The Shepway Core Strategy Flood Evaluation

This evidence supports the Shepway LDF Core Strategy. It is derived from Annexe 2 of the 'Development Sites Summary' which was approved by Shepway's Cabinet 13th April 2011 (Appendix 3 of the report to Cabinet), and other previously published documentation.

1. Flood risk

1.1 National policy requires that considerations of flood risk play a prominent part in the range of factors examined when considering the selection of sites for development.

1.2 PPS25 (Para. 16) sets out that it should be demonstrated that for an allocation "there are no reasonably available sites in areas with a lower probability of flooding that would be *appropriate* with the type of development or land use propose [emphasis added]. " This is known as the sequential test.

1.3 PPS25 relies firstly on Environment Agency (EA) Flood Zone mapping, which categorises land as follows:

- Zone 1: low probability (under 0.1% chance of flooding a year)
- Zone 2: medium probability
- Zone 3a: high probability
- Zone 3b: functional floodplain.

Over half of Shepway's land area is in zone 3a, and the local application of the sequential approach has been discussed with the EA in this specific context.

1.4 PPS25 encourages the preparation of a Strategic Flood Risk Assessment (SFRA) to provide further detailed information about higher risk zones The Shepway SFRA helps analysis by depicting EA zones in the future (addressing climate change) and by modeling residual risk and the degree of hazard (i.e. severity were flooding to occur).

1.5 Shepway's SFRA therefore provides information of significant practical use in the operation of the sequential approach. This note explains it is proposed that national flood risk policy applies within Shepway, firstly for strategic site allocation, and then for other potential sites in the LDF.

2. Strategic allocations and minimising flood risk

2.1 PPS25 has been applied as part of developing proposed allocations as follows:

Zone 1 Low Probability

2.2 Shorncliffe Garrison, Folkestone is proposed as a strategic allocation. This is in EA zone 1, and the Shepway SFRA provides strong confirmation that no essential or vulnerable development is at risk of flooding. It complies with the sequential test: no other site has a lesser flood risk.

2.3 Other potential sites were included in LDF Core Strategy 'Preferred Options' consultation in 2009 in Zone 1. However these are not applicable to the test as set out in PPS25 (e.g. para. 16) as they are not reasonably appropriate to the type of development proposed i.e. are not suitable as a strategic site in the Core Strategy. This is set out in the Potential Strategic Sites Evaluation, outcomes agreed by Shepway Cabinet April 2011.

Zones 2 and 3 Medium and High Probability

2.4 All sites outside of Zone 1 in Shepway have an element of high probability (Zone 3), as classified by the EA mapping. There are no sites predominantly in Zone 2.

2.5 To ensure sustainable development, specific exceptions to the sequential test are permitted in national policy. Regard can be had to the use proposed. PPS25 explains (para. 18) that necessary development can occur whilst managing flood risk if the Exception Test is met.

2.6 Specifically para. 19 of PPS25 details:

The Exception Test is only appropriate for use when there are large areas in Flood Zones 2 and 3, where the Sequential Test alone cannot deliver acceptable sites, but where some continuing development is necessary for wider sustainable development reasons, taking into account the need to avoid social or economic blight and the need for essential civil infrastructure to remain operational during floods. It may also be appropriate to use it where restrictive national designations such as landscape, heritage and nature conservation designations, eg Areas of Outstanding Natural Beauty (AONBs), Sites of Special Scientific Interest (SSSIs) and World Heritage Sites (WHS), prevent the availability of unconstrained sites in lower risk areas

2.7 This is clearly highly pertinent to Shepway:

- A majority of the district (Romney Marsh) is in Zone 3a.
- The Potential Strategic Sites Evaluation shows Zone 1 cannot deliver sufficient appropriate strategic sites to meet Shepway's sustainable development needs.
- Substantial parts of the district are covered by the Kent Downs AONB designation, or are SSSI (or even internationally recognised under 'Natura 2000 series' designations)¹.

2.8 Addressing these issues, the exceptions test actually constitutes three tests all of which must be satisfied. Application of the exceptions test(s) for the proposed strategic allocation of Folkestone Racecourse, Westenhanger and Folkestone Seafront is shown in the following table:

	Folkestone Racecourse, Westenhange	r Folkestone			
		Seafront			
Vulnerability by PPS25	Proposed land uses:				
category and policy					
compatibility:					
Water compatible	Will deliver sewage infrastructure	Features water-based recreation			
development.	(underground)				
In Zone 3a: "development					
is appropriate"					
Less vulnerable. In	Includes shops, offices and restaurants.				
Zone 3a: "development is					
appropriate"					
More vulnerable. In	re vulnerable . In Includes <i>dwelling houses</i> and various commercial and community services.				
Zone 3a: "exceptions test					
required" [see below]					
Highly vulnerable. In	N/A. [No emergency services accommoda	tion, caravans, basement dwellings to			
Zone 3a: "Development	be included].				
should not be permitted."					
Essential Infrastructure	N/A [No new national transport infrastructu	lite or			
In Zone 3a: "exceptions	utility infrastructure or wind turbines proposed]				
test required"					
Exception tests:	Rationale:				
It must be demonstrated	The Shepway SFRA shows that as a	The Shepway SFRA shows that			
that the development	whole the Racecourse site has minimal	most of the Seafront site is free from			
provides wider	flood risk. None of the land is in an	flood risk hazard. Any potential risks			
sustainability benefits	overtopping zone or has a hazard	identified are considered to be			
to the community that	rating. It is concluded that any flood risk	outweighed by the substantial			

