



Sustainability Appraisal (SA) of the **'Part' (Broadland part of Norwich Policy Area) Joint Core Strategy for Broadland, Norwich and South Norfolk**



SA Report Addendum

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Prepared for:
Greater Norwich
Development
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1 INTRODUCTION

- 1.1.1 Broadland District Council, Norwich City Council and South Norfolk Council¹ jointly published (August 2012) and then subsequently submitted the Part (Broadland part of the Norwich Policy Area) Joint Core Strategy (JCS) for Broadland, Norwich and South Norfolk to the Secretary of State for independent Examination on Monday 4 February 2013. An **SA Report** was published and submitted alongside.
- 1.1.2 As a result of representations received during the publication period, and discussions at the Examination, the Planning Inspector overseeing the Examination instructed that there was a need to make a number of 'Main Modifications' (henceforth 'Modifications') to the Part JCS. Proposed Modifications have been prepared and are published at the current time so that representations might be received. **This SA Report Addendum** is published alongside the Modifications with a view to informing representations.
- 1.1.3 A secondary aim of this SA Report Addendum is to supplement the appraisal of alternatives presented within the SA Report as previously published/submitted in relation to 1) greenhouse gas emissions from transport (see **Appendix I**); and 2) a small number of 'other sustainability issues' (see **Appendix II**) in light of issues raised at the Examination.

¹ The Councils are working with Norfolk County Council as the Greater Norwich Development Partnership (GNDP)

2 APPRAISAL OF THE PROPOSED MODIFICATIONS

2.1 Introduction

2.1.1 The following eight Modifications to the Part JCS (February 2013) are proposed:

- **MM1** – Minor clarifications to Para 7.16 (and table below) on pg. 95
 - This section of the JCS deals with 'Implementation', and in particular lists development that can come forward: 1) In advance of improvements to Postwick Junction; 2) Following improvements to Postwick Junction, but in advance of confirmation of delivery of the Norwich Distributor Road (NDR); and 3) Only subsequent to NDR delivery being confirmed. The changes made are for clarity and do not alter the substance of the policy approach.
- **MM2** – Insertion of a new section (Paras 7.19-20 and Policies 21 and 22)
 - The two new policies seek to ensure a positive approach to housing land supply. Specifically, the new policies: 1) Require monitoring of progress in relation to the delivery of housing land; and 2) Establish that, if monitoring after two years implementation of the Part JCS reveals that there is a shortfall (i.e. delivery of less than 90% of the housing land supply that is required), the Councils will remedy the situation by producing a short, focused Local Plan that identifies and allocates additional housing locations within the whole Norwich Policy Area (NPA) in accordance with the settlement hierarchy set out in paragraph 6.2 of the JCS.
- **MM3** – A point of clarification that is inserted into Appendix 6 (at the start of each of the first four pages)
 - The following text is to be inserted: *"This appendix illustrates the trajectory [in relation to housing delivery] as anticipated in 2010... Not only is this page of the appendix out of date but it also includes assumptions about delivery from elements of the plan that were remitted by court order. It is reproduced here solely for historical information. For updated information on housing trajectories please see the Annual Monitoring Report. For a housing trajectory in the Broadland part of the NPA see Appendix 6a and the published Annual Monitoring Report."*
- **MM4** – Changes to the 'Growth Locations' table within Appendix 6 (pg. 113)
 - This table presents the 'total number of units per year' expected to come forward at growth locations in each of the three districts up to 2025/26. The change made is simply to delete references to locations within the Broadland part of the NPA, instead direct readers to a new appendix ('6a' – see MM5), and note that remaining information is out of date.
- **MM5** – Insertion of a new Appendix ('6a')
 - The new appendix presents the total number of units per year expected to come forward (i.e. the expected 'trajectory') at growth locations within the Broadland part of the NPA. The trajectory is different to that previously presented within Appendix 6 of the JCS as submitted (February 2013). Specifically, the trajectory reflects an expectation that the rate of growth in the North East Growth Triangle will be slower in the earlier part of the plan period and faster in the latter part of the plan period compared to that previously anticipated.
- **MM6** – Changes to Appendix 7
 - This appendix lists infrastructure required to facilitate development promoted in this JCS. The change made is simply to delete references to infrastructure required to facilitate delivery of growth in the Broadland part of the NPA, and instead direct readers to a new appendix ('7a' – see MM7).

- **MM7** – Insertion of a new Appendix ('7a')
 - The new appendix presents an 'Implementation Framework and Critical Path' for the Broadland part of the Norwich Policy Area. This table is correct as of June 2013. The proposed implementation framework / critical path is very similar to that presented within Appendix 7 of the JCS as submitted (February 2013), which was correct as of June 2010. It is perhaps notable that: sewerage upgrading is now expected to come forward 'in phases up to 2026' as opposed to 'by 2016'.
- **MM8**- Insertion of a new Appendix ('8a')
 - Appendix 8 presents a 'monitoring framework'. The addition of Appendix 8a reflects the need to add additional monitoring indicators in-light of an understanding (as developed through SA) of expected/uncertain sustainability effects associated with growth in the Broadland part of the Norwich Policy Area. The new monitoring indicators reflect those suggested within Chapter 7 of the SA Report submitted alongside the Part JCS in February 2013.

2.1.2 Most of these Modifications do not affect the 'substance' of the policy approach proposed by the Part JCS, and hence need not be a focus of appraisal. Indeed, the only Modification that does reflect a decision to alter the policy approach is MM2 (which proposes the addition of two new policies). As such, it is **MM2 only** that is the focus of appraisal at the current time.

2.1.3 Reasons for effectively 'screening-out' other Modifications are as follows:

- MM1 and MM3 are simply points of clarification
- MM4 / MM5 do not reflect a policy approach. There is no phasing policy within the JCS; rather, it is the intention that development should come forward at a rate determined by market conditions. The Modifications simply reflect the latest understanding of market conditions.
 - N.B. Whilst the new trajectory does not reflect a policy proposal and hence does not require appraisal, there is a need to consider whether this understanding of the trajectory has bearing on previous appraisal findings made in relation to the proposed spatial approach to growth (as set out within the Table 6.2 of the SA Report submitted alongside the Part JCS). It is not considered that it does on the basis that growth in the earlier part of the plan period will still be 'significant'. One local environmental receptor that is particularly sensitive to the rate of growth is the water environment (SA objective 2 '*To improve the quality of the water environment*') given the potential for ground and river water abstraction to impact on the integrity of Special Areas of Conservation should development occur at a faster rate than the necessary improvements to water abstraction infrastructure. In this respect, the fact that housing delivery is now expected to be 'delayed' somewhat has positive implications, as it should increase the likelihood of improvements to infrastructure being completed in advance of abstraction levels being increased. This issue is also considered in the Habitats Regulations Assessment addendum.
- MM6 / MM7 do not reflect a policy approach. As with MM4 / MM5 there is, however, a need to give consideration to whether the latest understanding of infrastructure that can be expected to come forward alters previous appraisal findings made in relation to the proposed spatial approach to growth (as set out within the Table 6.2 of the SA Report submitted alongside the Part JCS in February 2013). It is not considered that it does given that differences between what was expected previously and what is expected now are minor.
- MM8 is simply a list of monitoring indicators / does not reflect a policy approach. It would be impossible to come to any conclusions on the bearing that monitoring will have in terms of the achievement of SA objectives.

2.2 Appraisal of MM2

2.2.1 Whilst it is appropriate to appraise MM2 in terms of the established SA Framework (i.e. the list of 21 SA objectives established via a process of 'scoping') it is immediately apparent that the potential for there to be a 'significant effect' in terms of the achievement of any SA objective is limited. This reflects the fact that:

- Policy 21 is essentially a commitment to take a positive approach when considering development proposals within the Broadland part of the Norwich Policy Area (i.e. one that, for example, involves working proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible). There can be no way of knowing what this will mean 'on the ground', particularly given that an equally positive approach may well have been taken in any case (i.e. under a business-as-usual scenario, without the new policy).
- Policy 22 reflects a specific commitment, but one that will only be implemented if 'triggered'. There can be no certainty that this trigger will occur. Furthermore, the commitment is not spatially specific. It is known that the allocation of additional sites would be 'planned' (through a focused Local Plan) and apportioned in-line with the settlement hierarchy; however, nothing more than that is known.

