From:	Faulkner, Stephen
To:	Norfolk Vanguard
Cc:	Lead Local Flood Authority; Perry, Lucy
Subject:	Lead Local Flood Authority Matters
Date:	08 February 2019 11:58:46
Attachments:	Guidance on Norfolk County Councils Lead Local Flood Authority.pdf SoCG_Finalised.docx Revised_NPPF_2018.pdf

FAO Examining Authority

Identification No. 20012439

Further to the issue raised by the Examination Panel at Hearing 1 (Onshore Environmental Matters) on 5/2/19 in respect of climate change issues, I can confirm as set out in the Statement of Common Ground (see attached) that the difference of view between the applicant and the County Council as Lead Local Flood Authority (LLFA) on page 9 regarding the climate change consideration of 40% (County figure) and the 20% of the applicant **has now been resolved**.

The County Council now accepts the applicant's lower figure (20%) based on the limited operational life of the substation (i.e. 30 years).

While the County Council figure (40%) is consistent with advice set out in the County Council Guidance Document as LLFA (April 2017)(attached) in section 12 on standing advice (page 12 and 13) it is felt that given the operational life of the development a reduced figure (20%) is acceptable.

If you have any further queries I would suggest you contact the LLFA Team direct at: Lead Local Flood Authority llfa@norfolk.gov.uk

Kind regards

Stephen

Stephen Faulkner MRTPI
Principal Planner
Community and Environmental Services
Telephone: 01603 222752

Campaign Logo

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Norfolk County Council

Lead Local Flood Authority

Statutory Consultee for Planning

Guidance Document

Version 3, April 2017

i. Purpose of this document

i.i This guidance document has been drafted to support the development of Norfolk County Council's (NCC's) Lead Local Flood Authority (LLFA) role as a statutory consultee to planning and to inform stakeholders in this process such as Local Planning Authorities (LPAs) and developers. This document is broken into three parts.

Part A aims to;

- Highlight recent changes in planning policy with regard to surface water drainage
- Explain the role of the LPA in determining Sustainable Drainage Systems (SuDS) proposals on new developments
- Outline Norfolk County Council's LLFA role as a statutory consultee to planning.

Part B aims to;

- Explain how the LLFA will fulfil this function and when it should be consulted.

Part C aims to;

- provide guidance for developers on the information required by the LLFA from applicants to enable it to provide responses to major planning applications.

i.ii This document will be periodically reviewed as the service develops to ensure that its contents remain accurate and that it provides an appropriate level of detail. References and links are included within the text of this document to highlight other publications that should be read in conjunction with this guidance. The role the LLFA plays in supporting the development of Local Plans and policies is not currently covered by this document.

ii. What is Sustainable Drainage?

ii.i Surface water drainage systems developed in line with the ideals of sustainable development are collectively referred to as Sustainable Drainage Systems (SuDS). Approaches to manage surface water that takes into account water quantity (flooding), water quality (pollution), amenity and biodiversity issues are collectively referred to as sustainable drainage. The philosophy of SuDS is to replicate, as closely as possible, the natural drainage from a site before development and to use shallow surface structures to mimic the pre development scenario and manage water close to where it falls. SuDS can be designed to slow water down (attenuate) before it enters streams, rivers and other watercourses, they provide areas to store water in natural contours and can be used to allow water to soak (infiltrate) into the ground, evaporate from surface water or be transpired from vegetation (known as evapotranspiration).

ii.ii Due to developer concerns of long term maintenance more conventional piped drainage that conveys water to an attenuation tank are often proposed as SuDS. Whilst these systems provide some elements of SuDS and may meet some of the required standards, they frequently do not consider any water quality, amenity or biodiversity benefits. The piped and tanked systems can be put forward for adoption and long term maintenance by Anglian Water but these will be classed as conventional drainage systems and not SuDS.

ii.iii Early engagement with Anglian Water or the Highways Authority mean that shallow surface SuDS structures proposed will be considered for adoption however these need to meet with the appropriate authorities standards. Norfolk County Council Highways Authority will consider adopting SuDS if they are appropriate and only take drainage from the adoptable Highway.

iii. Abbreviations and Definitions

iii.i Abbreviations used in this document are set out below;

EA	Environment Agency
FRA	Flood Risk Assessment
GIS	Geographic Information System
ha	Hectares
IDB	Internal Drainage Board
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
NCC	Norfolk County Council
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
RoFSW	Risk of Flooding from Surface Water
RMA	Risk Management Authority
SFRA	Strategic Flood Risk Assessment
SuDS	Sustainable Drainage Systems
100% annual probability flood	Previously referred to as the 1 in 1 year but is an event which is likely to happen every year.
10% annual probability flood	Previously referred to as the 1 in 10 year but is an event which has the probability to happen in any single year and not every 10 years.
3.33% annual probability flood	Previously referred to as the 1 in 30 year but is an event which has the probability to happen in any single year and not every 30 years
1 % annual probability flood	Previously referred to as the 1 in 100 year but is an event which has the probability to happen in any single year and not every 100 years
0.1% annual probability flood	Previously referred to as the 1 in 1000 year but is an event which has the probability to happen in any single year and not every 1000 years

Contents

PART A - National Policy Background and Approach

1. Background

1.1 From April 2010 to late 2014 it had been Government's intention to implement Schedule 3 of the Flood and Water Management Act 2010. The inclusion of SuDS in the Act was seen as essential due to the number of properties flooded from surface water and the overloading of drainage systems in 2007 (as reported in the Pitt Review). Schedule 3 of the legislation would have placed Unitary Local Authorities and County Councils at the centre of a new process, separate from planning, for approving, adopting and maintaining SuDS on new major developments. Subsequent to proposing and delaying the implementation of this Schedule on a number of occasions, Government resolved to deliver SuDS on new developments using the existing Town and County Planning process.

2. Recent changes to planning

2.1 In December 2014 Government set out changes to planning that sought to strengthen planning policy. These changes built on previously existing planning policy and ensure that SuDS will be provided in new major developments where appropriate. These changes came into force from the 6 April 2015.

2.2 At the same time Government also set out new consultation arrangements for planning applications for major developments. These changes made upper tier local authorities statutory consultees to planning in their capacity as LLFAs. This statutory consultee role is for *"major development with surface water drainage"* and came into force from the 15 April 2015. This role is broadly similar to that held by the Environment Agency (EA) prior to this date.

2.3 As part of Government's implementation of these changes to planning a Written Ministerial Statement was laid in the House of Commons on 18 December 2014, the Flood Risk and Coastal Change Section of the Planning Practice Guidance was updated and non-statutory technical standards for SuDS were published.

3. The role of the LPA in determining planning applications

3.1 The role of the LPA is to determine planning applications in accordance with national policy, local policies and relevant guidance whilst taking into account advice from statutory consultees (such as the LLFA and EA) alongside other material considerations. The LPA would also consider advice from other consultees which are none statutory. These include other risk management authorities (RMAs) such as Internal Drainage Boards (IDBs), Anglian Water or the Canals and Rivers Trust.

3.2 Where the planning application falls within the boundary of a IDB, they should be consulted along with the LLFA. The IDB, as a RMA, would have a significant role in managing the risk of flooding and the LLFA would want to avoid duplication of advice. However, the LLFA would, where appropriate, take an overview to ensure that SuDS and other local flood risk issues had been considered in a consistent approach across the county of Norfolk. Where the appropriate information has been submitted and clearly meets NPPF, PPG and the Non-Statutory Technical Standards for Sustainable Drainage, the LLFA would have minimal input to a consultation.

4. National Policy on Flood Risk and SuDS

4.1 In March 2012 Government published the National Planning Policy Framework (NPPF). The framework acts as guidance for LPAs and decision-takers, both in drawing up plans and making decisions about planning applications. Section 10 of this document, "Meeting the challenge of climate change, flooding and coastal change" (paragraphs 93 to 108) contains key information on how flood risk and SuDS should be considered as part of new development. Paragraph 109 also highlights the need to prevent pollution which is integral to a well-designed SuDS scheme.

4.2 Paragraph 103 of the NPPF includes key references to flood risk and SuDS for LPAs considering planning applications. It highlights that when determining planning applications, LPAs should for all types of development;

- Ensure flood risk is not increased elsewhere
- Only consider development appropriate in areas at risk of flooding where it can be demonstrated that within the site;
    - the most vulnerable development is located in areas of lowest flood risk
    - development is appropriately flood resilient and resistant, including safe access and escape routes where required.
    - that any residual risk can be safely managed

- that priority is given to the use of SuDS

4.3 Footnote 20 of the NPPF states that a site-specific flood risk assessment is required for proposals of 1 hectare or greater in Flood Zone 1. This was the reason that the Environment Agency would only comment on developments of this size, however flood risk should still be considered by a developer if below 1 hectare in size.

4.4 The sequential approach to Norfolk County Council's advice is based on current NPPF (2012) and Planning Practice Guidance (PPG) (online version). This uses up-to-date information to advise the Local Planning Authority at an early stage where best to steer development in line with the sequential test (PPG Paragraph: 019 Reference ID: 7-019-20140306 and associated links to Table 2 and 3). As a statutory consultee on surface water drainage we also have a duty to consider our other responsibilities including, local flood risk management and consenting of works which may affect flow within an ordinary watercourse. It is assumed that LPA's have undertaken a sequential test (and exception test where appropriate) for any allocated site within a Local Plan or windfall site.

4.5 The sequential approach is a precautionary one, to avoid the risk of flooding in the first instance. We support this approach as it is the most sustainable form of flood risk management. In accordance with PPG (Paragraph: 018 Reference ID: 7-018-20140306 and Paragraph: 019 Reference ID: 7-019-20140306), development should be steered to Flood Zone 1 (taking into account all sources of flooding), where there is no reasonable alternative sites taking into account flood risk vulnerability of land use (PPG Table 2) sites in Flood Zone 2 can be considered (employing the exception test where required – see NPPF paragraph 101 and 102). Further information can be found in Section 14 of information that can be used to define Flood Zone 1 (in addition to the Environment Agency's river and sea flood maps). It is important to note the following:

- Indicative Environment Agency's Risk of Flooding from Surface Water (RoFSW) maps (extent, depth, velocity and Hazard layers) for both the 1% annual probability of flooding (i.e flooding which can occur in any single year or the 1 in 100 year) and 0.1% annual probability of flooding (which can occur in any single year or the 1 in 1000) **can be used to identify potential risk of flooding from surface water flow paths and / or significant ponding**.
- Indicative Environment Agency (EA) River and Sea Flood Maps for Planning for both Flood Zone 2 and 3 – or up to 1% annual probability of flooding and 0.1% annual probability of flooding **can be used to identify potential risk of flooding from ordinary watercourses**. Where no mapping of fluvial flood risk (watercourses with catchments smaller than 3km^2), or there is uncertainty within the EA mapping, the RoFSW map is used as a proxy and used consistently with river flood mapping probability. To avoid doubt, the 1% annual probability of flooding is deemed equivalent to Flood Zone 3 and 0.1% annual probability of flooding is equivalent to Flood Zone 2 (as per Planning Practice Guidance – Flood Risk And Coastal Change Paragraph: 018 Reference ID: 7-018-20140306).

4.6 It should be noted that the NPPF has other aspirations on sustainability, promoting healthy communities, preventing pollution, green infrastructure and conserving the natural environment for which SuDS are also relevant. The multi benefits of flood management, climate change consideration, treatment of runoff, public open space and wildlife habitat opportunities can be met through a well designed and implemented SuDS scheme. With regard to NPPF Paragraph section 109 an appropriately designed SuDS, impropriating CIRIA SuDS Manual (C753) recommended treatment, is considered to treat the quality of surface water runoff effectively. The Environment Agency has standing advice that states in general they consider pollution of surface water runoff from residential development to be adequately addressed if SuDS have been provided for the runoff. Water quality treatment would not be met if traditional piped drainage schemes are promoted. If piped schemes are promoted as part of a SuDS scheme e.g. pipes connecting to geo-cellular crates or attenuation tanks, other SuDS components, such as permeable paving, swales, filter drains or strips should also be used to treat water prior to the final discharge.

4.7 On the 18 December 2014 the Secretary of State for Communities and Local Government, Eric Pickles made a Written Ministerial Statement on SuDS. This stated that Government **expects** local planning policies and decisions on planning applications relating to major development to ensure that SuDS for the management of run-off are put in place, unless demonstrated to be inappropriate. It was also restated that the current requirement in national policy that all new developments in areas at risk of flooding should give priority to the use of SuDS.

4.8 It was specifically acknowledged that the Written Ministerial Statement on SuDS should be taken into account in the preparation of local and neighbourhood plans and that it may be a material consideration in planning decisions. As such the Written Ministerial Statement on SuDS should be viewed as forming part of national planning policy.

4.9 No changes to the current planning enforcement mechanisms were made as part of the recent amendments to planning policy as any breach of a SuDS related planning condition can be enforced under the existing planning enforcement regime.

5. Planning Practice Guidance

5.1 Government updated its Planning Practice Guidance (PPG) as part of its SuDS and LLFA planning changes. These amendments and additions were made to the Flood Risk and Coastal Change section of the PPG. This section advises on how planning should take account of the risks associated with flooding and coastal change in plan-making and planning application processes.

5.2 The PPG highlights that developers and applicants need to consider flood risk to and from the development site. In doing so the PPG recommends that a broad approach of **assessing**, **avoiding**, **managing and mitigating** all forms of flood risk should be followed. A précis of this approach is set out below.

5.3 LPAs **assess** the flood risk posed to new development by;

- undertaking a Strategic Flood Risk Assessment (SFRA) for their area to inform the preparation of their Local Plan
- requiring developers to undertake a site-specific Flood Risk Assessment (FRA) to support their applications for planning permission for development that meets national and locally set thresholds.

5.4 LPAs **avoid** the flood risk posed to new development by;

- applying the 'Sequential Test' and, if needed, the 'Exception Test' to Local Plans to ensure that when selecting sites development is, as far as reasonably possible, located where the risk of flooding (from all sources) is lowest.
- applying the Sequential Test and if needed, the Exception Test for specific development proposals to steer development to areas with the lowest probability of flooding.

5.5 LPAs and developers **manage and mitigate** the flood risk posed to new development by;

- ensuring development is appropriately flood resilient and resistant, safe for its users for the development's lifetime, and will not increase flood risk overall.
- seeking flood risk management opportunities (e.g. safeguarding land) to reduce the causes and impacts of flooding (e.g. through the use of SuDS in developments).

6. Determining SuDS proposals on new developments

6.1 As part of the LPAs role in determining planning applications the LPA makes the final decision about the viability and suitability of the SuDS provision and whether it is proportionate to the level of flood risk affecting the site. Clearly this decision is made in the context of all the other policy and material considerations relating to the proposal.

6.2 In determining the SuDS element of planning applications the LPA will need to satisfy themselves that any SuDS proposals meet national and local policies. In addition, as set out in the Written Ministerial Statement they also need to;

- consult the LLFA on the management of surface water, (where appropriate).
- satisfy themselves that the proposed minimum standards of operation are appropriate.
- ensure through the use of planning conditions or planning obligations that there are clear arrangements in place for on-going maintenance (of SuDS) over the lifetime of the development.
- satisfy themselves that the SuDS are designed to ensure that the maintenance and operation requirements are economically proportionate.

6.3 The PPG states that the information sought by the LPA in answering the above requirements should be no more than necessary, having regard to the nature and scale of the development concerned.

6.4 The LPAs Local Plan also remains a key document in relation to directing development away from areas of high flood risk wherever possible, including areas at risk of flooding from surface water. It is expected that the evidence supporting the SFRA should be used by the LPA to inform their judgement both on the appropriateness of the proposed development and on the suitability of the proposed drainage system.

7. The LLFA role as statutory consultee to planning

7.1 LLFAs are unitary local authorities and County Councils who are responsible for managing flooding from

surface water, groundwater and ordinary watercourses. They were conferred this status by the Flood and Water Management Act 2010 and are required to deliver a strategy for local flood risk management in their areas, to investigate flooding and to maintain a register of flood risk assets. For Norfolk County Council this role is fulfilled by the authority's Flood and Water Management Team.

7.2 The LLFA role as statutory consultee to planning is created by the Town and Country Planning (Development Management Procedure) (England) Order 2015. Specifically Schedule 4 of this statutory instrument sets out the consultations before the grant of permission and paragraph (ze) states that the LLFA should be consulted on "major development with surface water drainage".

7.3 Major development is defined by Article 2(1) in Part 1 (Preliminary) of the Town and Country Planning (Development Management Procedure) (England) Order 2015 as development involving any one or more of the following;

(a) the winning and working of minerals or the use of land for mineral-working deposits;
(b) waste development;
(c) the provision of dwelling-houses where—
  (i) the number of dwelling-houses to be provided is 10 or more; or
  (ii) the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i);
(d) the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more; or
(e) development carried out on a site having an area of 1 hectare or more.

7.4 As a statutory consultee, in line with the Code of Practice relating to consultations on planning applications, the LLFA is expected to respond to the LPA within 21 days of receiving a consultation. The LLFA has to make a substantive response which can be one of the following;

(a) states that the consultee has no comment to make;
(b) states that, on the basis of the information available, the consultee is content with the development proposed;
(c) refers the consultor to current standing advice by the consultee on the subject of the consultation; or
(d) provides advice to the consultor.

7.5 For re-consultations following the submission of further information by an applicant, the LLFA will request the LPA to allow a further 21 days to provide bespoke advice to be given. The LLFA will endeavour to reply to statutory consultations within 21 days of being consulted. If the Local Planning Authority requires a reply sooner than this they should inform the LLFA at the point of consultation.

7.6 The LLFA as a statutory consultee also has a duty to report to Government on their performance in providing a substantive response within that deadline. The annual report to the Government should be provided no later than 1st July and must relate to the previous financial year (e.g. starting 1 April in the preceding year).

8. Involving the LLFA when determining planning applications

8.1 Government acknowledged the need for LPAs to access advice from LLFAs as part of its changes to planning. As part of its consultation on further changes to statutory consultee arrangements for the planning application process Government sought to avoid unnecessary over-consultation of the LLFA and to focus their statutory consultation role on development where LPAs require expert advice to determine the application. Governments response to this consultation confirmed it was for this reason that they limited the LLFA statutory consultee role to major development.

8.2 As part of the consultation it was suggested that LPAs may find it helpful to agree with the LLFA the circumstances and locations where LLFA advice should be sought about a planning application which raises surface water or other local flood risk issues on a non-statutory basis. It was noted that the risk of over-consultation could also be managed locally by the LLFA informing the LPA that it does not wish to be consulted in certain instances or through providing standing advice. This was reinforced by Governments New Burdens Assessment that stated it was expected that in the first year of their statutory consultee role the LLFA will develop standing advice. It is against this background that Part B of this document has been developed.

PART B – Norfolk Lead Local Flood Authority Approach

9. When to consult the Lead Local Flood Authority?

9.1 All consultations and correspondence should be directed to the LLFA inbox at llfa@norfolk.gov.uk Please note it is still necessary to consult other departments of the County Council as is current practice (e.g. for Highways matters). The Flood and Water Management Team will respond to any such consultations within 21 days of being consulted (see 7.4 – 7.6 above).

9.2 The thresholds at which we will provide bespoke advice will be periodically reviewed to ensure that the resources of the LLFA are focused where they can make the biggest contribution to mitigating and reducing local flood risk.

9.3 The current LLFA thresholds are:

Residential developments with greater than or equal to	**100 properties**
All developments with an area greater than or equal to	**2 hectares**

However, there are other high risk applications which we will aim to respond to under this general threshold (see Table 1 and text below). The LLFA will currently aim to provide bespoke consultation responses for the following application types:

- All residential development applications where the **number of units is greater than or equal to the LLFA threshold**. This would include individual applications of a multi-phased development that in total would be equivalent to or greater than the LLFA threshold.
- All other development applications with an **area greater than or equal to the LLFA threshold**.
- Any major development applications that have a **local flood risk** and are on an obvious flow route or include extensive surface water or fluvial flooding on the site. Significant ponding of surface water over a large proportion of the site boundary also falls within this category. Further information on screening applications against local flood risk is provided in Section 10.
- Sites adjacent to, or within, areas with **records of local flooding** (as evidenced and provided by the LLFA). Further information on screening applications against local records of flooding is provided in Section 10.

9.4 Standing advice is provided to assist the LPA in determining the remaining developments for which the LLFA would not expect to be consulted, including:

- **STANDING ADVICE 1**: Developments that may require consent for works within ordinary watercourses[1] (as represented by the Detailed River Network or Ordnance Survey mapping) on, or within 5 meters of the development sites[2]. Any applicant would still be required to apply separately to Norfolk County Council LLFA for consent. Further information on this process is available on our website.
- **STANDING ADVICE 2**: Major developments outside of the current LLFA thresholds set out above in 9.3. or developments identified as only having potential isolated shallow areas of surface water ponding on the Environment Agency's maps Risk of Flooding from Surface Water (RoFSW), which indicate local flow points on the site. These are unlikely to be of a depth to cross the threshold of buildings and are usually rationalised during development.
- **STANDING ADVICE 3:** Minor development for which the Lead Local Flood Authority will not be consulted, including domestic extensions, residential developments less than 10 dwellings, basements etc.

9.5 A matrix setting out when the LLFA should be consulted on applications is included as Table 1.

[1] An ordinary watercourse means any watercourse, ditch, stream, culvert or pipe; (except those regulated by IDBs or Main Rivers which are regulated by the EA).
[2] Please note in some instances the watercourse may be culverted or piped.

Table 1: Norfolk County Council LLFA Consultation Matrix

		Local Flood Risk Ranking		
		Local flood risk	**Records of local flooding (internal property flooding only as evidenced by LLFA)**	**No flood records or local flood risk**
Development Category	**Minor development**	No consultation required – standing advice applies	No consultation required – standing advice applies	No consultation required – standing advice applies
	Major development below LLFA thresholds	**Consult LLFA**	**Consult LLFA**	No consultation required – standing advice applies
	Major development above LLFA thresholds	**Consult LLFA**	**Consult LLFA**	**Consult LLFA**

9.6 It is envisaged that in the medium term the LLFA will offer pre-application advice to developers on a chargeable basis. Once resources and charging schedules are in place to support this element of the service, stakeholders will be informed.

9.7 Please note if LPAs determine applications contrary to statutory consultee advice they should inform the LLFA (by email at llfa@norfolk.gov.uk). Reporting these decisions aids the LLFA in monitoring the impact of planning on local flood risk in line with our Local Flood Risk Management Strategy.

9.8 Failing to adequately consider local flood risk or making adequate provision for SuDS within a development site may result in properties within the development being placed in an area at risk of flooding or alternatively may result in an increase in the risk of flooding elsewhere. This is contrary to the requirements of Paragraph 103 of the NPPF. As part of our responsibilities as LLFA, when and where incidences of flooding occur within buildings, we investigate the sources and contributing factors to that flooding incident. As part of this investigation, we would review how flood risk had been considered by the development management process.

10. How to screen applications based on local flood risk and local flood records?

Local flood risk

10.1 There are a number of data sources that are available to LPAs to screen planning applications when determining the need to consult the LLFA. The key datasets are;

- The Environment Agency's Risk of Flooding from Surface Water (RoFSW) maps- specifically the 3.33% annual probability and 1% annual probability extent maps downloadable from http://environment.data.gov.uk/ or online mapping at https://flood-warning-information.service.gov.uk/long-term-flood-risk/.
- Detailed Rivers Network which includes a large number of gravity watercourses but is less

reliable in pumped catchments and is available for LPA's to download at https://data.gov.uk/dataset/detailed-river-network-afa036

10.2 The LLFA should be consulted on development sites that have a current risk of flooding or have the potential to increase local flood risk. Example sites are shown in Figure 1. As a guide, the LLFA expects to be consulted on developments that (a) have a flow path passing though the development, (b) have a risk of surface water flooding along all or part of the development boundary, or (c) where there is a risk of flooding to adjacent properties. The LLFA does not expect to be consulted on applications where there are (d) isolated areas of surface water ponding identified on the site.