¹ For evaluation of the relationship between habitats, coastal flooding issues and the hydrological cycle see the Shepway Water Cycle Report.

outweigh flood risk,	from the East Stour River in part of the	potential sustainability merits of the	
informed by a SFRA	site is outweighed by the potential	site as confirmed in the Potential	
where one has been	sustainability merits of the site as	Strategic Sites Evaluation: Passed.	
prepared. ²	confirmed in the Potential Strategic		
	Sites Evaluation: Passed.		
The development should	The Racecourse site is part previously	The Seafront site is on previously	
be on developable	developed. Although a significant part is	developed land, although it is	
previously-developed	undeveloped there is considered to be	proposed to 'undevelop' part in order	
land or, if it is not on	no other available site in Shepway that	to help minimise flood risk i.e.	
previously developed	can be reasonably considered to	provide an extended beach by way	
land, that there are no	alternatively deliver the benefits	of directly reinforcing natural	
reasonable alternative	identified in the Potential Strategic Sites	defences: <i>Passed.</i>	
sites on developable	Evaluation: <i>Passed.</i>		
previously-developed			
land.			
A FRA must demonstrate	The SFRA is the best available local	The SFRA is the best available local	
that the development	document at present, and this shows	document at present, and this shows	
will be safe, without	safety from flood hazard, with dry	significant areas (not adjoining the	
increasing flood risk	access available. It concludes that the	coastline) free from hazards. There	
elsewhere, and, where	likelihood of passing the Exception Test	is identified potential for mitigation,	
possible, will reduce	is "high". An FRA will be required before	and subsequent work in anticipation	
flood risk overall.	any development proceeds.	of an FRA avoids concentrating	
	Comparison of EA flood zone mapping	more vulnerable or essential	
	(See below) with the most developed	infrastructure in the higher risks	
	masterplan proposals shows no more	areas. The masterplan focuses	
	vulnerable or essential infrastructure	residential development away from	
	proposed in the flood zone.	areas of extreme hazard. An FRA	
	There is the potential to improve the	will be required before any	
	environment of the East Stour and	development proceeds.	
	reduce flood risk: Likely to be passed	The SFRA concludes that the	
	subject to the receipt of a	likelihood of passing the Exception	
	satisfactory FRA for the site.	Test is "medium/ high": <i>Likely to be</i>	
		passed subject to the receipt of a	
		satisfactory FRA for the site.	

 $^{^2}$ "If the DPD has reached the 'submission' stage the benefits of the development should contribute to the Core Strategy's Sustainability Appraisal."

2.9 The exception test has been applied as part of the land in question is in EA zone 3a, and residential development is an important component of both. This has been undertaken as a precaution³. It is therefore considered the two sites meet national policy.

Folkestone Racecourse⁴: Flood Zone extent. SFRA Appendix 6 (p. 33)



³ That is, even though in one or more of the sites(s) as masterplanned, the uses in the specific area of flood risk may only be "less vulnerable" or "water compatible" and be where development is considered appropriate in Zone 3a under PPS25.

⁴ N.B. The assessment has been done on the basis of up to date proposed development information. This includes a wider boundary for relocation of the racecourse to the northeast. Residential development is expected only in the eastern part of the boundary shown, not near the flood zone.

Folkestone Seafront: SFRA flood hazard mapping

SFRA Appendix 6 (p. 6)



2.9. In conclusion, all proposed strategic site options from across the district have been considered together in terms of flood risk (as strategic sites are of district-wide or greater significance).

2.10 Flood risks and the expected disposition of uses have been appraised, and the inclusion of strategic sites at Folkestone Seafront, Shorncliffe Garrison and Folkestone Racecourse are shown in the SFRA, Sustainability Appraisal and in this note to be consistent with managing and reducing flood risk, and overall sustainable development.

3. The Core Strategy, non-strategic site delivery and minimising flood risk

3.1 Shepway has specific flood risk and sustainable development needs, and the overall framework for tackling these is outlined in the LDF Core Strategy. In implementing this and in achieving PPS25 development objectives as apply in the district, the SFRA will be of major practical use.

3.2 Shepway's SFRA notes (section 3.4):

To date the Sequential Test has presented the Council with a significant challenge because, as discussed above, over half of the entire District lies within Zone 3a. It has therefore been one of the primary objectives of the SFRA to sub-divide the area within this flood zone so that the Sequential Test can be applied within Shepway's extensive Zone 3a area.

3.3 The SFRA has established empirically and through widespread agreement of the appropriateness of an area based PPS25 approach. The Romney Marsh area is distinct, not least in its topographical characteristics, and it is wholly within Zone 3 (although the SFRA reveals significant variations in the hazard associated with the residual risk). The SFRA (section 12) recommends that the needs of the Marsh are specifically recognised, consistent with policy and avoiding extreme hazard risks.

