VALP: Aylesbury Vale District Flood Risk Sequential Test

September 2017

Version 3.1
Aylesbury Vale Flood Risk Sequential Test

About This Report

This report has been prepared to meet the National Planning Policy Framework paragraphs 93-104.

The study was completed during May-September 2017. The primary author was Aylesbury Vale District Council, working with a critical friend of JBA, the SFRA consultants and a peer review of the first draft and second draft report stage by Buckinghamshire County Council and the Environment Agency. The timetable of the study during 2017 was the following. In addition a version with minor corrections (track changes) was produced in July 2018. The corrections are track changes to the September 2017 final study. The purpose of the corrections is to clarify that Part 2 of the Exception Test can only be ultimately passed on sites at the development management stage. Until a planning application on the allocated site has been considered, the Council’s position is that it should be possible for the Exception Part 2 to be passed and indeed it is a requirement of the VALP for the Exception Test requirements of Part 2 to be passed in order to comply with the development plan.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Month</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary work</td>
<td>17 May</td>
<td>Meeting 12 June (AVDC, BCC, JBA, EA)</td>
</tr>
<tr>
<td>First Draft</td>
<td>19 June</td>
<td>Report circulated for 24 days for comment (JBA, EA, BCC)</td>
</tr>
<tr>
<td>Second Draft (v.2.0)</td>
<td>9 August</td>
<td>Report circulated 21 days for comment</td>
</tr>
<tr>
<td>Final Study (v3.0)</td>
<td>Publication by 13 September</td>
<td>Circulation of report (JBA, BCC, EA) and publication on AVDC website</td>
</tr>
<tr>
<td>Corrections (v3.1)</td>
<td>5 July 2018</td>
<td>Circulation of report (JBA, BCC, EA) and publication on AVDC website</td>
</tr>
</tbody>
</table>

The corrections made by AVDC only concern the following paragraphs:

Executive Summary, 4.1.12, 4.2.9, 4.2.10, 4.3.9 and 5.1
Executive Summary

The Sequential Test, as required under the National Planning Policy Framework (NPPF) and informed by the Planning Practice Guidance, has been applied and is passed for all sites being considered for allocation in the VALP Proposed Submission. The Exception Test has been applied where required. Part 1 has been passed for the sites as discussed and part 2 can be passed once the sites are considered in more detail at the development management stage, informed by the Level 2 SFRA.

The Level 2 SFRA supports applications of the Exception Test by providing more detailed evidence of flood risk at a site level, and sets out technical information to inform the requirements of site specific Flood Risk Assessments and how to make developments safe (the second part) of the Exception Test.

The SFRA has assessed sites in the Housing and Economic Land Availability Assessment (HELAA) and where there is flood risk vulnerability, taken sites to a Level 2 assessment. Recommendations in the SFRA Level 2 have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

Three sites require an Exception Test - WTV018/BIE022 within the VALP strategic allocation ‘Land North of the A41’ and site STO016 within ‘South West Aylesbury’.

The second part of the Exception Test can only be fully passed when determining a development proposal at the planning application stage.
### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> National and District Context</td>
<td>Executive Summary</td>
<td>6</td>
</tr>
<tr>
<td>1.1</td>
<td>Relevant Documents</td>
<td>6</td>
</tr>
<tr>
<td>1.2</td>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>1.3</td>
<td>The sequential, risk based approach to plan-making</td>
<td>6</td>
</tr>
<tr>
<td>1.4</td>
<td>Applying the Sequential Test</td>
<td>7</td>
</tr>
<tr>
<td>1.5</td>
<td>Applying the Exception Test</td>
<td>10</td>
</tr>
<tr>
<td><strong>2</strong> Methodology and Outcomes</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>2.1</td>
<td>Stage 1 – Can development site be allocated in Flood Zone 1, avoiding flood risk from other sources?</td>
<td>13</td>
</tr>
<tr>
<td>2.2</td>
<td>Stage 1a – Can development site be allocated entirely in Flood Zone 1, avoiding flood risk from other sources?</td>
<td>13</td>
</tr>
<tr>
<td>2.3</td>
<td>Stage 1b - Where flood risk is present in Flood Zone 1, can the Sequential test be used to locate development away from other sources of flooding?</td>
<td>14</td>
</tr>
<tr>
<td>2.4</td>
<td>Stage 2 – Where Flood Zone 2 or 3 is present can the Sequential test be used to locate all development into Flood Zone 1?</td>
<td>15</td>
</tr>
<tr>
<td>2.5</td>
<td>Stage 3 – Can development be allocated in Flood Zone 2 and 3?</td>
<td>20</td>
</tr>
<tr>
<td>2.6</td>
<td>Stage 4 – Is development appropriate in remaining areas?</td>
<td>21</td>
</tr>
<tr>
<td>2.7</td>
<td>Conclusions of the Sequential Test</td>
<td>21</td>
</tr>
<tr>
<td><strong>3</strong> VALP Site allocations considered for the Proposed Submission Local Plan</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>3.1</td>
<td>Sites that pass the Sequential Test without the need for detailed assessment</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Sustainability Appraisal</td>
<td>26</td>
</tr>
<tr>
<td>3.2</td>
<td>Site Allocation AYL073 - Land at Thame Road/Leach Road, Aylesbury</td>
<td>26</td>
</tr>
<tr>
<td>3.3</td>
<td>Site Allocation Policy AYL115 – Rabans Lane/railway line, Aylesbury</td>
<td>28</td>
</tr>
<tr>
<td>3.4</td>
<td>Site Allocation Policy BUC046 – Land south of A421, east of Gawcott Road</td>
<td>29</td>
</tr>
<tr>
<td>3.5</td>
<td>Site Allocation Policy BUC051 – Land west of Buckingham, Brackley Road and adjacent the River Great Ouse (Neighbourhood Plan Reserve Site Allocation)</td>
<td>31</td>
</tr>
<tr>
<td>3.6</td>
<td>Site Allocation Policy EDL003 – Land north of Cow Lane, Edlesborough</td>
<td>34</td>
</tr>
<tr>
<td>3.7</td>
<td>Site Allocation Policy EDL020 – Land at 29 The Green, Edlesborough</td>
<td>35</td>
</tr>
<tr>
<td>3.8</td>
<td>Site Allocation Policy EDL021 – Land at Slickets Lane, Edlesborough</td>
<td>37</td>
</tr>
<tr>
<td>3.9</td>
<td>Site Allocation Policy MGB003 – Land at Leopold Farm and area to the west, Marsh Gibbon</td>
<td>39</td>
</tr>
<tr>
<td>3.10</td>
<td>Site Allocation Policy NLV001 – Land at Salden Chase, south of the A421, north of Newton Longville</td>
<td>40</td>
</tr>
<tr>
<td>3.11</td>
<td>Site Allocation Policy QUA001 – Land south west of 62 Station Road, Quainton</td>
<td>42</td>
</tr>
<tr>
<td>3.12</td>
<td>Site Allocation Policy SCD008 Molly’s Folly, Molly’s Field, Land west of Addison Road, Steeple Claydon (Neighbourhood Plan site)</td>
<td>43</td>
</tr>
<tr>
<td>3.13</td>
<td>Site Allocation Policy WIN001 – Land to east of the B4033, Great Horwood Road</td>
<td>45</td>
</tr>
<tr>
<td><strong>Aylesbury Garden Town Sites</strong></td>
<td></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>
| 3.14 | **South Aylesbury**  
Site Allocation Policy SMD004 – Land south of Stoke Mandeville Hospital, Stoke Mandeville | 49 |
| 3.15 | Site Allocation Policy SMD006 – Land north of Stoke Mandeville, adjacent Lower Road, Stoke Mandeville | 50 |
| 3.16 | Site Allocation Policy SMD007 – Land south of Aylesbury, adjacent Wendover Road, Stoke Mandeville | 52 |
| 3.17 | Site Allocation Policy SMD008 – Land between railway line and Wendover Road, Stoke Mandeville | 53 |
| 3.18 | Site Allocation Policy SMD016 – Land straddling the railway line north of Stoke Mandeville | 55 |
| **South West Aylesbury** | | **58** |
| 3.19 | Site Allocation Policy STO016 – Land South West of Aylesbury/Southern Arc (west), south of Aylesbury | 58 |
| 3.20 | Site Allocation Policy SMD009 – Land between Marsh Lane, Princes Risborough railway line and Aylesbury | 61 |
| **Land North of A41** | | **64** |
| 3.21 | Site Allocation Policy WTV017– Westonmead Farm, off A41, east of Aylesbury (part of AGT-3 Land north of A41) | 64 |
| 3.23 | Site Allocation Policy BIE022 – Land at Manor Farm, land south of Grand Union Canal Aylesbury Arm | 69 |
| **Land South of A41** | | **73** |
| 3.24 | Site Allocation Policy WTV019– Land east of Holiday Inn, south of A41, east of Aylesbury | 73 |
| 3.25 | Site Allocation Policy WTV022– ‘Hampden Fields’, south of A41, east of Aylesbury west of Weston Turville | 74 |
| **Exception Test** | | **78** |
| 4.1 | HELAA site WTV018 – ‘Woodlands’, off A41, east of Aylesbury and south of Grand Union Canal Aylesbury Arm | 78 |
| 4.2 | Site Allocation Policy BIE022 – Land at Manor Farm, land south of Grand Union Canal Aylesbury Arm | 80 |
| 4.3 | Site Allocation Policy STO016 – Land South West of Aylesbury/Southern Arc (west), south of Aylesbury | 82 |
| 5.0 | **Conclusions of the Exception Test** | 83 |
|      | Appendix 1 – Table of all sites in Stage 1 | 84 |
|      | Appendix 2 – Maps for all Allocated Sites | 85 |
1. National and District Context

1.1 Relevant documents

1.1.1 Documents relevant to the Sequential Test include:

- Aylesbury Vale Level 1 SFRA
- Aylesbury Vale Level 2 SFRA
- Aylesbury Vale Housing and Economic Land Availability Assessment (HELAA) version 4.
- Vale of Aylesbury Local Plan (Draft Plan) summer 2016
- Planning Practice Guidance (2014-

1.1.2 These documents form part of the Local Plan evidence base and can be viewed on the Council’s website at https://www.aylesburyvaledc.gov.uk/supporting-evidence

1.2 Introduction

1.2.1 The National Planning Policy Framework (NPPF) sets strict tests to protect people and property from flooding which all local planning authorities are expected to follow. Where these tests are not met, national policy is clear that new development should not be allowed. The main steps to be followed are set out below which, in summary, are designed to ensure that if there are better sites in terms of flood risk, or a proposed development cannot be made safe, it should not be permitted.

1.2.2 Assess flood risk:

Local planning authorities undertake a Strategic Flood Risk Assessment to fully understand the flood risk in the area to inform Local Plan preparation (Level 1 SFRA).

1.2.3 Avoid flood risk:

In plan-making, local planning authorities apply a Sequential Test to site selection so that development is, as far as reasonably possible, located where the risk of flooding (from all sources) is lowest, taking account of climate change and the vulnerability of future uses to flood risk. In plan-making this involves applying the ‘Sequential Test’ to Local Plans and, if needed, the ‘Exception Test’ to Local Plans (this document and Level 2 SFRA).

1.2.4 Manage and mitigate flood risk:
Where development needs to be in locations where there is a risk of flooding as alternative sites are not available, local planning authorities and developers ensure development is appropriately flood resilient, resistant and safe for its users for the development’s lifetime. Safe access and egress arrangements must be possible and development must not increase flood risk overall (the Level 2 SFRA provides useful information, however, this is completed at development management stage).

1.3  The sequential, risk based approach to plan-making

1.3.1  The sequential, risk-based approach outlined in paragraph 100 of the NPPF and the Planning Practice Guidance on Flood Risk and Coastal Change (PPG) is designed to ensure areas with little or no risk of flooding from rivers (Flood Zone 1) and other sources of flooding are developed in preference in areas at higher risk, with the aim of keeping development outside of medium and high flood risk areas (Flood Zones 2 and 3) and away from other sources of flooding. Within Flood Zone 1, a Sequential Test should be taken to ensure that, wherever possible, development is situated away from areas at risk from all other sources of flooding.

1.3.2  When preparing a Local Plan, the LPA should demonstrate it has considered a range of possible site options for development, using SFRAs to apply the Sequential and Exception Tests where necessary. The PPG gives detailed instructions on how to perform the test in preparation of a Local Plan (https://www.gov.uk/guidance/flood-risk-and-coastal-change#Sequential-Test-to-Local-Plan).

1.4  Applying the Sequential Test

1.4.1  The Sequential Test should be applied to the whole LPA area to increase the likelihood of allocating development in areas not at risk of flooding. AVDC are carrying out the Sequential Test (and, if necessary, the Exception Test) as part of the Sustainability Appraisal (SA) process, and partners have been consulted on this. The evidence presented within the SFRA Level 1 and 2 is intended to support the decision-making process.

1.4.2  The reproduced PPG Diagram 2 Diagram 2: application of the Sequential Test for Local Plan preparation describes how the Sequential Test should be applied in the preparation of a Local Plan:
Notes to Diagram 2: Other sources of flooding also need to be considered.

1.4.3 Flood risk information must be considered alongside other spatial planning issues. Allocations are considered on the basis of their flood risk attributes and the outcome used to inform decisions that include other spatial planning issues such as transport, housing, economic growth, natural resources, regeneration, biodiversity, the historic environment and management of other hazards. All ‘reasonably available’ sites need to be sequentially tested, and therefore the source of sites is the Housing and Economic Land Availability Assessment (HELAA) version 4.

1.4.4 When applying the Sequential Test it is important to demonstrate:

- That a transparent process has been formulated and followed
- That this process has sought to steer new development to areas with the lowest probability of flooding, and;
- That full consideration has been given to reasonably available alternatives on land with a lower probability of flooding.

Appropriate development and the Sequential Test

1.4.5 Under the NPPF, development is classed as 'Essential Infrastructure', 'Less Vulnerable', 'More Vulnerable', 'Highly Vulnerable' or 'Water Compatible'. Table 2 and Table 3 of the Planning Practice Guidance provide further detail of the type of development considered
Aylesbury Vale Flood Risk Sequential Test

appropriate for each Flood Zone, where development is not permitted, and where
development is allowed only when the Exception Test is passed.

1.4.6 If when applying the Sequential Test development in the floodplain is necessary and
satisfactorily justified, the Local Planning Authority should also bear in mind the
vulnerability classification of the proposed development to assess if it is appropriate in
an area of flood risk. In certain circumstances, the Local Planning Authority may be
required to undertake the Exception Test.

1.4.7 Full details of the type of development in each flood risk vulnerability classification is
available in Table 2 of the PPG. They key types considered in the Local Plan are
summarised below:

- ‘Essential infrastructure’ – transport and utility infrastructure
- ‘Highly vulnerable’ development – emergency services, caravans and mobile homes.
- ‘More vulnerable’ development - residential development (including student
  accommodation and care homes), drinking establishments, hotels and hospitals
- ‘Less vulnerable’ development - shops, financial, professional and other services,
  restaurants, cafes, offices, general industry, storage and distribution, assembly and
  leisure, sewage treatment works.

1.4.8 Following the satisfactory application of the Sequential Test, Table 2 and Table 3 are used
to guide potential land uses to areas where the development vulnerability is appropriate
to the flooding probability. The Tables are also used to show where development is
inappropriate and should not be permitted in certain flood zones.