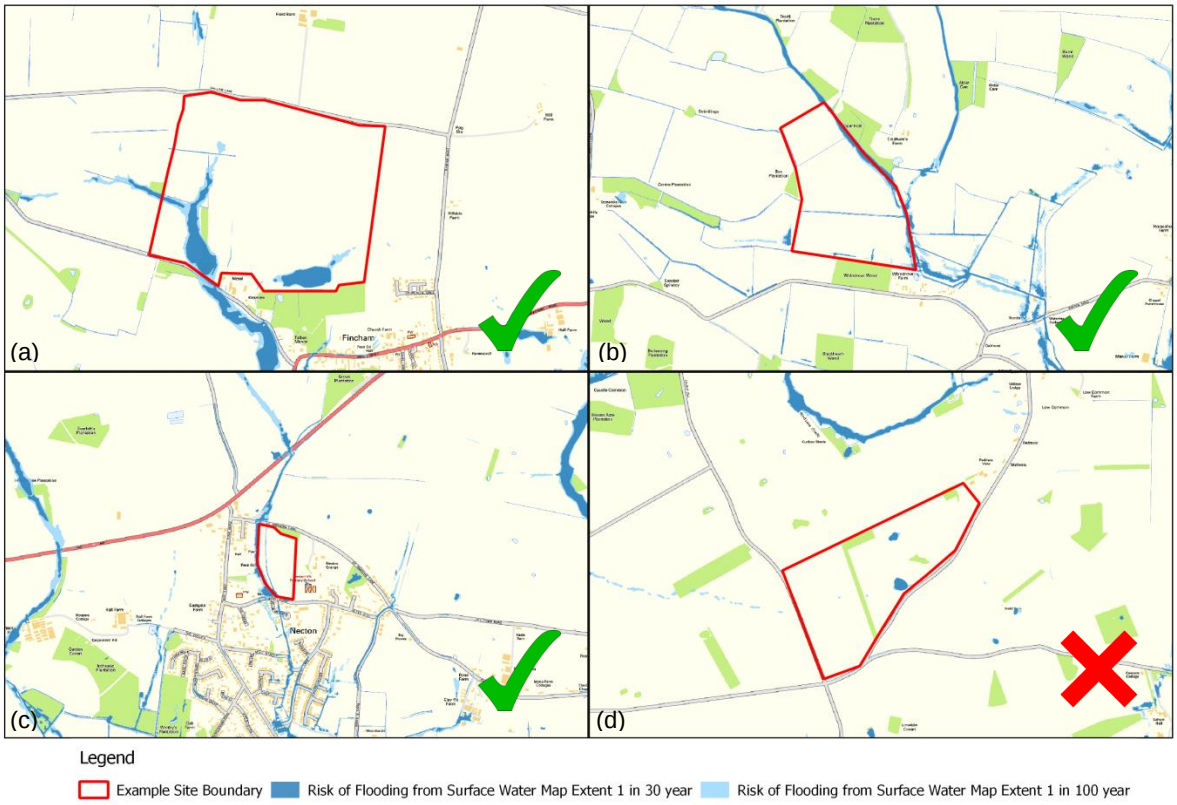

Figure 1: Local flood risk consultation examples

Records of local flooding

10.3 There are areas in Norfolk for which there are historic records of flooding. In these areas, the LLFA would expect to be consulted on applications. The LLFA holds a GIS database of recorded flood incidents in Norfolk which have been investigated and published. These records are restricted to those properties which have been internally flooded and will be made available to LPA's to add to their constraint searches for major developments. It is the intention that this dataset is updated twice a year as a minimum. Ad hoc updates may be circulated, following the collation of data in major flood incident.

10.4 Local representations may be provided alongside development applications that identify historic incidents of flooding on the site or flood risk issues in the vicinity of the site. The LLFA will review and acknowledge anecdotal evidence where surface water flooding has been experienced on the development site or if local representations identify previous incidents of surface water flooding in the highway or in properties adjacent to the development site. We do not, however, have sufficient resources to comment on all applications where there are anecdotal records of flooding but where no internal flood incidents have been investigated and published.

11. Other sources of advice for Local Planning Authorities

11.1 In addition to seeking advice from the LLFA, the National Planning Policy Framework Planning Practice Guidance recommends that LPAs consult the following stakeholders as appropriate;

(a) The relevant sewerage undertaker where a connection with a public sewer is proposed;

(b) The Environment Agency, if the drainage system directly or indirectly involves the discharge of water into a watercourse;
(c) The relevant highway authority for an affected road;
(d) The Canal and River Trust, if the drainage system may directly or indirectly involve the discharge of water into or under a waterway managed by them; and,
(e) An Internal Drainage Board (IDB), if the drainage system may directly or indirectly involve the discharge of water into an ordinary watercourse within a board's district.

12 LLFA Standing Advice

12.1 The standing advice referred to in the matrix included as Table 1 are set out below.

Standing Advice 1: Ordinary Watercourse Consenting

Norfolk County Council as the Lead Local Flood Authority (LLFA) for Norfolk is the drainage authority under the Land Drainage Act 1991 for regulating works on ordinary watercourses for the 80% of Norfolk outside of Internal Drainage Board (IDB) areas. If there are any works proposed as part of this planning application that are likely to affect flows in an ordinary watercourse, then the applicant is likely to need the approval of Norfolk County Council. It should be noted that this approval is separate from the planning process.

In line with good practice, the Council seeks to avoid culverting, and its consent for such works will not normally be granted except as a means of access. This is supported by Council Policy (OW4:Culverting) within Norfolk Local Flood Risk Management Strategy.

Guidance on this process as well as downloadable applications forms can be found on the NCC website page "Consenting works on ordinary watercourses". The web address is https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/information-for-homeowners/consent-for-work-on-ordinary-watercourses

Standing Advice 2 : Major Development below LLFA thresholds

To ensure that development is undertaken in line with Paragraph 103 of the National Planning Policy Framework the LLFA recommends that LPAs satisfy themselves of the following considerations prior to granting permission major development below LLFA thresholds:

1. *Is the development site currently at risk of flooding?*
   The risk of flooding on the current site should be acknowledged using national flood risk datasets such as the Environment Agency's Risk of Flooding from Surface Water maps. If any areas at risk of flooding are identified, these should be avoided from development in line with NPPF. Where this cannot be achieved a robust strategy should be provided that includes adequate flood resilience measures incorporated in the design.
2. *How does the site currently drain?*
   The method through which the site currently drains should be described, such as whether there are existing infiltration features, ordinary watercourses within or at the boundary of the development, or existing surface water sewer infrastructure.
3. *How will the site drain?*
   The proposed method for draining the site should be in accordance with the sustainable drainage hierarchy; with a preference for shallow (<2 m deep) infiltration measures, followed by measures to drain to a nearby watercourse, otherwise discharging to a surface water sewer. The last method of draining a site would be to either a combined/foul sewer, or via deep infiltration methods (>2 m below ground level).
4. *What sustainable drainage measures have been incorporated into the design?*
   Surface water drainage systems should replicate natural drainage processes as closely as possible. Sustainable Drainage Systems (SuDS), such as permeable paving, swales, green roofs/walls or attenuation basins should be preferred on all development sites ahead of conventional drainage measures (piped systems). Geocellular storage crates can provide elements of SuDS such as attenuating the amount of water to prevent an increase in flood risk, however without another SuDS component (swales, filter drains or strips) the do not provide any water quality treatment.

At a high level, the following evidence should be submitted by applicants for review by the LPA to demonstrate compliance with Paragraph 103 of the NPPF.

Local flood risk
The application submission should include an assessment of the risk of flooding to the development site from all sources. This should include a review against the national Risk of Flooding from Surface Water maps produced by the Environment Agency and should refer to the Strategic Flood Risk Assessment of the relevant LPA. Further detail is provided in **Section 14 of this guidance**.

Drainage destination
The submission documents should show how preference has been given to shallow (<2 m deep) infiltration drainage ahead of alternative drainage methods. Where infiltration drainage is proposed, infiltration testing should be provided as evidence to demonstrate that the site can drain. After shallow infiltration, preference should be given to discharge to a watercourse ahead of any connection to a sewer. Deep infiltration methods (including borehole soakaways or soakaways greater than 2 m in depth) are considered to be equivalent to a connection to a foul sewer on the drainage hierarchy. Further detail is provided in **Section 15 of this guidance**.

Infiltration testing
Infiltration testing should be undertaken at representative locations and depths across the proposed development site. The results of infiltration testing should be submitted alongside the application for review. Infiltration testing should be undertaken in accordance with BRE Digest 365, whereby three tests are undertaken in each location in quick succession (within 24 hours). A favourable rate for infiltration is better than 1×10^{-6} m/s or 0.0036 m/hr. A rate worse than this would indicate that only partial or no infiltration should be considered at a site. Further detail is provided in **Section 16 of this guidance**.

Runoff rate and volume
Development on greenfield land (i.e. not previously developed) should discharge at rates no greater than the existing greenfield rates for the 100% and the 1 % rainfall events. Development on brownfield land should aim to discharge at rates no greater than the equivalent greenfield rates for the site, but as a minimum should discharge at no greater than the existing rate. Developers should also consider the increase in the volume of runoff from the development where this cannot be used on the site or infiltrated. Further restrictions to the final runoff rates may be necessary to prevent an increase in the risk of flooding downstream from the site as a result of a greater volume of runoff. Further detail is provided in **Section 18 of this guidance**.

Climate change
The frequency and intensity of rainfall is predicted to increase as a result of climate change and an allowance for how this will affect the proposal will need to be factored into design. Applicants should refer to latest guidance published by the Environment Agency at https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances . For SuDS both 20% and 40% climate change scenarios should be tested. In addition rising sea levels may put some areas currently not at risk from tidal flooding into an area of risk. These areas should have been identified in the LPA's SFRA. Further detail is provided in **Section 19 of this guidance**.

Management and maintenance
Provision for long-term maintenance should be provided as part of any SuDS scheme submitted to the LPA. Model legal agreements that provide a mechanism for SuDS maintenance can be accessed on the CIRIA website at http://www.ciria.org. Further detail is provided in **Section 20 of this guidance**.

Resistance and resilience
Details of any flood proofing / resilience and resistance techniques that are included in the development should accord with `Improving the flood performance of new buildings' CLG (2007) available on the following link https://www.gov.uk/government/publications/flood-resilient-construction-of-new-buildings. Further detail is provided in **Section 21 of this guidance**.

Standing Advice 3 : Minor Development

To ensure that development is undertaken in line with Paragraph 103 of the National Planning Policy Framework the LLFA recommends that LPAs satisfy themselves of the following considerations prior to granting permission for minor development:

1. *Is the development site currently at risk of flooding?*
   The risk of flooding on the current site should be acknowledged using national flood risk datasets such as the Environment Agency's Risk of Flooding from Surface Water maps. If any areas at risk of flooding are identified, these should be avoided from development or adequate flood resilience measures incorporated in the design.
2. *How does the site currently drain?*
   The method through which the site currently drains should be described, such as whether there are existing infiltration features, ordinary watercourses within or at the boundary of the development, or existing surface water sewer infrastructure.
3. *How will the site drain?*
   The proposed method for draining the site should be in accordance with the sustainable drainage hierarchy; with a preference for shallow (<2 m deep) infiltration measures, followed by measures to drain to a nearby watercourse, otherwise discharging to a surface water sewer. The last method of draining a site would be to either a combined/foul sewer, or via deep infiltration methods (>2 m below ground level).
4. *What sustainable drainage measures have been incorporated into the design?*
   Surface water drainage systems should replicate natural drainage processes as closely as possible. Sustainable Drainage Systems (SuDS), such as permeable paving, swales, green roofs/walls or attenuation basins should be preferred on all development sites ahead of conventional drainage measures (piped systems). Geocellular storage crates can provide elements of SuDS such as attenuating the amount of water to prevent an increase in flood risk, however without another SuDS component (swales, filter drains or strips) the do not provide any water quality treatment.

Minor development commonly includes extensions that may build over existing surface water drainage infrastructure. We recommend that any existing drainage scheme is diverted rather than built over as this can lead to internal property flooding if not adequately designed. If it cannot be diverted a minimum of two inspection / maintenance manhole chambers should be provided at either end of the pipework which will be built over in discussion with the LPA and / or Building Control. If the drainage is Anglian Water Services infrastructure, suitable build-over agreements, in consultation with them, should be in place prior to seeking planning approval or starting construction.

Due to the risk of rapid inundation by floodwater, basements should be avoided in areas at risk of flooding. The LPA may hold additional guidance for basement extensions, e.g. within relevant Strategic Flood Risk Assessments (SFRAs).

13. Documentation to be provided to the LLFA

13.1 To enable Norfolk County Council to provide its response as a statutory consultee the developer should produce a drainage strategy for the development that includes the level of information corresponding to the stage of the application submitted. Table 2 provides a summary of the expected level of information to be submitted with applications. Further information may be requested to support the application where there are complex local issues. This information will draw on other information contained within the Planning Application but is required by the LLFA for all major developments to ensure that the standard of surface water management is appropriate. If a Flood Risk Assessment (FRA) is also required for a site then the surface water management proposals may be incorporated within this document.

13.2 The submitted information should consider how the surface water drainage strategy complies with the requirements of the SuDS Non-statutory Technical Standards.

13.3 It is important that the type of SuDS to be used on a development site is identified at concept design stage of the whole scheme. This information, as well as details of the extent and position of the SuDS, should be provided for both outline and full applications so it is demonstrated that the SuDS can be accommodated within the proposed development. It is not desirable to condition an application and leave the allocation of SuDS to a later application stage as this may preclude certain SuDS elements due to restrictions in the agreed layout. We would recommend that 10-15% of land be set aside within allocations to facilitate the implementation of SuDS and maintenance strips along river (blue) corridors. Whilst

maintaining a neutral or improved benefit to flood risk, SuDS / blue corridors can provide multiple biodiversity, amenity and water quality benefits (NPPF paragraph 99 and 114 and PPG Paragraph: 027 Reference ID: 8-027-2160211 / Paragraph: 028 Reference ID: 8-028-20160211).

Table 2: Level of information required for planning applications (from LASOO Guidance, 2015[3])

Pre-app[4]	Outline	Full	Reserved Matters	Discharge	Document to be Submitted	Link to PART C Technical Guidance
N/A	✓	✓			Flood Risk Assessment/Statement	14
N/A	✓	✓			Drainage Strategy/Statement & sketch layout plan	15
N/A	✓				Preliminary layout drawings	
N/A	✓				Preliminary "Outline" hydraulic calculations	19
N/A	✓				Preliminary landscape proposals	
N/A	✓				Ground investigation report (for infiltration)	18
N/A	✓	✓			Evidence of third party agreement for discharge to their system (in principle/ consent to discharge)	15
N/A		✓		✓	Maintenance program and on-going maintenance responsibilities	20
N/A		✓	✓		Detailed development layout	
N/A		✓	✓	✓	Detailed flood & drainage design drawings showing all dimensions (pipe numbers, gradients, sizes, locations, manhole details etc.) of every element of the proposed drainage system (pipes, swales, storage areas, ponds, etc)	15/18
N/A		✓	✓	✓	Full Structural, hydraulic & ground investigations	16/17
N/A		✓	✓	✓	Geotechnical factual and interpretive reports, including infiltration results	17
N/A		✓	✓	✓	Detailed landscaping details	
N/A		✓	✓	✓	Development Management & Construction Phasing Plan	20

[3] LASOO (2015) Non-Statutory Technical Standards for Sustainable Drainage: Practice Guidance
[4] Pre-application advice is not currently available from the LLFA

13.4 The Drainage Strategy should demonstrate how SuDS options have been considered with reference to the SuDS management train and hierarchy. Justification and evidence of how it will be achieved should be provided to document the chosen method(s) of surface water disposal.

13.5 For larger applications where there may be Master Planning or phased development it is particularly important that any submission considers how each phase will be delivered in relation to the surface water drainage strategy as a whole. In particular, highlighting where different phases rely on each another for connection to an infiltration basin or the wider watercourse network and how this will be implemented during construction and operation of the development.

13.6 Where an application is part of a larger site which already has planning permission it is essential that the new proposal does not compromise the drainage scheme already approved.

13.7 An application for **Outline** planning permission should include details of one workable solution for managing surface water. Where infiltration drainage is proposed, and infiltration testing in accordance with BRE 365 has not been undertaken, evidence or agreement in principal of an alternative surface water drainage discharge location proposal will be required. We would expect a Flood Risk Assessment to be provided with the application to consider the risk of flooding from all sources. This should identify any avoidance or mitigation measures to be employed during the detailed design of the site and note any constraints for the development of the site layout.

13.8 An application for **Reserved Matters or Full** planning permission should provide sufficient information to demonstrate that adequate space has been allocated within the development layout for the proposed surface water drainage measures and should include calculations as evidence to support the sizing of drainage infrastructure. For a Full application, we would expect a flood risk assessment be submitted to assess the risk of flooding from all sources. This should identify any avoidance or mitigation measures to be employed during the detailed design of the site and note any constraints for the development of the site layout. For a Reserved Matters application, we would expect the submitted documents to acknowledge any flood risk constraints on the site, such as existing areas at risk of flooding, and demonstrate how the development layout has been designed to avoid and minimise the risk of flooding. Where additional flood risk information has become available since the original planning application flood risk assessment, we would expect any Reserved Matters application to assess the risk of flooding against this updated information.

13.9 Information to **Discharge a Condition** should be submitted as one package in a Drainage Strategy rather than in piecemeal submissions. The summary report should include the methodology applied in the calculations for the scheme such as the global variables and any assumptions used. The report should also include an explanation of how the system operates, such as physical access arrangements for maintenance, establishment of legal rights of access in perpetuity and an appraisal of health and safety considerations for construction, operation and maintenance of the SuDS. In addition, a submission to discharge a drainage condition should include an assessment of the route which the water will take when leaving the site and whether the receiving watercourse or sewer network will be able to convey the proposed discharge. Where additional flood risk information has become available since the original planning application original flood risk assessment, we would expect any Discharge of Conditions application to consider the detailed design of the drainage system against this updated information.

13.10 The LLFA will respond to planning applications where we have been consulted. Where we feel there is no or inappropriate information supplied with a planning application to demonstrate achievable mitigation or advise that appropriate conditions could be set, we will object stating that the FRA or Drainage Strategy is inadequate and does not meet with policy or guidance. A summary of types of responses we will give to the LPA are as follows:

- **No Objection, with advice and recommendations** – This response will be sent if standing advice is provided or depending on the scale of development information has been submitted that has few concerns and conditions are not appropriate
- **Objection** – This response will be submitted where no FRA or drainage strategy has been provided or the documents submitted have significant information absent or is inappropriate to address the risks of flooding and/or to show that the proposed SuDS is achievable.
- **No Objection subject to conditions being attached to a consent** – This response will be submitted if appropriate information has been attached to the application to show that local flood risk has been adequately considered and at least one feasible SuDS scheme has been proposed. Enough information should be available to meet the PPG standards for setting conditions, that are:
    - necessary;
    - relevant to planning and;
    - to the development to be permitted;
    - enforceable;

  - precise and;
  - reasonable in all other respects.
- **Removal of our objection** – This response is likely be submitted where additional information has been submitted to address our concerns. For example, when information shows a condition can be discharged.
- **Objection in principal** – This response will be submitted if we do not see that there is a technical solution to the issues with the proposed development. We will highlight this at an early stage to give an applicant an opportunity to review the commercial viability of the development. We will provide a technical review of the proposal in the understanding that this does not prejudice the outcome.
- The LLFA will provide a "**no comment**" response if we have chosen not provide bespoke comments.

PART C – Technical Guidance

This technical guidance sets out the expectations of Norfolk County Council when reviewing flood risk assessment and surface water drainage submissions. The guidance is aimed at providing developers and their consultants with the locally specific technical knowledge to ensure that any submissions are aligned with the expectations of the LLFA. The technical guidance covers a limited range of areas and is expected to be built upon in further submissions. The technical areas considered in this version are:

- Local Flood Risk
- SuDS surface water drainage disposal destination
- Infiltration testing
- Runoff rate and volume
- Climate Change
- Water Framework Directive and Water Quality
- Management and Maintenance
- Resistance and Resilience

14. Local Flood Risk

14.1 All development should consider the existing risk of flooding from all sources; including main rivers, the sea, ordinary watercourses, surface water, groundwater, sewers and artificial waterbodies.

14.2 The NPPF and associated PPG (see Policy Box 1) sets out the national expectations for the assessment and management of flood risk on the site. The vulnerability of development (Table 2 and 3 of the Flood and Coastal change section of PPG) indicates the type of development that is appropriate according to the level of flood risk.

Policy Box 1: Local Flood Risk Guidance

"When determining planning applications, Local Planning Authorities should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where, informed by a site-specific flood risk assessment following the Sequential Test, and if required the Exception Test, it can be demonstrated:

*• Within the site, the **most vulnerable development** is located in areas of **lowest flood risk** unless there is overriding reasons to prefer a different location; and*

*• Development is appropriately **flood resilient and resistant**, including safe access and escape routes where required, and that any **residual risk can be safely managed**, including by emergency planning; and it gives priority to the use of sustainable drainage systems. "*

[Paragraph 103 of the National Planning Policy Framework]

*"Any development proposal should take into account the likelihood of flooding from **other sources**, as well as from rivers and the sea. The **sequential approach** to locating development in areas at lower flood risk should be applied to **all sources of flooding**, including development in an area which has critical drainage problems, as notified to the local planning authority by the Environment Agency, and where the proposed location of the development would **increase flood risk elsewhere**.*

[NPPF Flood Risk PPG Paragraph: 033 Reference ID: 7-033-20140306]

14.3 The sequential approach is a precautionary one, to avoid the risk of flooding in the first instance. We

support this approach as it is the most sustainable form of flood risk management. In accordance with PPG (Paragraph: 018 Reference ID: 7-018-20140306 and Paragraph: 019 Reference ID: 7-019-20140306), development should be steered to Flood Zone 1 (taking into account all sources of flooding). Sites in Flood Zone 2 and 3 should only be considered (employing the exception test where required – see NPPF paragraph 101 and 102) where there are no reasonable alternative sites, taking into account flood risk and the vulnerability of the land use proposed (PPG Table 2). Table 1 of PPG which defines flood zones (only based on river and sea flooding) can be supplemented with the following information.

- Indicative Environment Agency's Risk of Flooding from Surface Water (RoFSW) maps (extent, depth, velocity and Hazard layers) for both the 1% annual probability of flooding and 0.1% annual probability **to identify potential risk of flooding from surface water flow paths and / or significant ponding**.
- Indicative Environment Agency (EA) River and Sea Flood Maps for Planning for both Flood Zone 2 and 3 – or up to 1% annual probability of flooding and 0.1% annual probability **to identify potential risk of flooding from ordinary watercourses**. Where no mapping of fluvial flood risk (watercourses with catchments smaller than $3km^2$), or there is uncertainty within the EA mapping, the RoFSW map is used as a proxy and used consistently with river flood mapping probability. To avoid doubt, the 1% annual probability flood is deemed equivalent to Flood Zone 3 and 0.1% annual probability flood is equivalent to Flood Zone 2 (as per Planning Practice Guidance – Flood Risk And Coastal Change Paragraph: 018 Reference ID: 7-018-20140306).

