West of England Joint Spatial Plan: Publication Document

**Land at Long Ashton, SW Bristol**

Representations submitted on behalf of the University of Bristol

January 2018

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Reviewed by: Matthew Halstead

Alder King Planning Consultants

Pembroke House, 15 Pembroke Road, Clifton, Bristol BS8 3BA

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1.0 Introduction and Executive Summary

1.1 Alder King Planning Consultants (AK) has been instructed by the University of Bristol to submit representations in relation to its land at Long Ashton and in particular the failure of the JSP to identify it as an appropriate ‘Strategic Development Location’ (SDL). AK objects to the JSP in the sense it recognises that the location is highly sustainable and would meet the vision and strategic priorities of the JSP and JTS, but has not been identified. This is in the context that other much less sustainable locations have been identified that will fail to meet those objectives in a meaningful way. From any logical perspective that cannot be right and these representations seek to explore those issues in detail to ensure that the correct steps are taken to producing a JSP that can be found sound at examination.

1.2 It is apparent that the core issue is the reluctance of North Somerset Council to release any land from the Green Belt, irrespective of its sustainability credentials and contribution to Green Belt purposes. This has resulted in the JSP having to formulate a contrived spatial strategy based upon an incorrect sequential application of paragraph 84 of the Framework. In essence, the spatial strategy leapfrogs sustainable locations like land at Long Ashton, despite it not being required as Green Belt, in favour of SDLs that are in highly unsustainable locations that are poorly related to services, infrastructure and development need.

1.3 The spatial strategy is flawed in almost every regard, so in order to substantiate it the JSP has been forced to:

1) Overplay the sustainability credentials of the preferred SDLs and in those instances where even the JSP cannot portray a positive case, suggest that poorly located SDLs (Buckover) ‘have the potential to be sustainable’. Conversely, those SDLs that are located in highly sustainable locations such as land at Long Ashton are subject to a partisan assessment that ignores key evidence and which results in overtly negative conclusions on sustainability.

2) Undertake a flawed Green Belt assessment that is biased against those potential SDLs like land at Long Ashton, in order to overplay the importance of the Green Belt in locations where it is clear that it is not required.

3) To ease the challenge facing the contrived spatial strategy establish a housing requirement that does not address objectively assessed need.

1.4 As a result of the above flawed process, the JSP achieves the following:

1) A shortfall in required housing which by its own admission falls short on delivering critically needed affordable housing by at least 24%.

2) Succeeds in selecting unsustainable locations for SDLs that are isolated and totally separated from existing settlements and their associated services and public transport infrastructure.

3) Aims to improve unsustainable SDLs through extensive infrastructure packages that have not been robustly costed and which require ever increasing public subsidy, the availability of which is unknown.
What has been confirmed is that the estimated cost of the infrastructure packages is £9bn to £12bn, which in a 12 month period following the draft JSP has increased by £2bn.

4) Despite an estimated budget of £9bn to £12bn, the planned infrastructure would only maintain movements by car over the plan period at current levels.

5) Protects huge swathes of land with the potential to facilitate sustainable development on the basis that it is Green Belt, despite this land serving no Green Belt purpose.

1.5 The above issues have been raised at every stage of the JSP consultation including the ‘Issues and Options’ document in November 2015 and ‘Towards the Emerging Spatial Strategy’ document in December 2016. The responses to these previous iterations of the JSP have been used to inform the ‘Publication Draft’, which is the document currently out for consultation. AK previously stated that if the same proposals were to form part of the publication draft, it would not consider it would pass the statutory tests. From reviewing this latest version of the JSP, it is AK’s view that the concerns previously raised have not been sufficiently addressed and maintains its objection. Insufficient evidence has been presented to justify the approach and as a result there is real doubt that the JSP will deliver the Plan vision and strategic priorities.

1.6 In terms of the structure of this representation, comments have been made specifically in relation to the policies contained in Chapter 4 ‘Policy Framework’ of the consultation document, and for ease of reference these have been provided on the ‘Publication Representation Form’. A separate form has been completed for each of the policies commented on and these are included at Appendix 1. The consultation responses have also been informed by a number of technical documents and these are included at Appendices 2–6 as follows:

- Appendix 1 – Policy Representation Forms
- Appendix 2 – WSP Air Quality Note
- Appendix 3 – Sustainability Appraisal
- Appendix 4 – WSP Joint Spatial Strategy Plan Consultation Representations
- Appendix 5 – WSP Transport Strategy
- Appendix 6 – MDS Transmodal ‘The Case for Long Ashton Station’

AK are incredibly disappointed that this latest draft of the JSP has not been informed by any credible update to the evidence base since its last iteration. For this reason AK kindly request that the Inspector has due regard to the content of all of AK’s previous representations as the issues identified therein and associated technical data remains relevant.
Appendix 1: Policy Representation Forms
West of England Joint Spatial Plan - Publication Representation Form

The West of England councils - Bath & North East Somerset, Bristol City, North Somerset and South Gloucestershire councils are inviting representations on the Publication Document of the West of England Joint Spatial Plan. These will be considered by the examining Inspector in the context of the soundness and legal compliance of the Plan.

Please return this form by Wednesday 10th January 2018.
Email to: comment@jointplanningwofe.org.uk or post to: West of England Joint Spatial Plan, C/o South Gloucestershire Council, Planning, PO Box 1954, Bristol BS37 0DD

This form has two parts:
Part A – Personal Details Part B – Your representation.

Please fill in a separate sheet for each representation you wish to make.

To ensure your representation is restricted to issues of soundness and legal compliance, you are advised to refer to the accompanying Guidance Document and make your representation on this official form that has been specifically designed to assist you in making your representation.

Please be aware that all comments made on the Joint Spatial Plan will be publicly available. Anonymous forms cannot be accepted and so to submit your form you must include your details below.

You should refer to section 5 in the Guidance Document for advice on how to make a joint representation.

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<tr>
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<tr>
<td>Organisation* (where relevant)</td>
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</tr>
<tr>
<td>Address Line 1</td>
<td>Pembroke House</td>
</tr>
<tr>
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<td>15 Pembroke Road</td>
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<td>Address Line 3</td>
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<tr>
<td>Telephone Number</td>
<td>0117 317 1175</td>
</tr>
<tr>
<td>E-mail Address</td>
<td><a href="mailto:Mhalstead@alderking.com">Mhalstead@alderking.com</a></td>
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Signature ____________________________ Date 10/01/2018
Part B - Your Representation

Please use a separate form for each representation made and read the accompanying Guidance Note that accompanies this form before you complete it.

Name or Organisation:

Q1. On which part of the Joint Spatial Plan are you commenting? Please see the note above.

Chapter 4  Paragraph  Policy 1

Key Diagram

Q2. Do you consider the Joint Spatial Plan to be:

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Please tick as appropriate

Q3. Please give details of why you consider the Joint Spatial Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Joint Spatial Plan or its compliance with the duty to co-operate, please also use this box to set out your representation.

1.1 The first critical issue stated in the JSP is that “There is a critical need to substantially boost the housing supply, particularly affordable housing, of which the need is acute across the Plan area.” The related strategic priority states “To meet the sub-region’s identified housing needs, in a sustainable way. In particular to make a substantial step change in the supply of affordable housing across the Plan area.”

1.2 The robustness of the proposed housing figure has been raised as a concern by the University of Bristol in all its previous submissions to the JSP and it still considers that this has not been adequately justified. The stated housing requirement of 102,200 new homes remains the same. In relation to the overall supply of homes, with the exception of the introduction of a contingency figure (discussed below), this figure has also not significantly changed from the previous iteration of the JSP. It is noted there has been a minimal increase from 105,000 to 105,500. This is apparently due
to further review and consideration of the previous technical work undertaken which, in some cases, has resulted in a refinement of the capacity, sometimes resulting in revisions to the dwelling provision for each SDL (para 5.1 of ‘Strategic Development Location Assessment Methodology Paper’).

1.3 To reiterate, principal concerns with the quoted housing requirement are:-

- Population projections include a level of net migration in the UK well below levels observed in recent years.

- The uplifts for backlog, market signals and labour market imbalance in the ORS analysis are not treated cumulatively, resulting in underestimates of the contributions to the housing requirement from the various variables.

- There is inadequate treatment of the fact that older workers have higher tendencies towards part time working. This is highly relevant as a significant proportion of the additional workforce, through adjusted economic rates is amongst older age groups within the population.

**Uplift**

1.4 The Government recently consulted on a number of proposals to reform the planning system to increase the supply of new homes (Planning for the right homes in the right places: consultation proposals, September 2017). This included a standard method for calculating local authorities’ housing need and tabled a standardised approach for Councils to determine their housing requirement. This is a relatively straightforward approach that takes household projections as the baseline and then applies a ‘house price affordability uplift’ if house prices in a Council’s area are more than four times local average earnings. To take the West of England as an example, the JSP is planning for 105,500 new homes in the period 2016-2036, but using this new methodology, it would result in:

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<td>2,420</td>
<td>48,400</td>
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<tr>
<td>BANES</td>
<td>626</td>
<td>12,520</td>
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<tr>
<td>North Somerset</td>
<td>1,305</td>
<td>26,100</td>
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<td>SGC</td>
<td>1,474</td>
<td>29,480</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5,825</strong></td>
<td><strong>116,500</strong></td>
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1.5 Applying the new methodology would result in an extra 11,500 homes to deliver, which inevitably will significantly increase the pressure for further Green Belt release as additional land will be required to deliver this. The feedback from this consultation is currently being finalised and although this new methodology is not yet finalised, it is widely expected in the industry that it, or a variant of it, will be taken forward and incorporated into a revised National Planning Policy Framework (NPPF) to be published by 31 March 2018. This timetable is key, because if a plan is submitted to the secretary of state for consideration after 31 March 2018, then it will be subject to the new methodology. This is referenced within the consultation material (Topic Paper 1) where it states that the JSP is programmed to be submitted before 31st March 2018 and therefore, under the transitional arrangements, the new methodology will not apply.

1.6 Given that when applying the new methodology, it concludes that an extra 11,500 homes are required it dramatically throws into doubt that the 105,500 allowed for within the JSP is a realistic figure to deliver the WoE’s housing requirements.

1.7 Within ‘Topic Paper 1’ it confirms that in light of the advice in paragraph 14 of the NPPF (“Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change”) the JSP seeks to provide flexibility by increasing the OAN between 5% to 10% i.e. around 105,500 new dwellings or around 7.5%. There is no real explanation however to demonstrate why the figure of 7.5% has been chosen with it being a very arbitrary approach based upon an uplift in Southampton.

1.8 It is clearly stated within the consultation material that the role of the JSP is to address the overall quantum of housing need and the affordable housing need. However, by its own admission the JSP recognises that with respect to affordable housing delivery, there will be a shortfall of 24%, with only 24,500 affordable homes being delivered against a requirement of 32,200 homes.

1.9 Topic Paper 1 presents the affordable housing target of 24,500 homes as an ‘ambitious target’, and within the context of a 105,500 housing target it certainly is, although to the point of being unachievable. The evidence naively assumes that policy compliant targets of 35% will be achieved on all non-strategic growth and from Strategic Development Locations (SDLs). Inevitably some non-strategic sites will be subject to constraints that prevent a policy compliant quantum of affordable housing being delivered. Using Bristol as an example, the Council’s latest annual monitoring report (Table H17) confirms that the average percentage of affordable homes secured is 27.7%, despite the policy requirement being 30% and 40%. With the best will in the world it is unlikely that all non-strategic development will be able to provide its quota of affordable housing.
1.10 With respect to the SDLs, given the extensive infrastructure requirements for many of them, again it is unlikely that policy compliant affordable housing would be achievable. Even taking an optimistic approach which assumes that the quotas will be met, according to the trajectories contained in the Strategic Development Location Templates, due to the majority of SDLs not coming online until much later in the plan period, affordable homes from these sources of supply cannot be expected anytime soon.

1.11 Given the above, the anticipated shortfall in affordable housing is likely to be in excess of the 7,700 homes anticipated by the JSP. Despite the recognised shortfall, the response in Topic Paper 1 is an acceptance that 'it is unrealistic to expect the Plan alone to meet the full amount of affordable housing need' (para 3.12). If the development plan is not the means for delivering affordable housing, then the question has to be asked as to how any shortfall will be delivered?

1.12 The answer to this question can be found at Annex 1 to the Topic Paper, where it is acknowledged that while an additional uplift to the OAN beyond the 7.5% already sanctioned would have ‘some effect on increasing affordable housing, this is not in itself the solution’. Whilst accepting that a further uplift would have some effect, such an approach is not taken. Instead the affordable housing deficit will be met through additional subsidy, authorities ‘taking control through Housing Companies and ‘building partnerships’ with registered providers. Firstly, the Annexe acknowledges that the availability of finance is unknown, and the latter mechanisms are so vague in their intent that they cannot be treated as credible. In no way are these additional interventions considered a realistic basis for addressing the affordable housing shortfall.

1.13 Annexe 1 acknowledges that providing an overall increase in housing will have an effect on affordable delivery so this approach should be seriously considered. Whilst an arbitrary increase of 7.5% to the OAN has been suggested, this is simply a ‘figure in the air’ assessment of what might be acceptable. Linked directly to affordability in the West of England the emerging methodology for calculating a housing requirement presents a useful indicator against which to base any uplift. If applied to the OAN, a circa 20% uplift would be required to bring the housing requirement in line with the 116,500 target mentioned above and by doing so would reduce the affordable housing deficit by half.

1.14 However, further uplifts have been discounted, although no credible reason for doing so has been identified in any of the JSP’s evidence papers, despite the SHMA at paragraph 6.9 stating:

‘Given that the identified OAN already incorporates an uplift of 7.5% on the baseline household projections, this will contribute to increasing the supply of affordable homes through market housing led developments. The Councils will need to consider whether there is sufficient justification for any
further increase in the total housing figures included in the local plan (beyond the identified OAN) as part of their policy response to meeting the identified need for affordable housing…”

1.15 No robust account has been provided within the evidence base to discount any justification for an increase in the uplift, aside from a throw away comment in the Issues and Options paper which states at paragraph 3.10 that:

‘The OAN figure has already included a 7.5% increase in the housing number to address affordable housing need. A modest housing increase could be considered to provide further affordable homes, however, using this method to meet the affordable housing requirement, could lead to a substantial over provision of housing sites beyond which the market can sustain or deliver. Furthermore, this could lead to a failure to build on the more challenging brownfield sites and result in greater pressure on green field land. This approach also cannot guarantee more affordable homes or more affordable homes in the areas of greatest need.’

1.16 This statement appears to be based upon pure speculation, with none of the points contained therein having been evidenced. Given the recognised ‘critical’ need to boost significantly the supply of housing to casually dismiss a worthwhile uplift will ultimately have a deleterious effect on the ability to address housing need, irrespective of tenure.

1.17 AK also notes that if the Government’s new methodology for calculating the housing requirement were to be considered then the need identified in the Bristol City Council administrative area is 48,400 homes, which is considerably in excess of the 33,500 homes being planned for. The JSP correctly (for now) uses the SHMA methodology rather than calculating an authority by authority requirement, but the Government’s methodology highlights a weakness in the JSP that an insufficient supply of homes is being directed towards the Bristol urban area. The Spatial Strategy still appears based on locational choices (i.e. to prioritise SDLs outside of the Green Belt) that do not relate to where the need and demand is most acute.

Contingency

1.18 The Publication JSP introduces a contingency supply of around 3,000 homes and release of this will be considered should development not come forward as anticipated. A plan review would be the mechanism to undertake the release of the contingency land, informed by monitoring of delivery. This is stated as giving an overall potential housing supply within the JSP Plan period of 108,000 new homes (including contingency). This statement is somewhat misleading as the purpose of the contingency is not to allow for additional housing to come forward in numerical terms, but to rather act as a ‘back up’ or replacement if any of the other sites identified are not deliverable.
1.19 Whilst AK is supportive of the principle of contingency land, for it to be of any benefit it has to be deliverable at the point of need, otherwise it is simply a safety net to delivery with one too many holes. In this regard it would appear that there has been no assessments of the contingency sites within the consultation material, either within the ‘Sustainability Appraisal’ or ‘Strategic Development Location Templates’ and therefore it is questioned how these can be considered as realistic alternatives should any of the SDLs fail to come forward.

1.20 One of the contingency sites is identified as land east of Clevedon to provide around 1,500 dwellings, however the appropriateness and deliverability of this site is severely questioned. In the evidence base for the previous consultation on the JSP (WoE JSP Emerging Strategic HELAA – Assessment of Strategic Development Locations Beyond Settlement Boundaries – Location Dashboards) for Clevedon, it is concluded that “This location has not been identified for strategic housing growth as it was not considered compatible with the spatial strategy set out in the Joint Spatial Plan – Towards the Emerging Spatial Strategy consultation.” Why it has therefore been included as a contingency site is a mystery and there is no explanation within the latest consultation material. As confirmed in this document, this area is significantly constrained in terms of flood risk, landscape impact, transport and risk of coalescence with the village of Kenn. The draft JSP at paragraph 19 even states that locating development in flood risk areas would impact on delivery of the strategy. It should therefore not be taken forward as a contingency site.

1.21 One of the other contingencies is simply stated as “increased non-strategic growth in South Gloucestershire (around 500 dwellings) and in BANES (100 dwellings)”. This is a very general statement and, given the preferred spatial approach is to prioritise ‘non-strategic growth’ over new strategic locations, it is confusing as to why this additional capacity has not been maximised already in order to avoid having to seek locations within the Green Belt. Surely if a difficult decision had to be made to release land from the Green Belt, if there were alternative sites that could be attributed to non-strategic growth, this would have been used. Given that the principle of development in these locations is already acceptable, i.e. does not require allocations, development in these locations would come forward regardless, so cannot be treated as ‘contingency’.

1.22 There are also concerns about the contingency sites in terms of transport infrastructure. For example, Clevedon has none of the locational advantages of other potential sites, such as Long Ashton, and appears to be reliant on an extension to the Nailsea/Backwel SDL. Similarly, Chipping Sodbury would be reliant on an extension of the proposed Yate Metrobus corridor. If housing contingency sites are needed due to failure to deliver one of the sites closer to Bristol on these corridors (or to deliver their associated sustainable transport infrastructure) then it is unclear how the contingency itself would be deliverable and how it would solve the problem of under delivery.
Instead, it seems more logical to presume that contingency at Clevedon could only be served after Nailsea / Backwell and its associated corridors and transport improvements have been delivered. Therefore, there is a reasonable risk that identified contingency sites represent extensions of an already failing spatial strategy that they are intended to address, rather than being genuine alternatives which are deliverable if the initial strategy cannot be delivered quickly enough.

1.23 Appendix D to the updated SA at page 18 states:

‘The contingency sites will be considered and if required brought forward through Plan review. As such, it is not considered necessary to SA these sites until such time as they are to be released (through the Plan review process), and will be subject to SA at that time.’

Given the issues the apparent issues that have been identified with these sites, it is critical that their sustainability and in turn deliverability is ascertained now. It makes no sense to delay such assessments to subsequent local plans as in the event that contingency sites are required, it may transpire that those identified in the JSP are inappropriate resulting in a shortage of deliverable housing land.

Other Matters

1.24 The previous version of the JSP stated that commitments amounted to 66,000 homes which included both existing plan commitments and small windfalls. In the latest version the total figure for existing housing commitments and small windfalls is 68,250, however there is no explanation as to where these additional 2,250 homes have come from. In addition the figure attributed to ‘urban living’ has risen from 14,600 to 16,200, again seemingly with no explanation for this uplift. This is unhelpful and once again casts into sharp relief the robustness of the document.

Summary

1.25 The key purpose of the JSP is to form the strategic policy for individual local plans prepared by the 4 UAs which will be reviewed on the back of this document. Ignoring this new methodology, and the implications it would have for the required housing figure and land required to deliver this, seriously undermines the JSP process and raises questions about its reliability. Furthermore the JSP will be used to inform the local plans of the four UAs going forward. It is therefore imperative that the strategy is correct at this stage, in order to avoid the need for further reviews and potential planning appeals based on 5 year housing land supply arguments coming forward in the future which would undermine the very purpose of the JSP.
If it is the intention of the JSP not to provide a meaningful uplift to the housing requirement, then it must, as an alternative, and at the very least, address any likely shortfall through an appropriate contingency supply and one that it is confident can be delivered. However, in the interests of good planning, AK is firmly of the view that an uplift of 20% to the housing requirement should be provided in conjunction with the identification of additional SDLs like the land at Long Ashton now, thereby ensuring that there is in no future lacuna of deliverable land for housing.

For the reasons given above, Policy 1 is not considered sound as it is not positively prepared given its failure to meet objectively assessed development requirements in the form of housing, with this failure not having been appropriately justified. The plan is therefore not considered to be effective and is not consistent with national policy.
Q4. Please set out what modification(s) you consider necessary to make the Joint Spatial Plan legally compliant or sound, having regard to the matter you have identified at Q3 above where this relates to soundness. (Please note that any non-compliance with the duty to co-operate is incapable of modification at Examination.) You will need to say why this change will make the Joint Spatial Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. **Please be as precise as possible:**

1) The OAN should be reviewed in line with the new methodology for assessing housing requirements.
2) To address the anticipated increase in the housing requirement additional SDLs should be identified.
3) If there remains a requirement for contingency land then this should be subject to appropriate assessments now, as part of the JSP process, to demonstrate the sites are sustainable and deliverable.

**Please continue on a separate sheet/expand box if necessary**

**Please note** your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change, as there will not normally be a subsequent opportunity to make further representations based on the original representation at publication stage. **After this stage, further submissions will be only at the request of the Inspector, based on the matters and issues he/she identifies for examination.**

Q5. If your representation is seeking modification, do you consider it necessary to participate at the oral part of the Examination?

|   | No, I do not wish to participate at the examination hearings | Yes, I wish to participate at the examination hearings |

Q6. If you wish to participate, please outline why you consider this to be necessary.

The University of Bristol is a major landowner in the West of England with land holdings that are considered appropriate as Strategic Development Locations. On this basis it is considered necessary that the University has representation at the Examination.

**Please note** the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the Examination.

| Name       | Matthew Halstead | Date       | 10/01/2018 |

All representations must be received no later than Wednesday 10th January 2018

Please keep a copy of this form for future reference.
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<tr>
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<td>Matthew</td>
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<td>Halstead</td>
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<td><strong>Job Title</strong></td>
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Signature: [Signature]

Date 10/01/2018
West of England Joint Spatial Plan - Publication Representation Form

Part B - Your Representation

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Name or Organisation:

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<th>Policy</th>
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Key Diagram

Q2. Do you consider the Joint Spatial Plan to be:

- Legally compliant? Yes [x] No
- Sound? Yes [ ] No [x]
- Compliant with the Duty to co-operate? Yes [x] No [ ]

Please tick as appropriate

Q3. Please give details of why you consider the Joint Spatial Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Joint Spatial Plan or its compliance with the duty to co-operate, please also use this box to set out your representation.

1.1 It is noted that the tension at the heart of JSP spatial strategy is acknowledged within the JSP itself:

‘…the most sustainable (or potentially sustainable) locations in terms of their proximity to the Bristol urban area are within the Green Belt’ (JSP, para).

Further, the UoB recognises that the JSP has taken the important step of acknowledging that the exceptional circumstances exist to justify an amendment to the Green Belt boundary. However, its approach to amending the Green Belt boundaries is considered to be woefully inadequate, and as a result has totally undermined the spatial strategy and the prospect of achieving sustainable development.
1.2 It has previously been raised that the JSP has incorrectly interpreted and applied paragraph 84 of the NPPF. The JSP uses paragraph 84 as a means of deriving a sequential approach to site selection, which is not the intention of this policy. Interpreting it in this way has extremely damaging consequences for achieving sustainable development. The purpose of paragraph 84 is to ensure that LPAs have fully considered the need to promote sustainable patterns of development, and if that cannot be achieved via urban intensification and at non-Green Belt locations, then the context for exceptional circumstances exist. Essentially it requires LPAs to consider whether avoiding development within the Green Belt would result in the most sustainable pattern of development.

1.3 The correct approach to the treatment of Green Belt, would be to firstly establish whether the OAN could be accommodated in sustainable way without requiring incursion into the Green Belt. This exercise the JSP has undertaken in a somewhat roundabout way at Issues and Options stage although comes to the correct conclusion that sustainable development cannot be achieved. It is on this basis that the exceptional circumstances exist to alter the Green Belt boundaries, a position that AK agrees with.

1.4 After establishing that the exceptional circumstances exist, the next step should be to establish a spatial strategy having regard to paragraph 84 of the Framework. It is important to understand that the objective of para 84 is to promote sustainable patterns of development in the context of a Green Belt review. Whilst paragraph 84 stops short of requiring the most sustainable spatial strategy to be achieved, the second part of it does make it clear that LPAs should consider the consequences to sustainable development of channelling development to those locations outside of the Green Belt.

1.5 It is critical to note that the latter part of paragraph 84 does not advocate a sequential approach to locating development outside of the Green Belt. It instead requires LPAs to consider the implications of Green Belt avoidance which is a tempting course of action given the controversy that would be avoided by not releasing Green Belt. However, this is exactly what the JSP has done.

1.6 The Emerging Spatial Strategy (FESS) evidence paper advocates the following staged approach for formulating the spatial strategy:

- Stage 1 – Identify the reasonable alternative strategic locations;
- Stage 2 – Clarify what sustainable patterns of development are for the West of England;
- Stage 3 – Assess the implications for the Green Belt;
- Stage 4 – Selection of locations;
• Stage 5 – Refinement of spatial strategy.

1.7 The Stage 2 process establishes that the preferred spatial strategy is to focus development in locations which reduces the need to travel, and where travel is necessary, to facilitate this by walking, cycling or public transport. When considering the implications for the Green Belt, Stage 3 confirms that exceptional circumstances exist for alterations to its boundary in order to facilitate the Stage 2 spatial strategy.

1.8 For the Stage 4 assessment the FESS outlines the approach set out by paragraph 84 of the Framework, although it is at this point that the flawed interpretation of it as a sequential process occurs. This sequential approach focuses development in:

• Urban intensification;

• Towns and villages inset within the Green Belt (including some Green Belt release);

• Other sustainable locations (these include new strategic allocations such as garden village at Buckover);

• The priority of the most sustainable Green Belt locations (if still required).

1.9 The process of acknowledging that exceptional circumstances exist (Stage 3) is to facilitate the release of Green Belt land (subject to the tests set by paragraph 85 of the Framework) to achieve the Stage 2 spatial strategy. However, the sequential approach outlined above does not, in any way, reflect the Stage 2 spatial strategy – how can a new garden village in Buckover that is detached from any settlement and associated services reduce the need to travel as required by Stage 2? Further, given that exceptional circumstances have been established, it is unclear as to why some Green Belt locations are released in the second phase of the hierarchy, with other sustainable Green Belt locations being considered as a final step. This makes no sense, and suggests that there is some bias towards some Green Belt locations as opposed to others.

1.10 To highlight how ill-advised it is to use paragraph 84 as a sequential test, the following observations are made:

• It is entirely illogical to conclude that sites in the Green Belt, adjacent to inset villages should be released sequentially ahead of those on the main urban/city edge. There is no possible basis for the conclusion that Green Belt revisions to the towns and villages of Keynsham, Yate and Coalpit Heath are more sustainable than Green Belt revisions to the main urban area. The previous version of the Sustainability Appraisal (as referred to in our previous representation)
confirms this. They all have the same effects on Green Belt purposes as does development in the Green Belt on the edge of the city and should be afforded no primacy.

- It is wrong to conclude that settlements beyond the Green Belt are more sustainable relative to the urban edge when considered against the strategic priorities.

- The requirement to plan effectively to meet the critical issues and strategic priorities is immediately compromised by following a blunt sequential approach, particularly the one which seeks to avoid settlement patterns which are over-reliant on the private car.

- The SDLs that are proposed in the draft JSP are less sustainable options than land at Long Ashton, indicating that the requirements of paragraph 84 have not been followed. In the majority of cases the SDLs rely on costly mitigation which, in itself, does not appear to make the development acceptable or reverse the impacts of out-commuting.

1.11 Given that the JSP has wrongly treated paragraph 84 as a sequential test, it has failed to undertake the task required by the paragraph which is to promote sustainable development and to consider the consequences of avoiding Green Belt release.

1.12 To help demonstrate this point the UoB has commissioned a strategic level Air Quality Assessment which compares the air quality impacts of development at Long Ashton, in comparison to that at the Buckover SDL (see Appendix 2). The AQA is critical of the baseline data that has been used to inform the assessment framework and also highlights a weakness in the assessment themes associated with the framework. In short, the SA Framework (Theme1b), in relation to air quality, seems focused on locating sensitive development (housing) in locations away from Air Quality Management Areas (AQMAS). Ensuring that future residents are housed in locations with good air quality is clearly very important, however, it is just as important to ensure that the location of this development, in particular SDLs does not exacerbate air quality issues in other locations, in particular AQMAs. Whilst Theme 5a assesses proximity to sustainable transport options, there is no clear explanation as to how the two relate in air quality terms.

1.13 It is academic that the closer development can be located to existing settlements and the services therein, the less the reliance will be on the private motor car resulting in improvements to air quality through increased walking and cycling. Whilst proximity to public transport can help alleviate the issue, it is not a panacea, as public transport itself generates air pollution. This fact has been overlooked, with there being no consideration to locating development close to existing services.

1.14 When it comes to the actual assessment against Theme 5b it states that:
In effect, the impacts to the AQMAs which are located at the primary commuter destinations (e.g. Bristol) are unknown being determined upon data that is not yet available. Whilst it would be expected that public transport infrastructure, once in place, would contribute to reducing emissions, it is should be a secondary form of mitigation to be deployed after locating development in close proximity to existing services.

The Air Quality Assessment that has been undertaken shows that in circumstances where mitigation is not provided (i.e. a worst case scenario), as a result of car borne commuting to Bristol, Buckover would generate c.15 tonnes of emissions per year whereas development at Long Ashton would generate 1.4 tonnes per year. If the quantum of development at Buckover were scaled back to 1,000 dwellings in order to make it comparable with Long Ashton, then as a result of the greater commuting distance Buckover would generate five times more vehicular emissions than Long Ashton.

