

Central Bedfordshire Council  
Priory House  
Monks Walk  
Chicksands  
Shefford  
Bedfordshire  
SG17 5TQ

**Our ref:** AC/2017/125979/CS-  
01/PO1-L01

**Your ref:**

**Date:** 29 August 2017

Dear Sir/Madam

## **DRAFT LOCAL PLAN FOR CENTRAL BEDFORDSHIRE**

Thank you for consulting us on Draft Plan. Having examined the document we would like to make the following comments.

### **Plan Area**

The proposed allocated sites have avoided areas where there is extensive flood extents, with some sites within Flood Zone 1. A map showing the boundary of the proposed allocated sites would help assessment and avoid any ambiguity in future. Your Authority will also need to show that the allocated sites pass the Sequential Test. Evidence of this will need to be available but we note that this is a Draft Plan and the detail will come in future stages.

Much of the area is underlain by Principal and Secondary aquifers. Principal aquifers are geological strata that exhibit high permeability and provide a high level of water storage. They support water supply and river base flow on a strategic scale. Secondary aquifers are often capable of supporting water supplies at a local scale and normally provide an important source of flow to some rivers. The use of groundwater in the area makes the site vulnerable to pollution and, a number of licensed abstractions for public water supply are present across the plan area. The majority of Central Bedfordshire is designated within a Source Protection Zones (SPZ), and the sensitivity of groundwater should be taken into account for any future proposals. Under the Water Framework Directive (WFD) there is 'poor' groundwater body status. We are not in position to allow further deterioration in the groundwater quality status for bodies that have already been designated as being 'poor'. There are numerous industrial and agricultural licensed abstractions across the area. There are a few active landfills sites and several historic landfill sites interspersed across the area that is covered by the Plan area.

### **General Comments**

We support this Draft Local Plan. There are some good strong policies. However, there are details missing that we consider should be included:

There is no mention of how sites affected by contamination or where there is reason to suspect contamination will be considered and no specific policy to address this.

Your Authorities stance on floodplain compensation, voids, stilts and access and egress would be very beneficial to help avoid issues at the application stage. This could either be considered in the Local Plan or included in a separate flood risk Supplementary Planning Document (SPD). This would be of great benefit when it comes to developing the larger sites that are constrained by flood risk. Alternatively a Level 2 Strategic Flood Risk Assessment (SFRA) would provide more detail and guidance for the larger sites. We would be happy to work with your Authority in developing an SPD or a Level 2 SFRA.

We are unable to locate any meaningful policy or objective to ensure that foul drainage infrastructure is provided in a timely manner ahead of occupation of new properties.

Wastewater infrastructure is the most important pressure on environmental water quality, and growth and development has the potential to reduce the efficacy of that infrastructure leading to major problems. Wastewater treatment and the quality of the water environment should be addressed in the Local Plan to ensure there is infrastructure to support sustainable growth and there is no deterioration of water quality.

The Water Cycle Study (once Phase 2 is completed) should provide the evidence base to support the Local Plan. Although a link to technical supporting documents was provided, one of which is the Water Cycle Study (WCS), we cannot find reference to the WCS in the Draft Local Plan itself. We suggest that Section 17.7 and/or 17.8, and Policies CC6 and CC7 would be suitable places to address these issues.

We are surprised to see this final version of the WCS on the web portal. Several months ago we made some significant comments and actions required on the first draft that we were consulted on. In our opinion that document was not fit for purpose as it was impossible to ascertain how the assessments had been carried out and therefore how the conclusions had been drawn. To our knowledge there has been no further consultation. Some of our comments have been taken on board, and it is clear that there have been some substantial changes, but the document still has a very limited relevance until the actual proposed quantum of development has been properly assessed. It is essential that this assessment is completed in the Phase 2, Detailed WCS.

The Draft Plan prompts the use of Sustainable Drainage Systems (SuDS) throughout which is pleasing.

We are broadly supportive from a water resources perspective. The Draft Plan recognises the pressure on the water environment and also includes mitigation measures for any new developments.