14.4 For the avoidance of doubt, the LLFA will also use the following sources of information to assist with any review of an application.

- Historical information from the LLFA using published flood investigation report locations which highlight those properties which have already flooded both externally and internally. Reports of flooding that are yet to be investigated and published as well as Anglian Water records of reported locations of sewer flooding will also be reviewed as part of a precautionary approach to reviewing applications.
- Current Strategic Flood Risk Assessments (SFRA), Surface Water Management Plans (SWMP) or previous Flood Risk Assessments (FRA) / Drainage Strategies (DS) which the LLFA has been consulted on through the planning process. This would help with other sources of information such as the location of critical drainage catchments and reported groundwater flooding incidences.
- Other relevant information such as Ordnance Survey current MasterMap; Ordnance Survey Historical Maps (First Edition 1886, Second Edition 1905); Aerial Photography (1988 or 1946); Google Street View or the Detailed River Network (DRN) mapping to highlight surface watercourses or structures; Norfolk County Council produced sub-catchment identification; local officer experience or representations made by the public to the LLFA.

14.6 Three key criteria should be met to protect the public from flooding, both on site and in downstream areas. These are:

1) Protection against flooding from watercourses.
2) Protection against flooding from the drainage system.
3) Protection against flooding from overland flows (from sources within or external to the site).

British Standard BS 8582:2013 Code of Practice for surface water management for development sites also states in section 6.2.2 the following:

- The layout of the development site and drainage system should be designed so that surface water that enters the site from off-site sources is conveyed safely around or through the site, without compromising the level of service of the proposed drainage system or introducing unacceptable additional risk on-site or downstream
- Where run-off from off-site sources is drained together with the site run-off, the contributing catchment should be modelled as part of the drainage system in order to take full account of the additional inflows.
- Where run-off from off-site sources is conveyed separately to the proposed drainage system the flood risk should be managed in accordance with BS8533:2011 Assessing and managing flood risk in development – code of practice.
- The layout of the development site and the drainage system should be designed so that natural low-lying areas and overland conveyance pathways are used to manage surface run-off, where appropriate, where they do not pose and unacceptable risk to the new development or downstream areas.

14.5 If there is a risk of flooding from an ordinary watercourse or a surface water overland flow route, the LLFA

expects that this risk is assessed (and where appropriate modelled) to show how More Vulnerable Development (as per Table 1 of PPG) is placed outside of the risk of surface water flooding for the 1% annual probability rainfall event plus climate change allowance (equivalent to the requirements of fluvial Flood Zone 3). In the case of overland flow routes, if the areas cannot be avoided, sufficient information should be provided to demonstrate how this overland flow route will be managed within the site without creating a risk to people or property and not increasing the risk elsewhere. We would suggest that public open space is the most appropriate land use for this purpose. If roads or car parks are intended to be used, we would request that the hazard of this management be fully considered, the drainage of these impermeable areas be sized to accommodate the additional offsite flows (see section 14.6 above) and flood depths be minimised in line with Table 12.3 of CIRIA Design for Exceedance in Urban Drainage (C635). This states depth of water in flood events greater than 3.33% annual probability should be minimised to 100 mm on minor roads restricted to 30 mph and 200 mm within car parks. We expect that it can be shown that velocities of flood water will be minimised in these instances and do not impede safe access or egress from the area. This would be in line with the DEFRA / Environment Agency Hazard to People Classification/Rating. In addition, we would expect that sufficient mitigation is provided in the form of raised finished ground floor levels on residential properties to account for exceedance routes in rainfall events with a probability greater than 1% annual probability (see section 21 for further information)

14.6 Without early consideration of local flood risk in the planning process the viability for the site can be compromised as the layout (and hence density of housing) may require significant alteration.

14.7 Every opportunity to improve an existing local flood risk issue is encouraged (see LLFA policy within the Local Flood Risk Management Strategy), particularly within those areas defined by the Environment Agency or the LLFA as a Critical Drainage Area or Catchment. These areas have been highlighted as having particular serious existing flood risk problems and new or redevelopment could provide improvements through careful consideration of available land and proposed surface water drainage scheme. Within any critical drainage catchment we expect any brownfield development to limit surface water drainage discharge as close to greenfield rates as possible. Retaining per development 100% runoff from impermeable areas is unlikely to be acceptable.

15. SuDS Disposal Destination

15.1 Surface water drainage should be managed in a way that replicates the natural drainage processes on the site as closely as possible. All sites will have different constraints and varying degrees of existing drainage provision and condition. However, any proposed strategy for the management of surface water should utilise methods as high up the drainage hierarchy as possible.

Policy Box 2: Drainage Hierarchy

National Planning Policy Framework Flood Risk and Coastal Change Planning Practice Guidance

"Generally the aim should be discharge surface runoff as high up the following hierarchy of drainage options as reasonably practicable:

1. Into the ground (infiltration)

2. To a surface water body;

3. To a surface water sewer, highway drain or another drainage system;

4. To a combined sewer."

[Paragraph: 080 Reference ID: 7-080-20150323]

15.2 It should clearly be demonstrated in any submission how the proposals follow the hierarchy. Adequate justification and evidence, will be required should surface water be proposed to be discharged using methods lower down the hierarchy than infiltration. We expect that at least one option is demonstrated to be feasible can be adopted and properly maintained and would not lead to any other environmental problems. This is supported by several documents including, CIRIA SuDS Manual (C753), Building Regulations Part H, British Standard BS8582:2013 and LASSO Practice Guidance.

15.3 At least one feasible proposal for the disposal of surface water drainage should be demonstrated and in all cases supported by the inclusion of appropriate information. Infiltration should be considered first and this should be supported by BRE365 testing or equivalent (see section 16). If infiltration cannot be

undertaken or infiltration results are proven to be unfavourable (worse than 1 x 10-6 m/s or 0.036m/hr), we would expect to see in principal agreements for an alternative solution for the next available discharge location in the hierarchy. If this is connection to a watercourse within the site boundary this should be shown on a plan, however if there is a need to cross third party land evidence e.g. in principal agreement from a landowner to connect across land to a surface watercourse should be provided. We would also require evidence, such as a site walk over or photographs, to illustrate that a watercourse is connected to the wider network and able to convey water away from the development site. In Norfolk, there are many localised drainage soakaway ditches which are cut off from a wider watercourse network (e.g. are "blind"). These watercourses would not be a suitable location to accept the siting of a long term positive surface water drainage connection.

15.4 When no other practicable alternative exists to dispose of surface water other than a public sewer, the Water Company, the Highways Authority or their agents should confirm that there is adequate spare capacity in the existing system taking future development requirements into account.

15.5 NCC as LLFA would not see deep infiltration (greater than 2 m below ground level) or borehole soakaways as infiltration systems that meet the requirements of the first level of the drainage hierarchy. Whilst they can provide important groundwater recharge via infiltration at depth it does not mimic the natural drainage system as would shallow infiltration. We would only expect it to be used as a final option for the location of discharge of surface water on a par with a sewer.

15.6 It is our understanding that the Environment Agency would comment on issues with regard to potential groundwater pollution. They have clear guidance in their published Groundwater Protection Policy GP3 (in particular G1 and G9 or regarding SuDS G10, G11, G12 and G13). They state that the use of deep infiltration systems may be appropriate in some cases if it is clear that there are no other feasible surface water disposal options. The Environment Agency would consider the pollution potential following their risk assessment process. Whilst the Environment Agency may agree to a deep infiltration soakaway, they no longer have the role to advise the LPA on surface water drainage options and so the LLFA, would still require a clear justification to demonstrate why the SuDS hierarchy cannot be followed (see above).

15.7 If a deep infiltration soakaway is proposed, there is no other feasible way to discharge surface water and this is acceptable to the Environment Agency in groundwater pollution prevention terms, the LLFA would still expect that shallow or surface SuDS components be considered in the drainage scheme prior to the borehole being the final discharge point. This design of drainage would be used to provide the necessary protection to the water environment and to incorporate the multi-benefits in line with the SuDS philosophy of surface water attenuation, treatment train, amenity and biodiversity benefits.

15.8 Only clean residential roof water can be directly discharge to the water environment (including any watercourse or soakaway) without treatment.

16. Infiltration Drainage and Testing

16.1 The LLFA would expect all submitted drainage strategies to include an assessment of the suitability of the underlying geology to discharge collected surface water to the ground via infiltration. Information could include a ground investigation report, British Geological Survey (BGS) superficial and bedrock geological mapping, or other available information. Where infiltration drainage considered possible, LLFA would expect additional information to be submitted to provide evidence to support the assumed infiltration rate(s) across the site (see Table 3 for guidance).

16.2 At outline stage, we would prefer the submission of infiltration test results should infiltration drainage be the chosen method for the site. Should infiltration testing not be possible, in line with the CIRIA SuDS Manual (C753) Section 25.2.1, an alternative strategy for drainage the site (a Plan B) should be detailed in the drainage strategy and should include the proposed location of any discharge points, the proposed discharge rate, as well as the volume and location of any required storage.

16.4 For full permission, reserved matters or discharge of conditions applications where infiltration drainage is proposed, we would expect the results of infiltration testing to be provided as evidence to support the calculation assumptions in the detailed design of the drainage system.

16.5 If only indicative infiltration testing is provided, we will expect this undertaken again prior to a detailed design stage, at the location (if large basins are proposed along the length) and depth of the proposed infiltration structures.

16.6 To protect ground water from pollution, any infiltration structure must be shown to be able to be constructed 1.2 m above the anticipated seasonally high groundwater level. Information to support this could include geotechnical trial pits or borehole on site to demonstrate that groundwater is not present at the required depth.

Table 3: Norfolk County Council Infiltration Testing Requirements for Applications

	Application Stage	
	Outline	**Full / Reserved Matters / Discharge of condition**
Strategy promotes infiltration	Indicative infiltration testing required or alternative drainage strategy	Infiltration testing at depth and location of proposed structures required

16.7 Infiltration testing to support surface water drainage strategy calculations should be undertaken in line with BRE365 guidance (see Policy Box 3) or equivalent. We consider the following to be a good practice minimum requirement for infiltration testing in Norfolk:

- A minimum of **three tests** undertaken in quick succession at each location (as a minimum in the same day);
- The **lowest value** obtained across the site, or across representative geology, to be used for calculations;
- The **depth** of testing to be **representative** of drainage proposals (multiple depths may be required to represent different drainage methods i.e. permeable paving and soakaways);
- Any design of infiltration structure should ensure that it can **discharge from full to half-volume within 24 hours** in readiness for subsequent storm inflow (CIRIA SuDS Manual (C753) section 25.7 and BRE365). Where the infiltration storage is designed to accept a storm event greater than 3.33% annual probability, large attenuation may be required. Where there is adequate justification (i.e. not in a high flood risk area), we may accept longer half drain down times if additional freeboard can be provided e.g. enough storage to accept a subsequent 10% annual probability storm event; and
- One uncertainty for the design of infiltration systems is the infiltration rate, which may reduce over time. Particularly if there is no pre-treatment or there is poor maintenance. To account for this we expect a **safety factor** to be incorporated into the design, where the factor used is a judgement based on the consequence of failure of the drainage system. Table 25.2 of CIRIA SuDS Manual (C753) should be consulted and used. If the drainage system within a new development is to be offered to Norfolk County Council Highways Authority to be considered for adoption, the calculations should use the middle column of Table 25.2.

Policy Box 3: Infiltration Testing Guidance

BRE 365: Soakaway Design (2016)

- *Excavate a soakage trial pit to the same depth as anticipated in the full-size soakaway.*
- *The inflow should be rapid so that the pit can be filled to its maximum effective depth in a short time, i.e. to the design invert level of the drain to the soakaway.*
- *Fill the pit and allow it to drain three times to near empty [in quick succession]; each time record the water level and time from filling, at intervals sufficiently close to clearly define water level versus time*
- *Calculate the soil infiltration rate from the time taken for the water level to fall from 75% to 25% effective storage depth in the pit, using the lowest soil infiltration rate value of the three test results for design .*
- *In general, soakage trials should be undertaken where the drain will discharge to the soakaway. The use of full depth and of repeat determinations at locations along the line of trench soakaways is very important when soil conditions vary.*

17. Infiltration constraints

17.1 The scope for using infiltration may be reduced where soils have poor infiltration capacity, where groundwater levels are high (see section 16.6 above), there is a groundwater source protection zone constraint (particularly SPZ1), there is ground contamination where infiltration would mobilise pollutants or where ground conditions present particular risks of subsidence from voids and instability in the underlying geology. Chapter 8 of the CIRIA SuDS Manual (C753) considers how to design SuDS in areas with particular constraints.

17.2 Issues regarding the suitability of development (particularly housing) on a particular geology are for a suitably qualified structural engineer to consider during the design in a particular location. The LLFA are not aware of any widespread subsidence issues across Norfolk except in some parts of Norwich City. It is recognised that areas of Norwich are built on chalk where there have been previous mine workings and some are especially prone to subsidence. We would not generally consider in detail the impact of a proposed surface water drainage system on the ground stability on the site due to potential solution features unless we are aware of particular issues in the area. In general, we do not see that traditional ring (or point) soakaways as suitable in these locations due to the potential for settlement, however, not all SuDS should be automatically precluded but designed in proportion to the level of risk.

17.3 Shallow infiltration, such as permeable surfaces, may be suitable in areas of known subsidence and close to properties. This is because permeable surface infiltration is shallow, infiltrates over a wide area and replicates runoff processes in a similar way as it would prior to development. We would hence encourage any developer to identify the risk of subsidence and propose suitable SuDS features considering the level of risk during detailed design. We highlight that Section 25.2.3 of the CIRIA SuDS Manual (C753, 2015) states that, "*the potential risk of adverse effects from infiltrating water will depend on the volume of water being discharged along with the depth and plan area of the infiltration system. The smaller the area of the system in relation to the drained area, the greater the risk.*" The features which have the potential to cause the greatest impact where the geology is susceptible to solution features can be private dwelling soakaways. A scheme may therefore, during detailed design, need to exclude large or individual private soakaways from the surface water drainage strategy in favour of planar infiltration systems such as permeable paving, wide swales and shallow infiltration basins. Further guidance can be found in CIRA SuDS Manual (C753) chapter 8, section 20.3, chapter 25 and the SUSDrain factsheet, http://www.susdrain.org/files/resources/fact_sheets/09_12_fact_sheet_suds_close_to_buildings.pdf.

17.3 Norwich City Council has development management policies set for surface water flooding and drainage and subsidence (DM5, DM11). These policies state that "where it is demonstrated that permeable surfaces are likely to be unacceptable for these reasons; hard surfaced paving may be accepted. In these cases developers will be encouraged to explore alternative means of managing surface water runoff within the development site. Where soils are well drained, impermeable surfaces will only be permitted where it is demonstrated that there is an overriding need for such a surface." We would expect that an appropriately qualified geotechnical engineer would provide a risk assessment to consider subsidence in high risk areas.

18. Runoff Rate and Volume

18.1 The rate of runoff from a development should be restricted in line with the SuDS Non-Statutory Technical Standards (see Policy Box 4). Brownfield sites are strongly recommended to discharge at the original pre-development (greenfield) runoff rate where possible. If not, a significant reduction in the current rate of discharge should be achieved and agreed with the relevant drainage body (LLFA, IDB or Anglian Water). It is unlikely to be acceptable to maintain 100% runoff when considering sustainable redevelopment. This would be particularly important in areas which have been defined as Critical Drainage Areas (by the Environment Agency) or Critical Drainage Catchments (by the LLFA in conjunction with a District Council).

18.2 Areas of permeable and impermeable land for both the existing site and the proposed development are to be used to assess the change in surface water runoff. The site characteristics such as how surface water management is functioning on the site at present should be investigated.

Policy Box 4: Runoff Rate

SuDS Non-Statutory Technical Standards (2015)

S2. For greenfield developments, the peak runoff rate from the development to any highway drain, sewer or surface water body for the 1 in 1 year rainfall event [100% annual probability] and the 1 in 100 year rainfall event [1% annual probability] should never exceed the peak greenfield runoff rate for the same event.

S3. For developments which were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event [100% annual probability] and the 1 in 100 year rainfall event 1% annual probability] should be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event.

18.3 Consideration should be given to sub-catchments which may exist on the site. Calculations for greenfield runoff rates for individual watercourses should be based on the proposed area of impermeable land within its sub-catchment. It may be possible to divert water to a different sub-catchment only if the greenfield runoff rate for that watercourse is not exceeded.

18.4 It is unlikely to be acceptable to transfer water from a site which would naturally drain to a different watercourse catchment. If the fall of the site includes part of a catchment which natural drains to another watercourse, we would expect any proposed discharge rate to be limited to the greenfield of the “natural” catchment area. This may necessitate large volumes of water being stored on site to achieve these rates.

18.4 If discharging into an Ordinary Watercourse outside an IDB area where there are known flooding issues, it should not be assumed that the drainage scheme can be free flowing. We would expect that a flood flow e.g. bank full would act as an outfall constraint in modelling calculations.

18.5 Where there are issues of known history of flooding or capacity constraints within a watercourse e.g. Dereham Stream, greenfield runoff rates would need to be carefully considered. It is unlikely we would accept a proposed runoff rate that is greater than the greenfield equivalent (100%, 3.33% and 1% annual probability event or QBAR) without a robust assessment that the flood risk is not increased elsewhere. This would include any proposed design suggesting a discharge of 5 l/s to avoid blockage where there are lower calculated greenfield runoff rates. It is understood that 5 l/s is suggested as a minimum design for pipe outlets where sedimentation may be an issue in line with Sewers for Adoption rather than inclusion of SuDS treatment train and outlet control devices (Chapter 28 of CIRA SuDS Manual (C753)). There are also many priority vortex control devices which can limit discharges below 5l/s which have no reported problems of blockage. Were discharge of surface water should be discharged to ground but cannot be due to constraints such as contaminated land, greenfield rates would also likely produce a low greenfield runoff rate due to the soil type. The LLFA will consider proposals on a site be site basis and agree a rate between 1 to 2 l/s/ha based on other constraints (as in Section 3.3.2 of CIRA SuDS Manual (C753)).

18.6 Drainage strategies must also consider the potential increase in the volume of runoff from a development as a result of increases in the area of impermeable surfaces. Although runoff rates may be restricted to equivalent greenfield rates, the duration over which the site could discharge at this rate is likely to increase (as shown in Policy Box 5).

Policy Box 5: Runoff Volume

CIRIA SuDS Manual (C753)

"Peak rates of surface water runoff discharged from a development (i.e. relatively impermeable) site, if left uncontrolled, are normally significantly greater than from the site in its greenfield state. This is because most of the runoff drains off the surfaces of the developed site much quicker than the greenfield site and there is much more runoff, as less water is able to penetrate the ground or be intercepted in other ways."

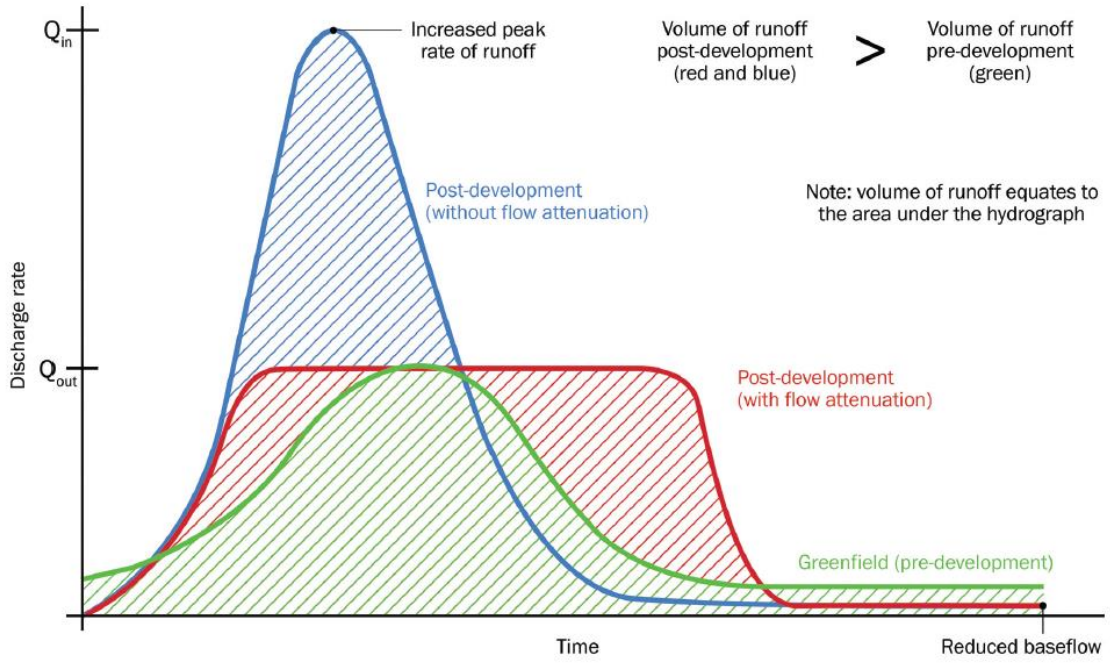

Figure 3.1 Example of a runoff hydrograph

[Reproduced from C753 Suds manual Section 3.1.1 ©CIRIA 2015]

18.7 Where it is not possible to use or dispose of the additional volume of runoff on the site (i.e. through infiltration or water re-use), we would expect that the final runoff rates from the development be restricted further to ensure compliance with Standard S6 of the SuDS Non-Statutory Technical Standards (2015).

18.8 The CIRIA SuDS Manual presents two approaches for the consideration of runoff volume from a development site:

- Approach 1 (Complex) – The additional volume (i.e. the increase from the volume calculated for the greenfield 1% annual probability, 6 hour event as stated in Section 24.10 of the CIRIA SuDS Manual 2015) should be discharged at a rate of 2l/s/ha. or less while still allowing greenfield peak runoff rates for the greenfield runoff volume.
- Approach 2 (Simple) – All runoff from the site should be discharged at a rate of 2l/s/ha or the annual average peak flow rate (QBAR), whichever is the greater.

18.9 Although Approach 2 will require a greater volume of storage than Approach 1, this approach is preferred in Norfolk.

18.10 If complex controls are to be used for control of discharge rates, calculations for the Greenfield runoff rate should be provided for the 100%, 3.33% and 1% annual probability events.

18.11 An assessment of the volume of attenuation storage that would be required on site should be submitted. This should be based on the 1% annual probability critical storm duration with climate change for the site and the allowable discharge rate. FSR (Flood Studies Report) rainfall data should be used for storm durations less than 1 hour and FEH (Flood Estimation Handbook) rainfall data should be used for storm

durations greater than 1 hour when identifying the critical storm duration. The method of attenuation should be identified and located on a plan of the site.

18.12 Urban Creep should be considered in any application to account for increases in impermeable surfaces throughout the lifetime of the development. This should be limited to residential development only and use the allowances shown in Table 4 (LASSO Practice Guidance). Where the inclusion of the appropriate allowance would increase the total impermeable area to greater than 100%, 100% should be used as the maximum

Table 4: Urban Creep Allowances

Residential Development Density Dwellings per hectare (ha)	Change Allowance % of Impermeable Area
≤ 25	10
30	8
35	6
45	4
≥ 50	2
Flats & Apartments	0

19. Climate Change

19.1 All flood risk assessments and surface water drainage strategies are now expected to incorporate the updated Environment Agency climate change allowances for peak river flow and rainfall intensity. This guidance supersedes the previous NPPF climate change allowances.