2.2.2 A focused Local Plan, if triggered as a result of Policy 22, would act as something of a 'safety net', ensuring that sufficient houses are delivered with a view to meeting housing needs, and ensuring that a 'plan-led approach' remains in-place (as opposed to a situation whereby planning applications are judged solely against the National Planning Policy Framework²).

2.2.3 Policy 22 states that the focused Local Plan should *"have the objective of identifying and allocating additional locations within the whole NPA area for immediately deliverable housing land to remedy that shortfall, in accordance with the settlement hierarchy set out in paragraph 6.2 of the JCS."* As such, if triggered the policy would be likely to result in a scenario whereby:

- More sites are allocated in the Norwich Policy Area (NPA) than would be the case under the scenario appraised within the SA Report submitted alongside the Part JCS, i.e. the scenario whereby the currently adopted JCS plus Part JCS is implemented³.
 - It is important to emphasise that site allocations would be additional to those resulting from the JCS / Part JCS. The scale of locations needed would be sufficient to remedy the identified shortfall.
- The implication of developers having more sites from which to choose would likely be that development is **more dispersed**, i.e. dispersed to a greater extent than would be the case under the JCS / Part JCS scenario (which would involve concentrated development at strategic locations).
 - Also, given that the focused Local Plan would allocate sites that are 'immediately deliverable' it would likely be the case that additional allocated sites tend to be relatively **small scale** (given that large scale developments require the delivery of enabling infrastructure before they can be built-out).
- In terms of growth quantum -
 - Over the plan period (i.e. up to 2026) the quantum of growth would likely be similar to that under the scenario whereby the JCS / Part JCS is implemented (i.e. the desired quantum of growth would be achieved).
 - In the longer term (i.e. beyond the plan period) it could be the case that there is 'more growth' if it is the case that all allocated sites (i.e. sites allocated by the JCS / Part JCS and Focused Local Plan) are eventually built out.

² Paragraph 49 of the NPPF states that *"Relevant policies for the supply of housing should not be considered up-to-date if the local planning authority cannot demonstrate a five-year supply of deliverable housing sites."* Paragraph 14 states that where local policies are out of date then planning applications should be determined in-line with the NPPF.

³ Subsequent to adoption of the Part JCS, the intention is to prepare a series of 'Area Action Plans' to allocate sites within the strategic locations identified in the JCS as adopted and Part JCS.

2.2.4 **Table 2.1** considers implications in terms of each of the SA objectives. It is important to note the following:

- The narrative within Table 2.1 primarily considers the merits of implementing Policy 22 (i.e. triggering a focused Local Plan) relative to a 'baseline' situation whereby the Part JCS is fully implemented alongside the JCS. This is considered appropriate; however, the result is that the appraisal somewhat overstates the negative implications of Policy 22. Another approach would be to consider the merits of Policy 22 against a 'baseline' situation whereby there is an undersupply of housing land and hence a situation whereby JCS policies are considered 'out-of-date' and planning applications are determined instead against NPPF policy (i.e. a situation whereby growth in the NPA is no-longer 'plan-led'). This would result in Policy 22 being seen in a better light.
- The narrative within Table 2.1 takes little account of the fact that a focused Local Plan would only "cover such a time period as may reasonably be considered necessary for the delivery delay or shortfall (however caused) to be resolved" and hence may be quite limited in scope. The effects of a focused Local Plan that is limited in scope would be fewer / less significant.

2.2.5 Subsequent to Table 2.1 a conclusions section presents a concise appraisal.

Table 2.1: Narrative on the merits of modifying the Part JCS by adding Policy 22

SA Objective	Narrative
<p>ENV1 To reduce the effect of traffic on the environment.</p>	<p>The SA Report submitted alongside the Part JCS (February 2013) highlights that a situation whereby growth in the NPA is focused to a large extent on the NEGT would likely lead to some localised traffic congestion, which in turn would lead to significant negative effects to local environmental quality (e.g. in terms of noise pollution and disruption to amenity). It noted, however, that there are numerous aspects of this spatial approach to growth that give rise to opportunities to minimise the number of additional car trips.</p> <p>It is somewhat unclear whether a more dispersed approach to growth – which would occur if a focused Local Plan is triggered as a result of Policy 22 - would be more or less likely to lead to traffic congestion and negative implications for local environmental quality. Traffic movements resulting from new development would not be concentrated in one area; <u>however</u>, it is the case that a more dispersed approach to growth would give rise to fewer opportunities to minimise the number / length of additional car trips. This reflects the fact that it would be unlikely that growth would be concentrated in such a way that a critical mass of new potential users of public transport is created that leads to investment in new high quality public transport infrastructure / services.</p> <p>Another determinant of 'car dependency' amongst new residents will be proximity to key employment locations. In this respect a more dispersed approach might well perform less well than an approach whereby growth is focused to a large extent on the NEGT (given that the NEGT is well located in this respect); however, it is not possible to be certain as key employment locations are fairly well spread around the NPA.</p>
<p>ENV2 To improve the quality of the water environment.</p>	<p>Focusing on Waste-water Treatment Works (WwTW) capacity, the SA Report submitted alongside the Part JCS (February 2013) concludes that a situation whereby growth in the NPA is focused to a large extent on the NEGT does not give rise to any major concerns.</p> <p>In comparison, a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 - <i>could</i> lead to development focused at locations where WwTW capacity would be</p>

	<p>stretched to the point where there was a risk of it being breached; however, this is unlikely to be the case in practice given that development locations will be planned through a focused Local Plan.</p> <p>It is also important to take into account the fact that there could be more development in the long term if the focused Local Plan is triggered. However, there is no particular evidence to suggest that this would result in negative implications for water quality.</p>
<p>ENV3 To improve environmental amenity, including air quality.</p>	<p>It is appropriate here to focus on air quality in particular. It is notable that all Air Quality Management Areas within the plan area are located within Norwich; and with this in mind it is possible to conclude that a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 - is less preferable to an approach whereby growth is focused to a large extent in the NEGT. This reflects the fact that there would be little potential to bring forward new high quality public transport infrastructure and hence more journeys into the City Centre would be made by private car.</p> <p>It is also important to take into account the fact that there could be more development in the long term if the focused Local Plan is triggered. This also has negative implications for air quality.</p>
<p>ENV4 To maintain and enhance biodiversity and geodiversity.</p>	<p>The SA Report submitted alongside the Part JCS (February 2013) concludes that a situation whereby growth in the NPA is focused to a large extent on the NEGT could lead to significant negative effects on the biodiversity baseline on the basis that some of the current biodiversity value of this extensive area would be lost. Having said this, it is noted that development at this scale offers excellent opportunities for mitigating negative effects through 'designing-in' a carefully planned green infrastructure network.</p> <p>It can be assumed that a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 - would be planned so that growth is directed away from more sensitive locations; however, this is still the potential for the loss of numerous smaller areas of less important habitat to have a 'cumulative' effect on the biodiversity baseline. What is certain is that there would be less potential to deliver coordinated (and hence high quality) green infrastructure. Overall, it is unclear which approach would be preferable, but also taking into account the fact that – in the long term - the focused Local Plan would lead to more development (i.e. there would be development at both strategic and smaller sites) it is possible to conclude that there are negative implications for biodiversity..</p>
<p>ENV5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.</p>	<p>As with ENV4, focusing growth to a large extent on the NEGT would lead to significant negative effects in terms of landscape (but there would be good potential to mitigate effects through green infrastructure).</p> <p>It could be that a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 - would lead to development of less sensitive locations; however, this is not likely. More likely is that (despite sites being allocated through a focused Local Plan) a high proportion of development will come forward at settlement edge locations that tend to be sensitive from a landscape perspective. Overall, it is unclear which approach would be preferable, but also taking into account the fact that – in the long term - the focused Local Plan would lead to more development (i.e. there would be development at both strategic and smaller sites) it is</p>