Table 3 of the PPG:

<table>
<thead>
<tr>
<th>Flood Zones</th>
<th>Flood Risk Vulnerability Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Essential infrastructure</td>
</tr>
<tr>
<td>Zone 1</td>
<td>✓</td>
</tr>
<tr>
<td>Zone 2</td>
<td>✓</td>
</tr>
<tr>
<td>Zone 3a †</td>
<td>Exception Test required †</td>
</tr>
<tr>
<td>Zone 3b *</td>
<td>Exception Test required *</td>
</tr>
</tbody>
</table>
Consideration of climate change

1.4.9 Updated government guidance on assessing the impact of climate change on flooding in line with the UKCP09 Climate Change Projections was released in February 2016. The guidance provides a range of climate change allowances which are dependent on location (by river basin) and timescale of development (epoch). It also provides several bands (termed ‘central’, ‘higher central’ and ‘upper end’) to test depending on the vulnerability of the development and the Flood Zone within which it is located.

1.4.10 The Level 1 SFRA carried out a high-level assessment of vulnerability to climate change using Flood Zone 2 as a proxy. The Level 2 SFRA used re-runs of existing hydraulic models to produce a modelled Flood Zone 3a plus climate change where available, and Flood Zone 2 as a proxy where no detailed models were available.

1.4.11 For the purposes of the Sequential Test, all sites have been assessed against the Level 2 SFRA Flood Zone 3a plus climate change. The impact on the area within the future Flood Zone 1 has been taken into account.

Consideration of other sources of flooding

1.4.12 The NPPF and PPG imply that all sources of flooding (not simply fluvial flooding as defined by the Flood Zones) must be considered in the Sequential Test, although this step is not explicitly laid out in Diagram 2 or Table 3. For AVDC, other sources of flooding have been considered at every stage of the Sequential Test.

1.4.13 In addition to the fluvial Flood Zones and historic flood information, every site in the HELAA has been screened for:

- Presence of small watercourses intersecting the site (i.e. catchment less than 3km² which are not included in the Flood Zones);
- Percentage of the site area at risk from surface water flooding in the 1 in 1,000-year event;
- Percentage of the site area at risk from reservoir flooding.

1.4.14 For those sites examined in the Level 2 SFRA, the likelihood of groundwater flooding was also considered. Sewer flooding data is provided by water companies at a relatively broad scale (numbers of incidents within each 5-digit postcode area), so it was not possible to assess sewer flooding in detail at a site scale.

1.5 Applying the Exception Test
1.5.1 The Exception Test should only be applied following the application of the Sequential Test and as set out in Table 3 of the PPG. If the Exception Test is required, then a Level 2 SFRA is likely to be needed.

1.5.2 The PPG Diagram 3 describes how the Sequential Test should be applied in the preparation of a Local Plan:

![Diagram of Sequential Test Process]

1.5.3 For the Exception Test to be passed:

- it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk as informed by the Level 1 and 2 SFRA.
- a site-specific flood risk assessment must demonstrate that 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.

1.5.4 Both elements of the test must be passed for development to be allocated or permitted.

1.5.5 The first criteria should be provided through the Sustainability Appraisal. If a potential site allocation fails to score positively against the aims and objectives of the sustainability appraisal, or is not otherwise capable of demonstrating sustainability benefits, AVDC should consider whether the use of planning conditions and/or planning obligations could make it do so. Where this is not possible the Exception Test has not been satisfied and the allocation should not be made.

1.5.6 The second part of the Exception Test relates to the “safety” of the development. When considering safety, specific local circumstances need to be taken into account, including:

- The characteristics of a possible flood event, e.g. the type and source of flooding and frequency, depth, velocity and speed of onset;
The safety of people within a building if it floods and also the safety of people around a building and in adjacent areas, including people who are less mobile or who have a physical impairment. This includes the ability of residents and users to safely access and exit a building during a design flood and to evacuate before an extreme flood;

- The structural safety of buildings, and;

- The impact of a flood on the essential services provided to a development.

1.5.7 The second part of the Exception Test can only be fully passed when determining a development proposal. The Level 2 SFRA supports applications of the Exception Test by providing more detailed evidence of flood risk at a site level, and sets out technical information to inform the requirements of site specific Flood Risk Assessments and how to make developments safe (the second part) of the Exception Test.

2. Methodology and Outcomes

2.01 Through the SFRA, the process of screening all potential development sites for the presence of all sources of flooding has been an iterative one, carried out at various stages to inform the development of the VALP, including:

- HELAA version 3 (May 2016) detailed in Appendix A of Draft Level 1 SFRA
- VALP Draft Plan stage sites (June 2016)
- VALP Draft Plan consultation response additional sites and other sites considered for HELAA version 4 (November 2016)
- HELAA version 4 (January 2017)

The screening process has allowed AVDC to carry out the Sequential Test using the methodology outlined below.

2.02 The Sequential Test set out in four stages in parallel with the flow diagram in Diagram 2 of the PPG.

2.03 Sites were initially simply ranked by flood risk:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Flood risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flood Zone 1, low risk from other sources of flooding</td>
</tr>
<tr>
<td>2</td>
<td>Flood Zone 1, significant risk of flooding from other sources</td>
</tr>
<tr>
<td>3</td>
<td>Flood Zone 2, 3a, 3a plus climate change or 3b present</td>
</tr>
</tbody>
</table>

2.04 Within the Appendix 1, the rank is shown and the sites were sorted by order of percentage of the site in Flood Zone 1 (high to low).
2.1 Stage 1 – Can development site be allocated in Flood Zone 1, avoiding flood risk from other sources?

2.1.1 The first part of the Sequential Test (in PPG Diagram 2) is “Can development be allocated within Flood Zone 1?” These sites have been ranked into two categories for clarity as described below:

a) Can the development site be allocated entirely in Flood Zone 1, avoiding flood risk from other sources?

b) Where flood risk is present on site, can the Sequential Test used to locate development only within Flood Zone 1 away from other sources of flooding?

2.2 Stage 1a – Can development site be allocated entirely in Flood Zone 1, avoiding flood risk from other sources?

2.2.1 Starting with the full list of sites in the HELAA version 4 (a total of 827 sites), and using the information from the Level 1 SFRA, an initial sweep was carried out to identify those that are in Flood Zone 1 and have low risk from other sources of flooding which could reasonably be avoided. The criteria used to define these sites were as follows:

- Site is entirely within existing Flood Zone 1 and not within Flood Zone 3a + climate change;
- No area identified within Environment Agency Historic Flood Map;
- No small watercourses intersecting the site (i.e. catchment less than 3km² which are not included in the Flood Zones);
- Less than 10% of the site area is at risk from surface water flooding in the 1 in 1,000-year event (almost all sites have some small isolated areas within the 1 in 1,000-year surface water map).
- No area at risk from reservoir flooding.

2.2.2 To define ‘significant’ surface water risk, a threshold of 10% was chosen as an area which could reasonably be mitigated through a surface water drainage strategy or avoided by sequential design. This was discussed and agreed with the Environment Agency.

2.2.3 A total of 450 sites were identified (ranked 1) and these sites can be considered to have passed the Sequential Test as described in Diagram 2 of the PPG (see ‘Stage 1a column’ of Appendix 1 spreadsheet). Some of these sites have been discounted for wider planning and sustainability reasons, which are given for each site in Appendix 1 under ‘reason discounted’ and summarised below.

2.2.4 A total of 299 of these sites were found to be unsuitable in the Housing and Economic Land Availability Assessment (HELAA) for reasons including:
Aylesbury Vale Flood Risk Sequential Test

- Lack of connectivity with existing development
- Adverse impacts on conservation areas, biodiversity, listed buildings, historic park and gardens
- Site falls within Green Belt, AONB, ancient woodland.
- Adverse landscape or visual impact
- Constraints in terms of highways and access
- Loss of green space

2.2.5 There are 88 sites that are already considered as commitments. These are either sites that already have planning permission (or a resolution to grant permission subject to signing of a Section 106 Agreement) so there is no need to allocate these sites (72 sites) or sites that area already allocation in a Neighbourhood Plan (16 sites).

2.2.6 There are 24 sites which have passed the Sequential Test and are being taken forward for allocation. Appendix 1 sets out the reasons why the remaining 39 of the remaining sites that have passed the Sequential Test are not being allocated. These reasons include:

- The site is inconsistent with a neighbourhood plan (5 sites). For example, the growth needs are already taken up by an alternative site at the settlement with no worse flood risk
- There are additional constraints which have come to light since the HELAA (3 sites)
- There is no confirmation from landowners the site is available for development, achievable and can be delivered (2 sites)
- Allocating the site would be contrary to the VALP Spatial Strategy (27 sites) (detailed reasons given in Appendix 1)
- The site is too small, the VALP is only allocating a minimum of 6 homes capacity on a site (7 sites)

2.3 Stage 1b - Where flood risk is present in Flood Zone 1, can the Sequential Test be used to locate development away from other sources of flooding?

2.3.1 In many cases the flood risk from other sources such as surface water can pose a risk to a large percentage of the site, and this is just as significant as fluvial risk, although how to deal with this risk in strategic planning is not so explicitly set out in the PPG.

2.3.2 The criteria used to define these sites were as follows:

- The site is entirely within Flood Zone 1 (accounting for the effects of climate change);
- A small watercourse intersects the site (i.e. catchment less than 3km² which are not included in the Flood Zones);
• More than 10% of the site area is at risk from surface water flooding in the 1 in 1,000-year event.
• Part of the site is at risk from reservoir flooding.

2.3.3 There were 230 sites which were identified as being within Flood Zone 1 but at risk from other sources of flooding (ranked 2), see Appendix 1 – ‘Stage 1b column’.

2.3.4 There were 9 sites which had wider sustainability drivers for taking them forward. Of the remainder, 221 were rejected for both sustainability and flood risk reasons, as outlined in Appendix 1.

2.3.5 Flood risk at these 9 sites was examined in further detail through a Level 2 SFRA. Each site was examined in relation to flood risk and the required housing allocation. In all cases it was found that parts of the sites were at risk of surface water flooding and for some, this also affects access and egress. This will decrease the area available for development and will need to be managed using SuDS and sequential design to make the development safe. The Level 2 SFRA advises on policy for these sites, for example access and egress and making development safe. If these policies are implemented, the sites will pass the Sequential Test.

2.4 Stage 2 – Where Flood Zone 2 or 3 is present can the Sequential Test be used to locate all development into Flood Zone 1?

2.4.1 This is set out in the ‘Stage 2 column’ of Appendix 1. A total of 145 sites are at medium or high risk of fluvial flooding (ranked 3). The criteria used to define these sites were as follows:

• The site is partly within Flood Zone 2, 3a, 3a plus climate change or 3b

2.4.2 There were 18 sites which had wider sustainability drivers (see below Table) for taking them forward. Of the remainder, 127 were rejected on flood risk grounds and for other sustainability reasons, as outlined in the ‘reasons discounted’ column of Appendix 1.

Table 2 – Wider Sustainability Drivers for progressing with sites with areas of Flood Zones 2 and 3

<table>
<thead>
<tr>
<th>Site</th>
<th>VALP Allocation name</th>
<th>Wider sustainability driver in VALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYL073</td>
<td>Land at Thame Road/Leach Road</td>
<td>• Within the designated ‘Aylesbury Garden Town’ and so proposals will accord with the VALP Policy D1 enhanced development principles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A new footway and potentially widened Thame Road</td>
</tr>
<tr>
<td>Site</td>
<td>VALP Allocation name</td>
<td>Wider sustainability driver in VALP</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SMD004, SMD006, SMD007, SMD009, SMD016 (part)</td>
<td>South Aylesbury (Aylesbury Garden Town)</td>
<td>Part of Aylesbury Garden Town proposals – a new comprehensively planned garden community. This strategic site enables:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A new dual carriageway distributor road between Lower Road and Wendover Road crossing the railway line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provide Aylesbury Linear Park, significant quantities of strategic green infrastructure (50% of the site)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A new Local Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mixed use development providing community facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• New cycling wan walking links to the wider countryside and public transport routes into the town centre</td>
</tr>
<tr>
<td>STO016, SMD016 (part), SMD012</td>
<td>South West Aylesbury (Aylesbury Garden Town)</td>
<td>Part of Aylesbury Garden Town proposals – a new comprehensively planned garden community. This strategic site enables:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• delivery of the South West Link Road, relieving traffic pressures in the town centre and enabling easier vehicular movement around Aylesbury</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stoke Brook alleviation providing betterment to the existing community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provide Aylesbury Linear Park, significant quantities of strategic green infrastructure (50% of the site)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mixed use development providing community facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Noise attenuation to High Speed 2 railway</td>
</tr>
<tr>
<td>BIE022, WTV017, WTV018, AST037</td>
<td>Land north of the A41 (Aylesbury Garden Town)</td>
<td>Part of Aylesbury Garden Town proposals – a new comprehensively planned garden community. This strategic site enables:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A flood alleviation scheme and sustainable drainage scheme providing wider reductions in flood risk</td>
</tr>
<tr>
<td>Site</td>
<td>VALP Allocation name</td>
<td>Wider sustainability driver in VALP</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| WTV022    | Land South of the A41 (Aylesbury Garden Town)                                         | • Delivery of the Eastern Link Road (South) to reduce congestion and improve the quality of the town centre environment  
• Landmark sporting facilities and associated athletes’ accommodation building on the Paralympic sporting heritage of Aylesbury and Stoke Mandeville  
• Aylesbury Linear Park, a significant strategic green infrastructure project improving access to the Grand Union Canal  
• 50% of the site as green infrastructure  
• New public transport connections to the wider area  
• A mixed use Local Centre and community facilities                                                                 | Part of Aylesbury Garden Town proposals – a new comprehensively planned garden community. This strategic site enables:  
• Flood alleviation scheme delivering town-wide benefits in addition to a sustainable drainage scheme to meet the needs of the development  
• New community facilities including schools  
• A dualled Southern Link Road between the A413 Wendover Road and A41 Aston Clinton Road and a strategic link road between the SLR and Marroway  
• A new Local Centre  
• 50% of the site as green infrastructure  
• New Park & Ride facility relieving traffic pressures in the town centre and enabling easier vehicular movement |
### Table: Flood Risk Sequential Test Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>VALP Allocation name</th>
<th>Wider sustainability driver in VALP</th>
</tr>
</thead>
</table>
| BUC051| West Buckingham, land bounded by Brackley Road and the River Great Ouse | - Feasibility for a flood alleviation/sustainable drainage scheme that has potential to offer town wide benefit to fluvial flooding in the Buckingham.  
- New riverside walk along the edge of the River Great Ouse  
- Consistent with the Buckingham Neighbourhood Plan (is an allocated site)  
- Green corridor (old railway line) with potential for pedestrian and cycle links into the town |
| EDL021| Slicketts Lane                                           | - Site allocated in the Edlesborough Neighbourhood Plan, meeting local needs and aspirations       |
| NLV001| Salden Chase                                             | An exemplar development of regional significance built to high sustainable design and construction standards:  
- A sustainable mix of land uses planned comprehensively including housing employment, retail, community and schools  
- A sustainable drainage system  
- Multi functional green infrastructure  
- High quality walking cycling and public transport links into Newton Longville Bletchley and Milton Keynes  
- Site for a railway station |
| WIN001| Land east of the B4033, Great Horwood Road               | - Improvements to the A413 and junction with Great Horwood Road  
- A bus service  
- New pedestrian and cycle links to the town and train station  
- An ecological buffer |

2.4.3 Flood risk at these 18 sites was examined in further detail as part of the Level 2 SFRA, each site was examined in relation to flood risk and the required housing allocation. For
many of these sites, the percentage of the site that is at flood risk is very small (e.g. over 90% of the site within Flood Zone 1 allowing for the effects of climate change), and full capacity of the site area is not required for the housing numbers allocated.

