

Development and Flood Risk Supplementary Planning Document (SPD) (July 2022)

Summary of Representations Received and the Council's Responses

Introduction

In 2013, Ipswich Borough Council adopted a Development and Flood Risk Supplementary Planning Document ('SPD'). It set out an approach to assessing the safety of proposed developments within the flood zone (the 'safety framework'), based on Environment Agency hazard mapping and data contained in the Ipswich Strategic Flood Risk Assessment, 2011. The SPD was updated in 2016.

The Council published a new Strategic Flood Risk Assessment in October 2020. It updates the 2011 document by reflecting the completion of the Ipswich tidal barrier in 2019, the Environment Agency's new Gipping Model published in 2020, and updated national climate change forecasts. Therefore, a new iteration of the Development and Flood Risk SPD has been prepared to take account of the new information and to reflect updated National Planning Policy and Guidance. The draft SPD has been developed in collaboration with the Environment Agency, Ipswich and Suffolk Joint Emergency Planning Unit, Suffolk County Council Flood and Water Management Team, and Anglian Water.

This summary of representations received, and the Council's responses, starts with the most recent consultation on the full draft of the Development and Flood Risk SPD, carried out between 10th August and 21st September 2021. It subsequently addresses the engagement undertaken for the 'call for ideas' stage.

Responses to the Development and Flood Risk SPD Public Consultation, 10th August to 21st September 2021.

In the table that follows, new text added to the SPD is shown underlined and deletions crossed through. Some paragraph numbers in Chapter 9 of the SPD have changed and this is shown where applicable.

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| Natural England | | <p>Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.</p> <p>Our remit includes protected sites and landscapes, biodiversity, geodiversity, soils, protected species, landscape character, green infrastructure and access to and enjoyment of nature.</p> <p>Whilst we welcome this opportunity to give our views, the topic of the Supplementary Planning Document does not appear to relate to our interests to any significant extent. We therefore do not wish to comment.</p> <p>Should the plan be amended in a way which significantly affects its impact on the natural environment, then, please consult Natural England again.</p> | <p>Comment noted. The SPD incorporates habitat considerations where appropriate. For example, section 9.9 addresses the need for sustainable drainage measures to be multi-functional spaces which support habitat alongside the drainage functions.</p> |

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| Natural England | | <p>Strategic Environmental Assessment / Habitats Regulations Assessment</p> <p>A SPD requires a Strategic Environmental Assessment only in exceptional circumstances as set out in the Planning Practice Guidance.</p> <p>While SPDs are unlikely to give rise to likely significant effects on European Sites, they should be considered as a plan under the Habitats Regulations in the same way as any other plan or project.</p> <p>If your SPD requires a Strategic Environmental Assessment or Habitats Regulation Assessment, you are required to consult us at certain stages as set out in the Planning Practice Guidance.</p> | <p>Scoping was carried out for the SPD to assess whether it needed to be subject to Strategic Environmental Assessment or Habitats Regulations Assessment. The scoping exercise concluded that neither was required, and the key agencies concurred with this conclusion.</p> |
| Suffolk County Council | Table of contents | <p>The formatting doesn't differentiate between the header sections i.e. Section 2 and the sub sections i.e. Section 2.1, 2.2, 2.3 etc. This could be made clearer. The page numbers need to be updated.</p> | <p>This has been checked, sub-section numbering corrected and font sizes changed to differentiate between sections and sub-sections.</p> |
| Suffolk County Council | 1.1.3 & 1.1.4 | <p>The Environment Agency (EA) have recently (27th July 2021) updated the fluvial and tidal climate change allowances for use within flood risk assessments. Ensure these are reflected within the document. NB: The EA's rainfall climate change guidances are also due for revision soon, however these are yet to be published.</p> | <p>New Peak River Flow Climate Change Allowances were published in July 2021. Ipswich is within the 'East Suffolk Management Catchment', in which the peak river flow allowances for the 2080s are now 19%, 29% and 54% for the central, higher central and upper end allowances. The guidance states that the central and higher central allowances should be used in SFRA's i.e. for the Gipping the 1% AEP event plus 19% and 29% increases in flow. It is not necessary to re-run the Gipping model because the allowances used (25%, 35%, 65%) provide a conservative assessment, and both these newer events (19% and 29%) will remain in bank. However, the SFRA will be updated in relation to the larger flood extent and corresponding flood levels for the 65% allowance (the former upper end allowance), which has been referred to for safe access.</p> <p>New text reflecting the above has been added to paragraph 1.1.5 of the SPD to explain the relationship to the more recent climate change allowances. The EA response (see</p> |

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| | | | below) confirms that the SFRA (and, therefore, also the SPD) has been based on the more challenging forecasts. Therefore, the SFRA represents a conservative assessment. |
| Suffolk County Council | 1.2.6 | There is an additional ‘.’ In the third text box of the diagram. The refinement of the diagram from the previous version, 5 boxes to 3 is an improvement and better reflects the process. | This has been corrected. Support for the amended diagram is welcomed. |
| Suffolk County Council | 1.2.7 | The paragraph advises that Policy DM4 is subject to public consultation and review during the Summer of 2021, given that this has now passed, are we able to update this paragraph to reflect the current state of this document. Policy DM4 is taken from the Adopted Local Plan (Feb 2017), in this version whereas the previous draft we reviewed incorporated aspects of the Emerging Local Plan (Jun 2020) which was far more detailed. It would be our preference that the 2020 version was included, even if subject to revision at a later stage. | The adopted (March 2022) version of Policy DM4 has been dropped into this section, to reflect the stage that the Local Plan process has reached. |
| Suffolk County Council | 1.3.1 | Flood Zone 3b is referred to as 3B and 3b intermittently. 3b should be used for consistency with the EA’s mapping and guidance. Suffolk County is referred to but no mention is made at this stage of the Suffolk Flood Risk Management Partnership or the Suffolk Flood Risk Management Strategy and its Appendices, of which the Local Surface Water Drainage (SuDS) Guide is particularly relevant. | All references to zone 3b have been checked and corrected to lower case if necessary. References to the Suffolk Flood Risk Management Partnership and Strategy have been added as new bullets in this list. |
| Suffolk County Council | 1.3.1 | The paragraph on Anglian Water states they manage the foul drainage system and adopted surface water infrastructure, could this be made clearer? They as the sewerage undertaker manage all shared foul water and surface water sewerage infrastructure that was constructed prior to 2011 and all adopted foul water and surface water infrastructure after this date. | The suggested wording has been added to the Anglian Water bullet point and Anglian Water have confirmed that the wording is accurate. |
| Suffolk County Council | 2.1.3 | Only fluvial and tidal flood risk is categorised into ‘zones’. This paragraph almost suggests that if a site is in flood | The order of paragraphs 2.1.3 and 2.1.4 has been reversed and wording changes made to clarify that land |

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| | | zone 1 then it is at low risk of flooding. A site can very easily be located in flood zone 1 and still be high risk of surface or groundwater flooding for example. This should amended to put the emphasis on zones only applying to fluvial/tidal flooding. | within Flood Zone 1 could still be at risk of surface or groundwater flooding. Paragraph 2.1.4 has been amended to read: 'In accordance with <u>Section 14</u> of the NPPF, flood risk from tidal and fluvial sources is categorised into zones according to the probability of river or sea/tidal flooding (ignoring the presence of existing flood defences). Flood Zone 1 is an area at low risk of tidal or fluvial flooding (<u>but can still be at risk from surface or groundwater flooding</u>); Flood Zone 2 is at medium risk; and Flood Zone 3 is at high risk. ...' |
| Suffolk County Council | 2.1.4 | Consider reordering paragraphs 2.1.3 and 2.1.4 to better introduce the different types before focussing in on fluvial/tidal risks and how it is categorised? Should reservoir flooding be included in this list? | The order of paragraphs 2.1.3 and 2.1.4 has been reversed as suggested. Reservoir flooding is not referred to because there are no reservoirs in Ipswich. |
| Suffolk County Council | 2.2.3 | Be VERY clear about return periods and annual probabilities. It is an industry wide misnomer that a 1 in 200 year flood means it will occur once every 200 years, which is very misleading. A percentage is far better and leads to less confusion. | 'Return periods' can be confusing for the reader to interpret. EA advised how the SPD should refer to the return periods. The primary references are percentage-based with further explanation provided thereafter, e.g. 'a 0.5% annual probability (a 1 in 200 chance in any year)', and 'a 0.1% annual probability (a 1 in 1000 annual chance of occurrence)'. These descriptions are considered appropriate. All subsequent references have been checked and clarified using this terminology where necessary. |
| Suffolk County Council | 2.2.4 | Should this paragraph include a reference to climate change and how it is represented in the mapping? Climate change is referred to in later paragraphs but it is not explained how it is applied. I.e. an estimated increase (mm) in sea level height for tidal flooding and an estimated percentage increase in river flow volumes (%) for fluvial flooding. Also, how it is considered when sequentially testing sites through the planning process which considers the | This is fully explained in the SFRA itself and therefore it is not proposed to add further explanation here. However, cross references have been added to the correct climate change sections of the SFRA: 5.1.2, 5.2.4 (River Gipping), 5.3.3 (River Orwell) and 5.4.2 (Belstead Brook). |

