

Flood Risk

Sequential & Exception Tests

Proposed
New M5 Motorway Junction (28A),
&
Cullompton Town Centre Relief Road.

1.0 Introduction

1.1 The National Planning Policy Framework (NPPF) requires that Local Plans should be supported by a Strategic Flood Risk Assessment (SFRA) and include policies to manage flood risk from all sources. It also requires Local Plans should apply a sequential, risk based approach to the location of development.

2.0 Sequential and Exception Tests

2.1 The Sequential Test is used to ensure that areas at little or no risk of flooding are developed in preference to areas of higher risk. The NPPF requires that **if it is not possible for development to be located in lower risk zones then the Exception Test must be applied** where development is more vulnerable to flooding.

2.2 Planning Practice Guidance (PPG) defines each flood zone as noted in Table 1 below.

Table 1	
Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map – all land outside Zones 2 and 3)
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
Zone 3b The Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

2.3 Planning Practice Guidance (PPG) identifies the circumstances when the Exception Test should be applied. As an example, where essential infrastructure is proposed on a site that is located within Flood Zone 3a or 3b, then the Exception Test should be applied.

2.4 Table 2 below demonstrates when the Exception Test should be applied.

Table 2					
Flood Risk Vulnerability Classification					
Flood Zones	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a	Exception Test required	X	Exception Test required	✓	✓
Zone 3b	Exception Test required	X	X	X	✓
Key:					
✓ - Development is appropriate					
X - Development should not be permitted					

2.5 The definition of the vulnerability of development is identified within Table 3.

Table 3	
Flood risk vulnerability classification	
Essential infrastructure	<ul style="list-style-type: none"> • Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood. • Wind turbines.
Highly vulnerable	<ul style="list-style-type: none"> • Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use. • Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').
More vulnerable	<ul style="list-style-type: none"> • Hospitals • Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels. • Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels. • Non-residential uses for health services, nurseries and educational establishments.

	<ul style="list-style-type: none"> • Landfill* and sites used for waste management facilities for hazardous waste. • Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.
Less vulnerable	<ul style="list-style-type: none"> • Police, ambulance and fire stations which are not required to be operational during flooding. • Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill* and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which do not need to remain operational during times of flood. • Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place.
Water-compatible development	<ul style="list-style-type: none"> • Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sewage transmission infrastructure and pumping stations. • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defense installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations. • Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. • Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

3.0 Cullompton Town Centre Relief Road & additional Motorway Junction (proposed J28A).

3.1 The market town of Cullompton is identified in the Mid Devon Local Plan Review 2013 – 2033; Proposed Submission (incorporating proposed modifications); as –
The strategic focus of new development, reflecting Cullompton`s accessibility, economic potential and environmental capacity.