2.4.4 For 17 sites, it was found that all the required housing allocation could be allocated within Flood Zone 1 (allowing for the effects of climate change) and away from other sources of flooding. The Level 2 SFRA advises on policy for these sites, that all development should be located within Flood Zone 1, and areas not in Flood Zone 1 should be reserved for green infrastructure. If these policies are implemented, the sites will pass the Sequential Test.

2.4.5 Under Diagram 3 of the PPG, “Development is in an appropriate location under NPPF flood risk policy”, and the Exception Test is not required. However, all of these sites will require detailed site specific Flood Risk Assessments to ensure that all development is located within Flood Zone 1 (accounting for climate change) and other sources of flooding.

Land North of the A41

2.4.6 There are two sites within the allocation ‘Land North of the A41’ (WTV018 and BIE022) where all the required allocation of housing could be located in Flood Zone 1, but there is a strategic need in VALP for an Eastern Link Road, and this would also need to provide access into each site and safe access/egress for wider users. The effect of the link road and significant extents of green infrastructure will be to reduce the extent of Flood Zones 2 and 3 on site and to the wider area. However because the development of these sites requires such significant mitigation before any housing can come forward, in terms of Sequential Testing, these sites are taken to the next stage, to examine whether ‘appropriate’ development can be allocated in Flood Zone 2 and 3.

South West Aylesbury

2.4.7 The land uses being allocated including housing and the primary school can be provided on the areas of the site STO016 shown as Flood Zone 1. However, the site under the VALP emerging proposals also needs to provide strategic infrastructure in South West Link Road. The Link Road has to cross the area of the Sedrup Brook in the middle of the site where there is significant surface water flooding and areas of Flood Zone 3a. Therefore an Exception Test is required to test is the site can achieve satisfactory access/egress and demonstrate the site can be made safe for the lifetime of its users without increasing risk elsewhere.
2.5 Stage 3 – Can appropriate development be allocated in Flood Zone 2 and 3?

2.5.1 This is set out in the ‘Stage 3 column’ of Appendix 1 spreadsheet. There is one site (WTV018) where some Essential Infrastructure may be allocated in Flood Zone 3. Also site BIE022 would need its primary access from site WTV018 to the wider road network due to constraints on Broughton Lane.

Land North of the A41 – Sites WTV018 and BIE022

2.5.2 WTV018. More Vulnerable development could be located in Flood Zone 1 (45% of the site). The full site is 170 hectares and AVDC are allocating for 1000 homes, which will require about 34ha of the site (20% of the gross site area). However there is also an Eastern Link Road required in the site allocation and the access to the residential areas to consider. The route of this road even on the ‘PBA Baseline’ remodelled flood zones is shown predominantly in Flood Zone 3b and small extents in Flood Zone 3a in Flood Zone 2. On this basis an Exception Test is needed to allocate the site.

2.5.3 This site has an existing planning application. The masterplan for the proposed development has been designed to respond to flood risk and accommodate floodplain, by adopting a sequential risk-based approach and focussing new development to the lowest flood risk areas. An FRA for the site has carried out new hydraulic modelling ‘The PBA Baseline’ to define the flood risk areas in more detail. In terms of the Sequential Test for the VALP site allocation we As a result of implementing the flood mitigation scheme associated with the Eastern Link Road, the extent of flood risk areas across the site would be reduced. In line with Table 2 of the PPG, all ‘More Vulnerable’ and ‘Less Vulnerable’ land uses (i.e. residential and commercial development) are proposed within Flood Zone 1 with only ‘Water Compatible Development’ (i.e. outdoor sport and recreation) and ‘Essential Infrastructure’ (i.e. Eastern Link Road) located within areas with a higher probability of flooding. An individual Sequential Test has been carried out for these land uses within the site.

2.5.4 Site BIE022 within ‘Land North of the A41’ requires an Exception Test because the primary access would need to be provided from the Eastern Link Road being delivered in site WTV018. A primary highway access from Broughton Lane would not be considered preferred due to highway width constraints and surface water flooding vulnerability. The remodelled ‘PBA Baseline’ sets out that the Eastern Link Road within suite WTV018 is predominantly in Flood Zone 3b and small extents in Flood Zone 3a in Flood Zone 2.

South West Aylesbury
Aylesbury Vale Flood Risk Sequential Test

2.5.5 Site STO016 in ‘South West Aylesbury’ requires an Exception Test because of the allocation of the South West Link Road. The Link Road has to cross the area of the Sedrup Brook in the middle of the site where there is significant surface water flooding and areas of Flood Zone 3a. Therefore an Exception Test is required to test if the site can achieve satisfactory access/egress and demonstrate the site can be made safe for the lifetime of its users without increasing risk elsewhere.

2.6 Stage 4 – Is development appropriate in remaining areas?

2.6.1 This stage is not applicable to any sites in Aylesbury Vale.

2.7 Conclusions of the Sequential Test

2.7.1 All the allocated sites except WTV018/BIE022 within the ‘Land North of the A41’ and site STO016 within ‘South West Aylesbury’ can be accommodated in Flood Zone 1 with the proviso that on all the allocated sites, areas of the site in Flood Zone 3a with climate change are set aside for only green infrastructure or other development that meets the terms of the NPPF/Planning Practice Guidance definition of ‘water compatible development’ for the purpose of Flood Risk Vulnerability Classification. The VALP Proposed Submission in both its allocation policies and site allocation boundaries shows these areas as green infrastructure.

2.7.2 The Sequential Test process has shown that whilst alternative sites to the site allocations may be in some cases entirely in Flood Zone 1, they have other constraints identified in the HELAA study or are in locations where development would be contrary to the VALP Spatial Strategy.

2.7.3 The strategic site allocation ‘Land North of the A41’ requires an Exception Test for the reasons set out above in 2.5.2-2.5.4.

2.7.4 Site specific criteria in the allocation policies (from recommendations in the SFRA Level 2) will tackle specific flooding issues such as the possibility of surface water or groundwater flooding.

2.7.5 Site STO016 requires an Exception Test due to the Link Road as ‘Essential Infrastructure’ and the presence of Flood Zone 3a on the site and areas of surface water flooding where the link road is likely to have to cross. The site forms part of the strategic allocation in VALP ‘South West Aylesbury’. 
3. VALP Site allocations considered for the Proposed Submission Local Plan

3.1 Sites that pass the Sequential Test without the need for detailed assessment

3.1.1 The following sites are proposed for allocation and are entirely within Flood Zone 1 and have very minimal surface flooding vulnerability so no SFRA Level 2 was required. The VALP Policy I4 on Flood Risk (see below emerging draft ahead of Proposed Submission) will apply to these sites but there is no specific coverage. Maps of all the allocated sites are shown in the VALP Proposed Submission plan.

| I4 Flooding |
| Management of flood risk |
| In order to minimise the impacts of and from all forms of flood risk the following is required: |
| a. Site specific Flood Risk Assessments (FRAs), informed by the latest version of the SFRA, where the development proposal is over 1ha in size and is in Flood Zone 1, or the development proposal includes land in Flood Zones 2 and 3 (as defined by the latest Environment Agency mapping). A site specific FRA will also be required where a development proposal affects land in Flood Zone 1 where evidence, in particular the SFRA, indicates there are records of historic flooding or other sources of flooding, e.g. due to critical drainage problems, including from ordinary watercourses. |
| b. Other than sites allocated in the VALP, all development proposals must clearly demonstrate that the flood risk sequential test and sequential approach, as set out in the latest version of the SFRA, has been passed. |
| c. If the Sequential Test has been satisfied, development proposals, other than those allocated in this Plan, must also satisfy the Exception Test in all applicable situations as set out in the latest version of the SFRA. |

Flood Risk Assessments

All development proposals must adhere to the advice in the latest version of the SFRA and will:
d. provide level for level floodplain compensation and volume for volume compensation unless a justified reason has been submitted and agreed which may justify other forms of compensation

e. ensure no increase in flood risk on site or harm to third parties

f. explore opportunities to reduce flood risk overall, including financial contributions from the developer where appropriate

g. ensure development is safe from flooding for its lifetime including an assessment of climate change impacts

h. ensure development is appropriately flood resistant, resilient and safe

i. take into account all sources and forms of flooding

j. ensure safe access and exits are available for development in accordance with Department for Environment, Food and Rural Affairs (DEFRA) guidance. Access to “safe refuges” or “dry islands” are unlikely to be considered safe as this will further burden the Emergency Service in times of flood

j. provide an assessment of residual flood risk

k. provide satisfactory Evacuation Management Plans, where necessary, including consultation with the Emergency Services and Emergency Planners;

**Sustainable drainage systems**

l. ensure development layouts are informed by drainage strategies incorporating sustainable drainage systems (SuDS).

m. All development will be required to design and use sustainable drainage systems (SuDS) for the management of surface water run-off, as part of the submitted planning application. All development should adopt exemplar source control SuDs techniques to reduce the risk of flooding due to post-development runoff. SuDs design should follow current best practice (CIRIA Manual 2015 or as replaced) and Buckinghamshire County Council guidance on runoff rates and volumes to deliver wider environmental benefits.

n. Where site specific FRAs are required in association with development proposals, they should be used to determine how SuDS can be used on particular sites and to design appropriate systems.
o. In considering SuDS solutions, the need to protect ground water quality must be taken into account, especially where infiltration techniques are proposed in considering a response to the presence of any contaminated land. The Environment Agency need to be consulted where infiltration is proposed in contaminated land. SuDS should seek to reduce flood risk, reduce pollution and provide landscape and wildlife benefits. Opportunities will be sought to enhance natural river flows and floodplains, increasing their amenity and biodiversity value and a Watercourse Advice Note is being prepared for further guidance.

p. Applicants will be required to provide a management plan to maintain SuDS in new developments, and a contribution will be required for maintenance of the scheme/SuDS.

q. Onsite attenuation options should be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.

r. Only in exceptional circumstances will surface water connections to the combined or surface water system be permitted. Applicants will need to demonstrate in consultation with the sewerage undertaker that there is no feasible alternative and that there will be no detriment to existing users.

Applicants will be required to liaise with the Lead Local Flood Authority, Internal Drainage Boards and the Environment Agency on any known flood issues, and identify issues from the outset with discussions with statutory bodies.

Climate change

s. Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk

t. Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.

u. Compensation flood storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood event

---

Table 1: Sites that pass the Sequential Test with no need for detailed assessment

<table>
<thead>
<tr>
<th>Site Ref</th>
<th>Address</th>
<th>Site Size (ha)</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMD005 (part of ‘South Aylesbury’)</td>
<td>Land around Red House Farm, Lower Road, Stoke Mandeville</td>
<td>2.8</td>
<td>70 homes</td>
</tr>
<tr>
<td>WTV021 (part of ‘Land South of A41’)</td>
<td>Land at New Road, Weston Turville</td>
<td>1.7</td>
<td>51 homes</td>
</tr>
<tr>
<td>AYL032</td>
<td>Ardenham Lane, Aylesbury</td>
<td>2</td>
<td>70 homes</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Size (ha)</td>
<td>Homes</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>AYL059</td>
<td>Land at junction of Buckingham Street and New Street</td>
<td>0.49</td>
<td>14</td>
</tr>
<tr>
<td>AYL063</td>
<td>Hampden House, High Street, Aylesbury</td>
<td>0.46</td>
<td>112</td>
</tr>
<tr>
<td>AYL068</td>
<td>Land North of Manor Hospital, Bierton Road</td>
<td>1.7</td>
<td>39</td>
</tr>
<tr>
<td>AYL077</td>
<td>Oaklands Hostel, 3 Bierton Road</td>
<td>0.44</td>
<td>13</td>
</tr>
<tr>
<td>NLV005</td>
<td>Land south of Whaddon Road and west of Lower Road, Newton Longville</td>
<td>0.3</td>
<td>17</td>
</tr>
<tr>
<td>BUC043</td>
<td>Land west of AVDLP allocation, Moreton Road</td>
<td>14.9</td>
<td>130</td>
</tr>
<tr>
<td>SCD003</td>
<td>Land adjacent 12 Queen Catherine Road, Steeple Claydon</td>
<td>0.26</td>
<td>8</td>
</tr>
<tr>
<td>STO008</td>
<td>Land south of Creslow Way, Stone</td>
<td>1.2</td>
<td>10</td>
</tr>
<tr>
<td>ICK004</td>
<td>Land off Turnfields, Ickford</td>
<td>1.4</td>
<td>20</td>
</tr>
<tr>
<td>HAD007</td>
<td>Land north of Rosemary Lane, Haddenham</td>
<td>44.8</td>
<td>315</td>
</tr>
<tr>
<td>CDN001</td>
<td>Land north of Aylesbury Road and r/o Great Stone House, Cuddington</td>
<td>0.59</td>
<td>6</td>
</tr>
<tr>
<td>CDN003</td>
<td>Dadbrook Farm, Dadbrook Close, Cuddington</td>
<td>0.57</td>
<td>15</td>
</tr>
<tr>
<td>MMO006</td>
<td>Land east of Walnut Drive and west of Foscote Road, Maids Moreton</td>
<td>7.7</td>
<td>170</td>
</tr>
<tr>
<td>WHI009</td>
<td>Holt’s field, North Marston Lane, Whitchurch</td>
<td>0.8</td>
<td>22</td>
</tr>
<tr>
<td>QUA014</td>
<td>Land adj 110 Station Road/Melling Farm, adj Leafwood, Station Rd, Quainton</td>
<td>1.25</td>
<td>24</td>
</tr>
<tr>
<td>WAD006</td>
<td>Allotment Site, A41, Waddesdon (including Neighbourhood Plan site)</td>
<td>11.4</td>
<td>75</td>
</tr>
</tbody>
</table>
3.1.2 The following 23 HELAA sites proposed for housing allocations required an Level 2 SFRA due to presence of:

- some areas of Flood Zones 2 or 3 (with or without climate change allowance) or
- more than 10% of the site is vulnerable to a 1 in 1000-year surface water flood outline as shown in the SFRA maps or
- presence of an ordinary watercourse or Main River within Flood Zone 1.
- Potential risk of groundwater flooding

Sustainability Appraisal

3.1.3 The VALP sustainability appraisal has scored all the potential sites that are being considered for allocation (the sites in the Housing and Economic Land Availability Assessment - HELAA version 4) in Appendix III – Site Options. Table A of the SA report scores the sites using criteria to reflect the SA framework as closely as possible. Table B lists the sites applying criteria to categorise the performance of the sites on a Red/Amber/Green scale. The ‘RAG’ assessment is used to highlight instances of site options performing well or poorly. ‘Green’ is used to predict very significant positive effects, whilst ‘Red’ indicates significant negative effects. The criteria used cover a site’s proximity to environmental and historic constraints and the proximity to services and facilities.