	<p>possible to conclude that there are negative implications for landscape.</p>
<p>ENV6 To adapt to and mitigate against the impacts of climate change.</p>	<p>The SA Report submitted alongside the Part JCS (February 2013) highlights that a situation whereby growth in the NPA is focused to a large extent on the NEGТ would lead to significant positive effects on the basis that 1) there is good potential to minimise the number and length of trips made by private car / encourage a greater proportion of trips by 'sustainable' modes; 2) focused growth at this scale would lead to a high likelihood of delivering decentralised and renewable or low carbon energy sources⁴; and 3) work has been undertaken to explore how development at Rackheath could come forward as an 'eco-community'.</p> <p>In comparison, a more dispersed approach to growth with a greater proportion of growth occurring at smaller sites / as part of smaller scale development – which would occur if a focused Local Plan is triggered as a result of Policy 22 - performs poorly. There would be more limited potential for developments to reach a critical mass whereby it becomes possible to fund new transport or renewable/low carbon energy generation infrastructure.</p> <p>It is noted that in the long-term large-scale sites allocated in the NEGТ would still (it is assumed) be built-out; however, delivery of renewable / low carbon energy schemes is something that should be achieved in the short-term if possible.</p>
<p>ENV7 To avoid, reduce and manage flood risk.</p>	<p>The SA Report submitted alongside the Part JCS (February 2013) highlights that a situation whereby growth in the NPA is focused to a large extent on the NEGТ does not give rise to any major concerns in relation to flood risk.</p> <p>It is assumed that a more dispersed approach to growth – which would occur if a focused Local Plan is triggered as a result of Policy 22 - could also be accommodated (i.e. planned through a focused Local Plan) without significantly increasing flood risk.</p> <p>It is also important to take into account the fact that there could be more development in the long term if the focused Local Plan is triggered. There is no particular evidence to suggest that this would result in negative implications for flood risk.</p>
<p>ENV8 To provide for sustainable use and sources of water supply.</p>	<p>A key issue for the JCS relates to the need for intervention to allow for the sustainable reduction of abstraction at Costessey.</p> <p>The SA Report submitted alongside the Part JCS (February 2013) highlights that a situation whereby growth in the NPA is focused to a large extent on the NEGТ does not lead to any implications in this respect. It is also likely that a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 - could be accommodated without giving rise to negative effects. However, in the long-term, the focused Local Plan could lead to a greater quantum of growth occurring in the NPA than would otherwise be the case (on the assumption that all allocated sites eventually get built-out). This is a notable concern and on this basis it is possible to say that proposed Policy 22 performs poorly.</p>
<p>ENV9 To make the best use of resources, including land and energy and to minimise waste</p>	<p>The SA Report submitted alongside the Part JCS (February 2013) concludes that a situation whereby growth in the NPA is focused to a large extent on the NEGТ would likely lead to significant negative</p>

⁴ The Greater Norwich Sustainable Energy Study concludes that development of 1,000 dwellings (and at the appropriate density) lead to CHP and communal heating schemes tending to have "excellent commercial prospects".

<p>production.</p>	<p>effects on the basis that development would be predominantly on greenfield land and, whilst agricultural land lost would be predominantly grade 3 (i.e. lower quality), there will more than likely be some grade 2 loss.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – could in theory be preferable should it be possible for the focused Local Plan to allocate sites that make better use of previously developed sites. However, in practice it is not thought likely that this would be the case. Most (if not all) sustainably located brownfield sites identified through Strategic Housing Land Availability Assessment are set to be allocated as a result of the JCS / Part JCS.</p> <p>It is also important to take into account the fact that there could be more development in the long term if the focused Local Plan is triggered. It is unlikely that this – in itself - would result in negative implications in terms of efficient use of land.</p>
<p>SOC1 To reduce poverty and social exclusion.</p>	<p>Development in the right location has the potential to stimulate / support the regeneration of deprived areas.</p> <p>The SA Report submitted alongside the Part JCS (February 2013) concludes that a situation whereby growth in the NPA is focused to a large extent on the NEGT will not directly support regeneration priorities given that the area does not contain, nor is it adjacent to, priority areas; however, there is the potential for indirect benefits. In particular, it is notable that growth focused at the NEGT will enable a Bus Rapid Transit (BRT) service that serves the Heartsease Estate (one of the most deprived parts of Norwich) which in turn will enable better access to employment locations and the City Centre. Heartsease residents will also have good access to jobs and services in the growth area.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – could be planned so that growth is targeted with a view to stimulating / supporting regeneration initiatives; however, it is unclear whether this would be likely to happen in practice.</p> <p>However, this is not the only consideration. It is also important to consider that Policy 22 would ensure that sufficient housing growth occurs at the scale of the NPA. In this respect the inclusion of Policy 22 represents a positive step.</p>
<p>SOC2 To maintain and improve the health of the whole population and promote healthy lifestyles.</p>	<p>The Part JCS as submitted (February 2013) requires that: <i>“[The Growth Triangle will include] a district centre based around an accessible high street and including a new library, education and health facilities.”</i> As highlighted by the SA Report submitted alongside the Part JCS (February 2013), this should mean that important services and facilities are easily accessible to new residents, including those who are less mobile. Furthermore new services and facilities within the NEGT will also be accessible to those who live in the rural parts of Broadland district and residents of Heartsease (one of the most deprived parts of Norwich).</p> <p>It is assumed that a dispersed approach to growth – which would occur if a focused Local Plan is triggered as a result of Policy 22 – would be less likely to support targeted improvements to town/local centres / targeted improvements to ‘community infrastructure’. However, it is noted that the implementation of the Community Infrastructure Levy (CIL) negates this ‘disbenefit’ to some extent. Overall, effects are unclear.</p>

<p>SOC3 To improve education and skills.</p>	<p>The Part JCS as submitted (February 2013) requires that: “[The Growth Triangle will include a] new pre-school provision and up to six new primary schools plus a new secondary school with an initial phase to open as early as possible. To facilitate early provision the early phases of development will concentrate on family housing.” As such, it is suggested within the SA Report that significant positive effects on the baseline are likely.</p> <p>A dispersed approach to growth would result in ‘challenges’ in terms of coordinating development and school capacity; however, it is unclear whether there would be any significant detriment to access to education as a result.</p>
<p>SOC4 To provide the opportunity to live in a decent, suitable and affordable home.</p>	<p>The inclusion of Policy 22 leads to positive implications for the achievement of this objective. As a result of Policy 22, if monitoring indicates that (two years after adoption of the Part JCS) there is insufficient housing land supply compared to what is necessary in order to meet housing needs then a focused Local Plan will be triggered. Policy 22 identifies that the focused Local Plan should identify sites that are ‘immediately deliverable’.</p> <p>Policy 22 may only be a ‘safety net’, but it is an important one given the urgency of providing sufficient land for housing. The Greater Norwich area already has a housing backlog⁵ and, looking forward, large scale sites will take several years to progress through the planning process.</p> <p>Faster rates of delivery may be achieved if it is the case that multiple smaller sites are allocated in addition to the large strategic sites; however, there is considerable uncertainty in relation to this conclusion. There is currently sufficient land supply to achieve house building rates considerably in excess of what is being delivered, which indicates that house building is being held back by factors other than land supply (such as mortgage finance, market confidence etc).</p>
<p>SOC5 To build community identity, improve social welfare, and reduce crime and anti-social activity.</p>	<p>As highlighted by the SA Report (February 2013), focused growth within the NEGT should mean that it is possible to deliver a new community that: includes a range of community services and facilities (including health facilities) within walking distance; and is master-planned with green infrastructure in mind.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – would be likely to result in the development of smaller scale new communities. These would (it is assumed) have less potential for social/community facilities to be incorporated within the development and, therefore, may tend to be less ‘mixed and inclusive’; hence this approach performs relatively poorly.</p>
<p>SOC6 To offer more opportunities for rewarding and satisfying employment for all.</p>	<p>As highlighted by the SA Report (February 2013), focused growth within the NEGT will enable excellent access to large employment locations (as well as employment in the City Centre). Specifically, Broadland Business Park is a strategic employment site nearby that has capacity to grow. The NEGT is also adjacent to Norwich Airport, another strategic employment site with capacity for growth. Smaller employment sites at Salhouse Road and Sprowston Retail Park provide some additional prospect for local employment growth locally. Furthermore, housing growth would give rise to the potential</p>

⁵ The adopted JCS plans for 1825 dwellings per year over the plan period (08-26) and delivery 08-13 has been running a c.900 dwellings per annum. Trajectories contained in the adopted JCS have not been delivered, which may suggest a considerable backlog of need.