19.2 The information for the Anglian Region and transitional arrangements for use within the planning process can be found at https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances. We highlight that peak river flow climate change allowances should be considered for ordinary watercourses as well as main rivers.

19.3 Further to this, the new allowances should be used to update any detailed design at reserved matters or discharge of conditions planning applications following an outline planning approval where the previous allowances may originally have been applied.

Policy Box 6: Flood risk assessments: climate change allowances

"Making an allowance for climate change in your flood risk assessment will help to minimise vulnerability and provide resilience to flooding and coastal change in the future.

The climate change allowances are predictions of anticipated change for:

- *peak river flow by river basin district*
- *peak rainfall intensity*
- *sea level rise*
- *offshore wind speed and extreme wave height*

They are based on climate change projections and different scenarios of carbon dioxide (CO2) emissions to the atmosphere. There are different allowances for different epochs or periods of time over the next century."

[https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances]

19.4 For ordinary watercourses we expect anyone undertaking a flood risk assessment to review Table 1 (peak river flows) for the Anglian Region and again assess the lifetime of the development and the vulnerability of the proposed land use. The appropriate allowances (explained in text under Table 2) can be applied to any modelling to assess the flood risk from an ordinary watercourse.

19.5 For the example of housing developments, we would anticipate the central allowance (a 20% increase) is used in the initial design of any surface water drainage system including SuDS, however, the upper end (a 40% increase in rainfall intensity) should also be tested to ensure that there is no additional mitigation required to protect people and property. This upper end scenario could inform any additional mitigation which might be required to prevent an increased risk of flooding such as additional freeboard allowances on drainage infrastructure and / or housing finished ground floor levels.

Table 5: Extract from the Environment Agency Table 1 peak river flow allowances by river basin district (use 1961 to 1990 baseline), 2016

River basin district	Allowance category	Total potential change anticipated for the '2020s' (2015 to 2039)	Total potential change anticipated for the '2050s (2040 to 2069)	Total potential change anticipated for the '2080s' (2070 to 2115)
Anglian	Upper end	25%	35%	65%
	High central	15%	20%	35%
	Central	10%	15%	25%

Table 6: Extract from the Environment Agency Table 2 peak rainfall intensity allowance in small and urban catchments (use 1961 to 1990 baseline), 2016

Applies across all of England	Total potential change anticipated for the '2020s' (2015 to 3039)	Total potential change anticipated for the '2050s' (2040 to 2069)	Total potential change anticipated for the '2080s' (2070 to 2115)
Upper end	10%	20%	40%
Central	5%	10%	20%

20 Water Framework Directive and Water Quality

20.1 It is recognised that this guidance does not cover this issue in any detail as we are still working with other Risk Management Authorities to develop it.

20.2 The Environment Agency have standing advice that in general they consider pollution of surface water runoff from residential development to be adequately addressed if SuDS have been provided to manage the runoff. Water quality treatment would not be met if traditional piped drainage schemes are promoted. If piped schemes are promoted as part of a SuDS scheme e.g. pipes connecting to geo-cellular crates or attenuation tank(s), other SuDS components, such as permeable paving, swales, filter drains or strips should also be used to treat water prior to the final discharge.

20.3 Only clean residential roof water can be directly discharge to the water environment (including any watercourse or soakaway) without treatment. The use of oil interceptors are not generally seen as a treatment step in SuDS but could be considered as a pre-treatment stage.

20.4 An applicant should review Section 4 and 26 of CIRIA SuDS Manual (C753), Tables 4.3 and 26.1 in particular, to risk assess the development and likely water quality treatment required as mitigation. In general, housing developments would need to assess if the simple index approach (Section 26.7.1 of the CIRIA SuDS Manual (C753) is as suitable assessment. We would expect this assessment to be included with an application.

21. Management and Maintenance

21.1 The management and maintenance of SuDS should appropriately account for the construction, operation and maintenance requirements of all components of the drainage system (surface and sub-surface). Applicants should sufficiently consider the likely maintenance requirements of new and existing infrastructure, over its design life including the provision of funding during the feasibility and planning

stages of a scheme (in accordance with CIRIA (C753) Part E, Chapter 32, 2015)). It is important that maintenance is also considered in the design of the drainage system and the development site to account for the requirements of undertaking all stages of maintenance work such as ease of access whether this is for personnel, vehicles or machinery.

Policy Box 7: Management and Maintenance

House of Commons Written Statement (HCWS161): Sustainable drainage systems

"in considering planning applications, local planning authorities should consult the relevant lead local flood authority on the management of surface water; satisfy themselves that the proposed minimum standards of operation are appropriate and ensure through the use of planning conditions or planning obligations that there are clear arrangements in place for ongoing maintenance over the lifetime of the development."

21.2 We therefore require, in accordance with the Written Ministerial Statement, PGG and the SuDS Manual, applicants to provide a management plan and maintenance schedule of work detailing the activities required and who will adopt and maintain the surface water drainage features for the lifetime of the development. The operation, management and maintenance of such systems should be accounted for in any proposed drainage works as early as possible.

21.3 Further guidance regarding the typical key operation and maintenance activities for each type of SuDS component are indicated in Table 32.1 of the SuDS Manual (2015). Further consideration of the frequency of such tasks should be provided.

21.4 Where it is proposed that a community will be adopting SuDS, maintenance plans and schedules should be clearly communicated to any future property owners. This should be done in accordance with section 12 and 11.4 of British Standard BS8582:2013. Such plans should further explain the consequences of not carrying out the maintenance.

21.5 There are several options for adoption and maintenance of SuDS and include:

- Anglian Water will consider adoption of a scheme designed to their standards set out in their manual (further information can found on their website at http://www.anglianwater.co.uk/developers/suds.aspx)
- An Internal Drainage Board will maintain certain watercourses of arterial importance within the IDB Internal Drainage District that are designated by the Board as 'Main Drains' of 'District Drains'. All watercourses within the IDB area generally remain the responsibility of the riparian owner irrespective of their designation as a 'Main Drain'. IDBs also may consider adopting a drainage scheme associated with new development if the site falls within their IDB area. (Details of how to contact the IDB can be found at http://www.ada.org.uk/idb_members_map.html)
- Norfolk County Council Highways Authority will consider adoption of SuDS and drainage schemes which only drain a highway (not additional housing or open space areas). Further information can be found at https://www.norfolk.gov.uk/roads-and-transport/roads/highway-boundaries-new-private-and-adopted-roads/adopted-and-private-roads
- Adoption could be also agreed through a Section 106 Agreement with a Borough, District Town or Parish Council. This could be combined with any public open space maintenance agreement.
- A third party company could be established to adopt and maintain a SuDS Scheme across the whole or part of a development.
- Individual property owners can become responsible for management and maintenance where it falls within their property boundary, however this would not cover any public or open space.

21.6 Where ordinary watercourses or other surface water features are bounding or within the development site, these should also be included within a management plan and maintenance schedule. Were new properties bound a watercourse, each property would have riparian owner responsibilities to undertake maintenance and this should be clearly highlighted to future property owners or tenants. An alternative is to provide other management arrangements for these features such as encompassing them in the responsibilities of any third party company established for the site. A maintenance buffer zone of 10 m is advocated by British Standard BS 8533:2011(section 5.3.3) but discussions should be held with the appropriate

regulatory authority (including an IDB) to discuss requirements. We recommend that at least a 10 m buffer should be allocated to an ordinary watercourse outside of IDB areas to allow for access for maintenance, in line with British Standards.

21.7 Many development sites are constructed on land which may have had an agricultural use. No dwelling should be constructed over an existing culvert that is to remain active and any field drains intercepted on the boundary of the development should be should be diverted so overall land drainage discharge can be maintained.

22 Resistance and Resilience

22.1 Safe access and egress through a new development site should be maintained in accordance with PPG (Paragraph: 039 Reference ID: 7-039-20140306). We expect that any source of flooding is considered and that any areas expected to flood are managed in accordance with DEFRA / Environment Agency Hazard to People Classification/Rating. It should be noted that there are currently no flood warnings provided to notify communities / residents of predicted surface water flooding events. The rapid inundation often experienced with surface water flooding, especially those events caused by convective thunder storms, means that careful consideration should be given to development proposed in areas identified at risk from Environment Agency Mapping.

22.2 The Guidance document "Improving the Flood Performance of New Buildings" by DEFRA dated 2007 can be reviewed when approaching the development of a mitigation strategy. This guidance advocates a hierarchy approach to development with the top of the hierarchy being avoidance of vulnerable development being place at risk of flooding (as stated in NPPF). We expect any resistance and resilience measures to assess the hierarchy of building and site design to avoid the risk in the first instance. Only where it is agreed this is not possible would the other steps be followed e.g. resistance (or prevention) of water entering a building and resilience of the building. Resilience seeks to ensure that if water did enter fabric of the building that the impacts are reduced. The last stage in the hierarchy is repairable design to ensure that any damage is easily repaired or replaced.

22.3 Resistance and resilience measures can also be included where there is a residual risk of flooding e.g. the development has avoided the risk of flooding up to a 1% annual probability plus climate change allowance but there are still properties proposed that would be at risk of 0.1% annual probability flood event. Where this is the case the LLFA would expect as a minimum that property finished ground floor levels (FFL) throughout the development are recommended to be set to a minimum of 300 mm freeboard above the anticipated flood levels in 1% annual probability event plus climate change from any source of flooding. Any source of flooding would also include an assessment to ensure there is 300 mm above anticipated flood levels within the drainage system, to provide protection in the event of an exceedance event. Where there is uncertainty in flood levels, this freeboard level should be increased up to 600 mm. We would expect that there would be a minimum of at least 150 mm freeboard between proposed external ground levels and property FFL. External ground levels should always slope away from any building, especially entrances to avoid ponding of water against or within a structure. An overview of mitigation is expected at an initial planning application stage to establish what is achievable within the development. The LLFA would expect the detailed design to then follow and implement any recommendations.

22.4 The types of mitigation that could be included in any proposal may be limited by the source, depth and velocity of flooding. For example groundwater flooding may require significantly different mitigation to surface water flooding. Examples of resistance and resilience include providing measures such as landscaping of external ground levels to avoid water entering buildings (including basements) or ensuring that essential electrical equipment is located above the expected water level.

Policy Box 8: Flow exceedance management

"For the 1 in 100 year return period event [1% annual probability event] (including relevant design allowances) for the site, flood levels associated with the surface water drainage system should be not less than 300 mm below the finished ground floor levels and the level of any opening into any basement of the proposed buildings on the site.

The design of the drainage system for exceedance flow management should take account of any residual flood risks for the site. An assessment should also be made of the likely significance of risks associated with the following scenarios:

a) a blockage or failure of a drainage system component;

b) failure of any embanked storage facility; and

c) rainfall events that are larger than the storms used for the design of the drainage system."
[British Standard BS8582:2013 Section 5.2.2.6]

22.5 The LLFA would expect that any water from a drainage scheme being managed on site during a 1% annual probability event plus climate change event outside of structures designed to store or convey water will meet recommendations within Table 12.3 of CIRIA Report C635 (2006), i.e. water on minor roads where speed limits are 30 mph will be a maximum of 100 mm deep and car parks would be a maximum of 200 mm deep.

22.6 Standard S9 of the SuDS Non-Statutory Technical Standards (2015) also require an applicant to consider how impacts to people and property will be minimised in the event that the drainage system will be exceeded in an event greater than 1% annual probability event plus climate change.

ANNEX - Reference Documents

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Norfolk Vanguard Offshore Wind Farm

Statement of Common Ground

Norfolk County Council

Applicant: Norfolk Vanguard Limited
Document Reference: Rep1 - SOCG - 15.1

Date: December 2018
Author: Royal HaskoningDHV

Photo: Kentish Flats Offshore Wind Farm

Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
26/06/2018	00	First draft for Internal review	ST	GK	GK
03/07/2018	01D	First draft for Norfolk Vanguard Limited review	ST	GK	GK
03/09/2018	02D	Second draft for Norfolk Vanguard Limited review	ST	JA	JA
07/09/2018	03D	Third draft for Norfolk Vanguard Limited review	ST	JA	JA
17/10/2018	04D	Fourth draft issued to NCC	ST	JA	JA
13/12/2018	05D	Fifth draft following NCC feedback	ST	JA	JA
19/12/2018	06D	Sixth draft following NCC feedback	ST	JA	JA

Table of Contents

Glossary

ADBA	Archaeological Desk Based Assessment
AMP	Access Management Plan
CIA	Cumulative Impact Assessment
CoCP	Code of Construction Practice
CWS	County Wildlife Sites
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
EMP	Ecological Management Plan
HDD	Horizontal Directional Drilling
HIA	Health Impact Assessment
IDB	Internal Drainage Board
LiDAR	Light Detection and Ranging
LVIA	Landscape and Visual Impact Assessment
MMP	Materials Management Plan
MSA	Mineral Safeguard Area
OCoCP	Outline Code of Construction Practice
OLEMS	Outline Landscape and Environmental Management Strategy
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
RWCS	Realistic worst case scenario
SoCG	Statement of Common Ground
SPE	Set Piece Excavation
SPZ	Source Protection Zone
TMP	Traffic Management Plan
TP	Travel Plan
WSI	Written Scheme of Investigation

Terminology

Array cables	Cables which link the wind turbines and the offshore electrical platform.
Landfall	Where the offshore cables come ashore at Happisburgh South
Mobilisation area	Areas approx. 100m x 100m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network suitable for the delivery of heavy and oversized materials and equipment.
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines
Necton National Grid substation	The existing 400kV substation at Necton, which will be the grid connection location for Norfolk Vanguard
Offshore accommodation platform	A fixed structure (if required) providing accommodation for offshore personnel. An accommodation vessel may be used instead
Offshore cable corridor	The area where the offshore export cables would be located.
Offshore electrical platform	A fixed structure located within the wind farm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which bring electricity from the offshore electrical platform to the landfall.
Onshore cable route	The 45m easement which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
The OWF sites	The two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West.
Trenchless crossing zone (e.g. HDD)	Temporary areas required for trenchless crossing works.

1 INTRODUCTION

1. This Statement of Common Ground (SoCG) has been prepared between Norfolk County Council and Norfolk Vanguard Limited (hereafter the Applicant) to set out the areas of agreement and disagreement in relation to the Development Consent Order (DCO) application for the Norfolk Vanguard Offshore Wind Farm (hereafter 'the project').

2. This SoCG comprises an agreement log which has been structured to reflect topics of interest to Norfolk County Council on the Norfolk Vanguard DCO application (hereafter 'the Application'). Topic specific matters agreed, not agreed and actions to resolve between Norfolk County Council and the Applicant are included.

3. The Applicant has had regard to the Guidance for the examination of applications for development consent (Department for Communities and Local Government, 2015) when compiling this SoCG. Points that are not agreed will be the subject of ongoing discussion wherever possible to resolve or refine the extent of disagreement between the parties.

1.1 The Development

4. The Application is for the development of the Norfolk Vanguard Offshore Wind Farm (OWF) and associated infrastructure. The OWF comprises two distinct areas, Norfolk Vanguard (NV) East and NV West ('the OWF sites'), which are located in the southern North Sea, approximately 70km and 47km from the nearest point of the Norfolk coast respectively. The location of the OWF sites is shown in Chapter 5 Project Description Figure 5.1 of the Application. The OWF would be connected to the shore by offshore export cables installed within the offshore cable corridor from the OWF sites to a landfall point at Happisburgh South, Norfolk. From there, onshore cables would transport power over approximately 60km to the onshore project substation and grid connection point near Necton, Norfolk.

5. Once built, Norfolk Vanguard would have an export capacity of up to 1800MW, with the offshore components comprising:

- Wind turbines;
- Offshore electrical platforms;
- Accommodation platforms;
- Met masts;
- Measuring equipment (LiDAR and wave buoys);
- Array cables;
- Interconnector cables; and
- Export cables.

6. The key onshore components of the project are as follows:

- Landfall;
- Onshore cable route, accesses, trenchless crossing technique (e.g. Horizontal Directional Drilling (HDD)) zones and mobilisation areas;
- Onshore project substation; and
- Extension to the existing Necton National Grid substation and overhead line modifications.

1.2 Consultation with Norfolk County Council

7. This section briefly summarises the consultation that the Applicant has had with Norfolk County Council. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application).

1.2.1 Pre-Application

8. The Applicant has engaged with Norfolk County Council on the project during the pre-Application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the Planning Act 2008.

9. During formal (Section 42) consultation, Norfolk County Council provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 29th November 2017.

10. Further to the statutory Section 42 consultation, several meetings were held with Norfolk County Council through the Evidence Plan Process. These are detailed throughout the SoCG and minutes of the meetings are provided in Appendices 9.15 – 9.26 (pre-Section 42) and Appendices 25.1 – 25.9 (post-Section 42) of the Consultation Report (document reference 5.1 of the Application).

1.2.2 Post-Application

11. The Applicant met with Norfolk County Council on 26 September 2018 to discuss the content of this SoCG following the receipt of Relevant Representations.

12. Norfolk County Council confirmed that the SoCG should be limited in focus to the topics presented with their Relevant Representation. Other topics such as landscape and visual impact, noise and vibration, contaminated land and air quality are the responsibility of the relevant District Councils. Therefore, this SoCG focuses on traffic and transport, ecology, historic environment, flood risk, tourism and recreation and socio economics only.

2 STATEMENT OF COMMON GROUND

13. Within the sections and tables below the different topics for areas of agreement and disagreement between Norfolk County Council and the Applicant are set out.

2.1 Project-wide considerations

14. Table 1 provides areas of agreement and disagreement for project-wide considerations.

Table 1 Project-wide considerations

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Electricity supply		
The principle of offshore wind is supported, as Norfolk Vanguard accords with national renewable energy targets and objectives. This was noted in Norfolk County Councils PEIR response in November 2017.	Agreed	It is agreed that both parties support offshore wind in principle and the project accords with national targets and objectives for renewable energy.
The onshore connection point was determined through a statutorily mandated process involving both the Applicant and National Grid, to identify a direct connection to the 400kV national transmission system. There are no planning or regulatory mechanisms through which the Applicant could identify direct 'infeeds' into the regional distribution network in Norfolk.	Agreed	The County Council accepts that Vattenfall are unable to influence National Grid and UK Power Networks regarding options to potentially feed electricity into the local transmission networks.
Site selection		
The methodology adopted for selecting and assessing the onshore project substation location options, including the final option, is considered robust and appropriate.	The intention is to extend the Necton substation with vehicular access provided from the A47(T). Traffic assessments for the A47(T) are issues for Highways England to comment upon and not NCC. Nevertheless NCC has expressed concern with regard to the proposed access arrangements.	NCC remains concerned in relation to safety but will leave this for Highways England to assess.

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
The methodology adopted for selecting and assessing the landfall location options, including the final option, is considered robust and appropriate.	Agreed	It is agreed by both parties that the approach to selecting and assessing landfall location was appropriately undertaken.
The proposed transition pit has been suitably set back from the cliff edge to ensure natural coastal erosion will not affect the drilled cable or transition pits within the conceivable lifetime of the project (approx. 30 years). In addition, the Applicant has committed to a long HDD to avoid any interaction with intertidal areas. Requirement 17 of the draft DCO (Landfall Method Statement) commits the Applicant to producing a method statement for the landfall works including the long HDD and any associated mitigation measures. This will be approved by the relevant planning authority. With this in place, measures to mitigate any impacts associated with the landfall are adequately secured.	Agreed	The County Council ask that sufficient safeguards and mitigation measures are put in place where the offshore cable route makes landfall to the south of Happisburgh (as a planning requirement), in order to ensure the onshore infrastructure does not exacerbate existing coastal erosion in the area.
Committing to a High Voltage Direct Current (HVDC) solution removes the need for additional onshore infrastructure (cable relay station) in North Norfolk and reduces the potential environmental impact associated with the cable route by narrowing the cable corridor from 100m to 45 m.	Agreed	The County Council welcomes the revised/amended design of the proposal and mitigation measures set out in the Applicant's Environmental Statement (ES). The County Council welcomes the decision by Vattenfall to pursue a HVDC solution, particularly in terms of minimising the impacts of this development on the landscape in North Norfolk.

Health Impact Assessment (HIA)		
Detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, will be addressed by the relevant District Councils and/or other statutory body such the Environment Agency.	Agreed	The County Council would expect detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, to be addressed by the relevant District Councils and/or other statutory body such the Environment Agency. Providing the District Councils are satisfied with the proposal in relation to the above matters, the County Council would not wish to raise any public health concerns at this time.
Minerals and waste		
The provision of a Materials Management Plan (MMP) is considered suitable to mitigate any potential impacts to the Mineral Safeguarding Areas (MSA). This was discussed and agreed during the Expert Topic Group meeting in September 2017. The MMP will form part of the final CoCP and is secured through Requirement 20(2)(f) of the draft DCO.).	Agreed	Norfolk County Council in its capacity as the Minerals and Waste Planning Authority does not object to the Proposed Vanguard Wind Power Project. Requirement 20(2)(f) adequately secures the request that the applicant continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.

2.2 Water Resources and Flood Risk

15. The project has the potential to impact upon water resources and flood risk. Chapter 20 of the ES, (document reference 6.1.20 of the Application), provides an assessment of the significance of these impacts.

16. Table 2 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding water resources and flood risk.

17. Table 3 provides areas of agreement and disagreement regarding water resources and flood risk.

18. Further details on the Evidence Plan for water resources and flood risk can be found in Appendix 9.20 and Appendix 25.2 of the Consultation Report (document reference 5.1 of the Application).

Table 2 Summary of Consultation with Norfolk County Council regarding water resources and flood risk

Date	Contact Type	Topic
Pre-Application		
25th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
8th September 2017	Meeting	Initial results from the assessment, project updates.
29th November 2017	Email from Norfolk County Council	PEIR feedback
23rd January 2018	Meeting	PEIR feedback, project updates, mitigation measures.
15th March 2018	Email correspondence	Approach to CIA including the list of projects to be considered.
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 2 Water resources and flood risk

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Sufficient survey data has been collected to inform the assessment. This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project. This was discussed in the Expert Topic Group meeting in January 2017, where concerns were raised over the methodology by the Environment Agency. This led to a revision of the methodology. The updated methodology was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the assessment is appropriate. This was discussed and agreed during the Expert Topic Group meeting in January 2018 and through PEIR feedback.	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.
Assessment findings	The ES adequately characterises the baseline environment in terms of water resources and flood risk. This was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed methodologies.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment of cumulative impacts is consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment of cumulative impact is consistent with the agreed methodologies
Approach to mitigation	The proposed locations for trenchless crossing techniques are appropriate and will be explored further and details agreed at each location at detailed design stage. This was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the proposed trenchless crossing techniques are appropriate, subject to detailed design.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The onshore project substation surface water drainage plan will have sufficient storage / attenuation volume to ensure that during the 1 in 100 year rainfall event, plus an allowance for climate change, there will be no increase in surface water runoff from the site. Whilst the outline drainage design assumptions included an allowance of 40% for climate change, this was included as contingency to demonstrate proof of concept. As the operational life of the project is approximately 30 years, the relevant flood risk epoch is 2040 to 2069 using the Environment Agency's Climate Change Allowance Guidance. This identifies an allowance of 20% for climate change. Based on the operational life of the substation (30 years) the detailed design of the surface water drainage plan will therefore allow for the 1 in 100 year critical rainfall plus **20% for climate change** as a minimum (as identified within the submitted Flood Risk Assessment). This is appropriate and in accordance with the Environment Agency's Climate Change Allowance guidance. 40% climate change allowance is the worst-case allowance identified for developments that have a design life extending beyond 2070. The onshore project substation has a 30-year design life running from approximately 2025-2055. Whilst the Applicant is committed to adopting best practice design standards for all infrastructure, adopting elevated standards that aren't appropriate for the proposal may lead to unnecessary over-engineering within the design and potentially affect the functionality of the drainage system that is installed. These systems are designed to receive a certain volume of water to self-clean. If they are over designed and receive less water than expected there is a risk they will silt up which could lead to impacts to the sensitive chalk river catchment.	Not agreed	Norfolk County Council as Lead Local Flood Authority request that detailed designs at the project substation and National Grid substation extension include modelling calculations and plans of the of the drainage conveyance network in the 1 in 100 year critical rainfall **plus 40% climate change** event to show, if any, the depth, volume and storage location of any above ground flooding from the drainage network ensuring that flooding does not occur in any part of a building or any utility plant susceptible to water (e.g. electricity equipment) within the development.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The onshore project substation surface water drainage plan is secured through DCO Requirement 20(2)(i) and will be developed in accordance with the submitted Flood Risk Assessment. This adequately secures the mitigation to manage potential flood risk impacts associated with the operation of the onshore project substation.	Yet to be discussed	
	The mitigation proposed for managing flood risk is appropriate and adequate.	Yet to be discussed	
	Part 4 of the DCO (Supplemental Powers) Article 15 (Discharge of water and works to watercourses) sets out that the Applicant must not undertake any works to any ordinary watercourse without the consent of the relevant internal Drainage Board or Norfolk County Council.	Agreed	The County Council confirms that for ordinary watercourses that are to be crossed by open cut trenching or where any other temporary works proposed as part of this project are likely to affect flows in an ordinary watercourse, then the Applicant would need the approval of Norfolk County Council
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	The wording of Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to water resources and flood risk are considered appropriate and adequate.	Yet to be discussed	

2.3 Onshore Ecology and Ornithology

19. The project has the potential to impact upon onshore ecology and ornithology. Chapter 22 and 23 of the ES, (document reference 6.1.22 and 6.1.23 of the Application), provides an assessment of the significance of these impacts.