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| | | positioning of the flood zones in the future rather than their present-day location. | |
| Suffolk County Council | 2.3.1 | Given this is the first use of the term 'Main River' in the document, should a very brief explanation be provided about how they are designated and what the alternative designation is 'Ordinary Watercourse' alongside the note about EA maintenance responsibilities etc? | There is a footnote to the 'main river' reference and the term is explained in the glossary. Therefore, to keep the document as concise as possible, it is not proposed to duplicate the explanation in the main text. |
| Suffolk County Council | 2.3.3 | Is it worth flagging that the 3m-4.8m AOD identified as the max water level in the extreme flood event should be compared to surveyed ground levels to establish a maximum depth of flooding locally. | This is not considered necessary. This paragraph has been amended, as it emphasises the 65% allowance, but in the latest July 2021 guidance, reference to the central and higher central is sufficient (19% and 29%). The key point is that the flows remain in bank. Paragraph 2.3.3 has been revised to read: <u>'Based on current predictions of climate change and the assumption that no upgrades to the flood defences will be made, the modelling results show that the 1% AEP event including a 25% and 35% allowance for climate change also remain in bank. These allowances provide a conservative assessment of the central and higher central allowances of 19% and 29% respectively.'</u> |
| Suffolk County Council | 2.3.6 | Good to flag that modelling of this location will be required in order to develop this area further. Should it be clarified that this will need to be bespoke modelling commissioned by the applicant unless further work has been done by the EA's modelling team by this point? | The final sentence of paragraph 2.3.6. has been amended to read as follows: <u>'Future development in this floodplain would require bespoke modelling commissioned by the applicant unless further work has been done by the EA's modelling team by this point.'</u> |
| Suffolk County Council | 2.3.7 and 2.3.9 | This paragraph correctly identifies that the area is at risk of pluvial flooding however this is the fluvial flooding section, should this be moved to further down the report, in the pluvial flooding section? Does the inclusion of this suggest that the other areas not specifically referred do not have a risk of pluvial flooding? | The two paragraphs do relate to surface water/pluvial flooding. As they provide information specific to the two watercourses mentioned, the information is considered to sit better where it is than in Section 2.5 Surface Water Flooding. However, a cross reference to Section 2.5 has been added to both paragraphs. Section 2.5 identifies the |

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| | | | areas in the Borough prioritised for action plans. |
| Suffolk County Council | 2.3.11 to 2.3.15 | Could this section be better split into a section on groundwater flooding, supported by the findings of the SFRA and a section on culverted watercourses? The anecdotal and historical knowledge is invaluable but the borough wide issue of groundwater flooding gets lost in the detail. | The Borough wide issue of groundwater flooding is described later in Section 2.6. |
| Suffolk County Council | 2.4.2 | Does 'the council' refer to IBC? This could be clearer. Also it is not just east Ipswich that relies on combined sewers, this is the case across the majority of the borough. | Paragraph 2.4.2 has been amended to refer to Ipswich Borough Council and clarify that the combined sewers issue affects much of Ipswich. |
| Suffolk County Council | 2.4.3 | It should be made clear that the proper functioning of gullies and drains depends heavily on regular maintenance, if this is not completed then they are more likely to fail. | Paragraph 2.4.3 has been amended to read: 'Over time there is potential for road gullies and drains to become blocked from fallen leaves, build-up of sediment and debris (e.g. litter). <u>The proper functioning of gullies and drains depends heavily on regular maintenance; if this is not completed then they are more likely to fail.</u> ' |
| Suffolk County Council | 2.4.4 | The combined sewer systems are also at greater risk of flooding because the capacity of the system is already taken up by some low level flows even during a dry period whereas dedicated surface water systems are in theory 'dry' immediately before a storm event. | The wording provided by SCC has been added to the start of paragraph 2.4.4 |
| Suffolk County Council | 2.4.6 & 2.4.8 | These paragraphs are not specific to sewer flooding and should be moved to a more appropriate section. | Wording has been added to the start of paragraph 2.4.6 as follows to clarify that this section relates to sewer flooding: ' <u>This type of flooding</u> particularly affects ...' |
| Suffolk County Council | 2.5 | Title this as 'Pluvial (surface water) flooding' | The title of the section has been changed to ' <u>Pluvial (Surface wWater) fFlooding</u> '. |
| Suffolk County Council | 2.5.2 | ...and accumulates in natural or manmade depressions ... The SuDS being shown as 'areas likely to flood' is not only specific to the Ravenswood area and is simply a result of the area being identified as low lying ground and therefore prone to accumulations of surface water. The RoFSW does not identify drainage features and is produced by deluging a | The sentence has been deleted: ' In Ravenswood, it is noted that the SuDS basins are shown as areas at risk of flooding on the mapping. ' |

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| | | volume of rainfall onto a surface and thus cannot identify gullies, ditches, ponds or basins etc. | |
| Suffolk County Council | 2.6 | Should we make reference to groundwater flooding being separate from surface water flooding in that it has a much longer reaction time to rainfall events and is likely to present itself at the end of winter or a prolonged wet period rather than shortly after a summer rainfall event for example. | The wording provided has been added to the end of paragraph 2.6.1: <u>'Groundwater flooding differs from surface water flooding in that it has a much longer reaction time to rainfall events and is likely to present itself at the end of winter or after a prolonged wet period rather than shortly after a summer rainfall event, for example.'</u> |
| Suffolk County Council | 3.1.1 – 3.1.5 | The latest iteration of the NPPF states that the sequential test is now to be based on all sources of flood risk (especially pluvial flooding), not just fluvial and tidal flood risk (i.e. that denoted by the 'zones'). This is a major policy change and needs to be recognised. This needs to be reflected in the remainder of the section by using the term 'area at risk of flooding' not zone at this refers specifically to tidal and fluvial flooding only. | <p>The NPPF July 2021 states: 'Strategic policies should be informed by a strategic flood risk assessment, and should manage flood risk from all sources. (p. 160)'</p> <p>'All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property.' (p.161)</p> <p>Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.</p> <p>Ipswich Local Plan and the SPD are informed by the SFRA, which considers all flood risk sources including surface water.</p> <p>The NPPF is reflected in section 3.1 of the SPD, e.g. paragraph 3.1.1 refers to ensuring that, '... areas at little or no risk of flooding from any source are developed in preference to areas at higher risk.'</p> |

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| | | | <p>It is appropriate to retain references to the Flood Zones, as they are still referred to through the Planning Practice Guidance and remain relevant to tidal and fluvial flooding.</p> <p>However, to emphasise that the sequential approach also applies to other sources of flooding, a sentence has been added to paragraph 3.1.1. as follows: <u>'Any development proposal should take into account the likelihood of flooding from other sources, as well as from rivers and the sea.'</u></p> <p>In addition, the reference to 'zones' in paragraph 3.1.4 has been amended to 'areas'.</p> |
| Suffolk County Council | 3.2 | It is my understanding that the IDB offer pre-app advice, albeit informally, and as they manage a large swathe of the Gipping this should be included in this section. | Reference to the East Suffolk Internal Drainage Board has been added in a new paragraph 3.2.4, including their contact details, and this has been agreed with them. (Subsequent paragraphs in this section have been renumbered). |
| Suffolk County Council | 3.2.3 | "the Flood and Water Management team at Suffolk County Council <u>strongly encourage</u> developers to contact them as soon as possible in the planning process for advice on how to produce an application which achieves the 4 pillars of SuDS; water quality, water quantity, biodiversity and amenity and is also acceptable from a flood risk perspective...." | <p>Paragraph 3.2.3 has been amended as requested and now reads as follows:</p> <p>'The Flood and Water Management team at Suffolk County Council also <u>strongly encourage</u>s developers to contact them as early as possible in the planning process for advice on how to <u>produce</u> create an application which <u>achieves the 4 pillars of SuDS - water quality, water quantity, biodiversity and amenity - and is also acceptable from a flood risk perspective.</u> meets minimum operational standards and is beneficial for all concerned organisations and individuals.'</p> |
| Suffolk County Council | 5.1 | In line with the new NPPF, the sequential test also applies to sites at risk of surface water flooding, not just sites within tidal and fluvial flood zones. | <p>The NPPF states: 'The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source.'</p> <p>The PPG states: 'Nor should it normally be necessary to apply the Sequential Test to</p> |

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| | | | <p>development proposals in Flood Zone 1 (land with a low probability of flooding from rivers or the sea), unless the Strategic Flood Risk Assessment for the area, or other more recent information, indicates there may be flooding issues now or in the future (for example, through the impact of climate change).'</p> <p>To address the County Council's concern, the first bullet point has been amended to refer explicitly to surface water flooding and add a hyperlink to the relevant website:</p> <p><u>'the development is in flood zone 2, flood zone 3, (find out which flood zone a site is in and see also SFRA Appendix A, Map 6) or at medium or high risk (100 year or 30 year flood events) of surface water flooding (find out if the site at risk of surface water flooding on the long term flood risk map); and</u></p> |
| Suffolk County Council | 5.2.3 | A sequential test must be carried out on sites which are at risk of surface water flooding, even if they are not at risk of fluvial or tidal flooding, i.e. in flood zone 1. | Given the amendment made to bullet 1 of paragraph 5.1.1 to refer to surface water flooding (see above), paragraph 5.2.3 has been deleted. |
| Suffolk County Council | 5.2.4 | Should the advice re 'no vulnerable dwellings in flood zone 3' not also apply to 'no vulnerable dwellings in areas at high risk of surface water flooding'. | <p>Paragraph 5.2.4 (now 5.2.3) states that highly vulnerable development, such as basement dwellings, will not be permitted in flood zone 3a or 3b, irrespective of a sequential test. This is policy in the NPPF.</p> <p>It is not appropriate for this to apply to areas at high risk of flooding as defined on the ROFSW mapping, as this is too widespread and can be managed through site specific FRAs and drainage strategies. This wording has been added to paragraph 5.2.3:</p> <p><u>'It should be noted that highly vulnerable development, such as basement dwellings, will not be permitted in flood zone 3a or 3b, irrespective of a sequential test. For areas at risk of surface water</u></p> |