These figures are stark and cast into sharp relief the consequences to sustainable development that would result from the spatial strategy.

It is clear that the JSP’s application of paragraph 84 as a sequential test is simply a means to maintain the four UAs dogmatic protectionist approach to the Green Belt (in particular within North Somerset). It is a flawed approach that stymies sustainable development. The fact that Green Belt designations should not trump sustainable development was acknowledged by the Inspector examining the Lichfield District Local Plan:

‘I can find no justification in the Framework, or in Planning Guidance…for the proposition that Green Belt land should be released only as a last resort. This would be to accept that sustainability is the servant of Green Belt designation – which it is not. On the contrary…the duty in determining Green Belt boundaries is to take account of the need to promote sustainable patterns of development’

Leeds, Newcastle and Birmingham City Councils all have recently adopted development plan documents which include removal of land from the Green Belt in order to accommodate their OAN. The common theme when preparing these spatial strategies was an emphasis on sustainable development and ensuring that the areas chosen for removal were the most sustainable locations. This is reflected in the relevant adopted policies within these documents. Some examples to demonstrate this are provided below.
1.20 An extract from the Inspector’s Report relating to the ‘Newcastle Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne 2010-2030’ (adopted March 2015) states (having considered paragraph 84) that:

‘The capacity of the urban areas has been carefully assessed, many inset towns and villages are designated as Growth Areas, and development beyond the Green Belt has been regarded as unsustainable to meet Newcastle’s and Gateshead’s needs. The Councils have determined that the Green Belt Growth Areas are the most sustainable locations outside the urban area.’

1.21 Within the Birmingham Development Plan (BDP) (adopted January 2017) an area of land to the north east of the City was considered to represent the most sustainable option to accommodate additional housing growth due to its proximity to existing local facilities and would have the least impact on the Green Belt. From a review of the background documents, a variety of approaches were considered, and although it was acknowledged that this would lead to a need to release land from the Green Belt, the approach taken by the City Council was that of a sustainable urban extension (SUE) including a range of community and other supporting infrastructure. The definition of a SUE involves:

‘the planned expansion of a city or town and can contribute to creating more sustainable patterns of development when located in the right place, with well-planned infrastructure including access to a range of facilities, and when developed at appropriate densities.’

1.22 The policy within the Leeds Core Strategy (adopted November 2014) confirms that a review of the Green Belt will need to be carried out to accommodate the scale of housing and employment growth identified, as well as an additional contingency to create new Protected Areas of Search. The review will generally consider Green Belt release around: (i) the Main Urban Area (Leeds City Centre and surrounding areas forming the main urban and suburban areas of the City); (ii) Major Settlements; and (iii) Smaller Settlements. Exceptionally, sites unrelated to the Main Urban Area, Major Settlements and Smaller Settlements, could be considered, where they will be in sustainable locations and are able to provide a full range of local facilities and services and are more appropriate in meeting the spatial objectives of the plan than the alternatives within the Settlement Hierarchy.

1.23 Despite raising the above concerns in AK’s last representation, the only new evidence to be found to justify the approach is that contained in Topic Paper 2. At paragraph 3.7 of this evidence it justifies the sequential approach to site selection based upon the findings of the Housing White Paper stating that:
‘...it provides further guidance that authorities should amend Green Belt boundaries only when they can demonstrate that they have examined fully all other reasonable options for meeting their identified development requirements…’

1.24 It is entirely wrong to reference the White Paper. It is a consultation document that provides no guidance that carries any weight. The Government has subsequently consulted on proposed changes to the NPPF and there are no proposed changes to Green Belt guidance. The White Paper is referenced again at paragraph 4.7 but it is entirely wrong to do so. It gives no credence to the spatial strategy.

1.25 In effect, the critique set out below is in relation to the approach to identifying the SDLs, whether Green Belt or not. It relates primarily to the commentary in TP2 at paragraph 4.7 that states,

“In line with the spatial priorities, NPPF para 84 and reflecting the Housing White Paper 2017, the number of new homes which can be delivered at the Strategic Development Locations (SDLs) within the plan period which are outside the Green Belt entail…”

1.26 The way in which the JSP authorities has interpreted the advice in paragraph 84 is fundamentally flawed. To use the White Paper as further justification only exacerbates the issue. TP2 provides no new evidence than that which is contained within ‘The Formulation of the Emerging Spatial Strategy’ document that accompanied the previous round of consultation. This does explore the rationale behind the Spatial Strategy and given there is any noticeable change in the approach, there is no alternative but to refer back to it to properly understand the methodology.

**A Way Forward**

1.27 When selecting the locations for development in Stage 4, the WoE should be applying the tests of paragraph 85 of the NPPF. Only then can it reasonably identify strategic development locations, albeit the two stages should logically be run in parallel. The following graphic presents the two approaches side by side:
1.28 Paragraph 85 of the NPPF establishes that when defining Green Belt boundaries, local planning authorities should:

- **Ensure consistency with the Local Plan strategy for meeting identified requirements for sustainable development** - this is the basic test that has already been critiqued, but in the paragraph 85 sense is used to actively identify sites. The only logical outcome is that development in the most sustainable locations should be identified through a robust SA process. In the case of land at Long Ashton, then it performs considerably better in both sustainability terms and in addressing the Strategic Priorities (including the north/south rebalancing) than those Green Belt and non-Green Belt locations that have been identified via this flawed process.

- **Not include land which it is unnecessary to keep permanently open** - this is a matter for a Green Belt Assessment. AK does not accept that the process has been undertaken robustly and contends that it has as a consequence led to unreasoned and unreasonable choices.

The assessment of locations against the purposes of Green Belt are made on the basis of land cover. This is based mainly on aerial mapping and, as such; does not properly consider the landform, nor the perception of the site, nor most crucially either the areas of study or the potential for either mitigation or design. All of these are relevant to an understanding of the Green Belt. This is a major flaw in the process and creates a false reading of the actual situation on the ground.
Land at Long Ashton is a site that could be developed with no significant impact on the integrity of the Bristol-Bath Green Belt and without undermining the essential reason why it was designated in the first place. Development of land at Long Ashton would not lead in any meaningful way to the merging of neighbouring towns given its separation distance from existing facilities and general containment by topographic features.

The process might be more of a reasonable one to adopt if no proposals for development have been advanced. This is the case in many settlements and locations but where masterplan proposals have been advanced that clearly signify the intent of the landowner/developer then why would these not be used to critically review the impacts of that development on Green Belt purposes? It is completely illogical not to consider what is actually proposed for development. This approach has proven to be valid and appropriate and failure to carry out the exercise has led to the failure of many local plans to pass the necessary tests and secure adoption.

Moreover, it is troubling that no credible assessment of core Green Belt principles has been carried out in non-Green Belt locations. Issues such as sprawl, encroachment and coalescence are equally valid in locations outside of the Green Belt. In the case of Buckover and Thornbury, the issue of coalescence is so acute that it demands very careful scrutiny. It appears to have been completely ignored; just because it is not Green Belt does not mean that the issue does not matter or is not relevant.

- where necessary, identify in their plans areas of ‘safeguarded land’ between the urban area and the Green Belt, in order to meet longer-term development needs stretching well beyond the plan period; Even if the WoE approach were soundly based, it does not obviate the authorities of the need to safeguard additional land from the Green Belt. Given the recognition that exceptional circumstances exist because of the substantial harm on a strategic scale that would otherwise be caused¹ then there can be no reasonable doubt that the same circumstances would not exist at the next stage of plan review when looking beyond 2036. The whole rationale for safeguarding land is to ensure that as far as practicable Green Belt boundaries can endure in the long term. These boundaries may only endure for as little as five years, giving them no permanence whatsoever.

The ‘difficult decisions’ in respect of Green Belt cannot be postponed under any spatial strategy in this current JSP process.

¹ FESS paragraph 19
• Make clear that the safeguarded land is not allocated for development at the present time. Planning permission for the permanent development of safeguarded land should only be granted following a Local Plan review which proposes the development. There is also the beneficial impact of providing flexibility within the plan making system such that those safeguarded sites can be brought forward when necessary without having to experience lengthy delays through JSP and then LP reviews. They can simply be brought through either a LP review or preferably through Council resolution as soon as the need arises.

• satisfy themselves that Green Belt boundaries will not need to be altered at the end of the development plan period; See comment in relation to safeguarded land.

define boundaries clearly, using physical features that are readily recognisable and likely to be permanent. This is a matter for subsequent local plan processes.

**Scope of change required to make the Plan sound**

1.29 The present strategy fails to ‘most appropriately deliver the Plan’s Vision and Strategic Priorities’. AK is firmly of the view that if the above preferred alternative methodology is pursued, then an equally robust spatial strategy will emerge based on the following reasonable alternative:
1.30  The Vision and Strategic Priorities form the core of what outputs are required from the Spatial Strategy. They are the fundamental building blocks of the strategy and are ultimately ignored through the application of a sequential approach.

1.31  In terms of the evolving work that proceeds in 2018, then the evidence base will need to provide a clear record of the decision-making process, including the weight afforded to supporting documents and the various dimensions of sustainability in determining the appropriate path, and devise a spatial strategy accordingly.

This iteration of the JSP has failed to apply paragraph 84 and 85 of the NPPF to the plan making process correctly and if it continues to pursue it, will fail in delivering the vision for the sub-region.
Q4. Please set out what modification(s) you consider necessary to make the Joint Spatial Plan legally compliant or sound, having regard to the matter you have identified at Q3 above where this relates to soundness. (Please note that any non-compliance with the duty to co-operate is incapable of modification at Examination.) You will need to say why this change will make the Joint Spatial Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible:

The spatial strategy is fundamentally flawed and has to be reconsidered in accordance with a correct and robust application of Framework paragraph’s 84 and 85.

Please note your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change, as there will not normally be a subsequent opportunity to make further representations based on the original representation at publication stage. After this stage, further submissions will be only at the request of the Inspector, based on the matters and issues he/she identifies for examination.

Q5. If your representation is seeking modification, do you consider it necessary to participate at the oral part of the Examination?

- [ ] No, I do not wish to participate at the examination hearings
- [x] Yes, I wish to participate at the examination hearings

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Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the Examination.

Name: Matthew Halstead
Date: 10/01/2018

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This form has two parts:
Part A – Personal Details
Part B – Your representation.

Please fill in a separate sheet for each representation you wish to make.

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Part A

1. Personal Details*

| Title* | 
|---|---|
| Mr |

| First Name* | 
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| Matthew |

| Last Name* | 
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| Halstead |

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| E-mail Address | Mhalstead@alderking.com |

Signature

Date 10/01/2018
West of England Joint Spatial Plan - Publication Representation Form

Part B - Your Representation

Please use a separate form for each representation made and read the accompanying Guidance Note that accompanies this form before you complete it.

Name or Organisation:

Q1. On which part of the Joint Spatial Plan are you commenting? Please see the note above.

Chapter 4 Paragraph Policy 3

Key Diagram

Q2. Do you consider the Joint Spatial Plan to be:

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Please tick as appropriate

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If you wish to support the legal compliance or soundness of the Joint Spatial Plan or its compliance with the duty to co-operate, please also use this box to set out your representation.

1.1 As already acknowledged in the representation to Policy 1, given the critical need for affordable housing in the HMA resulting from historic undersupply, it seems nonsensical to only provide 76% of the identified affordable housing requirement and therefore continue to perpetuate this issue. The JSP presents the first opportunity in over a decade to provide a strategic platform to correct this issue, and to tackle head on the associated barriers to development, but in its current guise the JSP spurns this opportunity.

1.2 The reality is that the overall level of affordable housing to be delivered within the plan period will be less than 76% of the total requirement as currently envisaged. The JSP assumes that the SDLs will achieve a policy compliant level of provision (35%) but it is unclear as to how this conclusion has been reached.
1.3 Topic Paper 4 is quite clear that the task of estimating residual land values over such long time periods (in some instances up to 14 years) is fraught with difficulties given the number of variables that could change, such as market conditions, build costs etc. Further, it is noted that none of the infrastructure costs for the SDLs are known at this stage, and therefore have not been factored into the viability appraisal. Whilst it is accepted that the SDLs would not be expected to bare the entirety of the infrastructure costs, until such time as these figures are known, and CIL established, a comprehensive understanding of the scheme viability cannot be known. Also, given the scale of infrastructure required for some SDLs, it is likely that delivery will take longer than what is currently envisaged, which casts further doubt on the reliability of the viability appraisal. Topic Paper 4 ends on page 45 by stating that:

‘It should be stressed that this report is only part of the overall planning balance and intends only to provide an indication of potential infrastructure funding (on and offsite) that the developer ‘pot’ may be able to contribute and where the challenges may be most acute. It is for the four UAs to assess infrastructure costs, other funding sources and set AH levels accordingly.’ (Emphasis added).

1.4 Whilst the viability assessment has concluded the potential availability of funds from the SDLs, this varies extensively between the sites and has been formulated in an ‘infrastructure off’ scenario. Given that the actual infrastructure costs are not actually known and in the availability of funds not confirmed, it is impossible to fix the quantum of affordable provision at this stage.

1.5 Given the prohibitive costs associated with infrastructure delivery, it is considered that the delivery of many of the SDLs is at risk. At best, where infrastructure is provided to facilitate the SDLs, given the anticipated costs and the absence of confirmed subsidy, AK considers that it will be offset against affordable housing delivery. Ultimately the 35% affordable housing requirement is just a target, and AK considers that due to viability concerns, it will be difficult to achieve.

**Location of Development**

1.6 Both within the policy and at paragraph 20 the JSP acknowledges that there is substantial housing need in Bristol. As a consequence the Policy states,

“The provision of Affordable Housing on the SDLs, and other strategic locations within or well related to the Bristol urban area, must contribute to the Affordable Housing need of Bristol through on site provision, with the option for off-site contributions in locations less well related to Bristol.”

1.7 The majority of SDLs are not well related to Bristol so most will presumably be providing some affordable homes, but with a substantial quantum of the policy requirement being met via offsite
contributions that can be spent in Bristol. In the first instance this will fail to deliver mixed and balanced communities in those remote SDLs, but equally provides no assurance that there is scope to spend the capital receipts in Bristol and the JSP establishes claw back mechanisms in the event the money is not spent. The JSP does not seek to meet the affordable needs of Bristol in any event, but to imagine that what is being planned for may not get delivered is simply not palatable and only exemplifies the fundamental flaw in the spatial strategy.

1.8 There is little value in seeking to make detailed submissions on other aspects of the Policy given the more fundamental concerns AK has in relation to the overall housing requirement/OAN and the rationale behind the spatial strategy, and indeed the effects of this part of the policy.

1.9 It exposes the weaknesses in the whole approach and provides no certainty for the delivery of affordable homes at Bristol. To that extent the policy fails all the necessary tests of soundness.

Please continue on a separate sheet/expand box if necessary
Q4. Please set out what modification(s) you consider necessary to make the Joint Spatial Plan legally compliant or sound, having regard to the matter you have identified at Q3 above where this relates to soundness. (Please note that any non-compliance with the duty to co-operate is incapable of modification at Examination.) You will need to say why this change will make the Joint Spatial Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible:

1) The OAN should be reviewed in line with the new methodology for assessing housing requirements thereby increasing the associated quota of affordable housing provision.

2) A robust assessment of SDL viability should be undertaken once a composite picture of associated infrastructure costs and confirmed subsidy is known.

3) The spatial strategy needs to be totally overhauled to ensure that SDLs and the associated affordable housing is located in those sustainable locations on the edge of Bristol where the affordable need is greatest.

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<tr>
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<td>Telephone Number</td>
<td>0117 317 1175</td>
</tr>
<tr>
<td>E-mail Address</td>
<td><a href="mailto:Mhalstead@alderking.com">Mhalstead@alderking.com</a></td>
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</table>

Signature: [Signature]
Date: 10/01/2018
Part B - Your Representation

Please use a separate form for each representation made and read the accompanying Guidance Note that accompanies this form before you complete it.

Name or Organisation:

**Q1. On which part of the Joint Spatial Plan are you commenting? Please see the note above.**

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**Q2. Do you consider the Joint Spatial Plan to be:**

- Legally compliant? Yes [x] No
- Sound? Yes [ ] No [x]
- Compliant with the Duty to co-operate? Yes [x] No

*Please tick as appropriate*

**Q3. Please give details of why you consider the Joint Spatial Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.*

If you wish to support the legal compliance or soundness of the Joint Spatial Plan or its compliance with the duty to co-operate, please also use this box to set out your representation.

1.1 There is no issue with the key principles listed under Policy 5, however it is not considered that the JSP in its current form will meet these, and consequently, will not contribute towards the delivery of high quality and sustainable places. In particular, it is not considered that principles 3, 5 and 7 will be met.

1.2 Current unsustainable patterns of travel are a significant cause of climate change and poor health. The strategic priority that promotes development in locations which maximise the potential to reduce the need to travel or, where travel is necessary, maximise opportunities to travel by sustainable, non-car modes is supported. The current JSP spatial strategy relies on a relatively large number of SDLs with significant infrastructure requirements, including those that rely primarily on traditional road based transport infrastructure e.g. Buckover. Development that requires major new roads to be built does not fit with any aspect of the climate change agenda. The only appropriate way for the JSP to
reduce the impact on climate change is to simply locate development that reduces the need to travel in the first instance. If the Bristol urban area is the key attractor of trips then common sense alone dictates that locating the majority of development (although clearly not all to ensure that the needs of the sub-region as a whole are met) within and adjacent to Bristol is the most appropriate solution. It would be naïve to suggest that those SDLs would not generate car trips, but they would at the very least be shorter trips, even if they were only to access the string of park and ride locations that are bound to be in close proximity.

1.3 Reducing commuting journey times can only facilitate healthy and sustainable lifestyles, by encouraging walking and cycling as much as is feasible.

1.4 There is concern that the SDLs will not be supported by the necessary infrastructure or are in the most appropriate locations to allow access to infrastructure which reduces reliance on the use of cars. As it stands, there is no suggestion that the infrastructure required to make some SDLs ‘sustainable’ can possibly be delivered for no other reason than the funding gap that is bound to exist.

1.5 The spatial strategy does not present the most sustainable outcome.

1.6 For the reasons given above, Policy 5 is not considered sound as it is not justified as it is not the most appropriate strategy when considered against the reasonable alternatives.

Please continue on a separate sheet/expand box if necessary
Q4. Please set out what modification(s) you consider necessary to make the Joint Spatial Plan legally compliant or sound, having regard to the matter you have identified at Q3 above where this relates to soundness. (Please note that any non-compliance with the duty to co-operate is incapable of modification at Examination.) You will need to say why this change will make the Joint Spatial Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible:

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2) To address the anticipated increase in the housing requirement additional SDLs should be identified at locations with less complex infrastructure delivery pre-requisites and lower risks.
3) If there remains a requirement for contingency land then this should be subject to appropriate assessments now, as part of the JSP process, to demonstrate the sites are sustainable and deliverable.
4) Further clarity is required in relation to infrastructure funding.

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Q5. If your representation is seeking modification, do you consider it necessary to participate at the oral part of the Examination?

[ ] No, I do not wish to participate at the examination hearings [X] Yes, I wish to participate at the examination hearings

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Name: Matthew Halstead  Date: 10/01/2018

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Please return this form by Wednesday 10th January 2018.
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This form has two parts:
Part A – Personal Details Part B – Your representation.

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### Part A

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</tr>
<tr>
<td>First Name*</td>
<td>Matthew</td>
</tr>
<tr>
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<td>Halstead</td>
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<td>Organisation* (where relevant)</td>
<td>Alder King Planning Consultants</td>
</tr>
<tr>
<td>Address Line 1</td>
<td>Pembroke House</td>
</tr>
<tr>
<td>Address Line 2</td>
<td>15 Pembroke Road</td>
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Signature: [Signature]
Date: 10/01/2018

(For official use only)
Rec’d:
Ack:
Respondent No:
Part B - Your Representation

Please use a separate form for each representation made and read the accompanying Guidance Note that accompanies this form before you complete it.

Name or Organisation:

Q1. On which part of the Joint Spatial Plan are you commenting? Please see the note above.

Chapter 4  Paragraph  Policy 6

Key Diagram

Q2. Do you consider the Joint Spatial Plan to be:

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<tr>
<td>Sound?</td>
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1.1  Policy 6 confirms that strategic infrastructure will be required to support the effective implementation of the JSP spatial strategy. Most of the SDLs rely on the delivery of strategic infrastructure, however there is no detail about how this is going to be funded. There are general statements such as “The new development will provide or contribute to a strategic transport package”. The ‘Infrastructure Position Statement’ confirms that to deliver the schemes required will cost circa £9 billion which is a significant amount. This figure has already increased from £7.5 billion in the previous consultation document (‘WoE Joint Transport Study Transport Vision Summary Document’) and this also makes reference to the funding requirement being much higher than that made available and that central government will need to be lobbied to highlight the need for and benefits of the package. Given that
the cost has already increased by £1.5 billion this raises the question of how this is going to be funded.

1.2 The reliance on a relatively large number of SDLs with major infrastructure requirements raises significant risks regarding either under-delivery of housing numbers to 2036, or of them coming forward unsustainably. Furthermore there are significant concerns regarding the extent of their ambition in terms of the number, scale and complexity of the transport packages required to enable many of the SDL’s to progress as sustainable new developments. It is contended that sites with complex, costly and uncertain pre-requisites should be balanced by more deliverable sites with lower delivery risk. This would provide a more robust strategy for ensuring delivery of necessary homes and employment opportunities to support growth of WoE as it would help to avoid either:

- back-loading of SDL housing completions beyond the JSP period (when the necessary infrastructure will hopefully have been planned, secured funding and been delivered – although there are numerous risks related to the sustainable transport schemes required to support many of the SDLs); or
- the progression of housing development in an unsustainable manner (prior to or without the necessary infrastructure to support and encourage modal shift).

1.3 It is considered that some sites (such as growth of Thornbury or delivery of Buckover Garden Village) pose the greatest risks in terms of delivering sustainable access within the JSP timeframe, due to the lack of current sustainable transport infrastructure. Both rely primarily on traditional road based transport infrastructure, which is already heavily congested at peak times, for all journeys into the Bristol area (and/or beyond the immediate settlement of Thornbury). Indeed, Buckover Garden Village requires local and strategic cycle route improvements to Thornbury, bus service improvements, as well as strategic improvements such as Charfield Station reopening, Metrobus extension (with no current plans for this, priority provision or strategic cycle route to the Bristol urban area), M5 J14 improvements, a new A38 Park and Ride site and other local highway improvements as necessary.

1.4 It is not believed that the strategy as set out most appropriately delivers the vision in terms of its sustainable transport objectives and vision, as there are lower impact, higher potential, more deliverable sites which have been overlooked. The inclusion of more sites with less complex delivery pre-requisites and lower risks would surely be preferable than relying largely on sites with lower ultimate sustainability potential and higher overall delivery or delay risk.
1.5 It is not clear what is meant by, “Priority will be given to schemes which support the delivery of the spatial strategy as set out in Policy 2.”

1.6 The JSP needs to explain what this means in order to be effective. A simple interpretation of it suggests there are schemes promoted through the JSP/identified on the key diagram that do not contribute to achieving the spatial strategy. What are these schemes and why are they identified? The spatial strategy extends beyond the SDLs and includes all those committed developments. The JTS also includes many schemes to ameliorate existing traffic and transport issues but presumably these are as essential to making the spatial strategy work as addressing the impacts of new development?

1.7 This policy is not positively prepared as it is not prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements. The wording lacks justification and is not effective as it is so unclear and lacking in detail. Clarity is required to make it sound.

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**Key Diagram:**

**Q2. Do you consider the Joint Spatial Plan to be:**

- Legally compliant?
  - Yes [X] No
- Sound?
  - Yes [ ] No [X]
- Compliant with the Duty to co-operate?
  - Yes [X] No [ ]

*Please tick as appropriate*

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1.1 Policy 7 is not considered to be sound as there is so little evidence to establish that the spatial strategy set out within the draft JSP is a deliverable one, and as a consequence an effective one. This is a key concern highlighted throughout all of the University of Bristol’s consultation responses, including to this document. There are major questions for delivery at all of the SDL sites and in a lot of cases, these will only be deliverable through substantial infrastructure investment, with no certainty that sufficient funds will be secured.

1.2 Significant concerns have been expressed regarding the number, scale and complexity of the transport packages required to enable many of the SDLs to progress as sustainable new developments. This remains the case and it is currently contended that sites with complex, costly and uncertain pre-requisites should be balanced by more deliverable sites with lower delivery risk, such as the University of Bristol’s site at Long Ashton. This would provide a more robust strategy...
for ensuring delivery of necessary homes and employment opportunities to support the growth of WoE as it would help to avoid either:

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1.3 The reliance on a relatively large number of SDLs with significant infrastructure requirements raises major risks regarding either under-delivery of housing numbers to 2036, or of them coming forward unsustainably.

1.4 It is considered that some sites (such as growth of Thornbury or delivery of Buckover Garden Village) pose the greatest risks in terms of delivering sustainable access within the JSP timeframe, due to the lack of current sustainable transport infrastructure. Both rely primarily on traditional road based transport infrastructure, which is already heavily congested at peak times, for all journeys into the Bristol area (and/or beyond the immediate settlement of Thornbury). Indeed, Buckover Garden Village requires local and strategic cycle route improvements to Thornbury, bus service improvements, as well as strategic improvements such as Charfield Station reopening, Metrobus extension (with no current plans for this, priority provision or strategic cycle route to the Bristol urban area), M5 J14 improvements, a new A38 Park and Ride site and other local highway improvements as necessary.

1.5 The development trajectories in the JSP imply that the infrastructure for the great majority of SDLs will all be in place for housing numbers to start building up in about 10 years’ time. This simultaneous implementation will create a peak requirement for funding of substantial proportions, which raises doubts over availability in practice.

1.6 Experience in the West of England on schemes such as MetroWest and MetroBus shows the potential for higher costs than anticipated at initial planning stages. This could affect the number of major schemes which can be progressed on similar timescales. Funding must be committed and available at the required dates.

1.7 A 10 year timescale is also likely to be the minimum time required for practical reasons. Some statutory processes must await adoption of the local plans which follow on from adoption of the
JSP, and so are at an early stage with no confirmed adoption dates. Experience, including in the West of England, shows that timescales for adoption of local plans can be delayed significantly.

1.8 There is also a wealth of evidence to suggest that development rarely proceeds at the trajectory a local plan envisages. In the case of South Gloucestershire, despite adopting its Core Strategy in 2013, the two neighbourhoods at Cribbs/Patchway and East of Harry Stoke have still not achieved outline planning permission, never mind a start on site. The trajectories advanced at that examination have been found to be wanting and SGC is constantly having to respond to a five year supply deficit. There is evidence that it can take up to 8 years from submission of outline applications for strategic development to then be delivering completions and once onsite there is little evidence available that supports the JSPs trajectories of delivering in the order of 300 dwellings per annum.

1.9 The trajectories seem arbitrary at best. There is no consistency or logic within them; they differ from one authority area to the next as do the build rates. It is a contrived trajectory to meet the 17,600 requirement and needs to be treated with considerable caution. The JSP authorities need to advance more evidence to back these assumptions up and to give them credibility. If some simple, more realistic assumptions were applied to the SDLs then the following would result:

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<td>JSP Trajectory with 2 year delay to completions</td>
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<td>10,825</td>
<td>-6,775</td>
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1.10 The housing delivery trajectories for most of the SDLs show development up to the end of the Plan period. There must be considerable doubt that the necessary transport infrastructure will be in place to allow the SDL delivery trajectories as currently envisaged in the JSP. Delayed starts would mean a shortfall in housing delivery in the Plan period.
The University of Bristol’s site at Long Ashton represents more than a reasonable alternative as an appropriate SDL. There is little that needs to be justified in advancing that position, given the excellent opportunity the site has to facilitate improvements to rail access through the delivery of a new local train station, its proximity to existing sustainable transport nodes (Long Ashton P&R and Metrobus) as well as the limited impacts to the purpose of the Green Belt.

Of course, further investment in infrastructure is required but it is on a corridor where so much is being planned that has a genuine chance of being funded and delivered. It is an omission from the JSP that makes no practical sense. Land at Long Ashton has greater sustainability potential in transport and accessibility terms, as well as fewer and less significant delivery risks associated with access and sustainable access provisions. Further information about why the land at Long Ashton meets the objectives of sustainable development in transport access terms and should be identified as part of a strategic location of growth is contained within Appendix 3, 4 and 5, however the key points are included here.

A summary of the planning merits of the land at Long Ashton site against the usual technical considerations was provided in the previous representation and so has not been repeated here. This was in the form of a rebuttal to the ‘Assessment of Strategic Development Locations Beyond Settlement Boundaries – Location Dashboard’ document within the previous round of consultation. This Dashboard Assessment process was previously criticised and the robustness of evidence base questioned by AK and this criticism still remains.

In addition to criticism of this document, concerns were also raised about the Sustainability Appraisal and the evidence used to inform it. None of the SDLs scored as highly as land at Long Ashton across the five sustainability topic areas and the SA had no regard to the potential for a new local train station to be provided at the site, despite this opportunity being highlighted at earlier stages of consultation. Since then additional feasibility work has been undertaken.

MDS Transmodal has been asked to consider the case for a new station at Long Ashton and have undertaken an assessment with a particular focus on:

- Which train services could realistically serve the new station and any subsequent wider operational impacts; and
- The potential passenger demand.

A copy of this is included at Appendix 6, however a summary of the key findings are included below.
1.17 A site for such a station is available and designs have already been put forward for the required platforms and access arrangements. A new passenger railway station should be welcomed, particularly if it is partially funded and delivered by a third party. New stations are long term developments which need to conform to and be able to accommodate realistic and expected medium-long term changes to service patterns.