20. Table 4 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore ecology and ornithology.

21. Table 5 provides areas of agreement and disagreement regarding onshore ecology and ornithology.

22. Further details on the Evidence Plan for onshore ecology and ornithology can be found in Appendix 9.19 and Appendix 25.1 of the Consultation Report (document reference 5.1 of the Application).

Table 3 Summary of Consultation with Norfolk County Council regarding onshore ecology and ornithology

Date	Contact Type	Topic
Pre-Application		
24th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
18th July 2017	Meeting	Initial results from the assessment, project updates, interim survey results.
29th November 2017	Email from Norfolk County Council	PEIR feedback.
22nd January 2018	Meeting	Project updates, PEIR responses, Habitats Regulations Assessment (HRA), mitigation measures, survey data and results.
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 4 Onshore ecology and onshore ornithology

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Survey methodology	Survey methodologies for Phase 1 Habitat Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	Survey methodologies for Phase 2 Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	Phase 2 scopes were submitted for comment post-January 2017 Expert Topic Group. Norfolk County Council provided recommendations on the survey scope for bat activity survey in July 2017. An updated survey methodology note was submitted, with the recommendations taken forward and implemented. Both parties agree that Phase 2 survey scopes are appropriate.
Existing Environment	Survey data collected for Norfolk Vanguard for the characterisation of onshore ecology and ornithology are suitable for the assessment. Due to access constraints only 50% of the onshore project area and only 40% of the ponds within the onshore study area were subject to ecological field surveys. The use of the Norfolk Living Map to 'fill-in' data gaps at this stage, is appropriate to inform the assessment. The Applicant has committed to undertake field surveys of all un-surveyed areas post consent, which will inform site specific mitigation.	Agreed	The County Council recognises field surveys of the currently un-surveyed locations will be necessary post-consent, and these surveys may lead to further mitigation at specific locations.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	County Wildlife Sites (CWS) in proximity to the cable corridor have been sufficiently surveyed to inform the assessment of potential impacts. At an early stage, the County Council advised that surveying of CWS close to the cable corridor was necessary (ETG meeting Jan 2017). This was accepted by the Applicant and the surveys were completed.	Agreed	It is agreed by both parties that the survey effort at CWS in proximity to the works is sufficient to inform the assessment.
	The ES adequately characterises the baseline environment in terms of onshore ecology and ornithology.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
Assessment methodology	Appropriate legislation, planning policy and guidance relevant to ecology and ornithology has been considered for the project (listed in section 22.2 and 23.2 in Chapter 22 Onshore Ecology and Chapter 23 Onshore Ornithology respectively).	Agreed	It is agreed by both parties that the appropriate legislation, planning policy and guidance has been taken into account with regard to onshore ecology and ornithology.
	The list of potential impacts on onshore ecology and ornithology assessed is appropriate	Agreed	It is agreed by both parties that the list of potential impacts considered is appropriate.
	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project. This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the ES, is appropriate for the project.	Agreed	It is agreed by both parties that the worst case scenario presented is appropriate.
Assessment findings	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment findings for potential cumulative impacts are consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.
Mitigation and Management			
Approach to mitigation	The provision of an Ecological Management Plan (EMP) (based on the Outline Landscape and Ecological Management Strategy (OLEMS) submitted with the DCO application, document reference 8.7) is considered suitable to ensure potential impacts identified in the EcIA are reduced to a non-significant level. The OLEMs sets out that all hedgerows will be reinstated along the cable route and sets out additional hedgerow planting that is proposed in proximity to the onshore project substation.	Agreed	The County Council welcome the approach and agrees the content of the outline CoCP and the OLEMS.
	The use of trenchless crossing techniques at CWS is acceptable subject to detailed design. This was discussed and agreed (in principle) during the Expert Topic Group meeting in January 2018.	Agreed	It is agreed by both parties that the use of trenchless crossings at CWS are acceptable, subject to detailed design.
	The mitigation proposed for bats is appropriate and proportionate.	Agreed	The County Council is content that appropriate mitigation for bats has been identified and notes that during the design process the landfall has moved away from the key area of concerns for Barbastelle bats at the Paston Great Barn SAC colony.
Draft Development Consent Order (DCO)			

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Wording of Requirement(s)	The Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore ecology and ornithology are considered appropriate and adequate.	Agreed	It is agreed by both parties that the Requirements provided in the draft DCO are considered appropriate and adequate.

2.4 Traffic and Transport

23. The project has the potential to impact upon traffic and transport. Chapter 24 of the ES, (document reference 6.1.24 of the Application), provides an assessment of the significance of these impacts.

24. Table 6 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding traffic and transport.

25. Table 7 provides areas of agreement and disagreement regarding traffic and transport.

26. Further details on the Evidence Plan for traffic and transport can be found in Appendix 9.21 and Appendix 25.5 of the Consultation Report (document reference 5.1 of the Application).

Table 5 Summary of Consultation with Norfolk County Council regarding traffic and transport

Date	Contact Type	Topic
Pre-Application		
25th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
17th July 2017	Meeting	Initial results from the assessment, project updates.
29th November 2017	Email from Norfolk County Council	PEIR feedback.
25th January 2018	Meeting	Project updates, PEIR responses.
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 6 Traffic and transport

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Sufficient survey data (extent/duration) has been collected to inform the characterisation of the baseline environment. The Applicant has subsequently obtained additional traffic count data at Oulton from Ørsted, associated with Hornsea Project Three. This dataset aligns with the data presented within the Norfolk Vanguard application and confirms that the traffic data presented within the Norfolk Vanguard application, at Oulton, is appropriate to inform the baseline environment.	Agreed – with the exception of the main compound at Oulton – see below. The applicant still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton.	Not yet agreed
Assessment methodology	The impact assessment methodologies used for the assessment represent an appropriate approach to assessing potential impacts.	NCC has no specific points to raise	n/a
	The methodology adopted for the Great Yarmouth port assessment (onshore construction traffic derived from the port) is acceptable. This was discussed and agreed in communications following the Expert Topic Group meeting in July 2017. All construction traffic associated with the onshore works, including that derived from relevant ports, will be included within the relevant Travel Plan for that stage of the works.	Agreed	Agreed
	The assessment adequately defines the realistic worst case scenario (RWCS) for traffic demand. This was discussed and agreed (in principle) during the Expert Topic Group meeting in July 2017.	NCC have no specific points to raise	n/a
	The assessment adequately defines the realistic worst case scenario for employee distribution.	NCC have no specific points to raise	n/a
	The assessment adequately characterises the baseline environment in terms of traffic and transport.	NCC have no specific points to raise	

	The proposed use of The Street at Oulton is required to access a single mobilisation area (MA7) further east along Heydon Road. This access route is identified as Link 68 within the application. MA7 is only required to supports the construction works in proximity to Oulton, and is not a main works compound. Peak traffic demand for both the duct installation and cable pulling phases is presented within Appendix 24.7. During duct installation peak traffic demand is 96 daily HGV movements, during a 16 week period in 2022. And a further 6 weeks at 88 daily HGV movements also in 2022. During the cable pull peak traffic demand is 64 daily HGV movements for approximately 20 weeks during 2024. The derivation of the traffic demand on Link 68 (The Street at Oulton) as defined in Appendix 24.7 represents a robust basis for the assessment of potential impacts on this access route. A biomass plant was refused planning permission in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development was 112 daily HGV movements (based on a 14-hour working day) and would occur throughout the operational life of that development (assumed to be approximately 25+ years). Operational traffic associated with that development would unavoidably occur during the peak background (harvest) traffic.	The applicants still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton. During duct installation peak traffic demand is 96 daily HGV movements, during a 16 week period in 2022. A further 6 weeks at 88 daily HGV movements also in 2022. During the cable pull peak traffic demand is 64 daily HGV movements for approximately 20 weeks during 2024. In comparison – PINS refused an Appeal, for a proposed biomass plant, by means of a hearing in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development involved the import of 30,000 tons of crop over an 8 week period. At its peak there would have been approximately 34 deliveries per day. The maximum traffic flow per hour during harvesting of biomass or removal of bio fertiliser from the site was unlikely to exceed 8 trips per hour i.e. 4 vehicles in and 4 vehicles out. Accordingly NCC still has concerns in relation to this aspect of the application.	Not agreed. The applicants still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton and not just their own traffic.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Abnormal Indivisible Loads	Consideration of Abnormal Indivisible Loads (AIL) is presented within the Outline Traffic Management plan (OTMP) (document reference 8.8). An AIL Route Access Study is included as Appendix 2 of the OTMP, which sets out the type of management measures which could be employed to minimise disruption to traffic during AIL delivery. The movement of AILs will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads system.	Agreed	NCC is satisfied that any impact from abnormal loads will be insignificant and falls outside the current assessment. However, it will still need to be assessed at a later and appropriate time.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Approach to mitigation	With the exception of points identified separately in this SoCG, the measures described in the OTMP, Outline Travel Plan (TP) and Outline Access Management Plan (AMP) (document reference 8.8, 8.9 and 8.10) are considered appropriate. Further detail and site-specific measures will be developed in the final documents post-consent and will require approval from the relevant planning authority in consultation with the highways authority. This is secured through DCO Requirement 21.	The TMP; TP and AMP are all in outline form only. Accordingly, they are working documents that need to be progressed as the project develops. In particular temporary signage will be required in accordance with TSRGD as well as Temporary speed limits via Temporary Traffic Regulation Orders The exact details to be confirmed via the CTMP. Also require a commitment to remove temporary construction access otherwise approved by the HA. The County Council expect the developer to: (A) enter into a legal agreement with the Highway Authority to ensure any damage is rectified; (B) set up local stakeholder involvement group/s to enable any traffic issues arising during the construction phase to be discussed and resolved.”	Agreed

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	Within the submitted Outline Traffic Management Plan TMP (DCO doc. 8.8) Link 68 (The Street at Oulton), serving mobilisation area MA7, is identified as requiring traffic management measures based on the peak traffic demand. Given the relatively limited period that peak construction traffic will be using this mobilisation area (outlined above in assessment methodology) the proposed traffic management measures (use of a pilot vehicle) for this route is appropriate for Norfolk Vanguard construction traffic alone.	PINS refused an Appeal, for a proposed biomass plant, by means of a hearing in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development involved the import of 30,000 tons of crop over an 8 week period. At its peak there would have been approximately 34 deliveries per day. The maximum traffic flow per hour during harvesting of biomass or removal of bio fertiliser from the site was unlikely to exceed 8 trips per hour i.e. 4 vehicles in and 4 vehicles out. Accordingly NCC still has concerns in relation to this aspect of the application.	Not agreed

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The Applicant is continuing to engage with Highways England on the approach to junction design off the A47(T). An SoCG between the Applicant and Highways England is also being progressed. A Substation Access Briefing Note (SABN) related to access proposals off the A47(T) has been submitted to Highways England for review. The SABN clarifies the approach the Applicant will take for subsequent design work to ensure that the final junction design will be undertaken to the satisfaction of Highways England. Requirement 22 of the draft DCO ensures that the siting, design, layout and any access management measures for any new, permanent or temporary means of access to a highway must be approved by the relevant planning authority in consultation with the highway authority. Following agreement of the SABN (and on the understanding that the work outlined within the document is delivered to the satisfaction of Highways England post-consent), and with the inclusion of Requirement 22, this will ensure that that any final junction design will be fit for purpose with regard to safety, driver delay and will not obstruct any future plans for dualling the A47(T).	The intention is for the Applicant to extend the Necton substation with vehicular access provided from the A47(T). Traffic assessments for the A47(T) are issues for Highways England to comment upon and not NCC. Nevertheless, NCC has expressed concern regarding the proposed access arrangements. In our professional opinion a right turn lane is needed.	NCC remain of the opinion that a full right turn lane is needed but acknowledge the applicant and Highways England are in discussion. Accordingly, we will leave Highways England to advise upon the suitability of the final junction design.
Cumulative impacts	The Applicant is working closely with Ørsted to identify potential cumulative impacts with Hornsea Project 3 in the Reepham area where the onshore cable route for the two projects cross. As outputs from this exercise become available the Applicant will engage with Norfolk County Council.	The Applicant still needs to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton. The outcome is still awaited.	Still in discussion
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	The wording of Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to traffic and transport are considered appropriate and adequate.	Yet to be discussed – we have now started to look at this and should be able to provide an update prior to hearing 1.	

2.5 Onshore Archaeology and Cultural Heritage

27. The project has the potential to impact upon onshore archaeology and cultural heritage. Chapter 28 of the ES, (document reference 6.1.28 of the Application), provides an assessment of the significance of these impacts.

28. Table 8 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore archaeology and cultural heritage.

29. Table 9 provides areas of agreement and disagreement regarding onshore archaeology and cultural heritage.

30. Further details on the Evidence Plan for onshore archaeology and cultural heritage can be found in Appendix 9.22 and Appendix 25.4 of the Consultation Report (document reference 5.1 of the Application).

Table 7 Summary of Consultation with Norfolk County Council regarding onshore archaeology and cultural heritage

Date	Contact Type	Topic
Pre-Application		
1st February 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
2nd May 2017	Meeting	Coastal, intertidal and nearshore archaeological considerations.
19th July 2017	Meeting	Initial assessment results in the draft PEIR.
29th November 2017	Email from Norfolk County Council	PEIR feedback.
24th January 2018	Meeting	Assessment results, approach to mitigation, PEIR feedback
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 8 Onshore archaeology and cultural heritage

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Sufficient survey data (extent/duration) has been collected to inform the assessment. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	It is accepted that outstanding geophysical surveys (scheme-wide) may be undertaken post-consent. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	The approach to the selection of priority geophysical survey areas was appropriate and sufficient to inform the assessment of impacts. This was agreed after the Expert Topic Group meeting in July 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	Heritage setting viewpoint locations are representative and appropriate.	Agreed	It is agreed by both parties that the heritage setting viewpoint locations are representative.
	Archaeological trial trenching is not required to inform the assessment of impacts pre-application. Further evaluation will be completed post-consent. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the assessment (DMRB Volume 11, Section 3, Part 2: Cultural Heritage) provide an appropriate approach to assessing potential impacts of the project. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst-case scenario presented in the assessment is appropriate. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment adequately characterises the baseline environment in terms of onshore archaeology and cultural heritage, including the setting of designated heritage assets. This was agreed after the Expert Topic Group meeting in July 2017.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	The scope of the Archaeological Desk Based Assessment (ADBA) is appropriate to inform the assessment. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the ADBA is appropriate to inform the assessment.
Assessment findings	Based on all of the currently available information and assuming the inclusion of the mitigation described and commitment to further evaluation post-consent, impacts on onshore archaeology and cultural heritage during construction, operation and decommissioning, are very likely to be non-significant in EIA terms.	Agreed	It is agreed by both parties that based on the currently available information impacts are very likely to be non-significant. Accepting that there is a small risk that highly-significant, previously-unrecorded and unexpected heritage assets with archaeological interest could be encountered.
	The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on onshore archaeology and cultural heritage are non-significant in EIA terms.	Agreed	It is agreed by both parties that the assessment of cumulative impact is appropriate and that the proposed mitigation will result in non-significant impacts.
Approach to mitigation	The provision of a pre-construction and construction Archaeological Written Scheme of Investigation(WSI) (Onshore) (to be based on the outline WSI, document reference 8.5) is considered suitable, with respect to Set-Piece Excavation (SPE); Strip, Map and Sample and archaeological monitoring/watching brief scenarios.	Agreed	It is agreed by both parties that the provision of a WSI is considered suitable.
	The mitigation proposed for potential impacts on buried and above-ground archaeological remains is appropriate.	Agreed	It is agreed by both parties that the proposed mitigation will result in non-significant impacts.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	The wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore archaeology and cultural heritage are considered appropriate and adequate. Specifically, Requirement 23 states: "*No stage of the onshore transmission works may commence until for that stage an archaeological written scheme of investigation (which accords with the outline written scheme of investigation (onshore)) has, after consultation with Historic England and Norfolk County Council, been submitted to and approved by the relevant planning authority*". And *(2) "In the event that archaeological site investigation is required, the scheme must include details of the following—* (a) *an assessment of significance and research questions; and* (b) *the programme and methodology of site investigation and recording;* (c) *the programme for post investigation assessment;* (d) *provision to be made for analysis of the site investigation and recording;* (e) *provision to be made for publication and dissemination of the analysis and records of the site investigation;* (f) *provision to be made for archive deposition of the analysis and records of the site investigation. "*	Agreed	Both parties are in agreement that potential impacts to archaeology and cultural heritage impacts will be adequately managed subject to the submission and approval of a final Written Scheme of Investigation.

2.6 Tourism and recreation

31. The project has the potential to impact upon tourism and recreation. Chapter 30of the ES, (document reference 6.1.30 and 6.1.31 of the Application), provides an assessment of the significance of these impacts.

32. Table 10 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding tourism and recreation.

33. Table 11 provides areas of agreement and disagreement regarding tourism and recreation.

34. Further details on the Evidence Plan for tourism and recreation can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

Table 9 Summary of Consultation with Norfolk County Council regarding tourism and recreation

Date	Contact Type	Topic
Pre-Application		
25th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29th November 2017	Email from Norfolk County Council	PEIR feedback.
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 10 Tourism and recreation

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of tourism and recreation.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Assessment findings	The assessment of effects for construction, operation and decommissioning presented is appropriate and, assuming the inclusion of the mitigation described, impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual impacts are non-significant.
	The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual cumulative impacts are non-significant.
Approach to mitigation	The mitigation measures identified within the Public Right of Way Strategy and the Code of Construction Practice (CoCP), are considered to be appropriate to mitigate impacts on the PRoW and Trails network.	Agreed	Norfolk County Council believes these documents should result in appropriate measures to manage impacts in relation to cable-laying. The County Council welcomes the intention of the applicant to liaise with the PRoW Officers and Trail Officers.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The Applicant has committed to trenchless crossing techniques at a number of sensitive footpaths, which will avoid direct impacts to those routes. These include the Norfolk Coast Path, and Marriott's Way, Paston Way and Wensum Way Long Distance Trails. This is detailed in Appendix 30.1.	Agreed	Norfolk County Council welcomes the use of HDD underneath some of the particularly heavily-used recreational routes (long-distance trails).
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	Given the impacts of the project, the wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to tourism and recreation are considered appropriate and adequate.	Agreed	It is agreed by both parties that the wording of Requirements within the DCO are appropriate and adequate.

2.7 Socio-economics

35. The project has the potential to impact upon socio-economics. Chapter 31 of the ES, (document reference 6.1.31 of the Application), provides an assessment of the significance of these impacts.

36. Table 10 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding socio-economics.

37. Table 11 provides areas of agreement and disagreement regarding socio-economics.

38. Further details on the Evidence Plan for socio-economics can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

Table 11 Summary of Consultation with Norfolk County Council regarding socio-economics

Date	Contact Type	Topic
Pre-Application		
25th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29th November 2017	Email from Norfolk County Council	PEIR feedback.
Post-Application		
26th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 12 Socio-economics

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of socio-economics.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Approach to mitigation	As set out in Chapter 21 Land Use and Agriculture (para 144), private agreements (or compensation in line with the compulsory purchase compensation code) will be sought between Norfolk Vanguard Limited and relevant landowners/occupiers regarding any measures required in relation to crop loss incurred as a direct consequence of the construction phase of the project. Norfolk Vanguard Ltd. is committed to exploring options for delivering a provision for communities, with the aim of recognising hosts and accounting for change, where benefits acknowledge and address tangible local change. The form of the benefit and its purpose will be explored with relevant stakeholders at the appropriate time, separate to the DCO process. Given the impacts of the project, the mitigation proposed for socio-economics are considered appropriate and adequate. Where significant impacts are identified suitable mitigation is proposed.	Not agreed	The reduction in the potential impacts and disruption to business as a consequence of using HVDC technology is welcomed, however, it is felt that Vattenfall should commit to providing appropriate compensation for businesses and communities adversely affected by the construction works.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	Where there is likely to be a demonstrable impact (i.e. during: construction; operation and/or decommissioning) on commercial fishing affecting communities in Norfolk, individual agreements will be reached as necessary, with any agreements based on evidence and track record and in accordance with FLOWW Best Practice Guidance for Offshore Renewables Developments.	Agreed	The County Council welcomes the revised/amended design of the above proposal and mitigation measures set out in the applicant's ES.
	Norfolk Vanguard Ltd. recognises the economic benefits of using local Port facilities at Great Yarmouth and has signed an agreement with Peel Ports that reserves space for the potential future operations and maintenance use of the site. This is subject to DCO consent award and other regulatory considerations.	Agreed	The County Council will continue to work pro-actively with Vattenfall to demonstrate the economic benefits of using the Port facilities at Great Yarmouth for
	Vattenfall is actively seeking to collaborate with stakeholders to support, complement and enhance where appropriate, local skills development programmes. The aim shared with these stakeholders is to work towards a sustainable and resilient employment pipeline, and to channel into / retain more local intellectual and social capital within the green energy sector. To date this has included collaborations with University of East Anglia, UTCN Norwich, local schools, EEEGR, NCC, NALEP and others.	Agreed	The County Council will also continue to work with the Applicant to develop the creation of apprenticeships and work experience.

The undersigned agree to the provisions within this SOCG

Name	
Position	
On behalf of	Norfolk County Council
Date	

Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	

Ministry of Housing,
Communities &
Local Government

National Planning Policy Framework

July 2018
Ministry of Housing, Communities and Local Government

This document is also available on our website at www.gov.uk/mhclg

If you have any enquiries regarding this document, complete the form at http://forms.communities.gov.uk/ or write to us at:

Ministry of Housing, Communities and Local Government
Fry Building
2 Marsham Street
London
SW1P 4DF
Telephone: 030 3444 0000

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Contents

1. Introduction

1. The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied[1]. It provides a framework within which locally-prepared plans for housing and other development can be produced.