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| | | | <p><u>flooding, highly vulnerable development would be subject to a site-specific Flood Risk Assessment and Drainage Strategy.</u> Development vulnerability is set out in Appendix 3 to the SPD.'</p> <p>The Council is not aware of any specific critical drainage areas where highly vulnerable development should not be permitted. None are identified through the SFRA.</p> |
| Suffolk County Council | 5.3.2 | This process needs to include areas at risk of surface water flooding alongside fluvial and tidal flood zones 2 and 3. | <p>The following sentence has been deleted:</p> <p>'For example, where there are large areas in Flood Zones 2 and 3 (medium to high probability of flooding) and development is needed in those areas to sustain the existing community, sites outside them are unlikely to provide reasonable alternatives.'</p> |
| Suffolk County Council | 6.1.1 | Remove the 'for example, particular soil types that are unsuitable'. This is not a valid reason not to use SuDS – a sustainable drainage system. If soils do not suit infiltration based drainage then water can be stored onsite and discharged into a nearby watercourse etc, this is still a sustainable means of drainage and still classed as 'SuDS'. Don't give developers any excuse not to use SuDS. If they have a valid reason not to, then can be the ones to suggest it rather than it being listed in policy. | Agreed – the wording about soil types has been deleted from paragraph 6.1.1. |
| Suffolk County Council | 6.1.3 | See 3.2.3 ('the Flood and Water Management team at Suffolk County Council <u>strongly encourage</u> developers to contact them as soon as possible in the planning process for advice on how to produce an application which achieves the 4 pillars of SuDS; water quality, water quantity, biodiversity and amenity and is also acceptable from a flood risk perspective....') | The new wording from paragraph 3.2.3 has been replicated here in paragraph 6.1.3, and cross reference has been added to Figure 9-8 which shows the four pillars of SuDS. |

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| Suffolk County Council | 9.1.5 | Design surface water flood event: 1 in 30 (3.33%) rainfall including an allowance for climate change is the largest common design standard for urban drainage. Although 1 in 100 (1%) rainfall should be used for more sensitive sites including an allowance for climate change. | A third bullet has been added to 9.1.5 to address surface water flooding as follows: <u>'For surface water flooding, urban drainage is typically designed to the 3.33% AEP (1 in 30 annual chance) event, including an appropriate allowance for climate change. It should be demonstrated that exceedance flows can be effectively managed within the site for the 1% AEP event including an appropriate allowance for climate change.'</u> |
| Suffolk County Council | 9.2.4 | Finished floor levels in areas at risk of surface water/pluvial flooding are equally as important and should be set 150-300mm above surrounding ground levels as a bare minimum as it cannot be accurately forecast or predicted and there is little or no lead in time to prepare. With greater allowance where surface water flooding is a particular risk. | A new clause has been inserted as follows to form a new paragraph 9.2.7: <u>'In areas of surface water flood risk: All development (Less Vulnerable, More Vulnerable and Highly Vulnerable) should set finished floor levels 150-300mm above the surrounding ground levels.'</u> |
| Suffolk County Council | Table 9-1 | H Wet dock – error value returned in link | The error message has been deleted. |
| Suffolk County Council | 9.2.15 | Basements in Flood Zone 1 should only be permitted where the risk of surface water flooding is also low or very low and they are subject to adequate FRAs.... | The proposed text has been added to paragraph 9.2.15 (now renumbered as paragraph 9.2.16): <u>'9.2.16 Basement dwellings in Flood Zone 1 should only be permitted where the risk of surface water flooding is also low or very low and they are subject to adequate FRAs, which must address groundwater, sewer and overland flood sources.'</u> |
| Suffolk County Council | 9.2.18 | This section should also reference safe access and egress with respect to surface water/pluvial flooding as it cannot be accurately forecast or predicted and there is little or no lead in time to prepare/evacuate. | Now that the design flood has been updated in section 9.1.5 to include surface water flooding, this section (9.2.18 – re-numbered as 9.2.19) also covers surface water flood risk. Therefore, no further amendment is proposed. |
| Suffolk County Council | 9.2.25 | This section should also stress the importance of not permitting basement and/or lower ground floor dwellings to be developed in areas at risk of flooding as there is no option for safe refuge and disabled/vulnerable occupants (who often occupy low cost housing such as | This wording has been added to paragraph 9.2.14 (renumbered 9.2.15) in the basement dwelling part of Chapter 9. <u>'9.2.15 Basements dwellings should not be permitted in areas susceptible to surface water flooding. It is</u> |

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| | | this) are at very high risk of being trapped. | <u>important not to permit basement and/or lower ground floor dwellings to be developed in areas at risk of flooding as there is no option for safe refuge and disabled/vulnerable occupants are at very high risk of being trapped.'</u> |
| Suffolk County Council | 9.2.28 – 9.2.29 | Large gap in formatting | The gap arose when the document was saved as a PDF and has been removed. |
| Suffolk County Council | 9.2.33 | Also include recommendations from "Improving the Flood Performance of New Buildings" such as; use ground supported floors where possible, include damp proof membranes, use water resistant insulation, consider flooding when choosing floor finishes, install flood resistant air bricks, ensure patio doors are properly protected and avoid under floor services. | Examples have been added to the bullet list (9.2.34) as follows: <ul style="list-style-type: none"> • Using materials and construction with low permeability (<u>for example, use water resistant insulation, include damp proof membranes, install flood resistant air bricks, ensure patio doors are properly protected</u>). • <u>Considering flooding when choosing floor finishes and avoid under floor services.</u> • Land raising. • <u>Using ground supported floors where possible.</u> |
| Suffolk County Council | 9.2.37 | Also include recommendations from "Improving the Flood Performance of New Buildings" such as; <ul style="list-style-type: none"> - consider flooding when choosing floor finishes, - use external insulation rather than cavity insulation where possible, - avoid external renders and use damp proof membranes. | Examples have been added to the bullet list (now paragraph 9.2.38) as follows: <ul style="list-style-type: none"> • <u>Consider flooding when choosing floor finishes;</u> • <u>Use external insulation rather than cavity insulation where possible;</u> • <u>Avoid external renders and use damp proof membranes;</u> |
| Suffolk County Council | 9.2.40 | More emphasis should be placed on the responsibilities of holiday lets in flood risk areas, information should be clearly displayed throughout the property regarding the level of risk, safe access/egress routes, where to find the flood response plan and contact details. | The wording provided has been added to paragraph 9.2.40 (renumbered 9.3.1): <p>'... and providing suitable contact numbers for visitors. <u>Information should be clearly displayed throughout the property regarding the level of risk, safe access/egress routes, where to find the flood response plan and contact details.'</u></p> |
| Suffolk County Council | 9.2.44 | Areas at risk of pluvial flooding should also be identified and allowances made for occupants of these dwellings at risk to be accommodated within the strategic plans. Flooded inhabitants are unlikely to | Wording has been added to paragraph 9.2.44 (renumbered 9.3.5) to explicitly refer to pluvial flood risk: |