1.18 There are currently three train services passing the location of the proposed Long Ashton station in each standard off-peak hour, and the analysis indicates that existing services could realistically incorporate an additional call at Long Ashton without any significant operational impacts. Taking into account expected or potential medium-long term changes to service patterns, including planned changes to the Great Western franchise specification and the Bristol Metrowest programme, in addition, a baseline service of two trains per hour per direction could realistically call at the proposed Long Ashton station. Both services pass via Bristol Temple Meads, thereby providing frequent connections into other long distance, regional and local services. Further options would also appear feasible, as detailed in the MDS report, and overall it is concluded that adequate network capacity is likely to be available. Therefore the station would provide the opportunity for sustainable travel into Bristol.

1.19 In terms of passenger demand, North Somerset has an overall population of around 210,000 so that the mean propensity to use rail in the district amounts to around 12 single rail trips per annum. There are proposals to add 2 further stations in North Somerset, at Portishead and Pill, as part of the Metrowest project. This project is described in some detail in the CH2M study for the Bristol area authorities and data within this study has been drawn upon to allow the proposals for a station at Long Ashton to be compared with forecasts for this new line.

1.20 The operating margin available to the railway industry is marginally greater in serving a new station at Long Ashton than that which apply for the Portishead Line and the capital costs far less. Only a new station is required as compared with the reopening of the Portishead Line, which was estimated earlier in 2017 to cost £145-175million.

1.21 A present value of £38.6 million could be derived from building a new station at Long Ashton, with additional operating costs being more than covered by additional revenue. Given that a new station would be expected to cost no more than £5-£10million including access costs, using a similar methodology as has been used for the MetroWest study, implies a relatively high rate of social return for a new station at Long Ashton, almost certainly higher than for MetroWest overall or the Portishead scheme alone without in any way diverting any of the traffic assumed for the MetroWest schemes.
1.22 As well as serving new site residents and employees, the station would also provide for existing residents in the area. The station would provide an opportunity for existing commuters in the local area to transfer to rail travel, at least for part-journeys, enhancing the local authority proposals for developing a local MetroWest network. Such a service could complement public transport provision via the Ashton Vale to Temple Meads MetroBus service, since the latter would provide greater penetration of the city centre and also call at intermediate stops between Long Ashton and the city centre. For trips to employment areas (and other destinations) in North Bristol, travelling by rail (or rail and interchange to MetroBus) would offer a journey time advantage to travelling by MetroBus the whole way.

1.23 Our conclusion is therefore, that because the Long Ashton scheme would capitalise on the fact that the community to be joined to the railway network already lies on a relatively busy railway line and does not require new railway infrastructure to be built beyond a pair of platforms, that a relatively high benefit cost ratio would emerge and that there would be little incremental cost for the railway industry in stopping trains at the proposed new station. It would appear perfectly feasible to timetable the station into the train schedules likely to be developed in the future. The station would contribute to overall connectivity and sustainability and in no way detract from other rail based projects in the area.

1.24 The JSP proposes the reopening of Charfield rail station, however there is nothing in the consultation material which assesses the feasibility of this, unlike that which our consultants have undertaken in relation to the site at Long Ashton. As such there is a real question as to whether this is a realistic, or viable prospect. This is concerning, especially as some of the other SDLs (e.g. Buckover, Thornbury) rely on this in order to provide sufficient strategic transport improvements. In addition, compared to the outline proposals for a future railway station at Ashton Gate, a station located on land at Long Ashton would make a better location for a minor outer-urban park and ride station, serving south west Bristol, Long Ashton and the surrounding villages north east of Nailsea. It would be easier to access from the surrounding area and avoid congestion hotspots within south west Bristol.

1.25 The high feasibility of future rail provision to Long Ashton, along with existing improved bus services, will maximise the opportunity for high levels of sustainable travel and connectivity, further reducing car reliance, in line with the objectives of the JSP. The site is able to assist in increasing mode share of travel to work by cycle and public transport, with the benefit over many SDLs of being a comfortable and realistic cycling distance to current and future employment opportunities and other services and facilities in and near Bristol (including via existing national and local cycle network connections). Indeed the JSP recognised the proximity of Long Ashton to Bristol, offering...
the opportunity to maximise cycle and Metrobus usage. It is considered that this should be afforded greater weight in preferred site selection.

1.26 Development of land at Long Ashton could also support the overall package put forward by providing additional patronage and supporting delivery of an early phase of extension of Metrobus south westwards from Bristol (to Nailsea and Backwell).

1.27 It is maintained that such factors (reduced travel distances and increased sustainable travel mode shares) should have significantly greater weight in site selection and in the comparison and selection of sites.

1.28 Specifically in relation to the SDLs that have been selected within the Green Belt there remain concerns about why certain locations have been selected over more suitable locations, such as land at Long Ashton. A full critique of all of these locations has not been undertaken, however on review of the ‘Joint Spatial Plan Green Belt Assessment Stage 2’ some of the SDLs include areas of land which are assessed as making a ‘major’ contribution to green belt purposes. In relation to Long Ashton, all but one of the cells were assessed as making a ‘contribution’ to Green Belt purposes. The cell to the east was considered to make a major contribution, however development is not proposed on this part of the site within the University of Bristol’s previous application.

1.29 Within the above document it states that “The principal area of potential development to the south is separated from Long Ashton by the railway and is difficult to integrate into the existing settlement because of severance issues”. This reasoning is considered to be a nonsense as integration would be possible and furthermore, there are many instances of settlements where there is a railway separating development areas within settlements. A prime example of this is at Charfield, which has been included as an SDL. This is also the case at Chipping Sodbury, where land to the south is identified as one of the contingency sites, but would be separated from the existing settlement by the railway line.

1.30 It also states that “It is a sensitive part of the Green Belt valued by the local community”, however this no doubt the case with all locations within the Green Belt, including those selected as SDLs and it would be inappropriate to value one community’s views above others. The document does however acknowledge that Long Ashton is relatively close to Bristol, so there is an opportunity to maximise cycling and use of metro bus.

1.31 There is a fundamental difference of developing SDLs that the JSP considers ‘sustainable’ and those that are the ‘most sustainable’ and AK’s view is that the locations identified for the SDLs do not represent the ‘most sustainable’.
1.32 The SDLs that are proposed in the draft JSP are less sustainable options than land at Long Ashton, indicating that the requirements of paragraph 84 have not been followed. As stated elsewhere, in the majority of cases the SDLs rely on costly mitigation which, in itself, does not appear to make the development acceptable or reverse the impacts of out-commuting.

1.33 As iterated throughout past representations, AK readily accepts the primacy that is afforded to the Green Belt and does not advocate any approach that does not recognise its intrinsic value. The assessment of Green Belt is a critical factor in the choices that are made, but it must be based on a fair assessment that considers the effect of development proposed and the mitigation that can be delivered. Only then can the implications on the five purposes of Green Belt be properly considered.

1.34 AK maintain the view that the proposed spatial strategy and the locations identified do not meet the Plan’s strategic priorities and vision and fail to meet the requirements of paragraph 84.

1.35 In summary, it is considered that the significant benefit of existing infrastructure and services to and close to Long Ashton, including the true potential for rail provision (benefitting both existing and future residents) should be afforded greater weight in determining SDL selection. It is not believed that the strategy as set out most appropriately delivers the vision in terms of its sustainable transport objectives and vision, as there are lower impact, higher potential, more deliverable sites such as land at Long Ashton which have been overlooked.

1.36 A lot of work (and funding) is required to bring forward the SDLs which form a notable part of the housing delivery strategy. There are also a number of delivery risks affecting many of schemes to support the SDLs and there is a real risk that the delivery principles will be watered down or delivery of sites will be delayed, impacting achievement of housing totals required by 2036. The inclusion of more sites with less complex delivery pre-requisites and lower risks would surely be preferable than relying largely on sites with lower ultimate sustainability potential and higher overall delivery or delay risk.

1.37 The land at Long Ashton site is:

- well located in terms of its proximity to the centre of Bristol;
- within close proximity to the existing facilities at Long Ashton;
- within close proximity of existing good bus connections to Bristol;
- within close proximity of good pedestrian and cycle connections to Bristol;
1.38 The UoB recognises that the strategic benefit of creating a bypass to the settlements of Banwell, Langford and Churchill to both ease traffic congestion within these settlements and to also provide improved connectivity between the M5 motorway and Bristol Airport.

1.39 Given known constraints around landownership issues, the UoB considers that the indicative development area should include land to the south and east of Langford, thereby ensuring the sufficient flexibility is provided to facilitate development.
Q4. Please set out what modification(s) you consider necessary to make the Joint Spatial Plan legally compliant or sound, having regard to the matter you have identified at Q3 above where this relates to soundness. (Please note that any non-compliance with the duty to co-operate is incapable of modification at Examination.) You will need to say why this change will make the Joint Spatial Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible:

1) The OAN should be reviewed in line with the new methodology for assessing housing requirements and associated infrastructure requirements.
2) To address the anticipated increase in the housing requirement additional SDLs should be identified at locations with less complex infrastructure delivery pre-requisites and lower risks.
3) If there remains a requirement for contingency land then this should be subject to appropriate assessments now, as part of the JSP process, to demonstrate the sites are sustainable and deliverable.
4) Further clarity is required in relation to infrastructure funding.

Please continue on a separate sheet/expand box if necessary

Please note your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change, as there will not normally be a subsequent opportunity to make further representations based on the original representation at publication stage. After this stage, further submissions will be only at the request of the Inspector, based on the matters and issues he/she identifies for examination.

Q5. If your representation is seeking modification, do you consider it necessary to participate at the oral part of the Examination?

No, I do not wish to participate X Yes, I wish to participate at the examination hearings

Q6. If you wish to participate, please outline why you consider this to be necessary.

The University of Bristol is a major landowner in the West of England with land holdings that are considered appropriate as Strategic Development Locations. On this basis it is considered necessary that the University has representation at the Examination.

Please continue on a separate sheet/expand box if necessary

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the Examination.

Name Matthew Halstead Date 10/01/2018

All representations must be received no later than Wednesday 10th January 2018
Please keep a copy of this form for future reference.
Appendix 2: WSP Air Quality Note
INTRODUCTION

The document has been prepared by WSP on behalf of the University of Bristol (UoB), in order to support the promotion of Fenswood Farm at Long Ashton as a Strategic Development Location (SDL) in the Joint Spatial Plan (JSP).

This document presents a critique of the West of England’s (WoE’s) approach to assessing local air quality. It presents a review of the supporting information referenced in WoE’s Sustainability Assessment (SA) of the JSP. It includes a qualitative air quality assessment of the operational impacts of the SDL at Buckover, considered by WSP to be an unfavourable location due to the lack of existing sustainable transport options and the need for extensive infrastructure to ensure its viability, and of the proposals at Fenswood Farm. A high level comparison of the air quality implications of the development of Buckover and Fenswood Farm is also presented.

REVIEW OF SUSTAINABILITY APPRAISAL (SA) OF JSP

A review of the SA has been undertaken to assess the relevance of the information, as well as the overall consideration of air quality in the appraisal of future SDLs in the SA. The sections below highlight the parts of the SA most relevant to the development sites considered here.

APPENDIX B: BASELINE DATA

Appendix B of the SA presents the baseline data utilised in the SA. The Appendix includes a broad description of air quality in the geographical areas covered by the Local Authorities (LAs) that make up the WoE partnership. The baseline data makes reference to the presence of Air Quality Management Areas (AQMAs) and references trends in air pollution concentrations.

The baseline data presented lacks depth and does not provide sufficient detail to assess air quality at the proposed SDLs and more importantly the SDLs impact on local air quality. It is reasonable to expect the Appendix to present a summary of existing monitoring data collected by the LAs, and also the extent of the monitoring network, considering that LAs apply different approaches in declaring AQMAs. The presence or absence of an AQMA does not necessarily mean than air pollution levels are not elevated. For example Bristol City Council’s (BCC’s) AQMA covers an extended area covering the city centre and parts of the main radial roads including the M32. South Gloucestershire’s AQMAs cover district areas along trunk roads. In addition, the Appendix makes no reference of any additional road links that might experience congestion issues and as a result elevated air pollution levels in areas that do not lie within the boundary of the AQMAs. The SA could have referenced baseline roadside projections for nitrogen dioxide (NO₂) (the air pollutant of most concern and associated with traffic emissions) published by Defra and tie these projections in with any road links considered to be problematic in terms of air quality due to congestion.

The baseline data and the SA as a whole does not reference the UK’s Plan for tackling roadside nitrogen dioxide concentrations that was published in July 2017 by Defra. The Plan references a number of measures including

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1 Areas declared by LAs where air quality objectives are at risk of or are exceeded and require mitigation measures to enable improvement in air quality

2 https://uk-air.defra.gov.uk/library/no2ten/2017-no2-projections-from-2015-data

several grants, an Air Quality Fund and the Green Bus Fund. A prominent feature of the Plan is the implementation of Clean Air Zones (CAZs), defined as:

“...an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in a way that delivers improved health benefits and supports economic growth. They will also help the UK to meet its legally binding carbon targets as set out in the Climate Change Act.”

There is only a brief mention of CAZs in the Joint Transport Strategy, in reference to freight transport. There is also no reference to CAZs in the JSP. This is particularly pertinent considering that BCC is currently considering designating CAZs, which are likely to influence traffic accessing Bristol.

**APPENDIX C: SA FRAMEWORK**

Appendix C presents the SA framework applied in the appraisal of the JSP. Theme 1b *Minimise impacts on air quality and locate sensitive development away from areas of poor air quality* is the ‘Theme’ most relevant to air quality. A key criterion is the presence of an AQMA/motorway in close proximity to sensitive locations and the potential impacts on an AQMA as a result of future development proposals. This criterion would benefit with having a specific distance (i.e. 100 m) to an AQMA/motorway, or other areas identified as having poor air quality, that can be used to qualify a negative scoring. This will ensure that the scoring is transparent. Considering that the SDLs would need significant infrastructure to ensure they are viable, additional criteria are needed that identify the location of AQMAs in relation to infrastructure requirements.

Although Theme 1b makes reference to traffic in relation to its impact on AQMAs it does not reference promoting development in locations that would minimise the need to travel, or ways to reduce emissions from other sources of air pollution (i.e. mineral extraction or waste management facilities). Theme 5a. *Achieve reasonable access to sustainable transportation* makes reference to distances from sustainable transport options but it is not clear in the SA how the two Themes are linked considering that there are likely to be trade-offs between the two. In other words developments located away from AQMAs and therefore away from urban centres are more likely to lack adequate sustainable transport options and require additional infrastructure to be put in place. Theme 1b appears to prioritise locating SDLs away from AQMAs and at commuter destinations, on the premise that future residents do not experience elevated levels of air pollution, this in turn encourages car commuting within the AQMAs, potentially causing a deterioration of air quality within the AQMA.

Theme 1b instead of referencing sustainable transport, includes criteria referencing mitigation and design measures including: “*Multiple trees included to assist in reducing poor air quality*” and “*Construction methods / design to reduce and / or eliminate air pollution within new sensitive development*”. There have been studies confirming that planting trees at roadside locations could reduce air pollution concentrations, however the inclusion of such criteria, although correctly classed as positive, are unlikely to be provide significant air quality benefits. In addition, they are unlikely to screen proposals effectively as it is anticipated that most proposals will include trees in their landscape design. Similarly referencing construction mitigation/design as a criterion will not screen proposals effectively as these elements would be included as standard in most planning applications. It would be more relevant to reference measures that would encourage low polluting, energy efficient development and link it to the climate change Theme 5b *Reduce non-renewable energy consumption and ‘greenhouse’ emissions, and provide opportunities to link into existing heat networks.*

Appendix C acknowledges that the SA has not considered the viability of any mitigation requirements that are not part of policy commitments. A number of SDLs, including Buckover, rely on the provision of additional infrastructure, which has not been investigated and therefore it may not be viable. This in turn puts at risk the delivery of the JSP and the much needed housing.

**APPENDIX D: APPRAISAL TABLES**

The appraisal tables provided in Appendix D acknowledge that air quality has not been explicitly addressed in the Plan, although a number of themes (i.e. health and wellbeing, climate change, access to infrastructure) that indirectly reference and influence air quality have been included. The mitigation and enhancements referenced as a result of the
issues identified are the requirement for Transport Impact Assessments and the implementation of a Green Infrastructure Plan. It is unclear how these will address air quality issues given that a number of SDLs are likely to be constrained in terms of access to public transport and would likely require significant infrastructure, and whether these SDLs can be delivered as no preliminary feasibility studies appear to have been undertaken. The appraisal recognises the risk that air quality issues will need to be addressed in order to deliver non-strategic growth.

AIR QUALITY REVIEW

AIR QUALITY AT FENSWOOD FARM

Baseline Conditions

Fenswood Farm lies within the administrative boundary of North Somerset Council (NSC) and is situated to the south of Long Ashton. It is bordered to the north by a railway line, to the east and west by agricultural fields and to the south by the A370, and covers land currently comprising agricultural fields. The main source of pollution in the area is road traffic and the relevant air pollutants for consideration are therefore nitrogen dioxide (NO$_2$) and particulate matter (PM$_{10}$ and PM$_{2.5}$).

The Environment Agency’s online pollution register indicates that there are no large scale Part A1 authorised industrial processes located within the vicinity of Fenswood Farm that are likely to have a significant influence on local air quality. Furthermore, a review of information relating to the public register available on NSC’s website confirms that there are no smaller scale Part A2 or B processes located within the immediate vicinity of the Site either.

NSC has not declared an Air Quality Management Area within its administrative area. According to their latest air quality report air quality in the district meets the UK Air Quality Strategy (AQS) objectives. There is one NO$_2$ diffusion tube monitoring site at Long Ashton Park and Ride, located approximately 1.5 km southeast of Fenswood Farm. The annual mean NO$_2$ concentrations measured at this monitoring site over a five year period are shown in the table below.

<table>
<thead>
<tr>
<th>Site</th>
<th>Grid Reference (x, y)</th>
<th>Height</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Ashton Park and Ride</td>
<td>356021,171009</td>
<td>3</td>
<td>20.3</td>
<td>21.9</td>
<td>21.2</td>
<td>18.9</td>
<td>18.4</td>
</tr>
</tbody>
</table>

The data in the table shows that annual mean NO$_2$ concentrations at the roadside in this location have been consistently below the annual mean objective of 40µg/m$^3$.

As part of the review of available air quality data, background pollutant concentrations were taken from the national maps provided on the Defra website, where background concentrations of those pollutants included within the UK’s Air Quality Strategy have been mapped at a grid resolution of 1x1km for the whole of the UK. Estimated concentrations are available for all years between 2015 and 2030.

Table 2 summarises the background pollutant concentrations of NO$_2$ and particulate matter (PM$_{10}$ and PM$_{2.5}$) at the Site for 2017.

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4 North Somerset Council (2016) 2016 Air Quality Annual Status Report, June 2016
5 https://uk-air.defra.gov.uk/data/lqm-background-home
Background concentrations of NO$_2$, PM$_{10}$ and PM$_{2.5}$ in the vicinity of the Fenswood Farm are well below the relevant objectives. Therefore, future residents are unlikely to experience concentrations above the AQS objectives.

**Receptors**

Sensitive locations are places where the public or sensitive ecological habitats may be exposed to traffic emissions associated with the development of Fenswood Farm. It is anticipated that the majority of the traffic generated by Fenswood Farm will use the A370 and links into Bristol City centre and a small proportion will use Weston Road into Long Ashton. No ecological habitats have been identified in the vicinity of these road links although there are sensitive human receptors along Weston Road. As Fenswood Farm is likely to generate additional traffic into Bristol, it is also likely to affect the air pollution concentrations within the BCC AQMA.

**Qualitative Assessment of Operational Traffic**

Fernwood Farm is likely to result in the generation of 6336 Annual Average Daily Traffic (AADT) movements on the local road network by the year 2036. (Note: that the AADT flows were based on the number of dwellings and the amount of employment space that could be provided and have not included the effect of any proposed mitigation measures in reducing the volume of development traffic generated.) The additional traffic will primarily use the A370 and road links into Bristol.

According to the latest Defra NO$_2$ roadside projections at Brunel Way (the closest link to Fenswood Farm likely to be used by the future development occupants to access Bristol and also within the BCC AQMA), annual mean NO$_2$ concentrations in 2030 (note projections are only available up to the year 2030), with no mitigation measures in place, are 18µg/m$^3$. Current (projected to 2017) annual mean NO$_2$ concentrations along Brunel Way are 34µg/m$^3$. The 2017 roadside annual mean NO$_2$ concentrations are close to the 40µg/m$^3$ air quality objective, although by 2030 the concentrations are well below it. The additional traffic generated by the development is likely to have an impact on local air quality and potentially the BCC AQMA, however given that the roadside projections for 2030 are well below the relevant NO$_2$ objective, potential impacts are not anticipated to be significant if appropriate mitigation measures and particularly sustainable transport options are applied. A Transport Strategy for Fenswood Farm has been produced as part of this Representation which aims to ensure the number of vehicle movements generated by the development is minimised.

An overview of the costs associated with the air emissions generated by the development of Fenswood Farm was undertaken by completing a damage cost calculation following Defra’s guidance$^6$ (refer to Appendix A for an overview of the guidance and approach) on valuing the impacts of a project on air quality. The damage cost calculation was undertaken using the calculated emissions of NO$_X$ and PM$_{10}$ from commuting traffic into Bristol generated by Fenswood Farm (see Table 4 for AADT in BCC AQMA). The level of commuting traffic generated by the development is estimated to produce approximately 1.3 tonnes/yr of NO$_2$ and 0.1 tonnes/yr of PM$_{10}$ based on the latest Defra Emission Factor Toolkit (EFT 8.0.1). Consequently, the damage costs per tonne of pollutant, based on 2015 prices, were calculated and multiplied by 5 to correspond to the 5 year assessment period as stipulated in the Defra guidance. It should be noted that the cost calculated is based on a number of assumptions and should be treated as an estimate only. The result of the damage cost calculation for Fenswood Farm is a value of £169,153. This value can be used to identify the financial cost of mitigation measures that might be needed to offset the impacts on air quality from the commuting traffic generated by Fenswood Farm. The damage cost value calculated has not considered the

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$^6$ https://www.gov.uk/guidance/air-quality-economic-analysis
proposed mitigation measures, detailed in the Transport Strategy for this site. In real terms the damage cost calculation for the Fenswood Farm will be considerable lower.

AIR QUALITY AT BUCKOVER

Baseline Conditions

Buckover lies within the administrative boundary of South Gloucestershire Council (SGC) and is situated east of Thornbury. The proposed site covers land currently comprising agricultural fields, with the A38 and A4061 running through the Site. The main source of pollution in the area is road traffic and the relevant air pollutants for consideration are therefore NO\(_2\), PM\(_{10}\) and PM\(_{2.5}\).

The Environment Agency's online pollution register indicates that there are no large scale/ Part A1 authorised industrial processes located within the vicinity of Buckover that are likely to have a significant influence on local air quality. Furthermore, a review of information relating to the public register available on SGC's website confirms that there are no smaller scale Part A2 or B processes located within the immediate vicinity of the Application Site either.

SGC has declared three AQMAs within its administrative area, however none are located in the vicinity of Buckover. SGC has no air quality monitoring stations in Buckover and background air quality data were extracted from the Defra website. Table 3 summarises the background pollutant concentrations of NO\(_2\) and particulate matter for 2017.

<table>
<thead>
<tr>
<th>Grid Square (Centre on OS Grid Reference)</th>
<th>NO(_2) (µg/m(^3))</th>
<th>PM(_{10}) (µg/m(^3))</th>
<th>PM(_{2.5}) (µg/m(^3))</th>
</tr>
</thead>
<tbody>
<tr>
<td>366500, 191500</td>
<td>9.1</td>
<td>13.4</td>
<td>8.7</td>
</tr>
<tr>
<td>367500, 190500</td>
<td>9.1</td>
<td>15.2</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Background concentrations of NO\(_2\), PM\(_{10}\) and PM\(_{2.5}\) in Buckover are well below the relevant objectives. Therefore, future residents are very unlikely to experience concentrations above the AQS objectives.

Receptors

Sensitive locations are places where the public or sensitive ecological habitats may be exposed to traffic emissions associated with Buckover. It is anticipated that the majority of the traffic generated will use the A38 and links (potentially also the M5) into Bristol City centre and a small proportion will use local roads into Thornbury. No sensitive ecological habitats have been identified in the vicinity of these roads links although there are sensitive human receptors along the B4061 and A38 Weston Road. As Buckover is likely to generate additional traffic into Bristol, it is also likely to affect air quality within the BCC AQMA that includes part of the A38.

Qualitative Assessment of Operational Traffic

Buckover is likely to result in 19614 Annual Average Daily Traffic (AADT) movements on the local road network by the year 2036, primarily using the A38 into Bristol. (Note: that the AADT flows were based on the number of dwellings and the amount of employment space that could be provided and have not included the effect of any proposed mitigation measures in reducing the volume of development traffic generated.)

According to the latest Defra NO\(_2\) roadside projections, annual mean NO\(_2\) concentrations along the A38 (Gloucester Road) in 2030, with no mitigation measures in place, are between 16-19µg/m\(^3\). Current (projected to 2017) annual mean NO\(_2\) concentrations are 28-33µg/m\(^3\). The 2017 roadside annual mean NO\(_2\) concentrations are approaching the 40µg/m\(^3\) air quality objective, although by 2030 the concentrations are well below it. The additional traffic generated by Buckover is likely to have a significant impact on local air quality and the BCC AQMA. Although roadside projection for 2030 is well below the relevant NO\(_2\) objective, the level of traffic generated is such that considerable mitigation will be needed to make the site acceptable in air quality terms. As indicated in the University of Bristol's previous representation to the draft JSP, there is a significant risk in delivering the sustainable traffic options and particularly
the infrastructure required to make Buckover a viable option. Given that additional mitigation will be needed on top of what has already been proposed, it is reasonable to conclude that Buckover is not a suitable SDL for air quality.

It is also worth noting that current proposals have not acknowledged the potential impacts of Buckover on the BCC AQMA and instead have relied in deflecting any potential impacts by assuming that Buckover will be a self-contained settlement when in reality commuting in Bristol will be a popular choice.

The level of commuting traffic into Bristol City centre is estimated to produce 13.8 tonnes /yr of NO₂ and 1.3 tonnes/yr of PM₁₀ based on the latest Defra latest Emission Factor Toolkit (EFT 8.0.1). An overview of the costs associated with the air emissions generated by the development of Buckover was undertaken by completing a damage cost calculation. The result of the damage cost calculation for Buckover is a value of £1,832,731.

**BUCKOVER VERSUS FENSWOOD FARM**

Table 4 presents a comparison of the expected traffic generation from the development of the two sites and details of the sustainable transport options and infrastructure requirements that are currently considered.

<table>
<thead>
<tr>
<th>SITE</th>
<th>PROPOSALS</th>
<th>SUSTAINABLE TRAFFIC OPTIONS/INFRASTRUCTURE REQUIREMENTS</th>
<th>DEVELOPMENT TRAFFIC IN AADT + % HGV</th>
<th>DEVELOPMENT TRAFFIC GOING THROUGH THE AQMA</th>
</tr>
</thead>
</table>
| Buckover     | 3,000 dwellings                                | - MetroBus Extesion to Thornbury and Buckover  
- A38(N) Park & Ride  
- M5 J14 improvements  
- Charfield Rail station reopening  
- Local bus service improvements (including shuttlebus to Thornbury)  
- Strategic and local cycle and pedestrian connections to Thornbury  
- Other local highway improvements as necessary | 19614 AADT  
10% HGVs | 6,538 AADT                                      |
| Fenswood Farm | 1,000 new residential dwellings,  
3 ha of employment land and associated leisure uses | - Close to existing MetroBus provisions with potential for extension of route to Fenswood Farm  
- Close to Long Ashton Park & Ride with potential for extended services  
- Future Rail Provision to Long Ashton  
- Existing regular bus services into Bristol  
- Bristol accessible by bicycle  
- Local facilities in Long Ashton can be accessed by foot and bicycle | 6336 AADT  
8% HGVs | 2,112 AADT                                      |

Air Quality at Buckover and Fenswood Farm is anticipated to be good with both sites likely to experience pollution concentrations well below the relevant air quality objectives. Both sites are likely to have an impact on air quality within the BCC AQMA to some extent as they will add traffic on road links that are in the BCC AQMA. However given the size and location of Buckover, it is estimated that an additional 6,538 AADT can potentially travel though the BCC AQMA, compared to 2,112 AADT associated with Fenswood (refer to Table 4). In addition a commuting vehicle into
Bristol from Buckover will need to travel an average of 44.8 km per day (two way trip), compared to 12.8 km (two way trip) from Fenswood Farm. Buckover is likely to have a considerable impact on the AQMA, especially when you consider the risk around the viability of the infrastructure proposed for this site and current lack of sustainable travel options. On the other hand, Fenswood Farm is far better placed as it has access to existing sustainable travel options and any additional infrastructure that might be required can be easily delivered. In addition a high level monetary evaluation of the costs, associated with the amount of NOx and PM$_{10}$ generated by the additional commuting vehicle movements into Bristol City centre associated with each site, concluded that Buckover is significantly more expensive compared to Fenswood Farm (refer to Appendix A). The damage cost calculations highlight that Buckover has a significantly greater impact on air quality compared to Fenswood Farm.

**SUMMARY AND CONCLUSIONS**

A review of the SA supporting information has identified a number of shortcomings within the report, including a lack of detailed information on air quality. However, and more importantly, the SA includes criteria that are unlikely to provide effective screening for the air quality impacts of the proposed SDLs. The SA acknowledges that air quality has not been considered explicitly in the JSP, but fails to clarify how any proposed amendments will ensure that air quality considerations are given adequate weight.