Sites that need a detailed assessment to see if they can pass the Sequential Test

3.2 Site Allocation Policy AYL073 – Land at Thame Road/ Leach Road, Aylesbury

VALP Allocation – 18 homes

Site area: 0.6ha

3.2.1 This site required a Level 2 SFRA due to an area of the site shown in the HELAA as being in Flood Zone 3a.
### Aylesbury Vale Flood Risk Sequential Test

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>97</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

3.2.2 Part of the site is within Flood Zone 3a plus climate change. A small area to the east of the site is shown at surface water flood risk. This site at risk of flooding in the event of failure or overtopping of the Bear Brook and Stocklake flood storage areas and Weston Turville Reservoir.

3.2.3 The VALP site boundary is only allocating the area of the site in Flood Zone 1.

3.2.3 The site is highly accessible to the Aylesbury Transport Hub, town centre facilities and Aylesbury College.

3.2.4 The site scores well in the VALP Sustainability Appraisal site appraisal criteria – scoring 21 ‘Green’, 8 ‘Amber’ and two ‘Reds’.

3.2.5 The SFRA Level 2 recommends the following for site specific flood Risk Assessments:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Residual risk to the site should be investigated, for example overtopping or breach of the Aylesbury Vale FAS storage areas.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Resilience measures will be required to ensure that development is safe if buildings are situated within Flood Zone 2.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
3.2.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.2.7 Conclusion – the site passes the Sequential Test.

3.3 Site Allocation Policy AYL115 – Rabans Lane/railway line, Aylesbury

<table>
<thead>
<tr>
<th>VALP Allocation – 200 homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site area: 6.6ha</td>
</tr>
</tbody>
</table>

3.3.1 This site required a Level 2 SFRA because 7% of the site is vulnerable to a 1 in 1000 year surface water flood. The SFRA Level 1 Addendum identifies the following proportion of site at risk in Flood Zones.

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.3.2 The site is also not within Flood Zone 3a plus climate change. However 7% of the site is at 1 in 1000-year surface water flood risk, which occurs as ‘ponding’ in low spots around the edge of the existing building. There is no flow route associated with these small risk areas. The SFRA also identifies Rabans Lane itself (where site access would come from) is at risk from surface water flooding in a 1 in 1000-year event.

3.3.3 The site is within Aylesbury Garden Town, a brownfield site, available and within walking or cycling distance of employment and retail areas. An allocation in this location is consistent with the VALP Spatial Strategy that focuses development at Aylesbury Garden Town. Redevelopment would offer the potential to reduce or remove the existing surface water flooding on the site by demolition of the existing building which causes the ponding shown on surface water flood maps and implementation of a surface water drainage strategy. Drainage could be tackled sustainably within the site and not lead to increased risk to Rabans Lane.

3.3.4 The site scores well in the VALP Sustainability Appraisal site appraisal criteria 31 performance categories – scoring 22 ‘Green’, 8 ‘Amber’ and just one ‘Red’ which is for proximity to a railway station.

3.3.5 As 100% of the site is in Flood Zone 1, all uses are appropriate and can be accommodated subject to the following policy criteria.
3.3.6 There are the following recommendations for this site in the SFRA Level 2 and these address include on the surface water issue:

**Flood risk assessment:**

- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA should be undertaken at an early stage
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.

**Guidance for site design and making development safe:**

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.3.7 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.3.8 **Conclusion – the site passes the Sequential Test.**

3.4 **Site Allocation Policy BUC046 – Land south of A421, east of Gawcott Road**
VALP Allocation: The site is allocated as a reserve site of 420 homes, Green Infrastructure and a Landscape Buffer.

Site area: 40ha

3.4.1 A Level 2 SFRA was carried out for this site due to the presence of an ordinary watercourse within Flood Zone 1. The SFRA identifies the following proportion of site at risk in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

3.4.2 Flood Zone 3a plus climate change was modelled as part of the Level 2 SFRA and found to be 1% of the site. As 99% of the site is in Flood Zone 1, allowing for climate change, all uses are compatible in this area and can be accommodated within that area subject to the following policy criteria.

3.4.3 The site has ‘wider sustainability drivers’ in Table 2 of this Sequential Test. Development in this location has the potential in settlement pattern to compliment the Buckingham Industrial Park adjacent, Tesco and the Lace Hill/Windsor Park development in terms of development on the southern edge of the A421. The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 19 ‘greens’, 8 ‘ambers’ and 4 ‘reds’.

3.4.4 The SFRA Level 2 recommends the following for site specific Flood Risk Assessments:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and Internal Drainage Board should be undertaken at an early stage.
- Any development must have consideration for its impact on the Buckingham and River Ouzel IDB drainage district and be aware of its Byelaws.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the ordinary watercourse.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding, particularly surface water flow routes, should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site and should seek to reduce the levels of flood risk downstream.
- The development should be designed using a sequential approach. Flood Zones defined by the detailed flood risk assessment should be preserved as public green space, with built
development restricted to the remaining Flood Zone 1.

- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding downstream due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes e.g. from Gawcott Fields.

3.4.5 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.4.6 Conclusion – the site passes the Sequential Test.

3.5 Site Allocation Policy BUC051 – Land west of Buckingham, Brackley Road and adjacent the River Great Ouse (Neighbourhood Plan Reserve Site Allocation)

VALP Allocation: 300 homes, Green Infrastructure including Riverside Walk, Landscape buffer and Flood Alleviation Scheme (subject to feasibility)

Site area: 20ha

3.5.1 A Level 2 SFRA was carried out due to the presence of significant extents of the site in Flood Zones 2, 3a and 3b. The Level 2 SFRA identifies these as follows:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>52</td>
<td>3</td>
<td>0</td>
<td>25</td>
<td>20</td>
</tr>
</tbody>
</table>

3.5.2 The total area at risk in Flood Zone 3 at present is 20%, this is likely to increase to 25% due to climate change.

3.5.3 More vulnerable uses such as housing opportunities are limited to Flood Zones 1 and 2 only and an Exception Test required for Flood Zone 3a. On this site only water compatible uses are appropriate on the entire site. There is some scope for essential infrastructure.

3.5.4 The site assessed in the HELAA is 99.3 hectares. The Neighbourhood Plan, reflecting local community aspirations following consultation, examination and referendum, allocates the site for 300 homes and the HELAA considered against constraints around
288 homes could be achieved within Flood Zone 1 on land with least landscape visual impact and best relates to settlement pattern.

3.5.5 The Proposed Submission plan site allocation policy in allocating the site for the 300 homes identified in the neighbourhood plan would only need around 9.6 hectares of the site and this can all be accommodated within the extent of Flood Zone 1 and outside of Flood Zone 3a plus climate change. The site boundary in the VALP should be drawn to reflect this.

3.5.6 The site has ‘wider sustainability drivers’ in Table 2 of this Sequential Test. The site is the only site not already a commitment with the potential to offer mitigation possibilities to intercept fluvial flow rates on the Great Ouse approaching the town centre from the west. The VALP Proposed Submission policy should require investigating the feasibility of a flood alleviation scheme in the south of the site as part of an area shown as green infrastructure. There have been a number of severe floods to Buckingham in the last 20 years including 1998 when 25 residential and 5 commercial properties were affected, in 2007 when the river was over 2 metres high and 70 homes and businesses were flooded and 2012 when river levels reached 1.75 metres and there was a significant threat to the local community.

3.5.7 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 14 ‘greens’, 12 ‘ambers’ and 5 ‘reds’.

3.5.8 The SFRA Level 2 recommends the following for site specific flood Risk Assessments:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority, the Internal Drainage Board and the Environment Agency should be undertaken at an early stage.
- Any development must have consideration for its impact on the Buckingham and River Ouzel IDB drainage district and be aware of its Byelaws.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Residual risk to the site should be investigated, for example overtopping or breach of the Stowe Octagon Lake and Stowe Park Lake.
- The impact of the blockage of the bridge under the disused railway should be modelled.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site and
should seek to reduce the levels of flood risk downstream.

- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event. The impact of any new river crossings on flooding on the site and downstream must be fully assessed, and compensation storage provided if necessary.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding downstream due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.5.9 A separate note has been prepared as part of the SFRA Level 2 to cover the possibility of groundwater flooding on the site. The JBA Groundwater Flood Map indicates a risk of groundwater at the surface across a significant area of the site overlain by superficial deposits, mainly following the course of the low ground and the floodplain of the watercourses crossing the site. The extents of this zone in which groundwater at surface level is predicted follows a similar layout to the fluvial Flood Zone 2, but extends over a wider area. Development of the site is already constrained by the fluvial risk, with 25% of the site falling within Flood Zone 3 with climate change considered. Groundwater is most likely to emerge within the fluvial Flood Zones, and the ST proposes that all development with be confined to Flood Zone 1. Given this, and a detailed consideration of groundwater flood risk in the FRA, it is reasonable to assume that the site could be developed in a way that enables the risks of groundwater flooding to be avoided or mitigated. The Groundwater Note sets out the following recommendation for a site specific Flood Risk Assessment:

- The site drainage strategy should consider whether infiltration is feasible under all groundwater conditions.

3.5.10 In addition, through the stakeholder consultation stages in drafting this Sequential Test, an additional recommendation has been made on potential groundwater levels:

- A site specific Flood Risk Assessment should carry out site investigations to identify likely groundwater levels and the site should be designed with consideration of potentially high groundwater levels.

3.5.11 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA
and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.5.12 Conclusion – the site passes the Sequential Test.

3.6 Site Allocation Policy EDL003 – Land north of Cow Lane, Edlesborough (Neighbourhood Plan site)

VALP Allocation– 15 homes (adjacent an existing site fronting Cow Lane with planning permission for 30 homes)

Site Area – 1.53ha

3.6.1 The site is included in SFRA Level 2 as 9% of the site (including the area committed for 30 homes) is vulnerable to a surface water flood of 1 in 100 and 1 in 1000 years.

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.6.2 As 100% of the site is in Flood Zone 1, all uses are appropriate and can be accommodated subject to the following recommendations from the SFRA Level 2:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA and the Internal Drainage Board should be undertaken at an early stage.
- All development within the Buckingham and River Ouzel IDB drainage district must observe the IDB Byelaws.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and IDB guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes.
A separate note has been prepared as part of the SFRA Level 2 to cover the possibility of groundwater flooding on the site. The JBA Groundwater Flood Model indicates a risk of groundwater between 0.0m and 0.025m below ground across the site and the majority of the village. Notably the SFRA did not identify any incidents of groundwater flooding in Edlesborough. This underlines that the GFM should not be used in the same way as a flood outline for surface or fluvial flood risk is used. There is no evidence that this site will be at any higher risk from groundwater than the rest of the village. The Groundwater Note sets out the following recommendation for a site specific Flood Risk Assessment:

- A site specific FRA should carry out site investigation to identify likely groundwater levels and the site should be designed with consideration of potentially high groundwater levels. Infiltration drainage is unlikely to be feasible on this site, and the risk of groundwater emergence should be considered when designing above or below ground surface water drainage, and when designing foul sewers.

Given this due diligence, it is reasonable to expect that the site can be developed without risk of groundwater flooding to properties.

The site has been brought forward by the local community and is proposed for allocation in a neighbourhood plan which is at the ‘Examination’ stage. If the site passes examination and referendum the site would then be part of the development plan and not need to be allocated in the VALP.

The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 22 ‘greens’, 5 ‘ambers’ and 4 ‘reds’.

The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

Conclusion – the site passes the Sequential Test.

Site Allocation Policy EDL020 – Land at 29 The Green, Edlesborough (Neighbourhood Plan site)

VALP Allocation: 6 homes

Site Area: 0.3ha

A Level 2 SFRA was carried out because of surface water risk identified at Level 1, particularly in the south western area of the site (15% of the site at risk in total). The SFRA identified the following proportions of the site in different Flood Zones:
### Flood Zone

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.7.2 The site is also not at risk from Flood Zone 3a plus climate change. As 100% of the site is in Flood Zone 1, all uses are appropriate and can be accommodated subject to the following recommendations from the SFRA Level 2:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA and the Internal Drainage Board should be undertaken at an early stage.
- All development within the Buckingham and River Ouzel IDB drainage district must observe the **IDB Byelaws**.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and IDB guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes.

3.7.3 A separate note has been prepared as part of the SFRA Level 2 to cover the possibility of groundwater flooding on the site. However groundwater risk was not found to be significant on this site. and so the note did not set out any detail risk assessment or recommendations for mitigation.

3.7.4 The site has been brought forward by the local community and is proposed for allocation in a neighbourhood plan which is at the ‘Examination’ stage. If the site passes examination and referendum the site would then be part of the development plan and not need to be allocated in the VALP.

3.7.5 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 24 ‘greens’, 4 ‘ambers’ and 3 ‘reds’.

3.7.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA
and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.7.1 **Conclusion – the site passes the Sequential Test.**

3.8 **Site Allocation Policy EDL021 – Land at Slicketts Lane, Edlesborough (Neighbourhood Plan Site)**

**VALP Allocation: 40 Homes and green infrastructure**

**Site Area: 6.4ha**

3.8.1 A Level 2 SFRA was carried out because of surface water risk identified at Level 1, particularly in the far eastern extent of the site (13% of the site in total at risk of surface water flooding). There are also some very small areas of the site in Flood Zones 2 and 3. The SFRA identified the following portion of the site in different Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>93</td>
<td>0</td>
<td>&lt;1</td>
<td>6</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

3.8.2 The total area at risk in Flood Zone 3 at present is <1%, this is likely to increase to 6% due to climate change.

3.8.3 As 93% of the site is in Flood Zone 1 and outside of Flood Zone 3a plus climate change, all uses are appropriate in those areas and can be accommodated subject to the following policy criteria. ‘Water compatible uses’ as defined in Table 2 the Flood Risk Vulnerability Classification in the Planning Practice Guidance are appropriate on the rest of the site (7%).

3.8.4 The VALP is mirroring the neighbourhood plan in allocating the site and has reached the Submission stage. The plan has been prepared in line with community aspirations and is proceeding to examination and if successful then a referendum will take place before AVDC can ‘make’ the plan and it will form part of the statutory development plan.

3.8.5 The Proposed Submission VALP allocates the site for 40 homes and the gross site area is 6.4 hectares. Therefore the site boundary can exclude that 6% of the site not in Flood Zone 1 (accounting for climate change) and the site boundary drawn to reflect that or the plan can allocate that area for green infrastructure only. Development can be accommodated subject to meeting the following criteria recommended in the SFRA Level 2:

**Flood risk assessment:**

- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
Consultation with the Local Authority, the Internal Drainage Board and the Environment Agency should be undertaken at an early stage.

All development within the Buckingham and River Ouzel IDB drainage district must observe the IDB Byelaws.

Detailed modelling will be required to confirm Flood Zone and climate change extents (see 'Available modelled data'). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.

Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.

Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.

Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

Guidance for site design and making development safe:

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and IDB guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes.

3.8.6 A separate note has been prepared as part of the SFRA Level 2 to cover the possibility of groundwater flooding on the site. However groundwater risk was not found to be significant on this site. and so the note did not set out any detail risk assessment or recommendations for mitigation.