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| | | have any warning and be impacted very quickly after the onset of a heavy rainfall event. | '... and that the development is designed to be safe for them with refuge at that level. <u>This applies to buildings at risk of pluvial flooding also, as flooded inhabitants are unlikely to have any warning and be impacted very quickly after the onset of a heavy rainfall event.</u> ' |
| Suffolk County Council | 9.2.55 | "An" FRA? "an" appropriate Flood Emergency Plan? | Grammatical corrections have been made (this is now paragraph 9.4.1). |
| Suffolk County Council | 9.2.58 | Add the following onto this sentence: "Ipswich BC is accountable via planning condition or agreement to ensure that plans are applicable ... and the assistance of SCC LLFA should be sought where applicable to ensure these are fit for purpose". | The sentence has been amended: 'Ipswich BC is accountable via planning condition or agreement to ensure that plans are suitable, <u>with input from the LLFA where appropriate.</u> ' (Now paragraph 9.4.4.) |
| Suffolk County Council | 9.2.58 – 9.2.59 | Check formatting of header sections - some are aligned to the left hand margin while others are offset. | The headings have been re-aligned. |
| Suffolk County Council | 9.5.1 | With respect to riverside development, alongside setting back development from the edge and considering opportunities for riverside restoration, future access for maintenance and remedial works (if required) should be referenced. | The wording has been added to paragraph 9.5.1 (now paragraph 9.8.1): 'Development should be set back from the edge of watercourses, and opportunities for riverside restoration <u>and future access for maintenance and remedial works (if required)</u> should be considered.' |
| Suffolk County Council | 9.5.4 | This paragraph could start similarly to paragraphs 9.5.2 and 9.5.3, "Land Drainage Consent will be required for any works in or immediately adjacent to Ordinary Watercourses which could potentially impact the flow regime. As the LLFA, SCC require" | The suggested wording has been added to paragraph 9.5.4 (now paragraph 9.8.4): ' <u>Land Drainage Consent will be required for any works in or immediately adjacent to Ordinary Watercourses which could potentially impact the flow regime.</u> As the LLFA, SCC require ...' |
| Suffolk County Council | 9.5.6 | SuDS can also be positioned on lower ground at a higher probability of flooding. | SuDS has been added to the list in paragraph 9.5.6 (now paragraph 9.8.6): '... whereas parking, open space, <u>SuDS</u> or proposed landscaped areas can be placed on lower ground with a higher probability of flooding.' |
| Suffolk County Council | 9.5.8 | Compensatory floodplain storage is not only applicable to fluvial watercourses. Compensatory flood storage works are required where the proposed development would otherwise reduce the available volume of flood storage. | A new paragraph 9.8.8 has been added at the start of this section, after the heading 'Floodplain compensation storage' (subsequent paragraphs have been renumbered): |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | This is unlikely to be required for small developments in estuaries as volumes in estuaries are dominated by tidal flood waters, however this may be required if the development could have a significant impact on the hydraulics of the estuary. Consideration of tide locking for sites where surface water is discharged to an estuary is also critical. | <u>'Compensatory flood storage works are required where the proposed development would otherwise reduce the available volume of flood storage. This most usually refers to areas at risk of fluvial flooding, or for sites where surface water is discharged to an estuary and tide locking is possible.'</u> |
| Suffolk County Council | 9.5.15 | Reference should be made here to indirect flood plain compensation as outlined in Appendix 3.3.10 of C624. | A new paragraph 9.8.15 has been added at the end of the sub-section about Floodplain compensation storage (and subsequent paragraphs renumbered): <u>'It is noted within the CIRIA Publication C624 that where direct compensation is not practicable it may be possible to provide indirect compensatory flood storage. Indirect replacement maybe provided through the use of a protected area into which water is allowed to spill at a controlled rate; typically an area of excavated land surrounded by a flood embankment with an inflow restriction device (e.g. weir or gate) incorporated into it. Water is prevented from flowing into this area until the flood reaches the level at which additional compensatory storage is required, at which time the water is allowed to flow into the bunded area at a controlled rate to mimic the natural rate at which the flood plain would fill. A controlled outfall is provided to allow water to drain from the bunded area as the water level in the watercourse falls. These types of schemes are often more problematic to design and operate and should only be considered where it has been shown that direct compensatory flood storage is not feasible.'</u> |
| Suffolk County Council | 9.6.2 | Include permeable paving in the list of SuDS appropriate to high density development. | Permeable paving has been added to the list of SuDS appropriate to high density development (now paragraph 9.9.2). |
| Suffolk County Council | 9.6.5 | Pleased to see the reference to the emerging update. In the meantime, reference the "Interim Guidance" which | Reference has been added to paragraph 9.6.5 (now paragraph 9.9.5): |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | acts as a minor update to Appendix A – The SuDS Guide. | <p>‘The Suffolk Flood Risk Management Strategy, Appendix A²¹ (<u>and Interim Additional Guidance for outline planning applications</u>), and in particular the emerging update, more closely reflects modern innovative SuDS practice.’</p> <p>In addition, footnote 21 has been updated as follows: ¹² Appendix A is currently under review – <u>refer to the County Council’s website for information</u> https://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/ and will be published during early summer 2021.’</p> |
| Suffolk County Council | 9.6.13 | The 4 pillars of SuDS diagram and concept is very important and should be introduced as early as possible in this section as surface water management is still viewed as ‘simply the management of water quantity in the majority of submissions’. | We agree that the diagram and concept are important but consider that the sequence in this section – setting out the policy framework and then explaining the four pillars – is logical. |
| Suffolk County Council | 9.5.15 | The hierarchy (as outlined in the SCC LLFA SuDS Guidance – Appendix A to the SFRMS) is rainwater harvesting, shallow infiltration, gravity discharge to a watercourse, gravity discharge to a surface water sewer, gravity discharge to a combined sewer, deep infiltration, pumped discharge to a watercourse/infiltration feature, pumped discharge to a surface water sewer, pumped discharge to a combined sewer, discharge to a foul sewer. | This comment refers to 9.6.15 (now 9.9.15). The hierarchy set out in paragraph 9.9.15 is taken from the SuDS Manual. The various forms of discharge referred to would fall under the fourth bullet, ‘conveyance’. |
| Suffolk County Council | 9.7.1 | Bullet Point 1 - This is the LLFA that dictate discharge rates, not the EA. Bullet Points 7 & 10 contradict each other | Reference to SCC has been added to bullet 1 (now in paragraph 9.10.1) and EA has been deleted in consultation with EA. In bullet 11, the distance for infiltration systems from a road has been changed from 4m to 5m as per section 6 of Appendix A to the Suffolk Flood Risk Management Strategy (referencing soakaways). |
| Suffolk County Council | 9.7.2 | The preference for infiltration has already been established in the hierarchy | It has been mentioned already in paragraph 9.6.15, but in 9.7.2 (now 9.10.2), the SFRA reference is also |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | earlier on. Consider removing this paragraph. | provided. Therefore, it has been retained. |
| Suffolk County Council | 9.7.3 | If 9.7.2 is removed then this paragraph needs rewording. | See above. |
| Suffolk County Council | 10.1.2 | The exception test is longer only based on which flood zone the site is located in. It also applies to pluvial flooding which is not classified into 'zones'. Wording taken directly from the NPPF is as follows..."the application of the exception test should be informed by a strategic or site-specific FRA." | <p>Paragraph 163 of the NPPF states that, 'The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3.' Table 3 in the PPG 'Flood Risk and Coastal Change' shows when the Exception Test is required, which is dependent on Flood Zone and flood risk vulnerability classification. Therefore, this text remains correct. However, wording has been added to address SCC's concern:</p> <p>'10.1.2 The requirement to apply the exception test is based on the <u>area Flood Zone</u> in which the site is located and the vulnerability classification of the proposed development, as shown in the Table in Appendix 3 <u>to the SPD. For sites which lie outside Flood Zones 2 and 3 and are vulnerable to pluvial and other flooding sources (see SFRA Appendix A and current national mapping), Chapter 7 of the SPD sets out when applicants will be expected to submit a site-specific FRA, of which the Exception Test forms a part.'</u></p> |
| Taylor Wimpey East Anglia | 9.6.15 | Rainwater Harvesting – Concerned about pushing rainwater harvesting as current products have issues with lack of maintenance and ownership (unless used for individual properties) which then takes up lots of space and reduces potential Net Developable Area. Concerns of stagnated water and will therefore also require a mains supply and therefore will only give a nominal reduction in surface water leaving site. | It is helpful to receive input relating to the practicalities of applying the measures to different types of development. However, the current wording of 9.6.15 (now numbered paragraph 9.9.15) is based on the manual published by the expert body, CIRIA (the Construction Industry Research and Information Association). It already allows for flexibility over which SUDS measures are used. Although this is first in the hierarchy, the SPD allows for evidence to be used to support |

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| | | | <p>alternative solutions lower in the hierarchy, if necessary.</p> <p>Furthermore, the Emerging Water Resources Regional Plan for Eastern England January 2022 identifies that, 'The whole of Eastern England is now classified as seriously water stressed. It is short of water now and if nothing changes that shortage will get worse.' Water is a resource not a waste product. Therefore, it is important to retain rainwater harvesting in new development as a potential response to the water situation, and no change is proposed.</p> |
| Taylor Wimpey East Anglia | Appendix 7 | <p>Table indicates no land take for Soakaways, this is not true. Although positioned underground, there are structural build off zones (5m or 10m in chalk) this then reduces the Net Developable Area.</p> | <p>Soakaways could be installed underground in areas of the site performing multiple non-built functions outside the distance prescribed by the Building Regulations, such as parking areas or communal gardens. However, in recognition of the Building Regulations requirement, this section of the table has been amended to 'varies'.</p> |
| Taylor Wimpey East Anglia | 9.7 | <p>Would be good to specify a hierarchy of maintenance options and adoptions of SuDS features. Such as an example of what is acceptable (so all developers can use) and who can/will adopt and in which order – Local Authority, Anglian Water or Management Company.</p> <p>Requirement to include guidance on Outline Planning Permissions to fix parameters for Reserved Matters applications, such as climate change where this is fixed at the point of Outline Planning Permission.</p> <p>Outline Permissions should include more detail drainage strategy which has infiltration tests carried out and proposals for attenuation, treatment etc. which can be delivered within the constraints of the site and shown on the masterplan.</p> | <p>As specified in paragraph 9.7.1 (now 9.10.1) bullet 4, SuDS maintenance and adoption needs to be considered by applicants and discussed with the Borough Council and Suffolk County Council as Lead Local Flood Authority (LLFA) early on to explore mechanisms for adoption. The current position is that SCC as an LLFA do not adopt SuDS; this may be subject to change in the future. SCC as a highway authority do adopt SuDS, as do Anglian Water.</p> <p>The Suffolk Flood Risk Management Strategy Appendix A 'Local SuDS Guide' includes an Interim Additional Guidance Note providing advice about Outline planning applications. A link is provided in paragraph 6.1.4 of the SPD and reference has been added to paragraph 9.9.5.</p> <p>Outline application stage should include drainage considerations if the development is in an area identified</p> |

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| | | | <p>as at risk. IBC would consult the LLFA at outline stage which would, as appropriate, require the drainage details at that stage anyway, rather than impose conditions.</p> <p>Because some time can elapse between an Outline permission being granted and a Reserved Matters application being submitted, it could not be guaranteed that new flood data issued after the outline permission would not affect the application.</p> <p>Drainage may also relate to matters that are to be reserved, such as landscaping, and therefore it may not be practical to fix parameters at the Outline stage.</p> |
| Taylor Wimpey East Anglia | Appendices | Would be useful to have an Appendix /Glossary that has all the links and contact details of relevant organisations and consultees, together with sources of information, all in one place. | A new Appendix 9 has been added providing contact details and links to some key documents. |
| Taylor Wimpey East Anglia | 1.3 | Should LLFA be included as a source of information? | Suffolk County Council is the LLFA and is already referenced in the list in 1.3. However, for clarity, its role as LLFA has been added. |
| Taylor Wimpey East Anglia | General comment | Any plans shown within the document are very small. It would be useful if they were at a scale which would enable accurate reference. | The approach preferred in the SPD is to refer users back to the original data and mapping in the SFRA – links have been provided in Appendix 9 of the SPD. The SFRA is a living document and will be updated from time to time. |
| Taylor Wimpey East Anglia | 3.2.1 | LLFA should be included within this section. | Paragraph 3.2.3 relates to the LLFA, therefore the information has not been duplicated in 3.2.1. |
| Taylor Wimpey East Anglia | Table 8.1 | Would be helpful to have links to a map to show the extents of areas referred to, such as Holywells Road area. | Where there is mapped information, it will already be included in the SFRA such as the breach hazard mapping in Appendix G. |
| Taylor Wimpey East Anglia | Table 9.1 | Reference “breach of 05 or 07” – needs explanation. | A footnote has been added signposting the section of the SFRA which explains the breach scenarios. |
| Taylor Wimpey East Anglia | Page 34 | What is this plan? It seems fairly unusable. | The figure title for Figure 9.2 has been moved up to sit with the map. The map provides generalised information. For site allocations, the proformas in Appendix F of the SFRA |