	<p>to deliver around 25ha of new employment land at Rackheath. As such, the SA Report concludes that significant positive effects on the baseline are likely.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – could lead to development that is well located in relation to key employment sites (see discussion under ENV1); however, there would be less potential for housing growth to stimulate investment in new employment locations. As such, this approach to growth is less preferable.</p>
<p>SOC7 To improve the quality of where people live.</p>	<p>As highlighted by the SA Report (February 2013): In the short term, many existing local residents will perceive development within the NEGT as having a detrimental effect on the quality of the local environment. This, in turn, could have negative implications in relation to health and well-being. However, it is likely that effects can be mitigated to a large extent through measures that can be put in place during masterplanning (including in relation to phasing and construction practices). In the longer term there is the potential for positive effects on the basis that the Part JCS as submitted (February 2013) requires that “[The Growth Triangle, along with other major locations for growth] will be masterplanned as attractive, well-serviced, integrated, mixed use development using a recognised design process giving local people an opportunity to shape development.” This should help to ensure that development in the NEGT is high quality.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – could be less likely to lead to high quality developments; however, this is somewhat unclear. There are arguably benefits to smaller scale developments.</p>
<p>SOC8 To improve accessibility to essential services, facilities and jobs.</p>	<p>Please refer to discussion of access to services and facilities under SOC2 and access to jobs under SOC6.</p>
<p>EC1 To encourage sustained economic growth.</p>	<p>As described under SOC6, a situation whereby growth in the NPA is focused to a large extent on the NEGT will ensure that housing development is focused in close proximity to key employment locations. This has positive implications for the continued success of these employment locations. Furthermore, in-line with Policy 10 (Locations for major new or expanded communities in the Norwich Policy) of the adopted JCS, the NEGT will be developed as a mixed-use development, meaning that housing will be interspersed with employment uses. These factors will help to secure a range of employment sites, and hence could factor into efforts to ensure a diverse employment base.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – would be less preferable. However, this is not the only consideration. It is also important to consider that Policy 22 would ensure that sufficient housing growth occurs at the scale of the NPA. Housing growth is necessary in order to ensure that identified opportunities for economic growth are realised, and so in this respect the inclusion of Policy 22 is a positive step.</p>
<p>EC2 To encourage and accommodate both indigenous and inward investment.</p>	<p>Please refer to discussion under EC1.</p>

<p>EC3 To encourage efficient patterns of movement in support of economic growth.</p>	<p>As described under EC1, a situation whereby growth in the NPA is focused to a large extent on the NEGT will ensure that housing development is focused in close proximity to key employment locations, and that a high proportion of residents are able to find employment within the NEGT. This will help to ensure efficient patterns of movement in support of economic growth. Furthermore, as described under ENV1, this approach to spatially targeting growth will help to ensure take-up of alternatives to private car travel.</p> <p>A more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – would be less preferable.</p>
<p>EC4 To improve the social and environmental performance of the economy.</p>	<p>As has been discussed under other objectives (e.g. ENV1), it is likely that a situation whereby growth in the NPA is focused to a large extent on the NEGT will enable considerable opportunity for residents to access employment by modes of transport other than the private car; and in comparison a more dispersed approach – which would occur if a focused Local Plan is triggered as a result of Policy 22 – would be less preferable.</p> <p>Another consideration relates to the fact that growth focused on the NEGT would result in employment opportunities in a location that is accessible to residents of both urban and rural areas.</p>

2.3 Appraisal conclusions

- 2.3.1 Table 2.1 highlights that a scenario whereby a focused Local Plan is triggered as a result of Policy 22 is less than ideal in terms of most SA objectives on the basis that growth could come forward in a more dispersed fashion and there could be more growth overall in the long-term. As such, it might be recommended that the Policy be modified so that the aim of the focused Local Plan is to identify an additional 'strategic site' rather than "additional locations within the whole NPA area for immediately deliverable housing land". However, it is recognised that such an approach would mean that Policy 22 would perform less well in terms of **SOC4** *To provide the opportunity to live in a decent, suitable and affordable home*. The positive performance of Policy 22 (as currently drafted) in terms of SOC4 is a key consideration, i.e. it is a positive effect that is of clear significance. Possible negative effects in terms of other SA objectives are a concern to a lesser extent given that there will be the potential to avoid / mitigate effects through the focused Local Plan (which would be prepared alongside a process of Sustainability Appraisal). Also, given that any focused Local Plan would only "cover such a time period as may reasonably be considered necessary for the delivery delay or shortfall (however caused) to be resolved" it may turn out to be limited in scope (i.e. it may not allocate very much land) in which case the potential negative implications highlighted in Table 2.1 would be fewer / less significant.

3 NEXT STEPS

- 3.1.1 This SA Report Addendum is published alongside the Main Modifications so that appraisal findings might be taken into account by consultees when making representations. Subsequent to the closure of the Publication period representations received and this SA Report Addendum will be taken into account by the Planning Inspector charged with overseeing the Examination of the Part JCS. At that point the Inspector may choose to hold further 'Examination Hearing' sessions, or he may report back on the soundness of the Part JCS.

APPENDIX 1: REVISITING THE ALTERNATIVES APPRAISAL (1): GREENHOUSE GAS EMISSIONS FROM TRANSPORT

Introduction

The August 2012 SA Report published alongside the Part JCS presented an appraisal of three alternative approaches (known as 'the Reasonable Alternatives') to distributing growth within the Broadland part of the Norwich Policy Area. One of the Reasonable Alternatives was identified at the time as the 'preferred' approach (and remains the Council's preferred approach).

During the publication, period representations were received that questioned the choice of preferred approach on the basis that it might not be that which performs best in terms of greenhouse gas emissions from transport. This matter was then discussed further at the Examination hearings.

In light of the representations received / discussion at the resumed hearings, the Council accepts that it is appropriate to present further analysis at the current time in relation to the merits of the Reasonable Alternatives in terms of greenhouse gas emissions from transport.⁶

The intention here is to supplement the work already carried out as part of the Sustainability Appraisal process to date, i.e. the analysis presented 'under' SA objectives ENV1, ENV6, and EC3 within Table 6.1 of the SA Report. In particular, it is recognised that there is a need to undertake supplementary analysis to allow conclusions to be drawn on the merits of the Reasonable Alternatives in terms of greenhouse gas emissions from transport.

There is no agreed or commonly adopted methodological approach to appraising alternative 'strategic spatial approaches to growth' in this respect. In the absence of an agreed methodology a simple approach is taken below aided by a series of maps. To avoid potential spurious accuracy and excessive complexity a modelling approach (which was suggested as appropriate by some participants at the Examination of the Part JCS) has not been used.

Three key issues have been looked at with a view to informing Sustainability Appraisal. These three key issues are as follows:

- 1) Proximity to the City Centre.
 - The City Centre is particularly important in the Norwich Urban Area offering a location for a very wide range of functions and services. Therefore the greater the distance from the City Centre that new housing is located, the greater the likelihood that average trip lengths will tend to be greater.
 - This analysis is aided by a simple map (Figure 1) illustrating the broad locations considered under the three previously defined Reasonable Alternatives and their proximity to the City Centre.
- 2) Distance to key employment locations.
 - A key employment location in close proximity is likely to create the opportunity for a proportion of residents to walk or cycle to work. As well as direct greenhouse gas emission benefits, there can be indirect benefits if traffic congestion is reduced (given that a car journey made in heavy traffic will use more fuel than a car journey made on clearer roads).
 - This analysis is aided by a simple map (Figure 2) illustrating nine key employment locations and the areas that fall within what is considered to be easy walking and cycling distances (1km - 3km). The key employment locations identified each offer a minimum level of employment of around 1,000 jobs.
 - It is important to note that scale of employment at these key employment locations varies considerably (with the City Centre being by the largest), and that several are set to expand in the future, regardless of the Part JCS.⁷ It is also worth noting that some of these locations (in addition to the City Centre) are also retail destinations.
- 3) Access to potential high quality public transport routes (in particular Bus Rapid Transit, BRT).

⁶ Further analysis is presented so that it might be drawn-on as part of plan-making and hence contribute to plan soundness.