2. Planning law requires that applications for planning permission be determined in accordance with the development plan[2], unless material considerations indicate otherwise[3]. The National Planning Policy Framework must be taken into account in preparing the development plan, and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.

3. The Framework should be read as a whole (including its footnotes and annexes). General references to planning policies in the Framework should be applied in a way that is appropriate to the type of plan being produced, taking into account policy on plan-making in chapter 3.

4. The Framework should be read in conjunction with the Government's planning policy for traveller sites, and its planning policy for waste. When preparing plans or making decisions on applications for these types of development, regard should also be had to the policies in this Framework, where relevant.

5. The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.

6. Other statements of government policy may be material when preparing plans or deciding applications, such as relevant Written Ministerial Statements and endorsed recommendations of the National Infrastructure Commission.

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[1] This document replaces the first National Planning Policy Framework published in March 2012.
[2] This includes local and neighbourhood plans that have been brought into force and any spatial development strategies produced by combined authorities or elected Mayors (see glossary).
[3] Section 38(6) of the Planning and Compulsory Purchase Act 2004 and section 70(2) of the Town and Country Planning Act 1990.

2. Achieving sustainable development

7. The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs[4].

8. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

   a) **an economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

   b) **a social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

   c) **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

9. These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.

10. So that sustainable development is pursued in a positive way, at the heart of the Framework is a **presumption in favour of sustainable development** (paragraph 11).

[4] Resolution 42/187 of the United Nations General Assembly.

The presumption in favour of sustainable development

11. Plans and decisions should apply a presumption in favour of sustainable development.

For **plan-making** this means that:

a) plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;

b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas[5], unless:

   i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area[6]; or

   ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

For **decision-taking** this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date[7], granting permission unless:

   i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed[6]; or

   ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

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[5] As established through statements of common ground (see paragraph 27).

[6] The policies referred to are those in this Framework (rather than those in development plans) relating to: habitats sites (and those sites listed in paragraph 176) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 63); and areas at risk of flooding or coastal change.

[7] This includes, for applications involving the provision of housing, situations where the local planning authority cannot demonstrate a five year supply of deliverable housing sites (with the appropriate buffer, as set out in paragraph 73); or where the Housing Delivery Test indicates that the delivery of housing was substantially below (less than 75% of) the housing requirement over the previous three years. Transitional arrangements for the Housing Delivery Test are set out in Annex 1.

12. The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making. Where a planning application conflicts with an up-to-date development plan (including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed.

13. The application of the presumption has implications for the way communities engage in neighbourhood planning. Neighbourhood plans should support the delivery of strategic policies contained in local plans or spatial development strategies; and should shape and direct development that is outside of these strategic policies.

14. In situations where the presumption (at paragraph 11d) applies to applications involving the provision of housing, the adverse impact of allowing development that conflicts with the neighbourhood plan is likely to significantly and demonstrably outweigh the benefits, provided all of the following apply[8]:

    a) the neighbourhood plan became part of the development plan two years or less before the date on which the decision is made;

    b) the neighbourhood plan contains policies and allocations to meet its identified housing requirement;

    c) the local planning authority has at least a three year supply of deliverable housing sites (against its five year housing supply requirement, including the appropriate buffer as set out in paragraph 73); and

    d) the local planning authority's housing delivery was at least 45% of that required[9] over the previous three years.

[8] Transitional arrangements are set out in Annex 1.
[9] Assessed against the Housing Delivery Test, from November 2018 onwards.

3. Plan-making

15. The planning system should be genuinely plan-led. Succinct and up-to-date plans should provide a positive vision for the future of each area; a framework for addressing housing needs and other economic, social and environmental priorities; and a platform for local people to shape their surroundings.

16. Plans should:

a) be prepared with the objective of contributing to the achievement of sustainable development[10];

b) be prepared positively, in a way that is aspirational but deliverable;

c) be shaped by early, proportionate and effective engagement between plan-makers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees;

d) contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals;

e) be accessible through the use of digital tools to assist public involvement and policy presentation; and

f) serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area (including policies in this Framework, where relevant).

The plan-making framework

17. The development plan must include strategic policies to address each local planning authority's priorities for the development and use of land in its area[11]. These strategic policies can be produced in different ways, depending on the issues and opportunities facing each area. They can be contained in:

a) joint or individual local plans, produced by authorities working together or independently (and which may also contain non-strategic policies); and/or

b) a spatial development strategy produced by an elected Mayor or combined authority, where plan-making powers have been conferred.

18. Policies to address non-strategic matters should be included in local plans that contain both strategic and non-strategic policies, and/or in local or neighbourhood plans that contain just non-strategic policies.

19. The development plan for an area comprises the combination of strategic and non-strategic policies which are in force at a particular time.

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[10] This is a legal requirement of local planning authorities exercising their plan-making functions (section 39(2) of the Planning and Compulsory Purchase Act 2004).
[11] Section 19(1B-1E) of the Planning and Compulsory Purchase Act 2004.

Strategic policies

20. Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision[12] for:

    a) housing (including affordable housing), employment, retail, leisure and other commercial development;

    b) infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);

    c) community facilities (such as health, education and cultural infrastructure); and

    d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.

21. Plans should make explicit which policies are strategic policies[13]. These should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues), to provide a clear starting point for any non-strategic policies that are needed. Strategic policies should not extend to detailed matters that are more appropriately dealt with through neighbourhood plans or other non-strategic policies.

22. Strategic policies should look ahead over a minimum 15 year period from adoption[14], to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure.

23. Broad locations for development should be indicated on a key diagram, and land-use designations and allocations identified on a policies map. Strategic policies should provide a clear strategy for bringing sufficient land forward, and at a sufficient rate, to address objectively assessed needs over the plan period, in line with the presumption in favour of sustainable development. This should include planning for and allocating sufficient sites to deliver the strategic priorities of the area (except insofar as these needs can be demonstrated to be met more appropriately through other mechanisms, such as brownfield registers or non-strategic policies)[15].

[12] In line with the presumption in favour of sustainable development.
[13] Where a single local plan is prepared the non-strategic policies should be clearly distinguished from the strategic policies.
[14] Except in relation to town centre development, as set out in chapter 7.
[15] For spatial development strategies, allocations, land use designations and a policies map are needed only where the power to make allocations has been conferred.

Maintaining effective cooperation

24. Local planning authorities and county councils (in two-tier areas) are under a duty to cooperate with each other, and with other prescribed bodies, on strategic matters that cross administrative boundaries.

25. Strategic policy-making authorities should collaborate to identify the relevant strategic matters which they need to address in their plans. They should also engage with their local communities and relevant bodies including Local Enterprise Partnerships, Local Nature Partnerships, the Marine Management Organisation, county councils, infrastructure providers, elected Mayors and combined authorities (in cases where Mayors or combined authorities do not have plan-making powers).

26. Effective and on-going joint working between strategic policy-making authorities and relevant bodies is integral to the production of a positively prepared and justified strategy. In particular, joint working should help to determine where additional infrastructure is necessary, and whether development needs that cannot be met wholly within a particular plan area could be met elsewhere.

27. In order to demonstrate effective and on-going joint working, strategic policy-making authorities should prepare and maintain one or more statements of common ground, documenting the cross-boundary matters being addressed and progress in cooperating to address these. These should be produced using the approach set out in national planning guidance, and be made publicly available throughout the plan-making process to provide transparency.

Non-strategic policies

28. Non-strategic policies should be used by local planning authorities and communities to set out more detailed policies for specific areas, neighbourhoods or types of development. This can include allocating sites, the provision of infrastructure and community facilities at a local level, establishing design principles, conserving and enhancing the natural and historic environment and setting out other development management policies.

29. Neighbourhood planning gives communities the power to develop a shared vision for their area. Neighbourhood plans can shape, direct and help to deliver sustainable development, by influencing local planning decisions as part of the statutory development plan. Neighbourhood plans should not promote less development than set out in the strategic policies for the area, or undermine those strategic policies[16].

30. Once a neighbourhood plan has been brought into force, the policies it contains take precedence over existing non-strategic policies in a local plan covering the neighbourhood area, where they are in conflict; unless they are superseded by strategic or non-strategic policies that are adopted subsequently.

[16] Neighbourhood plans must be in general conformity with the strategic policies contained in any development plan that covers their area.

Preparing and reviewing plans

31. The preparation and review of all policies should be underpinned by relevant and up-to-date evidence. This should be adequate and proportionate, focused tightly on supporting and justifying the policies concerned, and take into account relevant market signals.

32. Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements[17]. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered).

33. Policies in local plans and spatial development strategies should be reviewed to assess whether they need updating at least once every five years, and should then be updated as necessary[18]. Reviews should be completed no later than five years from the adoption date of a plan, and should take into account changing circumstances affecting the area, or any relevant changes in national policy. Relevant strategic policies will need updating at least once every five years if their applicable local housing need figure has changed significantly; and they are likely to require earlier review if local housing need is expected to change significantly in the near future.

Development contributions

34. Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.

Examining plans

35. Local plans and spatial development strategies are examined to assess whether they have been prepared in accordance with legal and procedural requirements, and whether they are sound. Plans are ‘sound’ if they are:

[17] The reference to relevant legal requirements refers to Strategic Environmental Assessment. Neighbourhood plans may require Strategic Environmental Assessment, but only where there are potentially significant environmental effects.

[18] Reviews at least every five years are a legal requirement for all local plans (Regulation 10A of the Town and Country Planning (Local Planning) (England) Regulations 2012).

a) **Positively prepared** – providing a strategy which, as a minimum, seeks to meet the area's objectively assessed needs[19]; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;

b) **Justified** – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;

c) **Effective** – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground; and

d) **Consistent with national policy** – enabling the delivery of sustainable development in accordance with the policies in this Framework.

36. These tests of soundness will be applied to non-strategic policies[20] in a proportionate way, taking into account the extent to which they are consistent with relevant strategic policies for the area.

37. Neighbourhood plans must meet certain 'basic conditions' and other legal requirements[21] before they can come into force. These are tested through an independent examination before the neighbourhood plan may proceed to referendum.

[19] Where this relates to housing, such needs should be assessed using a clear and justified method, as set out in paragraph 60 of this Framework.
[20] Where these are contained in a local plan.
[21] As set out in paragraph 8 of Schedule 4B to the Town and Country Planning Act 1990 (as amended).

4. Decision-making

38. Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible.

Pre-application engagement and front-loading

39. Early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality pre-application discussion enables better coordination between public and private resources and improved outcomes for the community.

40. Local planning authorities have a key role to play in encouraging other parties to take maximum advantage of the pre-application stage. They cannot require that a developer engages with them before submitting a planning application, but they should encourage take-up of any pre-application services they offer. They should also, where they think this would be beneficial, encourage any applicants who are not already required to do so by law to engage with the local community and, where relevant, with statutory and non-statutory consultees, before submitting their applications.

41. The more issues that can be resolved at pre-application stage, including the need to deliver improvements in infrastructure and affordable housing, the greater the benefits. For their role in the planning system to be effective and positive, statutory planning consultees will need to take the same early, pro-active approach, and provide advice in a timely manner throughout the development process. This assists local planning authorities in issuing timely decisions, helping to ensure that applicants do not experience unnecessary delays and costs.

42. The participation of other consenting bodies in pre-application discussions should enable early consideration of all the fundamental issues relating to whether a particular development will be acceptable in principle, even where other consents relating to how a development is built or operated are needed at a later stage. Wherever possible, parallel processing of other consents should be encouraged to help speed up the process and resolve any issues as early as possible.

43. The right information is crucial to good decision-making, particularly where formal assessments are required (such as Environmental Impact Assessment, Habitats Regulations assessment and flood risk assessment). To avoid delay, applicants should discuss what information is needed with the local planning authority and expert bodies as early as possible.

44. Local planning authorities should publish a list of their information requirements for applications for planning permission. These requirements should be kept to the minimum needed to make decisions, and should be reviewed at least every two

years. Local planning authorities should only request supporting information that is relevant, necessary and material to the application in question.

45. Local planning authorities should consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites, installations or pipelines, or for development around them.

46. Applicants and local planning authorities should consider the potential for voluntary planning performance agreements, where this might achieve a faster and more effective application process. Planning performance agreements are likely to be needed for applications that are particularly large or complex to determine.

Determining applications

47. Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. Decisions on applications should be made as quickly as possible, and within statutory timescales unless a longer period has been agreed by the applicant in writing.

48. Local planning authorities may give weight to relevant policies in emerging plans according to:

a) the stage of preparation of the emerging plan (the more advanced its preparation, the greater the weight that may be given);

b) the extent to which there are unresolved objections to relevant policies (the less significant the unresolved objections, the greater the weight that may be given); and

c) the degree of consistency of the relevant policies in the emerging plan to this Framework (the closer the policies in the emerging plan to the policies in the Framework, the greater the weight that may be given)[22].

49. However in the context of the Framework – and in particular the presumption in favour of sustainable development – arguments that an application is premature are unlikely to justify a refusal of planning permission other than in the limited circumstances where both:

a) the development proposed is so substantial, or its cumulative effect would be so significant, that to grant permission would undermine the plan-making process by predetermining decisions about the scale, location or phasing of new development that are central to an emerging plan; and

b) the emerging plan is at an advanced stage but is not yet formally part of the development plan for the area.

[22] During the transitional period for emerging plans submitted for examination (set out in paragraph 214), consistency should be tested against the previous Framework published in March 2012.

50. Refusal of planning permission on grounds of prematurity will seldom be justified where a draft plan has yet to be submitted for examination; or – in the case of a neighbourhood plan – before the end of the local planning authority publicity period on the draft plan. Where planning permission is refused on grounds of prematurity, the local planning authority will need to indicate clearly how granting permission for the development concerned would prejudice the outcome of the plan-making process.

Tailoring planning controls to local circumstances

51. Local planning authorities are encouraged to use Local Development Orders to set the planning framework for particular areas or categories of development where the impacts would be acceptable, and in particular where this would promote economic, social or environmental gains for the area.

52. Communities can use Neighbourhood Development Orders and Community Right to Build Orders to grant planning permission. These require the support of the local community through a referendum. Local planning authorities should take a proactive and positive approach to such proposals, working collaboratively with community organisations to resolve any issues before draft orders are submitted for examination.

53. The use of Article 4 directions to remove national permitted development rights should be limited to situations where this is necessary to protect local amenity or the well-being of the area (this could include the use of Article 4 directions to require planning permission for the demolition of local facilities). Similarly, planning conditions should not be used to restrict national permitted development rights unless there is clear justification to do so.

Planning conditions and obligations

54. Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.

55. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification[23].

56. Planning obligations must only be sought where they meet all of the following tests[24]:

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[23] When in force, sections 100ZA(4-6) of the Town and Country Planning Act 1990 will require the applicant's written agreement to the terms of a pre-commencement condition, unless prescribed circumstances apply.

[24] Set out in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010.

a) necessary to make the development acceptable in planning terms;

b) directly related to the development; and

c) fairly and reasonably related in scale and kind to the development.

57. Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available.

Enforcement

58. Effective enforcement is important to maintain public confidence in the planning system. Enforcement action is discretionary, and local planning authorities should act proportionately in responding to suspected breaches of planning control. They should consider publishing a local enforcement plan to manage enforcement proactively, in a way that is appropriate to their area. This should set out how they will monitor the implementation of planning permissions, investigate alleged cases of unauthorised development and take action where appropriate.

5. Delivering a sufficient supply of homes

59. To support the Government's objective of significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed, that the needs of groups with specific housing requirements are addressed and that land with permission is developed without unnecessary delay.

60. To determine the minimum number of homes needed, strategic policies should be informed by a local housing need assessment, conducted using the standard method in national planning guidance – unless exceptional circumstances justify an alternative approach which also reflects current and future demographic trends and market signals. In addition to the local housing need figure, any needs that cannot be met within neighbouring areas should also be taken into account in establishing the amount of housing to be planned for.

61. Within this context, the size, type and tenure of housing needed for different groups in the community should be assessed and reflected in planning policies (including, but not limited to, those who require affordable housing, families with children, older people, students, people with disabilities, service families, travellers[25], people who rent their homes and people wishing to commission or build their own homes[26]).

62. Where a need for affordable housing is identified, planning policies should specify the type of affordable housing required[27], and expect it to be met on-site unless:

    a) off-site provision or an appropriate financial contribution in lieu can be robustly justified; and

    b) the agreed approach contributes to the objective of creating mixed and balanced communities.

63. Provision of affordable housing should not be sought for residential developments that are not major developments, other than in designated rural areas (where policies may set out a lower threshold of 5 units or fewer). To support the re-use of brownfield land, where vacant buildings are being reused or redeveloped, any affordable housing contribution due should be reduced by a proportionate amount[28].

64. Where major development involving the provision of housing is proposed, planning policies and decisions should expect at least 10% of the homes to be available for

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[25] Planning Policy for Traveller Sites sets out how travellers' housing needs should be assessed for those covered by the definition in Annex 1 of that document.
[26] Under section 1 of the Self Build and Custom Housebuilding Act 2015, local authorities are required to keep a register of those seeking to acquire serviced plots in the area for their own self-build and custom house building. They are also subject to duties under sections 2 and 2A of the Act to have regard to this and to give enough suitable development permissions to meet the identified demand. Self and custom-build properties could provide market or affordable housing.
[27] Applying the definition in Annex 2 to this Framework.
[28] Equivalent to the existing gross floorspace of the existing buildings. This does not apply to vacant buildings which have been abandoned.

affordable home ownership[29], unless this would exceed the level of affordable housing required in the area, or significantly prejudice the ability to meet the identified affordable housing needs of specific groups. Exemptions to this 10% requirement should also be made where the site or proposed development:

a) provides solely for Build to Rent homes;

b) provides specialist accommodation for a group of people with specific needs (such as purpose-built accommodation for the elderly or students);

c) is proposed to be developed by people who wish to build or commission their own homes; or

d) is exclusively for affordable housing, an entry-level exception site or a rural exception site.

65. Strategic policy-making authorities should establish a housing requirement figure for their whole area, which shows the extent to which their identified housing need (and any needs that cannot be met within neighbouring areas) can be met over the plan period. Within this overall requirement, strategic policies should also set out a housing requirement for designated neighbourhood areas which reflects the overall strategy for the pattern and scale of development and any relevant allocations[30]. Once the strategic policies have been adopted, these figures should not need re-testing at the neighbourhood plan examination, unless there has been a significant change in circumstances that affects the requirement.

66. Where it is not possible to provide a requirement figure for a neighbourhood area[31], the local planning authority should provide an indicative figure, if requested to do so by the neighbourhood planning body. This figure should take into account factors such as the latest evidence of local housing need, the population of the neighbourhood area and the most recently available planning strategy of the local planning authority.

Identifying land for homes

67. Strategic policy-making authorities should have a clear understanding of the land available in their area through the preparation of a strategic housing land availability assessment. From this, planning policies should identify a sufficient supply and mix of sites, taking into account their availability, suitability and likely economic viability. Planning policies should identify a supply of:

a) specific, deliverable sites for years one to five of the plan period[32]; and

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[29] As part of the overall affordable housing contribution from the site.
[30] Except where a Mayoral, combined authority or high-level joint plan is being prepared as a framework for strategic policies at the individual local authority level; in which case it may be most appropriate for the local authority plans to provide the requirement figure.
[31] Because a neighbourhood area is designated at a late stage in the strategic policy-making process, or after strategic policies have been adopted; or in instances where strategic policies for housing are out of date.
[32] With an appropriate buffer, as set out in paragraph 73. See glossary for definitions of deliverable and developable.

b) specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15 of the plan.

68. Small and medium sized sites can make an important contribution to meeting the housing requirement of an area, and are often built-out relatively quickly. To promote the development of a good mix of sites local planning authorities should:

a) identify, through the development plan and brownfield registers, land to accommodate at least 10% of their housing requirement on sites no larger than one hectare; unless it can be shown, through the preparation of relevant plan policies, that there are strong reasons why this 10% target cannot be achieved;

b) use tools such as area-wide design assessments and Local Development Orders to help bring small and medium sized sites forward;

c) support the development of windfall sites through their policies and decisions – giving great weight to the benefits of using suitable sites within existing settlements for homes; and

d) work with developers to encourage the sub-division of large sites where this could help to speed up the delivery of homes.

69. Neighbourhood planning groups should also consider the opportunities for allocating small and medium-sized sites (of a size consistent with paragraph 68a) suitable for housing in their area.

70. Where an allowance is to be made for windfall sites as part of anticipated supply, there should be compelling evidence that they will provide a reliable source of supply. Any allowance should be realistic having regard to the strategic housing land availability assessment, historic windfall delivery rates and expected future trends. Plans should consider the case for setting out policies to resist inappropriate development of residential gardens, for example where development would cause harm to the local area.

71. Local planning authorities should support the development of entry-level exception sites, suitable for first time buyers (or those looking to rent their first home), unless the need for such homes is already being met within the authority's area. These sites should be on land which is not already allocated for housing and should:

a) comprise of entry-level homes that offer one or more types of affordable housing as defined in Annex 2 of this Framework; and

b) be adjacent to existing settlements, proportionate in size to them[33], not compromise the protection given to areas or assets of particular importance in this Framework[34], and comply with any local design policies and standards.

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[33] Entry-level exception sites should not be larger than one hectare in size or exceed 5% of the size of the existing settlement.

[34] i.e. the areas referred to in footnote 6. Entry-level exception sites should not be permitted in National Parks (or within the Broads Authority), Areas of Outstanding Natural Beauty or land designated as Green Belt.

72. The supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities. Working with the support of their communities, and with other authorities if appropriate, strategic policy-making authorities should identify suitable locations for such development where this can help to meet identified needs in a sustainable way. In doing so, they should:

a) consider the opportunities presented by existing or planned investment in infrastructure, the area's economic potential and the scope for net environmental gains;

b) ensure that their size and location will support a sustainable community, with sufficient access to services and employment opportunities within the development itself (without expecting an unrealistic level of self-containment), or in larger towns to which there is good access;

c) set clear expectations for the quality of the development and how this can be maintained (such as by following Garden City principles), and ensure that a variety of homes to meet the needs of different groups in the community will be provided;

d) make a realistic assessment of likely rates of delivery, given the lead-in times for large scale sites, and identify opportunities for supporting rapid implementation (such as through joint ventures or locally-led development corporations)[35]; and

e) consider whether it is appropriate to establish Green Belt around or adjoining new developments of significant size.

Maintaining supply and delivery

73. Strategic policies should include a trajectory illustrating the expected rate of housing delivery over the plan period, and all plans should consider whether it is appropriate to set out the anticipated rate of development for specific sites. Local planning authorities should identify and update annually a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against their housing requirement set out in adopted strategic policies[36], or against their local housing need where the strategic policies are more than five years old[37]. The supply of specific deliverable sites should in addition include a buffer (moved forward from later in the plan period) of:

a) 5% to ensure choice and competition in the market for land; or

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[35] The delivery of large scale developments may need to extend beyond an individual plan period, and the associated infrastructure requirements may not be capable of being identified fully at the outset. Anticipated rates of delivery and infrastructure requirements should, therefore, be kept under review and reflected as policies are updated.

[36] For the avoidance of doubt, a five year supply of deliverable sites for travellers – as defined in Annex 1 to Planning Policy for Traveller Sites – should be assessed separately, in line with the policy in that document.

[37] Unless these strategic policies have been reviewed and found not to require updating.

b) 10% where the local planning authority wishes to demonstrate a five year supply of deliverable sites through an annual position statement or recently adopted plan[38], to account for any fluctuations in the market during that year; or

c) 20% where there has been significant under delivery of housing over the previous three years, to improve the prospect of achieving the planned supply[39].