A qualitative review of the existing air quality at Buckover and Fenswood Farm reveals that although both sites experience good air quality, and are therefore suitable for their intended use, Buckover is associated with a far greater air quality damage cost compared to Fenswood Farm. More importantly Buckover’s size and location is such that it is has the potential to have a significant impact on BCC AQMA. Given the uncertainties around the viability of the proposed mitigation and infrastructure for Buckover, it can be concluded that it is not a suitable SDL in air quality terms. On the other hand Fenswood Farm is better placed and is associated with far lower delivery risks.
APPENDIX A – DAMAGE COST CALCULATIONS

The calculation of ‘damage’ costs has been undertaken following the methodology in DEFRA’s guidance on valuing impacts on air quality. This approach has been initially applied to assess policy/programmes and projects by central government. Local Authorities have taken this this approach and adapted it as part of their Low Emission Strategies (LESs) and as part of their technical guidance to developers on assessing air quality. As part of a planning submission, particularly for large developments, an LES is prepared and can include the following:

- Define the Proposed Development type classification as it will inform the type of mitigation measure applicable;
- Undertake a damage cost calculation using the Government’s Interdepartmental Group on Costs and Benefits (IGCB) damage cost approach to determine the level of financial contribution that should be spent on mitigation to offset the air quality impact of the Proposed Development;
- Review of the Transport Assessment (TA), travel Plan (ITP) and traffic data for the Proposed Development to identify and cross-reference any measures relevant to the LES; and
- Review of latest air quality reports and Local Travel Plan (LTP) by the Local Authority to identify any measures, which could be implemented and/or funded to reduce or offset the effects of the Proposed Development on air quality (if further measures are required).

The damage cost calculations are designed to ensure that additional weight is placed on air quality impacts and the mitigation proposed is adequate. It is not designed as a “charge” applied to developments, but rather a check to ensure that sustainable transport options and low emission technology has formed part of the development proposals.

As part of this representation the damage cost calculations are used to reflect the monetary value associated with the potential emission to air, prior to any mitigation has been applied, from commuting journeys to demonstrate the significant impact on air quality from the proposed development at Buckover.

The damage cost calculations for Buckover and Fenswood have been undertaken using emissions of NO\textsubscript{X} and PM\textsubscript{10} from road traffic generated by Buckover and Fenswood Farm. The damage costs for NO\textsubscript{X} and PM\textsubscript{10} used in the assessment (based on 2015 prices) are as follows:

- \textit{NO}\textsubscript{X}: £21,044 per tonne (central); and
- \textit{PM}\textsubscript{10}: £58,125 per tonne (central)

Emissions of NO\textsubscript{X} and PM\textsubscript{10} (tonnes/year), for use within the damage cost calculation, have been calculated based on the average two way commuting journeys (i.e. excluding HGV journeys) into Bristol City centre from the Buckover and Fenswood Farm developments, travelling at an average speed of 45kph. The traffic flows used in the calculation assume no mitigation measures are in place.

The Emissions Factor Toolkit (EFT) version 8.01 was used to determine PM\textsubscript{10} and NO\textsubscript{X} emissions (in tonnes/year). The damage costs per tonne of pollutant, based on 2015 prices, were calculated and multiplied by 5 to correspond to the 5 year assessment period from the opening year as specified by the Defra guidance.

A copy of the damage cost calculations are provided in below.

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Appendix 3: Sustainability Appraisal
Sustainability Appraisal

Land at Long Ashton

January 2018

Prepared by: Nicola Sully

Reviewed by: Matthew Halstead

Alder King Planning Consultants
Pembroke House, 15 Pembroke Road, Clifton, Bristol BS8 3BA
Email: mhalstead@alderking.com
Tel: 0117 317 1175
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3.0 Sustainability Credentials of Site as Existing.............................................................. 1
4.0 Sustainability of Developed Site.................................................................................... 3
1.0 Introduction

1.1 Alder King Planning Consultants have been instructed by the University of Bristol to undertake an appraisal of their land holding at Long Ashton to assess the sustainability of the site, both in its current form, and when developed.

1.2 For the purposes of the assessment it has been assumed that development of the site would be undertaken broadly in accordance with the scheme proposed within planning application 10/P/0066/OT2. This proposed:-

- Approximately 1,000 residential units of which a proportion would be affordable housing;
- Approximately 12,000 sqm of B1 employment land;
- Site for a new two form entry primary school; new community facilities;
- Green infrastructure;
- Formal and informal recreation space;
- Site safeguarded for a new rail halt; a new access onto the A370; and
- Cycle routes and public footpaths.

2.0 Site Location and Context

2.1 The site known as ‘Land at Long Ashton’ is situated to the south of the settlement of Long Ashton and extends to approximately 69 hectares. To the north the site is bounded by the main Penzance to Bristol Railway line, to the south and east it is bounded by the A370 Long Ashton bypass and to the west it is bounded by the local road, Wildcountry Lane. Vehicular access to the site is presently gained via Wildcountry Lane.

2.2 The edge of Bristol is approximately 1.5km to the east (5km south west of Bristol City Centre), with the A370 and A38 forming primary links to the centre, the M5 and Bristol Airport.

2.3 The site is served by a range of services and facilities and is close to existing and planned public transport infrastructure, including cycling, bus, Park and Ride and use of Metrobus.

3.0 Sustainability Credentials of Site as Existing

3.1 Sustainability is closely related to proximity and accessibility to services and facilities and the potential to use existing and new transport corridor opportunities.

3.2 The site is located immediately to the south of the existing settlement of Long Ashton and is within reasonable walking and cycling distance of Long Ashton’s existing facilities. This access is enhanced by existing cycle routes and a Public Right of Way.
3.3 Long Ashton has a very good quality of life in an affluent area for its residents, including an established infrastructure within the village. A significant proportion of the development site is within 10 minutes’ walk of the existing village centre, which offers the following facilities and services:-

- Supermarket
- Doctors’ Surgery and Pharmacy
- Bakery
- Hair salon
- Beauty salon
- Library
- Dental surgery
- Charity shop
- Public house
- Estate Agent
- Two primary schools (Northleaze and Birdwell)

3.4 Furthermore, Long Ashton is located relatively close to Bristol (approximately 5 km from the centre) which provides an even wider range of services and facilities. The proximity to central Bristol provides the opportunity to exploit both existing and potential new sustainable transport infrastructure including cycling, bus, park and ride and Metrobus.

3.5 The site is a comfortable and realistic cycling distance to these services and facilities, both within Long Ashton and those within Bristol. This is because the site is supported by high quality cycle routes (including via existing national and local cycle network connections and newer, flatter connections to the Festival Way already proposed) and this is reflected in the cycle to work mode share (2011 census). This shows the percentage figure for the Wraxhall and Long Ashton ward is almost double that of other neighbouring wards.

3.6 There are a number of bus routes that converge on their approach to Bristol through the village. Additionally there are numerous bus stops ensuring that much of the existing village is within 400m of an existing stop. The existing “First” bus network links Long Ashton with Bristol City Centre, Weston-super-Mare and other surrounding areas. The Long Ashton Park and Ride is located just off the A370, around 3km to the north east and this provides 1,500 parking spaces. It is to be upgraded as part of the MetroBus scheme to provide Bus Rapid Transit. The journey time into Bristol City Centre is around 15 minutes and runs every 10-20 minutes. Again when looking at public transport mode share, this is also higher for the Long Ashton ward than other neighbouring areas, reflecting its relative proximity to Bristol and its direct public transport connections. The presence of this existing public transport system forms the basis for further enhancement in order to meet the needs of the new development.
3.7 There are also a number of existing public footpaths that run through or adjacent to the site. Pedestrian bridges run over the existing railway line creating links to the existing settlement.

3.8 A number of employment facilities already exist within Long Ashton, including the Long Ashton Business Park and a variety of retail outlets.

3.9 The Bristol urban area provides employment for a significant proportion of the West of England, with much of this located within Bristol City Centre. Given its proximity to Bristol City Centre, Long Ashton is well suited for commuter purposes which will become substantially more sustainable over time with the enhanced public transport connections being implemented.

4.0 Sustainability of Developed Site

**ECONOMIC**

4.1 Additional employment will be created as a result of development of the site, both during the construction phase and that delivered by the employment elements within the scheme.

4.2 Although there are existing employment opportunities within the settlement, these are relatively limited and therefore development of the site would enhance the employment opportunities offered to residents of Long Ashton.

4.3 Commercial space is proposed as part of the development (circa 12,000sqm) and although the final breakdown of employment land uses at this stage is not known, an estimate of potential job creation indicates that approximately 328 office jobs and 157 jobs in light industry would be created. Such a level of provision would help facilitate the continued sustainable development of Long Ashton, by reducing out commuting and encouraging greater inward investment.

4.4 There is also the economic contribution that new residents will make through spending at the local retail facilities and businesses and this potential new customer base will help to ensure the viability of existing businesses and has the potential to attract new ones to the settlement.

**SOCIAL**

4.5 Long Ashton has a very good quality of life in an affluent area for its residents, including an established infrastructure within the village. Development of the site would provide additional school and community buildings, along with play areas, allotments and public open space further enhancing this quality of life.

**Delivery of Housing**

4.6 One of the key social benefits of developing the site will come from the delivery of additional housing, for which there is currently a critical need, including additional affordable housing provision.

4.7 As set out within the draft Joint Spatial Plan, there is a need for the provision of at least 102,200 houses in the West of England and sufficient sites are required in order to deliver this. The site is located within the
wider Bristol HMA and therefore development in this area would contribute well to meeting this objective. Furthermore, this is a greenfield site and therefore development is likely to be more viable than brownfield sites, therefore providing more certainty for the delivery of suitable tenure, including affordable housing.

4.8 Whilst the final level of affordable housing provision within the development will be subsequent to negotiation, any level of provision will have beneficial impacts for the existing community. In addition, a range of housing types and tenures would be possible at the site.

Education

4.9 Long Ashton currently benefits from two existing primary schools. The nearest secondary school provision is approximately 11 miles to the north of Long Ashton at Ham Green, Pill. A new primary school would be provided within the development.

4.10 Sufficient capacity exists at the nearest secondary school, however it is anticipated that developer contributions would be expected to assist with student transportation costs. This additional provision would therefore result in a benefit to the local community.

Health facilities

4.11 There is an existing GP surgery within Long Ashton as well as opticians and a pharmacy and it would be expected that financial contributions would need to be delivered through planning obligations to bolster existing provision.

4.12 Development of the site can help to facilitate an active community, through the provision of recreational facilities, open space, footpaths and cycle routes.

The development scheme makes provision for a significant level of additional green infrastructure and open space including both adult and child playing space and informal open space (e.g. allotments).

Transport and other related infrastructure (including rail station)

4.13 There is an opportunity to enhance the existing public transport system as a result of development of the site as an increase in the number of residents would provide additional patronage to support the viability of further improvements and extensions to existing and planned infrastructure. This could also extend to the provision of a new rail station. In addition existing footpaths would be upgraded to enable improved linkages with the existing village. This would provide additional travel options to residents of Long Ashton and may mean that certain destinations, and in turn certain services, that were previously inaccessible become accessible.

Village Centre and Community Enhancements
4.14 It has previously been identified that local residents have identified the need for a more recognisable village centre and also the provision of new retail facilities. There is however a preference for the enhancement of existing retail facilities within the village, rather than new provision, in order to create a recognisable village hub.

4.15 As part of any subsequent planning application process, necessary improvements to existing retail facilities within the village centre could be secured through planning obligations. In addition a new community centre is proposed within the scheme for use by local organisations, which would be located at an accessible location within the development and would be available for use by existing and future residents.

4.16 The extension to Long Ashton that would be created by the development would create an integrated village and sustainable extension that would complement the existing urban form.

ENVIRONMENTAL

Transport and accessibility

4.17 The site benefits from proximity to pedestrian, cycle, rail, bus, park and ride and Metrobus services, both existing and committed, including extensions to conventional and/or Metrobus services. Funding is already in place, and construction underway, for all of the Metrobus services to/from Long Ashton Park and Ride and would be available and accessible to future residents of the site.

4.18 Significantly, a site has been identified within the site for the provision of a new railway station and initial feasibility work undertaken by consultants has confirmed that this can realistically be delivered contributing to overall connectivity and sustainability. The site offers accessibility by rail subject only to a new railway station facility, without any accompanying need for extensive new or replacement track infrastructure and a high cost to benefit ratio. There is good potential for regular rail services from a new station at Long Ashton, building on existing Metrowest proposals, providing good opportunities for through services and onward connections. This includes connections to Bristol, Weston-super-Mare as other locations to both the north and south of Bristol through onward rail or Metrobus connections.

4.19 In addition, accessibility to existing facilities would be improved through enhancements to the existing pedestrian footbridges over the railway line, and the incorporation of footpaths and cycle routes within the site, all of which link with existing routes in Long Ashton and further afield.

4.20 The Bristol urban area accounts for about two thirds of the employment in the West of England and much of this employment is currently located in Bristol City Centre and the north fringe of Bristol. The presence of a rail station on the site, as well as the other planned sustainable transport enhancements will result in a reduction in commuter trips via private vehicles, therefore substantially more sustainable, providing a significant environmental benefit.

Landscape impact
The site is not subject to any protective landscape designations either at a local or national level. In addition, there will be no long term adverse impacts on either landscape features, or to the landscape character. There will be a long term benefit created to the landscape pattern and to site woodland, due to the creation of a newly planted structure of native woodland. The scheme is generally well related to the landform and the shape of the existing settlement.

**Townscape and cultural heritage**

The site is not subject to any heritage designations nor are there any in the immediate vicinity. There are listed properties located within the built up part of the village, however these are surrounded by modern development and there is no inter-visibility between the heritage assets and the site. Therefore development on the site would have no impact upon them.

The site has been the subject of an archaeological desk-based assessment and walkover survey which confirms that it contains no features of National or Regional archaeological importance, and the unknown archaeological potential was assessed to be low. There would be no change to the setting of Grade II* and Grade II Registered Parks and Gardens and Grade I and Grade II* listed buildings in the wider area due to distance from the site.

**Biodiversity and geodiversity**

Ecology is not a constraint to development of the site, subject to appropriate design and suitable mitigation measures.

Development of the site provides an opportunity to provide ecological benefits, habitat creation, species enhancement and enhance the biodiversity of the site. This includes the incorporation of landscape buffers, new woodland planting and additional tree, scrub, grassland and wildflower planting across the development.

There will be an overall positive benefit in terms of ecology on the site.

**Flood risk**

The site is located within flood zone 1 and surface water drainage can be managed through appropriately designed SUDs. Flood risk, both on and off site, can be appropriately managed as part of any development.

**Air quality**

The main source of pollution in the area is road traffic. Background concentrations of air pollutants in the vicinity of the site are well below the relevant air quality strategy objectives and therefore future residents are unlikely to experience concentrations above these objectives. There is no Air Quality Management Area in the locality.

Taking into account the additional traffic expected to be generated, development of the site is likely to have an impact on local air quality and potentially the Bristol City Council Air Quality Management Area. However,
given future projections are well below the relevant objectives, potential impacts are not anticipated to be significant if appropriate mitigation measures, and particularly sustainable transport options are applied. Adequate preventative and mitigation measures could be incorporated into any development.

**Potential for low carbon/renewables within the development**

4.30 The development will look to include low energy buildings and sustainable energy centres, linking to renewable energies which could take the form of energy from waste and CHP systems where possible, establishing a long term energy strategy for the entire development.
Appendix 4: WSP Joint Spatial Plan Consultation Representations
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## APPENDICES

Appendix A - Commute Distance Comparison of SDLs
1 INTRODUCTION

1.1.1. This document has been prepared by WSP on behalf of the University of Bristol (UoB), in order to support the promotion of Fenswood Farm at Long Ashton as a site for strategic mixed-use development.

**Background**

1.1.2. The site was previously promoted by UoB in December 2016, in response to the West of England (WoE) authorities’ ‘Emerging Joint Spatial Plan’ (EJSP) and ‘Emerging Transport Vision’ (ETV).

1.1.3. The UoB’s representations at the time outlined the site’s sustainability credentials in terms of proximity and ease of access to the Bristol urban area, including being able to benefit early from and maximise the value of existing or committed cycle, public transport, road and park and ride provisions, as well as established local services and facilities at Long Ashton.

1.1.4. In addition, it was argued that EJSP ruled Long Ashton out as a location based on severance from the village due to the railway line. UoB pointed out that this was an unfair assessment, since there are three railway bridges providing pedestrian and cycle access to the village and therefore offering genuine ‘filtered permeability’.

1.1.5. It does not appear, however, that any further consideration has been given to alternative sites, since the updated Sustainability Appraisal simply refers back to the EJSP which is reported to present reasons for site exclusion. A more transparent comparison of alternatives is required to demonstrate whether the JSP is sound.

1.1.6. The high feasibility of future rail provision to Long Ashton, along with existing improved bus services, will maximise the opportunity for high levels of sustainable travel and connectivity, further reducing car reliance, in line with the strategic priorities of the Joint Spatial Plan: Publication Version (JSP:PV). Indeed the EJSP recognised the proximity of Long Ashton to Bristol, offering the opportunity to maximise cycle and Metrobus usage. It is considered that this should be afforded greater weight in preferred site selection.

1.1.7. UoB’s consultants also highlighted in response to the EJSP, with reference to 2011 census data, how development at this site can contribute towards reduced travel distances, when compared to alternative sites further from the Bristol urban area. Typical daily km travelled for commuting purposes were compared between Long Ashton and other key settlements where Strategic Development Locations (SDLs) were being suggested. We would again argue that such factors (reduced travel distances and increased sustainable travel mode shares) should have significantly greater weight in site selection and in the comparison and selection of sites.

1.1.8. Furthermore, significant concerns were expressed in relation to the EJSP and Draft Joint Transport Strategy (DJTS) regarding the extent of their ambition in terms of the number, scale and complexity of the transport packages required to enable many of the SDLs to progress as sustainable new developments. This remains the case and we currently contend that sites with complex, costly and uncertain pre-requisites should be balanced by sites with lower delivery risk, such as Fenswood Farm. This would provide a more robust strategy for ensuring delivery of necessary homes and employment opportunities to support the growth of the WoE.
2 CONSULTATION DOCUMENTS

2.1.1. The West of England Authorities (Bath and North East Somerset Council, North Somerset Council, Bristol City Council and South Gloucestershire County Council) published the JSP:PV on 22 November 2017 and comments are invited by 10 January 2018.

2.1.2. In addition, a final report of the Joint Transport Strategy (JTS) was published by the WoE authorities dated October 2017. The JTS sets out ambitious proposals for significant growth and supporting infrastructure, along with very ambitious future mode of travel targets for the WoE area to 2036 (transport and smarter choices schemes to achieve trip reduction and modal shift to entirely counter a forecast c.20% increase in traffic as a result of growth set out by the JSP to 2036).

2.1.3. The Fenswood Farm site has still not been recognised by the JSP:PV as a future Strategic Development Location (SDL) able to support sustainable provision of much needed housing and employment to 2036, despite its favourable position in terms of proximity to the Bristol urban area (and notably to South Bristol), sustainable transport and accessibility credentials and significantly lower risks in terms of timely delivery of supporting infrastructure / services compared to a number of the other SDLs which the JSP continues to promote in favour of it.

2.1.4. Our response to the current consultation, as set out below, therefore re-iterates our concerns regarding the opaque selection process for the SDLs and the relatively lower sustainability of a number of them compared to Fenswood Farm, thereby making it a better choice to support a balanced package. Inclusion of Fenswood Farm would be preferable due to its deliverability and high level of strategic connectivity, countering the risk of the JSP:PV strategy as being likely to lead to either:

- back-loading of SDL housing completions beyond the end of the JSP period (when the necessary infrastructure will hopefully have been planned, secured funding and been delivered – although there are numerous risks related to the sustainable transport schemes required to support many of the SDLs); or
- the progression of housing development in an unsustainable manner (prior to or without the necessary infrastructure to support modal shift).

2.1.5. The pre-requisites for many sites are significantly more complex and risky in terms of number, cost and scale than those which would be needed to ensure sustainable development of Fenswood Farm, thereby making it a better choice to support a balanced package. Inclusion of Fenswood Farm would be preferable due to its deliverability and high level of strategic connectivity, countering the risk of the JSP:PV strategy as being likely to lead to either:

- back-loading of SDL housing completions beyond the end of the JSP period (when the necessary infrastructure will hopefully have been planned, secured funding and been delivered – although there are numerous risks related to the sustainable transport schemes required to support many of the SDLs); or
- the progression of housing development in an unsustainable manner (prior to or without the necessary infrastructure to support modal shift).

2.1.6. Taking into consideration Paragraph 15, the reliance on a relatively large number of SDLs with significant infrastructure requirements raises significant risks regarding either under-delivery of housing numbers to 2036, or of them coming forward unsustainably.

2.1.7. We argue that an inherently more sustainable development, with fewer delivery risks, as offered by Fenswood Farm is more aligned to the objectives of sustainable development. The site is able to assist in increasing mode share of travel to work by cycle and public transport, with the benefit over many SDLs of being a comfortable and realistic cycling distance to current and future employment opportunities and other services and facilities in and near Bristol (including via existing national and local cycle network connections and newer, flatter connections to the Festival Way already proposed as part of the Ashton Value to Temple Meads BRT scheme). In terms of the ‘rebalancing’ of economic growth referred, the site provides for accessibility to and from South Bristol via the South Bristol Link (including MetroBus services and new cycle connections to the Festival Way).

2.1.8. Development of Fenswood Farm could also support the overall package put forward by providing additional patronage and supporting delivery of an early phase of extension of MetroBus south westwards from Bristol (to Nailsea and Backwell). E.g. it is aligned to a corridor approach which the JSP:PV considers to be a sustainable approach to future development. The provision of additional patronage along corridors, to support viability of improvements / network extensions (for BRT and Rail), is presumably a key reason why the JSP:PV states favour for a corridor based spatial approach. It is considered that there could, however, be benefits in terms of delivery and sustainability of focussing on fewer corridors, rather than including a dispersed ring of sites all around Bristol, increasing the risk of dispersed (and more car dependent) travel patterns, particularly
if both employment and housing development occurs at those sites. Given the JSP:PV stated need to ‘rebalance’ the development in and around Bristol, it makes logical sense to include this site along the Nailsea / Backwell corridor, to support its delivery. Fenswood Farm could potentially be served via a shorter route extension (turning in the site) in the shorter term and then over the longer term from new stops on the A370 once the Nailsea / Backwell MetroBus corridor is established. Crossing provisions to support this could be incorporated within site access provisions.

2.1.9. We believe that proximity to existing infrastructure and key destinations (e.g., existing and future employment growth areas), as well as potential for sustainable public transport access to a range of these, should be rated more highly in the selection of future SDLs than a notably less solid ‘potential’ to be served by sustainable travel infrastructure. Indeed, pages 108 – 112 of the JSP:PV recognises the need for investment to reduce traffic levels by 2036, that the proposals for the Transport Vision are conceptual and should be reviewed as schemes come forward, and that significant work will be required to develop the Transport Vision further.

2.1.10. Consequently, many of the SDLs are based around sustainable transport schemes for which the business cases and technical feasibility has yet to be confirmed. It was not until autumn 2017 that the WoE authorities commissioned the preparation of business cases to explore, justify and demonstrate the case for the key infrastructure projects underpinning the JSP:PV. Their brief does not expect these to be concluded until autumn 2018. As such, there is a risk that some of the infrastructure required to deliver the SDLs will present a poor business case and/or not receive funding (in light of the high overall funding requirement of the JTS package).

2.1.11. Therefore, rather than the current spatial strategy having been fully and robustly informed by viability and deliverability considerations, these questions appear to be unresolved. This leads to questions regarding the soundness and deliverability of the strategy.

2.1.12. Instead, it is argued that the degree of ‘potential’ to be served, in terms of deliverability (and timescales to deliver) should be afforded greater weight in development of the spatial strategy. To treat ‘potential’ to serve sites sustainably through new major schemes (for which feasibility and the business cases and funding still need to be secured) as equal to proximity and potential ease of connection to existing and already committed infrastructure and services is considered unsound, since the former will be subject to significantly greater delivery risks. Indeed, the Infrastructure Position Statement recognises a number of significant risks associated with schemes, particularly the longer Metrobus routes (such as to Thornbury / Buckover), for which route length will lead to increased vehicle number requirements and potential commercial viability and operation risks. In addition, the A38 Metrobus route is recognised as likely to be subject to additional land acquisition.

2.1.13. Instead, the scale of risk (and cost) attached to future ‘potential’ infrastructure should also be taken into account. MDS’s report ‘The Case of Long Ashton Station’, outlines the feasibility of a new railway station at Long Ashton and the relatively low cost (approx. £5-£10 million) and high benefit (potential Cost Benefit Ratio (CBR) of c. 5:1 compared to a forecast CBR for the existing MetroWest rail improvement programme of around 1:1). The higher CBR relates to being adjacent to a live passenger rail line, lower delivery and operational costs, as well as being likely to be revenue benefitting to the operator (ongoing revenue forecast to exceed small additional incremental costs). A proposal for a new station at Long Ashton would be significantly less costly than the MetroWest Portishead scheme, since the latter requires new track infrastructure and rolling stock, as well as new stations. The scheme at Long Ashton provides greater opportunity for good benefits to ensue from investment and would be commercially viable to operate over the coming years without subsidy.

2.1.14. It is recognised that there is another opportunity to reopen a new station on the ‘live’ line at Charfield, to serve a proposed SDL there. However, Charfield is missing a great number of the other locational and accessibility benefits of Long Ashton, such as the ability to complement an already proposed JSP:PV corridor and to be accessible via other means of transport such as cycling, short conventional (or MetroBus) services and Park and Ride from the outset.

2.1.15. In contrast, the JTS recognises that development over the route of the former Thornbury railway line is likely to preclude rail connectivity for Thornbury or Buckover within the JSP:PV period. Instead, these sites would be reliant solely on other forms of public transport, as well as not benefitting from the same quality and level of cycle connections that already exist (or are planned to exist) to Long Ashton. The JSP:PV suggests that they could benefit from potential connectivity to a new railway station at Charfield, but it is not clear how this would be a real benefit to development at Thornbury / Buckover. Charfield is not ‘en route’ between Thornbury / Buckover and Bristol. Instead it is further from Bristol and its key employment areas than Thornbury /
Buckover themselves. It appears illogical to expect residents to drive (or use public transport connections to Charfield should it prove possible to viably provide these) 8.5km north eastwards away from Bristol, solely to connect with a railway service back into it. This would represent an illogical and inefficient journey, creating more road based trips. Future residents are considered far more likely to use a car (or Park and Ride, if a site is delivered on the A38 as envisaged by the JTS), contributing towards road based trips and reducing development sustainability.

2.1.16. In summary, it is considered that the significant benefit of existing infrastructure and services to and close to Long Ashton, including the true potential for rail provision (benefitting both existing and future residents) should be afforded greater weight in determining SDL selection.

2.1.17. Our reasoning is set out within the following sections in response to the JSP:PV.
3 VISION, CRITICAL ISSUES AND STRATEGIC PRIORITIES

3.1.1. The JSP:PV sets out the challenges of growth in the WoE area. It highlights that whilst the 2011 census shows that for WoE travel to work mode shares by walking and cycling are 14% and 5% respectively (compared to 11% and 3% nationally), along with 2% for rail (no figure is quoted for Bus, although the JTS outlines that fewer than 10% of workers living in Bristol commute to work by bus and 2% by rail. It continues that this is compared with 22% commuting by public transport in other English core cities). It is therefore highlighted that around two thirds of commuting journeys across the WoE are still undertaken by car. The JTS (Page 9) recognises the potential relationship between travel distances and modes of travel. Taken together, these are reasons why potential for mode shift and reduced commuting distances are so important in the development of the JSP:PV spatial strategy and should be afforded greater weight in site selection.
4 FORMULATING THE SPATIAL STRATEGY

4.1.1. Given that reducing both the number and the distance of car journeys is important to sustainable development, the spatial strategy does not clearly seem to reflect this in terms of site selection.

4.1.2. As a few examples, Buckover / Thornbury is at least 6 miles from the edge of Bristol and over 12 miles from the centre. Similarly, Charfield is c. 11 miles from the North Bristol Fringe (Aztec West) and c. 17 miles from its centre. Nailsea is approximately 10 miles from the centre of Bristol (but does benefit from an existing railway station). In contrast, Long Ashton is under 4 miles from the centre of Bristol, a comfortable cycling distance, supported by existing (and planned) high quality cycle routes into Bristol and reflected in the cycle to work mode share (2011 census) for the ward of Wraxall and Long Ashton (5.1%), compared to levels for Nailsea / Backwell (three wards and two wards respectively, 2.7% overall) or Charfield (1.8%).

4.1.3. Similarly, public transport mode share from Wraxall and Long Ashton also reflects its relative proximity to Bristol and its direct public transport connections, with travel to work mode share of 7.3% in 2011, exceeding levels for Nailsea and Backwell (6.6%), Thornbury (3.0%), Charfield (1.9%). These recorded levels were prior to public transport improvements through Long Ashton in recent years.

4.1.4. Furthermore, Wraxall and Long Ashton also record historically high levels of home working compared to these comparator areas. Overall, when all sustainable choices for commuting (including home working) are combined, Wraxall and Long Ashton Ward continues to historically show the greatest sustainable potential (with 27.0% commutes by non-car modes or home working, compared to 25.5% for Nailsea / Backwell, 23.2% for Thornbury and 18.9% to Charfield). Add this to the additional potential via rail (with a new station at Long Ashton benefitting from lower delivery / viability risks and costs than a new Metrobus route to either of Thornbury / Buckover or Nailsea / Backwell) and which would arise from the introduction of new local employment opportunities at Long Ashton (if it is allocated as an SDL), the available evidence on sustainable travel potential and impact is therefore clear. This case is particularly strong when coupled with potential differences in commuting distances from Long Ashton compared to other SDL locations favoured by the JSP:PV. These were presented by UoB in response to the EJSP and can be found at Appendix A. Long Ashton is simply better placed to minimise travel impacts and to maximise the sustainable travel choices that the JSP:PV is seeking to increase.

4.1.5. There is a rather circular definition of the SDLs within the JSP:PV document, with it stating that these are locations capable of delivering 500+ dwellings over the plan period in locations which support the spatial strategy. Since the spatial strategy in relation to the SDLs, set out in Policy 4 ‘The spatial strategy’, simply lists the locations for this development (rather than setting out the characteristics, requirements or rationale for their inclusion or why they are considered sustainable development locations), their inclusion in the policy is what the JSP:PV is suggesting makes them SDLs, rather than by virtue of inherent sustainability credentials. These preferred strategic development locations therefore seem to be somewhat arbitrarily self-defined by the WoE authorities, rather than justifiably for inclusion.