⁷ NRP/ UEA / N&N is set to be allocated 55ha of new employment land (with the potential to allocate further land in the future); Norwich International Airport is set to be allocated 30ha of new employment land (it should be noted that this is additional to the Norwich Aeropark Development that has recently been granted planning permission); Broadland Business Park is set to be allocated 25ha of new employment land; Hethel is set to be allocated 20ha of new employment land; Wymondham is set to be allocated 15ha of new employment land; and Longwater is earmarked for intensification and small scale expansion.

- The greater the potential for high quality public transport routes to serve both existing and proposed development the greater the potential to promote modal shift to public transport.
- This analysis is aided by three simple maps (Figures 3a-c) illustrating the likely distribution of development under each of the Reasonable Alternatives and the likely areas falling within 400m of an expected BRT route. Three maps are presented rather than one as the number/length of expected BRT routes varies between the three Reasonable Alternatives.

For information a summary of the three Reasonable Alternatives is given below:

The three Reasonable Alternatives are comprised of combinations of sectors as follows:

- Reasonable Alternative (1) = 7,000 homes in the NE sector inside and outside the NDR.
 - Plus 25ha of employment land at Rackheath.
- Reasonable Alternative (2) = 7,000 in the NE sector inside the NDR.
 - Plus 25ha of employment land at Broadland Business Park or Norwich International Airport.
- Reasonable Alternative (3) = 4,600 in the SW (making a total of 7,000 at this location in the plan period when combined with growth identified in the adopted JCS); and 2,400 across the Broadland part of the NPA (made up of two small scale locations of at least 1,000 each).
 - Plus 25ha of employment land in association with the large scale strategic housing development in the South West or at Norwich International Airport.

Analysis

Figure 1: Location of the sectors under consideration relative to the City Centre. Also showing key employment sites.



