and ecosystems.

Activity node A location where services and facilities are centred due to

good accessibility on foot, by bicycle or public transport and where population density is increased to take advantage of

proximity to the services and facilities provided.

**Biophilic design** Biophilic designs are those that connect people to nature and

natural processes, enabling them to act in more productive

ways.

**Biosolar roof** Dual technology roofs combining green roofs with

photovoltaic panels.

**Climate change adaptation** Initiatives and measures to reduce the vulnerability of natural

and human systems to actual or predicted climate change

effects.

**Climate change mitigation** Action to reduce the impact of human activity on the climate

system, primarily through reducing greenhouse gas emissions.

**District heat networks** District heating is a system for distributing heat generated in a

centralised location for residential and commercial heating

requirements. The heat is often obtained from a co-

generation plant burning fossil fuels but increasingly biomass, although heat-only boiler stations, geothermal heating and central solar heating are also used, as well as nuclear power.

**Fuel poverty** Households are considered to be in fuel poverty when they

have to spend more than 10 per cent of their household income on fuel to keep their home in a 'satisfactory'

condition.

Heritage asset A building, monument, site, place, area or landscape

identified as having a degree of significance meriting consideration in planning decisions because of its heritage interest. Heritage asset is a term that includes designated

heritage assets, listed buildings, world heritage sites, conservation areas, scheduled monuments, protected wreck sites, registered parks and gardens and battlefields) and non-designated assets which are identified by the local planning authority. Non-designated heritage assets include sites of archaeological interest, buildings, structures or features of local heritage interest listed by, or fulfilling criteria for listing by the local planning authority.

# Integrated water management

This is the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. It considers the multiple benefits that can be derived from the management of water such as biodiversity enhancement and climate change adaptation.

# Large scale major development

For dwellings, a largescale major development is one where the number of residential units to be constructed is 200 or more. Where the number of residential units to be constructed is not given in the application a site area of 4 hectares or more should be used as the definition of a largescale major development. For all other uses a largescale major development is one where the floor space to be built is 10,000 square metres or more, or where the site area is 2 hectares or more.

#### Microgeneration

A term used for the generation of low carbon or renewable energy at a micro scale. The primary source of current renewable microgeneration is solar energy (photovoltaic cells for electricity generation and solar thermal panels for the generation of hot water). Other technologies include micro wind turbines, micro hydro, micro combined heat and power (CHP), heat pumps and small-scale biomass.

#### Minor development

For dwellings, minor development is one where the number of dwellings to be constructed is between 1 and 9 inclusive. Where the number of dwellings to be constructed is not given in the application, a site area of less than 0.5 hectares should be used as the definition of a minor development. For all other uses, a minor development is one where the floor space to be built is less than 1,000 square metres or where the site area is less than 1 hectare.

#### Net zero carbon

A "net-zero" target refers to reaching net-zero carbon emissions by a selected date, but differs from zero carbon, which requires no carbon to be emitted as the key criteria. Net-zero refers to balancing the amount of emitted greenhouse gases with the equivalent emissions that are either offset or sequestered. This should primarily be achieved through a rapid reduction in carbon emissions, but where zero carbon cannot be achieved, offsetting through carbon credits or sequestration through rewilding or carbon capture and storage needs to be utilised.

#### Off gauge bike

A term used to denote bikes that are larger than standard bikes, for example those with trailers. These bikes require additional space for parking both in terms of width and length.

#### Passive solar design

An element of energy efficient building design that involves optimising heating and lighting gain from the sun, thus reducing the need for space heating, lighting and potentially also cooling. Passive solar design must be carefully balanced with the need to avoid overheating in the summer and shoulder (spring and autumn) months.

#### Regulated energy use

Building energy consumption resulting from the specification of controlled, fixed building services and fittings, including space heating and cooling, hot water, ventilation and lighting.

# Small scale major development

For dwellings, a small scale major development is one where the number of residential units to be constructed is between 10 and 199 (inclusive). Where the number of dwellings to be constructed is not given in the application a site area of 0.5 hectare and less than 4 hectares should be used as the definition of a smallscale major development. For all other uses a small scale major development is one where the floor space to be built is 1,000 square metres and up to 9,999 square metres or where the site area is 1 hectare and less than 2 hectares.

# Sustainable Drainage Systems (SuDS)

Development normally reduces the amount of water that can infiltrate into the ground and increases surface water run-off due to the amount of hard surfacing used. Sustainable drainage systems control surface water run-off by mimicking natural drainage processes through the use of surface water

storage areas, flow limiting devices and the use of infiltration areas or soakaways.

## Sustainable modes of transport

Sustainable modes of transport include walking, cycling and public transport.

#### Thermal mass

The property of some materials like stone and concrete to store heat whilst abundant and to release it slowly, flattening out daily temperature variations, thereby reducing the overall need for active heating and/or cooling systems. However, just including large amounts of concrete in the construction will not necessarily mean the material is utilising its potential thermal mass properties, unless specifically located and designed to do so. Thermal mass must also be combined with a means of secure ventilation to enable night purge ventilation to take place in order to ensure that the use of thermal mass does not contribute to overheating.

#### **Urban Heat Island Effect**

Describes the increased temperature of urban air compared with rural surroundings. The term 'heat island' is used because warmer city air lies in a 'sea' of cooler rural air.

#### Walkable neighbourhood

Areas typically based on 400m (five-minute walking time) catchments. The Urban Design Compendium (2000) Paragraph 3.1.2 describes the principles of 'The Walkable Neighbourhood', describing what facilities should be within a five- and ten-minute walk from home.

#### Water eutrophication

Caused by the enrichment of an ecosystem with chemical nutrients, typically compounds containing nitrogen or phosphorous. Frequently the result of nutrient pollution such as the release of sewage effluent into rivers. It generally promotes excessive plant growth and decay, favours certain weedy species over others and is likely to cause severe reductions in water quality.

### Cambridge City Council Equality Impact Assessment (EqIA)



This tool helps the Council ensure that we fulfil legal obligations of the <u>Public Sector Equality Duty</u> to have due regard to the need to –

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Guidance on how to complete this tool can be found on the Cambridge City Council intranet. For specific questions on the tool email Helen Crowther, Equality and Anti-Poverty Officer at <a href="mailto:equalities@cambridge.gov.uk">equalities@cambridge.gov.uk</a> or phone 01223 457046. Once you have drafted the EqIA please send this to <a href="mailto:equalities@cambridge.gov.uk">equalities@cambridge.gov.uk</a> for checking. For advice on consulting on equality impacts, please contact Graham Saint, Strategy Officer, (<a href="mailto:qraham.saint@cambridge.gov.uk">qraham.saint@cambridge.gov.uk</a> or 01223 457044).

#### 1. Title of strategy, policy, plan, project, contract or major change to your service:

Draft Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (SPD)

### 2. Webpage link to full details of the strategy, policy, plan, project, contract or major change to your service (if available)

The committee report and draft SPD will be available on the following page of the Council's website:

https://democracy.cambridge.gov.uk/ieListDocuments.aspx?Cld=475&Mld=3610&Ver=4

# 3. What is the objective or purpose of your strategy, policy, plan, project, contract or major change to your service?

The SPD has been prepared to provide guidance on the implementation of policies related to climate change and sustainable design and construction in the Cambridge Local Plan 2018 (and the South Cambridgeshire Local Plan 2018). For the Cambridge Local Plan, it provides guidance on the following policies:

#### Section 4: Responding to climate change and managing resources

- Policy 28: Carbon Reduction, Community Energy Networks, Sustainable Design and Construction and Water Use;
- Policy 30: Energy Efficiency Improvements in Existing Dwellings;
- Policy 31: Integrated water management and the water cycle;
- Policy 32: Flood Risk
- Policy 33: Contaminated land
- Policy 34: Light pollution control
- Policy 35: Protection of human health from noise and vibration
- Policy 36: Air quality, odour and dust

#### Section 7: Protecting and enhancing the character of Cambridge

- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 63: Works to a Heritage Asset to Address Climate Change

Guidance in the SPD takes the form of details of the documents that need to be submitted with planning applications and the information to be included in those documents. Proformas to be used to provide information such as carbon calculations and air quality information are included alongside a sustainability checklist to be submitted with applications to demonstrate how meeting policy requirements has been integrated into the design of new developments.

#### 4. Responsible Service

Greater Cambridge Shared Planning Service

5. Who will be affected by this strategy, policy, plan, project, contract or major change to your service? (Please tick those that apply)
⊠ Residents of Cambridge City
☐ Visitors to Cambridge City
☐ Staff
Please state any specific client group or groups (e.g. City Council tenants, tourists, people who work in the city but do not live here):
People who work in the city but do not live here.
6. What type of strategy, policy, plan, project, contract or major change to your service is this? (Please tick)
⊠ New
☐ Major change
☐ Minor change
7. Are other departments or partners involved in delivering this strategy, policy, plan, project, contract or major change to your service? (Please tick)
□No
The SPD has been written with input from officers across the Greater Cambridge Shared Planning Service as well as officers in Environmental Health and the Streets and Open Spaces team.
8. Has the report on your strategy, policy, plan, project, contract or major change to your service gone to Committee? If so, which one?
The draft for consultation will be considered at Planning and Transport Scrutiny Committee on the 25 June 2019

9. What research methods/ evidence have you used in order to identify equality impacts of your strategy, policy, plan, project, contract or major change to your service?

Reference has been made to the Equalities Impact Assessment prepared for the Cambridge Local Plan, the policies from which the SPD provides detailed technical guidance. Some consideration has also been given to the Climate just website: https://www.climatejust.org.uk/

Public consultation on the SPD will take place between July and September 2019. There will be equalities monitoring of respondents as part of this consultation process.

Official statistics on Fuel Poverty: <a href="https://www.gov.uk/government/collections/fuel-poverty-statistics">https://www.gov.uk/government/collections/fuel-poverty-statistics</a>

Cabinet Office (2017), 'Race Disparity Audit: Summary Findings from the Ethnicity Facts and Figures Website': <a href="https://www.ethnicity-facts-figures.service.gov.uk/static/race-disparity-auditsummary-findings.pdf">https://www.ethnicity-facts-figures.service.gov.uk/static/race-disparity-auditsummary-findings.pdf</a>

#### 10. Potential impacts

For each category below, please explain if the strategy, policy, plan, project, contract or major change to your service could have a positive/ negative impact or no impact. Where an impact has been identified, please explain what it is. Consider impacts on service users, visitors and staff members separately.

#### (a) Age

Note that this refers to any group of people of a particular age (e.g. 32 year-olds), or within a particular age range (e.g. 16-24 year-olds) – in particular, please consider any safeguarding issues for children and adults at risk

The SPD seeks to ensure that all new housing built in the Greater Cambridge area is built to be energy efficient and utilises renewable energy, which, if correctly implemented, should have a positive impact on residents through reducing energy bills, helping to address fuel poverty for residents moving into new homes.

Older people (as reported by Age UK over the years) are especially likely to be vulnerable to fuel poverty.

Where older people and children have long-term health conditions, these can be worsened by the effects of fuel poverty. Single parents and their children are most likely to be affected by fuel poverty compared to other household sizes, as 26.4% struggle to afford to pay their bills.

#### (b) Disability

Note that a person has a disability if they have a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.

The consultation documents for this policy will be made available in alternative formats where required, upon request, such as in large print or braille.

The SPD seeks to ensure that all new housing built in the Greater Cambridge area is built to be energy efficient and utilises renewable energy, which, if correctly implemented, should have a positive impact on residents through reducing energy bills, helping to address fuel poverty for residents moving into new homes. Long-term health conditions, including mental health, could be caused or exacerbated by effects of living in fuel poverty so the SPD could have a positive impact related to disability.

#### (c) Gender reassignment

No equality impacts have been identified at this stage that is specific to this equality group.

#### (d) Marriage and civil partnership

No equality impacts have been identified at this stage that is specific to this equality group.

### (e) Pregnancy and maternity

The consultation process from July to September 2019 has been extended in order to allow for the school holiday period. This will have a positive impact related to maternity by providing people with children opportunity to feedback.

The SPD seeks to ensure that all new housing built in the Greater Cambridge area is built to be energy efficient and utilises renewable energy, which, if correctly implemented, should have a positive impact on residents through reducing energy bills, helping to address fuel poverty for residents moving into new homes. Single parents and their children are most likely to be affected by fuel poverty compared to other household sizes, as 26.4% struggle to afford to pay their bills.

#### (f) Race

Note that the protected characteristic 'race' refers to a group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins.

The consultation documents will be translated upon request.

National research has found that ethnic minority groups' housing tends to be of lower quality, especially among households of Pakistani origin. Poor quality housing that is low in energy efficiency can cause fuel poverty. The SPD could have a positive impact for some ethnic groups then as it seeks to ensure that all new housing built in the Greater Cambridge area is built to be energy efficient and utilises renewable energy, which, if correctly implemented, should have a positive impact on residents through reducing energy bills, helping to address fuel poverty for residents moving into new homes.

### (g) Religion or belief

No equality impacts have been identified at this stage that is specific to this equality group.

#### (h) Sex

No equality impacts have been identified at this stage that is specific to this equality group.

#### (i) Sexual orientation

No equality impacts have been identified at this stage that is specific to this equality group.

(j) Other factors that may lead to inequality – <u>in particular</u> – please consider the impact of any changes on low income groups or those experiencing the impacts of poverty

Those on low income can often find themselves in poor quality housing, which can often be costly to heat leading to fuel poverty and a range of associated physical and mental health impacts. Fuel poverty is experienced by 1in 10 households nationally. The SPD seeks to ensure that all new housing built in the Greater Cambridge area is built to be energy efficient and utilises renewable energy, which, if correctly implemented, should have a positive impact on residents through reducing energy bills, helping to address fuel poverty for residents moving into new homes.

Following feedback on some new developments in the area, guidance has been included in the SPD on communal heating systems and the use of Codes of Best Practice to ensure that where communal heating systems are used, pricing for customers is fair and does not contribute to fuel poverty.

Climate impacts and extreme weather events can affect anyone, but some people have the potential to be more affected than others. The SPD seeks to ensure that all new development, including new social housing, incorporate measures to enable new and existing communities to be able to adapt to climate impacts such as heat waves and flooding.

11. Action plan – New equality impacts will be identified in different stages throughout the planning and implementation stages of changes to your strategy, policy, plan, project, contract or major change to your service. How will you monitor these going forward? Also, how will you ensure that any potential negative impacts of the changes will be mitigated? (Please include dates where possible for when you will update this EqIA accordingly.)

The Greater Cambridge Sustainable Design and Construction SPD will go through the following stages:

- Consultation (July September 2019)
- Adoption January 2020
- Implementation January 2020 onwards

The polices for which the SPD provides guidance, will be monitored through the Council's Annual Monitoring Report, giving us an opportunity to reflect on whether planning policies related to climate change and sustainable construction are being successfully implemented and whether any changes to policy or guidance are required. Such changes would need to be considered as part of work on the Joint Greater Cambridge Local Plan.

The consultation will be made available in alternative formats such as in other languages, braille or large print, upon request. The other the proposed consultation arrangements will be as follows:

- Letters / e-mails including consultation details to be sent to statutory and general consultees.
- The draft SPD to be made available to view at the following locations:
  - At the council's Customer Service Centre at Mandela House, 4 Regent Street, Cambridge, CB2 1BY from 9am-5.15pm Monday to Friday.
  - South Cambridgeshire Hall, Cambourne Business Park, Cambourne, Cambridge, CB23 6EA;
- An online consultation system will be available on the Council's website in order for people to respond directly via the internet. Hard copies of the response form will be made available at the Council's Customer Service Centre for those who do not have access to the internet.

#### 12. Do you have any additional comments?

#### 13. Sign off

Name and job title of lead officer for this equality impact assessment: Emma Davies, Senior Sustainability Officer (Design and Construction).
Names and job titles of other assessment team members and people consulted: n/a
Date of EqIA sign off: 5 June 2019
Date of next review of the equalities impact assessment:
All EqIAs need to be sent to Helen Crowther, Equality and Anti-Poverty Officer. Has this been sent to Helen Crowther?
⊠ Yes
□ No
Date to be published on Cambridge City Council website: July 2019



#### Item



#### STATEMENT OF COMMUNITY INVOLVEMENT

#### To:

Councillor Katie Thornburrow, Executive Councillor for Planning Policy and Open Spaces

Planning & Transport Scrutiny Committee [25/06/2019]

#### Report by:

Stephen Kelly, Joint Director for Planning and Economic Development Cambridge and South Cambridgeshire

Tel: 01223 - 457009 Email: stephen.kelly@cambridge.gov.uk

#### Wards affected:

ΑII

## **Key Decision**

# 1. Executive Summary

- 1.1 This report presents the Statement of Community Involvement (SCI) for adoption following the conclusion of public consultation. The Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2017, state that LPAs in England must review their SCI every five years to ensure it is up to date and reflects current legislation and best practice. The SCI has been prepared to ensure that the LPAs are in accordance with this regulatory requirement.
- 1.2 In the context of the Greater Cambridge area, the new SCI sets out how Cambridge City Council and South Cambridgeshire District Councils as part of the Greater Cambridge Shared Planning service will consult on planning policy documents and planning applications, ensuring that the two councils are consistent in their approach to engagement with local communities. The SCI will replace the adopted SCI of Cambridge City Council (2013) and South Cambridgeshire District Council (2010).

#### 2. Recommendations

- 2.1 The Executive Councillor is recommended to:
- Adopt the Statement of Community Involvement (2019) for Greater Cambridge, prepared jointly with South Cambridgeshire District Council.
- 2. Agree that the Joint Director of Planning and Economic Development is granted delegated authority, in liaison with the Executive Councillor for Planning Policy and Open Spaces, and the Chair and Spokes for the Planning Policy and Transport Scrutiny Committee, to make any editing changes prior to publication.

# 3. Background

- The Planning and Compulsory Purchase Act (2004) introduced the 3.1 requirement for local authorities to prepare a Statement of Community Involvement, and new regulations came into force on 6 April 2018 which require that SCIs must be reviewed at least every five years from the date of adoption. The current Cambridge City SCI was adopted in November 2013 and the SCI for South Cambridgeshire District Council was adopted in 2010. addenda to both documents were adopted during 2018, setting out approach of both Councils to providing support Neighbourhood Forums, community organisations and Parish Councils that are preparing Neighbourhood Plans or Development Orders.
- 3.2 The SCI sets out how the public will have an opportunity to engage in the planning process in Greater Cambridge. The SCI describes how the public, businesses, interest groups and individuals within the local authority areas can get involved in the creation of local planning policy and the planning application process aiming at shaping where we live, work and trade.
- 3.3 The SCI gives an introduction to the overall planning process, and then moves into detail about how stakeholders can get involved in the preparation of plans including Local Plans (which includes Area Action Plans), Supplementary Planning Documents and

Neighbourhood Plans. A further section identifies the mechanisms by which stakeholders will be provided an opportunity to engage in the planning application process. Finally, an overview of the process of preparing a Neighbourhood Plan or Order is provided, followed by the broad support available to community groups that are preparing such documents.

- 3.4 The SCI is drafted to reflect the requirements of planning regulations, and provides examples where the Local Planning Authorities (LPA) may, if resources permit, use methods of engagement that move beyond the regulatory requirements. It is important that the SCI does not commit the LPAs to actions that cannot be resourced in all cases, as this could then call into jeopardy decisions and actions taken. This does not, however, preclude the Council from choosing to use additional mechanisms to increase community engagement as and when it is considered appropriate to do so.
- 3.5 Whilst there is no mandatory requirement for consultation on a draft SCI, the Executive Councillor at the Planning and Transport Scrutiny Committee in January 2019 agreed that the draft SCI should be published for six weeks from Monday 11 February to Monday 25 March 2019. The consultation period was carried out in accordance with the requirements for Supplementary Planning Documents (see Table 2 of the SCI attached at Appendix 1).
- 3.6 There were a total of 12 representations received during the consultation period and they have been considered when preparing the SCI attached at Appendix 2. Of the 12 representations received, seven were objections, four were comments/no comments and one was support. As shown in further detail in the Consultation Statement (attached at Appendix 2), a number of the objections referred to the difficulties of navigating and responding to planning applications using Public Access (Idox). A detailed response to these issues has been set out within the Consultation Statement. summary, a single amendment is proposed to the SCI on the basis of the representations received, which is to include direct links to the webpages for viewing or commenting on planning applications for both Councils (see page 17 of Appendix 1). A small number of editorial corrections have also been made in addition to some further explanation on some of the terminology referred to in the document.

# 4. Implications

a) Financial Implications

None.