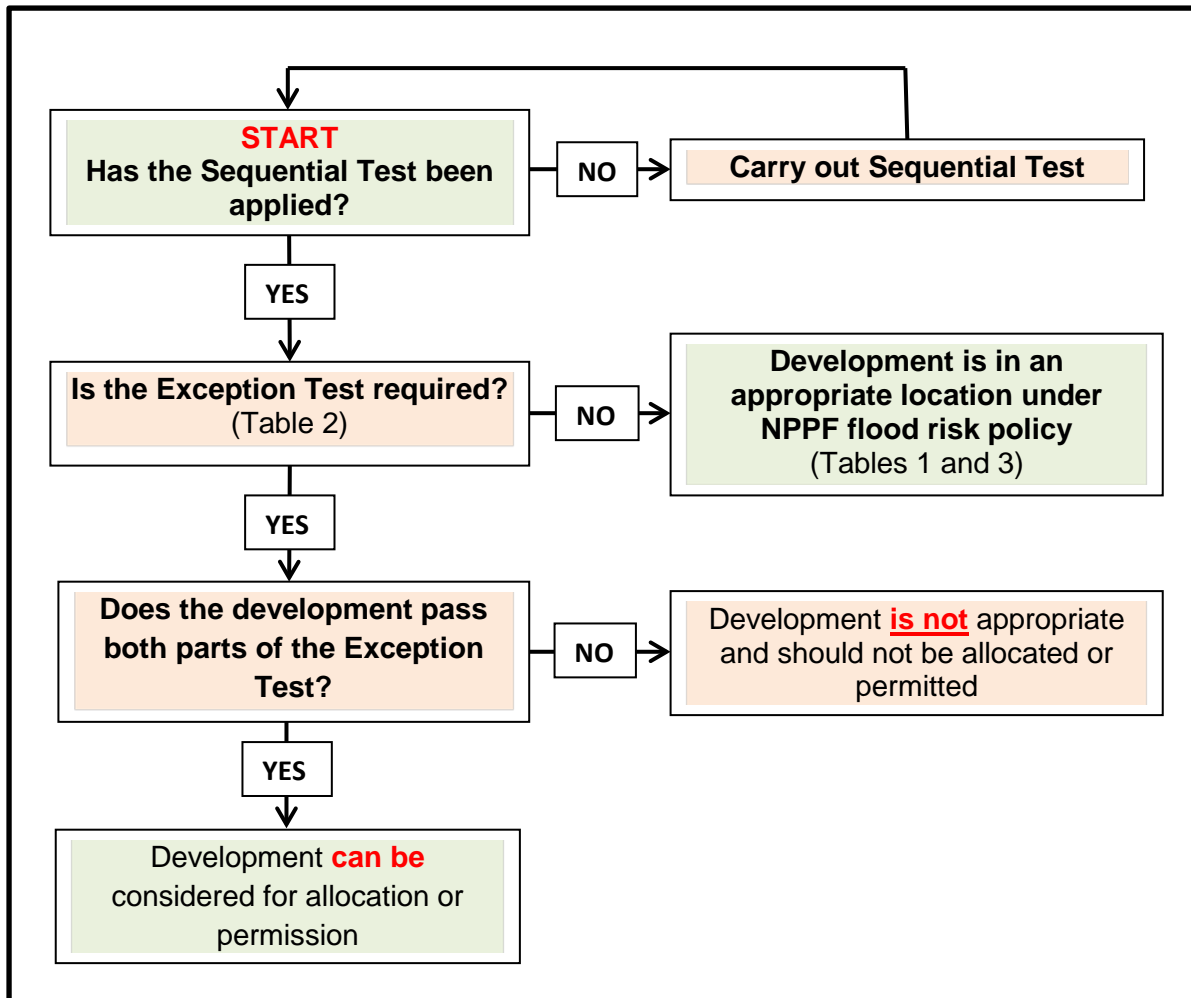
Development is targeted to:

- provide sustainable urban extensions containing a mix of homes, businesses, local shopping and other services and sustainable transport links.

- Provide enhancements to the town centre through additional investment, traffic and transport improvements and environmental enhancements to provide a significant boost to its vitality and viability, provide for a better range of retail and other uses and a significantly improved visitor environment.
 - Protect key environmental assets including heritage and biodiversity and improve air quality.
- 3.2 **Policy CU1** of the Plan allocates 100 hectares to the North West of Cullompton for mixed development comprising approximately;
- 1350 dwellings
 - 10,000 square metres of commercial floor space.
- 3.3 **Policy CU7** of the Plan allocates a site of 160 hectares to the East of Cullompton for mixed use development comprising approximately;
- 1,750 dwellings within the plan period and further development of at least 850 dwellings post-2033;
 - 20,000 square metres commercial floor space within the plan period and a further 12,000 post-2033, to include a care home or retirement complex, including a new primary school
 - Transport provision including a new or improved access and egress onto the M5 motorway and pedestrian and cycling links across the motorway to the existing town.
- 3.4 Other Local Plan policies CU13 (under construction), CU14, CU15 (completed) and CU16 (nearing completion) add a further 458 dwellings and CU17 and CU18 add a further 27,000 square metres of employment floor space.
- 3.5 Development in Cullompton is currently severely constrained by the existing limited capacity at Junction 28 of the motorway, in addition to traffic congestion and poor air quality in the town centre. The East of Cullompton Development (CU7) in combination with the urban extension to the North West (CU1) of Cullompton, presents an opportunity to resolve town centre traffic problems and provide an alternative means of access onto the M5.
- 3.6 The Council has been working closely with statutory consultees to ensure emerging improvements are appropriately designed.
- 3.7 The provision of appropriate transport infrastructure is a key requirement of these developments. This must ensure that there is sufficient long-term capacity for vehicles travelling onto, off and importantly across the motorway. The Council recognises that the high infrastructure costs will not solely be funded by the development. The Council is working with its partners and the development industry to secure external funding to ensure the delivery of the necessary infrastructure.
- 3.8 Devon County Council's Strategic Highways Option Report (2014) sets out an initial assessment of the various elements of transport infrastructure needed to service the site. A signalisation scheme at junction 28 of the M5 was undertaken in 2015. However this scheme does not produce junction capacity to accommodate the development. The first phase referred to in criterion (f) (CU12) therefore only relates to the subsequent highway works set out in the Devon County Council report.
- 3.9 The housing and employment land allocations to the east and west of Cullompton require:-
- Improvements to the existing motorway junction (J28)

- the construction of a new motorway junction with the M5, (J28A) and
- a town centre relief road.