3.4 National policy recognises the role of LDF Sustainability Appraisal⁵ in informing the management of flood risk and development. Shepway's SA and evidence base supports regeneration needs within the varied parts of the district, and accordingly the Core Strategy supports an area-based approach to avoiding flood risk in practice and ensuring the sustainable application of PPS25.

3.5 An area-wide Sequential Approach was undertaken (and subsequently supported) at LDF Core Strategy Preferred Options to confirm that land at New Romney formed the best performing option in the whole area for a major new development sites to meet the needs and flood risk of the Romney Marsh area. This forms the appendix.

⁵ For instance PPS25 Practice Guide (DCLG) para. 20, revised edition.

APPENDIX: SEQUENTIAL TEST -ROMNEY MARSH AREA [2009 NOTE]

A sequential approach and exceptions test are required by PPS25. Need for Romney Marsh focus established through evidence including emerging SA data.

Possible focal towns established from current strategic policy (Structure Plan) and Rural Services Study. Lydd has no deliverable/developable SHLAA sites comfortably in excess of 1ha (although 195, Station Yard and 335 Fisher Field, Dengemarsh Rd, are approximately of that magnitude); and emerging strategy identifies New Romney as generally more sustainable for strategic scale development (larger, better served, jobs, transport). The sequential test is therefore applied at New Romney for Core Strategy Preferred Options purposes.

New Romney inc Littlestone area:

A. IDENTIFY SITES & THEIR S.F.R.A. PERFORMANCE

• Qualification: 1ha

SSHLAA Ref	Name	Ward	Size (ha)	SFRA (+CC 2115)
373	NW of New Romney	RM	27	Red + (~5% orange <maroon)< td=""></maroon)<>
232	Allotments	NRT	2	Red + (10% orange ~8% white)
403	Ashford Rd (W)	NRT	3.5	Mostly orange/white
409	Cockreed La (NE)	NRT	5.6	Mostly white/yellow
415	Ashford Rd (E)	NRT	3.2	Red + (~30% orange ~10% white/yellow)
379	Victoria Rd Land	NRC	11	All red (apart from very small maroon)

Candidate deliverable/developable sites from SHLAA:

It can be seen that two sites are most preferable as contain no red ('significant risk') on the SFRA 2115 (Climate Change) test. These are 409 (which has more white) and 403. Site 379 is - at best – red, and with the 'significant risk' performs worse.

The other three are more mixed. Ranking these groupings in order of preference the results, can be expressed as follows:

- Order:
 - 1. white/yellow (most) =Site 409
 - 2. white/orange (most) =403
 - 3-5. Red +with some lesser risk =373/232/415
 - 6. Red +minor worse risk =379

There could be two options for distinguishing between the three sites of similar performance. One way is the detailed quantitative way of estimating the proportion of the sites that is non-red (see % figures above from GIS area calculations). But an additional option that could help provide guidance, is to have also have regard the current day (2012) situation maps:

SSHLAA	Name	Ward	Size (ha)	SFRA (base 2012)
Ref				
373	NW of New Romney	RM	27	Mostly yellow
232	Allotments	NRT	2	Mostly orange/white

415	Ashford Rd (E)	NRT	3.2	Mostly yellow/white, no red.

The judgements arising produce the same conclusions (this is not surprising as essential land conditions - site suitability - derived from the Marsh's topography are the same whatever the year in the model). Site 415 is the most sequentially preferable, probably followed by 373, then 232. Remember Site 379 is clearly worse than all these.

B. APPLYING FINDINGS SEQUENTIALLY

In meeting housing need the best performing sites should be considered first. The above process can be used to ensure that the most hazardous sites are not necessary.

All sites are 'Greenfield'. The total area housing requirement is calculated on the basis of the Sustainability Appraisal information (in accordance with national guidance) for Romney Marsh and considering the scale of local housing needs at Core Strategy Preferred Options stage. The strategic approach has been informed these factors, needs to form a cohesive strategic site, and also takes account of the need for proportionality with the urban area (this not being a regional growth area/SE Plan urban extension). It is additional to the supply from extent permissions (inc site 232).

New Romney housing strategic minimum requirement: ~300 additional units.

Cumulative Housing Count to meet needs

- 1. 1ST Sequential stage: Site409 =150houses. Continue sequence
 2. 2nd Sequential stage: add Site403 =250total. Cont. sequence again
- 3. 3rd Sequential stage: add Site415 =390total. Requirement met.

C. CONCLUSION: NEW ROMNEY

Sites 409, 403 and 415 are sequentially necessary given a 300 minimum dwelling

requirement. This exercise was undertaken by officer interpretation of SFRA hazard mapping at the first opportunity. It informed Core Strategy Preferred Options, and subsequently the SFRA produced extra interpretation in Appendix 6; the evaluation here is considered generally consistent with this additional perspective (on the basis of the "Hazard Rating" and "Emergency Access" summaries in this Appendix).

[POSTSCRIPT 2011] This was derived from SFRA data, and investigation of local flooding and exceptions tests as required should be undertaken on a site-by-site basis.