We are pleased to see that the Draft Plan supports energy efficiency and waste minimisation measures for new development and addresses issues such as the rise in population within the area. It is encouraging to see that your Authority will look favourably at proposals for development that use standards such as BREEAM to demonstrate their sustainability and to achieve higher standards than those prescribed by the Building Regulations.

The Strategy does link to the Minerals and Waste Plan 2014 and details waste management within the county. Wherever possible, the Waste Framework Directive and particularly the Waste hierarchy should be applied to future developments.

We note that although there are references to ecosystems services, there are no references to natural capital and valuing nature, in particular you may wish to include the work of the Bedfordshire Local Nature Partnership and its role in the planned Natural Capital Investment Plan for the Oxford-Milton Keynes-Cambridge Growth Corridor. Link here: <http://bedfordshirenaturally.com/2017/07/04/natural-capital-investment-plan-underway/>

### **Groundwater Protection and Contaminated Land**

Land contamination can adversely affect or restrict the beneficial use of land. Often development presents the best opportunity to successfully deal with these risks. However, in many instances consideration of land contamination and controlled waters at planning stage is too late. Groundwater in particular, is not a boundary issue and ensuring an area wide holistic approach when considering such a valuable resource is much more effective at strategic 'design' stage. Therefore, Local Plans have a key role to play in facilitating the improvement of land affected by contamination.

The potential for contamination and any risks arising from development activities should be properly assessed and the development must incorporate any necessary remediation and subsequent management measures to deal with unacceptable risks, including those covered by Part IIA of the Environmental Protection Act (EPA) 1990. Intending developers should be able to assure your Authority that they have the expertise, or access to it, to make such assessments. Developers should refer to guidance found at [www.gov.uk](http://www.gov.uk).

Government planning policy as set out in the National Planning Policy Framework (NPPF) states that local policies and decisions should ensure that new development is appropriate for its location, having regard to the effects of pollution on health or the natural environment, taking account of the potential sensitivity of the area or proposed development to adverse effects from pollution (paragraph 120). Therefore, the Plan should ensure that suitable location for developments, particularly in relation to sensitive receptors including Principal aquifers and SPZs, must be a consideration of the pre-application process. Certain new activities need to be deterred in certain areas based on their intrinsic hazard to groundwater. The hazard may result from a combination of the activity type, its duration and the potential for failure of controls. Close to sensitive receptors a precautionary approach is likely to be taken because, even where the risk of failure is low, the consequences may be serious or irreversible. We apply a risk-based regulation approach.

Applicants should be aware that certain development proposals within a groundwater SPZ1 (inner protection zone), or the protection zone of a private potable groundwater supply will result in an 'Objection in Principle' under the Environment Agency's Groundwater Protection Policy. Development proposals within an SPZ2 or 3, or on a Principal or Secondary aquifer will be considered on a risk based approach with the exception of developments involving deep soakaways, sewerage, trade and storm effluent to ground which will only be supported where it can be demonstrated that these are necessary, are the only option available and where adequate safeguards against possible contamination can be agreed, implemented and maintained. Development proposals will be expected to provide full details of the proposed construction of new buildings and construction techniques, including

foundation design.

**Our comments on the specific sections can be found below:**

**Section 2 - Key themes for the local plan**

**2.6.2 Climate change.**

There is no mention of flood risk. Climate change/flood risk is suggested by saying 'Ensuring measures put in place are fit for purpose and future proof'. We suggest that the wording could be amended by adding the following to the end 'by taking into consideration climate change and flood risk and providing betterment wherever possible'.

**Section 3 - Consultation**

**3.1.3**

We suggest adding 'whilst protecting the character and environment of the area' into this objective.

**Section 5 - Developing the strategy**

Flood risk and whether the development is appropriate should also be a key consideration. Currently flood risk does not appear to have been a consideration. This section does not mention the SFRA which acts as an evidence base.

**Section 6 - Vision & Objectives**

**6.2.1 Growth and infrastructure objective**

There is no mention or link to flood risk policy.

**Homes objective**

There is no mention or link to flood risk policy.

**Environment**

We suggest inclusion of something along the lines of 'Maintaining and enhancing an effective network of open space and environmental stewardship for our ecosystems services network for food production, flood control and wildlife'.