3.8.7 The site has been brought forward by the local community and is proposed for allocation in a neighbourhood plan which is at the ‘Examination’ stage. If the site passes examination and referendum the site would then be part of the development plan and not need to be allocated in the VALP.

3.8.8 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 21 ‘greens’, 5 ‘ambers’ and 5 ‘reds’.

3.8.9 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.8.10 Conclusion – the site passes the Sequential Test.
3.9 Site Allocation Policy MGB003 – Land at Leopold Farm and area to the west, Marsh Gibbon

VALP Allocation: 9 Homes

Site Area: 0.59ha

3.9.1 The site is included in SFRA 2 because of the extensive area of surface water flooding on site. 34% of the site is at risk in total from run off from Castle Street joining up with Summerstown Ditch to the south of the site. The SFRA Level 2 identifies the following extent of Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.9.2 As 100% of the site is in Flood Zone 1, all uses are appropriate and can be accommodated subject to the following recommendations in the SFRA Level 2:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA should be undertaken at an early stage
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes.

3.9.3 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 24 ‘greens’, 3 ‘ambers’ and 4 ‘reds’.

3.9.4 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.9.5 Conclusion – the site passes the Sequential Test.
3.10 Site Allocation Policy NLV001 – Land at Salden Chase, south of the A421, north of Newton Longville

VALP Allocation:

1,855 Homes, An employment area (B1), A neighbourhood centre including retail (A1, A2, A3, A4, A5), community (D1/D2), a primary school, a secondary school, grid road reserve, multi-functional green space, a sustainable drainage system, associated access, public transport infrastructure

Site Area: 143ha

3.10.1 A Level 2 SFRA was carried out because small parts of the site are in Flood Zone 2 and 3. The total area of the site at risk of surface water flooding is 9%. The SFRA Level 2 identifies the following extents of the site in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>99.62</td>
<td>0.08</td>
<td>0.3</td>
<td>9</td>
<td>0.3</td>
</tr>
</tbody>
</table>

3.10.2 The gross site area is 143.9ha. The following is an indication of the land required for each land use.

*Table – Indicative land uses on site NLV001*

<table>
<thead>
<tr>
<th>Use</th>
<th>Size (hectares)</th>
<th>% of site area</th>
<th>Flood Risk Vulnerability Classification</th>
<th>FZ allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Site</td>
<td>144.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing (C3)</td>
<td>54.2</td>
<td>37.6</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Employment</td>
<td>2</td>
<td>1.4</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>Green Open Space</td>
<td>55.7</td>
<td>38.7</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Local Centre</td>
<td>0.7</td>
<td>0.5</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>Primary School</td>
<td>3</td>
<td>2.1</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Secondary School</td>
<td>5.2</td>
<td>3.6</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Water Attenuation</td>
<td>5</td>
<td>3.5</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Grid road reserve/highway improvements (mass evacuation route)</td>
<td>11</td>
<td>7.6</td>
<td>Essential Infrastructure</td>
<td>1, 2 3a (ET Req'd) 3b (ET Req'd)</td>
</tr>
<tr>
<td>Other infrastructure (transport)</td>
<td>4.8</td>
<td>3.3</td>
<td>Essential Infrastructure</td>
<td>1, 2 3a (ET Req'd) 3b (ET Req'd)</td>
</tr>
</tbody>
</table>
3.10.3 The Proposed Submission VALP in allocating 1,855 homes would be able to revise this site boundary to only take (potentially less than half the site) for housing and achieve a notional density or around 30 dwellings per hectare which is not uncommon on HELAA sites. The VALP Proposed Submission will be able to make it clear no housing is allocated on areas outside of Flood Zone 1.

3.10.4 There are the following recommendations for this site in the SFRA Level 2:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- The capacity of openings through the A413 and railway embankments should be investigated. Blockage scenarios should be modelled for all flow routes. Opportunities should be taken to improve this risk where possible, e.g. through the development of the East West Rail link.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.10.5 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 18 ‘greens’, 7 ‘ambers’ and 6 ‘reds’.

3.10.6 The site has ‘wider sustainability drivers’ in Table 2 of this Sequential Test. The site has the potential to deliver an exemplar development of regional significance to live, work and grow.
Aylesbury Vale Flood Risk Sequential Test

3.10.7 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.10.8 Conclusion – the site passes the Sequential Test.

### 3.11 Site Allocation Policy QUA001 – Land south west of 62 Station Road, Quainton

**VALP Allocation:** 13 Homes

**Site Area:** 0.6 ha

3.11.1 A Level 2 SFRA was carried out due to the presence of 56% of the site in total at risk of surface water flooding. At the 1 in 100-year extent the area of the site affected was 19%. The SFRA Level 2 identifies the following extents of the site in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.11.2 Quainton has been identified in the VALP as a sustainable settlement. The site would be consistent with the made Quainton Neighbourhood Plan policy on location of development in Station Road and would be consistent with established settlement pattern. The HELAA did not find any other suitable sites at Quainton that don’t already have planning permission other than QUA014 (covering areas of QUA014/15/16) which is also allocated. The VALP sustainability appraisal scores the site well in the 31 site appraisal criteria. The site scores 22 ‘greens’, 6 ‘ambers’ and 3 ‘reds’.

3.11.3 The assessment in the SFRA acknowledges the presence of surface water flooding on the site. The size of the site relative to the 13 homes allocated offers some opportunity for areas of green space to be incorporated into the detailed site design to help tackle surface water. The following recommendations in the SFRA Level 2 should be addressed particularly in tackling the surface water issue:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA should be undertaken at an early stage
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
Guidance for site design and making development safe:

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere, and takes the opportunity to reduce flood risk for houses across Station Road.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.11.4 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.11.5 Conclusion – the site passes the Sequential Test.

3.12 Site Allocation Policy SCD008 Molly’s Folly, Molly’s Field, Land west of Addison Road, Steeple Claydon (Neighbourhood Plan site)

VALP Allocation: 110 Homes and Green Infrastructure, Sustainable Drainage Scheme

Site Area: 4.6ha

3.12.1 An SFRA Level 2 was required due to small areas of the site in Flood Zone 2 and 3b. With the effect of climate change allowance, an area of Flood Zone 3a also appears. The SFRA identifies the following proportion of site at risk in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>89</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

3.12.2 5% of the site would be in flood zone 3a taking into account of climate change whilst 3% of the site is in Flood Zone 3b and 3% in Flood Zone 2. Housing is a ‘More Vulnerable’ use and so is not permitted within Flood Zone 3b (3% of the site) and an Exception Test would be required to be passed to locate housing in the area of Flood Zone 3a (5%). Housing would be appropriate within 89% of the site that is in Flood Zone 1 and the 3% in Flood Zone 2 but should also have measures to tackle to likelihood of surface water flooding.

3.12.3 Steeple Claydon has been identified in the VALP as a sustainable settlement and suitable for allocations. In this case, the allocated sites (SCD008 and SCD013) have come forward through a neighbourhood plan which has reached the Submission stage. On site SCD008,
the VALP is proposing to allocate the same areas of built development and same areas of green infrastructure in the southern portion of the site. All the development on the site other than green infrastructure would be allocated in Flood Zone 1.

3.12.4 The Neighbourhood Plan in proposing the site for development reflects local community needs and aspirations and in the case of the neighbourhood plan, proposes 110 homes, a convenience retail scheme and medical services. The neighbourhood plan is next moving to the examination and then if successful, a referendum stage before it can be ‘made’ by AVDC and get full weight.

3.12.5 The VALP sustainability appraisal scores the site well in the 31 site appraisal criteria. The site scores 20 ‘greens’, 8 ‘ambers’ and 3 ‘reds’.

3.12.6 There are the following recommendations for this site in the SFRA Level 2:

**Flood risk assessment:**

- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.

- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage

Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’), and flood extents at lower return periods (below 100-year). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.

- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.

- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**

- Development must seek opportunities to reduce overall level of flood risk at the site.

- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.

- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
• Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent

• All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

• Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.

3.12.7 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.12.8 Conclusion – the site passes the Sequential Test.

3.13 Site Allocation Policy WIN001– Land to east of the B4033, Great Horwood Road

VALP Allocation: 585 homes and green infrastructure

Site Area: 17.8ha

3.13.1 A Level 2 SFRA was carried out because there is an area of the site in Flood Zones 2 and 3 (the centre of the site around the unnamed ordinary watercourse – tributary of the Claydon Brook). In addition 18% of the site in total is at risk of surface water flooding which largely follows the watercourse. The Level 2 SFRA identifies the following extents of the site at risk:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>73</td>
<td>3</td>
<td>0</td>
<td>24</td>
<td>9</td>
</tr>
</tbody>
</table>

3.13.2 The total area at risk in Flood Zone 3 at present is 9%, this is likely to increase to 24% due to climate change.

3.13.3 Housing is a ‘More Vulnerable’ use and so is not permitted within Flood Zone 3b (9% of the site) and an Exception Test would be required to be passed to locate housing in the area of Flood Zone 3a (24% when including climate change effects). Housing would be appropriate within 88% of the site that is in Flood Zone 1 and the 3% in Flood Zone 2 but should also have measures to tackle to likelihood of surface water flooding.
3.13.4 The gross site area (shown assessed in HELAA) is 47.9ha. The suitable extent of the site was the ‘areas up to the stream’ and this area was shown in the VALP Draft Plan. The site is only partly suitable. The Proposed Submission plan allocates the site for 585 homes on 16.7ha of the site south of the watercourse and the area allocated is entirely in Flood Zone 1 and outside Flood Zone 3a plus climate change. An area of the site in Flood Zone 3a with climate change is allocated as green infrastructure.

3.13.5 The site relates well to the new Winslow railway station which will have East-West Rail services. The site would also relate well to the made Winslow Neighbourhood Plan allocates adjacent land on Buckingham Road for business units and sports facilities.

3.13.6 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 18 ‘greens’, 11 ‘ambers’ and 2 ‘reds’.

3.13.7 The following recommendations in the SFRA Level 2 should be addressed in the VALP:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority, the Internal Drainage Board and the Environment Agency should be undertaken at an early stage,
- All development within the Buckingham and River Ouzel IDB must observe the IDB Byelaws.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- The impact of blockage of structures on flood risk should be modelled.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
Aylesbury Vale Flood Risk Sequential Test

3.13.8 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.13.9 Conclusion – the site passes the Sequential Test.
Aylesbury Garden Town Sites

South Aylesbury

VALP Proposed Submission – Draft

- 1,000 dwellings
- One primary school
- Multi-functional green infrastructure
- Aylesbury South East Link road between Lower Road and Wendover Road
- New local centre
- Cycling and walking links
- 5 Gypsy and Traveller pitches

Map 1 – South Aylesbury (using the previous name here of ‘Aylesbury South’)

This strategic site known as ‘South Aylesbury’ is allocated as a strategic site for Aylesbury and contributes to the delivery of the Aylesbury Garden Town. The allocation comprises the following HELAA sites:

- Land south of Stoke Mandeville Hospital (SMD004);
- Land around Red House Farm, Lower Road (SMD005);
- Land north of Stoke Mandeville adjacent Lower Road (SMD006);
- Land south of Aylesbury adjacent to Wendover Road (SMD007);
- Land between railway line and Wendover Road (SMD008);
- Land between Marsh Lane, Princes Risborough Railway Line and Aylesbury
Aylesbury Vale Flood Risk Sequential Test

(SMD009); and

- Land straddling railway line north of Stoke Mandeville (SMD016)

The sites are merged to enable a comprehensive, cohesive and co-ordinated approach to the development of the site as a whole. It offers benefits for infrastructure co-ordination and delivery, allowing the total infrastructure needs of the allocation as a whole to be considered and planned for, rather than a piecemeal approach that would flow from a site by site approach.

For the purposes of the Sequential Test (and in the SFRA), the individual parcels of land that make up the strategic site have been tested. Site SMD005 already passes the Sequential Test (See Table 1, p.21)

3.14 Site Allocation Policy SMD004 – Land south of Stoke Mandeville Hospital, Stoke Mandeville

VALP Allocation: 409 Homes as part of ‘South Aylesbury’

Site Area: 16.7ha

3.14.1 A Level 2 SFRA was carried out due to the presence of an ordinary watercourse within Flood Zone 1. A total of 15% of the area of the site at risk of surface water flooding. The ordinary watercourse would be affected by this and a surface water flow path from south to north through the middle of the site towards from Stoke Mandeville Hospital. The SFRA identifies the following proportion of site at risk in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>96</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

3.14.2 The SFRA also modelled 4% of the site as at risk from Flood Zone 3a plus climate change. On that 4% of the site, including the area of an ordinary watercourse once this has been modelled in an FRA, the development should be kept outside of Flood Zone 3a with climate change. VALP is proposing only green infrastructure as water compatible development. On the remaining 96% of the site, in Flood Zone 1, all uses are appropriate and can be accommodated subject to following the SFRA Level 2 guidance below.

3.14.3 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.
3.14.4 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 21 ‘greens’, 6 ‘ambers’ and 4 ‘reds’.

3.14.5 The SFRA Level 2 sets out the following recommendations:

### Flood risk assessment:
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority should be undertaken at an early stage.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the ordinary watercourse.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Risk of overtopping or breach from the Aylesbury Arm (Grand Union Canal) should be modelled.

### Guidance for site design and making development safe:
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere. Opportunity to mitigate against potential surface water flooding of Stoke Mandeville Hospital.
- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.14.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.14.7 Conclusion – the site passes the Sequential Test.

3.15 Site Allocation Policy SMD006 – Land north of Stoke Mandeville, adjacent Lower Road, Stoke Mandeville

**VALP Allocation:** 400 Homes as part of ‘South Aylesbury’

**Site Area:** 30.9ha
3.15.1 A Level 2 SFRA was carried out due to the presence of an ordinary watercourse (the Southcourt Brook) within Flood Zone 1. There is 8% of the site in total is at risk of surface water flooding. This is risk associated with the Southcourt Brook and also a surface water flow path along the west side of the site flowing into site SMD004. The Level 2 SFRA identifies the following proportion of site at risk in Flood Zones:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>96</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

3.15.2 The SFRA also modelled 4% of the site as at risk from Flood Zone 3a plus climate change. On that 4% of the site, including the area of an ordinary watercourse once this has been modelled in an FRA, the development should be kept outside of Flood Zone 3a with climate change. VALP is proposing only green infrastructure as water compatible development. On the remaining 96% of the site, in Flood Zone 1, all uses are appropriate and can be accommodated subject to following the SFRA Level 2 recommendations below.

3.15.3 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this sequential test.

3.15.4 The sites scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 20 ‘greens’, 7 ‘ambers’ and 4 ‘reds’.

3.15.5 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority should be undertaken at an early stage.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the ordinary watercourse.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere. Opportunity to mitigate against potential surface water flooding of Stoke Mandeville Hospital.
• The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
• Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
• All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
• Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.15.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.15.7 Conclusion – the site passes the Sequential Test.

3.16 Site Allocation Policy SMD007 – Land south of Aylesbury, adjacent Wendover Road, Stoke Mandeville

VALP Allocation: 252 Homes as part of ‘South Aylesbury’

Site Area: 10.29ha

3.16.1 A Level 2 SFRA was carried out because of the presence an Ordinary Watercourse (Bedgrove Brook) in Flood Zone 1. There is some of the site at risk of surface water flooding - a total of 18% at risk. The Level 2 SFRA identifies the following extents of the site at risk:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

3.16.2 The SFRA also modelled 1% of the site as at risk from Flood Zone 3a plus climate change. On that 4% of the site, including the area of an ordinary watercourse once this has been modelled in an FRA, the development should be kept outside of Flood Zone 3a with climate change. VALP is proposing only green infrastructure as water compatible development. On the remaining 99% of the site, in Flood Zone 1, all uses are appropriate and can be accommodated subject to following the SFRA Level 2 recommendations below.