74. A five year supply of deliverable housing sites, with the appropriate buffer, can be demonstrated where it has been established in a recently adopted plan, or in a subsequent annual position statement which:

a) has been produced through engagement with developers and others who have an impact on delivery, and been considered by the Secretary of State; and

b) incorporates the recommendation of the Secretary of State, where the position on specific sites could not be agreed during the engagement process.

75. To maintain the supply of housing, local planning authorities should monitor progress in building out sites which have permission. Where the Housing Delivery Test indicates that delivery has fallen below 95% of the local planning authority's housing requirement over the previous three years, the authority should prepare an action plan in line with national planning guidance, to assess the causes of under-delivery and identify actions to increase delivery in future years.

76. To help ensure that proposals for housing development are implemented in a timely manner, local planning authorities should consider imposing a planning condition providing that development must begin within a timescale shorter than the relevant default period, where this would expedite the development without threatening its deliverability or viability. For major development involving the provision of housing, local planning authorities should also assess why any earlier grant of planning permission for a similar development on the same site did not start.

Rural housing

77. In rural areas, planning policies and decisions should be responsive to local circumstances and support housing developments that reflect local needs. Local planning authorities should support opportunities to bring forward rural exception sites that will provide affordable housing to meet identified local needs, and consider whether allowing some market housing on these sites would help to facilitate this.

78. To promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services. Where there are groups of smaller settlements, development in one village may support services in a village nearby.

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[38] For the purposes of paragraphs 73b and 74 a plan adopted between 1 May and 31 October will be considered 'recently adopted' until 31 October of the following year; and a plan adopted between 1 November and 30 April will be considered recently adopted until 31 October in the same year.

[39] From November 2018, this will be measured against the Housing Delivery Test, where this indicates that delivery was below 85% of the housing requirement.

79. Planning policies and decisions should avoid the development of isolated homes in the countryside unless one or more of the following circumstances apply:

a) there is an essential need for a rural worker, including those taking majority control of a farm business, to live permanently at or near their place of work in the countryside;

b) the development would represent the optimal viable use of a heritage asset or would be appropriate enabling development to secure the future of heritage assets;

c) the development would re-use redundant or disused buildings and enhance its immediate setting;

d) the development would involve the subdivision of an existing residential dwelling; or

e) the design is of exceptional quality, in that it:

- is truly outstanding or innovative, reflecting the highest standards in architecture, and would help to raise standards of design more generally in rural areas; and
- would significantly enhance its immediate setting, and be sensitive to the defining characteristics of the local area.

6. Building a strong, competitive economy

80. Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation[40], and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.

81. Planning policies should:

a) set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration;

b) set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period;

c) seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment; and

d) be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances.

82. Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations.

Supporting a prosperous rural economy

83. Planning policies and decisions should enable:

a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed new buildings;

b) the development and diversification of agricultural and other land-based rural businesses;

c) sustainable rural tourism and leisure developments which respect the character of the countryside; and

[40] The Government's Industrial Strategy sets out a vision to drive productivity improvements across the UK, identifies a number of Grand Challenges facing all nations, and sets out a delivery programme to make the UK a leader in four of these: artificial intelligence and big data; clean growth; future mobility; and catering for an ageing society. HM Government (2017) *Industrial Strategy: Building a Britain fit for the future.*

d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.

84. Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist.

7. Ensuring the vitality of town centres

85. Planning policies and decisions should support the role that town centres play at the heart of local communities, by taking a positive approach to their growth, management and adaptation. Planning policies should:

a) define a network and hierarchy of town centres and promote their long-term vitality and viability – by allowing them to grow and diversify in a way that can respond to rapid changes in the retail and leisure industries, allows a suitable mix of uses (including housing) and reflects their distinctive characters;

b) define the extent of town centres and primary shopping areas, and make clear the range of uses permitted in such locations, as part of a positive strategy for the future of each centre;

c) retain and enhance existing markets and, where appropriate, re-introduce or create new ones;

d) allocate a range of suitable sites in town centres to meet the scale and type of development likely to be needed, looking at least ten years ahead. Meeting anticipated needs for retail, leisure, office and other main town centre uses over this period should not be compromised by limited site availability, so town centre boundaries should be kept under review where necessary;

e) where suitable and viable town centre sites are not available for main town centre uses, allocate appropriate edge of centre sites that are well connected to the town centre. If sufficient edge of centre sites cannot be identified, policies should explain how identified needs can be met in other accessible locations that are well connected to the town centre; and

f) recognise that residential development often plays an important role in ensuring the vitality of centres and encourage residential development on appropriate sites.

86. Local planning authorities should apply a sequential test to planning applications for main town centre uses which are neither in an existing centre nor in accordance with an up-to-date plan. Main town centre uses should be located in town centres, then in edge of centre locations; and only if suitable sites are not available (or expected to become available within a reasonable period) should out of centre sites be considered.

87. When considering edge of centre and out of centre proposals, preference should be given to accessible sites which are well connected to the town centre. Applicants and local planning authorities should demonstrate flexibility on issues such as format and scale, so that opportunities to utilise suitable town centre or edge of centre sites are fully explored.

88. This sequential approach should not be applied to applications for small scale rural offices or other small scale rural development.

89. When assessing applications for retail and leisure development outside town centres, which are not in accordance with an up-to-date plan, local planning authorities should require an impact assessment if the development is over a proportionate, locally set floorspace threshold (if there is no locally set threshold, the default threshold is 2,500m^2 of gross floorspace). This should include assessment of:

a) the impact of the proposal on existing, committed and planned public and private investment in a centre or centres in the catchment area of the proposal; and

b) the impact of the proposal on town centre vitality and viability, including local consumer choice and trade in the town centre and the wider retail catchment (as applicable to the scale and nature of the scheme).

90. Where an application fails to satisfy the sequential test or is likely to have significant adverse impact on one or more of the considerations in paragraph 89, it should be refused.

8. Promoting healthy and safe communities

91. Planning policies and decisions should aim to achieve healthy, inclusive and safe places which:

a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;

b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and

c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.

92. To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should:

a) plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;

b) take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;

c) guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs;

d) ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and

e) ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.

93. Planning policies and decisions should consider the social, economic and environmental benefits of estate regeneration. Local planning authorities should use their planning powers to help deliver estate regeneration to a high standard.

94. It is important that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement, and to development that will widen choice in education. They should:

a) give great weight to the need to create, expand or alter schools through the preparation of plans and decisions on applications; and

b) work with schools promoters, delivery partners and statutory bodies to identify and resolve key planning issues before applications are submitted.

95. Planning policies and decisions should promote public safety and take into account wider security and defence requirements by:

a) anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate[41]. Policies for relevant areas (such as town centre and regeneration frameworks), and the layout and design of developments, should be informed by the most up-to-date information available from the police and other agencies about the nature of potential threats and their implications. This includes appropriate and proportionate steps that can be taken to reduce vulnerability, increase resilience and ensure public safety and security; and

b) recognising and supporting development required for operational defence and security purposes, and ensuring that operational sites are not affected adversely by the impact of other development proposed in the area.

Open space and recreation

96. Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision. Information gained from the assessments should be used to determine what open space, sport and recreational provision is needed, which plans should then seek to accommodate.

97. Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:

a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or

b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or

c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.

98. Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.

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[41] This includes transport hubs, night-time economy venues, cinemas and theatres, sports stadia and arenas, shopping centres, health and education establishments, places of worship, hotels and restaurants, visitor attractions and commercial centres.

99. The designation of land as Local Green Space through local and neighbourhood plans allows communities to identify and protect green areas of particular importance to them. Designating land as Local Green Space should be consistent with the local planning of sustainable development and complement investment in sufficient homes, jobs and other essential services. Local Green Spaces should only be designated when a plan is prepared or updated, and be capable of enduring beyond the end of the plan period.

100. The Local Green Space designation should only be used where the green space is:

a) in reasonably close proximity to the community it serves;

b) demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife; and

c) local in character and is not an extensive tract of land.

101. Policies for managing development within a Local Green Space should be consistent with those for Green Belts.

9. Promoting sustainable transport

102. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

103. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

104. Planning policies should:

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

e) provide for any large scale transport facilities that need to be located in the area[42], and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements; and

f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government's General Aviation Strategy[43].

105. If setting local parking standards for residential and non-residential development, policies should take into account:

a) the accessibility of the development;

b) the type, mix and use of development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

106. Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.

107. Planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities, taking into account any local shortages, to reduce the risk of parking in locations that lack proper facilities or could cause a nuisance. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use.

Considering development proposals

108. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

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[42] Policies for large scale facilities should, where necessary, be developed through collaboration between strategic policy-making authorities and other relevant bodies. Examples of such facilities include ports, airports, interchanges for rail freight, public transport projects and roadside services. The primary function of roadside services should be to support the safety and welfare of the road user (and most such proposals are unlikely to be nationally significant infrastructure projects).

[43] Department for Transport (2015) *General Aviation Strategy*.

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

109. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

110. Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

111. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

10. Supporting high quality communications

112. Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections. Policies should set out how high quality digital infrastructure, providing access to services from a range of providers, is expected to be delivered and upgraded over time; and should prioritise full fibre connections to existing and new developments (as these connections will, in almost all cases, provide the optimum solution).

113. The number of radio and electronic communications masts, and the sites for such installations, should be kept to a minimum consistent with the needs of consumers, the efficient operation of the network and providing reasonable capacity for future expansion. Use of existing masts, buildings and other structures for new electronic communications capability (including wireless) should be encouraged. Where new sites are required (such as for new 5G networks, or for connected transport and smart city applications), equipment should be sympathetically designed and camouflaged where appropriate.

114. Local planning authorities should not impose a ban on new electronic communications development in certain areas, impose blanket Article 4 directions over a wide area or a wide range of electronic communications development, or insist on minimum distances between new electronic communications development and existing development. They should ensure that:

a) they have evidence to demonstrate that electronic communications infrastructure is not expected to cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and

b) they have considered the possibility of the construction of new buildings or other structures interfering with broadcast and electronic communications services.

115. Applications for electronic communications development (including applications for prior approval under the General Permitted Development Order) should be supported by the necessary evidence to justify the proposed development. This should include:

a) the outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college, or within a statutory safeguarding zone surrounding an aerodrome, technical site or military explosives storage area; and

b) for an addition to an existing mast or base station, a statement that self-certifies that the cumulative exposure, when operational, will not exceed International Commission guidelines on non-ionising radiation protection; or

c) for a new mast or base station, evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure

and a statement that self-certifies that, when operational, International Commission guidelines will be met.

116. Local planning authorities must determine applications on planning grounds only. They should not seek to prevent competition between different operators, question the need for an electronic communications system, or set health safeguards different from the International Commission guidelines for public exposure.

11. Making effective use of land

117. Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land[44].

118. Planning policies and decisions should:

a) encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains – such as developments that would enable new habitat creation or improve public access to the countryside;

b) recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production;

c) give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land;

d) promote and support the development of under-utilised land and buildings, especially if this would help to meet identified needs for housing where land supply is constrained and available sites could be used more effectively (for example converting space above shops, and building on or above service yards, car parks, lock-ups and railway infrastructure)[45]; and

e) support opportunities to use the airspace above existing residential and commercial premises for new homes. In particular, they should allow upward extensions where the development would be consistent with the prevailing height and form of neighbouring properties and the overall street scene, is well-designed (including complying with any local design policies and standards), and can maintain safe access and egress for occupiers.

119. Local planning authorities, and other plan-making bodies, should take a proactive role in identifying and helping to bring forward land that may be suitable for meeting development needs, including suitable sites on brownfield registers or held in public ownership, using the full range of powers available to them. This should include identifying opportunities to facilitate land assembly, supported where necessary by compulsory purchase powers, where this can help to bring more land forward for meeting development needs and/or secure better development outcomes.

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[44] Except where this would conflict with other policies in this Framework, including causing harm to designated sites of importance for biodiversity.

[45] As part of this approach, plans and decisions should support efforts to identify and bring back into residential use empty homes and other buildings, supported by the use of compulsory purchase powers where appropriate.

120. Planning policies and decisions need to reflect changes in the demand for land. They should be informed by regular reviews of both the land allocated for development in plans, and of land availability. Where the local planning authority considers there to be no reasonable prospect of an application coming forward for the use allocated in a plan:

a) they should, as part of plan updates, reallocate the land for a more deliverable use that can help to address identified needs (or, if appropriate, deallocate a site which is undeveloped); and

b) in the interim, prior to updating the plan, applications for alternative uses on the land should be supported, where the proposed use would contribute to meeting an unmet need for development in the area.

121. Local planning authorities should also take a positive approach to applications for alternative uses of land which is currently developed but not allocated for a specific purpose in plans, where this would help to meet identified development needs. In particular, they should support proposals to:

a) use retail and employment land for homes in areas of high housing demand, provided this would not undermine key economic sectors or sites or the vitality and viability of town centres, and would be compatible with other policies in this Framework; and

b) make more effective use of sites that provide community services such as schools and hospitals, provided this maintains or improves the quality of service provision and access to open space.

Achieving appropriate densities

122. Planning policies and decisions should support development that makes efficient use of land, taking into account:

a) the identified need for different types of housing and other forms of development, and the availability of land suitable for accommodating it;

b) local market conditions and viability;

c) the availability and capacity of infrastructure and services – both existing and proposed – as well as their potential for further improvement and the scope to promote sustainable travel modes that limit future car use;

d) the desirability of maintaining an area's prevailing character and setting (including residential gardens), or of promoting regeneration and change; and

e) the importance of securing well-designed, attractive and healthy places.

123. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

a) plans should contain policies to optimise the use of land in their area and meet as much of the identified need for housing as possible. This will be tested robustly at examination, and should include the use of minimum density standards for city and town centres and other locations that are well served by public transport. These standards should seek a significant uplift in the average density of residential development within these areas, unless it can be shown that there are strong reasons why this would be inappropriate;

b) the use of minimum density standards should also be considered for other parts of the plan area. It may be appropriate to set out a range of densities that reflect the accessibility and potential of different areas, rather than one broad density range; and

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).

12. Achieving well-designed places

124. The creation of high quality buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process.

125. Plans should, at the most appropriate level, set out a clear design vision and expectations, so that applicants have as much certainty as possible about what is likely to be acceptable. Design policies should be developed with local communities so they reflect local aspirations, and are grounded in an understanding and evaluation of each area's defining characteristics. Neighbourhood plans can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development.

126. To provide maximum clarity about design expectations at an early stage, plans or supplementary planning documents should use visual tools such as design guides and codes. These provide a framework for creating distinctive places, with a consistent and high quality standard of design. However their level of detail and degree of prescription should be tailored to the circumstances in each place, and should allow a suitable degree of variety where this would be justified.

127. Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users[46]; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

128. Design quality should be considered throughout the evolution and assessment of individual proposals. Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important for clarifying expectations and reconciling local and commercial interests. Applicants should work closely with those affected by their proposals to evolve designs that take account of the views of the community. Applications that can demonstrate early, proactive and effective engagement with the community should be looked on more favourably than those that cannot.

129. Local planning authorities should ensure that they have access to, and make appropriate use of, tools and processes for assessing and improving the design of development. These include workshops to engage the local community, design advice and review arrangements, and assessment frameworks such as Building for Life[47]. These are of most benefit if used as early as possible in the evolution of schemes, and are particularly important for significant projects such as large scale housing and mixed use developments. In assessing applications, local planning authorities should have regard to the outcome from these processes, including any recommendations made by design review panels.

130. Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions, taking into account any local design standards or style guides in plans or supplementary planning documents. Conversely, where the design of a development accords with clear expectations in plan policies, design should not be used by the decision-maker as a valid reason to object to development. Local planning authorities should also seek to ensure that the quality of approved development is not materially diminished between permission and completion, as a result of changes being made to the permitted scheme (for example through changes to approved details such as the materials used).

131. In determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.

132. The quality and character of places can suffer when advertisements are poorly sited and designed. A separate consent process within the planning system controls the display of advertisements, which should be operated in a way which is simple, efficient and effective. Advertisements should be subject to control only in the interests of amenity and public safety, taking account of cumulative impacts.

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[46] Planning policies for housing should make use of the Government's optional technical standards for accessible and adaptable housing, where this would address an identified need for such properties. Policies may also make use of the nationally described space standard, where the need for an internal space standard can be justified.

[47] Birkbeck D and Kruczkowski S (2015) *Building for Life 12: The sign of a good place to live.*

13. Protecting Green Belt land

133. The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

134. Green Belt serves five purposes:

a) to check the unrestricted sprawl of large built-up areas;

b) to prevent neighbouring towns merging into one another;

c) to assist in safeguarding the countryside from encroachment;

d) to preserve the setting and special character of historic towns; and

e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

135. The general extent of Green Belts across the country is already established. New Green Belts should only be established in exceptional circumstances, for example when planning for larger scale development such as new settlements or major urban extensions. Any proposals for new Green Belts should be set out in strategic policies, which should:

a) demonstrate why normal planning and development management policies would not be adequate;

b) set out whether any major changes in circumstances have made the adoption of this exceptional measure necessary;

c) show what the consequences of the proposal would be for sustainable development;

d) demonstrate the necessity for the Green Belt and its consistency with strategic policies for adjoining areas; and

e) show how the Green Belt would meet the other objectives of the Framework.

136. Once established, Green Belt boundaries should only be altered where exceptional circumstances are fully evidenced and justified, through the preparation or updating of plans. Strategic policies should establish the need for any changes to Green Belt boundaries, having regard to their intended permanence in the long term, so they can endure beyond the plan period. Where a need for changes to Green Belt boundaries has been established through strategic policies, detailed amendments to those boundaries may be made through non-strategic policies, including neighbourhood plans.

137. Before concluding that exceptional circumstances exist to justify changes to Green Belt boundaries, the strategic policy-making authority should be able to demonstrate that it has examined fully all other reasonable options for meeting its identified need for development. This will be assessed through the examination of its strategic policies, which will take into account the preceding paragraph, and whether the strategy:

a) makes as much use as possible of suitable brownfield sites and underutilised land;

b) optimises the density of development in line with the policies in chapter 11 of this Framework, including whether policies promote a significant uplift in minimum density standards in town and city centres and other locations well served by public transport; and

c) has been informed by discussions with neighbouring authorities about whether they could accommodate some of the identified need for development, as demonstrated through the statement of common ground.

138. When drawing up or reviewing Green Belt boundaries, the need to promote sustainable patterns of development should be taken into account. Strategic policy-making authorities should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt or towards locations beyond the outer Green Belt boundary. Where it has been concluded that it is necessary to release Green Belt land for development, plans should give first consideration to land which has been previously-developed and/or is well-served by public transport. They should also set out ways in which the impact of removing land from the Green Belt can be offset through compensatory improvements to the environmental quality and accessibility of remaining Green Belt land.

139. When defining Green Belt boundaries, plans should:

a) ensure consistency with the development plan's strategy for meeting identified requirements for sustainable development;

b) not include land which it is unnecessary to keep permanently open;

c) where necessary, identify areas of safeguarded land between the urban area and the Green Belt, in order to meet longer-term development needs stretching well beyond the plan period;

d) make clear that the safeguarded land is not allocated for development at the present time. Planning permission for the permanent development of safeguarded land should only be granted following an update to a plan which proposes the development;

e) be able to demonstrate that Green Belt boundaries will not need to be altered at the end of the plan period; and

f) define boundaries clearly, using physical features that are readily recognisable and likely to be permanent.

140. If it is necessary to restrict development in a village primarily because of the important contribution which the open character of the village makes to the openness of the Green Belt, the village should be included in the Green Belt. If, however, the character of the village needs to be protected for other reasons, other means should be used, such as conservation area or normal development management policies, and the village should be excluded from the Green Belt.

141. Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

142. The National Forest and Community Forests offer valuable opportunities for improving the environment around towns and cities, by upgrading the landscape and providing for recreation and wildlife. The National Forest Strategy and an approved Community Forest Plan may be a material consideration in preparing development plans and in deciding planning applications. Any development proposals within the National Forest and Community Forests in the Green Belt should be subject to the normal policies for controlling development in Green Belts.

Proposals affecting the Green Belt

143. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

144. When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.

145. A local planning authority should regard the construction of new buildings as inappropriate in the Green Belt. Exceptions to this are:

a) buildings for agriculture and forestry;

b) the provision of appropriate facilities (in connection with the existing use of land or a change of use) for outdoor sport, outdoor recreation, cemeteries and burial grounds and allotments; as long as the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it;

c) the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;

d) the replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces;

e) limited infilling in villages;

f) limited affordable housing for local community needs under policies set out in the development plan (including policies for rural exception sites); and

g) limited infilling or the partial or complete redevelopment of previously developed land, whether redundant or in continuing use (excluding temporary buildings), which would:

- not have a greater impact on the openness of the Green Belt than the existing development; or
- not cause substantial harm to the openness of the Green Belt, where the development would re-use previously developed land and contribute to meeting an identified affordable housing need within the area of the local planning authority.

146. Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. These are:

a) mineral extraction;

b) engineering operations;

c) local transport infrastructure which can demonstrate a requirement for a Green Belt location;

d) the re-use of buildings provided that the buildings are of permanent and substantial construction;

e) material changes in the use of land (such as changes of use for outdoor sport or recreation, or for cemeteries and burial grounds); and

f) development brought forward under a Community Right to Build Order or Neighbourhood Development Order.

147. When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

14. Meeting the challenge of climate change, flooding and coastal change

148. The planning system should support 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.

Planning for climate change

149. Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures[48]. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.

150. New development should be planned for in ways that:

a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and

b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.

151. To help increase the use and supply of renewable and low carbon energy and heat, plans should:

a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);

b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and

c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

[48] In line with the objectives and provisions of the Climate Change Act 2008.

152. Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.

153. In determining planning applications, local planning authorities should expect new development to:

a) comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and

b) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

154. When determining planning applications for renewable and low carbon development, local planning authorities should:

a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

b) approve the application if its impacts are (or can be made) acceptable[49]. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

Planning and flood risk

155. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

156. Strategic policies should be informed by a strategic flood risk assessment, and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards.

157. All plans should apply a sequential, risk-based approach to the location of development – taking into account the current and future impacts of climate change

[49] Except for applications for the repowering of existing wind turbines, a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing.

– so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by:

a) applying the sequential test and then, if necessary, the exception test as set out below;

b) safeguarding land from development that is required, or likely to be required, for current or future flood management;

c) using opportunities provided by new development to reduce the causes and impacts of flooding (where appropriate through the use of natural flood management techniques); and

d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more sustainable locations.

158. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.

159. If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.

160. The application of the exception test should be informed by a strategic or site-specific flood risk assessment, depending on whether it is being applied during plan production or at the application stage. For the exception test to be passed it should be demonstrated that:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

161. Both elements of the exception test should be satisfied for development to be allocated or permitted.

162. Where planning applications come forward on sites allocated in the development plan through the sequential test, applicants need not apply the sequential test again. However, the exception test may need to be reapplied if relevant aspects of the proposal had not been considered when the test was applied at the plan-making stage, or if more recent information about existing or potential flood risk should be taken into account.

163. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment[50]. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;

b) the development is appropriately flood resistant and resilient;

c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;

d) any residual risk can be safely managed; and

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

164. Applications for some minor development and changes of use[51] should not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments set out in footnote 50.

165. Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should:

a) take account of advice from the lead local flood authority;

b) have appropriate proposed minimum operational standards;

c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and

d) where possible, provide multifunctional benefits.

Coastal change

166. In coastal areas, planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Integrated Coastal Zone Management should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes.