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| | | | also provide information on habitable floor levels. |
| Taylor Wimpey East Anglia | Section 9 | We believe this Section jumps between areas, the report would read easier if Structural Safety of Buildings was brought forward after Finished Floor Levels, then Self-Contained Basement Development was dealt with leading onto creation of Safe Refuge and Safe Access/Egress routes and Car parking, together with the requirements for the preparation of Flood Response Plan. Consistency is required with reference to Flood Response Plan / Flood Warning and Evacuation Plans as both are referred to within this Section. It would be more helpful if one title for this document was used throughout to avoid any confusion. | The sub-headings used for each section and clear indexing at the start of the document should help users navigate the SPD and find what they need. Some of Chapter 9 has been renumbered to assist clarity and navigation of the document. 'Flood warning and evacuation plan' is the terminology favoured by the PPG, whereas 'Flood Risk Emergency Plan' is preferred by the EA in the ADEPT guidance. Unless referring directly to the PPG, the SPD has been amended to refer to a 'Flood Risk Emergency Plan' (since evacuation may not always be the advised course of action). Both terms are referred to in the glossary to avoid confusion. |
| Taylor Wimpey East Anglia | 9.6.2 | No mention of the use of swales and consultation with Highways Authority. | Paragraph 9.6.2 (now 9.9.2) is focused on higher density developments where swales may be less likely to be the SuDS used. The Highway Authority's role in highway drainage is covered in Appendix 4, however. |
| Taylor Wimpey East Anglia | Appendix 4 | Would be handy to have an additional column providing the contact details of each organisation. | Contact details have been added to a new Appendix 9. |
| Environment Agency | General comment | We are supportive of the SPD in its structure, layout and with the local guidance that it provides which supplements the National Flood Risk policies in the NPPF and the guidance provided in the Planning Practice Guidance for Flood Risk and Coastal Change. | Comment noted and no further action needed. |
| Environment Agency | General comment | We believe that it is harmonious with the National Policies and guidance whilst applying useful local information derived from the SFRA for which the Environment Agency was a key partner to the Borough Council (along with other Risk Management Authorities) in its production. | Comment noted and no further action needed. |
| Environment Agency | General comment | We believe that the document is fit for purpose in helping developers and their | The July 2021 iteration of the NPPF and changes to the Planning Practice |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | agents to properly assess and consider flood risk in their development designs and submissions for planning permission. Since we last reviewed a working draft of the SPD, there have been some changes to key National Policy documents and Guidance which are worth noting. | Guidance have been reflected through the SPD. |
| Environment Agency | General comment | There were minor changes to the NPPF in July 2021 which resulted in some minor text amendments and paragraph numbering within Section 14 (Meeting the challenge of climate change, flooding and coastal change). None of these appear to have any contextual impact on the SPD in its current form. | The July 2021 iteration of the NPPF and changes to the Planning Practice Guidance have been reflected through the SPD. |
| Environment Agency | General comment | There were changes to the Flood Risk Assessments: climate change allowances guidance on gov.uk in July 2021. These related to allowance for Peak River Flows and how these should be applied to various development types. Our comments below identify these changes where they relate to paragraphs within the SPD and the significance of the changes with regard to the guidance provided by the SPD. | This is addressed below. |
| Environment Agency | 1.1.4 | <p>We note the reference to the “New Peak River Flow Climate Change Allowances” in this paragraph and would advise the LPA that the new allowances were published on 27th July 2021.</p> <p>There are some notable changes in the magnitude and guidance for application of these allowances which the LPA should note:</p> <p>The previous “River Basin District” allowances have been replaced by more localised “Management Catchment” allowances. Ipswich Borough lies within the East Suffolk Management Catchment for which, the allowances give the following percentage flow uplifts for the post 2080s epoch:-</p> <p>Central 19% Higher Central 29% Upper End 54%</p> <p>It is worth noting that these are lesser climate change uplift figures that the previous “River Basin District” allowances that informed the EA’s 2020 River Gipping Flood Model and the IBC SFRA. The comparative allowances used for</p> | <p>New text has been added as follows to follow 1.1.4 as a new paragraph 1.1.5:</p> <p><u>‘New Peak River Flow Climate Change Allowances were published in July 2021. Ipswich is within the ‘East Suffolk Management Catchment’, in which the peak river flow allowances for the 2080s are now 19%, 29% and 54% for the central, higher central and upper end allowances. The guidance states that the central and higher central allowances should be used in SFRAs, which for the Gipping is the 1% AEP event plus 19% and 29% increases in flow. The Gipping modelling reported in the SFRA October 2020 (25%, 35%, 65%) provides a conservative assessment, and both these newer events (19% and 29%) will remain in bank. Therefore, the outputs used for the SFRA remain robust and conservative estimates of future fluvial flood risk. All relevant current Climate Change</u></p> |

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| | | <p>those studies/reports for the epoch post 2080s were:- Central 25% Higher Central 35% Upper End 65% Therefore the peak river flow climate change allowances that have been used for the latest EA River Gipping fluvial flow modelling and the IBC SFRA are conservative.</p> | <p><u>Allowances (Peak River Flow, Peak Rainfall Intensity and Sea level) for use in Flood Risk Assessments can be obtained from https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances.</u></p> |
| Environment Agency | 1.1.4 continued | <p>Furthermore, the new climate change guidance on gov.uk now states that both the central and higher central allowances should be assessed for strategic flood risk assessments with the higher central allowance being used to scrutinise essential infrastructure land uses that are proposed in flood zones 2, 3a and 3b, and the central allowance being used to scrutinise development proposals that fall within the water compatible, less vulnerable, more vulnerable and highly vulnerable land use classes in flood zones 2 and 3a). The allowances should be applied to developments currently in areas of flood zone 1 that have been identified, by the SFRA mapping as potential lying in flood zone 2 or 3 in future years.</p> <p>The new climate change guidance also specifically advises that the central allowance should be used in the consideration of safe access, escape routes and places of refuge for all development types other than essential infrastructure where the higher central allowance should be used.</p> | <p>The assessments in the SFRA are conservative. The requirements for finished floor levels and safe refuge set out in the SFRA are higher than they need to be now.</p> |
| Environment Agency | 1.1.4 continued | <p>For new settlements or significant urban extensions, the LPA may also need to assess the flood risk from a high impact climate change scenario as a “credible maximum scenario” for climate change impacts. In these circumstances it is recommended that the upper end allowance for peak river flow is used as a ‘sensitivity test’ to gauge how sensitive the proposal is to changes in the climate for different future scenarios. This will help to ensure that the development can be adapted to large-scale climate change over its lifetime.</p> <p>Climate Change Allowances for Sea level</p> | <p>The Ipswich Garden Suburb (as a significant urban extension) is not at significant risk of fluvial flooding. There is a risk from the watercourse that flows through Westerfield which will need to be managed through the site planning process, as well as the surface water flow paths that pass through the site.</p> |

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| | | <p>and Peak Rainfall Intensity remain unchanged since the completion of the SFRA.</p> <p>Weblink to Guidance:- https://www.gov.uk/guidance/flood-risk-assessments-climatechange-allowances#peak-river-flow-allowances</p> | |
| Environment Agency | 2.3.3 | <p>The LPA should note that the new Peak River Flow climate change allowances are marginally lower than the percentage uplift figures used in the SFRA and quoted in this paragraph.</p> <p>It may be worth clarifying that all development vulnerability classes in table 2 of the PPG (with the exception of “essential infrastructure”) only need to consider the Central band Peak River Flow Climate Change Allowance for the consideration of safe access, escape routes and places of refuge and for the Design Flood considerations for the setting of minimum habitable floor levels.</p> <p>It is worth noting that the new climate change guidance’s 19% “Central” climate change allowance uplift to the Gipping model’s 1% AEP event would result in water levels remaining in bank (as the modelling carried out by the EA with the pre-July 2021 climate change allowances showed a 25% and 35% uplift to the 1% AEP event flows as remaining within banks)</p> | <p>Paragraph 2.3.3 has been amended to read:</p> <p><u>‘However, based on current predictions of climate change and the assumption that no upgrades to the flood defences will be made, there is potential for areas of Ipswich to be at actual risk of fluvial flooding from the River Gipping during the design flood event in the future. The 1% AEP event including 65% allowance for climate change leads to flooding in parts of the Portman Quarter (west of Ipswich town centre, in the vicinity of Portman Road) with flood levels between 3m and 4.8m AOD. The modelling results show that the 1% AEP event including the lower 25% and 35% allowances for climate change remain in bank. Based on current predictions of climate change and the assumption that no upgrades to the flood defences will be made, the modelling results show that the 1% AEP event including a 25% and 35% allowance for climate change also remain in bank. These allowances provide a conservative assessment of the central and higher central allowances of 19% and 29% respectively, which will therefore also remain in bank.’</u></p> |
| Environment Agency | 2.3.4 | <p>For the extreme flood, we believe that the SFRA’s 25% climate change uplift to the 0.1% AEP flow is robust and a slightly conservative estimate in helping developers and the LPA to considering the issues of safe access, escape routes and places of refuge and emergency planning issues at site and local levels.</p> <p>The new climate change guidance suggests that the Central Allowance should be used for this assessment and</p> | <p>Confirmation that the SFRA climate change uplift assumptions are robust is welcomed.</p> |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | the new Management Catchment based Central Allowance for the East Suffolk Rivers is 19%. The range of flood levels quoted in paragraph 2.3.4 are therefore slightly conservative estimates. | |
| Environment Agency. | 8.1.1 | Note that the recent update to the NPPF has now duplicated Table 2 from the PPG in NPPF Annex 3. However, Table 2 still exists in the same form within the PPG currently and will still work from the SPD's hyperlink. | There are some discrepancies between the flood risk vulnerability classification in the NPPF and that in the PPG. The NPPF link has been inserted to paragraph 8.1.1 and NPPF text has been added to SPD Appendix 2 as the most up to date. A table note has also been added advising users to check which is most up to date at the time they wish to make an application. |
| Environment Agency | Appendix 2 | Flood Risk Vulnerability Classification. The recent update to the NPPF has included this table as Annex 3, although it also remains (currently) as table 2 in the PPG. | Unfortunately, there are some discrepancies between the flood risk vulnerability classification in the NPPF and that in the PPG. The NPPF link has been inserted to paragraph 8.1.1 and NPPF text has been added to SPD Appendix 2 as the most up to date. A table note has also been added advising users to check which is most up to date at the time they wish to make an application. |
| Environment Agency | General | We have no further comments to make at this stage. Should this Draft SPD be subject to further amendments, we would request to re-consulted for further review, and would provide bespoke comments within an agreed consultation period. | Changes arising from the consultation have been checked informally with EA. |
| Historic England | General comment | Thank you for consulting us on the Council's draft Development and Flood Risk SPD. I can confirm that while we do not have any specific comments at this stage, we will be interested in receiving subsequent consultations on this and related documents. | Comment noted – no further action needed. |
| Anglian Water | General comment | Due to resource constraints over the past month – my own and our flood team – it has not been possible to review the SPD in detail. Thank you for making the changes to the SPD which we sought in June and so I can confirm the SPD is now | Comment noted – no further action needed but any relevant wording changes arising from the consultation have been checked informally with AW. |