Figure 2: Areas within walking / cycling distance of a key employment sites

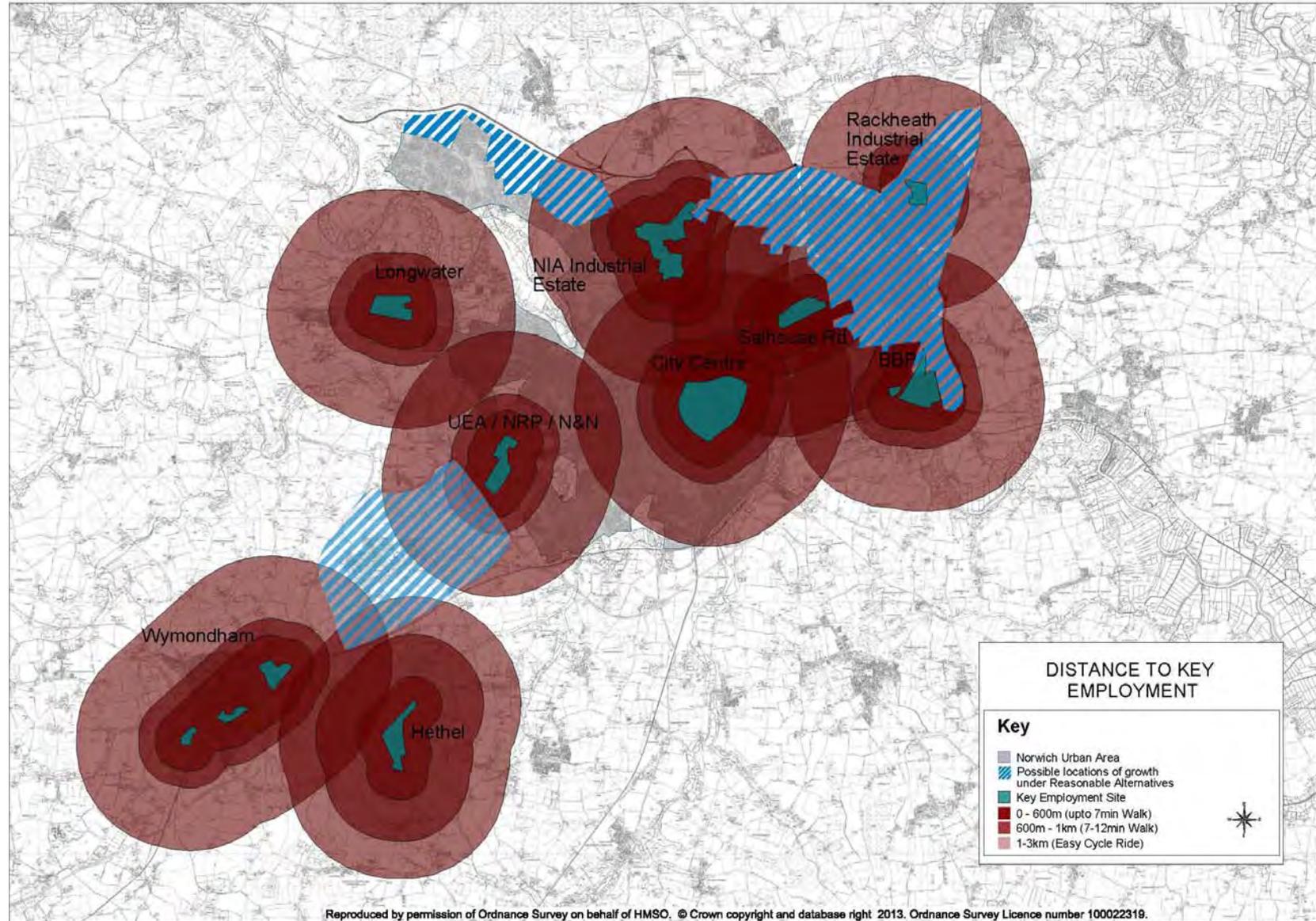


Figure 3a: BRT 'corridors' under Alternative 1

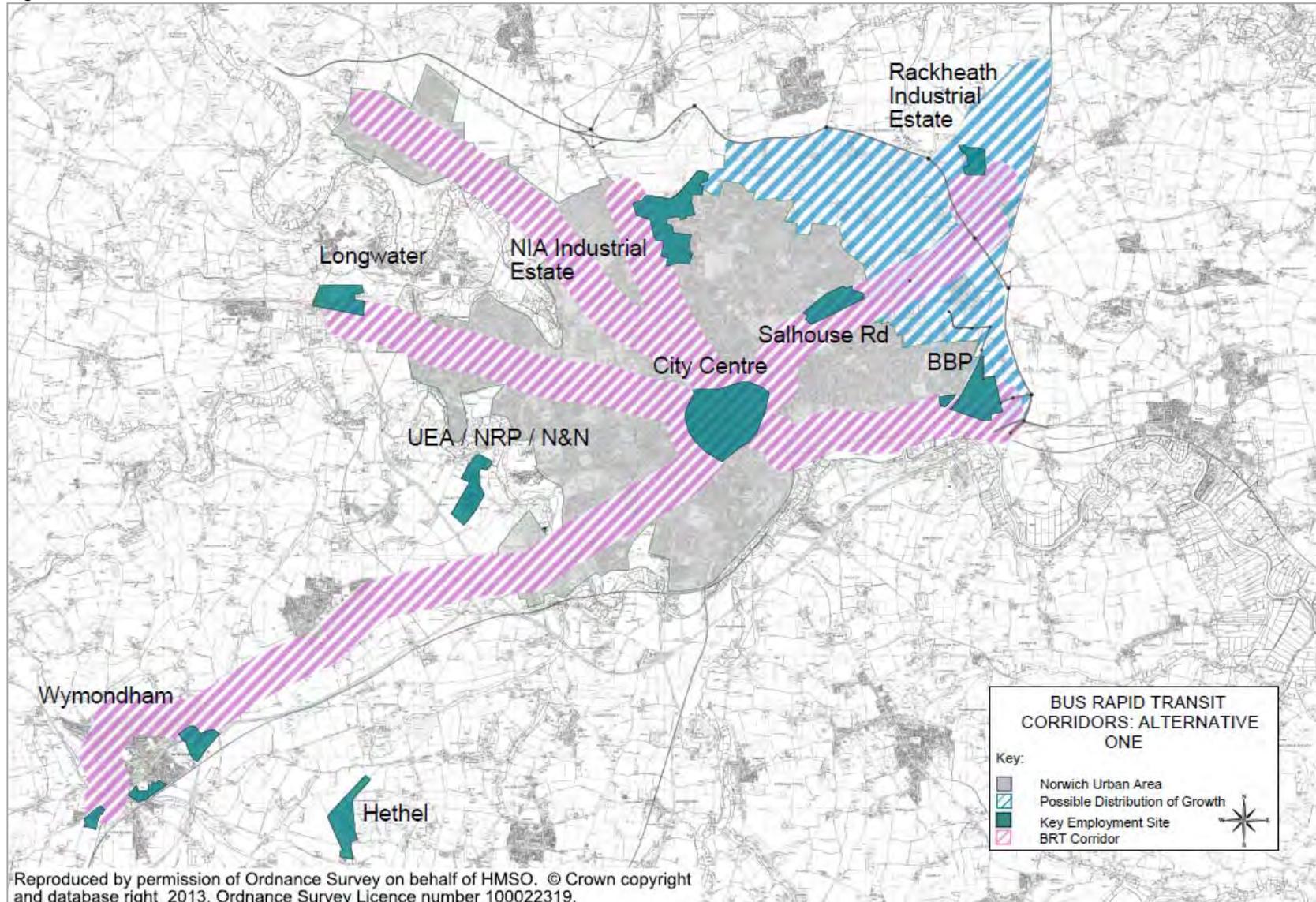


Figure 3b: BRT 'corridors' under Alternative 2

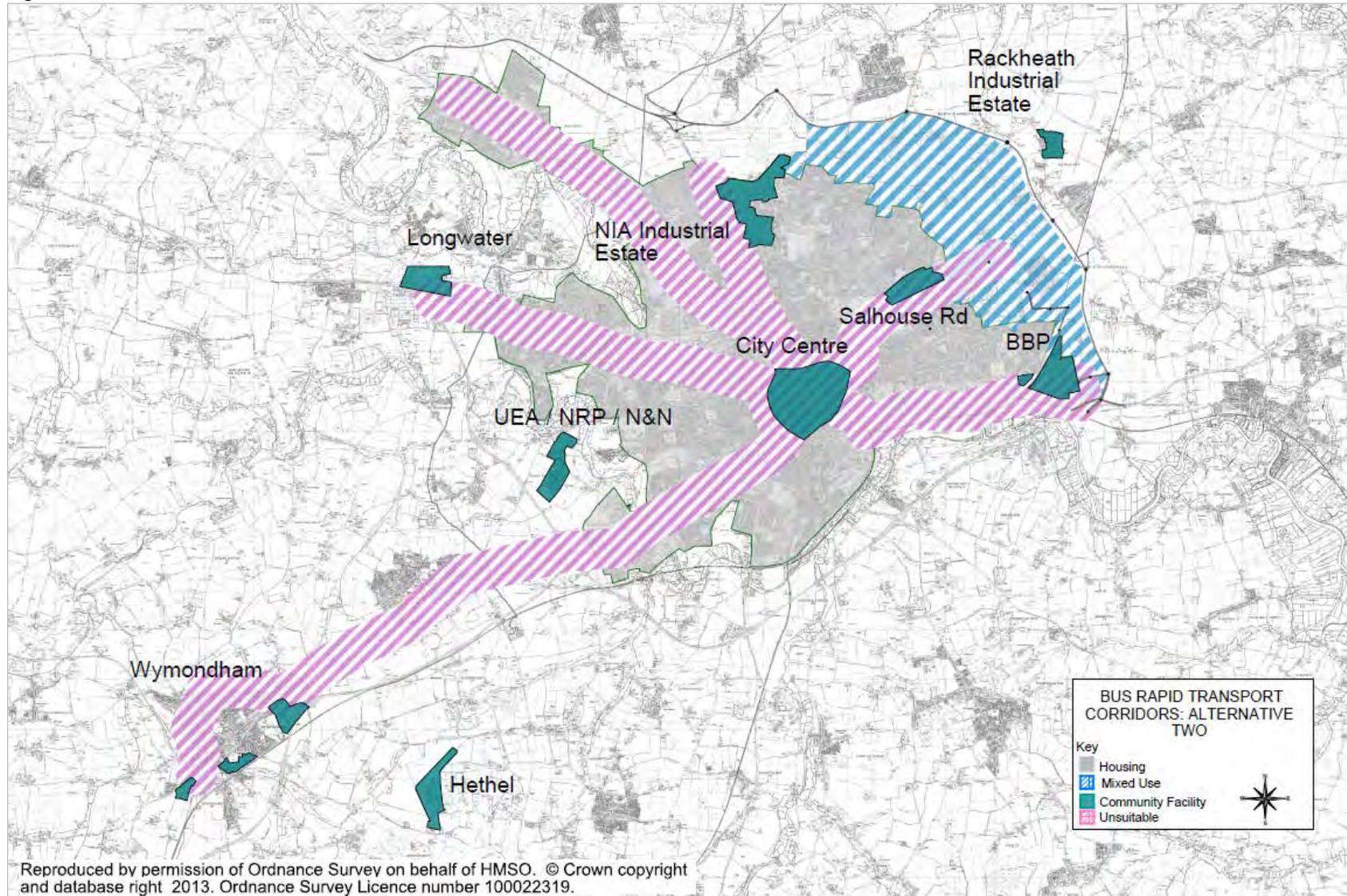
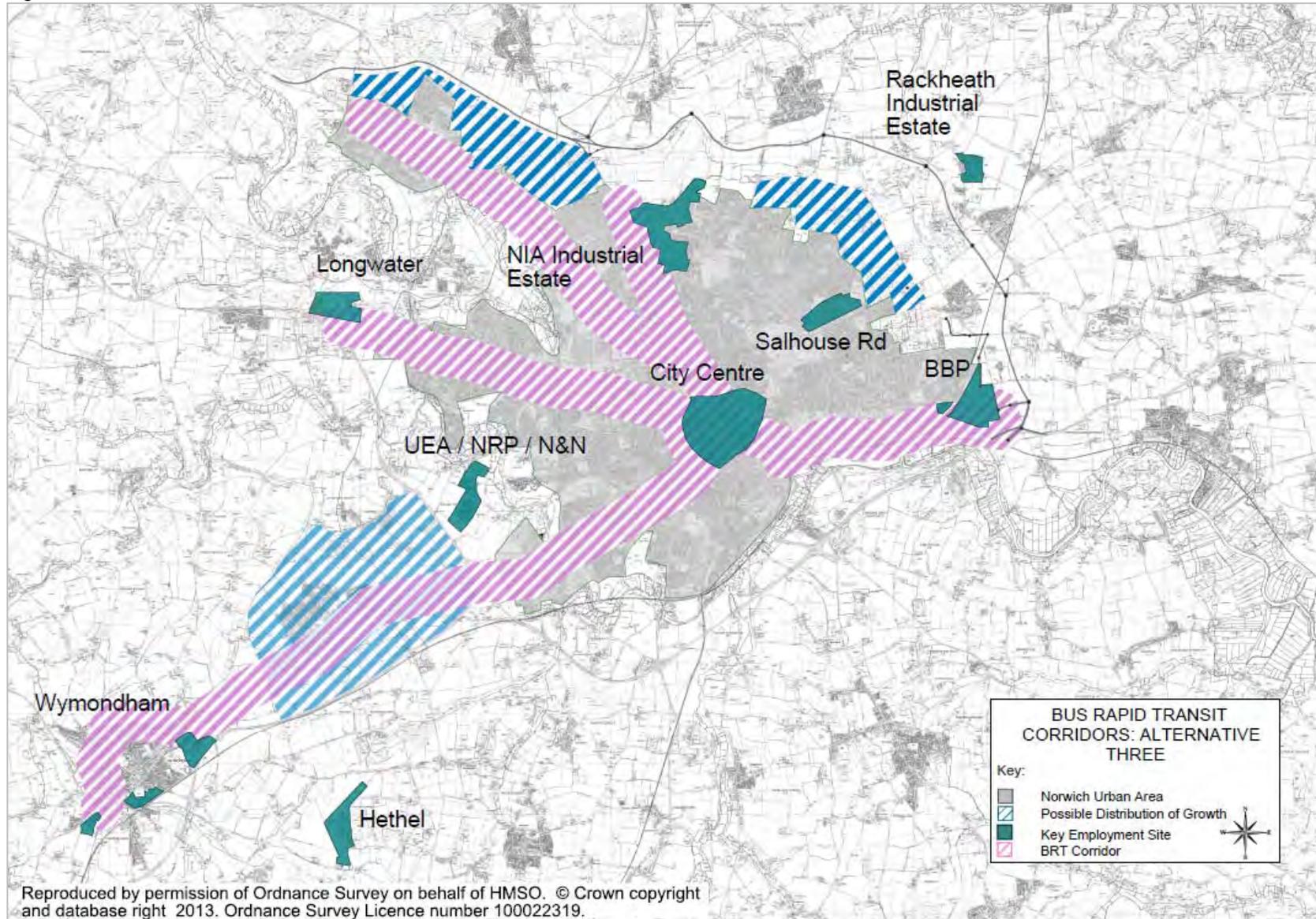


Figure 3c: BRT 'corridors' under Alternative 3



Discussion

Proximity to the City Centre.