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[50] A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

[51] This includes householder development, small non-residential extensions (with a footprint of less than 250m^2) and changes of use; except for changes of use to a caravan, camping or chalet site, or to a mobile home or park home site, where the sequential and exception tests should be applied as appropriate.

167. Plans should reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast. They should identify as a Coastal Change Management Area any area likely to be affected by physical changes to the coast, and:

a) be clear as to what development will be appropriate in such areas and in what circumstances; and

b) make provision for development and infrastructure that needs to be relocated away from Coastal Change Management Areas.

168. Development in a Coastal Change Management Area will be appropriate only where it is demonstrated that:

a) it will be safe over its planned lifetime and not have an unacceptable impact on coastal change;

b) the character of the coast including designations is not compromised;

c) the development provides wider sustainability benefits; and

d) the development does not hinder the creation and maintenance of a continuous signed and managed route around the coast[52].

169. Local planning authorities should limit the planned lifetime of development in a Coastal Change Management Area through temporary permission and restoration conditions, where this is necessary to reduce a potentially unacceptable level of future risk to people and the development.

[52] As required by the Marine and Coastal Access Act 2009.

15. Conserving and enhancing the natural environment

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

171. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework[53]; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

172. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks

[53] Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

and the Broads[54]. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development[55] other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and

c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

173. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 172), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and biodiversity

174. To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity[56]; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation[57]; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts),

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[54] *English National Parks and the Broads: UK Government Vision and Circular 2010* provides further guidance and information about their statutory purposes, management and other matters.
[55] For the purposes of paragraphs 172 and 173, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.
[56] Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.
[57] Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.

adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons[58] and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites[59]; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

Ground conditions and pollution

178. Planning policies and decisions should ensure that:

a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

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[58] For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

[59] Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.

179. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

180. Planning policies and decisions should also 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. In doing so they should:

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life[60];

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and

c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

181. Planning policies and 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. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. 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.

182. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.

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[60] See Explanatory Note to the *Noise Policy Statement for England* (Department for Environment, Food & Rural Affairs, 2010).

183. The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

16. Conserving and enhancing the historic environment

184. Heritage assets range from sites and buildings of local historic value to those of the highest significance, such as World Heritage Sites which are internationally recognised to be of Outstanding Universal Value[61]. These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations[62].

185. Plans should set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. This strategy should take into account:

a) the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;

b) the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;

c) the desirability of new development making a positive contribution to local character and distinctiveness; and

d) opportunities to draw on the contribution made by the historic environment to the character of a place.

186. When considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest, and that the concept of conservation is not devalued through the designation of areas that lack special interest.

187. Local planning authorities should maintain or have access to a historic environment record. This should contain up-to-date evidence about the historic environment in their area and be used to:

a) assess the significance of heritage assets and the contribution they make to their environment; and

b) predict the likelihood that currently unidentified heritage assets, particularly sites of historic and archaeological interest, will be discovered in the future.

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[61] Some World Heritage Sites are inscribed by UNESCO to be of natural significance rather than cultural significance; and in some cases they are inscribed for both their natural and cultural significance.

[62] The policies set out in this chapter relate, as applicable, to the heritage-related consent regimes for which local planning authorities are responsible under the Planning (Listed Buildings and Conservation Areas) Act 1990, as well as to plan-making and decision-making.

188. Local planning authorities should make information about the historic environment, gathered as part of policy-making or development management, publicly accessible.

Proposals affecting heritage assets

189. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

190. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.

191. Where there is evidence of deliberate neglect of, or damage to, a heritage asset, the deteriorated state of the heritage asset should not be taken into account in any decision.

192. In determining applications, local planning authorities should take account of:

a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;

b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and

c) the desirability of new development making a positive contribution to local character and distinctiveness.

Considering potential impacts

193. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

194. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:

a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;

b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional[63].

195. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

a) the nature of the heritage asset prevents all reasonable uses of the site; and

b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and

c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and

d) the harm or loss is outweighed by the benefit of bringing the site back into use.

196. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

197. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

198. Local planning authorities should not permit the loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.

199. Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible[64]. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

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[63] Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

[64] Copies of evidence should be deposited with the relevant historic environment record, and any archives with a local museum or other public depository.

200. Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

201. Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 195 or less than substantial harm under paragraph 196, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

202. Local planning authorities should assess whether the benefits of a proposal for enabling development, which would otherwise conflict with planning policies but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.

17. Facilitating the sustainable use of minerals

203. It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.

204. Planning policies should:

a) provide for the extraction of mineral resources of local and national importance, but not identify new sites or extensions to existing sites for peat extraction;

b) so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously;

c) safeguard mineral resources by defining Mineral Safeguarding Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked);

d) set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place;

e) safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material;

f) set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality;

g) when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction; and

h) ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place.

205. When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy[65]. In considering proposals for mineral extraction, minerals planning authorities should:

a) as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas;

b) ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;

c) ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source[66], and establish appropriate noise limits for extraction in proximity to noise sensitive properties;

d) not grant planning permission for peat extraction from new or extended sites;

e) provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances;

f) consider how to meet any demand for small-scale extraction of building stone at, or close to, relic quarries needed for the repair of heritage assets, taking account of the need to protect designated sites; and

g) recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the duration of planning permissions reflecting the intermittent or low rate of working at many sites.

206. Local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.

Maintaining supply

207. Minerals planning authorities should plan for a steady and adequate supply of aggregates by:

a) preparing an annual Local Aggregate Assessment, either individually or jointly, to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources);

[65] Except in relation to the extraction of coal, where the policy at paragraph 211 of this Framework applies.
[66] National planning guidance on minerals sets out how these policies should be implemented.

b) participating in the operation of an Aggregate Working Party and taking the advice of that party into account when preparing their Local Aggregate Assessment;

c) making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans, taking account of the advice of the Aggregate Working Parties and the National Aggregate Co-ordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;

d) taking account of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;

e) using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;

f) maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised[67];

g) ensuring that large landbanks bound up in very few sites do not stifle competition; and

h) calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.

208. Minerals planning authorities should plan for a steady and adequate supply of industrial minerals by:

a) co-operating with neighbouring and more distant authorities to ensure an adequate provision of industrial minerals to support their likely use in industrial and manufacturing processes;

b) encouraging safeguarding or stockpiling so that important minerals remain available for use;

c) maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment[68]; and

d) taking account of the need for provision of brick clay from a number of different sources to enable appropriate blends to be made.

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[67] Longer periods may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites.

[68] These reserves should be at least 10 years for individual silica sand sites; at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant, and for silica sand sites where significant new capital is required; and at least 25 years for brick clay, and for cement primary and secondary materials to support a new kiln.

Oil, gas and coal exploration and extraction

209. Minerals planning authorities should:

a) recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and put in place policies to facilitate their exploration and extraction;

b) when planning for on-shore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for;

c) encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility;

d) indicate any areas where coal extraction and the disposal of colliery spoil may be acceptable;

e) encourage the capture and use of methane from coal mines in active and abandoned coalfield areas; and

f) provide for coal producers to extract separately, and if necessary stockpile, fireclay so that it remains available for use.

210. When determining planning applications, minerals planning authorities should ensure that the integrity and safety of underground storage facilities are appropriate, taking into account the maintenance of gas pressure, prevention of leakage of gas and the avoidance of pollution.

211. Planning permission should not be granted for the extraction of coal unless:

a) the proposal is environmentally acceptable, or can be made so by planning conditions or obligations; or

b) if it is not environmentally acceptable, then it provides national, local or community benefits which clearly outweigh its likely impacts (taking all relevant matters into account, including any residual environmental impacts).

Annex 1: Implementation

212. The policies in this Framework are material considerations which should be taken into account in dealing with applications from the day of its publication. Plans may also need to be revised to reflect policy changes which this replacement Framework has made. This should be progressed as quickly as possible, either through a partial revision or by preparing a new plan.

213. However, existing policies should not be considered out-of-date simply because they were adopted or made prior to the publication of this Framework. Due weight should be given to them, according to their degree of consistency with this Framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given).

214. The policies in the previous Framework will apply for the purpose of examining plans, where those plans are submitted[69] on or before 24 January 2019. Where such plans are withdrawn or otherwise do not proceed to become part of the development plan, the policies contained in this Framework will apply to any subsequent plan produced for the area concerned.

215. The Housing Delivery Test will apply from the day following the publication of the Housing Delivery Test results in November 2018. For the purpose of footnote 7 in this Framework, delivery of housing which was substantially below the housing requirement means where the Housing Delivery Test results published in:

    a) November 2018 indicate that delivery was below 25% of housing required over the previous three years;

    b) November 2019 indicate that delivery was below 45% of housing required over the previous three years;

    c) November 2020 and in subsequent years indicate that delivery was below 75% of housing required over the previous three years.

216. For the purpose of paragraph 14:

    a) up to and including 11 December 2018, paragraph 14a also includes neighbourhood plans that became part of the development plan more than two years before the date on which the decision is made; and

    b) from November 2018 to November 2019, housing delivery should be at least 25% of that required over the previous three years, as measured by the Housing Delivery Test.

[69] For spatial development strategies, 'submission' in this context means the point at which the Mayor sends to the Panel copies of all representations made in accordance with regulation 8(1) of the Town and Country Planning (London Spatial Development Strategy) Regulations 2000, or equivalent. For neighbourhood plans, 'submission' in this context means where a qualifying body submits a plan proposal to the local planning authority in accordance with regulation 15 of the Neighbourhood Planning (General) Regulations 2012.

217. The Government will continue to explore with individual areas the potential for planning freedoms and flexibilities, for example where this would facilitate an increase in the amount of housing that can be delivered.

Annex 2: Glossary

Affordable housing: housing for sale or rent, for those whose needs are not met by the market (including housing that provides a subsidised route to home ownership and/or is for essential local workers); and which complies with one or more of the following definitions:

a) **Affordable housing for rent:** meets all of the following conditions: (a) the rent is set in accordance with the Government's rent policy for Social Rent or Affordable Rent, or is at least 20% below local market rents (including service charges where applicable); (b) the landlord is a registered provider, except where it is included as part of a Build to Rent scheme (in which case the landlord need not be a registered provider); and (c) it includes provisions to remain at an affordable price for future eligible households, or for the subsidy to be recycled for alternative affordable housing provision. For Build to Rent schemes affordable housing for rent is expected to be the normal form of affordable housing provision (and, in this context, is known as Affordable Private Rent).

b) **Starter homes:** is as specified in Sections 2 and 3 of the Housing and Planning Act 2016 and any secondary legislation made under these sections. The definition of a starter home should reflect the meaning set out in statute and any such secondary legislation at the time of plan-preparation or decision-making. Where secondary legislation has the effect of limiting a household's eligibility to purchase a starter home to those with a particular maximum level of household income, those restrictions should be used.

c) **Discounted market sales housing:** is that sold at a discount of at least 20% below local market value. Eligibility is determined with regard to local incomes and local house prices. Provisions should be in place to ensure housing remains at a discount for future eligible households.

d) **Other affordable routes to home ownership:** is housing provided for sale that provides a route to ownership for those who could not achieve home ownership through the market. It includes shared ownership, relevant equity loans, other low cost homes for sale (at a price equivalent to at least 20% below local market value) and rent to buy (which includes a period of intermediate rent). Where public grant funding is provided, there should be provisions for the homes to remain at an affordable price for future eligible households, or for any receipts to be recycled for alternative affordable housing provision, or refunded to Government or the relevant authority specified in the funding agreement.

Air quality management areas: Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

Ancient or veteran tree: A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.

Ancient woodland: An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS).

Annual position statement: A document setting out the 5 year housing land supply position on 1st April each year, prepared by the local planning authority in consultation with developers and others who have an impact on delivery.

Archaeological interest: There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.

Best and most versatile agricultural land: Land in grades 1, 2 and 3a of the Agricultural Land Classification.

Brownfield land: See previously developed land.

Brownfield land registers: Registers of previously developed land that local planning authorities consider to be appropriate for residential development, having regard to criteria in the Town and Country Planning (Brownfield Land Registers) Regulations 2017. Local planning authorities will be able to trigger a grant of permission in principle for residential development on suitable sites in their registers where they follow the required procedures.

Build to Rent: Purpose built housing that is typically 100% rented out. It can form part of a wider multi-tenure development comprising either flats or houses, but should be on the same site and/or contiguous with the main development. Schemes will usually offer longer tenancy agreements of three years or more, and will typically be professionally managed stock in single ownership and management control.

Climate change adaptation: Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities.

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Coastal change management area: An area identified in plans as likely to be affected by physical change to the shoreline through erosion, coastal landslip, permanent inundation or coastal accretion.

Community forest: An area identified through the England Community Forest Programme to revitalise countryside and green space in and around major conurbations.

Community Right to Build Order: An Order made by the local planning authority (under the Town and Country Planning Act 1990) that grants planning permission for a site-specific development proposal or classes of development.

Competent person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation.

Conservation (for heritage policy): The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

Decentralised energy: Local renewable and local low-carbon energy sources.

Deliverable: To be considered deliverable, sites for housing should be available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years. Sites that are not major development, and sites with detailed planning permission, should be considered deliverable until permission expires, unless there is clear evidence that homes will not be delivered within five years (e.g. they are no longer viable, there is no longer a demand for the type of units or sites have long term phasing plans). Sites with outline planning permission, permission in principle, allocated in the development plan or identified on a brownfield register should only be considered deliverable where there is clear evidence that housing completions will begin on site within five years.

Design code: A set of illustrated design requirements that provide specific, detailed parameters for the physical development of a site or area. The graphic and written components of the code should build upon a design vision, such as a masterplan or other design and development framework for a site or area.

Designated heritage asset: A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.

Designated rural areas: National Parks, Areas of Outstanding Natural Beauty and areas designated as 'rural' under Section 157 of the Housing Act 1985.

Developable: To be considered developable, sites should be in a suitable location for housing development with a reasonable prospect that they will be available and could be viably developed at the point envisaged.

Development plan: Is defined in section 38 of the Planning and Compulsory Purchase Act 2004, and includes adopted local plans, neighbourhood plans that have been made and published spatial development strategies, together with any regional strategy policies that remain in force. Neighbourhood plans that have been approved at referendum are also part of the development plan, unless the local planning authority decides that the neighbourhood plan should not be made.

Edge of centre: For retail purposes, a location that is well connected to, and up to 300 metres from, the primary shopping area. For all other main town centre uses, a location within 300 metres of a town centre boundary. For office development, this includes locations outside the town centre but within 500 metres of a public transport interchange. In determining whether a site falls within the definition of edge of centre, account should be taken of local circumstances.

Entry-level exception site: A site that provides entry-level homes suitable for first time buyers (or equivalent, for those looking to rent), in line with paragraph 71 of this Framework.

Environmental impact assessment: A procedure to be followed for certain types of project to ensure that decisions are made in full knowledge of any likely significant effects on the environment.

Essential local workers: Public sector employees who provide frontline services in areas including health, education and community safety – such as NHS staff, teachers, police, firefighters and military personnel, social care and childcare workers.

General aviation airfields: Licenced or unlicenced aerodromes with hard or grass runways, often with extensive areas of open land related to aviation activity.

Geodiversity: The range of rocks, minerals, fossils, soils and landforms.

Green infrastructure: A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.

Habitats site: Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites.

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. It includes designated heritage assets and assets identified by the local planning authority (including local listing).

Heritage coast: Areas of undeveloped coastline which are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.

Historic environment: All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Historic environment record: Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.

Housing Delivery Test: Measures net additional dwellings provided in a local authority area against the homes required, using national statistics and local authority data. The Secretary of State will publish the Housing Delivery Test results for each local authority in England every November.

International, national and locally designated sites of importance for biodiversity: All international sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including Local Wildlife Sites.

Irreplaceable habitat: Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.

Local Development Order: An Order made by a local planning authority (under the Town and Country Planning Act 1990) that grants planning permission for a specific development proposal or classes of development.

Local Enterprise Partnership: A body, designated by the Secretary of State for Housing, Communities and Local Government, established for the purpose of creating or improving the conditions for economic growth in an area.

Local housing need: the number of homes identified as being needed through the application of the standard method set out in national planning guidance, or a justified alternative approach.

Local Nature Partnership: A body, designated by the Secretary of State for Environment, Food and Rural Affairs, established for the purpose of protecting and improving the natural environment in an area and the benefits derived from it.

Local planning authority: The public authority whose duty it is to carry out specific planning functions for a particular area. All references to local planning authority include the district council, London borough council, county council, Broads Authority, National Park Authority, the Mayor of London and a development corporation, to the extent appropriate to their responsibilities.

Local plan: A plan for the future development of a local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. A local plan can consist of either strategic or non-strategic policies, or a combination of the two.

Main town centre uses: Retail development (including warehouse clubs and factory outlet centres); leisure, entertainment and more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, nightclubs, casinos, health and fitness centres, indoor bowling centres and bingo halls); offices; and arts, culture and tourism development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

Major development[70]**:** For housing, development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more. For non-residential development it means additional floorspace of 1,000m^2 or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Major hazard sites, installations and pipelines: Sites and infrastructure, including licensed explosive sites and nuclear installations, around which Health and Safety Executive (and Office for Nuclear Regulation) consultation distances to mitigate the consequences to public safety of major accidents may apply.

Minerals resources of local and national importance: Minerals which are necessary to meet society's needs, including aggregates, brickclay (especially Etruria Marl and

[70] Other than for the specific purposes of paragraphs 172 and 173 in this Framework.

fireclay), silica sand (including high grade silica sands), cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas (including conventional and unconventional hydrocarbons), tungsten, kaolin, ball clay, potash, polyhalite and local minerals of importance to heritage assets and local distinctiveness.

Mineral Safeguarding Area: An area designated by minerals planning authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.

National trails: Long distance routes for walking, cycling and horse riding.

Natural Flood Management: managing flood and coastal erosion risk by protecting, restoring and emulating the natural 'regulating' function of catchments, rivers, floodplains and coasts.

Nature Recovery Network: An expanding, increasingly connected, network of wildlife-rich habitats supporting species recovery, alongside wider benefits such as carbon capture, water quality improvements, natural flood risk management and recreation. It includes the existing network of protected sites and other wildlife rich habitats as well as and landscape or catchment scale recovery areas where there is coordinated action for species and habitats.

Neighbourhood Development Order: An Order made by a local planning authority (under the Town and Country Planning Act 1990) through which parish councils and neighbourhood forums can grant planning permission for a specific development proposal or classes of development.

Neighbourhood plan: A plan prepared by a parish council or neighbourhood forum for a designated neighbourhood area. In law this is described as a neighbourhood development plan in the Planning and Compulsory Purchase Act 2004.

Non-strategic policies: Policies contained in a neighbourhood plan, or those policies in a local plan that are not strategic policies.

Older people: People over or approaching retirement age, including the active, newly-retired through to the very frail elderly; and whose housing needs can encompass accessible, adaptable general needs housing through to the full range of retirement and specialised housing for those with support or care needs.

Open space: All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Original building: A building as it existed on 1 July 1948 or, if constructed after 1 July 1948, as it was built originally.

Out of centre: A location which is not in or on the edge of a centre but not necessarily outside the urban area.

Out of town: A location out of centre that is outside the existing urban area.

Outstanding universal value: Cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations. An individual Statement of Outstanding Universal Value is agreed and adopted by the UNESCO World Heritage Committee for each World Heritage Site.

People with disabilities: People have a disability if they have a physical or mental impairment, and that impairment has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities. These persons include, but are not limited to, people with ambulatory difficulties, blindness, learning difficulties, autism and mental health needs.

Permission in principle: A form of planning consent which establishes that a site is suitable for a specified amount of housing-led development in principle. Following a grant of permission in principle, the site must receive a grant of technical details consent before development can proceed.

Planning condition: A condition imposed on a grant of planning permission (in accordance with the Town and Country Planning Act 1990) or a condition included in a Local Development Order or Neighbourhood Development Order.

Planning obligation: A legal agreement entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal.

Playing field: The whole of a site which encompasses at least one playing pitch as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or was last occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill, where provision for restoration has been made through development management procedures; land in built-up areas such as residential gardens, parks, recreation grounds and allotments; and land that was previously developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape.

Primary shopping area: Defined area where retail development is concentrated.

Priority habitats and species: Species and Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Ramsar sites: Wetlands of international importance, designated under the 1971 Ramsar Convention.

Renewable and low carbon energy: Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon

technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Rural exception sites: Small sites used for affordable housing in perpetuity where sites would not normally be used for housing. Rural exception sites seek to address the needs of the local community by accommodating households who are either current residents or have an existing family or employment connection. A proportion of market homes may be allowed on the site at the local planning authority's discretion, for example where essential to enable the delivery of affordable units without grant funding.

Safeguarding zone: An area defined in Circular 01/03: *Safeguarding aerodromes, technical sites and military explosives storage areas*, to which specific safeguarding provisions apply.

Self-build and custom-build housing: Housing built by an individual, a group of individuals, or persons working with or for them, to be occupied by that individual. Such housing can be either market or affordable housing. A legal definition, for the purpose of applying the Self-build and Custom Housebuilding Act 2015 (as amended), is contained in section 1(A1) and (A2) of that Act.

Setting of a heritage asset: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Significance (for heritage policy): The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.

Special Areas of Conservation: Areas defined by regulation 3 of the Conservation of Habitats and Species Regulations 2017 which have been given special protection as important conservation sites.

Special Protection Areas: Areas classified under regulation 15 of the Conservation of Habitats and Species Regulations 2017 which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds.

Site investigation information: Includes a risk assessment of land potentially affected by contamination, or ground stability and slope stability reports, as appropriate. All investigations of land potentially affected by contamination should be carried out in accordance with established procedures (such as BS10175 Investigation of Potentially Contaminated Sites – Code of Practice).

Site of Special Scientific Interest: Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Spatial development strategy: A plan containing strategic policies prepared by a Mayor or a combined authority. It includes the London Plan (prepared under provisions in the Greater London Authority Act 1999) and plans prepared by combined authorities that have been given equivalent plan-making functions by an order made under the Local Democracy, Economic Development and Construction Act 2009 (as amended).

Stepping stones: Pockets of habitat that, while not necessarily connected, facilitate the movement of species across otherwise inhospitable landscapes.

Strategic environmental assessment: A procedure (set out in the Environmental Assessment of Plans and Programmes Regulations 2004) which requires the formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment.

Strategic policies: Policies and site allocations which address strategic priorities in line with the requirements of Section 19 (1B-E) of the Planning and Compulsory Purchase Act 2004.

Strategic policy-making authorities: Those authorities responsible for producing strategic policies (local planning authorities, and elected Mayors or combined authorities, where this power has been conferred). This definition applies whether the authority is in the process of producing strategic policies or not.

Supplementary planning documents: Documents which add further detail to the policies in the development plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Sustainable transport modes: Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport.

Town centre: Area defined on the local authority's policies map, including the primary shopping area and areas predominantly occupied by main town centre uses within or adjacent to the primary shopping area. References to town centres or centres apply to city centres, town centres, district centres and local centres but exclude small parades of shops of purely neighbourhood significance. Unless they are identified as centres in the development plan, existing out-of-centre developments, comprising or including main town centre uses, do not constitute town centres.

Transport assessment: A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies measures required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport, and measures that will be needed deal with the anticipated transport impacts of the development.

Transport statement: A simplified version of a transport assessment where it is agreed the transport issues arising from development proposals are limited and a full transport assessment is not required.

Travel plan: A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives and is regularly reviewed.

Wildlife corridor: Areas of habitat connecting wildlife populations.

Windfall sites: Sites not specifically identified in the development plan.