It reads as though there should be four points (after ending '...enhancing biodiversity', with an SO14 Objective of "Improving and protecting air and water quality ..."

To address our general comment about wastewater and water quality, we would have expected to see a Policy relating to the provision of wastewater infrastructure and your Authorities approach to Planning Applications in respect to the WCS conclusions and recommendations. Applications for sites not assessed within the WCS should be accompanied by a wastewater and water quality assessment

**Section 7 - The spatial Strategy**

**7.1.5**

New growth locations will require further detailed assessment to ensure that any proposed development is sequentially appropriate in accordance with the NPPF.

**7.5 Spatial Strategy Approach**

we suggest that reference to the environment could be made, particularly in bullet

point 3 as well as mention taking into account climate change.

#### 7.6 Proposed growth locations

Sites and development will need to pass the Sequential Test. Evidence should be undertaken to show this. It would be useful to include a map showing each site's boundary and this will help avoid any ambiguity. Some of the development is constrained by tight defined urban areas so significant growth would have to be accommodated in Greenfield runoff rates.

#### Tempsford South and Tempsford Airfield

The site is sandwiched between two floodplains and development should be steered away from these areas where possible. There is an ordinary watercourse that runs adjacent to the railway line. The modelling in this area is likely to exaggerate the floodplain so any development will need to undertake a review of the modelling. It is also likely that new modelling of this watercourse will be required to better understand the flood risk to the site.

#### New villages to the East of Biggleswade

The villages are potentially constrained by Ordinary Watercourses. Therefore, development that is more or highly vulnerable should be steered away from these areas where possible. There is also the opportunity to see flood risk betterment from this development due to the potential to reduce flood risk to local infrastructure. It is likely that modelling may be required to better understand the flood risk in this area. It would also be beneficial for the flood map to be updated with the results of the modelling, if carried out to our flood map standards. The influence of the River Great Ouse will need to be considered.

#### East of Arlesey

We believe East and West are the wrong way round. We have no flood risk concerns.

#### Marston Vale New Villages

There are areas of Flood Zones 2 and 3 around Marston Moretaine and Escheat Farm. Development that is more or highly vulnerable should be steered away from these areas where possible. However, there are various drains and watercourses in the area that are not modelled, so a better understanding of the flood risk to the development sites will be required, this is likely to include modelling. There is also the opportunity to see flood risk betterment from this development as it is upstream of Bedford. Therefore, a reduction in flows through SuDS or attenuation would be a benefit.

#### Aspley Triangle

There are areas of Flood Zones 2 and 3 close to the M1. Development that is more or highly vulnerable should be steered away from these areas where possible. We do not have detailed modelling for the watercourse in this area. Therefore, an application for development may be required to be supported by modelling. There is an opportunity to seek flood risk betterment for Milton Keynes from development in this area through reduction in run off rates below greenfield.

#### Land South of Wixams

it is stated that this is in Flood Zone 1. Without a boundary map this is difficult to check. However, there are some constraints as parts of the area is in Flood Zones 2 and 3. If development falls in this area then development that is more or highly vulnerable should be steered away from these areas where possible.

### 7.10 Housing target.

There is the risk of overdeveloping in some areas. We recommend for the allocated sites to be developed first before using windfall sites.

### **Policy SP2: NPPF Presumption in Favour of Sustainable Development**

Would a link to the planning portal to explain what a material consideration is help the public's understanding?

### **Section 8 - Implementation**

#### 8.5.3

The flood risk sections of the summaries only includes information on fluvial flood risk. Other sources should be mentioned when the information is available. Where flood risk is identified it would be good to have more detail on the requirements of national and local policy.

### **Section 9 - Green Belt, Coalescence and Settlements**

#### 9.5.1 and 9.5.2

'Planning permission for inappropriate development will only be granted where demonstrable, very special circumstances which outweigh the harm to the Green Belt can be demonstrated'. This is repeated.

### **Section 11 - Planning for Gypsies & Travellers**

There is no mention of flood risk and inappropriate development. Avoid areas (including those with noise or air quality issues or are in areas at high risk of flooding) that would have a detrimental impact on the health and well-being of any travellers that may locate there. We suggest adding something in to H8 and H9 to cover this or link to the flood risk policy.