| Organisation | Section of the SPD | Comment | IBC Response |
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| | | more positively worded focusing on a partnership approach. | |

In addition, the following changes and updates have been made to the Development and Flood Risk SPD since the consultation during the summer of 2021:

- references to the emerging Ipswich Local Plan have been updated to reflect its adoption on 23rd March 2022; and
- typographical corrections have been made.

Call for Ideas Stage

The Ipswich Statement of Community Involvement 2018 (updated November 2020) states that, ‘the Council will consult organisations and the local community as appropriate to the topic, seeking views on the content. The Council will do this through e-mail.’ The call for ideas for this document has been conducted in an informal and targeted way, reflecting the specific responsibilities organisations have in relation to flood risk, and the fact that this is an update which will replace the existing Development and Flood Risk SPD.

Therefore, the following organisations were invited by email to comment informally on an initial draft of the Development and Flood Risk SPD between 9th and 30th April 2021:

- The Environment Agency - the Environment Agency has a strategic overview of all sources of flooding and coastal erosion (as defined in the Flood and Water Management Act 2010);
- Suffolk County Council as Lead Local Flood Authority - Suffolk County Council has responsibility for managing the risk of flooding from surface water, ground water and ‘Ordinary Water Courses’; and
- Ipswich and Suffolk Joint Emergency Planning Unit, which is a member of the Suffolk Resilience Forum.

Comments were also invited (and received) from Anglian Water in June 2021, as the organisation with responsibility for foul and surface water drainage systems.

The comments received during the specialist Call for Ideas consultation are shown below, together with the Council’s response. Discussion was ongoing over a period of time and the comments and responses below encapsulate final positions reached during this informal stage of engagement. All respondents are thanked for their constructive comments on the scope and content of the SPD. The draft Development and Flood Risk SPD has been edited to respond to the respondents’ comments as indicated.

| Respondent | Part of Draft SPD | Specialist Call for Ideas comments received, April-June 2021 | IBC Response |
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| Joint Emergency Planning Unit | General | The Joint Emergency Planning Unit (JEPU) is providing this feedback for the sole purpose of providing outline commentary on the SPD in relation to the Strategic Flood Risk Assessment (SFRA). The SPD is the sole responsibility of the Ipswich Borough Council and JEPU does not endorse any specific SPD and cannot accept responsibility for any omission or error contained in any such SPD, or for any loss damage or inconvenience which may result from the approval of a development where the SPD was used as guidance. | Noted and no amendments made. |
| Joint Emergency Planning Unit | Section 9 | Re: The information in section 9 of the SPD compared to the information provided in SFRA. The overall information is good and the main safety points have been conveyed well in the SPD. There is more detail in the SFRA but lots of references have | Noted and no further mapping or content from the SFRA has been copied across to the SPD. |

| Respondent | Part of Draft SPD | Specialist Call for Ideas comments received, April-June 2021 | IBC Response |
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| | | been made to SFRA Oct 2020 if anyone wishes to view that document in conjunction with the SPD. | |
| Joint Emergency Planning Unit | Section 9 | An important note for developers from SFRA 7.1 paragraph 2 is important to reference in section 9 of SPD specifically the part about 'new development should not increase the burden on the Emergency Services or expose them to hazardous flooding when attempting to assist users of new developments'. Reference to the ADEPT/EA guidance where this statement was used in SFRA is used in section 9.2.52 in the SPD and may be an appropriate place for this to be added? | The sentence from SFRA para 7.1 has been copied across to the SPD para 9.2.56. |
| Joint Emergency Planning Unit | 9.2 | In SPD section 9.2.51 (title Flood Management Plans) would it be worth referencing a suggested structure for Flood Management Plans can be found in SFRA section 7.3.6? | This has not been added to the SPD because the structure for FMPs is reproduced in the SPD's Appendix 6 for ease of reference. |
| Joint Emergency Planning Unit | General | JEPU is happy with the amount of mapping that has been duplicated as this helps developers understand the affected areas under various circumstances and all mapping has been referenced in what it is showing. | The Council agrees that the balance between including mapping and cross referring to the SFRA is appropriate. |
| Joint Emergency Planning Unit | 9.2.45 | In recommending flood warning and evacuation as an approach, the capacity of emergency rest centres needs to be taken into account. The number of residents expected to occupy a building should be provided to the JEPU for the planning of rest centre provision. | Requirement added to 9.2.45 |
| Environment Agency | 1.2.4 | Refer to vulnerable forms of development (given that some types of less vulnerable development do not need the application of the Exception Test) | Text amended to reflect this. |
| Environment Agency | Flood Mitigation Strategy | In the flow chart, 'Avoid' should be Apply the ST; Substitute 'should apply the sequential approach at site level'? Also, the linear aspect of this diagram is a little constraining. There would most likely be an initial assessment to inform the ST, but more detail (the | The diagram was based on Table 7 of the Local Plan. It has been amended and simplified to align with the diagram in section 2.1 of the SFRA |

| Respondent | Part of Draft SPD | Specialist Call for Ideas comments received, April-June 2021 | IBC Response |
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| | | FRA proper) at the later stage to inform what goes where and control/mitigation on site. 'Avoid' is the first key action? | and Table 10-2 of the SFRA. |
| Environment Agency | 1.3.1 | The Flood Map for Planning only shows background flood risk from tidal and fluvial sources, not from Surface Water or Groundwater. The EA does produce a web-based map called "The Risk of Flooding from Surface Water" map as a separate mapping output on the gov.uk website. It may be worth mentioning this as a separate bullet point (perhaps just below the Flood Map for Planning and above the Ipswich SWMP bullets?) | Additional bullet added. |
| Environment Agency | 1.3.1 | This should read 'foul' drainage not sewerage drainage | Appropriate bullet changed. |
| Environment Agency | General | Flood zones are usually '3a' and '3b', rather than 3A & 3B. 3a & 3b are used elsewhere in this document | References checked and changed where necessary throughout. |
| Environment Agency | 2.1.3 | FZ3b is designated by the LPA through its SFRA i.e. unlike the rest of the flood zones, it is not designated by the EA. | Explanation added. |
| Environment Agency | 2.2.3 | Information requested from EA to provide the same context for the extreme 0.1% AEP (1 in 1000 annual chance) event for tidal – and subsequently provided. | Information incorporated in 2.2.3-2.2.5 from the EA. |
| Environment Agency | 2.2.4 | Suggest re-ordering with the start of this stating what a design flood is (and its importance in context of mitigations) and making reference that the Design flood (in the context of tidal flooding) is the 0.5% AEP event occurring over the development's lifetime. | Order changed as requested and reference to additional information regarding design flood. |
| Environment Agency | 2.3.2 | Change annual chance event references regarding the River Gipping Modelling. | Changed appropriately in the paragraph. |
| Environment Agency | 2.3.6 | Mention whether (and how) fluvial flood risk would need to be assessed even though it is not modelled? | Paragraph changed to reflect that future development in the Mill River floodplain would require modelling. |
| Environment Agency | 3.1.2 | It would be useful to include the website references for sequential and exception tests | Inserted. |

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| Environment Agency | 3.1.4 | Add 'Vulnerable forms' of development | Inserted. |
| Environment Agency | 3.2.1 | The reference to both IBC and EA pre-application services being charged for, is partly correct but is missing the distinction that we may also offer initial preliminary opinions which would be free of charge. The link underneath this paragraph is in fact the correct link to the preliminary opinion request form, within the wording it the directs applicants to the additional service we may be able to provide for more bespoke advice. | Suggested text accepted |
| Environment Agency | 3.2.1 | Suggest you add appropriate website references to bullets | Accepted and links added. |
| Environment Agency | 3.2.4 | Is it worth adding the Ipswich Surface Water Management Plan to the list above as developers may need to seek bespoke advice if their proposed development is located within a CDA identified by the SWMP? | Suggested wording added. |
| Environment Agency | 3.2.5 | Refer to "Risk Management Authorities" as bodies identified by Floods and Water Management Act 2010. | Accepted and references updated. |
| Environment Agency | 3.2.5 | There are currently no designated Areas with critical drainage problems across East Anglia (East) area. This point could be amended to say that there are no such areas within the IBC area? | Accepted and amended. |
| Environment Agency | 5.1.2 | Weblink to the sequential test would be useful in Chapter 5 | Web link added to the Planning Practice Guidance. |
| Environment Agency | 5.2.4 | Could again include the link to Table 3 of the NPPG, showing vulnerability & flood zone compatibility? | Para 5.2.4 has been cross-referenced with the SPD Appendices where it is referred to. |
| Environment Agency | 5.3.10 | Should include reference to the wider sustainability benefits that outweigh the flood risk (part of the ET). | Added. |
| Environment Agency | 7.1.1 | Weblink to guidance on preparing flood risk assessment should be added. | Added |
| Environment Agency | 8.1.3 | Check wording is consistent with the PPG's FRA checklist. | Wording checked and confirmed. |