In terms of proximity to the City Centre, Reasonable Alternative 2 performs best as most development would take place within 5km of the City Centre. Reasonable Alternative 1 also performs fairly well, with only the extremities of Rackheath located beyond 8km from the City Centre. Reasonable Alternative 3 would involve more development taking place outside the 8km ring and hence trips to the City Centre would be longer in length with associated negative implications for greenhouse gas emissions.

It is also the case that Reasonable Alternative 2 (and Reasonable Alternative 1 to a lesser extent) is well located to other destinations (and employment opportunities⁸) in North East Norwich including the local centres (as defined in the Adopted JCS) of Aylsham Road, Plumstead Road, Old Catton and Dussindale (Thorpe St Andrew). Essentially, it is the case that Reasonable Alternative 2 (and Reasonable Alternative 1 to a lesser extent) is well related to the existing 'urban form' of Norwich, whilst this is not the case for Reasonable Alternative 3 (which would involve a linear projection away from the existing urban form of Norwich).

Distance to key employment locations

In terms of distance to key employment locations it can be seen that Reasonable Alternatives 1 and 2 would involve development within easy walking / cycling distance of a range of existing key employment sites and hence there would be considerable opportunity for new residents to walk or cycle to work. Reasonable Alternative 3 performs worse in this respect given that sizeable parts of areas in both the South West and North West sectors are not within 3km of any existing key employment site.

Taking account of likely future growth at key employment sites results in Reasonable Alternative 3 being seen 'in a better light' (given that: NRP/ UEA / N&N is set to be allocated 55ha of new employment land, with the potential to allocate further land in the future; Hethel is set to be allocated 20ha of new employment land; and Wymondham is set to be allocated 15ha of new employment land). However, it does not alter the conclusion that Reasonable Alternative 3 is worst performing in terms of proximity to key employment locations (given that in the North East sector: Norwich International Airport is set to be allocated 30ha of new employment land in addition to the Norwich Aeropark Development that has recently been granted planning permission; and Broadland Business Park is set to be allocated 25ha of new employment land).

Access to potential high quality public transport routes

In terms of BRT corridors:

- Reasonable Alternative 1 – would lead to 15,840 existing address points⁹ falling within the Salhouse Road (4,583 address points) and A11 (11,257 address points) BRT corridors. A high proportion of new development would be within a BRT corridor (reflecting the linear shape of the proposed urban area outside of the NDR). There would also be the potential to link with the Postwick to Norwich Airport orbital public transport route (which would pass through the development).
- Reasonable Alternative 2 – would necessitate a shorter BRT corridor along the Salhouse Road corridor (3,979 existing address points). As such, 15,236 existing address points would fall within the two BRT corridors that are a focus of consideration here. Compared to Alternative 1, a lower proportion of new development within the NEGT is likely to have good access to a BRT route.
- Reasonable Alternative 3 –
 - It is unlikely to be possible to deliver the Salhouse Road BRT corridor – leading to a missed opportunity to ensure that c.4,000 existing address points fall within a BRT corridor – and new development in the NEGT would not be served by BRT.
 - There may be the potential to access the Airport BRT or Fakenham Rd BRT routes from development locations in the North West sector; however, the extent to which this will be the case remains uncertain. It is doubtful whether the scale of development proposed in the NW sector would be sufficient to speed the delivery or justify the diversion of the BRT corridor to serve new development.

⁸ Approximately 30,000 people work within the area that falls between the City Centre and the outer ring road

⁹ N.B. Address points are used on the GIS database and will overestimate residential properties.

- The SW would be well served by BRT. It should be possible to deliver a service of higher quality than would be the case without additional strategic scale development. It could be possible to deliver a BRT 'loop' to serve new development.

Alternatives appraisal

Introduction

In light of the supplementary analysis presented above, this section revisits the appraisal of Reasonable Alternatives as presented within Table 6.1 of the SA Report. In particular, there is a need to revisit the appraisal text within the 'rows' for SA objectives: ENV1 (*To reduce the effect of traffic on the environment*), ENV6 (*To adapt to and mitigate against the impacts of climate change*) and EC3 (*To encourage efficient patterns of movement in support of economic growth*). There is also a need to consider the implications for the 'conclusions' section from Table 6.1.

Implications for the [ENV1](#) appraisal

Discussion under ENV1 (*To reduce the effect of traffic on the environment*) focused on the potential for negative effects on the local environment, in particular as a result of private car use leading to air and noise pollution, disruption to amenity and potential secondary health impacts. It was concluded that:

- All alternatives would lead to concentrated growth on a large scale and hence would lead to increased car movements locally and the potential for significant negative effects on the local environment (e.g. in terms of noise and amenity).
- The alternatives can be ranked in order of performance as follows: Alternative 1 - Alternative 2 - Alternative 3 (although the distinction between Alternatives 1 and 2 was considered marginal).

The conclusion on the relative merits of the alternatives was reached on the assumption that the number of additional car trips generated by the 7,000 home new development that would occur under each option would be determined to a large extent by access to high quality public transport (in particular 'Bus Rapid Transit') and cycle routes.

In-light of the analysis and discussion presented above, it is deemed that the conclusions presented within Table 6.1 were appropriate:

- Despite the fact that new development in the SW under **Reasonable Alternative 3** would be well served by BRT, this alternative performs least well on the basis that:
 - The development in the NE (of 'at least 1,000 homes') would not be served by BRT; and
 - Development in significant parts of the SW and NW sectors does not give rise to good potential to walk/cycle to a key employment site.
- **Reasonable Alternative 2** performs better than Alternative 3. There would be very good potential for residents of development at the extremities of the growth area to walk/cycle to either the NIA or BBP key employment sites (both of which are large sites that are set to expand); and residents of development in the centre of the growth area would have good access to a BRT route (and would have the potential to walk/cycle to the Salhouse Rd and Rackheath employment sites).
- **Reasonable Alternative 1** performs best as within the new development the majority of residents would have good access to key employment sites (by walking/cycling) and/or BRT.

Implications for the ENV6 appraisal

Discussion under ENV6 (*To adapt to and mitigate against the impacts of climate change*) focused on another climate change mitigation issue – namely the potential to support decentralised renewable / low carbon energy generation – but also ‘sign-posted’ back to the discussion of ‘car dependency’ amongst residents of new development presented under ENV1 with the statement: “A key ‘climate change mitigation’ concern relates to the degree to which the alternative approaches support efforts to reduce car dependency / bring about a modal shift to public transport, less polluting forms of private transport and walking/cycling. As discussed under ENV1, alternative (3) does not support the objective of minimising car dependency.”

There was clearly the potential to include a more comprehensive and clear statement regarding greenhouse gas emissions from transport.

A conclusion on greenhouse gas emissions from transport should, first and foremost, reflect considerations relating to car dependency amongst residents of new development (which, in turn, will reflect access to BRT routes / likelihood of walking/cycling to key employment sites for residents) and the length of car journeys made (which, it is suggested, will be determined to a significant extent by proximity to the City Centre). As discussed above, under ENV1, Reasonable Alternative 1 performs best in this respect and Reasonable Alternative 3 performs worst. However, there is also a need to take into account the potential for development to support reduced car dependency within existing communities. Taking this factor into account casts Alternative 3 in a worse light (as there would be five BRT corridors running through Norwich, as opposed to six).