**b) Staffing Implications** None.

c) Equality and Poverty Implications

Yes – attached in Appendix 3.

d) Environmental Implications

None.

e) Procurement Implications

None.

f) Community Safety Implications

None.

## 5. Consultation and communication considerations

None at this final stage of the SCI process. The SCI was published for public consultation for six weeks and publicity of this consultation was in accordance with the requirements of consulting on Supplementary Planning Documents. The consultation document was made available on the council's website and at the Customer Service Centre throughout the consultation period. This is set out in the Consultation Statement (attached at Appendix 2).

# 6. Background papers

Background papers used in the preparation of this report:

• Equality Impact Assessment

# 7. Appendices

**Appendix 1 - Greater Cambridge Statement of Community Involvement** (2019)

**Appendix 2 - Consultation Statement** 

**Appendix 3 - Equalities Impact Assessment** 

### **Inspection of papers**

To inspect the background papers or if you have a query on the report please contact Terry De Sousa, Senior Planning Policy Officer, tel: 01223 - 457371, email: terry.desousa@cambridge.gov.uk.





# STATEMENT OF COMMUNITY INVOLVEMENT

# GREATER CAMBRIDGE SHARED PLANNING

2019

CAMBRIDGE CITY
COUNCIL

Po Box 700, Cambridge, CBI 0JH

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

South Cambridgeshire Hall, Cambourne Business Park, Cambridge, CB23 6EA

Date of Adoption

Cambridge City Council – June 2019

South Cambridgeshire District Council – July 2019

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## Glossary

DPD – Development Plan Document

LPA – Local Planning Authority

NPPF – National Planning Policy Framework

SCI – Statement of Community Involvement

SPD – Supplementary Planning Document

#### Statement of our intention to engage with our communities

This statement is part of a wider commitment made by Cambridge City and South Cambridgeshire District Councils to create and maintain effective working relationships with all sectors of the community, where citizens feel that they are listened to and have the opportunity to influence public decision making. Elected District Councillors have an important role in the planning process. Local protocols in each authority set out the relevant requirements that Members are to follow.

This document sets out how we will consult and engage with you in relation to the majority of our planning functions, with the overarching aim of engaging with communities in an efficient, effective and meaningful way both now and in the future.

We would encourage you, as residents and stakeholders (including Parish Councils and groups and associations representing residents and businesses in the area.), to use this Statement of Community Involvement and the protocols set out within it, to hold the Authorities to account and ensure that all local people have sufficient opportunities to have their say. We recognise that consultation and engagement activities are constantly evolving and this SCI will be revisited at regular intervals to ensure it is fully up-to-date and reflects local and national priorities, practices and policies.

#### 1.0 Introduction

#### What is a statement of community involvement?

- 1.1 This Statement of Community Involvement (SCI) sets out how Cambridge City Council and South Cambridgeshire District Council will engage the public in the planning process. The SCI describes how the public, businesses and interest groups within the local authority areas can get involved in the creation of local planning policy and the planning application process aiming at shaping were we live, work and trade. This is essential to help improve understanding and openness of the planning process.
- 1.2 There is a legal requirement on Local Planning Authorities (LPAs) to undertake public consultation on local plans, neighbourhood plans and planning applications. It is important that this is undertaken in a cost-effective, efficient and proportionate manner. This SCI is an important document as it will establish a minimum standard of consultation and publicity on planning matters for both Cambridge City and South Cambridgeshire District Councils. This SCI has been split into three sections which cover the following roles and responsibilities of the planning service:
  - Planning Policy including the production of planning policy documents including the Local Plan
  - Development Management including how the councils consider and publicise planning applications, and
  - Neighbourhood Planning setting out how the councils will assist groups who are preparing neighbourhood plans

# How does the statement of community involvement relate to the Greater Cambridge Shared Planning Service?

- 1.3 In 2015 Cambridge City Council and South Cambridgeshire District Council agreed to the principle of working in partnership to deliver a range of shared services. They also agreed to the principle of moving to a fully integrated shared planning service, known as the Greater Cambridge Shared Planning Service, to deliver the suite of services consistent with their obligations as the LPA for the two areas.
- 1.4 In reading this Statement, it is important to understand that although the Councils are sharing their planning services and have prepared this joint Statement, Cambridge City and South Cambridgeshire District remain separate legal entities, in so far as the designated Local Planning Authority (LPA), is concerned. This Statement has been written in this context.

1.5 As part of the work being undertaken to move towards a fully integrated shared planning service, the LPAs have committed to jointly prepare a new Local Plan for the combined area (known as Greater Cambridge).

#### Why has a new Statement of Community Involvement been prepared?

- 1.6 The councils have prepared this new SCI as there have been significant changes in development management and planning policy procedures since the adoption of the previous SCIs. The previous South Cambridgeshire District Council SCI was adopted in 2010 and the Cambridge City Council SCI was adopted in 2013. The changes to this SCI were in part due to changes to national policy and legislations, and reviews carried out by both authorities.
- 1.7 The Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2017, state that LPAs in England must review their SCI every five years to ensure it is up to date and reflects current legislation and best practice. This SCI has been prepared to ensure that the LPAs are in accordance with this regulatory requirement.
- 1.8 Further to these changes to national planning policy and legislation, the Localism Act 2011 introduced the opportunity for local people to prepare neighbourhood plans and orders. These may be prepared by parish councils in South Cambridgeshire or neighbourhood forums in Cambridge City. The councils have a statutory<sup>1</sup> role in the preparation of neighbourhood plans and orders.
- 1.9 These requirements have provided the opportunity to prepare a new SCI for the Greater Cambridge area. This will ensure both a consistent approach to consultations on planning applications and that the most effective consultation mechanisms are in place to support successful involvement of the local community in the emerging Joint Local Plan. This SCI also reflects current practices in community engagement, including greater use of electronic communications such as email and social media.
- 1.10 The councils want to ensure local communities are better informed about planning matters within the Greater Cambridge area. To achieve this, the councils will continue to promote the use of electronic methods of consultation including email and social media to make involvement easier, quicker and more cost effective. The councils are keen to explore new methods of communication and engagement with local communities, recognising that e-communications are the most appropriate way of publicising information on all aspects of the planning service to the widest possible number of people and organisations.

.

<sup>&</sup>lt;sup>1</sup> Neighbourhood Planning (General Regulations) 2012

#### What is planning?

- 1.11 Most new buildings, certain changes to existing buildings (including their use) or significant changes to the local environment need consent known as planning permission.
- 1.12 Cambridge City Council and South Cambridgeshire District Council are the local planning authorities (LPAs) within the Greater Cambridge area. The authorities are responsible for a number of planning functions, including preparing an up to date Local Plan for the area as well as deciding whether a development proposal should be permitted.
- 1.13 Preparing a Local Plan involves a number of key stages in which local communities and key stakeholders can have their say on the emerging vision and planning policies for the area. Local communities also have the opportunity to prepare their own policies for their areas in a Neighbourhood Plan.
- 1.14 In determining planning applications, regard must be had to the relevant planning policies which have been adopted for the area as well as any comments that have been made by local people and other stakeholders.
- 1.15 The public can also get involved in the planning process by reporting planning control breaches to the councils' Planning Enforcement teams.
- 1.16 This SCI sets out in further detail the LPAs functions in relation to preparing planning policy, determining planning applications and how local community groups<sup>2</sup> and parish councils will be assisted in preparing their own Neighbourhood Plans. Within each of these sections, the LPAs have also set out how they will publicise public consultation and the time periods that will be applied to ensure an appropriate balance between effective public participation and efficient plan and decision making.

<sup>&</sup>lt;sup>2</sup> Where a community wants to take up the opportunities offered by neighbourhood planning, the legislation enables three types of organisations known as qualifying bodies to lead it. These are either a parish or town council; a neighbourhood forum; or a community organisation within a non-parished area.

#### 2.0 How can I get involved in the planning process?

- Since planning has a direct impact on the daily lives of residents and the 2.1 business community, it is very important that development proposals are transparent and that you have the opportunity to have a say in the planning decisions that are made on your behalf.
- 2.2 Early involvement in the planning process means that you stand the best chance of influencing a decision. This SCI has been written to inform you about the different formal stages when you can get involved and how.
- 2.3 Local knowledge is very valuable in helping to make good decisions and it is important that decision makers understand the type of community you want to live and work in. Likewise, it is very important that we understand the aspirations of those who are ultimately responsible for delivering future development (for example, developers and land owners) so that we can work together to bring forward development which is in the public interest.
- 2.4 The SCI has been written to guide you through the plan making, development management and neighbourhood planning process and set out how you can get involved in each of these areas. Nevertheless there are also a number of other ways you can engage in the planning process at a local level.
- Within South Cambridgeshire, Parish Planning Forums<sup>3</sup> are held to discuss 2.5 planning matters with district councillors and planning officers. There are also Community Forums<sup>4</sup> relating to the new settlements at Northstowe, Waterbeach and development within the CB23 area of the district. These community forums are also held for growth areas that overlap with Cambridge City, including Cambridge East and North West Cambridge.
- Both LPAs also hold Agent Forums<sup>5</sup> to update planning agents on changes to 2.6 legislation and procedures within the Greater Cambridge Shared Planning Service.
- 2.7 Within Cambridge City, you are also able to get involved in the planning process through the Disability Panel<sup>6</sup> and Residents Association Forum<sup>7</sup>.

#### 3.0 Our methods for community engagement in Planning Policy

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www.scambs.gov.uk/councillor-information/parish-councils/parish-planning-forums-and-training/

www.scambs.gov.uk/community/community-forums/

<sup>&</sup>lt;sup>5</sup> South Cambridgeshire District Council: <u>www.scambs.gov.uk/planning/forums-committees-and-</u> consultations/south-cambridgeshire-agents-forum-archive

Cambridge City Council: <a href="https://www.cambridge.gov.uk/planning-agents-forum">www.cambridge.gov.uk/planning-agents-forum</a>

6 More information con hard to the control of the con

More information can be found by emailing access@cambridge.gov.uk

<sup>&</sup>lt;sup>7</sup> www.cambridge.gov.uk/residents-association-forum

- 3.1 The National Planning Policy Framework (NPPF) explains that the Local Plan is a plan for the future development of the local area, drawn up by the local planning authority in consultation with the local community. A local plan can consist of either strategic or non-strategic policies, or a combination of the two and cover all or part of the Greater Cambridge Area.
- 3.2 Cambridge City Council and South Cambridgeshire District Council each adopted individual Local Plans in 2018. The councils will commence a joint Local Plan review in 2019, which will cover the whole of the two districts with a single plan. In addition, a joint Area Action Plan is being prepared for the Cambridge Northern Fringe. This will provide specific policies to cover this Area of Major Change. These documents are subject to sustainability appraisal, and must also be considered at independent examination before they can be adopted.
- 3.3 A timetable for preparing and reviewing local plan documents is set out in the Local Development Scheme, which is available on the councils' websites. This is regularly updated, and during plan preparation live information is provided online.
- 3.4 Local Plans are supported by supplementary planning documents (SPDs). These provide guidance to support the implementation of planning policies. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the Development Plan. An SPD should also not add unnecessarily to the financial burdens on development. The key difference for SPDs is that they do not undergo public examination by a Planning Inspector and are not automatically subject to a sustainability appraisal. The same applies to the process for preparing or reviewing a statement of community involvement.
- 3.5 It should be noted that where documents are being produced by an individual council rather than jointly, the measures in this SCI will be applied by the individual council. An example might be an SPD being produced to supplement one of the current separate local plans.
- 3.6 Neighbourhood planning is a way for local communities to take a proactive approach to deciding the future of the places where they live and work. Communities can use a neighbourhood plan to help shape the future development and use of land in their neighbourhood. As LPAs, both South Cambridgeshire District Council and Cambridge City Council have a statutory

duty to give advice and assistance to their communities or qualifying bodies<sup>8</sup> when it considers appropriate in the preparation of a neighbourhood plan.

3.7 The LPAs will provide details of both adopted plans and plans in preparation on their websites<sup>9</sup>, including neighbourhood plans and Orders.

#### How will the Local Planning Authorities consult on Local Plan documents?

- 3.8 The LPAs will give those with an interest in development in the area the opportunity to have their say on planning policy. The councils will aim to provide a flexible, proportionate and effective approach to consultation, customised and guided by the nature of the document being prepared.
- 3.9 We will also ensure that we meet the requirements of the Equality Act 2010, which aims to promote equality, eliminate discrimination and encourage good relations between different groups associated with age, disability, gender/gender reassignment, religion and other protected race, characteristics. It is recognised that some parts of the community are not always adequately represented such as gypsy and traveller communities in the area, the young and the elderly. The councils will work closely with relevant organisations that have experience in a particular matter to find the best way of consulting and liaising with these groups.
- 3.10 In preparing a Local Plan document, the LPAs will engage with relevant stakeholders and gather evidence. They will prepare a Consultation Statement setting out how this has been done, and how issues that have been raised have been considered in preparing the plan.
- 3.11 As part of the Examination process there could be further consultations, for example on main modifications to a plan. Any additional consultations will be for 6 weeks unless it falls over a main holiday period where it may be extended.
- 3.12 The statutory process for preparing these documents is set out in the Town and Country Planning (Local Planning) (England) Regulations (2012). There are two key stages of consultation during local plan preparation:

<sup>9</sup> Cambridge City Council: <u>www.cambridge.gov.uk/about-the-local-development-scheme-latest-information-and-timetables</u>

South Cambridgeshire District Council: <a href="https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/news-and-updates/">www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/news-and-updates/</a>

<sup>&</sup>lt;sup>8</sup> Qualifying Body is the term used in national legislation to refer to local groups preparing neighbourhood plans.

Table 1: Local plan preparation

Local Plan Stage	Consultation duration	Consultation methods
Public participation (Regulation 18)	One or more public consultations, on issues and options or draft policies. Consultations will be undertaken for a minimum of a 6 week period. All representations must be received within the consultation period.	Inviting representations through a notice on the councils' website, and advertising through other methods such as social media, news releases, Council publications or press adverts;
Pre-submission publication (Regulation 19)	Consultation will be undertaken for a minimum of a 6 week period. All representations must be received within the consultation period.	Written / email consultations with 'specific consultation bodies' and appropriate 'general consultation bodies' and other relevant stakeholders <sup>10</sup> ;  Consultation documents will be available to view on the councils' websites, and at council offices <sup>11</sup> ;  Public consultation events if appropriate to the nature of the consultation.

- 3.13 Following the stages above the council submits the Local Plan to the Secretary of State together with the representations received at the Regulation 19 stage. The submitted document, and the representations received, will be considered by a Planning Inspector at an independent examination. The councils will notify the specific and general consultation bodies who were invited to make representations at earlier stages, and all those who have requested to be notified, of this stage.
- 3.14 Those individuals and organisations that have made representations may be invited by the inspector to submit a written statement during the examination. Individuals and organisations that made an objection to the document and have requested to speak at the examination will be contacted by the Inspector to be informed of the procedure for being heard.
- 3.15 The council will notify all those who have requested to be notified, as soon as reasonably practicable following the receipt of the Inspector's Report. The

<sup>&</sup>lt;sup>10</sup> Defined in Appendix 1

<sup>&</sup>lt;sup>11</sup> Defined in Appendix 5

report will also be made available on the councils' website and at council offices<sup>12</sup>.

3.16 If the Inspector has concluded that the Plan is 'sound' the council will adopt the plan and will publish an adoption statement on their website and make it available to view at council offices. They will notify all those who have requested to be notified as soon as reasonably practicable.

#### Who the Local Planning Authorities involve in plan making?

- 3.17 Regulations specify a number of organisations that LPAs must consult when preparing planning policy documents. These bodies are set out in Appendix 1. They include 'specific consultation bodies' and various types of 'general consultation bodies'. Specific consultation bodies include utility companies, government agencies, local authorities and parish councils. General consultation bodies are voluntary bodies active in the area and those bodies which represent different interests and include Neighbourhood Forums.
- 3.18 The council is required to co-operate with neighbouring local planning authorities and other prescribed bodies on strategic matters that cross administrative boundaries under the statutory 'duty to co-operate'. Whilst Local Nature Partnerships (LNP) are not subject to the requirements of the duty, the councils' are committed to cooperating with the LNP (Natural Cambridgeshire) and have regard to their activities which are relevant to local plan making. The LNP acts as an independent, objective voice for the natural environment in Cambridgeshire and Peterborough and part of its role is to coordinate partners to deliver projects and activity that will meet the Partnership's vision and aims<sup>13</sup>. The bodies identified under the statutory 'duty to co-operate' are listed in Appendix 1.
- 3.19 Although those identified above will be specifically contacted during the preparation of Local Plan documents, any individual, business, organisation or group is welcome to submit comments during consultation periods.
- 3.20 The LPAs will notify individuals, organisations or bodies who have requested to be notified about the preparation of documents they are interested in. The online consultation systems allow individuals and organisations to register their details, and identify documents they would like to receive updates on.
- 3.21 Individuals and organisations can opt-in to receiving future mailings in relation to public consultations or notifications on planning policy documents by logging in to the <u>Cambridge City</u> and/or <u>South Cambridgeshire District</u>

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<sup>&</sup>lt;sup>12</sup> Defined in Appendix 5

<sup>13</sup> www.naturalcambridgeshire.org.uk

consultation database and choosing the 'areas of interest' that you would like future mailings about. When you log in, you will find the list of 'areas of interest' under 'My Details'.

- 3.22 As a recently established shared planning service, there are currently two separate consultation databases. The 'areas of interest' available to opt-in to within the two consultation databases are different as the 'areas of interest' either relate to planning policy documents for South Cambridgeshire or Cambridge.
- 3.23 If you do not have an email address and would like to opt-in to receiving future mailings in relation to public consultations or notifications on one or more of our planning policy documents, please telephone us using the following numbers:

South Cambridgeshire District Council: 01954 713183

Cambridge City Council: 01223 457200

- 3.24 The privacy notice for planning policy consultations and notifications sets out how your personal data will be used and by whom, if you opt-in to any of our 'areas of interest'. This privacy notice is available to view online 14.
- 3.25 If you make comments on a planning policy document, we will also offer you the opportunity to opt in to these updates, which will keep you informed about future stages of the plan making process.

#### How can comments (representations) be submitted?

- 3.26 During the consultation periods it will be possible to submit comments in writing, or electronically via email or, if available, an online consultation portal. Verbal comments will not be recorded. Representations received will be published on the councils' website(s).
- 3.27 Responding to the General Data Protection Regulations (GDPR), the councils have published a Privacy Notice, regarding how it will handle representations and your personal data submitted with those representations. This can be viewed on the councils' websites.
- 3.28 The councils will not accept or publish comments that contravene its compliance with the Equality Duty under the Equality Act 2010<sup>15</sup>.

<sup>&</sup>lt;sup>14</sup> Cambridge City Council: <a href="https://www.cambridge.gov.uk/planning-policy-consultations-and-notifications-and-n privacy-notice

South Cambridgeshire District Council: <a href="www.scambs.gov.uk/planning-policy-privacy-notice">www.scambs.gov.uk/planning-policy-privacy-notice</a>
<sup>15</sup> Equality Duty – Under the Equality Act 2010, the Council must have due regard to the need to:

#### **Preparation of Supplementary Planning Documents (SPD)**

- 3.29 Supplementary Planning Documents (SPD's) can be prepared in order to add greater detail and guidance to planning policies or allocations. An SPD can not create new or amend existing planning policy. SPDs could relate to a location or area or they may be topic-based, such as affordable housing or design guidance. The process for preparing an SPD is different to Local Plan preparation.
- 3.30 Prior to the formal stage of consultation, the LPAs will engage with relevant stakeholders and gather evidence. They will prepare a consultation statement setting out how this has been done, and how issues that have been raised have been considered in finalising the SPD.
- 3.31 The statutory process for preparing these documents is set out in the Town and Country Planning (Local Planning (England) Regulations (2012). There is one key stage of consultation during SPD preparation:

**Table 2: SPD preparation** 

Supplementary Planning Documents Stage	Consultation duration	Consultation methods
Regulation 12 and 13 Public Consultation on the Draft SPD	Minimum of four weeks	Inviting representation through a notice on the councils' website, and advertising through other methods such as social media, news releases, Council publications or press adverts;  Written / email consultations with specific and appropriate general consultation bodies and other relevant stakeholders (as set out in Appendix 1);  Consultation documents available to view on the councils' websites, and at council offices 16;  Public consultation events if appropriate to the nature of

eliminate unlawful discrimination, harassment and victimisation; advance equality of opportunity between different protected groups; and foster good relations between different protected groups. <sup>16</sup> Defined in Appendix 5

the consultation.