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| | | | <p>The following has been added to 8.1.3 to signpost up to date climate change data:</p> <p><u>'All relevant current Climate Change Allowances (Peak River Flow, Peak Rainfall Intensity and Sea level) for use in Flood Risk Assessments can be obtained from https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances.'</u></p> |
| Environment Agency | Table 8.2 | <p>"Close to flood defence walls" might be better.</p> <p>Breach modelling would help to inform both structural and non-structural measures to bring about safe development. If rapid and highly hazardous characteristics, then design of the development might need to reflect this, whereas if onset of flooding to a site is over a longer period and transition from low hazard to a higher hazard is longer then there can perhaps be more reliance on non-structural measures to facilitate safety i.e. evacuation and flood response plans and less chance of being "caught out" by the flooding. It would need to be used to check that the structure of the building was capable of withstanding hydrostatic and hydrodynamic forces of floodwater where positioned close to defence walls and structures that are effectively acting as dams.</p> <p>FRAs for development adjoining defences should also focus on how the development itself will not affect the integrity of the flood defence (or potentially modify a flood flowpath to the detriment of others)</p> | <p>Text added referring to development close to flood defence walls as well as adjoining.</p> <p>Clarification also added to Table 8-2 about the approach to ground floor sleeping accommodation in developments adjoining or close to flood walls, following further discussion.</p> |
| Environment Agency | 9.1.2 | Characteristics of flood event referred to in bullet point 1 need to link to breach flooding. | Appropriate cross-reference added (now bullet 3). |

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| Environment Agency | 9.1.7 | Reference to breach in flood infrastructure | Appropriate cross-reference added. |
| Environment Agency | 9.2.8 | Need to consider what needs to be advised for self-contained ground floor flats as these will not have sleeping accommodation above breach level. There is a similar issue for bungalows or single storey developments. Is it the intention to preclude these types of development from areas assessed to be at residual risk of tidal flooding and in the case of flats, replace ground floor accommodation with car parking or less vulnerable forms of development? | Appropriate changes made as this is the intention. |
| Environment Agency | 9.2.13 | Please note: These are the “undefended” levels as the Flood Zones are drawn up to show land that is at risk of flooding for the given chance of flooding without the mitigating effects of flood defences. | Added. Need to retain this para as there could be sites in FZ2 or FZ1 that in 100 years’ time with climate change would flood. Therefore, they would not be safe. |
| Environment Agency | 9.2.17 | ‘..the FRA should detail how the design makes the car park safe.’ This is particularly important for areas behind raised flood defences where flood hazard and rapidity of inundation would be extreme should the defences fail when loaded. | Emphasis has been added to this point. |
| Environment Agency | 9.2.24 | Add “Deep or hazardous flooding with rapid speed of onset” | Amended accordingly. |
| Environment Agency | 9.2.28 | The provision of refuge as a measure of safety for future occupants taking account of direct or residual risks for extreme flooding need to link to the need for a Flood Response Plan (to provide essential advice to future users of what they should do should un-warned for flooding start to affect the site (or its surrounds). | Text added. FRP’s are dealt with in later chapter. |
| Environment Agency | 9.2.30 | Structural safety of buildings is an important consideration. | Appropriate text added. |
| Environment Agency | 9.2.40 | While a flood warning & evacuation plan is essential to inform development accommodating transient occupants, they are important for any development where a specific action is required to keep safe. | Appropriate text added. |
| Environment Agency | 9.2.40 | It is important that Flood Warning and Evacuation Plans are developed for sites at risk of flooding, where there is the potential need to evacuate in advance of an extreme flood or to take action to | Relevant text added in new paragraph 9.2.41 Emergency Flood |

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| | | <p>keep safe in the event of the occurrence of flooding with no pre-warning (such as that which could occur should a flood defence breach. The Plan needs to make clear the steps that the occupants of a building need to take to keep themselves safe in such circumstances and the plan should make use of information from the Flood Risk Assessment to inform the occupants of circumstances where and how they should take refuge, the likely duration and other circumstances (pre-warning of an extreme flood) where they should be prepared to evacuate to a rest centre if advised to do so by the emergency services (the plan should show where the nearest rest centre is located).</p> <p>It would be worth making reference to the recent ADEPT guidance on the preparation of Emergency Flood Response Plans:- https://www.adeptnet.org.uk/floodriskemergencyplan</p> | Response Plans dealt with in 9.2.52 |
| Environment Agency | 9.2.42 | There may be a need to ensure that Flood Warning and Evacuation Plans are transferable if properties are sold over their lifetime. Developers can register the plans as a Land Charge so that they come up in legal property searches. The Plan could form part of the documents linked to the property deeds. | Text added |
| Environment Agency | 9.2.44 | Consider stating that applications for developments within flood risk areas that don't provide these up front as supporting evidence of non-structural measures designed to help satisfy the second part of the Exception Test, are likely to be refused. Where refuge is the key measure for keeping safe in extreme circumstances it is important that occupants know that this is the primary action that they need to take and that the development is designed to be safe for them with refuge at that level. | Text added |
| Environment Agency | 9.2.45 | <p>Advise a strategy of primarily evacuation linked to flood warning, but you will need to take opinions from Emergency Planning as to whether there is rest centre capacity to support this.</p> <p>I think it would always be prudent to ensure that any development built in an area that could be subject to hazardous flooding is built with fall back provisions to assist occupants in keeping safe, especially as we</p> | This has also been discussed with the JEPU who requested the addition of a reference to the capacity of rest centres to accommodate those evacuated. |

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| | | <p>know that people will not always choose to evacuate, or that there may be circumstances where raised defences fail with no fore-warning of flooding and limited response time. This is an issue for fluvial risk as well given that the old tidal defences between Stoke Bridge and the London/Handford Road areas will provide management of fluvial water levels significantly above the surrounding ground levels during floodflow events. There are also raised fluvial defences upstream of Horseshoe Sluice in the Yarmouth Road area which retain elevated water levels in the river channel at a height that exceeds the surrounding land. Failure of those defences would see the need for persons to seek refuge within their dwellings.</p> | <p>Text added to address these points.</p> |
| Environment Agency | 9.2.47 | <p>New developments post 2012 are also not counted within the benefits formula for Flood Defence Grant-in-Aid, so it is essential that developers provide development designs that help to manage the impacts of future flooding to their buildings and to the safety of the future occupants. Defence enhancements are not a “given” and are dependent upon affordability (Eligible Flood Defence Grant-in-Aid and Local Partnership funding contributions) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/182524/flood-coastal-resilience-intro-guide.pdf</p> <p>Gov Policy statement - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/221094/pb13896-flood-coastal-resilience-policy.pdf</p> | <p>2012 cut-off date does not work well for a regeneration area like Ipswich, which has seen significant growth since 2012 and has relatively low land values. However, the wording of the paragraph covers the point that funded improvements to the defences cannot be relied upon. Text amendments retained.</p> |
| Environment Agency | 9.2.49 | <p>This needs to be determined by the Suffolk Resilience Forum and Emergency Planning, based upon their capabilities and the resources available to organise evacuations and capacity of facilities (Rest Centres) to cater for those evacuated. Given the fact that no-one can be forced to evacuate their dwelling (and recent events show that they may refuse to leave) this should be seen as a residual risk and developers should recognise this and ensure that building provide fallback arrangements to ensure that residents can stay safe in-situ.</p> | <p>Mirrored the approach for fluvial flooding because there should be warning of an extreme event. Checked with JEPU and reference to capacity has been added, plus reference below to developers providing occupancy estimates of developments.</p> |
| Environment Agency | 9.2.51 | <p>Information regarding the EA’s operational strategy for the flood defences has been provided from our Flood Resilience team who are charged with</p> | <p>Wording about the operation of defences confirming that</p> |

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| | | administering and evolving the flood warning system for the town. | contingency is in place has been inserted as provided from EA. |
| Environment Agency | 9.2.52 | A flood warning, response and evacuation plan, prepared by the developer and agreed by the LPA taking advice from the EA and emergency planners/responders prior to the award of planning permission is essential in this context. | Text added |
| Environment Agency | 9.2.52 | Adequacy of FRA's must be agreed prior to the award of planning permission if the plan is an integral piece of evidence base to help inform the Exception Test. | Agreed – text added. |
| Environment Agency | 9.2.57 | Glad to see ADEPT/EA guidance referred to. | Noted. |
| Environment Agency | 9.3.2 | "the design flood" 1 in 100 year (1% AEP) plus climate change flood event. | Clarified in the text. |
| Environment Agency | 9.5.2 | EA would support/look for ecological enhancements, perhaps as part of demonstrating biodiversity net gain. Amenity & recreation improvements could also be incorporated. Is there a Local Plan policy that this line could link to? I'd like developers to be given more of a steer on this, so links to policy and/or further guidance would be useful. | Agreed, text added and links to emerging policies DM8 Natural Environment and DM10 Green Corridors (adopted policies DM31 and DM33). |
| Environment Agency | 9.5.6 | EA would also look for any existing features (ditches, ponds etc.) to be retained on site, and enhanced wherever possible. | Added. |
| Environment Agency | 9.5.8 | 1% AEP "design flood" event | Added reference to design flood. |
| Environment Agency | 9.5.9 | Change in building footprint must ensure that it does not impact upon the ability of the floodplain to store water or alter flood flow paths that would give rise to higher flood hazard in off-site developed areas | Added. |
| Environment Agency | 9.5.11 & 9.5.17 | Add "design flood level" | Added. |
| Environment Agency | 10.3.4 | It may be useful to provide weblinks to this guidance on gov.uk: https://www.gov.uk/guidance/flood-risk-assessment-the-sequential-test-for-applicants And the PPG: | Added |