3.10 The potential routes for the proposed new highways lie within Flood Zones 3a and 3b.



Based on Diagram 3 of NPPF Planning Practice Guidance: Flood Risk and Coastal Change (paragraph 028, Reference ID: 7-021-20140306) March 2014

Table 4	
Sequential Test	
Site	Land East and West of the M5, Cullompton
Allocation	Area for Town Centre Relief Road & Motorway Junction
Flood Zone	3a, 3b
Highest vulnerability of proposed use	Essential Infrastructure
Reasonable alternative site/s available in same or lower flood zone?	Please see Devon County Council's Strategic Highways Option Report (2014). Cullompton needs new M5 junction capacity. This cannot be provided at the existing junction 28. A new southbound junction is required to provide the additional

	<p>capacity required also providing a second overbridge link to the town east to west. This additional overbridge needs to be provided close to the town centre. The road will need to cross and be within the flood plain. The site lies essentially within flood zone 3a and 3b.</p>
Exceptions Test	
<p>It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk.</p>	<p>Wider Community Benefits.</p> <ul style="list-style-type: none"> • Mid Devon Local Plan - Policy CU7 of the Local Plan recognises that an essential prerequisite to major development east of Cullompton is <i>“transport provision to ensure appropriate accessibility for all modes, including a new or improved access and egress onto the M5 motorway and pedestrian and cycling links across the motorway to the existing town”</i>. • The draft Cullompton Neighbourhood Plan supports proposals to ensure that junction 28 of the M5 functions efficiently and safely as population and business activity in the Cullompton area grows. • Creating capacity for the growth and development of Cullompton, which is currently constrained by the severely limited capacity of junction 28 motorway M5, and air quality issues in the Town Centre. • Provision of increased area of flood plain, an increase of 50,100 cubic metres over the existing situation with enhanced connectivity between the channel and floodplain ensuring that the floodplain of the Culm is used to maximum effect. • Provision of new additional southbound motorway junction (28A) with the new M5 motorway junction removing congestion from the existing at capacity junction 28. • Provision of an additional road and pedestrian/cycle over bridge across the M5 motorway linking Cullompton town centre with areas to the East, removing congestion from the only existing (main route) overbridge. • Provision of Town Centre Relief Road removing substantial through traffic from the town centre and improving air quality in the town.

<p>Is must be demonstrated that the development will be safe for its lifetime taking into account the vulnerability of its users without increasing flood risk elsewhere and where possible reduce flood risk overall.'</p>	<p>See detailed site specific Flood Risk Assessment (FRA). The detailed site specific FRA demonstrates that the development will be safe for its lifetime. Flood warnings and evacuation issues, if necessary, will be considered at the detailed road and bridge design stage, the FRA will highlight any key areas where these should be considered.</p>
<p>Summary</p>	
<p>It is considered that there are no reasonable alternatives to this site for the new motorway junction and road proposals within lower flood zones. It is considered the site passes the Exceptions Test for essential infrastructure having taken account of the wider community benefits and the fact the development will be safe (in respect of flood risk) for its lifetime.</p>	

3.11 There are two elements to the Exception Test as set out below. Both elements need to be passed for a site to be allocated for development in the Local Plan.

- The development must provide wider sustainability benefits (**see above**) that outweigh the flood risk informed by a Strategic Flood Risk Assessment; https://www.middevon.gov.uk/media/103563/sfra_main_report.pdf , and
- It must be demonstrated that the development will be safe for its lifetime. This should be informed by a Level 2 Strategic Flood Risk Assessment. https://www.middevon.gov.uk/media/103563/sfra_main_report.pdf Flood warnings and evacuation issues therefore need to be considered in the design and layout of planned developments, the FRA will highlight any key areas where these should be considered.

4.0 Do the proposals pass the sequential and exception test requirements?

4.1 YES

- The road infrastructure proposals are situated in flood risk areas 3a and 3b. The development comprises **essential transport infrastructure** which has to cross the area at risk of flooding.
- **There are no other appropriate locations** which would provide for the necessary traffic movements east/west to and from Cullompton and provide access to the motorway from the town.
- The capacity of **the existing flood plain will be significantly increased.**
- The scheme provides much needed wider community benefits (see table 4 above)
- The scheme will **permit growth in and around Cullompton which would otherwise be constrained by its highway infrastructure for the foreseeable future.**
- **The scheme will improve air quality in the town centre and remove congestion from M5 J28.**
- **The scheme will reduce existing flood risk in some parts of Cullompton.**