3.32 The LPAs will consider all valid comments that are made and make any appropriate changes to the SPD before it is adopted. Upon adoption the SPD will be published together with an adoption statement, made available to view on the councils' websites, and at the councils main offices during normal working hours. It will also send a copy of the adoption statement to all those who requested to be notified.

#### **Preparation of Neighbourhood Plans**

3.33 The statutory process for preparing these documents is set out in the Neighbourhood Planning Regulations 2012 and subsequent amendments. Table 3 below sets out the key stages of consultation during Neighbourhood Plan preparations that are undertaken by the local planning authority. More information regarding the neighbourhood planning process can be found online<sup>17</sup>.

**Table 3: Neighbourhood Plan preparation** 

Neighbourhood Plan Stage	Consultation duration	Consultation methods
Regulation 5, 6 and 7 Neighbourhood Area Designation Designating a neighbourhood area – the qualifying body <sup>18</sup> applies to the local planning authority for an area to be designated.	No consultation is required where the whole of a parish is proposed. A minimum period of 6 weeks consultation for all other proposed neighbourhood areas.	Inviting representation through a notice on the councils' website, and advertising through other methods such as social media, news releases, Council publications and/or press adverts;  Notify by email the specific and appropriate general consultation bodies and other relevant stakeholders;  The relevant qualifying body will be asked to assist the LPA in publicising the consultation by:  • Placing information

<sup>&</sup>lt;sup>17</sup> South Cambridgeshire: <a href="www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/neighbourhood-planning">www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning</a>

Cambridge City: www.cambridge.gov.uk/neighbourhood-planning

<sup>&</sup>lt;sup>18</sup> Where a community wants to take up the opportunities offered by neighbourhood planning, the legislation enables three types of organisations known as qualifying bodies to lead it. These are either a parish or town council; a neighbourhood forum; or a community organisation within a non-parished area.

		about it in any local newsletters or on their website, and • Placing around their local area at key locations the consultation poster prepared by the council.  If requested by the relevant qualifying body the LPA will also notify local contacts in the proposed neighbourhood area. The contact details of these local groups to be provided by the qualifying body;  Consultation documents available to view on the council offices during normal working hours; and additionally at the relevant qualifying body's office or other appropriate publically accessible venue within the neighbourhood area. The qualifying body may consider having the document available to view on their community website if one exists.
Regulation 9, 10 and 11 Designation of a neighbourhood forum	Not less than 6 weeks from the date on which the application is first publicised.	Inviting representation through a notice on the councils' website, and advertising through other methods such as social media, news releases, Council publications and/or press adverts;  Notify by email the specific and appropriate general consultation bodies and other relevant stakeholders;

<sup>&</sup>lt;sup>19</sup> Defined in Appendix 5

		The relevant qualifying body will be asked to assist the council in publicising the consultation by:  • Placing information about it in any local newsletters or on their website, and  • Placing around their local area at key locations the consultation poster prepared by the council.
		Consultation documents available to view on the councils' websites and at council offices <sup>20</sup> during normal working hours; and additionally at the relevant qualifying body's office or other appropriate publically accessible venue within the neighbourhood area. The qualifying body may consider having the document available to view on their community website if one exists.
Regulation 15 and 16 Submission Where a draft neighbourhood plan is submitted to the local planning authority and the plan meets the requirements in the legislation, the local planning authority must publicise the neighbourhood plan	Minimum of 6 weeks	Inviting representation through a notice on the councils' website, and advertising through other methods such as social media, news releases, Council publications and/or press adverts;  Written / email consultations to notify any consultation body referred to in the consultation statement submitted alongside the draft neighbourhood plan. These bodies are referred to in

<sup>&</sup>lt;sup>20</sup> Defined in Appendix 5

		Paragraph 1 of Schedule 1 in the regulations. The qualifying body will have considered which of these to notify depending on whose interests the qualifying body considers may be affected by proposals in the draft plan;  Emails to anyone that has 'opted-in' to be notified of consultations on the specific document being prepared;  Consultation documents available to view on the councils' websites and at council offices <sup>21</sup> during normal working hours; and additionally at the relevant qualifying body's office or other appropriate publically accessible venue within the neighbourhood area. The qualifying body may consider having the document available to view on their community website if one exists.
Regulation 18 Independent Examination Post receipt of the Examiners Report the local planning authority may decide to make a decision which differs from that recommended by the examiner. If this is the case the local planning authority must carry out a targeted consultation inviting representations.	Within 6 weeks of the local planning authority first inviting representations	Emails sent by the LPA inviting representations from; i) the qualifying body; ii) anyone whose representation was submitted to the examiner; and iii) any consultation body that was previously consulted.

<sup>&</sup>lt;sup>21</sup> Defined in Appendix 5

3.34 Section 4.0 of this Statement of Community Involvement sets out how the LPAs will assist and advise Parish Councils and Neighbourhood Forums during the neighbourhood plan making process.

#### **Annual Housing Position Statement**

3.35 The National Planning Policy Framework<sup>22</sup> (2018) requires LPAs to prepare an annual housing position statement which sets out a five year supply of deliverable housing sites against the annual housing target set out in the Local Plan. In line with Planning Practice Guidance<sup>23</sup> (PPG), the Annual Housing Position Statement will be consulted on for a minimum of 4 weeks. The LPAs will consult with the relevant organisations found in Appendix 1.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/74 0441/National\_Planning\_Policy\_Framework\_web\_accessible\_version.pdf 23 www.gov.uk/guidance/housing-and-economic-land-availability-assessment

#### 4.0 Our methods for community engagement at the planning application stage

- 4.1 A planning application is a means by which someone applies for permission from the local planning authority (LPA) to develop land. Cambridge City Council and South Cambridgeshire District Council are responsible for planning decisions that are made in their respective areas and receive a range of different types of planning applications for formal determination.
- 4.2 There are four key stages to the planning application process:
  - Pre-application a developer prepares the development proposal. Early engagement with the LPA, relevant stakeholders and the community is encouraged.
  - Planning application an application is submitted to the LPA who will consult on the planning application.
  - Decision making a decision is made by either a planning committee or delegated to a planning officer.
  - Appeals the applicant has a right to appeal where they disagree with the decision of the LPA to refuse permission.
- 4.3 The statutory requirements for consulting on planning applications are set out in Appendix 3.

#### Pre-application advice and consultation

- 4.4 Both Cambridge City and South Cambridgeshire District Council encourage applicants to carry out early engagement with the LPA and the local community before submitting a planning application. Early discussion of a proposal in the form of a pre-application with the council can:
  - Verify the information required to be submitted with the application;
  - Reduce the likelihood of submitting invalid applications;
  - Help the applicant to understand how planning policies and other requirements may affect their proposal; and
  - Raise the quality of the development.
- 4.5 This pre-application advice stage is an important opportunity for planning officers to provide an initial view on a proposal, to identify any elements which may need amending and to identify information which should be submitted to support the application. These discussions enable planning officers to provide advice to the applicant and in no way predetermine the outcome of the application.

- 4.6 Whilst some pre-application discussions can be confidential for commercial reasons, developers are strongly encouraged to undertake community engagement at this stage of the planning process, particularly where development is likely to have significant impacts on local communities or where the site is particularly sensitive. It is however not compulsory.
- 4.7 Section 122 of the Localism Act 2011 introduced a duty for developers to consult local communities before submitting planning applications for certain developments. For development proposals that fall outside of the requirements of the Localism Act, the LPA encourage pre-application consultation with local communities and key stakeholders. This allows those likely to be affected by the development to raise potential issues and to make suggestions. This in turn might reduce local opposition, increase the chances of a timely and positive decision from the LPA and improve the resulting quality of development.
- 4.8 Further information about the pre-application process can be found on the councils' websites<sup>24</sup>. Additionally, both LPAs also offer a Duty Planning Officer service where members of the public can obtain advice and guidance on largely householder applications. More information on the Duty Planning Officer service can be found on the councils' websites. There is also further general information and advice on the councils' websites about the planning application process.

#### **The Planning Application Process**

- 4.9 The Town and Country Planning (Development Management Procedure) Order 2015 requires that at any time before a decision is made on a planning application, stakeholders and the local community should have the opportunity to comment on any aspect of the proposal. The level and extent of consultation will vary depending on the size, scale, location and nature of the proposed development. Planning applications, supporting information and key dates are available for public inspection online<sup>25</sup>.
- 4.10 The comments, known as representations, that are received during the consultation period will be considered in decisions made by and on behalf of the councils'. Representations must be in writing and can only be taken into account if they relate to material planning considerations<sup>26</sup>. Representations

Cambridge City: www.cambridge.gov.uk/pre-application-advice

<sup>&</sup>lt;sup>24</sup> South Cambridgeshire: <a href="https://www.scambs.gov.uk/content/pre-application-advice">www.scambs.gov.uk/content/pre-application-advice</a>

South Cambridgeshire: https://www.scambs.gov.uk/planning/view-or-comment-on-a-planningapplication/

Cambridge City: <a href="https://www.cambridge.gov.uk/planning-applications">https://www.cambridge.gov.uk/planning-applications</a>
<a href="https://www.cambridge.gov.uk/planning-applications">https://www.cambridge.gov.uk/planning-applications</a>
<a href="https://www.cambridge.gov.uk/planning-applications">https://www.cambridge.gov.uk/planning-applications</a>

will be added to the application file and made publically available online alongside the planning application documents. These will be published in accordance with the Council's Privacy Notice.

- 4.11 It is current practice to take into account late representations received up to the point of determination of the application. Nevertheless it is strongly recommended that representations are received by the LPA during the time period indicated in the LPAs publicity.
- 4.12 When a planning application is registered by the LPA, there is a statutory period during which anyone can comment on the proposal, as set out in Table
  4. It is the LPAs responsibility to publicise planning applications. The approach to notification of planning applications will be to:
  - Publish details of planning applications online (Public Access), including which applications have been registered, digital copies of plans and supporting information. Our websites include a search function to help find specific planning applications.
  - Undertake appropriate notification as shown in Table 4. In some instances, the LPA can go beyond the minimum statutory requirements where the development would potentially have a wider impact, and may make use of additional methods of publicity such as articles in Council magazines. Such wider consultation is carried out at the discretion of the planning officer.
  - Parish Councils in South Cambridgeshire as well as Neighbourhood Forums in Cambridge City are consulted on all appropriate planning applications as statutory consultees.
  - Consult with both statutory and non-statutory consultees. All consultees have 21 days (30 days for applications accompanied by an Environmental Statement) from the issue of the consultation notice to make representations (extended as appropriate where the period extends over public or bank holidays). It is highly recommended that representations are submitted prior to the published consultation deadline. The list of statutory and non-statutory consultees related to planning application consultations is set out in Appendix 2.
- 4.13 Where neighbour notification letters/emails are sent out, this will usually be sent to properties directly adjoining the application site. The planning officer may sometimes determine that neighbour notification letters/emails should be sent beyond this where a development could potentially have an impact on a wider area. This may include properties facing the application site or other properties within the street.

- 4.14 In addition Cambridge City Council operates a Development Control Forum<sup>27</sup> where petitioners to an application can present their views to councillors, planning officers and the applicant some weeks before a planning application is determined. The aim of the forum is to allow early discussion of the planning issues raised by petitioners and to explore the scope for building consensus and for resolving concerns. This informal meeting does not determine the application, which is set out in more detail below.
- 4.15 It is at the discretion of the LPA whether further publicity and public consultation is necessary when an application has been amended. In deciding whether it is necessary, the LPA will consider the criteria set out in Planning Practice Guidance<sup>28</sup> published by the Government.
- 4.16 If it has been determined that re-publicity and re-consultation is necessary then it is open to the respective LPA to set the time frame for responses, balancing the need for the public to be given time to consider the issue that is being re-consulted upon and respond, against the need for efficient decision making. A period of 10-14 days is in most cases considered an appropriate period to allow for further comment.
- 4.17 Table 4 sets out how the councils will publicise planning applications made under planning legislation. Each type of planning application will be the subject of a different method of publicity which will broadly reflect the scale and impact of the proposal on its surroundings.

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<sup>&</sup>lt;sup>27</sup> https://democracy.cambridge.gov.uk/mgCommitteeDetails.aspx?ID=190

www.gov.uk/guidance/consultation-and-pre-decision-matters#Re-consultation-after-amended

**Table 4: Minimum publicity for planning applications** 

	Minimum method of publicity					
Type of application	Site notice	Site notice or neighbour notification letter/email	Press notice in local newspaper	Website	Parish Council notification email/letter	Neighbourhood Forum email/letter notification
Major Development						
Minor Development						
Householder Applications						
Applications subject to EIA which are accompanied by an Environmental Statement*		<b>Ø</b>	<b>Ø</b>		<b>Ø</b>	
Applications which do not accord with the development plan for the area*						
Applications affecting a Public Right of Way*						
Listed Building applications and applications affecting the setting of a Listed Building		<b>Ø</b>	<b>⊘</b>		<b>Ø</b>	
Brownfield Land Register (Part 2)						
Works to protected trees	Responsibility of the applicant	Landowner must be notified			<b>✓</b>	
Applications relating to an advertisement						
Hazardous Substances Consent						

Where an application falls within a Conservation Area, a site notice may be required. The LPA will advise. Prior Notification Applications will be publicised as set out in the relevant regulations<sup>29</sup>. The LPA will advise.

There is no statutory requirement to consult on the following types of applications:

- · Certificates of Lawfulness of proposed use or development;
- Certificates of Lawfulness of existing use or development;
- · Approval of details/Discharge of Conditions;
- Non-material amendments.

\* 30 Days public notice in local newspaper

Method of publicity will be appropriate

Discretionary (to be determined on a case by case basis by the LPA)

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<sup>&</sup>lt;sup>29</sup> www.planningportal.co.uk/info/200126/applications/60/consent\_types/10

#### **Decision Making Process**

- Decisions on planning applications are made by Planning Committee and Planning Officers under delegated powers. This is set out in the Schemes of Delegation<sup>30</sup>. Applications that are likely to be considered by the Planning Committee include applications for Major developments and applications relating to the demolition of a listed building or a Building of Local Interest.
- There are two separate Planning Committees across the two LPAs. Agendas and reports for Planning Committee are publicly available at least 5 working days before the meeting and are also published online. The committee meetings are minuted and published online. Members of the public may speak at a Planning Committee provided they have previously made written representations on the proposed development. Both councils have further guidance and information regarding speaking at Committee Meetings and can be viewed online<sup>31</sup>. There is also a Joint Development Control Committee – Cambridge Fringes, which comprises members appointed by the city, county and district council. This committee considers planning applications for major and ancillary developments on the fringes of Cambridge.
- 4.20 Once an application has been decided, a copy of the planning decision notice will be sent to the applicant. Notification of the decision will also be sent to all third parties who have made representations. This is in accordance with the LPA's statutory requirements<sup>32</sup>. The LPA will also make the decision available to view online through Public Access along with the reports that have been considered in the reaching of the decision. A Weekly List of determined planning applications is made available for Parish Councils, Neighbourhood Forums and any other interested parties to be kept informed of planning decisions in their areas on a weekly basis.

#### **Planning Appeals**

4.21 An applicant may appeal to the Planning Inspectorate against a refusal or contest any of the conditions imposed to the granting of permissions or the non-determination of an application. Only the applicant has the right to appeal. The LPA will support the appeals process by adding appeal documentation to

http://scambs.moderngov.co.uk/documents/s106617/Constitution%20-

%20Complete%20Document.pdf

http://scambs.moderngov.co.uk/documents/s93758/Public%20speaking%20protocol%20FINAL%20a greed%203%20June%202015.pdf

Cambridge City Council: <a href="https://www.cambridge.gov.uk/have-your-say-at-committee-me">www.cambridge.gov.uk/have-your-say-at-committee-me</a>etings

www.legislation.gov.uk/uksi/2015/595/article/33/made

<sup>&</sup>lt;sup>30</sup> South Cambridgeshire District Council:

Cambridge City Council: www.cambridge.gov.uk/media/4094/constitution-part-3-section-9.pdf 31 South Cambridgeshire District Council:

the online planning file. The councils will inform all parties that were originally consulted on the application or made representations on the proposal of the appeal. A planning appeal will then be considered by the Planning Inspectorate, who will make the final decision on the proposal. The LPA has no statutory requirement to notify neighbours or interested parties of the appeal decision. This will be made available on the Planning Inspectorate website<sup>33</sup>.

4.22 There are three procedures that an appeal can follow, written representations which usually relate to householder applications, advertisement consent and minor commercial (shop front) applications as well as a public hearing or a public inquiry. The procedure for these is set out in the 'Procedural Guide to Planning Appeals – England' (2018)<sup>34</sup>.

#### **Enforcement**

4.23 Planning enforcement describes the processes involved in ensuring that people comply with planning law and requirements of a planning permission. The majority of cases arise through referrals from the public, councillors and council officers. Many investigations are confidential so the process involves little public consultation. Where a breach of planning control is reported, an officer will investigate and assess the complaint, gather evidence and establish what, if any, the most appropriate course of action should be. Many investigations result in the submission of a planning application in an attempt to regularise a breach. When this is the case the community can become more involved in the same way as with any other planning application. If the breach cannot be regularised, the LPA will consider formal enforcement action. The LPA will ensure that the complainant is informed of the outcome of the council's investigation. Further information about the enforcement process can be found on the councils' websites, including the Planning Enforcement Policies<sup>35</sup>.

<sup>&</sup>lt;sup>33</sup> www.gov.uk/appeal-planning-inspectorate

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/74 3495/Procedural\_Guide\_Planning\_appeals\_version\_3.pdf 35 South Cambridgeshire District Council: <a href="https://www.scambs.gov.uk/planning/planning-control-and-data/file/74">www.scambs.gov.uk/planning/planning-control-and-data/file/74</a>

enforcement/enforcement-action/

Cambridge City Council: www.cambridge.gov.uk/media/2796/planning enforcement policy.pdf

#### 5.0 How the local community can prepare a Neighbourhood Plan or Order

- 5.1 The Localism Act 2011 introduced the opportunity for local people to prepare neighbourhood plans and orders. These may be prepared by parish and town councils or neighbourhood forums.
- 5.2 Neighbourhood Plans set out policies for the development and use of land in a local area or neighbourhood. They are required to be in general conformity with strategic policies in the local plan. Once adopted a neighbourhood plan forms part of the development plan for the area and has the same status as a local plan.
- 5.3 Neighbourhood development orders grant planning permission for specific developments within a designated neighbourhood area and remove the requirement to submit a planning application for this type of development.
- 5.4 Local planning authorities (LPAs) have a statutory duty to help local communities who are preparing neighbourhood plans, however the planmaking process itself must be community led. Neighbourhood plans are required to undergo independent examination and be subject to a referendum of the local community.
- 5.5 As part of the statutory duty to support that the LPA must undertake, set out in the Neighbourhood Planning (General Regulations) 2012 regulations, the LPA must give advice and assistance to the Parish Council or Neighbourhood Forum. Figure 1 below broadly sets out how the LPAs carry out this duty to advise and assist Parish Councils and Neighbourhood Forums at each of the key stages. The amount of support provided will be subject to both the resources available and the needs of the Parish Council/Neighbourhood Forum. Further detailed guidance has been prepared by the LPAs and is available online with particular note of the relevant support offer for each LPA:
  - Cambridge City Council Neighbourhood Plan Guidance Note
  - South Cambridgeshire District Council <u>Neighbourhood Planning Toolkit</u> and support offer
- 5.6 Appendix 3 identifies other sources of information regarding neighbourhood planning. This will be kept under review and updated when necessary.

# Figure 1: Broad overview of how the LPAs will provide advice and support for neighbourhood planning

SCDC: South Cambridge District Council

CCC: Cambridge City Council

#### **Step One: Getting Started**

The local planning authority (LPA) will provide advice online as a first port of call for enquiries about neighbourhood planning;

The LPA will meet with parish councils in South Cambridgeshire or community/ residents groups in Cambridge City who may be interested in preparing a Neighbourhood Plan to discuss:

- the requirements of preparing a plan,
- any other options that might also be available to meet local objectives and whether the Parish Council or community organisation has the necessary information to decide what approach would be best for them; and
- identifying the area within which their plan would apply know as the neighbourhood area.

CCC: the requirements of forming a neighbourhood forum



#### **Step Two: Designating a Neighbourhood Area/Forum**

SCDC: Application Form for a neighbourhood area to be completed and submitted by the parish council. The LPA can assist by preparing a map to show the proposed Neighbourhood Area.