3.16.3 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this sequential test.
Aylesbury Vale Flood Risk Sequential Test

3.16.4 The sites scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 20 ‘greens’, 7 ‘ambers’ and 4 ‘reds’.

3.16.5 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority should be undertaken at an early stage.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the Bedgrove Brook.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Blockage of the culvert under the A413 should be modelled.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach placing development away from areas at risk from ordinary watercourse and surface water flooding. Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event. Any access routes should not impact floodplain flows.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.16.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.16.7 Conclusion – the site passes the Sequential Test.

**3.17 Site Allocation Policy SMD008 – Land between railway line and Wendover Road, Stoke Mandeville**

**VALP Allocation:** 270 Homes as part of ‘South Aylesbury’

**Site Area:** 20.7ha
Aylesbury Vale Flood Risk Sequential Test

3.17.1 A Level 2 SFRA was carried out because of the presence of an Ordinary Watercourse (Bedgrove Brook) in Flood Zone 1. There is some of the site at risk of surface water flooding too – 23% at risk in total. The Level 2 SFRA identifies the following extents of the site at risk:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.17.2 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this sequential test.

3.17.3 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 21 ‘greens’, 6 ‘ambers’ and 4 ‘reds’.

3.17.4 As 100% of the site is in Flood Zone 1, in terms of sequential testing all land uses are appropriate. However due to the surface water flooding issue, the site detailed design and drainage in particular needs to be tackled carefully and in line with the following criteria.

3.17.5 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority should be undertaken at an early stage.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the ordinary watercourse.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Blockage of the culvert under the A413 should be modelled.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk.
Aylesbury Vale Flood Risk Sequential Test

of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.17.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.17.7 Conclusion – the site passes the Sequential Test.

3.18 Site Allocation Policy SMD016 – Land straddling the railway line north of Stoke Mandeville

VALP Allocation: 168 Homes, Link Road, Green Infrastructure as part of ‘South West Aylesbury’

Site Area: 14.8ha

3.18.1 This site is in three parts, two of which are at very low flood risk and would pass the Sequential Test. The third and smallest part is at risk from the modelled Flood Zone 3a plus climate change for an ordinary watercourse, Southcourt Brook. There are the following extents of the whole site at risk:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3A +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>96</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

3.18.2 The SFRA also modelled 4% of the site as at risk from Flood Zone 3a plus climate change. On that 4% of the site, including the area of an ordinary watercourse once this has been modelled in an FRA, the development should be kept outside of Flood Zone 3a with climate change. VALP is proposing only green infrastructure as water compatible development in the area of Flood Zone 3a with climate change. On the remaining 96% of the site, in Flood Zone 1, all uses are appropriate and can be accommodated subject to following the SFRA Level 2 guidance below.

3.18.3 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this sequential test.

3.18.4 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 21 ‘greens’, 7 ‘ambers’ and 3 ‘reds’.

3.18.5 The SFRA Level 2 sets out the following recommendations:
### Flood risk assessment:

- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the LLFA should be undertaken at an early stage.
- Detailed modelling will be required to confirm 1 in 20, 100 and 1000 year extents and 1 in 100 year plus climate change extents on the ordinary watercourse.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding, particularly surface water flow routes, should also be considered as part of a site-specific flood risk assessment.

### Guidance for site design and making development safe:

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.18.6 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.18.7 **Conclusion – the site passes the Sequential Test.**

### South West Aylesbury

This strategic site ‘South West Aylesbury’ is allocated as a strategic allocation for Aylesbury and
For the purposes of the Sequential Test (and in the SFRA), the individual parcels of land that make up the strategic site have been tested. SMD012 is not part of the Sequential Test as it contributes to the delivery of the Aylesbury Garden Town.

South West Aylesbury is proposed to be allocated for:
- Up to 1,550 dwellings
- flood alleviation,
- one primary school,
- multifunctional green infrastructure (totalling 56.33ha)
- strategic flood defences and surface water attenuation
- South West Link Road between A413 Wendover Road and A418 Oxford Road, provision of a linear park, buffer zone for HS2 and noise mitigation.
- Provision of 5 Gypsy and Traveller pitches

Map 1 – South West Aylesbury (using the previous name here of ‘Aylesbury South West’)

The allocation comprises the following sites:
- ST0016 - South West Aylesbury – up to 1,382 dwellings
- SMD012 - Land at Lower Road Aylesbury – already committed for 190 dwellings
- SMD009 - Land between Marsh Lane, Princes Risborough Railway Line and Aylesbury – up to 168 dwellings
already has a resolution to grant planning permission subject to completion of a Section 106 agreement.

3.19 Site Allocation Policy STO016 – Land South West of Aylesbury/Southern Arc (west), south of Aylesbury

**VALP Allocation: 1382 Homes, Link Road, Primary School, Green Infrastructure as part of ‘South West Aylesbury’**

*Site Area: 94.1*

3.19.1 A Level 2 SFRA was carried out because areas of the site fall within Flood Zone 2 and 3a. In addition there is also some surface water risk with 11% of the site at risk in total, – in particular in the north west of the site draining into the Sedrup Brook and ponding alongside the Stoke Brook. The SFRA identifies the following extents of flood risk on the site:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>91</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

3.19.2 The total area at risk in Flood Zone 3 at present is 2%, this is likely to increase to 5% due to climate change.

3.19.3 In terms of the Sequential Test, housing (More Vulnerable use) is appropriate on the 91% of the site in Flood Zone 1 and 3% in Flood Zone 2. Housing in areas of Flood Zone 3a would require passing of the Exception Test. Housing in the area of Flood Zone 3b is not permitted. The Link Road is ‘Essential Infrastructure’ and so an Exception Test is required if this is to be located in Flood Zones 3a or Flood Zone 3b. A primary school may be located on the site and this is ‘more vulnerable’ and therefore also requires an exception test.

3.19.4 The Proposed Submission plan site allocation policy only proposes housing development on part of the site (around 40 ha) and for 1382 homes. The gross size of the site is 94.1ha. Of that site area, any areas of the site not in Flood Zone 1 are allocated for green infrastructure.

3.19.5 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.
3.19.6 The sites scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 15 ‘greens’, 13 ‘ambers’ and 3 ‘reds’.

3.18.7 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Residual risk to the site should be investigated, for example overtopping or breach of the Aylesbury Vale FAS storage areas.
- Risk of overtopping or breach from the Aylesbury Arm (Grand Union Canal) should be modelled.
- The impact of blockage of the A418 culvert on flood risk should be modelled.
- The impact of the deployment of the temporary barriers at the Willows on flooding on the site should be modelled.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.19.8 The Level 2 SFRA identified that the site is in an area of variable risk of groundwater emergence according to the. This is, however, a result of the site lying across the boundary between two OS 1km grid squares upon which the groundwater flooding is mapped. The site does not have a reported history of groundwater flooding (although
extensive flood history is not commonly available for greenfield sites). The JBA Groundwater Flood Model (GFM) indicates a risk of groundwater at the surface across a significant central area of this site. This is low-lying land with a network of existing field drains and, as indicated by the Surface Water Flood Map, prone to surface inundation. However, the GFM indicates that the area of risk of groundwater emergence continues through the existing developed areas of Walton Court and Southcourt. There have been no reports of groundwater flooding in this area.

3.19.9 All housing can be allocated within Flood Zone 1, and only green infrastructure is in Flood Zone 3. Due to its size and significant areas of green infrastructure it would be feasible to avoid development in the lowest lying areas of the site, in order to avoid groundwater, surface and fluvial flood risks.

3.19.10 The SFRA Level 2 has the following recommendation concerning potential groundwater flooding on the site:

- The site drainage strategy should consider whether infiltration is feasible under all groundwater conditions.

3.9.11 In addition further recommendations on the potential groundwater risk issue have come out of the stakeholder consultation on the Sequential Test version 2.0:

- Site investigation to identify likely groundwater levels
- Potential detailed hydrogeological assessment may be required, subject to the outcomes of the site investigation
- Site to be designed with consideration of potentially high groundwater levels, subject to the above
- Assessment of modifications in the behaviour of the groundwater system underlying the site due to the development and any proposed mitigation, together with assessment of off-site implications/impacts on groundwater flood risk, particularly to the communities of Walton Court, Southcourt and the Willows to the north.
- Drainage strategy to assess and detail the management of the above groundwater findings together with interactions with surface water and watercourses

3.19.12 The above recommendations have been taken in the VALP site allocation policy or Policy I4.

3.19.13 On the basis of the above, an Exception Test is required because the Link Road would have to cross the area of the Sedrup Brook where there is significant surface water flooding and areas of Flood Zone 3a. Other than that, the quantities of housing, a primary school...
Aylesbury Vale Flood Risk Sequential Test

(if that goes on this part of the South West Aylesbury allocation) can be provided on the areas of the site shown as Flood Zone 1.

3.19.9 Conclusion – Exception Test required.

3.20 Site Allocation Policy SMD009 – Land between Marsh Lane, Princes Risborough railway line and Aylesbury

VALP Allocation: 168 Homes, Link Road, Green Infrastructure (as part of ‘Aylesbury South West’)

Site Area: 11.63

3.20.1 A Level 2 SFRA was carried out because of the presence of areas of Flood Zone 2, 3a and 3b. The site is also at risk of surface water flooding at 5% of the site in total. However the SFRA acknowledges fluvial flooding is the more critical source of flooding here. These are the following risk extents:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>88</td>
<td>4</td>
<td>0</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

3.20.2 The total area at risk in Flood Zone 3 at present is 6%, this is likely to increase to 12% due to climate change.

3.20.3 In terms of the Sequential Test, housing (More Vulnerable use) is appropriate on the 88% of the site, which is in Flood Zone 1 (accounting for climate change). Housing in areas of Flood Zone 3a would require passing of the Exception Test and VALP is only proposing green infrastructure (water compatible use) in that area of Flood Zone 3a with climate change. Housing in the area of Flood Zone 3b is not permitted and is not proposed in the VALP – only green infrastructure is allocated there.

3.20.4 The Proposed Submission plan site allocation policy only proposes to allocate part of the promoted site, the gross size of the site promoted is 63.6ha. The VALP site allocation is 4.8ha and of that housing is entirely proposed in the area within Flood Zone 1. Areas of that 4.8ha in other flood zones will have green infrastructure only.

3.20.5 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

3.20.6 The sites scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 21 ‘greens’, 5 ‘ambers’ and 5 ‘reds’.

3.20.7 The SFRA Level 2 sets out the following recommendations:
Flood risk assessment:

- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- The impact of the blockage of the culvert under the railway should be modelled.

Guidance for site design and making development safe:

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event, including where new road infrastructure is built.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- New major transport infrastructure such as Stoke Mandeville A4010 Realignment, A413/A418 Link Road and HS2 should be designed so that the potential loss of floodplain and change of flow pathways resulting from their implementation do not have an adverse effect on flood risk. They should also be designed to ensure that they remain operational and safe for users in times of flood.

3.20.8 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.20.9 Conclusion – the site passes the Sequential Test.
Land North of A41

This strategic site ‘Land North of the A41’ is allocated as a strategic allocation for Aylesbury and contributes to the delivery of the Aylesbury Garden Town.

Land North of A41 is proposed to be allocated for:

- Around 102,800 sqm of employment land (B1 (25,600 sqm), B2 (44,400 sqm) and B8 (32,800 sqm))
- Around 1,660 dwellings (including custom and self build units)
- 60 residential extra care units (Use Class C2)
- Mixed use local centre of around 4000 sqm (Use Classes A1, A2, A5 and D1)
- Strategic link road connecting with the ELR (N) and the A41 Aston Clinton Road
- Strategic flood defences
- Around 5000 sqm hotel and conference centre (Use Class C1)
- A local centre
- Around 16 ha for sports village and pitches
- Athletes accommodation
- Around 2ha for 2 form entry primary school (D1)
- Open space totalling 0.2ha play areas, 74.2 ha informal open spaces, 16.7 ha formal open spaces, 1.2ha allotments/community orchards, and; 5.5ha woodland area
- Landscape buffers and ecological mitigation
- Flood mitigation and drainage including Sustainable Drainage systems
- Cycling and walking links

Map xx – ‘Land North of the A41’ site (using the previous name here of ‘Woodlands’)
Aylesbury Vale Flood Risk Sequential Test

The allocation comprises the following sites:

<table>
<thead>
<tr>
<th>Site Description</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTV018 - Woodlands</td>
<td>170</td>
</tr>
<tr>
<td>BIE022 - Manor Farm</td>
<td>29</td>
</tr>
<tr>
<td>WTV017 - Westonmead Farm</td>
<td>6.5</td>
</tr>
<tr>
<td>AST037 - College Farm</td>
<td>10</td>
</tr>
</tbody>
</table>

For the purposes of the Sequential Test (and in the SFRA), the individual parcels of land that make up the strategic site have been tested.

3.21 Site Allocation Policy WTV017– Westonmead Farm, off A41, east of Aylesbury (Land North of A41)

Site area 6.5ha

VALP Allocation: 60 homes (all in Flood Zone 1) and green infrastructure.

3.21.1 A Level 2 SFRA was carried out because there are parts of the site in Flood Zones 2 and 3. These are on the far northern boundary of the site as promoted to the Council. The extents of flood risk as:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>96</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

3.21.2 The total area at risk in Flood Zone 3 at present is 3%, this is likely to stay the same with climate change according to the SFRA Level 2 modelling.

3.21.3 Housing is a More Vulnerable use and so is not permitted within Flood Zone 3b (3% of the site). Housing would be appropriate within 96% of the site that is in Flood Zone 1 and 1ha in Flood Zone 2 but should also have measures to tackle to likelihood of surface water flooding (5% of the site at risk in total from surface water flooding).

3.21.4 The gross site area (shown assessed in HELAA) is 10ha. The suitable extent of the site was the ‘areas up to the stream’ and this area was shown in the VALP Draft Plan. However that was in the context that land further north was open countryside but the new context is the Woodlands development to the north. The Proposed Submission plan allocates the site for 60 homes on the part site entirely in Flood Zone 1 (so allowing for a buffer strip to the watercourse). Part of the site is allocated for green infrastructure because it is in Flood Zone 3a/3b.
Aylesbury Vale Flood Risk Sequential Test

3.21.5 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

3.21.6 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 23 ‘greens’, 3 ‘ambers’ and 5 ‘reds’.

3.21.7 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Risk from reservoirs to the site should be investigated, for example overtopping or breach of the Weston Turville Reservoir.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- Mitigation for reservoir flood risk should be discussed with the Environment Agency.

All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.21.8 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.21.9 Conclusion – the site passes the Sequential Test.