4.1.6. In its identified ‘critical issues’ and ‘strategic priorities’ the JSP:PV states that the spatial strategy focuses on the 3 main centres. The JSP:PV also outlines that key future significant generators of trips (places residents will want to travel to) are anticipated to be central Bristol, parts of the Bristol North Fringe, central Bath / Bath Regeneration Zone and Weston-Super-Mare. It goes on later to list anticipated future employment locations in more detail (see later). As outlined above, however, it is considered that after ‘urban intensification’ and ‘urban living’ development, the selection of SDLs does not reflect this key principle as well as it could if all the selected SDLs had the best possible functional connectivity to and sustainable travel potential with the urban areas (particularly Bristol) and the employment growth areas (mainly in Bristol).

4.1.7. As noted previously, the JSP:PV highlights the need to avoid unsustainable expansion of the north and east fringes of Bristol, beyond existing commitments, and to rebalance economic growth. The latter is understood to largely relate to increasing employment opportunities to the south of Bristol, helping to rebalance the current concentration of opportunities (outside the centre and its associated Temple Quarter Enterprise Zone) to the north and east of Bristol. Fenswood Farm is well placed to assist in rebalancing employment growth towards south / west Bristol, well connected to South Bristol via the South Bristol Link (including MetroBus and cycling infrastructure).
5 DEMONSTRATING FLEXIBILITY AND CONTINGENCY

5.1.1. The JSP:PV also states that there is a contingency of 3,000 dwellings now identified and locations for these. The choice of these sites and locations are not, however, clearly justified in terms of being well provided for in terms of the JTS or as being sustainable locations, or importantly, as being deliverable as an alternative to the identified SDLs if they do not come forward. Clevedon, for example, currently has none of the locational advantages of Long Ashton and appears to be reliant on an extension of the Nailsea / Backwell SDLs MetroBus corridor. Similarly, Chipping Sodbury would be reliant on extension of the proposed Yate MetroBus corridor. If housing contingency sites are needed due to failure to deliver one of the sites closer to Bristol on these corridors (or to deliver their associated sustainable transport infrastructure) then it is unclear how the contingency itself would be deliverable and solve the problem of under delivery. Instead, it seems more logical to presume that contingency at Clevedon could only be served after Nailsea / Backwell and its associated corridors and transport improvements have been delivered. Therefore, there is a reasonable risk that identified contingency sites represent extensions of an already failing spatial strategy that they are intended to address, rather than being genuine alternatives which are deliverable if the initial strategy cannot be delivered quickly enough. This is not considered to be sound.
6 MITIGATIONS AND INFRASTRUCTURE REQUIRED TO SUPPORT THE SPATIAL STRATEGY

6.1.1. In respect of Paragraph 20, the costs and complexities of delivery of the JTS to enable the JSP:PV to represent sustainable development are significant. Therefore, sites which can be delivered earlier within the plan period and with fewer, less costly and lower risk pre-requisites should be prioritised to enable and accelerate sustainable delivery of needed housing and employment opportunities.

6.1.2. Whilst Fenswood Farm is close to some congestion hotspots identified by the JTS, this is also the case for many of the other allocations, given the extent of the challenge the West of England faces, particularly due to lower levels of existing public transport usage than other core cities. There is no reason to believe that Fenswood Farm would exacerbate problems any more than sites further out on the various identified future sustainable transport corridors from Bristol. Instead it would offer greater opportunity for sustainable travel choices by existing and future residents of Long Ashton and future employees, partly by virtue of shorter journey distances to key destinations and partly due to access to key existing and committed cycle and public transport infrastructure schemes and a new railway station.

6.1.3. Paragraph 26 states that: “Transport investment can be a major influence on where development is located and how to create high quality places in which people want to live and work.” Proximity to already committed schemes and connections, as well as investment in a new railway station for Long Ashton makes Fenswood Farm an important site for creating a high quality place, attractive to developers.

6.1.4. Development of Fenswood Farm would support the objectives of Paragraph 27 by integrating housing and employment development with investment in reliable, high quality transport choices, helping to reduce the length and number of journeys to work and to other services and facilities. It is considered that this would be one key benefit of the Fenswood Farm site over other allocations.

6.1.5. Fenswood Farm is a comfortable walking or cycling distance to a wide range of day to day services, facilities and destinations within and close to Long Ashton, including convenience shopping, education, healthcare and community uses. Sustainable transport usage could further be improved by the co-location of residential, employment and ancillary uses within the site. Walking to and from Long Ashton would be encouraged by a site layout offering genuine ‘filtered permeability’ and greater ease of access to the village on foot and by bicycle via existing and upgraded railway crossings, than by private car. In turn, existing Long Ashton residents would be encouraged to travel to the new railway station on foot and by cycle as this would be the quickest, most pleasant and most cost effective means to get there. This strategy will also protect local streets from additional traffic, whilst still providing good connectivity to Long Ashton’s services and facilities.

6.1.6. In summary, in terms of both potential trip generation, journey length and by maximising opportunities to choose sustainable modes of travel, Fenswood Farm is well placed (indeed better placed than many of the selected SDLs typically more remote from key journey destinations) to ensure early availability and delivery of high quality transport choices and reduced reliance on car based journeys.

6.1.7. Fenswood Farm complies with Paragraph 28 in that it maximises the effectiveness of sustainable travel, whilst minimising non-car mode travel and associated mitigation measures.
7 ENCOURAGING SUSTAINABLE TRAVEL CHOICES ACROSS THE PLAN AREA

7.1.1. The JSP:PV sets out how it envisages that sustainable travel choices will be encouraged.

7.1.2. Fenswood Farm can support and encourage real mode shift to all of the modes identified in Paragraphs 29-33, including Bus Rapid Transit, Park and Ride, conventional bus services, rail, walking and cycling, from the outset or relatively quickly, via:

- Already existing or committed infrastructure, such as committed cycle connections via the Festival Way, South Bristol Link and the Long Ashton to Temple Meads MetroBus corridor to the centre of Bristol (and Temple Quarter Enterprise Zone). In the meantime, a National Cycle Network link (33, Festival Way) from Long Ashton to central Bristol already exists, as does an alternative flatter route (requiring cyclists to use a short stretch of the A369 which might reasonably be improved to support this). Similarly, there are already public transport services to Bristol from Long Ashton which have been improved in recent years to provide combined service of 4 per hour to and from central Bristol, as well as the nearby Long Ashton Park and Ride site minimising the distance of any residual trips towards Bristol and providing additional connections to major and minor employers in Clifton, Redland and Southmead; and
- Relatively low risk, cost effective and localised public transport improvements are possible, to the benefit of existing and future Long Ashton residents, such as a new railway station and short (and therefore likely more viable) public transport extensions.

7.1.3. This cannot be said for many of the other SDLs which the WoE authorities have favoured over Fenswood Farm.
8 POLICY FRAMEWORK

8.1.1. The JSP:PV sets out policies to respond to challenges and issues facing the WoE area.

8.1.2. Paragraph 6 says that this spatial strategy “promotes a pattern of development across both HMAs which most appropriately delivers the Plan’s Vision and Strategic Priorities. In particular, it seeks to meet the need for new homes and economic growth supported by the necessary infrastructure.”

8.1.3. As outlined previously we do not believe this to be the case. There are lower impact, higher potential, more deliverable sites such as Fenswood Farm which have been overlooked. Fenswood Farm would deliver better on the strategic priorities and desired outcomes of the JSP:PV than many of the sites identified as proposed SDLs in Policy 2.

8.1.4. Paragraph 8 reiterates that a principal element of strategy is to maximise development opportunities in urban areas. Explaining the rationale for this, it says that this “helps to ensure new development is well related to facilities and benefits from existing infrastructure”. By simply categorising all development as either urban or otherwise and by not systematically comparing how much benefit new sites can derive from existing infrastructure or straightforward extension to existing infrastructure or services, when undertaking site selection and developing the strategy, the JSP:PV fails to best respond to these principles which it believes should underpin its strategy. The benefit of Fenswood Farm, closer to the urban fringe than many of the SDLs and benefiting from existing (or already committed) infrastructure for development has been overlooked.

8.1.5. The JSP:PV states that the Strategic Development Locations Template sets out how SDLs were identified. However, upon reviewing this document it becomes clear that there is no systematic consideration or sifting of alternative sites or scenarios presented or underpinning justification for the spatial strategy presented in the JSP:PV. Instead the document just provides some further limited information regarding the rationale for the sites that have been selected and included, with no consideration at all of alternative or better strategies or reasons for the exclusion of alternative sites. Following the EJSP consultation there is no evidence that there has been any further consideration of SDL selection during 2017. This is not considered to be sound as new evidence, such as that on travel distances presented in representations in relation to Fenswood Farm to the EJSP, should have been considered in further development and justification of the strategy. Furthermore, even prior to the EJSP alternative sites should have been given full consideration and this should be available to those reviewing the current JSP:PV.

8.1.6. Paragraph 10 says that a range of spatial approaches were considered and that following this, the current strategy “focusses developments at locations: well related to existing urban areas, which are served by existing sustainable transport routes; or those with the potential to be sustainable as a result of the type or form of development proposed. This reduces the need for travel to facilities and employment and where travel is needed to do so more sustainably.” (our emphases).

8.1.7. Again, we do not believe that the strategy chosen by the JSP:PV does do this, as Fenswood Farm is undeniably better related to one of the main existing urban areas and better serviced by existing transport routes and with greater potential to be served by additions to these existing routes than many of the selected SDLs. The fact that Fenswood Farm has been excluded with no clear justification or understandable rationale means that the selected strategy cannot achieve what it says in the best way possible within the development opportunities across the area. As noted previously, the potential for extensive corridor improvements appears to have been treated equally to accessibility to existing transport services. In addition, complex and costly public transport and park and ride improvements appear to have been rated as equal to access to existing services or shorter corridor improvements. Otherwise, growth at locations such as Thornbury and Buckover, for which current public transport mode share is very low (serving as one proxy for the quality and attractiveness of existing services, compared to Fenswood Farm) would not be included in the strategy when Fenswood Farm has been excluded. Thornbury and Buckover have poorer existing public transport services and cycle connections to Bristol (in terms of both distance and infrastructure/services) and they benefit from no existing park and ride site on the A38 approach nor current (or future) rail provision within the JSP period. Therefore it is impossible to accept that the spatial strategy has been developed in the way in which Paragraph 10 states it has because Fenswood Farm has been excluded and these sites included.

8.1.8. Overall, in relation to both selection of the SDLs and the contingency sites we do not consider the strategy to provide a robust supply of deliverable land, nor a choice of locations and flexibility to respond to changing circumstances, as stated by Paragraph 14.
8.1.9. Given the importance of the strategic priority of maximising opportunities for affordable housing for and well related to Bristol (Policy 3 and Paragraph 20), it is also considered that sites better related to Bristol, such as Fenswood Farm, should be prioritised.

8.1.10. Policy 4: outlines the employment land requirement underpinning the JSP:PV. It states that the JSP “seeks to enable access to employment opportunities for all through the spatial distribution of development”. Sites offering low cost, effective, active travel opportunities (for residents and employees), which have lower barriers to access and use, are considered better able to do this in an equitable way than sites further from Bristol, Bath and Weston-super-Mare and their key strategic employment locations (Bristol City Centre, Bath City Centre, Weston-super-Mare town zone, Temple Quarter Enterprise Zone, Avonmouth / Severnside Enterprise Area, Filton Enterprise Area, Emersons Green Enterprise Area, Bath Riverside Enterprise Zone, Somer Valley Enterprise Zone, J21 Enterprise Area, and key strategic infrastructure employment locations such as Bristol Port, Airport and Oldbury Power Station, within which Paragraph 26 says employment growth will be focussed). Fenswood Farm is therefore well placed to contribute, particularly in light of Paragraph 28 which states that opportunities for new employment land in South Bristol are constrained.

8.1.11. At a strategic level, there is good potential for regular rail services from a new station at Long Ashton, building on existing MetroWest proposals, providing good opportunities for through services (and onward connections) to a wide range of the key strategic employment locations listed by the JSP:PV. As set out in MDS’s ‘The Case for Long Ashton Staton’, there is real potential for sustainable connections / services to the centre of Bristol and Temple Quarter Enterprise Zone (via Bristol Temple Meads), Weston-Super-Mare, major employers to the North Fringe of Bristol (such as MOD via Filton Abbey Wood, Rolls Royce via Patchway, Friends life and UWE via Parkway station), in addition to other employers to north and south Bristol through onward rail or Metrobus connections from these stations. These include on the original Metrobus route to Cribbs Causeway, on the Metrobus spur to the Emersons Green Enterprise Area and on the Patchway to Cribbs Causeway Metrobus Extension (CPME) from Parkway Station (connecting to Aztec West and existing and future business areas at Filton). Whilst interchange may deter some such journeys, it is undeniable that the choice and range of employment destinations (and in turn residential areas) that could be reached without a private car from (and to) Long Ashton is impressive. When compared to more peripheral sites such as Thornbury and Buckover or Charfield, it is difficult to see how they provide anywhere near the same locational advantages. In addition to the above, existing regular Park and Ride services from Long Ashton Park and Ride also connect to other major Bristol employers and services, including the University of Bristol and Southmead Hospital.

8.1.12. Funding is already in place (and construction underway) for all of the Metrobus services to/from Long Ashton Park and Ride. This means that they would be available and accessible to future residents of Fenswood Farm (and existing residents of Long Ashton) well before the infrastructure funding can be secured and delivered for other potential SDLs, such as Thornbury or Buckover.

8.1.13. Recognising that people do not necessarily live close to where they work and do not typically move house as often as they change jobs, development at Long Ashton opens up the opportunity for future residents and employees at the site to really benefit from sustainable access to and from a wide range of areas, importantly including South Bristol.

8.1.14. In relation to Policy 5’s ‘Place Shaping Principals’, Fenswood Farm can contribute well to the following:

- Character and improved accessibility (Point 1) and connection to sustainable transport networks (Paragraph 34). A new railway station and provision from existing and future public transport and MetroBus services would achieve improved accessibility at Fenswood Farm and for adjacent Long Ashton residents.
- Improving health and wellbeing (Point 2) by capitalising on utility and leisure walking and cycling opportunities, the site can impact on behaviour and encourage physical activity (in accordance with Paragraph 35). This will help to reduce obesity and contribute towards physical and mental health, reducing health service provider costs. Fenswood Farm, would support this aim well. Design principles such as filtered permeability between the site and Long Ashton village centre will assist in encouraging walking and cycling.
- Minimise energy demand (Point 6) and usage by households through reduced need to travel, lower car ownership requirements, shorter journey distances (as demonstrated in representations to the EJSP) and thereby lower energy demand for transport services.
- Provide and ensure access to infrastructure including public transport which reduces reliance on private cars (Point 7). Fenswood Farm benefits from proximity to existing and committed public transport services and over the longer term can provide for access to proposed MetroBus corridor to Nailsea / Backwell.
- Maintain and enhance the green infrastructure network (Point 8.). A number of public rights of way run through Fenswood Farm, such as Monarch Way. Routes through the site can be maintained and enhanced as part of redevelopment.

8.1.15. The above summary outlines how Fenswood Farm can meet and support these principles, in a number of cases better than selected SDLs. In accordance with Policy 5, it therefore follows that it should rightfully be selected as an SDL.

8.1.16. We have concerns about the soundness of Policy 6, given that it states that the infrastructure identified on the key diagram and in the WoE Joint Infrastructure Delivery Plan will be delivered within the period 2016-2036. According to the JTS this will require £8.9 billion investment, which as outlined previously has not yet been secured. Nor has deliverability of many of the schemes been proven.

8.1.17. In relation to Paragraph 52 and Policy 6, which are related, we believe that there should be a hierarchy of site suitability applied, rather than existing and potential infrastructure being treated equally, as follows:

- Reduced need to travel (in terms of length and need to travel by car) should be rated most highly. We have outlined how Fenswood Farm can do this.
- Access to existing infrastructure should next be rated most highly (over potential future infrastructure) as deliverability is certain in supporting mode shift. The range and types of infrastructure and travel choices and their quality are also important.
- Access to committed infrastructure and services should come next, as the certainty and likelihood of these schemes being delivered is significantly higher than for those not yet firmly committed. Therefore proximity to MetroBus routes already under construction should be considered as a greater benefit than potential new MetroBus corridors.
- Finally, the ease, certainty and cost effectiveness (as well as timescales within which) new sustainable travel infrastructure can be delivered and how commercially viable it will be after delivery is then important, with easier to deliver routes (shorter and lower risk) taking priority over longer routes for which there are viability concerns or other deliverability or funding questions.

8.1.18. In addition to its sustainable location, Fenswood Farm could also relatively easily be served by a new railway station (no new track infrastructure and identified scheduling potential to accommodate calls here) and extensions to conventional and/or MetroBus services. According to MDS’s report ‘The Case for Long Ashton Station’ the new railway station would have a good prospect of a baseline service of 2 trains per hour through to North Bristol being achievable (and possibly additional service extensions or calls) and could offer a high Cost Benefit Ratio, thereby suggesting a high level of likelihood of deliverability and ranking highly under a hierarchical approach suggested above. Coupled with access to existing and committed cycling, Park and Ride and BRT infrastructure Fenswood Farm would fare very well.

8.1.19. Reduced delivery requirements (and costs) for additional infrastructure will equate to lower delivery risk (and indeed less chance that a business case cannot be made or subsequently funding cannot be secured to support the infrastructure proposed).

8.1.20. The JSP:PV and JTS seem to treat all sites that might ‘potentially’ be made sustainable in transport terms equally, ignoring the overall possible impact on the delivery programme of needing to justify, secure funding for and deliver so many schemes in parallel in order to deliver the envisaged housing growth.

8.1.21. We believe that some SDLs which can be provided more easily and can become more sustainable earlier in the JSP:PV period to 2036 should be given greater weight in site selection than those with greater risk. Unfortunately, as outlined previously the contingency sites instead suggest an extension or ‘further delivery’ in the case of a failing strategy (e.g. they require other SDLs and their infrastructure to have already been delivered), rather than a genuine alternative with lower delivery risk. We consider this unsound particularly where there is no overall and clear delivery programme for each and every item of the infrastructure proposed to underpin the JSP:PV.

8.1.22. We believe that some sites (such as growth of Thornbury or delivery of Buckover Garden Village) pose the greatest risks in terms of delivering sustainable access within the JSP timeframe, due to the lack of current sustainable transport infrastructure. Both rely primarily on traditional road based transport infrastructure, which is already under pressure, for all journeys into the Bristol area (and/or beyond the immediate settlement of Thornbury). Indeed, according to the JSP:PV Buckover Garden Village requires local and strategic cycle route improvements to Thornbury, bus service improvements (including shuttle bus to Thornbury), as well as strategic improvements such as Charfield Station reopening, Metrobus extension (with no currently detailed or
advanced plans for this), priority provision of strategic cycle route to the Bristol urban area, M5 J14 improvements, a new A38 Park and Ride site and other local highway improvements as necessary. Other schemes may also be required and even following this investment, the chance of success in achieving favourable sustainable travel mode shares is likely to still remain lower than for Fenswood Farm.

8.1.23. The length of road based public transport (BRT) infrastructure required to connect to the urban area is significant and is unlikely to make use of the most direct route into the centre of Bristol (the A38) due to space availability (the JSPs preferred route is therefore via the MetroBus route already committed from Aztec West to the Centre, which would be less direct than a route via the A38 which the JSP concludes would need underground running).

8.1.24. It is clear this list is much longer and poses much greater delivery risk than proposals to support sustainable travel to and from Fenswood Farm. In contrast, Fenswood Farm already enables easy access to an existing high quality national cycle network route into central Bristol (Festival Way), already benefits from improved public transport services into central Bristol via the village and is relatively much closer to existing Metrobus provision and an existing Park and Ride site. This would reduce travel distances, reduce car reliance and enable greater and more cost effective prospects for extension of existing services in the short term. Similarly, extending Metrobus routes to Fenswood Farm would be relatively straightforward in terms of distance and cost. Indeed, the JTS and JSP:PV already propose a Metrobus route right past the site (to Nailsea and Backwell) and able to serve it via the A370. Development here would therefore support the business case / patronage for such a future service and potentially offers opportunities for earlier initial extension of Metrobus as far as this site, along with longer term provision via the A370.

8.1.25. Fenswood Farm furthermore offers relatively straightforward opportunities to secure early rail accessibility, when the JTS considers rail provision unlikely to Thornbury / Buckover Garden Village during the JSP:PV period, due to historic development on the former rail line into the town. Instead the JTS suggests connection to Charfield Railway Station, but in reality this station would be further from Bristol than Thornbury / Buckover themselves and therefore unlikely to represent a viable and attractive route into the Centre of Bristol for future residents of Thornbury or Buckover, even if a station is reopened.

8.1.26. In relation to Policy 7, Paragraph 63 states that twelve SDLs have been identified which are “consistent with the sustainable development objectives of the plan but also represent a variety of different areas and forms of development which will provide flexibility and choice over the plan period.”

8.1.27. For the various reasons already outlined we do not believe this to be the case and instead believe the approach and strategy presented increases delivery risks as many sites face potentially similar deliverability issues.
9 DELIVERY AND IMPLEMENTATION

9.1.1. Paragraph 4 recognises the ambition of the delivery timescales. A lot of work (and funding) is required to bring forward the SDLs which form a notable part of the housing delivery strategy. There are also a number of delivery risks affecting many of schemes to support the SDLs and there is a real risk that the delivery principles will be watered down or delivery of sites will be delayed, impacting achievement of housing totals required by 2036. The inclusion of more sites with less complex delivery pre-requisites and lower risks would surely be preferable than relying largely on sites with lower ultimate sustainability potential and higher overall delivery or delay risk. We believe that if WoE really wish to deliver on the principles of sustainable development which the JSP:PV refers to then Fenswood Farm should be genuinely reconsidered and included as part of the final strategy. Otherwise, there is a risk of potentially significant under-delivery on required housing totals and/or a risk that sites come about without the infrastructure which has underpinned the justification for their inclusion within the JSP:PV in the first place. This is not considered a robust approach when better alternative sites exist.

9.1.2. Whilst the establishment of WECA may increase funding prospects and certainty for some schemes, the JSP:PV states that WECA funds total £900 million over 30 years (£30 million per annum), equivalent to £60 million over a 20 year plan period, to support priority infrastructure schemes as well as those to support the JSP development locations. It is clear that this is significantly less than the £8.9 billion suggested as required by the JTS (already rising according to recent reporting of work to consider rapid transit feasibility), representing a huge shortfall at the outset. Whilst other funding sources will be explored and come forward (including developer funding) it is considered that the shortfall is significant enough to risk it not being met, thereby only serving to highlight again how it would be prudent to reconsider other sites with better deliverability potential. We believe that Fenswood Farm should be included in the final strategy.
10 SUMMARY AND CONCLUSIONS

10.1.1. The key issues drawn from the JSP:PV and JTS can be summarised as follows:

- Not enough weight is given to the potential for sustainable mode share and reduced commuting distances;
- There is need to reduce both the number and distance of car driver journeys to achieve sustainable development, but the latter is poorly reflected in the strategy;
- The selected SDLs do not reflect the key principles in terms of favouring the most attractive sites in terms of sustainable travel potential;
- The strategy for selecting SDLs is not robustly outlined and does not sufficiently favour highly deliverable sites;
- No justification is provided to show whether the newly identified contingency sites are well located in terms of the JTS or meet the JSP:PV objectives. They appear somewhat marginal and like an extension of what would presumably be a ‘failing’ strategy if the contingency sites were called upon, rather than representing genuine alternative options able to appropriately and effectively address any under delivery;
- There is a lack of information within the JSP:PV (or the JTS) regarding the anticipated delivery timescales, funding and delivery of all of the various infrastructure which is identified as necessary to successfully deliver the spatial strategy. Individually and in combination there are high levels of risk associated with delivery, not least in view of the estimated £8.9 billion total cost forecast (rising);
- By categorising all development as either urban or otherwise, and by not systematically comparing how much benefit new sites can derive from existing infrastructure or straightforward extension to existing infrastructure or services, when undertaking site selection and developing the strategy, the JSP:PV fails to best respond to the principles of sustainable development which it claims are its ‘strategic priorities’ and should underpin its strategy;
- Overall the site selection process has been very opaque and there is no evidence that it has been revisited since the EJSP was consulted upon;
- No justification is provided as to why the Fenswood Farm site has been excluded from the SDL site selection process;
- No hierarchy of site suitability is applied in respect of potential infrastructure. Instead existing and potential infrastructure is treated equally;
- Consideration has not been given to viability, deliverability and risk when selecting sites (i.e. risks associated with delivery of transport packages identified by the JTS); and
- Overall, the selected SDL package is insufficiently sustainable to address the challenges facing the WoE area as identified by the JTS. The JTS suggests ambitious mode share targets to enable new development without any increase in existing traffic levels across the wider area. This appears to imply that existing levels of traffic and congestion across the WoE area are acceptable. The pressures faced in the area are already great. If the selection of SDLs genuinely maximised sustainability potential, through selection of more sustainable sites such as Fenswood Farm, rather than proposing a dispersed and inherently unsustainable approach to accommodating future growth (likely to notably increase and disperse trip origins and destinations, leading to increased rather than reduced car dependency) then the outcomes for the WoE area would be better.

10.1.2. Taking the above points into consideration, we believe that Fenswood Farm is better placed to meet the JSP:PV’s strategic priorities in terms of transport, accessibility and sustainability than a number of other SDLs.

10.1.3. In summary, allocation of Fenswood Farm would reduce the risk of either under-delivery of housing (and indeed affordable housing where it is most needed) or of unsustainable development being permitted without the necessary supporting infrastructure to enable sustainable development. In terms of SDLs, development of Fenswood Farm would:

- Maximise opportunities for travel reduction (in terms of number and length of trips);
  - Proximity to Bristol to increase the opportunity for shorter length trips to key destinations;
  - Proximity to Long Ashton, offering a full range of services and facilities;
  - High levels of potential for active travel for utility and leisure trips, supporting health and wellbeing.
- Reduce infrastructure, service requirements and funding necessary to offer real travel choice for journeys that cannot be avoided, because it would maximise opportunities for sustainable travel, in terms of:
- Proximity and/or high potential for sustainable travel options to key existing and future employment locations;
- Proximity to existing sustainable travel networks (e.g. Festival Way);
- Proximity to committed sustainable travel provisions (MetroBus to Long Ashton, future MetroBus and cycle provisions via the new South Bristol Link);
- Proximity to existing public transport services (recently improved X1 and X9 services through Long Ashton and X2 and X8 services via Long Ashton Bypass);
- Better potential for short, cost effective (and therefore more likely to be commercially viable) public transport services or MetroBus extensions than SDLs further from Bristol;
- Genuine potential for future high levels of rail accessibility, via a new railway station at Long Ashton, without the need for new track infrastructure or line re-opening (as the site is already located adjacent to the existing south west main line);
- Existing high quality park and ride site nearby able to further reduce residual car trips, including trips destined to major employers in Bristol outside the employment growth areas (e.g. University of Bristol and Southmead Hospital).

10.1.4. It is one of the better potential locations for encouraging active travel (walking and cycling) in particular, as well as public transport usage, by making use of existing and already committed (and soon to be delivered) infrastructure rather than that which is instead subject to greater funding and delivery uncertainties. The site is also one of the SDLs most able to contribute towards the specific ‘critical issues’ the JSP:PV raises in relation to the Bristol urban area (greatest affordable housing need) and South Bristol (need to increase employment opportunities to the South of the city compared to historic concentrations to the north and east).

10.1.5. If the spatial strategy had been clearly and fully based upon an objective assessment and ranking of sites in relation to the degree (and ease / certainty) with which they can meet the JSP:PV’s stated ‘strategic priorities’ (in relation to sustainable access and accessibility), then we believe that this location would have been (and should be) favoured.

10.1.6. Fenswood Farm is well located for sustainable development and to form part of the final selection of SDLs and yet has continued to be overlooked by the WoE authorities. We request that this position is reconsidered in light of sustainable transport potential, along with its ability to contribute to the continued growth and prosperity of Bristol. We request that the Fenswood Farm site is incorporated into the final strategy.
Appendix A

COMMUTE DIFFERENCE

COMPARISON OF DIFFERENT SDLS
Appendix A:

Transport Transport Planning Associated (TPA) undertook an analysis of commute distances from different SDL locations to the south of Bristol, compared to Fenswood Farm, to inform its response on behalf of the University of Bristol to the Emerging West of England Joint Spatial Plan in 2017. TPA’s summary table is attached.

Based on the TPA analysis, Table 1 summarises the estimated total daily commute distance (Km) from each of the potential SDL settlement locations to the three main centres of Bristol, Bath and Weston-super-Mare (estimated from 2011 Census data). When weekly, monthly or annual estimated total commute distances from each settlement are considered, the differences increase and the relative sustainability of Long Ashton is even more apparent.

Table 1: Estimated Total Daily Commute Distance (Km)

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<tr>
<th>Location of Usual Residence</th>
<th>Distance Per Household Per Day (Km)</th>
<th>Estimated Distance Travelled to Work (Daily) to:</th>
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<tr>
<td>Long Ashton</td>
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<tr>
<td>Backwell</td>
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<td>Banwell</td>
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<td>14</td>
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<tr>
<td>Nailsea</td>
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<td>31</td>
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<th>No. Future Employees per Dwelling</th>
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<th>Percentage %</th>
<th>No. Future Employees</th>
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<td>10.7%</td>
<td>939</td>
</tr>
<tr>
<td>Weston</td>
<td>1.3%</td>
<td>13</td>
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<tr>
<td>Bath</td>
<td>1.3%</td>
<td>11</td>
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<th>Total People/One Way Trips</th>
<th>Distance to Place of Work (km)</th>
<th>Two Way Trips (Daily)</th>
<th>KM travelled (Daily) /w 14% Travel Discount</th>
<th>Distance per household (per day) Km</th>
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<td>2,719</td>
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<td>220</td>
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<tr>
<td>Bath</td>
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<td>106</td>
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<tr>
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<td><strong>370</strong></td>
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<td><strong>35</strong></td>
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### Banwell

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### Nailsea

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<th>Distance to Place of Work (km)</th>
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<th>Distance per household (per day) Km</th>
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<tr>
<td>Weston</td>
<td>259</td>
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<td>31</td>
<td>4,578</td>
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<tr>
<td>Bath</td>
<td>44</td>
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<tr>
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### Long Ashton

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<thead>
<tr>
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<th>Assumed Employment Rate Factor i.e. No. of employed people per dwelling</th>
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#### 2011 Census Journey to Work from Ward No.