CCC: Application forms for creating a neighbourhood forum and a neighbourhood area to be completed and submitted by relevant local organisation. The LPA can assist by preparing a map to show the proposed Neighbourhood Area.

Where consultation is required for a neighbourhood area this will be for a minimum of six weeks undertaken by the LPA. The publicity for public consultation will correspond with the timescales and methods set out in Table 3 of the SCI.



#### **Step Three: Preparing the Plan and Evidence Base**

Once the Neighbourhood Area is designated, the LPA will meet with the Parish Council/Neighbourhood Forum to advise on:

- The Local Plan and emerging LPA policy and guidance documents
- What support the LPA can give during plan making process
- Regulatory and legal requirements, including the requirement to meet the

Basic Conditions<sup>36</sup>

- Sources of grants and technical support
- Effective methods of public engagement
- Mapping support
- Other sources of information including providing a lending library of resources
- The use of a planning consultant who specialises in neighbourhood planning.

During the preparation of the plan the LPA will:

- Provide information about where to find the data for building the evidence base for the plan
- Share information on contacts for key consultees
- Highlight the key allocations and designations on the Local Plan Policies Map that will impact the neighbourhood plan area
- Provide constructive comments<sup>37</sup> on emerging draft policies in the Neighbourhood Plan against the Basic Conditions
- Provide access to a Planning Toolkit which includes a range of guidance and specialist advice, subject to capacity, on how to prepare a neighbourhood plan such as gathering an evidence base and on planning issues that may need to be included in a Plan, such as local housing need.



# Step Four: Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and Habitat Regulation Assessment (HRA)

There is a statutory requirement for neighbourhood plans to carry out an SEA and HRA assessment to ensure:

- The emerging neighbourhood plan provides a high level of protection of the environment (SEA)
- The emerging neighbourhood plan protects and improves Europe's most important habitats and species (HRA).

A Neighbourhood Development Order may also require an Environmental Impact Assessment (EIA) to ensure that the full knowledge of any significant effects on the environment are known.

Other European directives, or future equivalent, may apply in particular circumstances of a draft neighbourhood plan or Order and the LPA will be able to advice at this stage.

SCDC: The LPA will organise and pay for the SEA and HRA Screening of the neighbourhood plan up to a maximum cost of £1,000. If the cost is higher than CCC: The LPA will make the neighbourhood forum aware of their statutory requirements at this stage and advise on third party technical support

www.gov.uk/guidance/neighbourhood-planning--2#basic-conditions-for-neighbourhood-plan-to-referendum

37 The LPA will require 3 weeks notice of when decreases a second conditions of the conditi

<sup>37</sup> The LPA will require 3 weeks notice of when documents or policies will be submitted for comment. The LPA will then seek to respond with comments within 3 weeks of receiving the draft policies/plan.

this or a repeat screening is required then this will need to be funded by the Parish Council. The LPA will also advise on third party technical support packages for any neighbourhood plan that requires a full SEA or HRA. packages for any neighbourhood plan that requires a full SEA or HRA.



# **Step Five: Pre-submission consultation and preparing the Plan for submission**

SCDC: Where appropriate, the LPA will offer up to a maximum of £1,000, towards a single pre-submission health check of the draft neighbourhood plan before the parish council submits their neighbourhood plan and supporting documents to the LPA. Not all neighbourhood plans are eligible for this offer and the eligibility requirements are set out in the Neighbourhood Planning Toolkit<sup>38</sup>.

CCC: The LPA will advise the neighbourhood forum of the value of having a pre-submission health check of the draft neighbourhood plan before they submit the Plan and supporting documents to the LPA.



# **Step Six: Submission of the Neighbourhood Plan for Public Examination**

The final stages of preparing the neighbourhood plan are undertaken with the LPA as the lead rather than the Parish Council or Neighbourhood Forum. The LPA will keep the Parish Council/Neighbourhood Forum informed of progress and liaise with them to resolve any issues as the plan goes through the examination and referendum stages of the process. This will include liaising with the Parish Council or Neighbourhood Forum regarding:

- The appointment of an examiner;
- Arrangements for any public hearing that might be necessary;
- Changes proposed in the Examiner's Report to ensure the Plan meets the Basic Condition tests; and
- Any changes to the neighbourhood plan.



<sup>&</sup>lt;sup>38</sup> SCDC Neighbourhood Planning Toolkit

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# **Step Seven: Public Referendum and Adoption**

Subject to a successful outcome of the Public Examination, the LPA will then inform the Parish Council or Neighbourhood Forum of the council's decision to proceed to referendum and subsequent timescales. The organising of the public referendum and publicity regarding its outcome will be undertaken by the elections team at the council, rather than by the LPA.

Subject to a successful referendum, the Neighbourhood Plan will then be made by the Council as part of the statutory development plan for the area.

#### 6.0 Monitoring and Review

- 6.1 The SCI is based on current national planning policy and legislation. As per the Town and Country Planning (Local Planning) (England) (Amendment) Regulations 2017, the LPAs are committed to reviewing the SCI at least every five years to ensure that it is up to date, reflecting current legislation and best practice.
- 6.2 Should national legislation change, there may be elements of this SCI which no longer apply. The LPAs will endeavour to update this SCI as soon as possible after significant national legislation change.
- 6.3 Each year the LPAs monitor and review the progress and effectiveness of the Local Plan in an Annual Monitoring Report (AMR). In accordance with the Annual Monitoring Report, the LPAs will also review consultation activities that have been carried out in accordance with the Statement of Community Involvement. This is to ensure the methods and techniques used to engage with all stakeholders of the community are effective and robust.
- 6.4 The councils' will use the following indicators to measure outcomes:
  - Number of people participating in consultation
  - Number of people using the councils' online website to make representations

# **Appendix 1: Consultation Bodies for Plan Making**

The Town and Country Planning (Local Planning) (England) Regulations 2012 specify a number of organisations that local planning authorities should consider consulting when preparing planning policy documents. These are known as 'Specific Consultation Bodies' and 'General Consultation Bodies'.

The Regulations allow the councils to select 'such of' the Specific and General Consultation Bodies that may have an interest and/or the 'local planning authority consider appropriate' to the consultation document being prepared.

The organisations the councils will consult will be drawn from the list in this appendix and will depend upon the nature of the consultation being undertaken, bearing in mind:

- 1. The area covered by the document certain organisations may only operate in parts of Cambridge and/or South Cambridgeshire:
  - a. The new Local Plan for Greater Cambridge will cover the whole of both Cambridge and South Cambridgeshire.
  - b. A topic-based Supplementary Planning Document (SPD) elaborating on district-wide policies in one or other council's adopted Local Plan may cover the whole of Cambridge or South Cambridgeshire.
  - c. A site specific SPD may cover part of Cambridge or South Cambridgeshire.
- 2. The subject matter of the document an SPD may address a specific topic which may only be of interest to some organisations.

The consultation bodies outlined in this appendix are common to both Cambridge and South Cambridgeshire. Where there are differences between the councils, these have been identified below.

#### **Specific Consultation Bodies**

The 'Specific Consultation Bodies' are defined in the Town and Country Planning (Local Planning) (England) Regulations 2012, Part 6, Regulation 2 as the following:

- The Coal Authority(b)<sup>39</sup>
- The Environment Agency
- The Historic Buildings and Monuments Commission for England (now known as Historic England)
- The Marine Management Organisation(e),
- Natural England

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<sup>&</sup>lt;sup>39</sup> The Coal Authority has advised South Cambridgeshire District Council it does not wish to be consulted

- Network Rail Infrastructure Limited (company number 2904587) (Network Rail Office of Rail Regulation)
- The Highways Agency (now known as Highways England)
- Relevant authority any part of whose area is in or adjoins the local planning authority's area:
  - a) A local planning authority

For both LPAs this includes Cambridgeshi	re and Peterborough Combined Authority
SCDC:	CCC:
<ul> <li>Bedford Borough Council</li> </ul>	<ul> <li>South Cambridgeshire District</li> </ul>
Braintree District Council	Council
<ul> <li>Cambridge City Council</li> </ul>	
<ul> <li>East Cambridgeshire District</li> </ul>	
Council	
<ul> <li>Fenland District Council</li> </ul>	
<ul> <li>Huntingdonshire District Council</li> </ul>	
<ul> <li>North Hertfordshire District</li> </ul>	
Council	
<ul> <li>Peterborough City Council</li> </ul>	
<ul> <li>Uttlesford District Council</li> </ul>	
<ul> <li>West Suffolk Council (comprising</li> </ul>	
Forest Heath and St Edmundsbury	
Councils)	

b) A county council referred to in section 16(1) of the Act,

For both LPAs this includes Cambridgeshire County Council			
SCDC: Also includes the following			
adjoining county councils:			
Essex County Council			
Hertfordshire County Council			
Suffolk County Council			

c) A parish council

SCDC:	CCC:
<ul> <li>Parish Councils within South</li></ul>	<ul> <li>Parish Councils within South</li></ul>
Cambridgeshire; and <li>Parish Councils which adjoin South</li>	Cambridgeshire which adjoin the
Cambridgeshire	City

- d) A local policing body (Cambridgeshire Constabulary)
- any person—
  - (i) to whom the electronic communications code applies by virtue of a direction given under section 106(3)(a) of the Communications Act 2003, and

- (ii) who owns or controls electronic communications apparatus situated in any part of the local planning authority's area,
- If it exercises functions in any part of the local planning authority's area—
  - (i) a Primary Care Trust established under section 18 of the National Health Service Act 2006(g) or continued in existence by virtue of that section; (now known as Clinical Commissioning Groups)
  - (ii) a person to whom a licence has been granted under section 6(1)(b) or (c) of the Electricity Act 1989(h);
  - (iii) a person to whom a licence has been granted under section 7(2) of the Gas Act 1986(a);
  - (iv) a sewerage undertaker; and
  - (v) a water undertaker;
- The Homes and Communities Agency (now known as Homes England); and
- where the local planning authority are a London borough council, the Mayor of London<sup>40</sup>.

#### **General Consultation Bodies**

The 'General Consultation Bodies' are defined in the Town and Country Planning (Local Planning) (England) Regulations 2012, Part 6, Regulation 2 as the following:

- a) voluntary bodies some or all of whose activities benefit any part of the local planning authority's area;
- b) bodies which represent the interests of different racial, ethnic or national groups in the local planning authority's area;
- c) bodies which represent the interests of different religious groups in the local planning authority's area;
- d) bodies which represent the interests of disabled persons in the local planning authority's area;
- e) bodies which represent the interests of persons carrying on business in the local planning authority's area;

The LPAs must also ensure they meet the requirements of the Equality Act 2010. To ensure the views of 'harder to reach groups' are represented, the LPAs will work closely with relevant organisations that have experience in a particular matter to find the best way of consulting and liaising with these groups.

The LPAs will also consult with other consultation bodies which they consider to be appropriate to planning and who do not fall into the above categories. These may include:

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<sup>&</sup>lt;sup>40</sup> Note: the Mayor of London and Transport for London are not applicable to Cambridge and South Cambridgeshire.

- Residents' Associations;
- Developers and agents;
- Landowners;
- Special interest groups.

#### **Duty to Co-operate Bodies**

The 'Duty to Cooperate Bodies' are defined in Town and Country Planning (Local Planning) (England) Regulations 2012, Part 2, Regulation 4 as follows:

- The Environment Agency
- The Historic Buildings and Monuments Commission for England (known as Historic England)
- Natural England
- the Mayor of London <sup>2</sup>
- The Civil Aviation Authority
- The Homes and Communities Agency (now known as Homes England)
- Each clinical commissioning group established under section 14D of the National Health Service Act 2006
- The National Health Service Commissioning Board;
- The Office of Rail Regulation (known as the Office of Rail and Road)
- Transport for London <sup>2</sup>
- Each Integrated Transport Authority
- Each highway authority within the meaning of section 1 of the Highways Act 1980 (including the Secretary of State, where the Secretary of State is the highways authority)
- The Marine Management Organisation.

In addition, the Planning Practice Guidance states:

"Local Enterprise Partnerships and Local Nature Partnerships are not subject to the requirements of the duty. But local planning authorities and the public bodies that are subject to the duty must cooperate with Local Enterprise Partnerships and Local Nature Partnerships and have regard to their activities when they are preparing their Local Plans, so long as those activities are relevant to local plan making."

(Planning Practice Guidance, Paragraph: 006 Reference ID: 9-006-20160519)

The Local Nature Partnership for Cambridgeshire and Peterborough is Natural Cambridgeshire. The role of Natural Cambridgeshire is to act as an independent, objective voice for the Natural Environment in Cambridgeshire & Peterborough, acting as a conduit to local and central government and other stakeholders. The main focus for the Natural Cambridgeshire Board will be to provide strategic leadership, coordinating partners to deliver projects and

activity that will meet the Partnership's vision and aims. More information regarding Natural Cambridgeshire is available on their website<sup>41</sup>.

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<sup>41</sup> https://naturalcambridgeshire.org.uk/

# **Appendix 2: Consultation Bodies for a Planning Application**

Statutory Consultees that Cambridge City Council or South Cambridgeshire District Council may consult (those consulted will vary depending on the type of application)

- Ancient Monument Society
- Anglian Water Services Ltd
- British Gas
- British Telecommunications plc
- Cambridge Water Company
- Cambridgeshire County Council
- Cambridgeshire and Peterborough Combined Authority
- Canal and River Trust
- Coal Authority
- Control of Major-Accident Hazards Competent Authority
- Crown Estates Commissioners
- Council for British Archaeology
- Department of Energy and Climate Change (DECC)
- Designated Neighbourhood Forums
- Department for Environment, Food and Rural Affairs (DEFRA)
- Environment Agency (EA)
- Forestry Commission
- Health and Safety Executive
- Highways Authority
- Highways England
- Historic England
- Marine Management Organisation
- Ministry of Housing, Communities and Local Government
- Mobile Operators Associations
- National Grid Transco
- Natural England
- Network Rail
- Parish Councils
- Rail Infrastructure Managers
- Rail Network Operators
- Society for the Protection of Ancient Buildings
- Sport England
- Theatres Trust
- The Gardens Trust
- The Georgian Group
- Twentieth Century Society
- Victorian Society

Examples of Non-Statutory Consultees that the councils may consult (those consulted will vary depending on the type of application)

- Cambridge Business Improvement District
- Cambridgeshire and Peterborough Clinical Commissioning Group (GGC)
- Internal council service areas (such as Housing and Environmental Health) (as relevant)
- Adjoining Parish Councils and Local Authorities (as relevant)
- Civil Aviation Authority
- Emergency Services and Multi-Agency Emergency Planning
- Ministry of Defence
- Office of Nuclear Regulation
- Residents' Associations
- Royal Society for the Protection of Birds (RSPB)
- Police and Crime Commissioner
- Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire

If you wish to join our consultation database, please send your contact details to:

## Cambridge City Council

Email: <a href="mailto:applicationsupport@cambridge.gov.uk">applicationsupport@cambridge.gov.uk</a>

Write to: Application Support, Cambridge City Council, PO Box 700, Cambridge, CB1 0JH

#### South Cambridgeshire District Council

Email: planning@scambs.gov.uk

Write to: Planning Department, South Cambridgeshire Hall, Cambourne Business Park, Cambourne, CB23 6EA

# Appendix 3: Statutory requirements for consulting on planning applications

The LPAs are required to undertake a formal period of public consultation, prior to deciding a planning application. This is prescribed in:

- The Town and Country Planning (Development Management Procedure)
   (England) Order 2015
- The Town and Country Planning (Permission in Principle) (Amendment) Order 2017
- The Planning (Listed Buildings and Conservation Areas) Regulations <u>1990</u>
- The Planning (Listed Buildings and Conservation Areas) (Amendment) (England) Regulations <u>2004</u>
- The Town and Country Planning (General Permitted Development) (England)
   Order 2015

# **Appendix 4: Sources of information for Neighbourhood Planning**

The following sources of information relate to the Stages of Neighbourhood Planning set out in Section 4.0. The LPAs will update this list when new information is published and new/amended legislation and regulations are introduced.

## **Guidance and Regulations**

Neighbourhood Planning Regulations:

Original (April 2012): Neighbourhood Planning (General) Regulations 2012

Amended (February 2015): <u>Neighbourhood Planning (General) (Amendment)</u>
<u>Regulations 2015</u>

Amended (October 2016): <u>Neighbourhood Planning (General) and Development</u>

Management Procedure (Amendment) Regulations 2016

National Planning Practice Guidance on Neighbourhood Planning

National Planning Practice Guidance – <u>Strategic Environmental Assessment</u> requirements for Neighbourhood Plans

#### Other resources

Cambridge City Council Neighbourhood Plan Guidance Note

South Cambridgeshire District Council Neighbourhood Planning Toolkit

Department of Communities and Local Government (DCLG) – <u>Notes on Neighbourhood Planning</u>

Locality has a dedicated <u>Neighbourhood Planning website</u>. The <u>Neighbourhood Plan</u> <u>Roadmap Guide</u> provides a good introduction to neighbourhood planning.

Planning Aid (<u>Forum for Neighbourhood Planning</u>) have published a suite of documents and resources to assist those developing a neighbourhood plan.

Planning Advisory Service (PAS) have published a number of guides, tools and templates for neighbourhood planning.

Locality – Information regarding applying for grants and technical support

A Parish Council or Neighbourhood Forum can apply directly to an independent Neighbourhood Plan examiner or approach the following organisations to refer them to an examiner to carry out health checks of Neighbourhood Plans:

Neighbourhood Planning Independent Examiner Referral Service (NPIERS)

<u>Intelligent Plans and examinations (IPe)</u> (There may be other organisations that offer this referral service).

# Appendix 5: Council offices where planning consultation documents will be made available for public inspection

It should be noted that where documents are being produced by an individual council rather than jointly, documents will only be made available for public inspection at the relevant council office.

# **Cambridge City Council**

**Customer Service Centre** 

Mandela House

4 Regent Street

Cambridge

CB2 1BY

# **South Cambridgeshire District Council**

South Cambridgeshire Hall

Cambourne Business Park

Cambourne

Cambridge

**CB23 6EA** 





# Greater Cambridge Statement of Community Involvement Statement of Consultation

#### Background

The Council as the Local Planning Authority has prepared a Statement of Community Involvement (SCI). The purpose of the SCI is to set out how Cambridge City Council and South Cambridgeshire District Councils will consult on planning policy documents, planning applications and advise and support the preparation of neighbourhood plans. The methods of consultation and publicity set out in the SCI will set the minimum standards that the councils' will apply when fulfilling their statutory duties.

The SCI is structured in six chapters:

- Chapter 1 provides an introduction to the SCI, setting out why a new SCI has been prepared and a general overview of the planning system.
- Chapter 2 sets out how the local community can participate in the planning process.
- Chapter 3 explains in detail how the community can engage in the plan making process, including setting out how the councils will consult on planning policy documents including Local Plans, Supplementary Planning Documents and Neighbourhood Plans.
- Chapter 4 explains the development management process and how the community can engage throughout the process, including how to submit representations when an application is being consulted on and speaking at Planning Committee.
- Chapter 5 provides a high level overview of how the councils will provide advice and support for neighbourhood planning.
- Chapter 6 identifies how the councils will monitor and review public engagement related to planning

#### **Consultation on the Statement of Community Involvement**

The SCI was approved for public consultation at the Planning and Transport Scrutiny Committee on 15 January 2019. It was also approved for public consultation at Cabinet on 9 January 2019 at South Cambridgeshire District Council.

The consultation on the draft SCI took place for six weeks from Monday 11 February to Monday 25 March 2019.

The Council has consulted widely on the SCI in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended) via email or post where no email address is available. This has included the Specific Consultation Bodies<sup>1</sup>,

<sup>&</sup>lt;sup>1</sup> Specific consultation bodies and duty to cooperate bodies required under the Town and Country Planning (Local Planning) (England) Regulations 2012 as amended

other Local Authorities, Community Organisations including Parish Councils and Residents' Associations, developers and agents, and a range of other national, regional and local organisations, and other individuals with a stated interest in the area or local to the area.

#### Other methods of notification include:

- a public notice in the Cambridge News;
- through the councils webpages <a href="https://www.cambridge.gov.uk/consultations/greater-cambridge-statement-of-community-involvement-consultation">https://www.statement-of-community-involvement-consultation</a> and <a href="https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/statement-of-community-involvement/">https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/statement-of-community-involvement/</a>.