### **Section 12 - Housing**

#### **Policy H1: Housing mix.**

There is no mention of flood risk or climate change. But, this could be solved by signposting to the flood risk policy in key sections.

#### **Section 12.3 Supporting an Ageing Population**

There is currently no detail on where development such as care homes are proposed. The Sequential Test should be followed. Consideration should be given to the location of highly vulnerable development such as care homes, steering it away from flood risk areas, particularly as paragraph 12.3.9 states that there should be more bungalows, ground floor apartments and apartments with appropriate lifts to cater for people with mobility issues. It is important that these developments are in areas of low flood risk now and into the future so that access and egress is not an issue for these highly vulnerable developments, otherwise it may put unnecessary pressure on the local emergency services.

#### **Policy H3: Supporting older people**

Bullet point 1 could include 'provide accommodation in suitable sustainable and sequentially appropriate locations'. Larger developments require level access. However, flood risk should be considered as level access will increase the risk of internal flooding.

#### **Policy H8 and H9**

These policies could allow your Authority to explore the specific needs of travelling show people in terms of flood risk. Sites should be sequentially appropriate as

detailed in the NPPF and steered away from areas at high risk of flooding.

## **Section 15 - Transport**

### **Policy T3: Highway Safety and Design**

The consideration of flood risk on transport links could be highlighted here i.e. it must be demonstrated that pedestrian access is unimpeded during periods of extreme weather and the site is accessible at all time by emergency vehicles including times of flood.

### **Policy T4: Parking**

We recommend that this policy needs to confirm that the parking design guide refers to flooding. Your Authority should have a position on whether you consider parking in areas of flood risk is appropriate as this will help developers in sequentially designing their sites.

### **Policy EE1 & Policy EE2**

We consider that these policies should state that this includes watercourses.

### **Policy EE13: Applications for Minerals and Waste Development.**

We suggest that an additional point is added to make it clear to developers that proposals for minerals and waste development should also include an assessment of the impact on water resources through a Hydrogeological Risk Assessment (HRA).

Water abstraction for the purpose of mineral washing, either from an aquifer or a surface water feature, may require an abstraction licence.

It should be noted that under the Water Act 2003 abstraction for dewatering to facilitate mineral excavation or construction works will no longer be exempt from abstraction licensing. However, the provisions of the Water Act 2003 are being implemented in several phases. Although dewatering activities do not yet require an abstraction licence, the National Permitting Service (NPS) should be contacted for any proposals before the commencement of any dewatering to confirm the legal requirements at the time. When scheduling their work, the applicant should be aware that it may take up to 3 months to issue an abstraction licence.

We would recommend updating policy EE13 to reflect our requirement to locate high risk waste disposal and treatment facilities and very high risk developments (such as landfill) away from groundwater SPZ1.

## **Section 17 - Climate change and sustainability**

It would be good to know what approach to climate change adaptation your Authority wishes to take: Managed adaptation or future proofing (building in space to allow future adaptation or design to the current best estimate of impact now).

### 17.2.9

This refers to the requirement to be able to adapt to climate change in the future through the future provision of infrastructure - is this reflected in the policy? i.e. should developers plan open space in the developments to allow for future works i.e. ensure space near the flood zones are left clear or houses are designed to be easily retrofitted with resilience measures.

### 17.2.13

We suggest removing the word 'more' so that there is no ambiguity.

## **Policy CC1: Climate change and sustainability**

Water exclusion (resistance measures) is a much better way of protecting against flooding and should be used before flood resilience measures which are a mitigation. Therefore, flood resistance measures should be included, and if necessary utilise flood resilience measures as well.

The sequential approach should be used within the site taking into account climate change to avoid future areas of flood risk. The climate change section will need to detail how climate change will be considered within the Sequential Test.

The sustainability statement should also include how the developer has determined the impact of climate change on flood risk and how they propose to have adapt to it. Climate change allowances are now a range so a decision has to be made on which allowance to design to.

We are supportive of the water resources statements included in this policy.

### 17.4.2

Indicates the risk of pluvial and surface water flooding - does the flooding policy reflect this?