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| | | https://www.gov.uk/guidance/flood-risk-and-coastal-change#The-Exception-Test-section | |
| Environment Agency | Appendix 4, Table 3-1 | Other forms of Environmental permit are generally required for waste storage, use, treatment and disposal. For activities that may occur in facilities which carry out industrial processes like refineries, food and drink factories and intensive farming activities, radioactive substances regulation and waste water discharges | Added reference to other forms of permit potentially being required (column 3). |
| Environment Agency | Appendix 5, Table 8-1 section 2 | Lifetimes are still valid for residential development and flood risk. | Text on development lifetimes retained. |
| Environment Agency | Appendix 5 Table 8-1 section 2 | Flood paths are still relevant as it is specifically talking about surface water flood paths, appropriate to remain under SW management section | Text on flood paths retained. |
| Flood and Water Management SCC | 1.3.1 | EA with LLFA's develop Flood Risk Management Plans (FRMP) We are currently working with EA on the draft FRMP2 2021-2027. Ipswich is identified as a Flood Risk Area and we developed 5 intervention measures in consultation with stakeholders. | Additional bullet point added to paragraph 1.3.1 to reflect this. |
| Flood and Water Management SCC | 4.1.4 | Add Land Drainage Consent for alterations to ordinary watercourses (Land Drainage Act 1991 S23), and if its main River then EA consent may be required | Text added |
| Flood and Water Management SCC | 6.1.3 | There is standing advice that developers/landowners/consultants should refer to on SCC website first, this is the web page https://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/ | Text added, together with a link to the web page. |
| Flood and Water Management SCC | 6.1.4 | Suffolk Flood Risk Management Partnership - website address above should be added | Website address added |
| Flood and Water Management SCC | 7.1.1 | Add another bullet 'Development in a 'critical drainage area' as identified in the Ipswich SWMP' | Added (5 th bullet) |

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| Flood and Water Management SCC | 7.1.2 | Developers would need to assess the impact of displacing surface water by ground raising. If the ground raising is in a mapped or known flood risk area then it will have some impact, and an FRA will determine the scale and nature of the impact | Text added (3 rd bullet) |
| Flood and Water Management SCC | 7.1.2 | The SFRA should be referred to by applicants. | Agreed – covered by 5 th bullet |
| Flood and Water Management SCC | Table 8-2 | The EA carry out Breach modelling so applicant needs to consider this in the impacts on the development. | Text added addressing breach modelling. |
| Flood and Water Management SCC | Section 9 Flood warning and evacuation | The most appropriate approach for managing the future fluvial flood risk from the River Gipping needs to be developed in conjunction with the EA and JEPU / Suffolk Resilience Forum re evacuation/site specific flood plan by applicant. | New Paragraphs added – 9.2.45 and 9.2.49 |
| Flood and Water Management SCC | 9.6.3 | Could this be reworded to remove the emphasis on SuDS being something that could be perceived as negative and instead an integral part of all new development & redevelopment. SuDS such as green/blue roofs, vertical rain gardens, tree pits & planters are all very compatible with high density development. Surely town centre sites are the most at need of a little ‘green/blue’ space and amenity space? | Agreed, text added (and also illustrations from the CIRIA Manual to show SuDS in higher density development – see Appendix 7). |
| Flood and Water Management SCC | 9.6.4 | This is no longer referred to in Appendix A to the Suffolk FRMP. See Section 1 of the attached App A draft for new wording. | Text deleted and footnote added referring to emerging Appendix A. |
| Flood and Water Management SCC | 9.6.6 | This wording does not reflect current operational practice more reflective of the emerging draft Appendix A. | Text amended to fit more modern practice as requested. |
| Flood and Water Management SCC | 9.6.11-9.6.15 | The approach is increasingly geared towards managing water runoff as a resource than a waste product. Perhaps this section could reflect this better? The approach is increasingly geared towards managing water runoff as a resource than a waste product. Perhaps this section could reflect this better? | Text amended but also includes the reference to the ‘three goals’ as this comes from Flood Risk PPG. |

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| Flood and Water Management SCC | 9.6.15 | Water Harvesting should be prioritised. The whole ethos behind SuDS is to create pleasant places to live and also to reduce the impact of the development on the environment through water re-use at source. | Agreed bullet point moved to the top of the list and wording changed |
| Flood and Water Management SCC | Table 9.2 | There needs to be a minimum 1.2m separation between the base of the infiltration feature and the highest groundwater level in relation to a high water level. Combine filled land and contaminated land, as so similar in nature. | Agreed Table wording amended |
| Flood and Water Management SCC | 9.6.17 | Please refer to the Green Suffolk website at the end of the para. | Paragraph amended accordingly |
| Flood and Water Management SCC | 9.6.18 | 12-15% of the site area of all new Outline developments need to be dedicated to SuDS | Paragraph amended accordingly |
| Flood and Water Management SCC | 9.7.1 | Could this refer to App A to save repetition See sections 4 (Suffolk general design principles) and 5 (Suffolk specific design principles. | Paragraph amended accordingly |
| Anglian Water | Section 9 | AW is surprised that SuDS are not covered in detail until page 48 and trust that both the EA and LLFA are content that structure of the document and the location of SuDS within the SPD does not reflect the importance of SuDS as their and our preferred way forward? | The EA and LLFA have not expressed concerns about the structure of the SPD in terms of where guidance about SuDS appears. Because SuDS are a measure to manage and mitigate surface water flood risk, there are stages in the development application process – such as the sequential test and preparing an FRA – which necessarily need to be covered first. Section 9 places great emphasis on SuDS as one of several measures that applicants will need to consider, and also refers to the SWMP Appendix A produced by the County Council which provides guidance on SuDS. Nevertheless, wording has been added |

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| | | | to 2.4.2 which refers to the SuDS guidance set out in section 9.6 of the SPD. |
| Anglian Water | 2.4.2 | <p>Firstly, we suggest that paragraph 2.4.2 is revisited as it can be interpreted several ways and perhaps could be worded more positively. On this we acknowledge the problem of extreme events and so suggest a change to the 'not cost beneficial' text which could be read as 'it costs too much'. One option is an extra sentence at the end of that section that reads something like 'Anglian Water is working with the Council, County Council and Environment Agency to seek other climate adaption measures, for example surface water management improvements required to be implemented as part of new development set out in section 9.6'. Alternatively, you could reference Policy CS17 in the adopted Local Plan which sets out who the Council is working with partners to address flood risks. This would ensure consistency between the adopted Plan & the draft SPD.</p> | <p>An extra sentence has been added to the end of paragraph 2.4.2 as suggested:</p> <p>'Anglian Water is working with the Council, Suffolk County Council and Environment Agency to seek other climate adaptation measures, for example surface water management improvements. These are required to be implemented as part of new development as set out in section 9.6 of the SPD, which includes advice on the use of sustainable drainage systems (SuDS) in new developments.'</p> |
| Anglian Water | 5.2 | <p>Anglian Water often has limited options other than to extend/ build in the flood zone because our facilities are already located there due to historic circumstances and the engineering requirements of our water and wastewater networks. It's good to see you/ the Council as LPA is taking a pragmatic approach on the sequential test. For example, we agree that existing essential infrastructure sites may be the most appropriate locations for expansion to support new communities and business. This is because maximising the use of existing infrastructure capacity reduces both the impact on communities from construction at new sites as well as the cost to customers. Importantly using existing sites also significantly reduces the embedded carbon from construction which is inevitable if new sites/ facilities have to be found and developed. That site/ development is also then potentially on land which can be used for new housing, community facilities</p> | <p>Comment noted. Section 5.3 allows some flexibility on area of search for the sequential test.</p> |

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| | | and business which arguably it is more important to locate outside of flood zones. | |
| Anglian Water | 5.3.2-5.3.3 | <p>Anglian Water is committed to making increased use of renewable energy as a key part of our strategy to reaching carbon net zero by 2030. We are already generating solar energy on several of our sites and plan to bring forward more with the support of forward-thinking Councils. It takes a substantial amount of power to source, treat and pump water across the region to our six million customers. This has a significant impact on our carbon footprint. Renewable energy including solar installations can be developed at most of our sites and has long term potential to enable a transition from other energy forms. By harnessing energy from renewable sources, we can help power our operations and seek to significantly reduce our carbon emissions and so help protect the environment for future generations. When considering options for supporting growth Anglian Water will therefore want to prioritise sites which offer the ability to reduce and minimise our carbon impact including renewable energy generation opportunities. This would support the adopted Local Plan objectives including policies CS1, DM2 and CS18.</p> <p>With this in mind, on paragraph 5.3.2/ 5.3.3, Anglian Water would suggest that the area of search is the whole Ipswich area unless through pre application discussions on our schemes or those initiated as part of others development, we agree a bespoke area based on carbon/ energy, engineering and capacity requirements. We recognise that 5.3.2 and 5.3.3 covers all development and so suggest that the emphasis on this is that the search areas referenced are used as a starting point. This then supports early pre application discussions with Anglian Water, other infrastructure providers and all developers. Those discussions and agreements with the Environment Agency can then avoid the risk of challenge further down the line which takes up both Council and developer resources and can unnecessarily delay applications.</p> | The Council agrees that some flexibility may be needed to address non-carbon based energy generation as appropriate. Wording has been added to 5.3.3 to address this, to refer to areas of search being bespoke in certain circumstances. |