## **Consultation Methodology**

A six-week consultation period for the SCI took place from:

#### 9am on 11 February 2019 to 5pm on 25 March 2019

The draft SCI was made available for inspection at the following locations:

- online on the Council's website <a href="https://www.cambridge.gov.uk/consultations/greater-cambridge-statement-of-community-involvement-consultation">https://www.cambridge.gov.uk/consultations/greater-cambridge-statement-of-community-involvement-consultation</a>
- at the Council's Customer Service Centre at Mandela House, 4 Regent Street,
   Cambridge, CB2 1BY from 9.00am-5.15pm Monday to Friday
- at South Cambridgeshire District Council, South Cambridgeshire Hall,
   Cambourne Business Park, Cambourne, Cambridge, CB23 6EA

#### Comments could be made using:

- the online consultation system <a href="http://cambridge.jdi-consult.net/localplan/">http://cambridge.jdi-consult.net/localplan/</a> or;
- the electronic or printed response form which could be downloaded and filled in electronically by visiting website <a href="https://www.cambridge.gov.uk/consultations/greater-cambridge-statement-of-community-involvement-consultation">https://www.cambridge.gov.uk/consultations/greater-cambridge-statement-of-community-involvement-consultation</a>

#### Completed forms could be returned to:

- Planning Policy, Cambridge City Council, PO Box 700, Cambridge, CB1 0JH
- Planning Policy, South Cambridgeshire District Council, South Cambridgeshire Hall, Cambourne Business Park, Cambourne, Cambridge, CB23 6EA
- Emailed to policysurveys@cambridge.gov.uk
- Or emailed to <a href="mailed-to-ldf@scambs.gov.uk">ldf@scambs.gov.uk</a>

Contact details for further information were also made available as follows:

• Tel: 01223 457200 / 01954 713183

• Email: <a href="mailto:policysurveys@cambridge.gov.uk">policysurveys@cambridge.gov.uk</a> / <a href="mailto:ldf@scambs.gov.uk">ldf@scambs.gov.uk</a>

# Next steps

After the close of consultation, the key issues raised were considered by the Council and changes were made to the SCI, where appropriate. These are set out below.

# Summary tables of main issues raised, Council assessment and proposed modifications

Statement of our intention to engage with our communities					
Representations Received	Support: 0	Object: 0	Comment: 0	Total: 0	
Main Issues in reps:	None	,	,	•	

1.0 Introduction				
Representations Received	Support: 1	Object: 0	Comment: 2	Total: 3
Main Issues in reps:	Two 'no comment' responses.  Historic England (HE) support general aims and approach of the draft SCI. HE welcome acknowledgement of Historic England as a statutory consultee.			
	With regards to neighbourhood planning they would welcome notification of proposed neighbourhood planning areas as well as consultation on draft plans. The regulations state that Historic England should be consulted where interests could be affected. Historic England would welcome consultation at informal level in addition to requirements of legislation, where issues may benefit from early involvement.			
Council's Assessment	In South Cambre with a parish condesignation of the Meighborn Management Properties with a parise relevant LPA with statutory bodies	t is noted and welco idgeshire, where a uncil boundary, no he neighbourhood p urhood Planning (G rocedure (Amendme here a neighbourho sh boundary or is well consult on the are sof the consultation	neighbourhood placonsultation is uncolan area as per the eneral) and Develont) Regulations 2 od area application cambridge Cora boundary and not a constant of the energian of	dertaken on the e requirements opment 016. n does not city, the otify the
	which outlines to	he advice and supp forums and parish o	ort available from	the councils' to

	neighbourhood plan. Where relevant, the councils' will provide advice on the relevant statutory and key consultees' forums and parishes could engage with in preparing their neighbourhood plans. This may include Historic England and other key consultees such as Sport England.
Proposed Modifications	No proposed modifications.

2.0 How can I get involved in the planning process?						
Representations	Support: 0 Object: 3 Comment: 0 Total: 3					
Received						
	1111					
Main Issues in		ity Council webpage				
	and there must be more ways for local communities to engage in					
reps:	planning than w	planning than what is stated in the SCI.				
	The SCI does not appear to make clear how members of the public can respond to applications. People can be uncertain how to do this, and put off by the process. Community engagement is important so people need to see easily how to comment, and if it goes to the planning committee, how to speak at it.  This consultation is nonsense as it 'calls a spade a spade' and it is not clear what information/feedback is required.					
	IDOX is very ha	rd and slow to use.	It is very user-unfri	endly for		
	members of the public, thus may disenfranchise many people.					
0 111 -	The outdated Resident Association Forum webpage on the					
Council's	Cambridge City	Council website is r	noted and this has	been		
Assessment	reviewed and updated.					
	Whilst there are a number of ways for residents to get involved in the planning process, this particular chapter sets out how people can actively engage in planning matters with the councils as Local Planning Authorities. This includes various forums and committees as set out in Section 2.0 of the SCI. Nevertheless there are also other ways for people to get involved in planning, including joining local resident and campaign groups such as resident associations, lobby organisations and other societies. The list of local groups is extensive in Greater Cambridgeshire and it is not the role of the SCI to identify them. The SCI, in particular Section 2.0, sets out how people can engage with the council in a formal capacity including					

during the plan making process (section 3.0), planning application stage (section 4.0) and through the neighbourhood planning process (section 5.0). Section 4.0 of the SCI sets out the planning application process, how people can respond to planning applications and how decisions are made, including how members of the public can speak at Planning Committees. Nevertheless it is agreed that a link to the two councils' online consultation platforms would be helpful in signposting people to the correct webpages. As set out in the introduction to the SCI, the councils' are required to prepare a Statement of Community Involvement to meet our legal requirements on how we will undertake public consultation on local plans, neighbourhood plans and planning applications. This updated SCI has also been prepared to reflect current planning legislation and the formation of the Greater Cambridge Shared Planning Service. The representation regarding Idox (Public Access) has been addressed under 'Involving the Community at the Planning Application Stage'. Insert the following wording to the end of paragraph 4.9 **Proposed Modifications** 'Planning applications, supporting information and key dates are available for public inspection online<sup>23</sup>.' Insert the following footnote <sup>23</sup> South Cambridgeshire: <a href="https://www.scambs.gov.uk/planning/view-or-">https://www.scambs.gov.uk/planning/view-or-</a> comment-on-a-planning-application/ Cambridge City: https://www.cambridge.gov.uk/planning-applications

3.0 Involving the Community in Planning Policy				
Representations	Support: 0	Object: 0	Comment: 0	Total: 0
Received				
Main Issues in	None			
reps:				

Representations Received	Support: 0	Object: 3	Comment: 0	Total: 3		
Main Issues in	IDOX (Public Access) is not an intuitive, modern tool for many					
reps:	members of the	public to use. For the	nis reason it exclud	les too many		
	who might wish to comment on planning applications and remains					
	challenging for t	hose who already d	0.			
Council's	The issues rega	rding IDOX to view	and comments on	planning		
Assessment	applications are	noted.				
	The Councils have, as part of the Shared Planning Service, agreed to use IDOX as its preferred planning application online platform. This decision was taken following an independent review into the two consultation software that the two councils currently use, IDOX and APAS.  The councils' have previously raised the issues relating to URL's to IDOX on the IDOX Ideas Page. This feature is where councils can suggest changes to the systems for IDOX to consider in further detail, subject to it being voted on by other local planning authorities On previous occasions, where the councils' have suggested changes to URL's, they have not been supported by other local planning authorities on the ideas page and subsequently by IDOX. Nevertheless the councils will continue to engage with IDOX to see if URL's can be amended so they improve user functionality.					
	opened within II internet speeds, and/or mobile de particular issues generally split la Statement, when	nich information is do DOX is based on a rather technical specification as the evices as well as the are outside of the earge documents, such they exceed 50 paralloading and viewing	range of factors, individual fications of individual file sizes. Whilst to councils' control, the chas a Design and file ages or 10MB in file	cluding ual computers these ne councils' will I Access		
	submitted by the consultees when accompany a planames are presented by the consultees when accompany a planames are presented by the consultees when accompany and accomplanames (Development of the consultees).	ame the documents applicant. This is to considering the subanning application. Cribed by planning less Statement is tall opment Managemeded). However the consequences of the consequences	o assist the Planning porting documen A number of the does gislation, for exancted from the Town of Procedure) (Engles)	ng Officer and ts that ocument nple the term and Country gland) Order		

creating a glossary of documents to place on its websites which can provide further information explaining what some of these documents might contain to make it easier for people to understand the terminology.

The search functionality is a set feature within the software. In order for this to change and/or improved, this would need to be supported on the IDOX Ideas Page (see response above). It should be noted that users can search for specific properties using the map functionality. The map is updated on a regular basis to reflect current and historic planning applications, planning appeals and building control records. There is also the option to search for planning and building control applications within the map based on a specific timeframe, e.g. within the last six months.

In addition to searching for 'live' planning applications, IDOX also allows users to generate a report of weekly and monthly planning applications validated or decided within a specific week or month.

The dates shown refer to the different notifications sent out by the councils and the different publicity methods that the individual councils are required to undertake according to planning legislation. The councils' intentions are to align consultation dates where possible.

Regarding some of the terminology used to describe the dates shown in IDOX, they are defined as follows:

- 'Standard Consultation Date' refers to the date consultees were consulted on the application
- 'Neighbour Consultation Expiry Date' refers to the deadline for neighbours to submit any representations on the application

Whilst there are multiple dates shown under each specific planning application, this is to reflect some of the statutory requirements of planning regulations and also to allow the councils to alter dates where planning applications are amended during the consultation period and/or where there has been an agreed extension of time to determine the application with the applicant. It should be noted that applications are open to comments until the 'Agreed Expiry Date'. To clarify this issue regarding dates further, the councils' will update the frequently asked questions on its websites to include further

detail and clarification.

All files should be in Microsoft Word or PDF format which also includes emails. Historically emails were added to specific planning applications as .eml files but this practice was amended several years ago to overcome the issues noted in the representations. The councils will remind officers of this to ensure the correct procedures are followed for future applications.

Details of where the committee is being held, and on what date and time, can be found on the letter sent out to the agent or applicant and people who have submitted representations on the application. This is uploaded to the documents tab within IDOX. Unfortunately there is not a field available for this information to be stored on Public Access. Members of the public who are tracking an application will be made aware of the letter being uploaded. Further details can also be found on the Planning Committee's website. The officer's report and the amendment sheet/de-brief are added into IDOX. Minutes of the committee are found on the relevant Planning Committee webpages (Cambridge City Council / South Cambridgeshire District Council).

Section 106 documents are added to the website once completed. Historically they were not added but the councils have been organising a project to upload them so most applications should now have these available to view.

Regarding the representation about the lack of a data feed, this is not something that either the existing Cambridge City Council or future South Cambridgeshire District Council IDOX systems produce. Nevertheless the councils will consider how we can share this open data more widely in an accessible format.

Whilst the councils are aware of some of the issues raised in the representations regarding the online planning application platform, both councils' will continue to work with the software provider in seeking improvements to the way people access, navigate and view documents within the system.

# Proposed Modifications

No proposed modifications.

5.0 How the community can prepare a Neighbourhood Plan or Order				
Representations	Support: 0	Object: 0	Comment: 0	Total: 0
Received				
Main Issues in	None	<b>'</b>		•
reps:				

6.0 Monitoring and Review					
Representations	Support: 0	Object: 0	Comment: 0	Total: 0	
Received					
Main Issues in	None		,	1	
reps:					

Appendix 1 - 5					
Representations Received	Support: 0	Object: 1	Comment: 0	Total: 1	
Main Issues in	No mention in d	raft consultation reg	ı jarding involvemei	nt of schools.	
reps:	This is a grievous omission considerably impacting on viability and sustainability of communities as well as quality of life for Greater Cambridgeshire residents. Involvement of schools and educational establishments at all points of the planning process must be considered to comply with equalities legislation (Equalities Act 2010).				
	NPPF places considerable weight on educational issues(inter alia para 94) this has not been acknowledged in policies by the Greater Cambridge Partnership.  Current SCDC Planning Policy uses existence of Primary Schools to denote Group Village status yet has no mechanism to support them which is contrary to NPPF guidelines. There appears to be no mechanism for assessing the impact of Local Plans on communities.  We are keen to engage with Greater Cambridgeshire Partnership to ensure that schools continue to thrive. Current flows of information are not fit for purpose and no substitute for direct consultation with schools.				
Council's	_	ree that it is importa			
Assessment		ough the plan making other interested orgon	• .		

institutions, are able to sign up for planning policy notifications. This includes notifications on public consultations and the adoption of planning policy documents. More information on how to sign up for these notifications can be found on the councils' websites.

Notifications of specific planning applications that fall within close proximity to an educational institution will be consistent with the method of publicity set out in Table 4 of the SCI. It is also possible to register for planning application notifications within Cambridge City and this feature will also be available in South Cambridgeshire from December 2019.

Planning application notifications allow the user to receive notifications of applications that fall within a certain area which can then be tracked by the user. Residents, businesses and other organisations and interested parties are encouraged to use this notification system to ensure they are kept aware of development proposals in their areas of interest.

As part of the councils' responsibilities, there is regular engagement with statutory bodies, such as Cambridgeshire County Council who are the local education authority for the area. This engagement includes identifying and responding to education issues in preparing planning policy documents such as a Local Plan and consulting them on planning applications, where education capacity and potentially funding towards school provision are considered prior to a decision being made on a particular application.

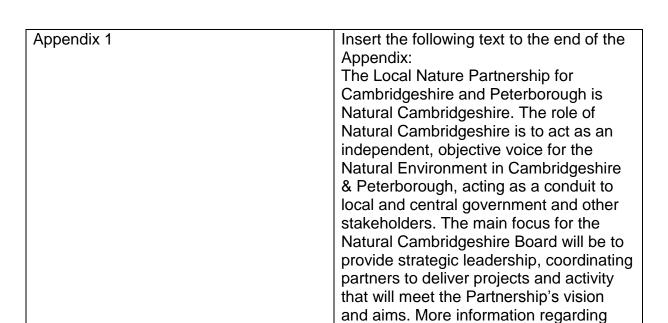
# Proposed Modifications

No proposed modifications.

# Summary table of additional proposed minor modifications

Paragraph / Section	Proposed modification
Statement of our intention to engage with	Amend the paragraph to read as follows:
our communities	
	We would encourage you, as residents
	and stakeholders (including Parish
	Councils and Residents' Associations as
	appropriate groups and associations
	representing residents and businesses in
	the area.), to use this Statement of
	Community Involvement and the
	protocols set out within it, to hold the
	Authorities to account and ensure that all
	local people have sufficient opportunities

	to have their say.
Paragraph 1.16	Insert footnote to explain community
. alagraph ilio	groups in the context of neighbourhood
	planning.
	<sup>2</sup> Where a community wants to take up
	the opportunities offered by
	neighbourhood planning, the legislation
	enables three types of organisations
	known as qualifying bodies to lead it.
	These are either a parish or town council;
	a neighbourhood forum; or a community
0.5	organisation within a non-parished area.
2.5	Reference to South Fringe Community
	Forum removed as the last meeting will
Table 1: Legal Plan properation	take place in June 2019.
Table 1: Local Plan preparation	Text deleted for consistency with Table 2.
	۷-
	Public consultation events if appropriate
	to the nature of the consultation. These
	may include public exhibitions and open
	day events.
3.17	Insert the following text to the end of the
	paragraph:
	and include Neighbourhood Forums.
3.18	Amend the paragraph to read as follows:
	The council is required to co-operate with
	neighbouring local planning authorities and other prescribed bodies on strategic
	matters that cross administrative
	boundaries under the statutory 'duty to
	co-operate'. Whilst Local Nature
	Partnerships (LNP) are not subject to the
	requirements of the duty, the councils'
	are committed to cooperating with the
	LNP (Natural Cambridgeshire) and have
	regard to their activities which are
	relevant to local plan making. The LNP
	acts as an independent, objective voice
	for the natural environment in
	Cambridgeshire and Peterborough and
	part of its role is to coordinate partners to
	deliver projects and activity that will meet
	the Partnership's vision and aims. These
	bodies identified under the statutory 'duty
	to co-operate' are also listed in Appendix
	1.



their website.

Natural Cambridgeshire is available on



# Cambridge City Council Equality Impact Assessment (EqIA)



This tool helps the Council ensure that we fulfil legal obligations of the <u>Public Sector Equality Duty</u> to have due regard to the need to –

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Guidance on how to complete this tool can be found on the Cambridge City Council intranet. For specific questions on the tool email Helen Crowther, Equality and Anti-Poverty Officer at <a href="mailto:equalities@cambridge.gov.uk">equalities@cambridge.gov.uk</a> or phone 01223 457046. Once you have drafted the EqIA please send this to <a href="mailto:equalities@cambridge.gov.uk">equalities@cambridge.gov.uk</a> for checking. For advice on consulting on equality impacts, please contact Graham Saint, Strategy Officer, (<a href="mailto:qraham.saint@cambridge.gov.uk">qraham.saint@cambridge.gov.uk</a> or 01223 457044).

1. Title of strategy, policy, plan, project, contract or major change to your service:

Statement of Community Involvement 2019

2. Webpage link to full details of the strategy, policy, plan, project, contract or major change to your service (if available)

The following webpage will be updated to show the adopted document: <a href="https://www.cambridge.gov.uk/statement-of-community-involvement">https://www.cambridge.gov.uk/statement-of-community-involvement</a>

3. What is the objective or purpose of your strategy, policy, plan, project, contract or major change to your service?

The Statement of Community Involvement (SCI) sets out how Cambridge City Council and South Cambridgeshire District Council will engage the public in the planning process. The SCI describes how the public, businesses and interest groups within the local authority areas can get involved in the creation of local planning policy and the planning application process which shapes were we live, work and trade. This is essential to help improve understanding and openness of the planning process.

There is a legal requirement on Local Planning Authorities (LPAs) to undertake public consultation on local plans, neighbourhood plans and planning applications. It is important that this is undertaken in a cost-effective, efficient and proportionate manner. This SCI is an important document as it will establish a minimum standard of consultation and publicity on planning matters for both Cambridge City and South Cambridgeshire District Councils.

The SCI has been split into three sections which cover the following roles and responsibilities of the planning service:

- Planning Policy including the production of planning policy documents including the Local Plan
- Development Management including how the councils consider and publicise planning applications, and
- Neighbourhood Planning setting out how the councils will assist groups who are preparing neighbourhood plans

The Councils are committed to treating everyone fairly and justly, and wants to ensure that everyone gets an opportunity to be involved in the planning process. We recognise that consultation and engagement activities are constantly evolving and this SCI will be revisited at regular intervals to ensure it is fully up-to date and reflects local and national priorities, practices and policies.

#### 4. Responsible Service

Greater Cambridge Planning Service

7.	Are other departments or partners involved in delivering this strategy, policy, plan, project, contract or major change to your service? (Please tick)
☐ No	
⊠ Yes	s (Please provide details):
To vai	rying degrees;
Camb	ridge City Council (joint plan-making partner)
•	Planning Services Community Services Housing Environmental Section Property Services Other service departments as relevant and required
South	Cambridgeshire District Council (joint plan-making partner) Planning Environmental Health Housing Procurement Other service departments as relevant and required
Camb  • •	ridgeshire County Council (key stakeholder assisting with plan-making) Planning including Minerals and Waste team Transportation Education Other service departments as relevant and required
ways i includ planni	tatement of Community Involvement sets out the broad parameters guiding the in which interested parties may be able to engage in planning matters. This es plan making, decision making on planning applications, and neighbourhood ng. These processes include a wide range of stakeholders in addition to those above.
8.	Has the report on your strategy, policy, plan, project, contract or major change to your service gone to Committee? If so, which one?
Transp was p Camb	raft Statement of Community Involvement was presented to Planning and port Scrutiny Committee on 15 January 2019. The adopted version of the SCI resented to Planning and Transport Scrutiny Committee on 24 June 2019 at ridge City Council and Cabinet on 1 July 2019 at South Cambridgeshire at Council.

9. What research methods/ evidence have you used in order to identify equality impacts of your strategy, policy, plan, project, contract or major change to your service?

The SCI is concerned with the processes for enabling everyone to get involved in the planning process.

The Authority Monitoring Report will include data on any consultations that have been undertaken during the relevant monitoring period, and will use the following indicators:

- Number of people participating in consultation
- Number of people using the councils' online website to make representations

#### 10. Potential impacts

For each category below, please explain if the strategy, policy, plan, project, contract or major change to your service could have a positive/ negative impact or no impact. Where an impact has been identified, please explain what it is. Consider impacts on service users, visitors and staff members separately.