Total Site Area – 200.2ha

The site is allocated for:

- up to 1100 dwellings (C3)
- employment land (B1, B2, B8)
- strategic link road connecting with the ELR (N) and the A41 Aston Clinton Road
- Transport infrastructure, landscape, open space, flood mitigation and drainage
- Residential extra care units (C2);
- Mixed use local centre (A1, A2, A5 and D1)
- Restaurant-bars/cafes (A1, A3 and A4)
- Sports village and pitches,
- Athletes accommodation (10 x 8 apartments)
- Primary school (D1)
- Green Infrastructure

3.22.1 A Level 2 SFRA was carried out because of significant areas of the site in Flood Zone 2 and 3. The Level 2 SFRA examined existing flood risk mapping and found the proportion of the site in the Flood Zones to be as follows. This takes into account a new ‘Baseline’ flood model from Peter Brett Associates (PBA) as part of the work in submitting the ‘Woodlands’ planning application.:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>46</td>
<td>11</td>
<td>6</td>
<td>52</td>
<td>37</td>
</tr>
</tbody>
</table>

3.22.2 The total area at risk in Flood Zone 3 at present is 43%, this is likely to increase to 52% due to climate change. The EA flood zone map indicates that most of the western half of the site is currently located within Flood Zone 3 ‘High Probability’. The eastern part of the site is located mostly in Flood Zone 1, with a pathway of Flood Zone 2, ‘Medium Probability’. In extreme rainfall the EA ‘Surface Water Flood Risk Map’ shows the site could be potentially susceptible to surface water flooding.

3.22.3 Housing is a More Vulnerable use and so is not permitted within Flood Zone 3b (37% of the site) and an Exception Test is required should there be housing proposed for any housing in Flood Zone 3a. A planning application has been prepared, currently being considered and the application includes remodelled Flood Zones on the site reducing the
extent of Flood Zones 2 and 3. At the time of producing this Sequential Test there is still a possibility that some housing may be located in areas shown on the PBA Baseline as in Flood Zone 3a (this is before mitigation proposed in the planning application including as part of the construction of the Eastern Link Road is carried out). The following is an indication of the land required for each land use.

<table>
<thead>
<tr>
<th>Use</th>
<th>Size (hectares)</th>
<th>% of site area</th>
<th>Flood Risk Vulnerability Classification</th>
<th>FZ allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Site</td>
<td>183</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing (C3)</td>
<td>56</td>
<td>30.6</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Extra Care (C2)</td>
<td>1</td>
<td>0.5</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Local Centre (A1, A2, A5, D1)</td>
<td>2</td>
<td>1.1</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>Primary School (D1)</td>
<td>2.9</td>
<td>2.3</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Employment (B1/B2/B8)</td>
<td>21</td>
<td>11.5</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>Hotel</td>
<td>2.5</td>
<td>1.4</td>
<td>More Vulnerable</td>
<td>1, 2 3a (ET reqd)</td>
</tr>
<tr>
<td>Outdoor Sports village (D2)</td>
<td>9.3</td>
<td>5</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Link Road</td>
<td>8.3</td>
<td>4.5</td>
<td>Essential Transport Infrastructure</td>
<td>1, 2 3a (ET reqd), 3b (ET reqd)</td>
</tr>
<tr>
<td>Green Infrastructure</td>
<td>80</td>
<td>43.7</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
</tbody>
</table>

Table – Indicative land uses on site WTV018 part of ‘Land North of A41

3.22.4 Around 76 hectares of the gross site is in Flood Zone 1 and the Proposed Submission VALP only needs 33ha for the housing all in Flood Zone 1 (at 30 dwellings per hectare). Although there is sufficient capacity within the existing site (centre and east) for this using the PBA Baseline, regard is had to the indicative layout of the majority of the site as part of the ‘Woodlands’ planning application. Also the Employment uses which may eventually relate better to being located in the east of the site near the Arla Dairy and the A41 dual carriageway. At the time of producing the VALP Sequential Test it is unclear if all the housing and a hotel (More Vulnerable Uses) are definitely located outside Flood
Zone 3a. However the VALP does not have a ‘need’ for a hotel even if the general location as part of the comprehensive development and new road links may make sense.

3.22.5 The Eastern Link Road (ELR – South), a mass transit and mass evacuation route is a key part of the proposals and has two fixed points of entry within the site. These are the A41 roundabout and the end of the ELR (North) at the Grand Union Canal adjacent the ‘Kingsbrook’ site. Therefore an Exception Test is needed to assess if it is appropriate to locate the proposed level of housing within site WTV018. As a Mass Evacuation Route (Essential Infrastructure) is very likely to be in an area of Flood Zones 3a then an Exception Test is needed.

3.22.6 The other ‘more vulnerable’ uses allocated – the Extra Care unit, Primary School are considered compliant with the Sequential Test because of their small land take involved and in that they could be located within areas of the site is Flood Zone 1 that can achieve satisfactory access/egress arrangements i.e. that aren’t blocked in the event of an extreme flood. The Employment and Local Centre elements of the allocation would be acceptable in Flood Zones 1,2 and 3a and therefore can be achieved on areas of the site outside the functional floodplain. The outdoor sports village and green infrastructure are water compatible uses allowed in all zones by the Sequential Test.

3.22.7 The VALP is able to control the phasing of the site so that any flood alleviation and mitigation, new access/egress arrangements (the Eastern Link Road) are put in before the development of more vulnerable uses takes place. This matter will be considered further in the Exception Test.

3.22.8 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

3.22.9 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 16 ‘greens’, 8 ‘ambers’ and 7 ‘reds’.

3.22.10 The SFRA Level 2 sets out the following recommendations:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to refine the Flood Zone and climate change extents. The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. The existing modelling has a number of limitations here.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
Reservoir risk to the site should be investigated, for example overtopping or breach of the Weston Turville Reservoir.

Risk of overtopping or breach of the Aylesbury Arm (Grand Union Canal) should be considered.

The impact of blockage of the siphon under the canal or blockage of the culverted ordinary watercourse in the centre of the site should be considered.

**Guidance for site design and making development safe:**

- Development must seek opportunities to reduce overall level of flood risk at the site. Flood mitigation options are likely to be required to make this site viable for development.
- The development should be designed using a sequential approach. Built development should be located towards lower risk zones and functional Flood Zone should be used as public open space.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- New major transport infrastructure such as Eastern Link Road should be designed so that the potential loss of floodplain and change of flow pathways resulting from their implementation do not have an adverse effect on flood risk. They should also be designed to ensure that they remain operational and safe for users in times of flood.
- Resilience measures will be required to ensure that development is safe if buildings are situated within Flood Zone 2.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.22.11 The site is the only one capable of delivering the required strategic infrastructure mentioned above because of its location between the Kingsbrook development, the Grand Union Canal, the A41 and the Woodlands/Arla Enterprise Zone.

3.22.12 **Sequential Test Outcome – Exception Test Required** because there is a mass evacuation route and potential for housing in Flood Zone 3a.

3.22.13 **Conclusion – Exception Test Required**

3.23 **Site Allocation Policy BIE022 – Land at Manor Farm, land south of Grand Union Canal Aylesbury Arm**

**VALP Allocation** – 350 homes and Green Infrastructure as part of the site ‘Land North of the A41’.

**Site Area: 18.1ha**

3.23.1 A Level 2 SFRA was carried out for this site which identifies the following proportion of site at risk in Flood Zones:
3.23.2 The total area at risk in Flood Zone 3 at present is 29%, this is likely to increase to 36% due to climate change.

3.23.3 More vulnerable uses such as housing opportunities are appropriate for Flood Zones 1 and 2 only and an Exception Test would be required for Flood Zone 3a. On this site only water compatible uses are appropriate on the entire site. There is some scope for essential infrastructure.

3.23.4 The Proposed Submission plan only allocates housing to 35% of the site assessed in the HELAA – the site allocation boundary extent of housing all of which is in Flood Zone 1 and outside of Flood Zone 3a plus climate change. However, the primary vehicular access into the site would be needed from the Eastern Link Road (ELR) as discussed in paragraph 2.5.4 and on this basis because the ELR itself needs an Exception Test on site WTV018, then site BIE022 also needs one.

3.23.5 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

3.23.6 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 15 ‘greens’, 9 ‘ambers’ and 6 ‘reds’.

3.23.7 The following site specific criteria in the SFRA need to be complied with:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Residual risk from breach or overtopping of the Aylesbury Arm (Grand Union Canal) should be considered.

**Guidance for site design and making development safe:**
- Development must seek opportunities to reduce overall level of flood risk at the site.
The development should be designed using a sequential approach. Flood Zones 2 and 3, and 3a + upper end climate change (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.

- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.

3.23.8 On the basis of the above, whilst the housing and green infrastructure provision can take place in line with the Sequential Test, the site requires the provision of the Eastern Link Road on adjacent site WTV018 and until that major infrastructure is put in as part of wider mitigation on the ‘Woodlands’ site WTV018, it is not clear on site BIE022 that residents would have a safe and practical access into the site and that adequate emergency access arrangements would be provided.

3.23.9 The VALP sets out that Site BIE022 will come forwards in the latter part of the plan period and therefore the access from the Eastern Link Road and Link Road itself and timings/phasing thereof (and phasing of the housing) can be set out in a Masterplan and Delivery SPD to be prepared and adopted by the Council.

3.23.10 The new Eastern Link Road has to be put in to provide site access and significant mitigation from the adjacent site WTV018 can reduce the extents of Flood Zone 3, however the sequential test takes a conservative position taking account of the existing situation and concludes that and Exception Test must be passed to allocate the site.

3.23.9 Conclusion – Exception Test Required
Land South of A41

This strategic site ‘Land South of the A41’ is allocated as a strategic allocation for Aylesbury and contributes to the delivery of the Aylesbury Garden Town.

The allocation comprises the following sites:

- WTV022 - the first is the major development area known as ‘Hampden Fields’ which allocates 3,000 homes and 46,800 sq metres of employment.
- WTV019 - the second site known as ‘Land adjacent to Aston Clinton Holiday Inn’ will deliver 60 homes;
- WTV021 - the third known as ‘Land at New Road Weston Turville’ will deliver a further 51 homes.

Map xx – ‘Land South of the A41’ site (using the previous name here of Aylesbury South East)

Land South of the A41 is proposed to be allocated for:

- Around 3,111 dwellings
- 60 bed care home/extra care facility
- Land for a Park and Ride site
- 6.90ha of employment land
- Two primary schools
- A mixed use local centre
- Multi-functional green infrastructure (totalling 108.43ha)
- Strategic flood defences and surface water attenuation
The sites are merged to enable a comprehensive, cohesive and co-ordinated approach to the development of the site as a whole. It offers benefits for infrastructure co-ordination and delivery, allowing the total infrastructure needs of the allocation as a whole to be considered and planned for, rather than a piecemeal approach that would flow from a site by site approach.

For the purposes of the Sequential Test (and in the SFRA), the individual parcels of land that make up the strategic site have been tested. Site WTV021 already passes the Sequential Test (See Table 1, p.21)

### 3.24 Site Allocation Policy WTV019– Land east of Holiday Inn, south of A41, east of Aylesbury

**VALP Allocation:** 60 homes (as part of ‘Land South of the A41’)

**Site Area:** 5.79ha

#### 3.24.1 A Level 2 SFRA was carried out as parts of the site are within Flood Zone 2. The Level 2 SFRA sets these out as:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a +cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>91</td>
<td>9</td>
<td>0</td>
<td>14</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.24.2 The total area at risk in Flood Zone 3 at present is 0%, this is likely to increase to 14% due to climate change.

#### 3.24.3 Housing is a More Vulnerable use and so is appropriate within Flood Zones 1 and 2. VALP is only proposing allocating the housing in Flood Zone 1 and the remainder of the site is allocated as green infrastructure.

#### 3.24.4 The site is critical to delivery of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

#### 3.24.5 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria.

The site scores 21 ‘greens’, 5 ‘ambers’ and 5 ‘reds’.

#### 3.24.6 The following recommendations are in the SFRA Level 2:

**Flood risk assessment:**
- At the planning application stage, a site-specific flood risk assessment and surface water
drainage strategy will be required.

- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.

Other sources of flooding, including groundwater and surface water should be considered as part of a site-specific flood risk assessment.

- Reservoir risk to the site should be investigated, for example overtopping or breach of the Weston Turville Reservoir.
- The impact of blockage of structure(s) under Aston Clinton Road should be modelled.

**Guidance for site design and making development safe:**

- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.

3.24.7 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.24.8 Conclusion – the site passes the Sequential Test.

3.25 Site Allocation Policy WTV022– ‘Hampden Fields’, south of A41, east of Aylesbury west of Weston Turville

VALP Allocation: 3000 homes as part of ‘Land South of the A41’

Up to 3,111 dwellings and a 60 bed care home/extra care facility; land for a Park and Ride site; 6.90ha of employment land; two primary schools; a mixed use local centre; multifunctional green infrastructure (totalling 108.43ha); strategic flood defences and surface water attenuation; a dualled Southern Link Road between A413 Wendover Road and A41 Aston Clinton Road; and a strategic link road between the Southern Link Road and Marroway.
Aylesbury Vale Flood Risk Sequential Test

**Site Area: 218.7ha**

3.25.1 A Level 2 SFRA was carried out because parts of the site are within Flood Zone 2 and 3. The Level 2 SFRA sets these out as:

<table>
<thead>
<tr>
<th>Flood Zone</th>
<th>FZ1</th>
<th>FZ2</th>
<th>FZ3a</th>
<th>FZ3a+cc</th>
<th>FZ3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>92</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

3.25.2 The total area at risk in Flood Zone 3 at present is 3%, this is likely to increase to 8% due to climate change.

*Table – Indicative land uses on site WTV022 part of ‘Land North of A41’*

3.25.3 Housing is a More Vulnerable use and so is appropriate within Flood Zones 1 and 2

<table>
<thead>
<tr>
<th>Use</th>
<th>Size (hectares)</th>
<th>% of site area</th>
<th>Flood Risk Vulnerability Classification</th>
<th>FZ allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Site</td>
<td>218.7</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing (C3)</td>
<td>77.7</td>
<td>35</td>
<td>More Vulnerable</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3a (ET reqd)</td>
</tr>
<tr>
<td>Extra Care (C2)</td>
<td>1</td>
<td>0.5</td>
<td>More Vulnerable</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3a (ET reqd)</td>
</tr>
<tr>
<td>Local Centre (A1, A3, D1, Day Nursery, A4, A2)</td>
<td>3.75</td>
<td>1.7</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>2 Primary Schools (D1)</td>
<td>8</td>
<td>4</td>
<td>More Vulnerable</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3a (ET reqd)</td>
</tr>
<tr>
<td>Employment (B1/B2/B8)</td>
<td>6.9</td>
<td>3.1</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
<tr>
<td>Extensions to domestic gardens in Tamarisk Way</td>
<td>0.22</td>
<td>0.1</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Link Road</td>
<td>7</td>
<td>3.2</td>
<td>Essential Transport Infrastructure</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3a (ET reqd)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3b (ET reqd)</td>
</tr>
<tr>
<td>Green Infrastructure</td>
<td>108.4</td>
<td>49.5</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Flood Alleviation Scheme</td>
<td>5</td>
<td>2.3</td>
<td>Water-compatible</td>
<td>1, 2, 3a, 3b</td>
</tr>
<tr>
<td>Park &amp; Ride Site</td>
<td>3.2</td>
<td>1.5</td>
<td>Less Vulnerable</td>
<td>1, 2, 3a</td>
</tr>
</tbody>
</table>

(which cover 97% of the site). VALP only allocates housing on the areas of the site in Flood Zone 1. Any areas of Flood Zone 3a plus climate change are allocated as green infrastructure. On this basis and with the further policy criteria below then the development would meet the Sequential Test.
Aylesbury Vale Flood Risk Sequential Test

3.25.4 The site is critical to deliver of Aylesbury Garden Town, at the heart of the VALP Spatial Strategy and contributes to the delivery of the ‘wider sustainability drivers’ in Table 2 of this Sequential Test.