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<td>1294</td>
</tr>
<tr>
<td>Weston</td>
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<tr>
<td>Bath</td>
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<tr>
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<td><strong>1600</strong></td>
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Appendix 5: WSP Transport Strategy
University of Bristol

FENSWOOD FARM TRANSPORT STRATEGY
University of Bristol

FENSWOOD FARM TRANSPORT STRATEGY

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 70039594
OUR REF. NO. FENSWOOD FARM

DATE: JANUARY 2018

WSP
Kings Orchard
1 Queen Street
Bristol
BS2 0HQ
Phone: +44 117 930 2000

WSP.com
# QUALITY CONTROL

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<tr>
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<td>10 January 2018</td>
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<td>Pete Evans</td>
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INTRODUCTION
1 INTRODUCTION

1.1 INTRODUCTION

1.1.1. This report has been prepared by WSP on behalf of University of Bristol (UoB) to set out a transport strategy to support promotion of land at Fenswood Farm for a strategic mixed-use development. The strategy builds on that previously prepared by TPA as part of previous representations in 2016 and 2017. To inform the evolving strategy, bespoke rail input has been provided by MDS Transmodal in relation to the potential to open a railway station at Fenswood Farm and to accommodate future train calls at the site as part of established routes already using this stretch of line or planned to do so following future timetable changes (anticipated December 2018). MDS additionally identify the possibility of additional calls on extended or existing cross country services. A separate supporting note by MDS considering rail capacity is included as part of this submission.

1.1.2. The ‘Publication Version’ of the West of England Authorities’ Joint Spatial Plan (JSP:PV), dated November 2017, did not include Fenswood Farm as an identified Strategic Development Location (SDL). We consider this to be a shortcoming given that Fenswood Farm has greater sustainability potential in transport and accessibility terms, as well as fewer and less significant delivery risks associated with access and sustainable access provisions.

1.1.3. This report sets out the reasons why the land at Fenswood Farm meets the objectives of sustainable development in transport and access terms and should be identified as part of a strategic location of growth. It is considered that the site should be identified for around 1,000 houses, 3ha employment use, community uses and education including a primary school. It is also considered at this stage that it could provide a rail station. The development would be expected to provide good opportunities for self-containment, as well as favourable mode shares and lower residual car travel distances compared to more remote and less well connected SDLs. It can also provide the opportunity to reduce current car trips originating in Long Ashton, which could transfer to rail.

1.1.4. The site benefits from being close to Bristol City Centre, a key employment location, only 4 miles (6.4km) from Fenswood Farm, making cycling and public transport travel to destinations such as the City Centre and Temple Quarter Enterprise Zone (as well as beyond) a genuine opportunity for new residents. In turn, residential areas to the west and south of Bristol are within comfortable cycle distances.

1.1.5. The site benefits from existing national and local cycle connections, as well as conventional and Park and Ride bus services in proximity. Added to this are firmly committed new cycle routes and MetroBus schemes planned to and from Long Ashton Park and Ride site and south Bristol, which will further improve sustainable travel choices in the short to medium term.

1.1.6. Overall, there is greater potential for sustainable commuting to and from Fenswood Farm as compared to a number of other SDLs, which are more remote from established employment areas and employment growth areas identified by the JSP:PV. This relates both to the potential to offer shorter commute distances (contributing significantly to potential sustainable mode share) and to the availability of key walking and cycling connections and public transport services. The total distance (mileage) of residual car based commuting trips can also be expected to be shorter in length overall and on average than for a number of other SDLs.

1.1.7. In addition to sustainable commuting potential, key day-to-day services and facilities are available within or close to Long Ashton, a comfortable walking or cycling distance from the site. These will be available to new residents of Fenswood Farm from the outset of development, with connections over the south west mainline via existing bridges, which already provide public rights of way or which have the potential to be reopened to ensure good functional integration of the site with Long Ashton on foot and by cycle. Added to these are opportunities for leisure cycling and walking from the site.

1.1.8. The site benefits from:
- Being next to a live railway line, with the potential to provide a new station with direct links to Bristol and the wider area;
- Being in close proximity to the centre of Bristol;
- Being in close proximity to the existing facilities at Long Ashton;
- Existing good bus services to Bristol;
- Existing good pedestrian and cycle connections to Bristol.
1.1.9. Initial contact was made with the West of England (WoEP), Bristol City Council (BCC), North Somerset Council (NSC), Great Western Railway (GWR) and Highway England (HE) in respect of Fenswood Farm, late 2016 by UoB’s consultants. Ongoing dialogue will be sought with the stakeholders in due course.

1.1.10. It is concluded that the Land at Fenswood Farm provides the opportunity to locate development which maximises the opportunity for sustainable travel including rail, and which provides the opportunity to minimise the length of car journeys associated with new growth.
2

BACKGROUND CONTEXT
2 BACKGROUND CONTEXT

2.1 INTRODUCTION
2.1.1. Fenswood Farm is considered to be well positioned given its proximity to a number of existing and proposed transport connections which are shown on Figure 2.1.

2.2 PLANNING BACKGROUND
2.2.1. A planning application for a similarly envisaged scheme was submitted in 2009, although this was subsequently withdrawn following the revocation of the South West Regional Spatial Strategy in which the site was allocated as part of a South West Bristol urban extension. The conceptual masterplan as previously submitted is included as Appendix A.

2.2.2. The West of England Authorities (Bath & North East Somerset Council, Bristol City Council, North Somerset Council and South Gloucestershire Council), have recently published a Joint Spatial Plan (JSP) and Joint Transport Study (JTS).

2.2.3. The purpose of both the JTS and JSP is to consider the long-term development needs in the West of England and to identify both the strategic locations for growth and the direction for the long-term development of the transport system to 2036 and beyond. It is understood that the JTS and JSP strategies are to fit hand-in-glove.

2.2.4. Long Ashton was identified within the JSP ‘Issues and options (I&O) for consultation’ report (November 2015) as an area for the possible strategic location of development.

2.2.5. The JSP:PV no longer contains the ‘Guiding Principles’ previously set out within the ‘Emerging Joint Spatial Plan’ (November 2016). Instead, the JSP:PV sets out a number of critical issues and some ‘Strategic Priorities’ for responding to these (reference Figure 3 of the JSP), along with the intended outcomes of following those priorities. In addition, the JTS (Figure 3-10) identifies its goals and associated objectives. These are set out in Chapter 4, with the Land at Fenswood Farm assessed against them.

2.2.6. It is envisaged that the development of Land at Fenswood Farm would assist in delivering on these ‘Strategic Priorities’ and their intended outcomes, including by:

- Reducing car dependency through the choice of sustainable travel options available and proximity to destinations;
- Improving public transport access to opportunities, jobs and services;
- Contributing towards mitigating the impacts of climate change (a reduction in the need to travel by car, maximisation of sustainable travel mode share and lower residual car travel distances would all contribute towards reductions in greenhouse emissions); and
- Improved health and wellbeing outcomes, including through proximity to (and promotion of) existing high quality active travel and leisure walking and cycling infrastructure connecting to key destinations.

2.2.7. UoB’s consultants previously initiated consultation with stakeholders including WoEP, BCC, NSC, Sustrans and HE. Highways England and the West of England Partnership responded confirming that Land at Fenswood Farm is in sensible place for development given its existing transport connections. Correspondence is included at Appendix B.

2.3 RAIL
2.3.1. The site is situated to the south of the Bristol to Penzance rail line. The site is approximately 3.75km to the west of Parson Street Railway Station and approximately 7.5km from Bristol Temple Meads. This is the closest strategic location for growth to the Bristol conurbation as identified in the JSP:PV that is adjacent to a railway line.

2.3.2. Great Western Railway (GWR) currently operates local and inter-city passenger services past the site linking Cardiff and Bristol with Weston-super-Mare and the South West. Cross Country trains also operate inter-regional passenger trains on this route.
2.3.3. In terms of local services, those operated by GWR are of most relevance to a new station at Long Ashton as it operates all-station and selected-station services between Bristol Temple Meads and Nailsea & Blackwell stations. Journey times between these two points range from 10-15 minutes along the 8-mile stretch of route. The latter services do not stop at Bedminster or Parson Street stations, which lie between Bristol Temple Meads and Long Ashton. Trains are typically formed of 2-car diesel multiple units (DMU).

2.3.4. In terms of footfall at adjacent stations, the latest statistics from the Office of Road & Rail (ORR) are shown in Chart 2.1 below. Growth from Parson Street station has been dramatic, (circa 7,700% compared to national rail growth of 300%), increasing estimated throughput by over 77 times compared to 1998 levels, most of this having been achieved over the last 10 years.

Chart 2.1 – Estimated station entries and exits, Parsons Street and Nailsea and Backwell

2.3.5. Network Rail’s current plans for the local rail network include third-party proposals for new stations at Portishead and Pill (5 miles to the north-west of the site), as part of the wider MetroWest phase 1 proposals for reinstating passenger services on the freight-only branch line.

2.3.6. In December 2017, the West of England LEP and the promoting authorities (Bath & North East Somerset, Bristol City, North Somerset, South Gloucestershire and the West of England Combined Authority) submitted a funding bid for MetroWest Phase 1 to the Department for Transport's Large Local Major Schemes programme. The proposals also make provision for a future additional station, subject to business case, at Ashton Gate (2 miles to the north-east of the site). The current MetroWest rail proposals Phase 1 and Phase 2 are summarised in Inserts 2.1 and 2.2 respectively.
Insert 2.1 – Current MetroWest Proposals Phase 1 (Source ‘A Case for Long Ashton Station’)

Insert 2.2 – Current MetroWest Proposals Phase 2 (Source ‘A Case for Long Ashton Station’)

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FENSWOOD FARM TRANSPORT STRATEGY
Project No.: 70039594 | Our Ref No.: FENSWOOD FARM
University of Bristol
2.4 BUS

2.4.1. Two existing bus services currently serve the village of Long Ashton, X1 and X9, providing connections with Bristol City Centre. In combination the X9 (Bristol-Nailsea) service and the X1 (Weston-super-Mare to Bristol) service. Each service runs at an approximately half hourly frequency Monday to Saturday and provides a combined frequency of approximately 4 buses per hour (at 10-20 minute frequencies) between Long Ashton and Bristol Bus Station.

2.4.2. There are a number of bus stops provided along the length of Weston Road and Long Ashton Road. The location of the bus stops and routes are shown on Figure 2.1.

2.4.3. There are existing footways connections between the site and these bus stops. There are also three footbridges which can provide connections to the stops located on Weston Road and Long Ashton Road, although one is currently not used.

2.4.4. These services provide a current journey time of approximately 15-20 minutes from the site to Bristol Bus Station.

2.4.5. In addition, two bus services currently run past the site along the Long Ashton Bypass, these are the X8 between Bristol Bus Station and Nailsea, which operates approximately every 30 minutes and the X2 service from Bristol Bus Station to Marine Parade, Weston-super-Mare, which runs at a frequency of approximately every 40 minutes.

2.4.6. The Long Ashton Park & Ride site is located around two kilometres to the north east of the site (via the A370). This provides 1,500 parking spaces and currently operates a bus frequency to the centre of Bristol every fifteen minutes between 6.15am and 20:30pm.

2.4.7. This site will soon be upgraded as part of the MetroBus scheme, so as to provide for Bus Rapid Transit. This will augment the existing operating service with a new service and a connection will be added via the Ashton Vale to Temple Meads (AVTM) Rapid Transit Line once complete.

2.4.8. In addition, the 505 service also operates from the Long Ashton Park and Ride site to Clifton, Redland and Southmead Hospital. Services depart from Long Ashton Park and Ride to Southmead Hospital from 6.05am until 20.20pm Monday to Friday and similar hours on Saturdays. The last return service from Southmead Hospital on weekdays arrives at the Park and Ride site at 20:50pm.

2.5 CYCLE

2.5.1. Existing local cycle routes within the vicinity of Land at Fenswood Farm and the surrounding area are considered to be extensive.

2.5.2. National Cycle Network Route 33, also known as Festival Way, is located to the north of the site, connecting with the Monarch Way (Public Right of Way) which crosses the railway line to the central north of the site. The route currently links Bristol, 6.5km to the east, with Nailsea 7.6km in the west. The approximate journey time along this route, from the site to the centre of Bristol, is 25 minutes.

2.5.3. National Cycle Network Route 334 also passes along the western boundary of the site, along Wild Country Lane and connects the site with Felton and Bristol airport (through connections to National Cycle Network Route 410).

2.5.4. The three existing footbridges that cross over the railway line are all approximately 4m wide and although one is currently closed, it is intended that all three of these could be upgraded as part of the development. It is considered that these would form ideal off-road north to south crossing points in principle for both pedestrians and cyclists. These bridge locations are shown on Figure 2.1, and would provide connections to existing services in Long Ashton.

2.5.5. Anecdotally, it is understood that some cyclists from Long Ashton use cycle provisions adjacent to the B3128 and A370, Blackmoor Lane and then the A369 between Blackmoor Lane to re-join NCN33 as a more direct route than cycling through the Ashton Park Estate. The developer would work with stakeholders to identify whether improvements could be made to this short stretch of the A369 to improve conditions and safety for cyclists who choose to do so. The provisions adjacent to the B3128 and A370 provide a connection from NCN33 to Ashton Park Secondary School.

2.5.6. Nonetheless, it is anticipated that wider cycle connections will be enhanced as all improvements associated with the BRT schemes to Long Ashton Park and Ride site (and south Bristol via the South Bristol Link) are
delivered. It is anticipated that a connection will be provided between the Festival Way and the cycle provision forming part of the South Bristol Link, in accordance with the transport assessment prepared to support the planning application for the South Bristol Link. This will connect to the proposed cycle connections adjacent to the Ashton Vale to Temple Meads BRT route and thereby provide a safer alternative to the route via Ashton Court Estate than the A369.

2.5.7. The West of England has made significant progress in improving options for travel by active modes, bus and rail. The JTS notes that there has been substantial growth in the numbers of trips made by cycling during the last decade with a 50% increase between 2008/09 and 2015/16. Fenswood Farm is much better positioned, compared to many of the SDLs to capitalise upon and contribute to continued success going forward.

2.6 WALKING

2.6.1. Footways and street lighting are currently provided on at least one side of Long Ashton Road within the vicinity of the site. There is no existing provision on Wild Country Lane in the vicinity of the site.

2.6.2. A public right of way (LA12 5/20) connects with the site at Wild Country Lane, and its route is parallel to the alignment of the railway line before linking with Monarchs Way and the A38 in the south.

2.6.3. It is intended that the development would provide pedestrian connections between the site and Long Ashton utilising the existing footbridges.

2.7 ACCESSIBILITY

2.7.1. An assessment has been undertaken of the distance from the centre of the potential development to key day-to-day services and destinations by walking and cycling. These are summarised in Table 2.1.

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### Table 2.1 – Facilities within comfortable walking distance of the centre of the site

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Closest Facility to site</th>
<th>Approx. Distance (Metres)</th>
<th>Approx. Travel time by foot (80 Metres/Minute[1])</th>
<th>Approx. Travel time by cycle (320 Metres/Minute[2])</th>
<th>Desirable (Metres) [1]</th>
<th>Acceptable (Metres) [1]</th>
<th>Preferred Maximum (Metres) [1]</th>
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</thead>
<tbody>
<tr>
<td>Village centre</td>
<td>Long Ashton</td>
<td>1000</td>
<td>13 mins</td>
<td>3 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Convenience Store</td>
<td>The Co-operative Food</td>
<td>1000</td>
<td>13 mins</td>
<td>3 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Restaurant</td>
<td>Bird in Hand</td>
<td>1200</td>
<td>15 mins</td>
<td>4 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>GP</td>
<td>Long Ashton Doctors Surgery</td>
<td>1150</td>
<td>15 mins</td>
<td>5 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Cohens Chemist</td>
<td>1150</td>
<td>15 mins</td>
<td>5 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Post Office</td>
<td>Long Ashton Post Office</td>
<td>1150</td>
<td>15 mins</td>
<td>5 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
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<td>Community Centre</td>
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<td>15 mins</td>
<td>5 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Library</td>
<td>Long Ashton Library</td>
<td>950</td>
<td>12 mins</td>
<td>3 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Nursery</td>
<td>Apple Tree Daycare Nursery</td>
<td>1100</td>
<td>14 mins</td>
<td>3 mins</td>
<td>400</td>
<td>800</td>
<td>1200</td>
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<td>Primary School</td>
<td>Birdwell Primary School</td>
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<td>9 mins</td>
<td>2 mins</td>
<td>500</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Local Employment Location</td>
<td>Space near Pulse Community Healthcare</td>
<td>1100</td>
<td>14 mins</td>
<td>3 mins</td>
<td>500</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Railway Station</td>
<td>Proposed Long Ashton Station</td>
<td>650</td>
<td>8 mins</td>
<td>2 mins</td>
<td>800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


2.7.2. A full range of day-to-day facilities and amenities are available within comfortable walking or cycling distances of the site. These include personal business, healthcare, convenience shopping and community facilities, as well as primary education and younger years’ childcare. The only day-to-day destination that cannot be
reached comfortably on foot is Ashton Park secondary school (approximately 4.2km from the site), within a comfortable 15 minute cycle of the site. It is also intended to provide facilities within the site, although these will be local facilities and limited in nature to avoid any competition with existing provisions within Long Ashton village.

2.7.3. Cycle times to key strategic employment locations within Bristol have also been considered. Bristol City Centre and Temple Meads Enterprise Zone are approximately 7.2km and 8km from the centre of the site respectively. Each falls within around a 25 minute cycle from the centre of the site. Once proposed connections between the Festival Way and South Bristol Link are available and the South Bristol Link is connected to Long Ashton Park and Ride site, cycle time to the Long Ashton Park and Ride site will be reduced to around a 15 minute cycle from the centre of the site (4.7km). There are also alternative opportunities for establishing a connection to the south of the B3128, linking the Park and Ride site to the Festival Way for example, which may be explored in association with the proposed development, benefitting both future and current residents of Long Ashton. The centre of the site would then be around a 4km cycle away (approximately 13 minutes).

2.7.4. Whilst existing ‘Fenswood Road’ bus stops on Weston Road fall just beyond a preferred desirable maximum walking distance to a bus stop of around 800m, the services through Long Ashton Village are considered to be of a good level of service frequency (4 per hour) and would therefore offer the potential for attracting trips from the site given the stops will fall around an 11 minute walk from the centre of the site. These stops and services would be available to the very first residents at Fenswood Farm, prior to any critical mass of occupations being required to justify services through the site. With the development, operators may also consider enhancing the service frequency further. They would also be close enough to provide supplementary and alternative provision. Nonetheless, in line with the public transport strategy it is proposed that stops will be provided within the site, within 400m of 90% of dwellings (see Section 3.3).

2.8 ROAD

2.8.1. The South Bristol Link (SBL) is both a new link road and part of an express MetroBus route for travel between the A370 Long Ashton bypass and Hengrove Park. This is shown on Figure 2.1. The route opened to general traffic in January 2017, although MetroBus routes are planned for a later date following commencement of the Temple Meads to Ashton Vale services. There is a connection solely for MetroBuses proposed from the Park and Ride site to the SBL, alongside which cycle provision is proposed.

2.8.2. The JSP ‘Issues and options for consultation’ report identified traffic ‘hot points’ close to land at Fenswood Farm at the following locations, as shown on Figure 2.1:

- Barrow Street and A370 interchange;
- Brunel Way (Cumberland Basin); and
- Bridgewater Road / Bedminster Road.

2.8.3. In accordance with the expectation that the SBL would help reduce local traffic pressures, WSP has purchased automatic traffic count data for the A370 (in the vicinity of Wild Country Lane) from North Somerset Council for the period November 2016 to November 2017 inclusive. Analysis of the data shows a reduction in the volumes of traffic (daily average flows), on both the A370 eastbound and westbound.

2.8.4. Initial trip generation estimates for future residents and employment development at Fenswood Farm have been identified via TRICS. Whilst it is expected that these trips will be achieved (or even further reduced) based on active travel planning and the excellent connectivity of the site to sustainable transport routes, it has been assumed that approximately two thirds (as per existing flows on the A370) would exit the site eastbound in the AM peak and one third exit westbound (and visa-versa for arrivals and in turn in the PM Peak). Additional trips (175 two way) have been added in each peak hour to allow for future use of the proposed railway station and associated car parking proposed at Fenswood Farm, again overestimating potential trips within this initial analysis. Allowing for traffic growth to 2026, the operation of several different site access options have been modelled (three roundabout and one signal option(s)) and this initial assessment suggests that any of these designs would work with sufficient spare capacity in 2026. The base traffic flows on the A370 used for the initial modelling assessment were based on flows taken from modelling for the SBL and therefore do not reflect any traffic reductions observed since January 2017. Our assessment is therefore considered to be robust and demonstrates the flexibility available in agreeing an appropriate access junction with the relevant authorities in association with any future planning application. Further detail is provided in Section 3.2.
2.8.5. In bringing forward a development at Fenswood Farm, the intention would be to work collaboratively with NSC, BCC and HE, as well as other relevant stakeholders to agree any direct mitigation that is required on the local highway network. The location of the site alongside the western side of the A370 offers significant flexibility in providing an appropriate access junction (roundabout or signals) to accommodate and manage residual trip generation to and from the site and to meet other objectives of the strategy where necessary.

2.9 LOCAL CHARACTERISTICS

2.9.1. It is considered that the site is:

- well located in terms of its proximity to the centre of Bristol;
- within close proximity to the existing facilities at Long Ashton;
- within close proximity of existing good bus connections to Bristol;
- within close proximity of good pedestrian and cycle connections to Bristol;
- well located for future rail travel; and
- will minimise the length of journeys to key services and employment opportunities within Bristol.
3 ACCESS STRATEGY
3 ACCESS STRATEGY

3.1 CONTEXT

3.1.1. In order to ensure a sustainable development at Fenswood Farm it is essential that the development aims to reduce car borne trips. As such it is imperative that links are provided to both existing and proposed public transport, pedestrian and cycle facilities. Where appropriate this will be introduced as part of the development proposals, together with suitable and complementary land use planning.

3.1.2. The mixed use proposals at the site would promote self-containment with employment, local centres and educational institutions, therefore internalising trips and reducing the need to travel off site. Insert 3.1 illustrates simple trip movement principles for self-containment and the masterplan will be developed with this in mind.

Insert 3.1 – Simplified Trip Types

3.1.3. A review of local Census travel to work data has been carried out as an initial proxy to consider the likely assignment of external traffic to and from the site. This confirms that the majority of residents living in the Wraxall and Long Ashton ward, within which the site is located, work locally within Bristol City Centre, Lawrence Hill, Southville and Nailsea as shown on Insert 3.2. The local wards are shown on Figure 3.1 at the rear of this report.
Plate 3.2 suggests that a relatively high proportion of people live and work within the ward. It also confirms that commuting is focussed to the Cabot Ward and Lawrence Hill, in central Bristol. The Transport Strategy for the development will focus on enhancing the already strong public transport connections between the site and Bristol. This is anticipated to minimise new vehicular trips, particularly in the highway network peak periods of operation. It is considered that this is compliant with the aspirations set out in the JSP and JTS to maximise sustainable travel and reduce the impacts of travel on the environment.

3.2 HIGHWAY STRATEGY

3.2.1. The 2009 planning application identified a number of highway access options and concluded that the optimum arrangements would comprise a signalised junction with the A370 and a secondary junction onto Wild Country Lane. The currently anticipated access strategy is presented on Figure 3.2. The initial drawings that accompanied the previous planning application are included in Appendix C. The proposals will be confirmed with stakeholders in detail in due course. WSP has subsequently considered appropriate junction arrangements from an operational capacity testing perspective. This is considered in more detail below.

3.2.2. At this stage, it is envisaged that the majority of vehicular access to the site would be via a new junction formed with the A370. Access to a limited number of dwellings and/or for ‘Bus only’ access would be provided in addition from Wild Country Lane. No through route would be established for through traffic to prevent rat-running, with a bus gate located appropriately within the site (as shown indicatively on Figure 3.2). This would also limit additional traffic on Wild Country Lane. Following appropriate detailed consultation (including with bus operators, local authorities and Sustrans), improvements may be made to Wild Country Lane to enable a limited increase in general and/or bus traffic, as well as to safeguard or enhance its function as National Cycle Network route 334. Access from the site directly to Wild Country Lane will also be made through the masterplan for cyclists.

3.2.3. The Fenswood Farm site offers a long boundary with the A370, offering space within the site to accommodate an appropriate access junction, able to accommodate trip generation associated with 1,000 dwellings, c. 3ha employment development and a local railway station with associated car park of circa 200 spaces. The size of...
railway station has been informed by work undertaken by MDS Transmodal, looking at potential levels of rail service provision and patronage to/from a new railway station at Long Ashton in the future.

3.2.4. Initial modelling suggests that an access could be formed that would operate with ample spare capacity and the work undertaken by WSP is outlined below.

TRIP GENERATION

3.2.5. An initial estimation of potential trip generation associated with 1,000 dwellings and 8,250sqm B1 employment space has been made using the TRICS 7.4.4 trip rate database. In terms of assessment parameters, for both dwellings and B1 office uses, surveys were included for Edge of Town and Suburban Areas (PPS6 Out of Centre) and Neighbourhood Centres (PPS6 Out of Centre), developments of up to 1000 units. London sites were excluded. Three sites were removed from the selection as they were notably closer to a town centre than Fenswood Farm.

3.2.6. A potential employment floorspace quantum of 8,250sqm has been assumed as an estimate for the assessment based on the assumption that approximately 2,750sqm of B1 employment floorspace is typically accommodated per hectare. This has been taken from the Guildford Borough Employment Land Assessment (2013) which reports typical levels for different use classes of employment based on data from Experian. B1 use has been assumed as this leads to the highest level of floorspace and trip generation, leading to the most robust assessment.

3.2.7. In addition, based on estimates from MDS Transmodal for similarly sized railway stations as envisaged at Long Ashton, additional trips associated with the occupation of 175 spaces have been added to the AM and Pm peak hours to relate to this trip generation.

TRIP DISTRIBUTION

3.2.8. Data purchased from North Somerset Council for the A370 in the vicinity of Wild Country Lane records approximately two thirds of traffic during the AM peak hour being inbound towards Bristol and the remaining third outbound. In the PM peak hour the flows appear to be reversed, reflecting tidal flows to and from Bristol. All forecast trips generated to and from the site have therefore been distributed in this manner.

JUNCTION OPERATIONAL ASSESSMENTS

3.2.9. Models of potential access options were prepared and run by TPA in 2016. These took base and future year flows on the A370 from modelling associated with the SBL planning application. These base flows have been retained in the current assessments, although it is noted that analysis of the recorded flows on the Long Ashton Bypass (from the traffic data purchased from North Somerset Council) shows that the two-way average daily flow dropped by approximately 1700-1800 vehicles per day (around 9%) from Nov 2016 to Nov 2017; Traffic reassignment after the opening of the South Bristol Link in January 2017 is likely to be a key contributor to this reduction. It is therefore likely that the modelled flows may represent an over-estimate of the current traffic demand, and as such is a robust assessment.

3.2.10. Three roundabout options and a signalised junction have been assessed as follows:

   a) Three arm traffic signal controlled junction operating with three stages.
   b) Three arm roundabout with two lanes flaring to three for the two A370 approaches and one lane flaring to two from the proposed site.
   c) As (b) with a free-flow lane for left-turning vehicles from A370 south into the site and the roundabout entry reduced to two lanes at the stop line.
   d) As (b) with a free-flow lane for straight ahead traffic from the A370 North to A370 South and the roundabout entry reduced to two lanes at the stop line.

3.2.11. With the revised development flow estimates, as outlined above, all four junctions would operate within capacity (including with the additional station car park trips).

3.2.12. Overall the assessment suggests there is flexibility in agreeing an access design with key stakeholders at the time of a planning application and to select a design which best supports other transport strategy objectives.
3.3 PUBLIC TRANSPORT STRATEGY

3.3.1. The 2009 planning application safeguarded land within the masterplan for a rail station. The location is included within Appendix A.

3.3.2. It is proposed that the developers of Land at Fenswood Farm would include promotion of a new rail station and associated parking situated in the north of the site. The station will be situated approximately 6.5km to the east of the existing Nailsea and Backwell train station and approximately 3.75km and 7.5km to the west of Parsons Street and Bristol Temple Meads train station respectively.

3.3.3. A recent example of a new station development in the South West opened at Cranbrook in December 2015, on the single-track main line between Exeter and Westbury. The proposed station at the site would be anticipated to be of a similar specification, with platforms serving each of the main line tracks.

3.3.4. The station would provide the opportunity for sustainable travel into Bristol (both the Temple Quarter Enterprise Zone, Central Bristol; as well as to North Bristol, via existing and proposed stations within the north fringe of Bristol and connecting MetroBus services in the north fringe). As well as serving new site residents and employees, the station would also provide for existing residents in the area. The station would provide an opportunity for existing commuters in the local area to transfer to rail travel, at least for part-journeys, enhancing the local authority proposals for developing a local MetroWest network. Such a service could complement public transport provision via the Ashton Vale to Temple Meads MetroBus service, since the latter would provide greater penetration of the city centre (localised accessibility to destinations) and also call at intermediate stops between Long Ashton and the city centre. For trips to employment areas (and other destinations) in North Bristol, travelling by rail (or rail and interchange to MetroBus) would offer a journey time advantage to travelling by MetroBus the whole way.

3.3.5. Compared to the outline proposals for a future railway station at Ashton Gate, a station located on Land at Fenswood Farm would make a better location for a minor outer-urban park and ride station, serving south west Bristol, Long Ashton and the surrounding villages north east of Nailsea. It would be easier to access from the surrounding area and avoid congestion hotspots within south west Bristol (see Figure 2.1).