#### (a) Age

Note that this refers to any group of people of a particular age (e.g. 32 year-olds), or within a particular age range (e.g. 16-24 year-olds) – in particular, please consider any safeguarding issues for children and adults at risk

It is anecdotally recognised that it can sometimes be more difficult to engage with younger age groups, and where possible and appropriate relevant organisations and individuals will be identified to reach as wide an age range as possible. This could include ChYPPS and external organisations. Evidence suggests that some older people are also less likely to have access to the internet. The Council as a Digital Inclusion Strategy in order to support people who are excluded from using the internet gain access and skills they need to use it.

No safeguarding issues are identified at this stage however the Council has a Safeguarding Policy and a designated Safeguarding Officer to follow up on concerns in each service.

#### (b) Disability

Note that a person has a disability if they have a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.

#### (b) Disability

Note that a person has a disability if they have a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.

The SCI identifies a range of external groups and organisations that may be consulted on planning matters, and we have a Disability Panel helping to feedback on impacts new developments have on people with a range of disabilities.

The consultation document can be made available on request in large copy print, audio cassette or Braille and officers are willing to meet individuals and talk issues through. This approach would also apply, as necessary, to subsequent consultation documents that are prepared in the plan making process. In respect of planning applications, information can be made available in a range of formats if required.

#### (c) Gender reassignment

No equality impacts have been identified at this stage that is specific to this equality group.

#### (d) Marriage and civil partnership

No equality impacts have been identified at this stage that is specific to this equality group.

#### (e) Pregnancy and maternity

Where people are required to care for children, it may be difficult for them to engage in consultation events and meetings. A number of the planning policy consultation events take place within and outside of usual working hours to try and ensure residents and businesses are able to engage in the process. Planning applications are available for public inspection online and can be accessed at any time of the day.

No equality impacts have been identified at this stage that is specific to this equality group.

#### (f) Race

Note that the protected characteristic 'race' refers to a group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins.

No equality impacts have been identified at this stage that is specific to this equality group.

#### (g) Religion or belief

No equality impacts have been identified at this stage that is specific to this equality group.

#### (h) Sex

No equality impacts have been identified at this stage that is specific to this equality group.

#### (i) Sexual orientation

No equality impacts have been identified at this stage that is specific to this equality group.

(j) Other factors that may lead to inequality – <u>in particular</u> – please consider the impact of any changes on low income groups or those experiencing the impacts of poverty

It can be difficult to contact some low income groups if they have limited access to the internet and transport, and the SCI sets out that where additional mechanisms are required to improve levels of engagement on planning matters that bespoke methods may be used. This will be considered in detail taking into account the subject matters and geographic scope of each new stage of plan making, and in respect of planning applications.

Evidence suggests that some older people are also less likely to have access to the internet. The Council as a Digital Inclusion Strategy in order to support people who are excluded from using the internet gain access and skills they need to use it.

11. Action plan – New equality impacts will be identified in different stages throughout the planning and implementation stages of changes to your strategy, policy, plan, project, contract or major change to your service. How will you monitor these going forward? Also, how will you ensure that any potential negative impacts of the changes will be mitigated? (Please include dates where possible for when you will update this EqIA accordingly.) The SCI will go through the following stages: Adoption (2019) Monitoring and review 5 yearly reviews of SCI and annual review in AMR 12. Do you have any additional comments? The councils will not accept or publish comments that contravene its compliance with the Equality Duty under the Equality Act 2010<sup>1</sup>. The councils will publicise consultations to reach the widest groups of people as possible. This is set out in the Statement of Community Involvement. 13. Sign off Name and job title of lead officer for this equality impact assessment: Terry De Sousa, Senior Planning Policy Officer Names and job titles of other assessment team members and people consulted: Amanda Thorn, Principle Planning Policy Officer Date of EqIA sign off: 23 May 2019 Date of next review of the equalities impact assessment: Spring 2024 All EqlAs need to be sent to Helen Crowther, Equality and Anti-Poverty Officer. Has this been sent to Helen Crowther?

Date to be published on Cambridge City Council website: June 2019

X Yes

□ No

<sup>&</sup>lt;sup>1 1</sup> Equality Duty – Under the Equality Act 2010, the Council must have due regard to the need to: eliminate unlawful discrimination, harassment and victimisation; advance equality of opportunity between different protected groups; and foster good relations between different protected groups.

Item

# S106 FUNDING ROUND 2019: PLAY AREAS AND OPEN SPACES

#### To:

Councillor Katie Thornburrow, Executive Councillor for Planning Policy and Open Spaces Planning and Transport Scrutiny Committee 25/06/2019

## Report by:

Alistair Wilson, Development Manager, Streets & Open Spaces Tel: (01223) 458514 Email: alistair.wilson@cambridge.gov.uk

#### Wards affected:

Abbey, Arbury, Castle, Cherry Hinton, Coleridge, East Chesterton, King's Hedges, Market, Newnham, Petersfield, Queen Edith's, Romsey, Trumpington, West Chesterton

# **Key Decision**

# 1. Executive Summary

1.1 The Council uses S106 contributions paid by developers to mitigate the impact of developments on facilities and amenities in Cambridge. In line with the arrangements agreed by the Executive Councillor in March 2019, the Council has invited proposals for improving play areas and open spaces within the city as part of its 2019 S106 funding round. Thirty applications have been received and assessed against the S106 selection criteria. This report summarises those applications and assessments and makes 17 recommendations for S106 funding.

#### 2. Recommendations

The Executive Councillor is recommended to:

- De-allocate £50,000 of informal open space S106 funding for previously prioritised project for a skate park at Chesterton Recreation Ground (see paragraph 3.9);
- ii. Allocate S106 funding to the following projects, subject to business case approval (see Section 4 and Appendix A for project details).

		S106 fun	ding types
	Project	Play provision	Informal open space
N01	Logan's Meadow: provide more benches and bins	-	£7.5k
N02	Bramblefields local nature reserve: more planting	-	£7.5k
N05	Arbury Court play area improvements (landscaping & equipment)	£15k	£15k
N07	Jubilee Gardens: improved access, landscaping, planting and seating	ı	£40k
N08	Chestnut Grove Play Area: benches and bins	-	£7.5k
E07	Robert May Close play area: new play equipment and the replacement of two park benches	£5k	£35k
S01	Cherry Hinton Hall play area improvements: including accessible play equipment, plus landscaping	£90k	£60k
S02	Holbrook Road play area improvements (additional equipment and extra bench)	£46k	£1k
S03	Nightingale Avenue Rec Ground: new all-weather footpath between car park and community garden	-	£15k
S05	Consort Way play area (Trumpington Meadows): boundary fencing	-	£30k
WC1	Jesus Green ditch: landscaping and biodiversity improvements	-	£53k
WC2	Jesus Green: new wildflower meadow	-	£18k

		S106 fun	ding types
	Project	Play provision	Informal open space
WC3	Jesus Green: ecological/ educational space	-	£7k
WC4	Jesus Green barbecue area (and associated signage) plus drinking water fountain	1	£12.5k
WC5	Midsummer Common Community Orchard: drinking water fountain	-	£2.5k
WC6	Sheep's Green local nature reserve: biodiversity bank improvements at Mill Pond	-	£22k
X01	Biodiversity enhancements (e.g. 'Bee banks') at parks in in East Chesterton, Coleridge, Trumpington & Market	•	£5k

0400 ( 1: 4

# 3. S106 Funding Context

- 3.1. The Council has secured generic, off-site S106 funding from developers, under a range of contribution types, to help mitigate the impact of local development prior to the changes to the national regulations in 2015. An overview can be found at: <a href="https://www.cambridge.gov.uk/our-approach-to-s106">www.cambridge.gov.uk/our-approach-to-s106</a>.
- 3.2 S106 funding has to be used for intended purposes. Here are some examples of eligible project spend:
  - a. 'Provision for children and teenagers' S106 contributions can be used for play equipment for children and teenagers, and safety surfacing in Council play areas.
  - b. 'Informal open space' S106 contributions can be used for the following types of spend <u>within</u> the city's parks and green spaces: paths, landscaping (including skate parks), fencing, lighting related to the open space itself, signposting, new trees and shrubs, drainage improvements, habitat creation, new benches, bins and noticeboards.

- 3.3 The availability of remaining generic S106 funding is limited and unevenly spread across the city. Consistent with all previous S106 funding rounds, the 2019 generic S106 funding round has only been able to seek project proposals from those wards that still retain S106 funding locally.
- 3.4 Proposals for local **play area** improvements have been invited from these wards:

Up to £25,000: Market, West Chesterton Up to £75,000: Coleridge, Queen Edith's

Over £75,000: Trumpington

Proposals were also welcomed for improving a large play area in the south of Cambridge, which is used by children and families from across the city.

3.5 Proposals for local **open space** improvements have been invited from:

Up to £25,000: Abbey, Petersfield, Queen Edith's

Up to £50,000: Cherry Hinton, Coleridge, Market, Romsey

Up to £75,000: West Chesterton

Over £75,000: Trumpington

Given that the impact of new development in one ward can be mitigated by an improvement project in another, this has provided some room for manoeuvre. See also paragraph 3.9 below.

There is also further informal open spaces S106 funding from largescale major developments in South Area, which can be made available for strategic informal open space projects in the city.

3.6 The arrangements for the 2019 S106 funding round for play area and open space improvements were agreed by the Executive Councillor following a report to the Community Services Scrutiny Committee on 21 March 2019. See the flow chart at the top of the next pages:

## Flow-chart of arrangements for S106 funding round

Proposals invited from wards where funding available. (March)



Deadline for seeking grant applications & proposals (by end April)



Councillors invited to comment on relevant proposals (early June)



Applications assessed against selection criteria (May)



Proposals, assessment and funding recommendations reported to Scrutiny Committee in June

- 3.7 The application process has been publicised via the Council's website, social media and news releases. Where S106 funding has been available in a ward, local ward councillors have been:
  - a. invited to put forward eligible proposals for its use;
  - b. asked to encourage local groups also to put forward eligible proposals; and
  - c. given the opportunity to comment on any of the proposals received in their area of the city, as part of the assessment process.
- 3.8 The play area and open space improvement proposals received during the 2019 S106 funding round have been assessed against the following selection criteria, which were featured in the application pack. This highlighted that proposals needed to be:
  - a. eligible for S106 funding (i.e., within the city of Cambridge and not for repairs, maintenance, like-for-like replacements or running costs);
  - b. affordable within the S106 funding available in the appropriate contribution type;
  - c. about providing additional benefit;
  - d. an effective use of resources (e.g., related to relevant Council strategies, such as the Outdoor Play Investment Strategy);
  - e. accessible, in line with Council equalities policies;

- f. realistic, achievable & ready (i.e., deliverable within around 18 months of a funding decision);
- g. financially viable, with a robust business case and/ or management plan.
- 3.9 Before considering future proposals for S106 funding, Members need to note that there is one project allocated S106 funding in the 2016/17 funding round, which looks as though it does not have sufficient public support to go forward. In March 2017, North Area Committee allocated £50,000 of informal open space S106 funding for a skate and scooter park at Chesterton Recreation Ground. When developing the business case for this project, officers have found that the consultation results were inconclusive regarding need and location, and whether the project was supported locally. As a result, officers now recommend that the S106 funding is de-allocated. This would enable other open space improvement proposals in East Chesterton to be considered for funding, including some highlighted in this report.

# 4. Assessment of proposals received for \$106 funding

4.1 Thirty proposals for play area or open space proposals have been received during the 2019 round. The applications received, along with the findings of the officer assessment and likely funding requirements are outlined in more detail in Appendix A.

# 5. Local Engagement

- 5.1 Local ward councillors have submitted comments in line with the agreed process (see 3.7c) and these are summarised in Appendix B.
- 5.2 In the S106 report to Scrutiny Committee in March, it was envisaged that further local engagement, with local ward councillors and other interested parties, be undertaken on the previous S106 funding commitments for St. Clement's Churchyard and Coldham's Common BMX track. Unfortunately, this has not yet proved possible alongside other competing priorities. Officers will address this over the next few months and report back.
- 5.3 Without yet knowing whether any informal open space funding from Abbey ward may be released through the review of the current £85,000 allocation for the BMX track proposal, it is unfortunately not possible to

make a recommendation in support of the proposal for footpath improvements at Thorpe Way Recreation Ground.

## 6. Implications

## 6.1 Financial implications:

- a. Any S106 funding for the provision of new Council-owned facilities and amenities in the city is likely to produce additional financial implications for Council revenue budgets, which would need to be budgeted for. As existing Council-owned facilities amenities already have budgets for operational costs, there is a greater likelihood that the running and maintenance costs of S106-funded improvements could be subsumed within existing budgets. There is, therefore, an assumption that projects to be funded from the remaining generic S106 funding availability are more likely to be improvements to existing facilities.
- b. In line with the Outdoor Play Investment Strategy, there is an assumption that the S106 funding is more likely to be focussed on existing, medium and large-scale play areas, rather than new play areas or smaller ones.
- c. The S106 funding availability figures in paragraphs 3.4 and 3.5 are regularly being refined in order to maximise the local benefit available. If any significant changes to the availability figures arise, this will be raised with the Streets and Open Spaces development team prior to the preparation of business cases.
- 6.2 **Staffing implications:** The delivery of S106 funded projects will be resourced from within existing staffing.
- 6.3 **Equality and poverty implications:** The primary purpose of S106 funding is to mitigate the impact of development (not address pre-existing needs). The equality implications for particular S106-funded proposals are considered at the business case stage, before projects are implemented.
- 6.4 **Other implications:** Climate change, community safety and other considerations are also addressed at the project business case stage.

#### 7. Consultation and communication considerations

7.1 The arrangements undertaken to publicise the 2019 funding round have been outlined in paragraph 3.5. Those proposals for improvements to Council-owned play areas or open spaces, which would be managed by the Streets & Open Spaces service, will be subject to further consultation as part of the business case process.

# 8. Background papers

Background papers used in the preparation of this report:

'S106 Funding: Next Steps (Streets and Open spaces)' report to Environment and Community Scrutiny Committee, 21 March 2019

# 9. Appendices

Appendix A: Assessment of play area and open spaces proposals in 2019 S106 funding round

Appendix B: Summary of comments received on applications received

# 10. Inspection of papers

To inspect the background papers or if you have a query on the report please contact:

Alistair Wilson, Development Manager, Streets & Open Spaces, (tel: 01223-458514, email: <a href="mailto:alistair.wilson@cambridge.gov.uk">alistair.wilson@cambridge.gov.uk</a>

**SELECTION CRITERIA** 

Effective use

S106 Eligible

# Assessment of play area and open spaces proposals in 2019 S106 funding round

Key:
Y = Yes;
N = No
? indicates a query requiring further investigation

	N = Nc				106 Eligible	Affordable	ffective use	Additionality	Accessible	Ready	Viable	Overall
		Project	Ward	S106 Bid								
U	NORT	H AREA										
NORTH AREA  NO1 Logan's Meadow: provide more benches and bins  NO2 Bramblefields local nature reserve: East Chester more planting  Chesterton Recreation Ground: Junior play area improvements & scooter track  NO4 More dog bins outside Nuffield Medical Chester Che		East Chesterton	£7.5k	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
95			East Chesterton	£7.5k	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	N03		East Chesterton	£50k	Y	N <sup>1</sup>	Υ	Υ	Υ	Υ	Υ	N
	N04		East Chesterton	NIL	N¹	-	-	-	-	Y Y Y Y Y Y Y Y N N		
	N05		King's Hedges	£30k	Υ	Y <sup>3</sup>	Υ	Υ	Υ	Υ	Υ	Y

There is insufficient play area S106 funding in East Chesterton.

Proposals for lighting improvements would have additional revenue implications, which cannot be support by S106 funding.

Key:Y = Yes;N = No? indicates a query requiring further investigation

,	SELE	-C110	ON C	KIII	EKIA	١	
S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable	Overall
Y	N <sup>4</sup>	Y	Υ	Υ	Z	Υ	N

		Project	Ward	S106 Bid								
Page 370	N06	Nuns Way Recreation Ground: multiple benches and litter bins (but not the proposal for lighting in the recreation ground <sup>2</sup> )	Kings Hedges	£11k	Υ	$N^4$	Υ	Υ	Υ	N	Υ	N
	N07	Jubilee Gardens (between Boathouse pub and Jesus Lock footbridge): improved access, landscaping, planting and seating (but not improvements to mooring areas) <sup>5</sup>	West Chesterton	£40k	Υ	<b>Y</b>	Y	<b>Y</b>	<b>Y</b>	~	~	Y
	N08	Chestnut Grove Play Area: benches and bins (but not proposals for improved lighting <sup>2</sup> )	West Chesterton	£7.5k	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y

<sup>3.</sup> Whilst there is insufficient S106 funding available in King's Hedges ward, Cllr Sargeant has suggested that some S106 funds from West Chesterton could be used towards this project given the proximity of the two wards.

<sup>4.</sup> There is insufficient informal open space S106 funding from King's Hedges ward.

<sup>5.</sup> Improvements to mooring areas would not be related to new housing development and therefore would not be eligible for S106 funding.

Key:
Y = Yes;
N = No
? indicates a query requiring further investigation

<b>Key:</b> Y = Ye N = No ? indic	Project  ST AREA  1 Thorpe Way Rec Ground: new footpath Stourbridge Common local nature reserve: increase the number and depth of seasonal pools on the flood meadow – to provide habitat for amphibians in temporary pools  Ditton Lane shops: environmental			S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable	Overall
	Project	Ward	S106 Bid								
EAST	AREA										
E01	Thorpe Way Rec Ground: new footpath	Abbey	£15k	Υ	? <sup>6</sup>	Υ	Υ	Υ	Υ	Υ	?
E02	reserve: increase the number and depth of seasonal pools on the flood meadow – to provide habitat for amphibians in	Abbey	£6k	Υ	N <sup>7</sup>	Υ	Υ	Υ	Υ	Υ	N
E03	Ditton Lane shops: environmental improvements	Abbey	NIL	N <sup>8</sup>	-	-	-	-	-	-	N
E04	Coggleshall Close: improving alley and small patch of ground	Abbey	NIL	N <sup>8</sup>	-	-	-	-	-	-	N

**SELECTION CRITERIA** 

S106

<sup>6.</sup> Until the current query has been resolved about the level of funding for the BMX track at Coldham's Common, it is unclear whether there is sufficient informal open space funding available from Abbey ward. This could be reported back to a future meeting of this scrutiny committee.

Insufficient informal open space S106 funding available in Abbey ward.

Not eligible for informal open space S106 funding: not a park or open space.

Key:Y = Yes;N = No? indicates a query requiring further investigation

,	SELE	ECTIO	ON C	RITI	ERIA	1
S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable

		Project	Ward	S106 Bid								
Page 372	E05	Barnwell Road shops: open space improvements (outdoor counter featuring mosaics, noticeboard by shops and permanent tree lights)	Abbey	NIL	N <sup>8</sup>	-	-	-	-	-	-	N
age	E06	Ashbury Close play area improvements <sup>9</sup>	Coleridge	£55k	Υ	?	?	Υ	Υ	Ν	Υ	N
37		Robert May Close play area: new play equipment and the replacement of two park benches	Coleridge	£40k	Y ? <sup>10</sup>	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	E08	Petersfield Green: removal of shrubs and low-level plants and replacement with semi-mature trees and grass in order to address anti-social behavior.	Petersfield	Nil	N <sup>11</sup>	1	1	1		1	-	N

<sup>9.</sup> This application meets the criteria but there has been £20k of revenue spent at this play area in Spring 2019. Further assessment is needed about how the proposed improvement would relate to the recent maintenance works and the nature of safety surfacing being suggested (this might have implications for whether it would call on play area or open space S106 funds).

<sup>10.</sup> S106 funding cannot be used for like-for-like replacements, so there is a query about the proposal to replace two park benches.

<sup>11.</sup> This is not eligible for S106 funding, which must be focused on mitigating the impact of development. The Council's Anti-Social Behaviour has already been made aware of the concerns raised.

				7,	SELI	ECTIO	ON C	RIT	ERIA	<b>\</b>	
Key: Y = Ye N = No ? indic				S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable	Overall
	Project	Ward	S106 Bid								
SOUT	H AREA										
S01	Viable Vi										
S02		· ·	£46k	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y
S03	new all-weather footpath between car		£15k	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ
S04	,		NIL	Υ	?	Υ	Y	Υ	Υ	Υ	<b>N</b> <sup>12</sup>

CELECTION CDITEDIA

<sup>12.</sup> Whilst the polytunnel proposal for Nightingale Avenue Rec community garden meets most selection criteria, current indications are that there is insufficient informal open space S106 funding to support all three proposals from Queen Edith's ward, for which informal open space S106 funding would be needed. The Community Garden has received £22k of informal open space funding in recent years and, in 2018, it was awarded a further £15k of community facilities S106 funding to improve the existing meeting hut.