### 17.4.5

We consider that the requirements of the exception test need to be widened - the wording currently focusses on compensation but misses the fact that they have to demonstrate that the users/occupants will be safe. The exception test doesn't require betterment so perhaps it should be 'where possible'. We would be happy if the policy makes this a requirement but the policy will have to reflect this.

### 17.4.6

This mentions that future flood risk should be taken into account, we suggest reference to the Climate Change guidance and allowances.

*'Opportunities to enhance green infrastructure and reduce flood risk by making space for water should be sought.'* We consider this could be more strongly worded, such as *'large developments will be required to provide green infrastructure and attenuation of water through sustainable urban drainage systems.'*

### 17.4.7

'Satisfactorily implemented'. Who decides if it is satisfactory? Developments that require new flood defences should not be promoted because they are unsustainable. Ideally the wording should reflect the bias against being new defences to allow development unless there is significant betterment to offsite areas. Where new defences are promoted, the residual risks should be identified and mitigated for.

### 17.4.8

What is the definition of fair or poor condition? It is good to identify but actually they could improve them. What is deemed the suitable Standard of Protection? We consider that there should be a greater requirement than just identifying the assets. If development behind the fair or poor condition defence is necessary then they should be improved to a suitable standard.

### 17.4.9

Guidance for the applicant will be needed to ensure they know what is needed for these Flood Risk Assessments. Clear lines of responsibility will be needed. This may trigger the requirement for a flood risk SPD. Asking for FRA's for sites that are within 20m of any watercourse will help identify opportunities for development. It needs to be clarified who will assess the FRA's for these sites. We are not a statutory consultee for areas outside of the flood map, not within 20m of a Main river. Your Authority will have to be prepared to review and approve these applications. We would recommend that a clear definition of watercourse is provided i.e. is a field drain a watercourse or a sewer. A link to the SFRA could also be of benefit here.

#### 17.4.12

Should there be a caveat here that there may be a charge for this service? The IDB also should be included as there may be watercourses under their jurisdiction.

#### 17.4.13

As well as any information relating to flood risk from other sources such as the Environment Agency, IDB or local knowledge.

#### 17.4.14

The SFRA may become out of date. Therefore, we recommend caveating it by stating the most up to date and best available information should be used.

#### 17.4.16

A resistance resilience hierarchy would be useful here. Firstly looking at avoidance, then, if avoidance is not possible, raising finished floor levels (FFL), property level sequential design, property level resistance (PLR) and lastly resilience.

FFL should be set above the design flood level but currently the appropriate level is not defined. This paragraph introduces the idea that the appropriate level may be affected by the type of development. This should be expanded and explained elsewhere to make it clear to developers what is required of them. Similarly the need to future proof developments will need to be explained.

If raising floor levels is not possible and flood water will enter the property, then flood resilience measures will be required. In this instance we would strongly recommend no ground floor sleeping accommodation being allowed as occupants can be caught out by flood events happening during the night whilst they are asleep, and therefore having difficulty getting out of their properties. We have found that putting this in place greatly improves the safety of occupants in an extreme flood event. We would be happy to discuss this in more detail with you if you feel that including this as policy would be of benefit.

There is often a conflict between ridge height restrictions and raising floor levels for flood resistance. We would recommend that your Authority determine a position on which issue takes precedence as this will provide clarity to developers.

#### 17.4.17

Has this been done for the allocated sites? '*Wherever possible, opportunities should be taken...*' could be more strongly worded.

The construction of new upstream storage schemes and cross-boundary working; this is particularly important around Luton, where fluvial and surface water flow routes from outside of Luton increase the risk within the town. Site allocations in Houghton Regis, Sundon, and Caddington which are on surface water and fluvial

flow routes into Luton should include attenuation/storage as part of the site design. This should ensure an improvement in flood risk for receptors downstream, as opposed to maintaining the existing risk.

### **Policy CC3: Flood risk management**

What is the normal design standard? This does not appear to be defined. The use of SuDS could be stronger. If your Authority decide to adopt the policy of not allowing ground floor sleeping accommodation in developments where flood water will enter the property, this could be added in here.