3.3.6. An initial simple catchment analysis has been undertaken to understand areas from which patronage might be attracted. Two drive-time isochrones are incorporated at Appendix D, one is for Nailsea and Backwell Station and the other for Long Ashton. These are based on an average drive speed of 40mph throughout the surrounding area, to provide an indicative catchment, albeit that it is recognised that speeds on some roads will be lower and on some roads will be higher. It is considered that Long Ashton Station could potentially serve areas such as Long Ashton, Flax Bourton, Cambridge Batch, Barrow Gurney, Failand and Abbots Leigh, as well as provide an alternative to Parsons Street for some parts of South West Bristol, potentially reducing a congestion hotspot close to Parsons Street Station as identified in Figure 3.5 of the JTS.

3.3.7. Rail access would then provide a key sustainable transport benefit of the site.

3.3.8. MDS Transmodal has undertaken an initial review of the potential for existing services to be amended (in accordance with Network Rail Timetable Planning Rules), avoiding downstream capacity and timetable issues or impacts. They have concluded that there would be good prospect for a baseline service of 2no trains per hour from the station, by inserting a call at Long Ashton in the following routes:

- Cardiff to Taunton (Regional), which runs via stations including Temple Meads, Patchway and Filton Abbey Wood; and
- Weston-super-Mare to Yate / Gloucester (MetroWest), running via Bristol Temple Meads and Bristol Parkway.

3.3.9. Both services would enable frequent connections onto other long distance, regional and local services at Bristol Temple Meads Station.

3.3.10. Two further additional options also appear feasible in timetable terms, extension of the Manchester- Bristol cross country route to Yatton (to call at Nailsea and Long Ashton), or occasional extensions of the Manchester Cross County to Paignton service to call at Long Ashton (but not Yatton or Nailsea).

3.3.11. Following an initial assessment of likely delivery costs, patronage and fares income, using the same principles of methodology to CH2M’s assessment of the business case for the overall MetroWest scheme, MDS Transmodal conclude that that the Benefit to Cost Ratio (BCR) would be in the region of 5:1. This is partly
because the scheme would require no additional new track or rolling stock, reducing delivery costs (and risks).
Instead it would only require a new station and pair of platforms. Furthermore, operating costs would be more
than covered by additional revenue. This would represent a considerably higher BCR than was estimated by
CH2M for the Portishead rail extension (BCR estimated at around 1:1).

3.3.12 Development of the station would be subject to more detailed business case assessment, engagement with
relevant stakeholders (including Network Rail, Great Western Railway, Department for Transport, Local
Planning Authorities) and progression of the scheme through Network Rail’s “GRIP” process. The objective
would be to arrive at a station configuration and associated service pattern which delivers net new passenger
growth to rail (including relieving pressure on Parson Street station where appropriate), but without impacting
on current journey times and service performance. Discussions with these stakeholders are ongoing.

PROPOSED PUBLIC TRANSPORT SERVICES

3.3.13 The key objective of the bus strategy is to provide services that meet the needs of people living and working at
the site by providing frequent and convenient access to employment, health, education and leisure facilities.

3.3.14 In summary, the targets for the bus strategy will be to provide:

i. a bus route which ensures that 90 percent of residents of the development have good access to a bus stop
within 400 metres of their home; and

ii. an efficient bus link from the development to key destinations which could include some of Bristol City
Centre, Bristol Airport, bus stations at Long Ashton, Nailsea, and Weston-Super-Mare.

3.3.15 New and/or extended and/or diverted bus routes would provide bus penetration. Exact route options will be
considered in due course in collaboration with stakeholders (notably bus operators, as well as officers at NSC
and BCC). The scheme could be designed to discourage through traffic passing through the site, through use
of a bus gate within the site and no general through traffic between Wild Country Lane and the A370.

3.3.16 Options for achieving access to strategic bus routes would include a service extension(s) of conventional bus,
Park and Ride or BRT services in the short and medium term respectively, since a number of services pass
the site via the A370 at present, terminate at the Park and Ride site or are anticipated to do so in future.

3.3.17 In the longer term, stops could be provided on the A370 to access the proposed Nailsea and Backwell
MetroBus corridor. The route could be diverted via the site or stops could be provided on its proposed route
along the A370 Long Ashton Bypass, with appropriate crossing and stopping facilities incorporated into the
design of the new access for the site. This would add patronage to these planned routes.

3.3.18 In terms of allowing flexibility for future service options, the masterplan would be designed so as to safeguard
the opportunity for a bus gate to be introduced within the site to allow through movement of buses to/from Wild
Country Lane in future as necessary. This offers the greatest flexibility to agree service provisions with
operators.

3.3.19 Overall, shorter bus service or MetroBus extensions would be required to serve Fenswood Farm than to serve
other SDLs further from Bristol, offering greater prospects for deliverability and commercial sustainability.

3.4 WALKING AND CYCLING NETWORK STRATEGY

3.4.1 The masterplan for the development would be designed with movement of pedestrians and cyclists as a
priority, ahead of the movement of vehicles. A number of shared space and quiet streets would be provided,
which would be designed to constrain vehicular speeds and therefore provide a safe environment.

3.4.2 The three existing footbridges are shown on Figure 3.2. It is the intention that these would be upgraded where
possible to enhance the links between the site and Long Ashton. Discussions with Network Rail were
previously initiated by Intermodality.

3.4.3 A range of day-to-day services and facilities are already within comfortable walking distance of the site,
including but not limited to the Co-operative food store in Long Ashton, the Bird in Hand public house, Cohens
Chemist, the Apple Tree Day-care Nursery, the Birdwell Primary School, Long Ashton Post Office and Library.

3.4.4 Key local public rights of way already connect to and beyond the site and the development of Fenswood Farm
will provide an opportunity to enhance and safeguard these and to improve connectivity to Long Ashton.
3.4.5. A comprehensive cycling network will be developed internally within the development that will link existing and proposed routes. Key connections with be to National Cycle Network Route NCN33 which passes very close to the north of the site and to NCN334 which runs along the western edge of the site.

TRAVEL PLANNING STRATEGY

3.4.6. An essential aspect of the transport strategy for the scheme will be managing travel demand; particularly single occupancy car travel.

3.4.7. There are a range of ways through which travel demand can be influenced and managed, including through:

- a suitable mix of uses (qualitatively and quantitatively, to maximise levels of self-containment and therefore reduce external trips and maximise the scope for walking and cycling);
- the provision of high quality alternatives to single occupancy car travel, for both internal and external trips, allied with an appropriate parking strategy – to encourage the use of sustainable modes including rail; and
- a suite of complimentary non-physical measures (e.g. information provision and marketing) to encourage maximum take up of the alternatives provided.

3.4.8. ‘Hard’ infrastructure measures will be provided within the development to ensure appropriate access and to deliver facilities for public transport, cycling and walking schemes.

3.4.9. During recent years, the WoE authorities have worked in partnership with major developers, as part of the Local Sustainable Transport Fund (LSFT) and then Access West funded schemes, in order to bring the TravelWest branding and materials into travel promotions at new residential and commercial developments, as well as to support personalised travel planning. They have provided a range of supplementary transport improvements and services to existing local employers, such as electric or conventional cycle loans, sustainable commuter and resident challenges and a travel team to visit offices and talk to staff about their travel options (as just a few examples).

3.4.10. The developer at Fenswood Farm will take the lead in funding, developing and implementing a Framework Travel Plan for the site, with individual subsidiary plans for component land uses / occupiers as appropriate. They will work proactively in partnership with North Somerset and Bristol City Council officers and relevant third party stakeholders, to keep abreast of all local sustainable transport and highway network schemes and sustainable transport changes relevant to Long Ashton, to make best use of available materials and incentives and to communicate these effectively to residents where necessary and appropriate to complement or highlight (rather than duplicate) TravelWest marketing. There would be potential to perhaps encompass surrounding existing residents in initiatives introduced, as part of a settlement based approach for Long Ashton, further mitigating any residual trip reductions.

3.5 OFF-SITE MITIGATION STRATEGY

3.5.1. One traffic hotspot is identified by the JTS Figure 3.5, on the local highway network between Long Ashton and Bristol, this is illustrated on Figure 2.1. Whilst the SBL and JTS schemes (such as improvements on the A370 at Backwell) would address some local and wider hotspots, Fenswood Farm would provide (or contribute towards) suitable direct mitigation in these location and elsewhere, where appropriate to reflect the impacts of the Fenswood Farm development.

3.5.2. It is the intention of the site promotors to work collaboratively with the stakeholders to appropriately identify what would reasonably be required.

3.5.3. Policy T3 of the Long Ashton Neighbourhood Plan. Policy T3 states that: “Any development which leads to significantly increased traffic flows within Long Ashton will be required to provide proportionate mitigation measures within the village.” The site promoter would intend to work collaboratively with the local residents to address transport issues in the settlement arising from the scheme. The promoter is aware of the objectives to the ‘village enhancement scheme’ as put forward by Hamilton-Baillie (February 2014) which includes:

- a stronger gateway at Wild Country Lane;
- a major remodelling of ‘The Centre’ to incorporate the junction with Keedwell Hill, the front of the Co-op, and the green space;
- a lobby space fronting the Post Office and adjoining shops, to include the Bird-in-Hand; and
- redefining and clarifying any on-street parking to keep shop frontages and key external spaces clear.
3.6 KEY SUSTAINABLE TRANSPORT STRATEGY COMPONENTS

PUBLIC TRANSPORT STRATEGY
- a railway station and car park, enabling mode shift amongst future residents and employees, as well as existing residents;
- bus routing which ensures that 90 percent of residents of the development have good access to a bus stop within 400 metres of their home;
- efficient bus links from the development to key destinations;
- potential new, extended or diverted existing services into the development in order to serve the site in the short to medium term;
- longer-term potential to provide access to the proposed Nailsea / Backwell MetroBus corridor proposed along the A370; and
- bus gate within the site to control through traffic between the A370 and Wild Country Lane.

WALKING AND CYCLE NETWORK STRATEGY
- improvements to existing railway bridges to improve north-south connectivity;
- links to wider cycle network;
- explore options to improve conditions for cyclists choosing to use the A369 between Blackmoor Lane and NCN33 as an alternative route than NCN33 via Long Ashton; and
- comprehensive internal network.

TRAVEL PLANNING STRATEGY
- a comprehensive travel planning strategy will be developed to influence and manage travel to and from the site. This will be funded by the site promoters but where appropriate the developer will work in partnership with NSC and BCC to develop and/or implement the strategy.

OFF SITE MITIGATION STRATEGY
- hot points to be addressed through Local Authority SBL scheme and mitigation if identified as appropriate in these locations and elsewhere; and working collaboratively with local residents on schemes in Long Ashton.
4

ASSESSMENT OF OBJECTIVES AGAINST JTS AND JSP STRATEGIC PRIORITIES
4 ASSESSMENT OF OBJECTIVES AGAINST JTS AND JSP STRATEGIC PRIORITIES

4.1.1. The JTS is centred on a number of ‘goals’ and ‘objectives related to each goal. Each is intended to address specific challenges facing the West of England Area. The JTS calls this the ‘Framework for shaping the Transport Vision’ and presents these as Figure 3-10 (see Appendix E).

4.1.2. The JSP contains ‘strategic priorities’ identified which are again how the WoE authorities believe development to 2036 can help to address the challenges facing the area. These are then linked to key ‘desirable outcomes’ from new development, which are largely similar to the strategic priorities. These are presented at Figure 3 of the Publication Version of the JSP (also provided for ease of reference at Appendix E).

4.1.3. A broad assessment of the site against the goals and objectives of the JTS and the ‘Strategic Priorities’ and desired ‘outcomes’ of the JSP is set out below.

4.2 JTS GOALS AND OBJECTIVES

4.2.1. The five JTS goals and associated objectives are discussed in turn below:

Support Economic Growth
EC1: Tackle congestion and improve journey times and journey time reliability
EC2: Improve the resilience of road and rail networks to incidents and the impacts of climate change
EC3: Deliver the transport infrastructure capacity needed to enable job creation and business growth
EC4: Deliver the transport infrastructure needed to unlock sustainable growth in housing
EC5: Improve connections with strategic road and rail links, Bristol Port, Bristol Airport and other Gateways

4.2.2. The stated ‘objectives’ are considered to instead describe the ways in which the WoE authorities believe the JTS must support economic growth.

4.2.3. Development of Fenswood Farm can contribute towards supporting economic growth by providing a new railway station which will help to deliver the transport infrastructure capacity necessary to enable job and business growth in a resource efficient and cost effective way, offering high value for money (estimated BCR 5:1). This will in turn help to tackle congestion (for new residents and associated with existing movements), improve journey times and journey time reliability. It will provide additional capacity on the corridor from the south west into Bristol, thereby helping improve network resilience (another mode of travel when congestion incidences occur impacting road based transport). This infrastructure will unlock sustainable housing growth and complement the already high levels of travel sustainability observed for the Long Ashton and Wraxall Ward, reflecting its unique location well related to existing and committed infrastructure and relative to Bristol itself. The sustainability credentials of Fenswood Farm mean that it can also help these objectives by reducing the number and length of residual car trips when compared to other SDLs. The infrastructure it provides will serve the wider local catchment and not just residents of Fenswood Farm.

Reduce Carbon Emissions
CA1: Provide a transport network which is low carbon and resource efficient in operation
CA2: Encourage low carbon travel choices

4.2.4. Reducing the number of car trips through self-containment, high quality sustainable mode choices and reducing and length of residual car journeys will enable Fenswood Farm to contribute significantly towards reducing carbon emissions. Its proximity and connectivity to Long Ashton and Bristol and aspects such as new rail provision and filtered permeability will encourage low carbon travel choices. The fact that any bus route diversions or extensions would be short, direct and limited in length given proximity to key destinations within Bristol would also contribute towards resource efficient operation. Furthermore, building on the corridor approach by locating further development adjacent to the proposed Nailsea / Backwell MetroBus route can also be seen to be in line with principles of resource efficiency (achieving more with the same investment). The range and quality of connections and the genuine prospect of cycling from the site to key employment locations or to the site from vast areas of south and west Bristol would enable Fenswood Farm to perform well in encouraging low carbon travel choices through site design and travel promotions as part of the Travel Plan.
Improve quality of life and a healthy natural environment

EV1: Reduce the impacts of travel on the quality of places and enhance the built environment
EV2: Minimise the impacts of transport and travel on the rural environment

4.2.5. Development at Fenswood Farm can again support these objectives through high quality design and provision of high quality travel options including rail. The vast majority of trips to and from the site would enter and exit via the A370 already a key strategic route and thereby avoid negative impacts of traffic on nearby residents, whilst still enabling good functional connections (on foot and by bicycle) to and from Long Ashton.

Contribute to better health, safety and security

SH1: Encourage healthy travel choices and behaviours
SH2: Address issues of poor air quality generated by transport
SH3: Improve the safety of all users of the transport network, particularly the most vulnerable

4.2.6. Development at Fenswood farm will contribute towards healthy travel choices and behaviours, both through local and longer distances cycling and walking for day to day purposes and commuting (e.g. to facilities in Long Ashton and beyond within Bristol and at its employment areas) and through supporting public transport, particularly rail, journeys which typically include an element of walking and/or cycling at either the origin or destination end of the trip. Reductions in car trips and residual car trip lengths will contribute towards air quality objectives.

Promote accessibility

AC1: Improve access for all to employment, education and training
AC2: Improve access to local services

4.2.7. The JSP and JTS highlight the impacts of a historic imbalance of employment development in Bristol (outside its centre) being primarily to its north and east. Balancing this to provide better spatial distribution of employment and more opportunities to the south of Bristol is considered important by the WoE authorities. Provision of employment development at Long Ashton can provide employment development better aligned to this objective than any of the other SDLs (except Whitelchuch), with new employment opportunities created to the south west of Bristol. Fenswood Farm would additionally benefit from cycle infrastructure connections from West and South Bristol and proximity to a new railway station.

4.3 JSP STRATEGIC PRIORITIES AND DESIRED OUTCOMES

4.3.1. Table 4.1 summarises how the proposed development at Fenswood Farm would contribute towards the strategic priorities and desired outcomes sought by the JSP (see Appendix E, for more information on the critical issues). We have excluded strategic priority 4, although we do not consider the site to undermine this priority, since it does not relate directly to transport issues.
<table>
<thead>
<tr>
<th>Critical Issue</th>
<th>JSP Strategic Priority</th>
<th>JSP Outcomes Sought</th>
<th>How development at Fenswood Farm will align</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial boost in housing supply required (particularly affordable)</td>
<td>To meet the sub-regions housing needs, in a sustainable way, in particular to make a substantial step change in the supply of affordable housing across the plan area.</td>
<td>Delivery of affordable housing targets in accordance with spatial policy</td>
<td>Development at Fenswood Farm will contribute towards much needed housing supply. In association it will deliver affordable housing where most needed (within or closely related to Bristol). It will do so in a sustainable way due to the range and high quality of sustainable transport options, including a new railway station.</td>
</tr>
<tr>
<td>Prosperity has not been shared equally between communities</td>
<td>2 To pursue inclusive economic growth by accommodating the economic growth objectives of the LEP Strategic Economic Plan. Particularly to: • promote the growth of existing employment centres such as the Enterprise Zones and Enterprise Areas • ensure more inclusive growth and life chances for all, across the West of England, and improve accessibility to jobs.</td>
<td>Delivery of the plan’s employment land requirement in accordance with the Plan’s spatial strategy.</td>
<td>Should any employment development occur outside the existing employment centres, E1Zs and EAs, as envisaged by the JSP’s allowance for appropriate employment development at SDLs, Fenswood Farm is very well placed to assist through a sustainable location adjacent to a live railway line, proposals for a new railway station and the prospect of high levels of sustainable travel by other non-car modes. Fenswood Farm will therefore be well connected to a number of the other existing and proposed E1Zs and EAs, as well as the centre of Bristol. It can therefore support the strategy well. It will provide for new employment opportunities south west of Bristol where they are currently fewer, contributing towards addressing the historical imbalance towards the north and east.</td>
</tr>
<tr>
<td>Significant pressure on infrastructure and settlement patterns which are over-reliant on the private car, inhibiting to wealth creation, productivity and contributing to climate</td>
<td>3 To deliver a spatial strategy which; • focuses on three primary centres of Bristol, Bath and Weston-super-Mare and recognises the complementary role of market towns to achieve sustainable growth. • ensures that new development is properly aligned with infrastructure and maximises opportunities for sustainable and active travel. • through a place making approach promotes places</td>
<td>Sustainable growth of homes and jobs, supported by necessary infrastructure. Reduction in car dependency and improved public transport access to opportunity, jobs and services. Contribution to mitigating impacts of climate change. Delivery of</td>
<td>As outlined in this report, Fenswood Farm will enable sustainable growth of homes and jobs supported by necessary infrastructure. It can be delivered more quickly than many SDLs, by virtue of fewer and lower risk infrastructure requirements. It can reduce car dependency better than a number of other SDLs due to proximity to a range of high quality transport choices and active travel networks. This is reflected by the high sustainability of commuting behaviour within the Long Ashton and Wraxall ward according to the 2011 census (27.0% commutes by non-car modes or home working, compared to 25.5% for...</td>
</tr>
<tr>
<td>change and poor health.</td>
<td>of density and scale with a range of facilities and which encourages healthy lifestyles and cultural wellbeing. • integrates high quality, multi-functional green infrastructure. Reduces greenhouse gas emissions and ensure resilience to the impacts of climate change.</td>
<td>Communities in which people want to live and work. Improved health and wellbeing outcomes.</td>
<td>Nailsea / Backwell, 23.2% for Thornbury and 18.9% to Charfield) and by an analysis showing shorter commute distances. It will also improve sustainable commute options for existing local residents (through new rail provision). Its development will therefore contribute towards mitigating the impacts of climate change. It will be a community where people want to live and work due to access to high quality leisure and utility walking and cycling routes, other transport connections and facilities and amenities in Long Ashton. Its location and proximity to these and Bristol will support health and wellbeing outcomes.</td>
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5

SUMMARY AND CONCLUSIONS
5 SUMMARY AND CONCLUSIONS

5.1.1. This report has been prepared by WSP on behalf of The University of Bristol to set update the transport strategy for the promotion of the Fenswood Farm site for the West of England Joint Spatial Strategy. The site is envisaged as likely to enable development of around 1,000 dwellings, 3ha of employment land and ancillary uses. This document updates a strategy drafted by Transport Planning Associates (TPA) in January 2017 in response to the Emerging Joint Spatial Plan consultation, in order to reflect subsequent changes, such as opening of the South Bristol Link, to respond to the Publication Version of the Joint Spatial Plan and to reflect additional assessment undertaken by the project team since January 2017, particularly in relation to developing the case for Long Ashton Railway Station.

5.1.2. The development would facilitate self-containment amongst new residents, and would be intended to maximise local walking, cycling and public transport trips, including rail.

5.1.3. The Highway Strategy would connect the site to local roads and would be served principally by the A370, with mitigation as necessary. Initial assessments suggest that various forms of access could work successfully in highway operational terms, offering flexibility to incorporate an option best able to support the masterplan and other transport objectives. Limited access could also be provided from Wild Country Lane, coupled with a bus gate within the site, to allow flexibility for route diversions or extensions through the site. No through route would be provided, minimising traffic towards Long Ashton Village using Wild Country Lane and supporting its continued roll as National Cycle Network Route 334.

5.1.4. The Public Transport Strategy would provide a rail station and bus routes which ensure that 90 percent of residents have good access to public transport services. A bus gate would be provided within the site to deter through traffic and enable flexibility for short, medium and longer term public transport provision. The proximity of the site to existing services terminating at Long Ashton Park and Ride site (both Park and Ride and planned MetroBus services) may enable cost effective extensions of the route to the site in the short, medium and longer term. Several conventional services also pass the site along the A370 offering diversion as well as extension options. The optimal and most commercially viable option would be agreed in consultation with prospective operators and the Local Highway Authorities.

5.1.5. The Walking and Cycling Strategy would include new routes through the scheme that would connect with existing and proposed off-site routes to maximise connectivity with Long Ashton, nearby settlements, local and national cycle network routes. The proposed strategy would take advantage of ‘filtered permeability’ meaning that it is quicker, easier and more convenient to walk and cycle to nearby facilities and services than to drive, supporting travel planning and active travel mode promotion. A Framework Travel Plan for the site would complement the provision of necessary on- and off-site infrastructure through the provision or promotion of supporting services to reduce the barriers to and motivate cycling, as well as through promotion of available routes and the benefits of cycling and walking to health and wellbeing. Local leisure walks and cycles would also be promoted to new residents.

5.1.6. The Travel Plan Strategy would influence journey habits by encouraging sustainable travel early in occupation, by promoting the genuinely wide range, quality and convenience of non-car travel options in this locality. A Framework Travel Plan will coordinate activities across the site and subsidiary Travel Plans will be prepared for component land uses / occupiers as appropriate. Development and implementation of the plans would occur in consultation and partnership with the relevant West of England Authorities. Consideration will be given to implementing an area travel plan encompassing the whole of Long Ashton or a Station Travel Plan related to the new Long Ashton Station, in order to maximise the benefits of sustainable travel provisions made in association with site development.

5.1.7. The Off Site Mitigation Strategy would appropriately address the need for improvements within Long Ashton and elsewhere, as appropriate. This would be informed by operational capacity assessments undertaken to a scope that will be agreed with the relevant West of England Authorities (NSC and BCC).

5.1.8. It is concluded that the car trips generated by development of land at Fenswood Farm can be minimised, with residual trips being accommodated on the local highway network and other person trips accommodated by the wider transport networks. The scheme will provide wider benefits that cannot be provided by other sites currently proposed in the JSP.
Appendix A

2009 MASTERPLAN
Dear Jeff

Thank you for your email which on the whole accurately reflects our conversation. There are just a couple of points of clarification which I list below using the numbers used in your email.

6. The main pressure is the southbound off-slip at J19, however, this is most likely as a result of out-commuting from the Portishead with travellers returning home in the PM peak.

7. There are pressures emerging with M5 Jct. 19 off slip in the PM peak. HE have been developing an interim solution, however recent dynamic changes on the local network have reduced the benefits and the original proposal may have to be revised.

As I said to you on the phone Highways England does not have an objection in principle to the proposed site subject to it being shown to not have an adverse impact on the strategic road network, particularly M5 J19 or that the impact it does have can be successfully mitigated.

Regards

Jacqui

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Hi Jacqui,

Thank you for your time last week to discuss the JTS and specifically the site at Long Ashton.

A couple of points I noted from our conversation below

1. The site we are looking at promoting is at Fenswood Farm at Long Ashton, which was subject of a previous application in 2009. This was however ultimately withdrawn. It was noted that Highways England (then Highways Agency) had reviewed the application and supporting information and concluded that it would not have a significant adverse impact of the Strategic Highway Network.

2. The site is being promoted for circa 1,000 residential units 11,000m2 of employment and community uses including a primary school, as such it will promote self-containment.

3. It is the intention that it would most likely be access via a new junction with the A370. This was acceptable in principle.

4. It was agreed that it was a sensible place for development given its transport connections.

5. Should the site be taken forward to a planning application, Highways England would request the impact of the M5 junction 19 be considered to demonstrate any potential impact. This would need to be undertaken using microsimulation modelling.
6. The main pressure at present at this junction is the southbound off slip in the PM peak, most likely associated with out-commuting from Bristol.
7. At present, Highways England are seeking to secure funding for a scheme to improve the circulatory of the junction to address (5). If secured improvements could be made in the next 12 months.
8. You suggested that we consider the site in the context of transport scheme that are due to come forward in the near future such as MetroBus.
9. Going forward Reps are required by the end of January, but is anticipated that further work would follow in due course to promote the site.

We would be grateful if you could confirm/amend the above as appropriate.

Kind regards

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Jeff, this is not quite what I meant!

Regarding your first sentence in point 1) below, I would recommend referring to the consultation document for the objectives of the JTS – it is not, primarily, intended to identify the principles against which sites are considered for development – it is primarily intended to clarify the pattern of strategic transport investment across the West of England over the next 20 years.

Regarding 2), there is not a formal established hierarchy in the transport-focussed development scenario – I noted general, sequential principles which would have helped inform locations in this scenario around trip behaviour.

Bill

Bill Davies
Rapid Transit Network Co-ordinator
West of England Local Enterprise Partnership Office
0117 922 4928

Bill,

Thank you for your time yesterday to discuss the JTS/JSP and specifically the site at Long Ashton.
A couple of points I noted from our conversation below:

1. The objective of the JTS is to identify the principles against which sites are considered for development. It is not to specifically identify development sites.

2. A hierarchy is established to identify areas that have a lower impact, in the first instance in terms of travel and then travel by sustainable modes, with the objective of minimising travel. This considers urban intensification, urban extensions to existing settlement with a preference likely to be given to existing settlements on strategic transport corridors. The objective being to minimise trips/trip lengths.

3. The JTS informs the JSP, but the sites identified within the JSP are not locations where the development would necessarily go.

4. The site we are looking at promoting is at Fenswood Farm at Long Ashton, which was subject of a previous application in 2009. The site is being promoted for circa 1,000 residential units 11,000m2 of employment and community uses including a primary school, as such it will promote self-containment. It is the intention that it would most likely be accessed via a new junction with the A370. It was agreed that it was a sensible place for development given its existing transport connections.

5. Going forward Reps are required by the end of January, but is anticipated that further work would follow in due course to promote the site.

6. It was suggested that for further detailed discussion we liaise with North Somerset Council - Steve Thorne (highways) and Michael Reap (planning).
We would be grateful if you could confirm/amend the above as appropriate.

Kind regards

Jeff Troake (jeff.troake@tpa.uk.com)
Principal Transport Planner
Transport Planning Associates

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Appendix D

DRIVE TIME ISOCHRONES
### Figure 1

**Legend**

- **Potential Railway Station**
- **Driving Isochrone**

**Distance / Time**
- 0 - 1.0km (1 min)
- 1.0 - 2.1km (2 mins)
- 2.1 - 3.2km (3 mins)
- 3.2 - 4.2km (4 mins)
- 4.2 - 5.3km (5 mins)
- 5.3 - 6.4km (6 mins)
- 6.4 - 7.5km (7 mins)
- 7.5 - 8.5km (8 mins)

**Legend**

- Red: Potential Railway Station
- Green: Driving Isochrone (0 - 1.0km)
- Yellow: Driving Isochrone (1.0 - 7.5km)

**Figures**

- No specific figures are labeled in the text provided.
Legend

- Nailsea & Backwell Railway Station

Distance / Time
- 0 - 1.0km (1 min)
- 1.0 - 2.1km (2 mins)
- 2.1 - 3.2km (3 mins)
- 3.2 - 4.2km (4 mins)
- 4.2 - 5.3km (5 mins)
- 5.3 - 6.4km (6 mins)
- 6.4 - 7.5km (7 mins)
- 7.5 - 8.5km (8 mins)

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Appendix E

JTS AND JSP GOALS AND STRATEGIC PRIORITIES
**Figure 3-10 Framework for shaping the Transport Vision**

An affordable, low carbon, accessible, integrated, efficient and reliable transport network to achieve a more competitive economy and better connected, more active and healthy communities.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Support economic growth</th>
<th>Reduce carbon emissions</th>
<th>Improve quality of life and a healthy natural environment</th>
<th>Contribute to better safety, health &amp; security</th>
<th>Promote accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
<td>Impacts of congestion</td>
<td>Limited transport choices</td>
<td></td>
<td></td>
<td>Limited transport choices</td>
</tr>
<tr>
<td></td>
<td>Economic impacts (labour market, competitiveness)</td>
<td>Environmental impacts (carbon emissions from traffic)</td>
<td>Environmental impacts (noise, severance, tranquillity)</td>
<td>Social impacts (inactivity, air quality)</td>
<td>Social impacts (deprivation)</td>
</tr>
<tr>
<td>Objectives</td>
<td>EC1: Tackle congestion and improve journey times and journey time reliability</td>
<td>CA1: Provide a transport network which is low carbon and resource efficient in operation</td>
<td>EV1: Reduce the impacts of travel on the quality of places and enhance the built environment</td>
<td>SH1: Encourage healthy travel choices and behaviours</td>
<td>AC1: Improve access for all to employment, education and training</td>
</tr>
<tr>
<td></td>
<td>EC2: Improve the resilience of road and rail networks to incidents and the impacts of climate change</td>
<td>CA2: Encourage low carbon travel choices</td>
<td>EV2: Minimise the impacts of transport and travel on the rural environment</td>
<td>SH2: Address issues of poor air quality generated by transport</td>
<td>AC2: Improve access to local services</td>
</tr>
<tr>
<td></td>
<td>EC3: Deliver the transport infrastructure capacity needed to enable job creation and business growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC4: Deliver the transport infrastructure needed to unlock sustainable growth in housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC5: Improve connections with strategic road and rail links, Bristol Port, Bristol Airport and other Gateways</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Critical issues

Previous stages of the Plan’s preparation included public consultation on the key issues and challenges that should be addressed. The comments received have been taken into account and used to inform the Plan’s critical issues and strategic priorities.