3.25.5 The site is capable of accommodating all the allocated land uses in Flood Zone 1 other a the flood alleviation scheme likely to go to the area of Flood Zone 3a, green infrastructure on the area of Flood Zone 2 in the north of the site and part of the link road connecting to the existing A41 roundabout also in an area of Flood Zone 2. All these uses are compatible with the national Flood Risk Vulnerability Classification.

3.25.6 The site scores well in the VALP Sustainability Appraisal in the 31 site appraisal criteria. The site scores 17 ‘greens’, 12 ‘ambers’ and 2 ‘reds’.

3.25.7 The following recommendations are in the SFRA Level 2:

Flood risk assessment:
- At the planning application stage, a site-specific flood risk assessment and surface water drainage strategy will be required.
- Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
- Detailed modelling will be required to confirm Flood Zone and climate change extents (see ‘Available modelled data’). The Environment Agency and LLFA should be consulted to obtain the latest hydraulic modelling information for the site at the time of the flood risk assessment. They will advise as to whether existing detailed models need to be updated.
- Climate change modelling should be undertaken using the relevant allowances (February 2016) for the type of development and level of risk.
- Surface water modelling should be undertaken to define the level of surface water risk, and the risk areas / flow paths. Climate change should be modelled using the +40% allowance (February 2016) for rainfall intensity.
- Other sources of flooding should also be considered as part of a site-specific flood risk assessment.
- Residual risk to the site should be investigated, for example overtopping or breach of the Weston Turville Reservoir.
- The impact of blockage of structure(s) under Aston Clinton Road and on Bedgrove Brook should be modelled.

Guidance for site design and making development safe:
- Development must seek opportunities to reduce overall level of flood risk at the site.
- The surface water drainage strategy should ensure that the development does not increase flood risk elsewhere.
- The development should be designed using a sequential approach. Flood Zones 2 and 3 (subject to a detailed flood risk assessment) should be preserved as public green space, with built development restricted to Flood Zone 1.
- Safe access and egress should be demonstrated in the 1 in 100 plus climate change event.
- New major transport infrastructure should be designed so that the potential loss of floodplain and change of flow pathways resulting from their implementation do not have an adverse effect on flood risk. They should also be designed to ensure that they remain operational and safe for users in times of flood.
- Compensation storage would need to be provided for any land-raising within the 1 in 100 plus appropriate climate change flood extent.
Aylesbury Vale Flood Risk Sequential Test

- Onsite attenuation options would need to be tested to ensure that changing the timing of peak flows does not exacerbate flooding downstream.
- All development should adopt exemplar source control SuDS techniques to reduce the risk of flooding due to post-development runoff. SuDS design should follow current best practice (CIRIA Manual 2015) and BCC guidance on runoff rates and volumes, to deliver multiple benefits including water quality, biodiversity, amenity, green infrastructure etc.
- Drainage designs should ‘design for exceedance’ and accommodate existing surface water flow routes, with development located outside of surface water flood risk areas.

3.25.8 The above recommendations have been taken forward into the draft VALP Proposed Submission Plan either as site specific criteria or covered under Policy I4. The HELAA and the Sequential Test identifies that there are no reasonably available sites appropriate for the development identified in the VALP with a lower probability of flooding.

3.25.9 Conclusion – the site passes the Sequential Test.
Aylesbury Vale Flood Risk Sequential Test

Exception Test

4.0 The test comes in two parts:

- **PART ONE** - It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment, and

- **PART TWO** – A site specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of users, without increasing flood risk elsewhere and where possible reduce flood risk overall.

4.01 Three sites require Exception Tests:

4.02 On three of the sites where the Sequential Test was applied, an Exception Test was required. The Woodlands site (WTV018) requires the Exception Test because of significant areas of the site being in Flood Zone 3a and Flood Zone 3b as shown on the PBA flood model extent Present Day. The link road would have to cross these areas. The site forms part of the strategic allocation in VALP ‘Land North of the A41’.

4.03 Site BIE022 requires an Exception Test because it would need its primary access from site WTV018 (which itself needs an Exception Test) to the wider road network due to highway width and surface water flooding constraints on Broughton Lane. The site forms part of the strategic allocation in VALP ‘Land North of the A41’.

4.04 Site STO016 requires an Exception Test due to the Link Road as ‘Essential Infrastructure’ and the presence of Flood Zone 3a on the site and areas of surface water flooding where the link road is likely to have to cross. The site forms part of the strategic allocation in VALP ‘South West Aylesbury’.

4.1 **HELAA site WTV018 – ‘Woodlands’, off A41, east of Aylesbury and south of Grand Union Canal Aylesbury Arm**

**WTV018 - Exception Test PART ONE**

4.1.1 The site and development proposals have been informed by a Strategic Flood Risk Assessment completed in 2016-17. The site has had both a Level 1 and Level 2 assessment. The SFRA Level 2 sets out recommendations for the FRA and site
4.1.2 The site is the only site that can deliver key elements of strategic infrastructure needed for the long term growth of Aylesbury Vale and in particular the designated Aylesbury Garden Town. Table 2 of this Sequential Test sets out these wider sustainability benefits, in particular completion of the Eastern Link Road, town wide flood alleviation and delivery of a sports village and strategic green infrastructure projects such as parts of Aylesbury Linear Park. Other benefits would include employment land sites in the Aylesbury Woodlands/Arla Enterprise Zone boosting economic growth, new community facilities including schools and green infrastructure to offset the recreational pressures in sites in the Chilterns AONB.

4.1.3 The site is the only one capable of delivering the required strategic infrastructure mentioned above because of its location between the Kingsbrook development, the Grand Union Canal, the A41 and the Woodlands/Arla Enterprise Zone.

4.1.4 Paragraph 3.21.9 summarises the outcome of the site’s scoring against criteria in the VALP Sustainability Appraisal. The site scored well and as part of the Council’s preferred strategy the SA shows this to be the strategy with the most sustainable benefits compared to evaluated alternatives. The housing is needed on the site to contribute to sustainable development objectives and make the site viable.

4.1.5 On the basis of the above the first part of the Exception Test of the site is considered passed.

**WTV018 - Exception Test PART TWO**

4.1.6 The site is a current planning application and has been informed by new detailed modelling by Peter Brett Associates (PBA). The planning application is accompanied by a Flood Risk Assessment (FRA), Environmental Statement (ES) and Environmental Statement Addendums.

4.1.7 The planning application provides robust evidence in the Flood Risk Assessment that it is possible to be constructed to enable a potential development across the site to remain safe over its lifetime without increasing flood risk elsewhere.

4.1.8 The FRA, ES and ES Addendums have been reviewed by the Council’s SUDs officer, Planning Policy Officers, BCC’s Flood Risk Officer, Environment Agency and Thames Water. No objections are raised to the proposal subject to conditions that would require (1) development to be carried out in full accordance with the Flood Risk Assessment (by PBA) submitted with the application; (2) additional hydraulic modelling is used to determine the level, volume, flood compensatory storage
scheme and details of any proposed flood mitigation measures, including watercourse crossings, flood conveyance culverts and detailed design of the preferential flow route/flood mitigation scheme (within future reserved matters applications) and (3) the development is appropriately phased to require the flood mitigation scheme (including the construction of the ELR(S)) to be implemented before any vulnerable uses are constructed within the lower risk flood zones (following mitigation).

4.1.9 Thames Water recommend that conditions are imposed which require (1) details of Impact Studies to determine the capacity of water supply in the area, the magnitude of any new additional capacity required in the system and a suitable connection point and (2) details of the surface water drainage detailing any on and/or off site drainage works.

4.1.10 The development proposal includes measures to make the development safe for its lifetime taking into account the vulnerability of its users, without increasing the risk elsewhere. The proposal supports the development of essential infrastructure which will facilitate growth within Aylesbury. The development of the ELR(S) will meet one of the key objectives of the Buckinghamshire County Council Strategic Economic Plan (SEP). The supporting FRA identifies the ELR(S) will be safe for its lifetime taking account of the vulnerability, the FRA identifies the ELR(S) to be in accordance with the golden thread of sustainable development providing wider benefits to Aylesbury.

4.1.11 The Peter Brett Flood Model shows that the baseline Flood Zones are less extensive than the previous Flood Zones and also that with mitigation flood risk betterment will be achieved on adjacent land zones 2 and 3 shrunk on adjacent land in addition to site WTV018.

4.1.12 On the basis of the above the second part of the Exception Test of the site is considered capable of being passed at the development management stage of considering a planning application.

4.1.13 Both parts of the Exception Test for site WTV018 can be passed, part two the test ultimately passed following considering a planning application (both outline and detailed).

4.2 Site Allocation Policy BIE022 – Land at Manor Farm, land south of Grand Union Canal Aylesbury Arm
4.2.1 The site and development proposals have been informed by a Strategic Flood Risk Assessment completed in 2016-17. The site has had both a Level 1 and Level 2 assessment. The SFRA Level two sets out recommendations for the FRA and site design/making development safe that the VALP can refer to and make a requirement of development.

4.2.2 The site needs an Exception Test because of the primary access into the site is likely to be coming from site **WTV018** and in particular, connecting to the Eastern Link Road. That site **WTV018** providing the link road is the only site that can deliver key elements of strategic infrastructure needed for the long term growth of Aylesbury Vale and in particular the designated Aylesbury Garden Town. Table 2 of this Sequential Test sets out these wider sustainability benefits, in particular completion of the Eastern Link Road, town wide flood alleviation and delivery of a sports village and strategic green infrastructure projects such as parts of Aylesbury Linear Park. Other benefits would include employment land sites in the Aylesbury Woodlands/Arla Enterprise Zone boosting economic growth, new community facilities including schools and green infrastructure to offset the recreational pressures in sites in the Chilterns AONB.

4.2.3 The site is the only one that can deliver the required strategic infrastructure mentioned above because of its location between the Kingsbrook development, the Grand Union Canal, the A41 and the Woodlands/Arla Enterprise Zone.

4.2.4 Paragraph 3.22.6 summarises the outcome of the site’s scoring against criteria in the VALP Sustainability Appraisal. The site scored well and as part of the Council’s preferred strategy the SA shows this to be the strategy with the most sustainable benefits compared to evaluated alternatives.

4.2.5 On the basis of the above the first part of the Exception Test of the site is considered passed.

**Exception Test PART TWO**

4.2.6 There is no planning application on this site. However, the SFRA Level 2 sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere. The primary site access would be from the Eastern Link Road “however, once that has been delivered, – that part of the SFRA detailed requirements on site access would not apply”. The SFRA shows significant flood risk constraints around a site access from Broughton Lane.

4.2.7 The VALP Policy I4 and site allocation criteria require adherence to the SFRA Level 2 and its site recommendations. The VALP, through a forthcoming Masterplan and
Delivery SPD, to be prepared and adopted by the Council can be set out a phasing of development of the site so that the residential area is not constructed until after the Eastern Link Road and flood alleviation on site WTV018 has been carried out.

4.2.8 The site is considered capable of meeting the site specific recommendations of the SFRA Level 2 in formulating a future planning application. A Masterplan SPD and concept plan will advise detailed site planning and set out how the SFRA requirements should be met by the applicant to demonstrate that the Exception Test can be passed.

4.2.9 On the basis of the above the second part of the Exception Test of the site is considered capable of being passed at the development management stage of considering a planning application, subject to a site-specific FRA that fully addresses access and egress issues in accordance with the requirements of the Level 2 SFRA and any SPD and concept plan.

4.2.10 Both parts of the Exception Test for site BIE022 are considered capable of being passed, but part two of the Test shall ultimately be discharged through consideration of a planning application.

4.3 Site Allocation Policy STO016 – Land South West of Aylesbury/Southern Arc (west), south of Aylesbury

STO016- Exception Test PART ONE

4.3.1 The site and development proposals have been informed by a Strategic Flood Risk Assessment completed in 2016-17. The site has had both a Level 1 and Level 2 assessment. The SFRA Level two sets out recommendations for the FRA and site design/making development safe that the VALP can refer to and make a requirement of development.

4.3.2 The site is the only site that can deliver key elements of strategic infrastructure needed for the long term growth of Aylesbury Vale and in particular the designated Aylesbury Garden Town. Table 2 of this Sequential Test sets out these wider sustainability benefits, in particular completion of the South West Link Road, town wide flood alleviation and strategic green infrastructure projects such as parts of Aylesbury Linear Park. Other benefits would include bringing over the Prices Risborough Railway Line, noise mitigation to the High Speed 2 railway and community facilities including a primary school and 56ha of green infrastructure to offset the recreational pressures in sites in the Chilterns AONB.

4.3.3 The site is the only one that can deliver the required strategic infrastructure mentioned above because of its location between the A418 Oxford Road, southern Aylesbury, the Princes Risborough railway line and the High Speed 2 railway route.
Aylesbury Vale Flood Risk Sequential Test

4.3.4 Paragraph 3.18.6 summarises the outcome of the site’s scoring against criteria in the VALP Sustainability Appraisal. The site scored well and as part of the Council’s preferred strategy the SA shows this to be the strategy with the most sustainable benefits compared to evaluated alternatives.

4.3.5 On the basis of the above the first part of the Exception Test of the site is considered passed.

**Exception Test PART TWO**

4.3.6 There is no planning application on this site. However, the SFRA Level 2 sets out detailed requirements for making the site safe for its lifetime for the various site users without increasing flood risk elsewhere.

4.3.7 The VALP Policy I4 and site allocation criteria require adherence to the SFRA Level 2 and its site recommendations. The VALP can phase development of the site so that the residential area is not constructed until the South West Link Road, town flood mitigation, green infrastructure and HS2 noise attenuation has been carried out.

4.3.8 There is no reason the requirements of the SFRA Level 2 cannot be met. A Masterplan SPD and concept plan will advise detailed site planning and set out how the SFRA requirements should be met.

4.3.9 On the basis of the above the second part of the Exception Test of the site is considered capable of being passed and would ultimately be passed by the Council at the planning application stage.

**Conclusions of the Exception Test**

5.0 The Sequential Test has been applied, and is passed for the sites listed as being proposed for allocation in the VALP Proposed Submission version (August 2017). Alternative sites in the Aylesbury Vale HELAA have been considered.

5.1 The Exception Test has been applied in the three instances where required. Part One has been passed for the sites discussed and Part Two will be progressed in more detail for two of the sites once site masterplanning SPD has been completed by AVDC and sites come forward as planning applications, informed by the Level 2 SFRA. Part 2 of the
Aylesbury Vale Flood Risk Sequential Test

Exception Test as on the sites required is considered capable of being passed but this is ultimately discharged in considering a planning application.

Appendix 1 – Tables of all sites assessed in Stage 1

(see table of sites – separate PDF)
Appendix 2 – Maps for Allocated Sites

(see VALP policy map insets – separate PDF)