					,	SELE	ECTIO	ON C	RITI	ERIA	١	
	Key: Y = Yes N = No ? indica	•			S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable	Overall
		Project	Ward	S106 Bid								
	S05	Consort Way play area: boundary fencing (but not play area equipment <sup>13</sup> )	Trumpington	£30k	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	WEST/	CENTRAL AREA										
Page 374	WC1	Jesus Green ditch: landscaping and biodiversity improvements – creation of a small native meadow, wetland feature and vegetated banks along the ditch to benefit native flora and forna. Could include a boardwalk.	Market	£53k	Υ	Y <sup>14</sup>	Y	Y	Y	Υ	Y	Υ
	WC2	Jesus Green: new wildflower meadow, with a mix of perennial species	Market	£18k	Υ	Y <sup>13</sup>	Υ	Υ	Υ	Υ	Υ	Υ
	WC3	Jesus Green: ecological/ educational space	Market	£7k	Υ	Y <sup>13</sup>	Υ	Υ	Υ	Υ	Υ	Υ

<sup>13.</sup> This play area on the Trumpington Meadows development has recently been provided on-site as part of planning obligations for this major growth site. The proposed boundary fencing would help to improve the safe use of the site, however.

<sup>14.</sup> As a strategic project benefitting the city as a whole, it could also draw on large amounts of funding from large-scale major developments in other parts of the city (e.g., from South Area).

Key:
Y = Yes;
N = No
? indicates a query requiring further investigation

	<ul><li>Key:</li><li>Y = Yes;</li><li>N = No</li><li>? indicates a query requiring further investigation</li></ul>							Additionality	Accessible	Ready	Viable	Overall
		Project	Ward	S106 Bid								
	WC4	Jesus Green barbecue area (and associated signage) plus drinking water fountain	Market	£12.5k	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Pag	WC5	Midsummer Common Community Orchard: drinking water fountain	Market	£2.5k	Υ	Υ	Y	Υ	Y	Υ	Y	Υ
Page 375	WC6	Sheep's Green local nature reserve: biodiversity bank improvements at Mill Pond	Newnham	£22k	Υ	Y <sup>13</sup>	Υ	Υ	Υ	Υ	Υ	Υ
	WC7	Biodiversity enhancements to Queens' Green/ ditch	Newnham	£55k	<b>Y</b>	?	Y	Y	Y	<b>Y</b>	Y	<b>N</b> <sup>15</sup>

**SELECTION CRITERIA** 

<sup>15.</sup> There would be insufficient S106 funding for strategic open space improvements to fund this proposal alongside the proposals listed under WC01, WC02, WC03 and WC06.

							ECTIO	ON C	RITI	ERIA	١	
	Key: Y = Yes N = No ? indica	•	S106 Eligible	Affordable	Effective use	Additionality	Accessible	Ready	Viable	Overall		
		Project	Ward	S106 Bid								
	VARIO	US LOCATIONS ACROSS THE CITY										
Page 376		Biodiversity enhancements: 'Bee banks') at parks in East Chesterton, Coleridge, Trumpington & Market: nesting sites for a range of solitary bees (non-stinging varieties) and other invertebrates	Various wards	£5k	Υ	Y	Y	Y	Z	Y	Y	Y
	OUTSII	DE CAMBRIDGE										
	Z01	Wildlife planting around Cambridge North Station and along stretch to St Ives	Outside Cambridge	NIL	N <sup>16</sup>	1	-	1	1	1	1	N

<sup>16.</sup> Generic S106 funding secured by Cambridge City Council can only be used within the city of Cambridge.

# Summary of comments received on applications received

N	o.	Proposal	Councillor	Comment
E	01	New footpath on Thorpe Way Recreation Ground	Davies	It seems to me that there's a clear problem for residents and that resolving that issue would be a clear benefit to the community. It seems to me to be low cost, low risk and it would improve and widen access to an well-used open space.
			Johnson	On the face of it I would prioritise E01 as Stourbridge Common has had attention given to it in previous years.
E	03	Enhancements at Ditton Lane Shops	Johnson	It's disappointing that the Barnwell Road and Ditton Lane proposals were ruled out as being not in keeping with the criteria; I recall being involved with both applications and believed they were in order.
i			Massey	I also echo Councillor Johnson words and I am disappointed the Barnwell shops didn't make it.
N	05	New play equipment at Arbury Court	Sargeant	The proposal for Arbury Court Play Area can be funded from West Chesterton.
S	02	New play equipment at Holbrook Road Play Area	McGerty	I would like to see us promote all three of these bids if possible.
S	03	Nightingale Avenue Rec footpath	McGerty	The Community Garden is a project extremely worthy of our support and providing better accessibility would be my top priority.

7age 37/

No.	Proposal	Councillor	Comment
S04	Provision of Nightingale Poly Tunnel	McGerty	It would be a shame to lose S04 for the want of £1.5k so I hope we can review the affordability of S02 and try to do something please.
WC4	Enhancements on Jesus Green; barbecue area, drinking water fountain and associated signing enhancements	Bick	The proposal for barbecue area and drinking water fountain at Jesus Green needs to include clear and permanent signage (e.g., BBQs in BBQ area only). The cost estimates (previously £2k) seem low at this stage and need to be increased to allow for multiple BBQ slabs.

The list of proposals that was sent to Members for comment in late May inadvertently omitted the suggested improvement of Consort Avenue play area (Trumpington ward). Cllr Lord said that he hoped that there would be an opportunity to put forward future proposals for Trumpington ward, which would help to mitigate the impact of development. Ward councillors for Trumpington will be made aware of this play area proposal prior to the committee meeting: if any comments are received from them prior to the meeting, officers will provide the Committee with an oral update.

## Item

# ANNUAL REPORT OF 3C BUILDING CONTROL SERVICE AND PLANNING SHARED SERVICE 2018/19

#### To:

Councillor Katie Thornburrow, Executive Councillor for Planning Policy and Open Spaces

Planning & Transport Scrutiny Committee [25/06/2019]

## Report by:

Fiona Bryant, Strategic Director

Tel: 01223 - 457325 Email: fiona.bryant@cambridge.gov.uk

#### Wards affected:

ΑII

# **Not a Key Decision**

# 1. Executive Summary

- 1.1 This report summarises the performance of the 3Cs Building Control Shared Service and the Greater Cambridge Shared Planning Service during 2018/19.
- 1.2 The principle of producing a single annual report for both the 3Cs and Greater Cambridge (2Cs) shared services was agreed at committee in July 2015.
- 1.3 The overarching Annual Report for the 3Cs Shared Services, submitted to South Cambridgeshire and Huntingdonshire District Council Committees for scrutiny, includes ICT, Legal and Building Control Shared Services. At the City Council, only the Building Control service falls under the remit of this Committee, and therefore the annual report is extracted from the overarching report and enclosed below.
- 1.4 Greater Cambridge Shared Services Annual Report covers the Waste, Planning and Internal Audit services, and is submitted to the South Cambridgeshire District Council Committee for scrutiny, but at the City Council only the Planning

Shared Service falls under this Committee's remit and therefore the service report has been extracted and is included below.

#### 2. Recommendations

2.1 The Executive Councillor is recommended to note the content of the report.

# 3. Background

- 3.1 In July 2015, Cambridge City, Huntingdonshire District and South Cambridgeshire District Councils each approved a model for sharing Legal, Building Control and ICT services. The three services went live within 3C Shared Services in October 2015 with a commitment to provide an Annual report.
- 3.2 The Shared Planning Service forms part of the Greater Cambridge Shared Services (2Cs). The business case for a Shared Planning Service (SIAS) between Cambridge City Council and South Cambridgeshire District Council was approved by both Councils in 2017. The service went live in December 2017.
- 3.3 The overarching Shared Service performance is monitored through the Greater Cambridge Shared Services Management Board (containing the lead directors from each authority), Greater Cambridge Chief Executives' Board and 2C Joint Advisory Group (comprising of the leaders of each of the Councils). The Shared Planning Service also has a member led steering group.
- 3.4 The service business plans for the Shared Building Control and Planning services were approved by the City, Huntingdonshire District and South Cambridgeshire District Councils' committees in March 2018.
- 3.5 The business plans contain the priorities, key performance indicators and budgetary profiles for 2018/19.

# 4. Building Control Shared Service Annual Report 2018/19

#### 4.1 **General Information**

- 4.1.1 3C Building Control was set up in October 2015 with the following objectives:
  - Protection of services which support the delivery of the wider policy objectives of each Council.
  - Creation of services that are genuinely shared between the relevant councils with those councils sharing the risks and benefits whilst having in place a robust model to control the operation and direction of the service.
  - Savings through reduced managements costs and economies of scale.
  - Increased resilience and retention of staff.
  - Minimise the bureaucracy involved in operating the shared service.

- Opportunities to generate additional income, where appropriate.
- 4.1.2 When creating the shared service, the priorities were to improve capacity by expanding the skilled team with management arrangements that enabled resources to be deployed effectively and efficiently, the adoption of best practices and processes and to improve recruitment and retention in local authority building control services.
- 4.1.3 This Annual Report reflects progress against the Business Plan for 2018/19. The Plan contained detailed service information and was approved at partner committees in March 2018. Given the commercial nature of the service, only limited information has been included in this public report.

## **General Progress**

- 4.1.4 The Strategic Lead has been successfully recruited into a secondment into the Greater Cambridge Shared Planning Service for a six month period on a part time basis, commencing in April 2019. To facilitate this secondment, a Principal has been appointed to act up as Strategic Lead on a part time basis and a Senior has been appointed to act up as Principal. Recruitment has taken place of a replacement Surveyor, who is due to commence early in 2019/20.
- 4.1.5 There has been some slippage in the budget, which means the service review planned for 2018/19 is likely to take place in the new Financial Year, subject to finances. The service also will be in a position to review the proportions set for fee earning and non fee earning for the financial year 2019/20.
- 4.1.6 The team continues to improve its processes. The majority of applications are now made electronically and the aim is to achieve fully electronic processes by July 2019. This is being rolled out across hubs.
- 4.1.7 With regard to its marketing activities, the service has nominated 14 schemes for the Local Authority Building Control (LABC) National Building Excellence Awards 2019, and 11 of these are finalists. Out of the total number of finalists for the LABC East Anglia region, 3C Building Control has almost a quarter of the nominations. This is testament to the excellent schemes within the area of operation.
- 4.1.8 In terms of the recognition received by staff during the year, the team were nominated in the South Cambridgeshire staff awards; one member of the team was nominated in the South Cambridgeshire staff awards, above and beyond, and one member of the team was highly commended in the national LABC Rising Star Awards 2019. The team were also Finalists in the Association for Public Service Excellence Awards 2018/19 for the Best Construction Team.

#### Financial Performance

4.1.9 The outturn position for 2018/19 is recorded in the table below:

£	Budget	Actual	Variance/Outturn
3CBuilding Control	1,801,160	1,533,956	267,204 (surplus)

- 4.1.10 It is a requirement that each Council contributes to the non fee earning account for all statutory works for which the service is unable to charge.
- 4.1.11 The service is currently forecasting an increase in the deferred income. This is a more positive position than the last two years.

#### Service Performance

4.1.12 Building Control had eight Key Performance Indicators for 2018/19 ranging from acknowledging and determining applications to customer satisfaction levels. These KPIs form part of the quality management system adopted by the service.

# Customer Feedback

- 4.1.13 This is the first time customer satisfaction feedback has been obtained for a number of years. For 2018/19 the Building Control Partnership has been collating data on the percentage of customers who overall have rated the service as good and above. A KPI target has been reported on throughout the year. The service distributes customer satisfaction surveys to all customers, including those who submit regularisations. This is captured via an online questionnaire. Returns are generally positive. An interim target of 75% has been exceeded with an actual rate of 86% satisfaction. Some areas have been identified for improvement, which the service reviews and actions if appropriate.
- 4.1.14 The service will be working to a Quality Management Service Target of 95% in 2019/20.

#### **Key Projects**

- 4.1.15 Building Control identified six development projects in its 2018/19 Business Plan. Four of these projects are on track, while two have encountered some (but not significant) slippage.
- 4.1.16 The service is undertaking a full review of the IT infrastructure to maximise effectiveness of the teams and enable agile working. This is ongoing and interlinked with other projects. The Council Anywhere project and new equipment should benefit the service; however, there has been some slippage with the roll out of new laptops and screens. Related to this, the service is working to transform paper based filing systems into a fully digitised records and management system.

- 4.1.17 Staff recruitment, retention and development is a key objective for Building Control. A recruitment drive has been successful and team development days have been held and working groups set up. Team members are undertaking training to enhance their skills. Further recruitment exercises have been undertaken in July and September 2018 and March 2019 to ensure succession planning is effective. There remain issues with recruitment of experienced professionals.
- 4.1.18 A project was identified to unlock the commercial potential of the team. To date the Strategic Lead has been undertaking some consultancy work.
- 4.1.19 Green ratings have been reported for implementing the ISO 9001: 2015 quality management system across the partnership and for developing a marketing and communication strategy for the service. These projects are now business as usual and not included in 2019/2020 Business Plan.

## 5. Planning Shared Service Annual Report 2018/19

- 5.1.1 The Greater Cambridge Shared Planning Service went live in April 2018 with the following objectives:
  - To create and deliver and effective programme for the creation of a single, unified "Greater Cambridge" planning capability serving the Planning Committees of each of the participating Councils.
  - To build a shared capacity and capability within the combined teams (and provide opportunities to support others) in a way that seizes opportunities for greater efficiency and improvements to the quality of service and subsequent development across the area by providing services and products (including additional charged services) that meet the needs of users and the community at the lowest net cost.
  - To deliver a service that can be flexible in deployment and delivery.
  - To build/retain a reputation for professionalism, staff development, the delivery of high quality outcomes and competent "business management" amongst peers and partners.
- 5.1.3 The Greater Cambridge Shared Planning Service is the "Local Planning Authority" for the areas of South Cambridgeshire District Council and Cambridge City Council. It therefore has a number of statutory roles to perform on behalf of the two Councils and, in addition, undertakes a number of "discretionary" activities that complement the delivery of corporate and strategic planning objectives.
- 5.1.4 The service can charge fees, which are set nationally for planning and related applications and for land charge searches. It also levies a range of discretionary charges for pre-application advice.

#### Financial Performance

Further information is provided in the performance report in the Appendix.

5.1.5 The budget position for 2018/19 is recorded in the table below:

£	Budget	Actual	Variance/Outturn
Planning	4,485,235	3,209,758	1,275,477 (surplus)

The total underspend of £1,275m primarily relates to revised costs (including staffing) and significant increased income for South Cambridgeshire District Council.

#### Service Performance

- 5.1.6 During 2018 the service implemented a new management structure. This comprises two service centred teams (led by the two Assistant Directors, Sharon Brown and Paul Frainer) and a central support/enabling team to assist the senior management team in managing the efficient operation of the "business" led by Steven Winsor. During the implementation phase of the project, the service is also being supported by a discrete implementation capability.
- 5.1.7 The service's performance against the three indicators that it monitors is on track. No slippage is reported. The on track indicators are:
  - Decision making within statutory or agreed timelines for Major applications
  - Decision making within statutory or agreed timelines Minor applications
  - Decision making within statutory or agreed timelines Other applications

Further information appears in the Appendix.

- 5.1.8 The previous Head of Implementation left in April 2019 and to mitigate the impact of this, Heather Jones 3C Building Control Strategic Lead has been seconded into the shared service on a part time basis. Her role will be to assist with the second phase implementation and transition phase of the shared planning service. Recruitment to the Operations Manager post has been successful with a start planned for May 2019.
- 5.1.9 With regard to ICT matters, an e-mail address has been confirmed and will shortly be implemented. A focused recruitment website is also to be progressed this year along with the upgraded new planning software system(IDox). Implementation of the IDox solution, has slipped to the autumn to allow for the Council Anywhere (CA) rollout in the service, the progression of the phase 2 implementation and the need to focus resources on operational priorities in 3C ICT and the planning service. Council Anywhere implementation is currently underway and appears favourable. Team members will receive their new devices in through June, Office 365 training is now being offered to all.
- 5.1.10 Work has commenced on the service's branding. It is anticipated there will be some quick wins for team development.

- 5.1.11 The service can report on some significant achievements and success stories. This year has seen the conclusion of the Local Plan process to put in place an up to date Development Plan for the Greater Cambridge Area. Work on the Development of the North East Cambridge Area Action Plan, underpinning the Housing Infrastructure Fund Bid has also started. The adoption of the Local Plan has been accompanied by ongoing work on the Supplementary Planning Documents (SPD) for strategic sites at Waterbeach, Cherry Hinton and Bourn Airfield and adoption of SPD for Mitchams Corner and the Grafton Centre. Support for the GCP and Combined Authority programmes have seen significant engagement with those bodies.
- 5.1.12 On the Delivery side, approval of reserved matters on a number of Strategic sites and progress around project delivery at Wing, Northstowe, Waterbeach, Darwin Green and on a number of key employment sites has nevertheless been accompanied by ongoing service delivery challenges associated with staff workloads and system performance.
- 5.1.13 On 27 February 2019 the service held a celebration to mark 50 years of the Cambridge Conservation Area in the Guildhall. It was a successful event with over 100 attendees. There was an afternoon session with exhibition and talks highlighting the significance of conservation areas along with display boards of the history of various buildings within Cambridge Conservation Area. The evening session consisted of a series of talks and question and answer panel of James Littlewood, CPPF, Ian Harvey, Civic Voice, Duncan Wilson, Historic England. Talks ranged from community involvement in the Conservation Area and a national picture of their importance along with ideas for future evolution. This supports the vision of the Greater Cambridge Shared Planning service.
- 5.1.14 With two finalists in the National Urban Design Awards, it was fantastic that the co-housing at Marmalade Lane won the public sector award on 28 March 2019. These awards celebrate the best in the design of towns and cities, streets and spaces and there are five categories in total. Marmalade Lane is the first co-housing project in Cambridgeshire consisting of 42 housing units and communal space with common ownership. The community were involved throughout with the design team, City Council as land owner, South Cambridgeshire District Council as planning authority and Members to collaborate on this successful scheme.

#### **Customer Engagement**

- 5.1.15 Data for South Cambridgeshire show satisfaction running at 72%. Data has not historically been collected for Cambridge City. New measures are being developed for the whole service alongside the proposed creation of additional capacity in the service to improve customer insight.
- 5.1.16 The service continues to engage actively with users through forums (Agents and Parishes) and has undertaken joint projects, such as village design statements in South Cambridgeshire throughout the year.

5.1.17 All planning services traditionally receive a number of complaints. This is generally due to the decision making process; however there are other reasons such as response times. Whilst both Councils have been transitioning into the Greater Cambridge Shared Planning service this has impacted on the response to complaints for the service. Measures are now being put in place to address this. Complaints tend to be complex, requiring lengthy investigation time and are generally related to development management issues.

#### **Key Projects**

- 5.1.18 The service has two projects on track, two have experienced some slippage that is not significant and one has significant slippage. The projects on track are Phase 2 of the shared service planning programme and a review into how improved accountancy will allow the service further to account for and recover where possible the costs of delivering projects, advice or services to others in line with the objective of maintaining our capabilities (to deliver high quality development on behalf of communities) at lower net cost and meet 2019/20 MFS commitments.
- 5.1.19 Amber progress is reported in respect of the review advice services and the recruitment and retention programme. The Planning software upgrade has seen significant delays. The upgrade to Uniform has been re-phased and likely implementation is proposed in the autumn. The Council Anywhere Programme will be delivered through May/June on site; Planning is one of the first services in this rollout. It will be followed by mobile phone deployment to support agile working across the service.

# 6. Implications

# a) Financial Implications

The financial implications are shown in section 4.1.9 above and in the Appendix.

# b) Staffing Implications

There are no staffing implications.

# c) Equality and Poverty Implications

Not required for this report.

# d) Environmental Implications

None for this report.

## e) Procurement Implications

None specific related to the service. Any procurement relating to the service provision is carried out in line with the Councils' policies.

## f) Community Safety Implications

There are no community safety implications.

#### g) Consultation and communication considerations

This will be conducted in accordance with the Council's agreed policy.

#### h) Background papers

Background papers used in the preparation of this report:

**Shared Service Quarterly reports** 

Greater Cambridge Shared Services 2018/19 Annual Report

3C Shared Services 2018/19 Annual Report

#### i) Appendices

Planning Shared Service Budget Position and Service Performance Against Indicators

#### j) Inspection of papers

To inspect the background papers or if you have a query on the report please contact Fiona Bryant, Strategic Director, tel: 01223 - 457325, email: <a href="mailto:fiona.bryant@cambridge.gov.uk">fiona.bryant@cambridge.gov.uk</a>.