Figure 3: Critical issues and strategic priorities.

<table>
<thead>
<tr>
<th>Critical Issue</th>
<th>Strategic Priority</th>
<th>Policy framework</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a critical need to substantially boost the housing supply, particularly affordable housing of which the need is acute across the Plan area.</td>
<td>1 To meet the sub-region’s identified housing needs, in a sustainable way. In particular to make a substantial step change in the supply of affordable housing across the Plan area.</td>
<td>1, 2, 3, 7</td>
<td>Delivery of the Plan’s housing requirement and affordable housing target (as set out at Policy 1 and Policy 3 in accordance with the Plan’s spatial strategy at Policy 2).</td>
</tr>
<tr>
<td>Economic prosperity has brought substantial benefits to residents, communities and the environment. However, prosperity has not been shared equally by all communities as there are pockets of deprivation within the sub region.</td>
<td>2 To pursue inclusive economic growth by accommodating the economic growth objectives of the LEP Strategic Economic Plan. Particularly to: • promote the growth of existing employment centres such as the Enterprise Zones and Enterprise Areas • ensure more inclusive growth and life chances for all, across the West of England, and improve accessibility to jobs.</td>
<td>4</td>
<td>Delivery of the Plan’s employment land requirement (as set out at Policy 4 in accordance with the Plan’s spatial strategy at Policy 2).</td>
</tr>
</tbody>
</table>
### Critical Issue |
#### The form and function of development in some parts of the West of England has resulted in significant pressure on infrastructure and settlement patterns which are over-reliant on the private car. This inhibits wealth creation and productivity and contributes to climate change and poor health.

### Strategic Priority |
3 To deliver a spatial strategy which:
- focuses on three primary centres of Bristol, Bath and Weston-super-Mare and recognises the complementary role of market towns to achieve sustainable growth.
- ensures that new development is properly aligned with infrastructure and maximises opportunities for sustainable and active travel.
- through a place making approach promotes places of density and scale with a range of facilities and which encourages healthy lifestyles and cultural wellbeing.
- integrates high quality, multi-functional green infrastructure. Reduces greenhouse gas emissions and ensure resilience to the impacts of climate change.

### Policy framework |
2,5,6,7

### Outcome |
Sustainable growth of homes and jobs, supported by necessary infrastructure.
Reduction in car dependency and improved public transport access to opportunity, jobs and services.
Contribution to mitigating impacts of climate change.
Delivery of Communities in which people want to live and work.
Improved health and wellbeing outcomes.

### Critical Issue |
#### The sub-region benefits from a world class environment. This brings substantial economic and community benefits and contributes significantly to the quality of life of residents, visitors and businesses.

### Strategic Priority |
4 To protect and enhance the sub-region’s diverse and high quality natural, built and historic environment and secure a net gain in biodiversity. To prioritise development on brownfield locations, optimise densities and retain the overall function of the Bristol and Bath Green Belt.

### Policy framework |
2,5,6,7

### Outcome |
Enhanced quality of the natural, built and historic environment.
Biodiversity gains.
Appendix 6: MDS Transmodal ‘The Case for Long Ashton Station’
THE CASE FOR LONG ASHTON STATION

1. MDS Transmodal has been asked to consider the case for a new station at Long Ashton on the railway line between Bristol and Taunton. We understand that a site for such a station is available and designs have already been put forward for the required platforms and access arrangements. We also understand that there are proposals for an additional 1,000 houses at Long Ashton which would add to the available market for such a station.

2. Taken at face value, a new passenger railway station should be welcomed, particularly if it is partly funded and delivered by a third party (rather than Network Rail or other public sector body). Passengers can only access trains at stations; new station facilities should therefore attract new ridership (thereby generating wider benefits associated with modal shift) and generate additional fare-box revenue for the railway industry.

3. However, there are a range of wider factors which when considered together can render a new station proposal unattractive to the railway industry. For example, a new station could simply abstract passengers from existing stations, meaning that the overall impact on mode shift and fare-box revenue is neutral. Ideally, a new station would be served by inserting an additional call into existing train services passing the new station. However, this can have capacity implications and wider operational impacts on other train services elsewhere on the network. On a worst case basis, a totally new service would have to be launched. Overall, there could be significant cost implications, such as the need to procure new rolling stock, recruit additional train crew and pay additional track access charges. These additional costs could potentially outweigh any additional fare-box revenue generated.

4. Taking the above into account, this technical note undertakes additional technical investigations to those submitted as part of the previous representation to the JSP, with a particular focus on:

   - Which train services could realistically serve the new station and any subsequent wider operational impacts; and
   - The potential passenger demand: estimates as to the volume of passengers that would be likely to patronise such a station based upon the market share that rail secures, and is expected to secure, at existing and proposed stations in the area.

5. Medium to long term initiatives associated with changes to the Great Western franchise and the Bristol MetroWest scheme are also considered.
Train Pathing at Long Ashton

6. This section of the technical note demonstrates that the proposed new station at Long Ashton will be able to accommodate calls from passenger train services passing along the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway route.

7. As noted above, ideally a new station would be served by simply inserting an additional call into existing train services passing the new station, although this can have capacity implications and wider operational impacts elsewhere on the network. As a general rule of thumb, for regional and intercity type train services an additional station call will generally add 2-3 minutes to the overall end-end journey time between origin and terminating stations. This takes into account the time required to stop a train, station dwell time (generally minimum one minute for intra-regional and intercity type train services) and then to accelerate back up to line speed. Under this operating scenario, passing station train services would arrive at their terminating stations 2-3 minutes later when compared with existing timetables following a call at the new Long Ashton. This could be overcome by departing from the origin station 2-3 minutes earlier (thereby arriving at the terminating station at the existing arrival time).

8. However, such an approach could result in each train service then passing through known capacity pinch-points (e.g. at-grade junctions or stations with limited platform capacity) 2-3 minutes earlier or later when compared with existing timetables, thereby potentially generating conflicting movements with other train services at those pinch-points which have not had their running schedules adjusted. These pinch-points could be located a significant distance away from the new station. Given that many locations on the network are known to be operating at capacity, there may not be scope to run 2-3 minutes earlier/later and not conflict with other trains. This is therefore an important issue to consider.

9. Further, as rolling stock is leased for fixed monthly charges, train operators ‘sweat their assets’ in order to minimise their per-unit operating costs (economies of scale). In practical terms, train operators will seek to maximise the in-service running time when compared with downtime at origin/terminating stations; train sets are therefore diagrammed with minimal turnback downtime. There are also minimum turnback time requirements at stations set by Network Rail in order to aid service recovery following perturbations. Consequently, there may not be scope within a train set’s turnback downtime to accommodate the 2-3 minutes (4-6 minutes on a round-trip basis) implied by inserting an additional call into an existing service. Inserting a call into an existing passing service could therefore result in the need to lease additional rolling stock and roster additional train crew personnel. Further, such an approach could then extend station downtime, thereby increasing per-unit operating costs (cost vs revenue implications).

10. Consequently, simply identifying that there are passing train services and that undertaking an additional station call will not impact on the following train service in the immediate vicinity of
the new station is not the correct approach. Wider network operational impacts, particularly with respect to capacity further along the network and cost implications, need to be considered. Further, expected or potential changes to service patterns over the medium to long term, reflecting changes to franchise specifications and local stakeholder aspirations, also need to be taken into account. New stations are long term developments which need to conform to and be able to accommodate realistic and expected medium-long term changes to service patterns.

11. Our approach has therefore been to consider:

- The existing standard train service patterns on the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor, and subsequently which services could accommodate an additional call at Long Ashton without generating any wider operational/capacity impacts; and
- Realistic and expected medium-long term changes to service patterns on the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor.

**Existing Service Patterns**

12. The table below lists the current standard train service pattern in each hour on the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor. Modern ‘clockface’ train timetables generally repeat in previous and subsequent hours across the daytime, the exceptions being very early morning and late evenings. This is the case along the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor, albeit some services are extended during the AM and PM peaks to accommodate commuters.
Table 1: Current Standard Train Service Pattern along Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequency</th>
<th>Operator</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol TM – London Paddington</td>
<td>2 trains per hour (tph)</td>
<td>Great Western</td>
<td>Runs via Bath. Extends to Weston-s-Mare in some peak hours (passing Long Ashton)</td>
</tr>
<tr>
<td>Bristol TM – Manchester Piccadilly</td>
<td>1 tph</td>
<td>Cross Country</td>
<td>Extends in some hours to/from Paignton/Penzance (passing Long Ashton). Runs via Birmingham.</td>
</tr>
<tr>
<td>Cardiff – Portsmouth Harbour</td>
<td>1 tph</td>
<td>Great Western</td>
<td></td>
</tr>
<tr>
<td>Cardiff – Taunton</td>
<td>1 tph</td>
<td>Great Western</td>
<td>Passing Long Ashton. Extends to/from Paignton/Exeter in some peak hours.</td>
</tr>
<tr>
<td>Gloucester/Malvern – Westbury/South Coast</td>
<td>1 tph</td>
<td>Great Western</td>
<td>Calls Oldfield Park, Keynsham and Yate.</td>
</tr>
<tr>
<td>Weston-s-Mare – Bristol Parkway</td>
<td>1 tph</td>
<td>Great Western</td>
<td>Passing Long Ashton.</td>
</tr>
<tr>
<td>Bristol TM – Avonmouth/Severn Beach</td>
<td>c45 mins</td>
<td>Great Western</td>
<td></td>
</tr>
</tbody>
</table>

13. From the above, there are currently three train services passing the location of the proposed Long Ashton station in each standard hour, namely:

- Cardiff – Taunton (Great Western);
- Weston-s-Mare – Bristol Parkway (Great Western); and
- Plymouth/Penzance – North East/Scotland (Cross Country).

14. Our analysis indicates that the Cardiff-Taunton service and the Plymouth/Penzance – North East/Scotland Cross Country service could both realistically incorporate an additional call at Long Ashton without any significant operational impacts.

15. The Diesel Multiple Unit (DMU) train set which operates the Cardiff-Taunton service terminates in Taunton before returning to Cardiff 13-14 minutes later. Network Rail Timetable Planning
Rules (for Western Region) stipulate a minimum 5 minutes turnback time at Taunton for DMUs arriving from Cardiff. On that basis, heading southbound this service could depart from Cardiff Central at its existing time (thereby occupying the same path through Bristol Temple Meads), call at Long Ashton and then arrive into Taunton circa 3 minutes later when compared with the current timetable. It could then return northbound to Cardiff 3 minutes earlier (i.e. still within the stipulated minimum 5 minutes turnback allowance), call at Long Ashton and again pass through Temple Meads in its existing path.

16. Likewise, the Cross Country service could sustain a slightly later arrival into Plymouth/Penzance and an earlier departure within minimum turnback allowances (thereby occupying the same paths through Bristol Temple Meads) implied by an additional call at Long Ashton in both directions.

17. The Bristol Parkway to Weston-s-Mare could not undertake calls at Long Ashton presently. This hourly service is currently operated using two DMU train sets. Heading southbound, one DMU departs Bristol Parkway at xx:12 and arrives into Weston-s-Mare at xx:59. It then reverses to head back to Bristol Parkway at xx:10 in the following hour (implying an 11 minutes turnback time at Weston-s-Mare), arriving into Bristol Parkway at xx:03 (the other DMU operates this pattern in reverse). Network Rail Timetable Planning Rules stipulate a minimum 10 minutes turnback time at Weston-s-Mare. Consequently, an additional call at Long Ashton would result in the DMU arriving into Weston-s-Mare at around xx:02, thereby unable to meet the minimum 10 minutes turnback time required by Timetable Planning Rules for a return working north at xx:10. Further, analysis indicates delaying the following northbound working to achieve the minimum 10 minutes turnback time and subsequently undertake a call at Long Ashton would result in significant operational impacts between Temple Meads and Bristol Parkway (it would conflict with the path of another service running Temple Meads to Filton Abbey Wood and generate a conflicting crossing movement at Bristol Parkway). Essentially three DMU train sets would be required to undertake an additional call at Long Ashton in both directions, with significant station downtime for the DMUs also imported into the operation.

**Future Services**

18. Regarding expected or potential medium-long term changes to service patterns on the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor, we have considered the following:

- Planned changes to the Great Western franchise specification; and
- The Bristol MetroWest programme.

19. The introduction of the new Hitachi-built Class 800 train sets, replacing the existing 40 year old High Speed Trains HSTs, will be accompanied by changes to the Great Western franchise service specification from the December 2018 timetable change onwards. Bristol Temple Meads will
then be served by four trains per hour to/from London Paddington. Two services per hour will operate via Bath, as per the current timetable, while the other twice hourly services will run via Bristol Parkway. One of the Paddington to Bristol Temple Meads via Bristol Parkway services will also be extended to/from Weston-s-Mare in most hours. Regional services (currently operated by Great Western) passing via Temple Meads and the Cross Country services are expected to remain as per the current operating schedule (see Table 1).

20. The Bristol MetroWest programme is an initiative being promoted by the West of England Combined Authority. Supporting economic growth and other objectives, MetroWest aims to provide a step-change in service frequency on local train services in the greater Bristol area passing through Temple Meads, including the Bath-Bristol route. It is planned to be delivered in two phases, as follows:

- Phase 1: Re-opening the branch line to Portishead for passenger train services (it is currently open to Portbury Docks for freight trains only). Planned infrastructure works include new stations at Portishead and Pill (with associated parking and public transport interchange facilities), 5km of new track from Pill to Portishead, renewal and upgrade of the junction with the main line at Parson Street, new signalling equipment and track, sleeper and ballast renewals at various locations on the existing freight line to allow for passenger services. Works elsewhere include signalling works on the Avonmouth branch line and upgrades to stations in the greater Bristol area. Changes to local train service frequency are proposed to provide at least a twice hourly service along the Bath/Parson Street to Avonmouth via Temple Meads route corridor (with hourly services to Portishead and Severn Beach).

- Phase 2: Re-opening the Henbury branch line for passenger train services. Plans are at an earlier stage of development, but phase 2 would see the existing freight only line from Filton to Severnside re-opened for passenger train services, with new stations at Henbury and North Filton. Further changes to local train service frequency are proposed, including introducing a twice-hourly frequency between Yate (and possibly Gloucester) and Bristol Temple Meads along with an hourly service from Temple Meads to the new Henbury station.

These are illustrated in the figures below.
21. Given the above developments, the table below details the potential medium-long term standard train service pattern in each hour on the Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor based on the December 2018 franchise specification and local stakeholder aspirations (MetroWest).

22. The most obvious solution to deliver a twice hourly frequency to Yate/Gloucester (MetroWest Phase 2) is to extend the existing service from Weston-s-Mare which currently terminates in Bristol Parkway (as the current Westbury/South Coast-Gloucester/Malvern service already calls at Yate, this would achieve the aspired twice hourly frequency). This service along with the proposed new service to/from Portishead and Pill will consequently provide Parson Street and Bedminster with two trains per hour to Temple Meads.

23. The proposed new Bath-Avonmouth service combined with the existing Westbury/South Coast-Gloucester/Malvern service will provide a twice hourly frequency at Keynsham and Oldfield Park. Likewise, combining the new services from Portishead and Bath will provide a twice hourly service to all stations to Avonmouth.
Table 2: Potential Standard Train Service Pattern along Weston-s-Mare – Bristol Temple Meads – Bristol Parkway corridor – December 2018 Franchise Specification and MetroWest Phases 1 and 2

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequency</th>
<th>Operator</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intercity/Regional</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bristol TM – London Paddington</td>
<td>2 trains per hour (tph)</td>
<td>Great Western</td>
<td>Runs via Bath.</td>
</tr>
<tr>
<td>Bristol TM – London Paddington</td>
<td>2 tph</td>
<td>Great Western</td>
<td>Runs via Bristol Parkway. 1tph extended to/from Weston-s-Mare (passing Long Ashton)</td>
</tr>
<tr>
<td>Bristol TM – Manchester Piccadilly</td>
<td>1 tph</td>
<td>Cross Country</td>
<td>Extends in some hours to/from Paignton/Penzance (passing Long Ashton). Runs via Birmingham.</td>
</tr>
<tr>
<td>Cardiff – Portsmouth Harbour</td>
<td>1 tph</td>
<td>Great Western/to be determined (TBD*)</td>
<td></td>
</tr>
<tr>
<td>Cardiff – Taunton</td>
<td>1 tph</td>
<td>Great Western/TBD</td>
<td>Passing Long Ashton. Extends to/from Paignton/Exeter in some peak hours.</td>
</tr>
<tr>
<td><strong>MetroWest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gloucester/Malvern – Westbury/South Coast</td>
<td>1 tph</td>
<td>TBD</td>
<td>Existing service, calls Oldfield Park, Keynsham and Yate.</td>
</tr>
<tr>
<td>Weston-s-Mare – Yate/Gloucester</td>
<td>1 tph</td>
<td>TBD</td>
<td>Existing Weston-Parkway service extended to Yate/Gloucester.</td>
</tr>
<tr>
<td>Portishead – Avonmouth/Severn Beach</td>
<td>1 tph</td>
<td>TBD</td>
<td>New service, also calling Parson Street and Bedminster.</td>
</tr>
<tr>
<td>Bath-Avonmouth</td>
<td>1 tph</td>
<td>TBD</td>
<td>New service, also calling Oldfield Park and Keynsham.</td>
</tr>
<tr>
<td>Bristol TM – Henbury</td>
<td>1 tph</td>
<td>TBD</td>
<td>New service.</td>
</tr>
</tbody>
</table>

* Recent proposals from the DfT suggest that local/regional services in the Bristol area could be operated by a new franchise separate from Great Western intercity services.
24. Based on the above assumed service pattern, a pathing and timetabling exercise has been undertaken to ascertain whether calls at a new Long Ashton station could be undertaken by the train services likely to be passing the proposed new station.

25. Essentially we have devised an indicative timetable for the Weston-Temple Meads-Bristol Parkway corridor based on Table 2. To undertake this exercise, these assumed train services were plotted onto traingraph diagrams. These are a visual representation of a timetable, allowing the location of trains at a particular moment in time to be identified (each line represents the movement of a particular train service through distance and time). Consequently, where lines intersect this represents two or more trains being at the same location at that particular time. This is not a problem where trains are occupying different tracks or station platforms. Conversely, pathing conflicts will occur where trains have been scheduled in such a way that they occupy the same section of track or pass through an at-grade junction at the same time. The use of traingraphs therefore allows an indicative timetable to be developed without any pathing conflicts and ensuring that minimum headway requirements are adhered to.

26. Timings for the four London Paddington services (arrival/departure times, sectional running times\(^1\) and station dwell times) were sourced from a recent iteration of the December 2018 Great Western Main Line timetable held in-house by MDS Transmodal. This also includes the hourly extension to/from Weston-s-Mare. All the other services were then scheduled, with arrival/departure times matched as closely as possible to the equivalent existing services. Likewise, sectional running times for all other services were based on those for the equivalent existing services. The MetroWest aspiration to provide regular and near evenly-spaced frequencies across the clock-face hour were also incorporated. All pathing conformed to Network Rail Timetable Planning Rules, as follows:

- Headways between following trains – 4 minutes (with the exception of a stopping train following a non-stop train between Temple Meads and Parkway);
- Junction margins – minimum 2.5 minutes;
- Station dwell times – these vary between stations and train types; the relevant value for each train type being adopted. In the case of Long Ashton, we have assumed one minute, as per Nailsea and Yatton;
- Turnback allowances – these vary between stations and train types; the relevant value for each train type being adopted;
- Platform re-occupation – these vary between stations and train types; the relevant value for each train type being adopted.

27. We assumed a ‘penalty’ of three minutes for a station call at the proposed Long Ashton station inserted into an existing service, including one minute dwell time as described.

\(^1\) Running time between two timing points on the network, such as a station or junction,
28. The traingraph diagrams are appended to this technical note. While the traingraphs illustrate the 1200 to 1300 time period, as noted above given modern ‘clockface’ timetables, this pattern will therefore repeat in previous and subsequent daytime hours. Blue lines represent intercity and regional train services, while the red lines are the proposed Bristol MetroWest train services. We can conclude from this analysis that, compliant with the assumed December 2018 franchise specification and MetroWest programme (Phases 1 and 2), a baseline service of two trains per hour per direction across the day (i.e. including calls in the peak hours for commuters) could realistically call at the proposed Long Ashton station conforming to Timetable Planning Rules, from the following services:

- Cardiff to Taunton (Regional); and
- Weston-s-Mare to Yate/Gloucester (MetroWest).

29. Both services pass via Bristol Temple Meads, thereby providing frequent connections into other long distance, regional and local services.

30. Two further options would appear feasible:

- Option 1 extends the Manchester-Bristol Cross Country via Long Ashton to terminate at Yatton and reverse in the loops at Yatton (with a call also at Nailsea). The train set which currently operates this service is held at Bristol Temple Meads for around 50 minutes before undertaking the return working to Manchester. It is therefore possible to operate to Yatton and back (via Long Ashton) within this planned downtime; and
- Option 2 reflects the occasional extensions of the Manchester Cross Country to Paignton, calling at Long Ashton (but not Nailsea or Yatton).

31. Overall, we conclude that adequate network capacity is available.

**Passenger Demand**

32. Altogether, the 5 stations within North Somerset handled some 2.49 million passengers in 2016/17, of which 1.15 million were to and from Weston Super Mare, 0.50 million with Nailsea & Backwell and 0.44 million were with Yatton.

33. North Somerset has an overall population of around 210,000 so that the mean propensity to use rail in the District amounts to around 12 single rail trips per annum. There are proposals to add 2 further stations in North Somerset, at Portishead and Pill, as part of the MetroWest project (see
above also). This project is described in some detail in the CH2M study for the Bristol area authorities in the preliminary business case report of September 2014 and we have drawn upon data in this study to allow the proposals at Long Ashton to be compared with forecasts for this new line.

34. In order to compare the ‘performance’ of different parts of the district we have compiled the following table. Station throughputs are sourced from the Office of Rail and Road and North Somerset parish populations from the census. For comparative purposes, we have extended the table to include the proposals for new stations at Portishead and Pill (and the forecast passenger volumes in the above study) and the proposal at Long Ashton. In the case of Long Ashton, we have assumed an additional 2,500 residents as compared with today as a consequence of the proposed new residential development.

35. It may well be that the current passenger volume through Yatton is boosted through passengers from Weston-s-Mare driving to Yatton because of its park and ride facilities. If, for example, we were to assume that the rates for Yatton and Weston-s-Mare were identical (at 20 per person per annum) then we could assume that 183,000 of the Yatton passengers had, in fact, driven from and returned to the Weston-s-Mare area (around 5 such passengers boarding each train departing). It will be noted that the effective rate assumed in the study for Portishead and Pill is also 20 trips per annum, although given this is based upon the assumption of only one train service per hour this might be considered optimistic.

36. Note also that the propensity for journeys to work to be taken by rail is relatively low in North Somerset as compared with the larger conurbations; just 1,860 out of a workforce of approximately 100,000 according to the 2011 census (of which 60% to Bristol) plus 276 inbound rail trips. This is explained by the low density of population. However, this can be addressed by locating new residential development adjacent to stations where there are strong potential commuter flows to denser urban areas. Only a relative handful of passengers appear to use rail to commute to points east of Bristol. Total trips for work in and out of North Somerset by rail are therefore around 1m p.a., or 40% of all local rail trips, which as a proportion of the total local trips by rail would be considered normal.

37. The forecasts for the new line to Portishead are for 656,000 trips in 2019.
Our Ref: 217078n_case for long ashton_ver2

Table 3: Current and forecast rail passenger volumes in North Somerset (2016 levels with new stations and development at Long Ashton)

<table>
<thead>
<tr>
<th>Parishes included</th>
<th>Stations included</th>
<th>Population ('000s)</th>
<th>Station throughput ('000s p.a.)</th>
<th>Trains per hour</th>
<th>Implied passengers trips/person p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weston super mare</td>
<td>Weston, Wisk St L., Locking, Hutton, St Georges</td>
<td>Weston-s-M, Weston Milton, Worle</td>
<td>86</td>
<td>1,537</td>
<td>2/3</td>
</tr>
<tr>
<td>Yatton</td>
<td>Yatton, Confressbury, Cleve</td>
<td>Yatton</td>
<td>12</td>
<td>443</td>
<td>2/3</td>
</tr>
<tr>
<td>Nailsea</td>
<td>Nailsea, Backwell, Brockley</td>
<td>Nailsea &amp; Backwell</td>
<td>19</td>
<td>504</td>
<td>2/3</td>
</tr>
<tr>
<td>Portishead/Pill</td>
<td>Portishead &amp; NW, Easton in Gordano, Portbury</td>
<td>Portishead, Pill (projected)</td>
<td>29</td>
<td>578* (forecast)</td>
<td>1*</td>
</tr>
<tr>
<td>Long Ashton</td>
<td>Long Ashton, Barrow Gurney, Dundry (restored)</td>
<td>Long Ashton (restored)</td>
<td>7 (9.5 forecast with new development)</td>
<td>190</td>
<td>2/3</td>
</tr>
<tr>
<td>Other</td>
<td>All others</td>
<td></td>
<td>57</td>
<td>zero</td>
<td>-</td>
</tr>
<tr>
<td>Forecast overall</td>
<td></td>
<td></td>
<td>212.5</td>
<td>3,252</td>
<td>2/3</td>
</tr>
</tbody>
</table>

* 656,000 in 2019, deflated to 2016 based on the study’s assumption of 4.3% p.a. growth in rail trips.

38. The CH2M study has calculated the overall costs and revenues for the new line within the wider MetroWest evaluation. The mean cost per train set is estimated in the study at £870,000 p.a.. The proposed timetable implies that a single train could simply shuttle between Portishead and Bristol Temple Meads on a stand-alone basis.

39. The study estimated that revenue per passenger mile would be 20p (12.5p/passenger km), which implies a mean fare of £1.75 each from the Portishead line and £0.9 from Long Ashton, assuming trips all terminate at Bristol Temple Meads or passengers would in case have been rail passengers beyond Temple Meads so that no additional revenue benefit to the railway industry would accrue (that is, these would be the incremental revenues to the railway as a consequence...
of re-openings). Annual additional revenue to the industry along the Portishead Line would be £1.01m (578,000 passengers at 2016/7 levels) to produce a small incremental margin over operating costs of £0.14 million per annum (£1.01million - £0.87million). We would expect longer distance trips using rail would generally already be moving by rail.

40. No additional trains would be required from Long Ashton and the extra volumes would amount to only around 8 extra passengers per train call on trains that generally carry higher volumes beyond Bristol. Extra rolling stock would not therefore be required. In these circumstances almost all of the extra revenue of £171,000 (190,000 passengers @£0.9) would be retained by the train operator.

41. The operating margin available to the railway industry is therefore marginally greater in serving a new station at Long Ashton than that which apply for the Portishead Line and the capital costs far less; only a new station itself is required as compared with the reopening of the Portishead Line, which was estimated earlier in 2017 to cost £145-175million.

42. The CH2M study estimated a wider present value economic benefit (option 5b) of £228.2 million for the overall MetroWest scheme from user and non-user benefits (mainly through reducing car volumes on the road) from an additional annual ridership of 1.18 million passengers, equating to £193 present value per annual extra passengers carried. It is this calculation that justifies the capital cost of the works involved. On that basis the Portishead Line re-opening would justify a capital investment of £126 million at 2019 projected traffic levels (£193 x 656,000 passengers), to produce a Benefit to Cost Ratio (BCR) of 1:1.

43. Given that these benefits derive mainly from reduced traffic levels and faster journeys to work within Bristol, the benefits per passenger of transferring traffic to rail via Long Ashton could be expected to be similar. That would imply a present value of £36.7 million could be derived from building a new station at Long Ashton, with additional operating costs being more than covered by additional revenue. Given that a new station would be expected to cost no more than £5-£10million including access costs, using a similar methodology as has been used for the MetroWest study implies a relatively high rate of social return (a BCR of probably around 5:1) for a new station at Long Ashton, almost certainly higher than for MetroWest overall or the Portishead scheme alone without in any way diverting any of the traffic assumed for the MetroWest schemes.

Conclusion

44. Our conclusion is, therefore, that because the Long Ashton scheme would capitalise on the fact that the community to be joined to the railway network already lies on a relatively busy railway line and does not require new railway infrastructure to be built beyond a pair of platforms that a
relatively high benefit cost ratio would emerge and that there would be little incremental cost for the railway industry in stopping trains at the proposed new station. It would appear perfectly feasible to timetable the station into the train schedules likely to be developed in the future. The station would contribute to overall connectivity and sustainability and in no way detract from other rail based projects in the area.

Reference for Long Ashton throughput estimates and evaluation


http://fosbr.org.uk/ourcase


http://map.n-somerset.gov.uk/dande.html


https://en.wikipedia.org/wiki/List_of_civil_parishes_in_Somerset
Potential WTT Bristol Parkway to Weston-s-Mare via Bristol Temple Meads - Baseline Option
Potential WTT Bristol Parkway to Weston-s-Mare via Bristol Temple Meads - Option 2

- Intercity/Regional
- Local/MetroWest