There is no mention of other existing plans e.g. Catchment Flood Management Plan (CFMP). We suggest the following wording, 'Development should take account of and be consistent with any adopted strategic and local flood and coastal management strategies including the Catchment Flood Management Plan'.

The flood risk policy could place a requirement for the development to consider the impacts of the layout, transport network and green infrastructure on offsite flood risk, and identify and implement passive measures to improve flood risk off site i.e. removing restrictions that cause flooding upstream, reconnection of rivers to the floodplain, restriction of run off rates to below the existing situation etc. Adding this to the policy would reduce potential impacts and avoid any ambiguity in submissions. This would also provide flood risk betterment.

There is not much on the requirement for floodplain compensation or your view on stilts/voids. We consider that this should be included as having clear position would help applicants and ensure quicker application process.

#### 17.5

This may fit better in the environmental section.

We suggest that new development must not overshadow the channel or its buffer zone. River corridors are very sensitive to lighting and rivers and their 9m buffer zones (as a minimum) should remain/be designed to be intrinsically dark e.g. Lux level of 0-2.

#### 17.5.3

It is unlikely that we will be able to financially support the review and approval process of these modelling outputs. Developers can submit these as 'evidence based reviews' and we will update the flood map with the information where suitable, or they can submit a pre-application enquiry where we will review the model for a fee. It should be noted that modelling may also be required where there are existing Flood Zones, but the data is not suitable for a site specific FRA.

#### 17.5.5

There should be de-culvert where possible too.

### **Policy CC4: Development close to watercourses**

This policy states 'preferable a minimum 9m wide undeveloped buffered strip'. Seems more relaxed than paragraph 17.5.4 where it states that 'no less' should be provided. It needs to be made clear that the undeveloped buffer strip includes the exclusion of gardens, these are usually delineated by fencing that disrupts flood flows.

We consider a policy is required to protect and encourage the habitat of protected species when developing close to a watercourse. This could be covered in Policy

EE2, but needs to be specific to riparian habitat, could be part of the 9m buffer strip in Policy CC4.

## 17.6

Site allocation NLP257 (Houghton Regis) – the Houghton Regis Flood Storage Area is on this site, is this taken into account in the proposed allocation?

### **Section 17.7: Water quality and the Water Framework Directive**

There is no reference to the River Lee through Luton. The River Lee in Luton is the source to a chalk stream river which then passes through Hertfordshire and meets the Thames at Bow in London. The River Lee has a large number of WFD actions throughout its length, including Luton. The Local Plan should include the role that planning and development have in delivering the River Basement Management Plans (RBMP) actions and objectives, including on the Lee which passes through your Plan area, such as re-naturalisation of modified reaches and de-culverting through redevelopment.

We consider that there should be a policy to cover invasive non-native species and their management, including biosecurity measures. Invasive species are a growing issue and must be addressed to stop the spread. Development sites should be checked for invasive species and measures should be put in place to follow biosecurity and eradicate the invasive species on site.

### **Policy CC7: Pollution**

This refers to the potential pollution impacts on health, the environment and amenity from development activities in the area. We suggest that this policy is reworded or a separate policy is proposed to make it clear to developers what is required for sites that are effected by or suspected of contamination. It should be stated in the Local Plan that development proposals on sites affected by contamination, or where there is reason to suspect contamination, must include an assessment of the extent of contamination and any possible risks. Furthermore, proposals will only be permitted where it is demonstrated that the identified contamination is capable of being suitably remediated for the proposed end use. We suggest wording along the lines of *“Development proposals on sites effected by contamination, or where there is reason to suspect contamination, must include an assessment of the extent of contamination and any possible risks. Proposals will only be permitted where it is demonstrated that the identified contamination is capable of being suitably remediated for the proposed end use.”*

We look forward to being consulted on subsequent stages of your Local Plan.

Should you wish to discuss this matter further please do not hesitate to contact me

Yours faithfully

**Neville Benn**  
**Principal Planning Advisor**  
**Sustainable Places**  
Direct dial 0203 0251906  
Direct e-mail [neville.benn@environment-agency.gov.uk](mailto:neville.benn@environment-agency.gov.uk)