# **PLANNING SHARED SERVICE**

# **Budget Position**

	2018/19 Budget £	2018/19 Actuals £	2018/19 Variance
	_		£
Income	(5,435,193)	(5,158,326)	(276,867)
Expenditure	9,920,428	8,368,084	1,552,344
Total (Net)	4,485,235	3,209,758	1,275,477

# **Service Performance Against Indicators**

Decision making within statutory or agreed timelines for Major applications.  Monthly	2018/19 Target 60% Actual 71% GREEN
Decision making within statutory or agreed timelines – Minor applications. Monthly	2018/19 Target 65% Actual 70% GREEN □
Decision making within statutory or agreed timelines – Other applications. Monthly	2018/19 Target 80% Actual 86% GREEN

# Agenda Item 10a

### Non Key CAMBRIDGE CITY COUNCIL

Record of Executive Decision

#### DRAFT MINERALS AND WASTE PLAN

Decision of: Councillor Herbert, Leader of the Council and Executive

**Councillor for Strategy and External Partnerships** 

**Reference:** 19/URGENCY/P&T/5

Date of decision: 09/05/19 Published

**on:** 17/05/19

**Decision Type:** Non Key

Matter for To ensure that the Council responds within the consultation period, the Executive Member is now seeking to finalise the

attached Cambridge City Council response outside of the

committee cycle.

Why the decision had to be made

(and any alternative options):

The Draft Minerals and Waste Local Plan is subject to consultation until 9 May 2019. This is the second consultation on the emerging Minerals and Waste Local Plan (MWLP), which will replace the existing Core Strategy (2011) and Site Specific Proposals Plan (2012). This decision will be reported in June 25

2019 to the Planning and Transport Scrutiny Committee.

The Executive Councillor's

decision(s):

To agree the consultation response to the draft Minerals and

Waste Plan

Reasons for the

decision:

As set out in the briefing paper from the Principal Planning Policy

Officer

Scrutiny

consideration:

The Chair and Spokesperson of Planning and Transport Scrutiny Committee were consulted prior to the action being authorised.

Attached documents can be viewed with this document titled

**Report:** 'Member Consultation' and 'Briefing Report'.

Conflicts of interest:

None known



**To:** Councillor Sargeant (Chair) and Councillor Bick (Spokesperson)of the Planning and Transport Scrutiny Committee

Comment to: Claire Tunnicliffe

**Date:** 09/05/19

**Tel:** 01223 457135

CAMBRIDGE CITY COUNCIL

E-mail: claire.tunnicliffe@cambridge.gov.uk

#### MEMBER CONSULTATION

#### **Local Development Scheme**

#### **Urgency Action**

As the Chair and Opposition Spokes of the Planning and Transport Committee you are being informed of a matter on which action must be taken as a matter of urgency, in accordance with the Council's Constitution.

The Leader of the Council and Executive Councillor for Strategy and External Partnerships is minded to make the decision set out in the attached Record of Decision relating to the submission of representations to the Draft Minerals and Waste Local Plan, prepared jointly by Cambridgeshire County Council and Peterborough City Council. These representations are to submitted jointly by Cambridge City Council and South Cambridgeshire District Council.

The reasons for making the decision out of the committee cycle are set out in the attached Record of Decision. If you have any comments on the decision please let me know before 16 May 2019.

A briefing document report is also attached setting out the background and current situation. If you have any comments on the documents please speak to Caroline Hunt, Planning Policy Manager or Amanda Thorn, Principal Planning Policy Officer.

The Council's Constitution requires the Chair and Spokespersons of the relevant Scrutiny Committee to be informed of the matter on which the decision is to be made.

After 5 clear working days have elapsed, the remaining members of Scrutiny Committee will be notified of the decision.



#### <u>Urgent Decision</u> Briefing document report

The Draft Minerals and Waste Local Plan is subject to consultation until 9 May 2019. This is the second consultation on the emerging Minerals and Waste Local Plan (MWLP), which will replace the existing Core Strategy (2011) and Site Specific Proposals Plan (2012). The first round of consultation on the Preliminary Minerals and Waste Local Plan ended in June 2018, and was reported to Members via committee in Cambridge and South Cambridgeshire. Comments at this initial stage in 2018 were restricted to high level issues and matters of principle, as the published document did not contain much detail.

The current consultation period was initially due to close on 25 April 2019, but as this stretched across the Easter holiday period has been extended by two weeks. The original timetable set did not permit a response to be prepared for a committee cycle. Greater Cambridge Shared Planning have therefore prepared a joint response for members to consider "out of cycle" in both Cambridge and South Cambridgeshire. The proposed response is contained at Appendix 1, and the key points are highlighted below.

The emerging MWLP will cover the period to 2036 and is prepared for the area covered by Cambridgeshire and Peterborough.

No new minerals extraction sites are proposed by the Draft MWLP, with extensions proposed at Cottenham (Chear Fen) and Willingham/Over (Needingworth). Those that are allocated in the emerging plan are already being worked, with the allocation now reflecting the area that is still available. There remains considerable uncertainty around the largest sand and gravel extraction allocation at Block Fen/Langwood Fen, Mepal. Whilst this allocation is not within the Greater Cambridge area, it is significant to the choice of overall strategy. The Draft MWLP is clear (see paragraph 3.22 of the consultation document) that the allocated site has not delivered at the anticipated rate, and a recent application for planning permission was refused as it did not accord with the adopted policy position. The County Council continues to seek assurance from the owner/operator of the site that applications that are policy compliant will be forthcoming in a timely manner, but also suggest that if these assurances are not forthcoming they would consider removing the allocation. Whilst this is an appropriate course of action to take for the Minerals and Waste authority in response to a site that has not come forward as intended, there is a need for an alternative strategy to meet the requirements for sand and gravel over the Plan period. This alternative strategy is not apparent in the Draft MWLP. An objection will be raised on this basis.

There is a change in approach proposed to the way in which waste management is addressed by the emerging MWLP. The policy sets out a criteria based approach, which identifies key locations that would be considered most suitable for the provision of new or extended waste management facilities. The key locations of relevance to the Greater Cambridge area are: Cambourne, Cambridge, Northstowe and Waterbeach. The policy goes on to reflect that where the proposed use and operations are potentially suitable within and urban setting, then proposals should first consider the use of employment land in specific circumstances. There is a concern that this approach may not be fully compatible with employment allocations as the job density is likely to be low, and potentially not reflect an efficient use of employment land. GCSP recognise this approach may offer flexibility and prevent land becoming unnecessarily sterilised or otherwise blighted by a waste management operation, if it subsequently not found to be necessary. However, there is a concern this approach will not meet the identified needs for waste management facilities across the Plan area.

There is a further requirement for strategic development sites of more than 1,500 new homes to make provision for on-site waste management. In principle this approach is considered acceptable, however there is insufficient information within the policy, or more widely in the Plan, about what type of waste management facility is likely to be required and how this would be secured. Recognising this would be proportionate to the scale

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of the new settlement, it would be helpful for the policy or supporting text to provide some clarity.

The North East Cambridge development area, currently subject to an emerging Area Action Plan requires a comprehensive approach to development to be achieved to ensure the most efficient use of land. Policies in the Draft MWLP are not completely clear in this regard, and GCSP will continue to seek assurance that the existing allocations and safeguarding areas will not prevent this comprehensive approach from being achieved.

Alongside the publication of the Draft MWLP and a range of supporting documents, a draft Statement of Common Ground has also been prepared for comment and engagement by the County Council. Response to this document and further engagement with the MWLP team will be required to ensure that the interests of GCSP and the two Councils are fully reflected.



# Minerals and Waste Draft Local Plan Consultation Cambridge City Council and South Cambridgeshire District Council joint response

#### Paragraph 2.3 General comment

There is a point around the way in which consultations on planning applications for minerals or waste operations are handled, and the extent to which specific neighbour notifications are utilised. There has been an instance in the Greater Cambridge area in the recent past where only immediately adjoining neighbours were notified, but there was a feeling locally that the proposals were of a scale to warrant wider notification of those that may potentially be impacted. Can the Minerals and Waste Authority consider bespoke mechanisms for notification near to minerals or waste operations, including the proposed routes for HCV movements?

#### Paragraph 2.5 General comment

The Councils welcome this opportunity to comment on the emerging MWLP, and seek assurances from the County Council that continued opportunities to engage in a meaningful way to the further preparation of the MWLP will be available. It would be anticipated that specific meetings and discussions would be available between the planning teams to discuss concerns and issues raised in accordance with the Duty to Cooperate.

# Table 2 – Plan and Sustainability Appraisal Objectives Object

While the main principles behind the objectives contained within this table are supported, insufficient emphasis has been given to minimising the impacts of mineral and waste proposals on communities that may be impacted directly or indirectly by the development, including when considering traffic movements. It should be made clear that the impacts on communities may not be restricted only to those in the immediate vicinity, and indeed the potential impacts of increased HCV movements can be significant at some distance from an active minerals or waste operation

Under the Sustainable Waste Management heading (#2), there is reference to "the waste hierarchy" and "net waste self-sufficiency". These are important terms used throughout the MWLP and are not clearly defined early in the document to aid the reader. It would be helpful if definitions/explanation could be provided.

In relation to the resilience and restoration objective, national policy requires that development does not increase the risk of flooding to areas downstream or adjacent to developments, but consideration has only been given in this table to flood risk to minerals and waste developments themselves. We would recommend that reference to minimise risks to communities adjacent to proposals be included in this table.

Further, sections 7, 11 and 12 of Table 2 must also include reference to the need to avoid and minimise the impacts to communities of Heavy Commercial Vehicle (HCV) traffic, ensuring appropriate access and routing is secured in connection with the implementation of proposed Policy 23 "Traffic, Highways and Rights of Way". This must also take account of the specific features and characteristics of any proposed preferred route, including the proximity of individual buildings to the carriageway, the width of the carriageway and any pavements. Reference to the potential nuisance caused by vibration should also be added to section 12 of Table 2.

# Policy 1: Sustainable Development and Climate Change Object

The broad approach to achieving sustainable development and responding to, and mitigating the risks of climate change is welcomed.

Criterion (a) could usefully be expanded to include a wider reference to wellbeing, and it is suggested that the final line should read "...human health, wellbeing and air quality;"

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However, we would recommend that criterion (f) of the policy be reworded to read "incorporation of sustainable drainage schemes to minimise flood impacts, reduce current flood risk and provide additional benefits including contributing to biodiversity net gain and improvements to water quality". This change would bring the policy into line with national policy requirements in relation to reducing flood risk and also proposed changes to national policy in relation to introducing mandatory biodiversity net gain requirements for new developments.

#### Paragraph 3.21 - 3.22 Object

These two paragraphs identify that the allocation at Black Fen/Langwood Fen, Mepal is currently retained from the existing MWLP, but has failed to deliver at the rate expected. It is not yet fully consented. A recent planning application to Cambridgeshire County Council was refused as the proposal was not in accordance with the Core Strategy or the adopted Masterplan. Assurances are sought from the owner and operator by the County Council that a policy compliant scheme will be forthcoming for the area. If these assurances are not received, the Councils are currently minded to remove the allocation.

This position takes into account the need to demonstrate deliverability, and clearly if there is doubt around this matter the Councils should take appropriate action. What is not clear from these paragraphs or the rest of the Plan, is how the requirement for sand and gravel extraction will be met if this significant site is no longer allocated. The potential implications for Greater Cambridge are therefore not clear. The consultation that took place in 2018 set out that a further Call for Sites was being undertaken in parallel to identify further potential sites for sand and gravel extraction. This exercise and its outputs are not referenced in the Draft MWLP. The Councils object to the lack of demonstrable alternative strategy should the existing allocation be removed.

#### Policy 2: Providing for Mineral Extraction Object

There is uncertainty around the allocations at Block Fen/Langwood Fen, which together total 7.46Mt of sand and gravel reserve. This is approximately 40% of the 18.775Mt of new allocations identified in the draft MWLP. This is a significant proportion of the allocations identified for sand and gravel extraction, and there are no alternative sites proposed for potential allocation if this site is not allocated in the pre-submission Plan. The Councils must therefore object on the basis of this uncertainty, as it is not clear what the implications would be should alternative allocations be necessary.

There is overall support for the principle of seeking extensions to existing sites over allocation of new sites. However the impacts of proposed extraction sites must consider fully the implications of operations on communities.

In respect of operations at Bare Fen & West Fen, Willingham/Over (M019) it is recognised that this allocation is broadly similar to that which is allocated by the adopted MWLP (2011 and 2012). Where HCV movements are considered in this location, care must be taken to avoid where possible and minimise and mitigate, if avoidance is not possible, the impact of traffic movements through villages such as Willingham and Over.

The proposed allocations at both Mitchell Hill Farm South (M021) and Chear Fen (M022) in Cottenham are extensions to existing operations. There is local concern about the capacity and suitability of the local road network, and in particular the A10. The Councils seek assurances from the County Council that increases in traffic through villages are avoided where possible and minimised and mitigated if avoidance is not possible.

# Policy 3: Waste Management Needs Support

The Councils support the policy approach to achieve net self-sufficiency in relation to the management of waste arising from within the Plan area.



# Policy 4: Providing for Waste Management Object

Policy 4 contains a number of approaches to different elements of waste management, and the Councils support some elements of the approach and objects to others. Recognising that there is sufficient capacity to meet the majority of waste management needs within existing allocations, the need for significant additional allocations is reduced. The approach proposed has both advantages and disadvantages, and more clarity is required via conversations under the Duty to Cooperate before the Councils will be in a position to confirm whether there would be support or objection to this policy. The Councils support that existing waste management sites across Greater Cambridge, where these benefit from planning consent and other necessary licences, should continue to operate to ensure the overall delivery of the waste hierarchy in acceptable locations where there are opportunities to minimise environmental damage via resource depletion and excess emissions from increased transport miles. The policy or supporting text should make clear what is meant by "moving waste up the waste hierarchy". This may be better addressed in connection with comments made on Table 2.

The flexibility introduced by this approach, and a focus on key broad locations within the overall Plan area is broadly welcomed. An advantage to this approach is that land will not be unnecessarily sterilised from other uses by an allocation for waste management. However there are concerns around whether this approach will deliver the scale of waste management facilities required, particularly if there is a reliance on the market bringing forward proposals through the Development Management process only. By not identifying specific sites, or even broad locations, there is a reliance on the Minerals and Waste Authorities engaging at an early stage in the preparation of Local Plans and Site Allocations to identify where they may consider waste management provision should be made, and what type of facility is required. The Councils seek assurances from the County Council that there are sufficient resources available to engage at an early stage, and to maintain that resource during the preparation of Local Plans and other relevant planning documents.

Further consideration of whether such spaces are available in the centres listed is required. Not all the locations identified have undeveloped employment allocations in the Cambridge and South Cambridgeshire adopted Local Plans of the nature and scale envisaged. Some sites may also not be suitable for a use which would encourage vehicular traffic to visit an area, due to the traffic conditions and planning objectives of the area. Whilst such uses may be compatible in an employment or industrial setting, the job density of such operations is likely to be low. This may therefore have an impact on the overall employment strategy for Greater Cambridge, and the employment land supply at the site level. It could also cause local issues around compatibility of uses.

It is not clear from this draft Policy whether the existing allocation for a waste management site at Northstowe is still required, either at all, or within its current location. This uncertainty is hampering delivery of the Enterprise Zone, and has implications for securing employment provision at the new town which will aid delivery of a sustainable settlement. Further clarification regarding this matter is urgently required.

The proposal to address the demand for waste management proposals as part of new strategic development areas has potential. However, clarity is required on specifically what is meant by waste management facilities in this context. The scale of facility required is not clear, and whilst the policy sets out that this must be "of a scale, use and accessibility to enable communities and businesses within that strategic development area to take some responsibility for their own waste", there is no information in the policy or supporting text on what might be needed for a development of 1,500 or more homes. Further clarity on this point would be welcomed.

The policy and supporting text make no reference to the existing operations at Milton, and it



had been understood that this may be due to close over the next few years. Clarity on this position is required to fully understand the strategy for waste management across Greater Cambridge.

Policy 4 makes reference to Waterbeach. It is assumed this is a reference to the planned new town north of Waterbeach. This should be made explicit.

Waste Management Facilities – Inert Disposal. Is there a "not" missing in (d)? i.e. "...an alternative site would **not** be more suitable...".

# Policy 5: Minerals Safeguarding Areas General comment

Clarity is required around the operation of the Minerals Safeguarding Areas in and around Cambridge. The policies map appears to exclude the whole of Cambridge.

# Policy 10: Waste Management Areas Object

The North East Cambridge Area Action plan will be looking comprehensively at an area of Cambridge to bring forward development for employment, housing and other supporting uses and facilities. In order to make best use of the land around the new station where significant investment has taken place on transport infrastructure, it may be necessary to consider whether the site remains the most appropriate location for future waste uses. The County Council have previously acknowledged the potential need for relocation of uses in their response to the North East Cambridge Area Action Plan Issues and Options consultation earlier this year. GCSP seek continued assurance from the County Council and the MWLP that this flexibility to consider a comprehensive approach remains, and that meaningful dialogue on this matter can continue. Additional supporting text on this matter would be welcomed, and particularly around the application of "normal" in these circumstances.

# Policy 11: Water Recycling Areas Object

This policy would be applied where there are applications for new Water Recycling Facilities. It is questionable whether the second part of paragraph d regarding land value realisation is sound. It is not clear how it would be interpreted, and there is no explanation of justification for the point provided in the plan. Releasing land value may be necessary to support a range of policy goals that deliver sustainability benefits. North East Cambridge is a case in point. The policy already requires evidence of need, which is sufficient.

#### Policy 15: Transport Infrastructure Areas (TIAs) Object

The need to protect such areas is acknowledged. However, the plan does not reference seeking opportunities for new infrastructure, including railheads. With planned new rail schemes in the area, there will be new opportunities to explore which could deliver better locations, particularly where current facilities create issues for the planning of urban areas, and the maximisation of the benefits of sites like North East Cambridge. The plan should provide a hook for exploring this.

Where applications for new, extended or upgraded railhead operations are being considered, the County Council should consider incorporating requirements to address the need for mitigation measures to reduce nuisance that can arise by way of dust, noise and air pollution. This could incorporate measures such as damping down of dust, and use enclosed conveyor belts rather than cranes to move aggregates.

# Policy 18: Amenity Considerations Support

It is vital that any new or extended mineral or waste operations seek to minimise any impacts on communities that are directly and indirectly impacted in terms of factors which may impact



on quality of life. Policy 18 addresses a number of these points, but to address local concerns must explicitly state that these factors also include the impact of associated traffic movement.

Criterion a. should be expressed as "risk of harm" not "harm"

Criterion b. it is not clear on what basis any assessment of the ongoing operation(s) of neighbouring (or planned neighbouring) land uses will be conducted. Where these neighbouring uses are residential, this must also include the ability to continue to live in the property without significant harm or impact on amenity.

Criterion d. must be expanded to include all communities that are impacted not just those nearby. The impact of traffic movements must be considered along the whole route.

The text at the end of the policy is not completely clear, and the meaning of "deliverability" in this context is ambiguous. Could this whole sentence be made clearer – "....to establish the extent to which the impacts on the amenity of any land or property would be considered to be acceptable after incorporating the effects of any planned mitigation measures."

# Policy 22: Water Resources Object

While the policy on the whole is supported, it should be noted that it is not possible to use Supplementary Planning Documents to develop new policies. As such, we would recommend that the final sentence of the policy be amended to read "Proposals should also have due regard to the latest guidance in the Cambridgeshire Flood and Water SPD and the Peterborough Flood and Water Management SPD (or their successors).

# Policy 23: Traffic, Highways and Rights of Way Object

The potential impacts of increased HCV movements are of concern to residents and wider communities that are near to minerals and waste operations or routes. The Councils are supportive of the requirements of Policy 23 to address these concerns, but also request that additional requirements are added to (e) which set out that monitoring and reporting of traffic movements will be required.

In d. It is not clear what "severe residual cumulative impacts" means, and whether this relates to the increase in number of traffic movements and a change in the type of traffic using the routes i.e. increases in HCV movements, or the absolute volume of traffic on a given route. In either case, the impacts will depend on the specific characteristics of the area and the key routes that lead to the minerals or waste operation. It can be the case that the traffic movements cause significant local concern, rather than necessarily the operation itself. Further clarity is required, and the Councils would welcome discussion on this matter.