Implications for the EC3 appraisal

Under EC3 (*To encourage efficient patterns of movement in support of economic growth*) it was stated that:

“... all alternatives would result in housing development that would place new residents in close proximity to major employment locations, but it is (1) and (2) that would result in the greatest benefits.”

This statement is accurate. It would, however, have been useful to explain the situation more fully (see discussion above).

Implications for ‘conclusions on relative merits’

The ‘conclusions on relative merits’ text from Table 6.1 stated:

“With respect to transport and its effects, Alternatives (1) and (2) are considered more sustainable since they would be likely to support public transport improvements in the form of high quality BRT in the north eastern part of the urban area with commensurate benefits in terms of air quality, greenhouse gas emissions (responsible for climate change) amenity and health. While the SW sector would be served by a similar level of BRT under alternative (3), the strategic scale growth in the NE and NW would not be served by high quality BRT.”

However, a more appropriate concluding statement is as follows:

With respect to transport and its effects (which relate to air quality, greenhouse gas emissions, amenity and health), Alternative (1) is considered on balance to be most sustainable as it is likely to support good access to high quality public transport (in the form of BRT) for new and existing residents and will lead to good potential for new residents to walk/cycle to key employment locations. There is little to differentiate Alternatives (1) and (2), but Alternative (2) may perform less well on the basis that fewer residents within the new development would have good access to BRT (although it is worth noting that more residents would be in close proximity to the City Centre). Alternative (3) performs least well on the basis that: there would be less opportunity for residents of new development to walk/cycle to key employment locations; some residents of new development (i.e. the ‘at least 1,000 home’ new development in the NE sector) would not have access to BRT (although residents of the 7,000 home new development in the SW sector would likely have access to a particularly high quality BRT); fewer existing residents would have access to a BRT (on account of there being no Salhouse Road BRT route linking the City Centre with the NE sector) and residents of the new development would live some distance from the City Centre and other destinations in the Norwich Urban Area.

Conclusion

Revisiting the alternatives appraisal presented within Table 6.1 of the SA Report has shown that, whilst the broad conclusion - that Reasonable Alternative 1 performs best and Reasonable Alternative 3 performs worst in terms of transport related considerations - was correct, some of the detail within the appraisal was not as clear or helpful as it might have been. The discussion and analysis presented above has sought to remedy this for the benefit of consultees.

Finally, it is important to note that the issue of 'transport and its effects' must be considered in context. There are other issues besides that have informed the Council's view on a preferred approach. For some other key issues the differentiation between the Reasonable Alternatives is more clear-cut than is the case for 'transport and its effects'. One particularly key issue relates to deliverability and hence the potential to address housing need. As stated within the 'Conclusions on relative merits' section of Table 6.1 within the SA Report submitted alongside the Part JCS: *"Although much needed new housing would be provided under all three alternatives, it is important to note that Alternatives (2) and (3) could lead to challenges in delivering this at the rate required to combat housing need."*

APPENDIX 2: REVISITING THE ALTERNATIVES APPRAISAL (2): OTHER ISSUES

Introduction

The SA Report published/submitted alongside the Part JCS presented an appraisal of three alternative approaches (known as 'the Reasonable Alternatives') to distributing growth within the Broadland part of the Norwich Policy Area. One of the reasonable alternatives was identified at the time as the 'preferred' approach (and remains the Council's preferred approach).

During the publication period representations were received that questioned the choice of preferred approach on the basis that it might not be that which performs best in terms of sustainability issues/objectives relating to water quality, air quality, environmental amenity (e.g. noise, vibration and visual intrusion), designated historic assets (e.g. Conservation Areas, Registered Historic Parks and Gardens and listed buildings) and access to key employment locations. These matters were then discussed further at the Examination hearings.

The Council feels that the evidence / analysis presented within Table 6.1 in relation to these sustainability issues was appropriate; however, with a view to enhancing clarity, each issue is revisited under sub-headings below.

Water quality

A concern raised by the Green Party is that: *"Despite being written into the objective, water quality (governed by the EU Water Framework Directive) was not given any consideration under ENV2, only the availability of sewer capacity."*

Discussion under ENV2 focused on wastewater treatment works capacity as this is a key factor that can determine the relative merits of alternative broad spatial approaches in terms of water quality. As stated at the start of the discussion under ENV2: *"Water quality is a significant issue in the plan area and there is a need to deliver improvements to wastewater treatment works in order to ensure water quality in the future."* This reflects the fact that if capacity is breached then there is the potential for untreated sewage to enter the water environment.

There are, of course, other ways that development can result in impacts to water quality (e.g. through increased run-off of polluted surface water); however, this need not be a consideration when choosing between alternative broad spatial approaches. Such issues can be adequately addressed through careful site allocation, master-planning, design / construction measures (regardless of broad location), and hence should be a consideration at the site allocation and planning application stages of decision-making.

It is also the case that water quality can be impacted as a result of water abstraction leading to depletion of groundwater resources with consequential implications for surface water, e.g. the flow of rivers and streams. 'Water resources' are considered in Table 6.1 of the SA Report under ENV8 (*To provide for sustainable use and sources of water supply*), where it is stated that: *"A key issue for the JCS relates to the need for intervention to allow for the sustainability reduction of abstraction at Costessey. However, it is not clear that any of the alternative spatial approaches to growth under consideration here have implications in terms of this issue, or any other strategic water resource issue."*

Air quality

A concern raised by the Green Party is that: *"Under ENV3... [a]ir quality was deemed "not applicable" despite the fact that traffic data did not appear to be used, making it impossible to state with any certainty that no existing Air quality Management Areas would be affected nor that any new Air Quality Management Areas may be triggered under the different development alternatives."*

Under ENV3 it was stated that *"Given that development will lead to increased local car movements (see discussion under ENV1), it can be assumed that development will lower environmental amenity (including air quality) to some extent locally. However, given that none of the alternatives would be likely to increase car movements / decrease air quality within an area associated with existing identified problems (i.e. includes an Air Quality Management Area, AQMA) it is suggested that none of the alternatives lead to significant effects on the baseline."*

Below this is the statement that *"Just as it is not possible to differentiate between the alternatives in terms of 'significant effects', neither is it possible to conclude anything about the relative merits of the alternatives in*

more general terms." 'Not applicable' in the columns to the right of the discussion indicates that it was not possible to differentiate between the alternatives in terms of air quality.

It is not clear how traffic data could be used to inform the appraisal / differentiate between the alternatives. It might be suggested that the likelihood of reasonable alternatives to result in additional car movements in the City Centre (which is where the AQMAs are found),¹⁰ is related to the proximity of development locations to the City Centre (see Figure 1, above). However, it is not clear that this would be the case in practice. Detailed modelling could potentially be drawn on to further inform the appraisal; however, it is not clear that modelling work would be reliable given the high-level (i.e. non-site specific) nature of these alternative strategies.

It is considered that it was appropriate to conclude 'not applicable' with a view to ensuring that readers' attention was focused elsewhere in Table 6.1 (i.e. focused on other sustainability issues) rather than to conclude 'uncertain' on the basis that further analysis could potentially highlight differences in performance. There is always the potential for further analysis.

Environmental amenity

A concern raised by the Green Party is that: *"Under ENV3 no environmental amenities were considered other than air quality, such as noise, vibration and visual intrusion, all of which are key facets of amenity."*

It is true that the discussion under ENV3 focused on the issue of air quality. This is because 'other environmental amenity' issues were given consideration under ENV1, which states that:

"All housing development, unless 'car free', will inevitably generate additional trips locally as new residents move into the area. The adopted JCS includes policies to promote non-car modes and reducing the need to travel, but does not require car free development (although the supporting text of Policy 1 does reference the potential for car free development in 'appropriate urban locations'). Development will therefore give rise to increased air and noise pollution, disruption to amenity and potential secondary health impacts locally; and as such, it is suggested that none of the alternatives are wholly in-line with this objective and all alternatives would lead to significant negative effects on the baseline."

The discussion under ENV1 then goes on to discuss the merits of the alternatives in terms of the number of additional car movements that would be generated, drawing on analysis of access to high quality public transport and walking/cycling infrastructure. The conclusion is that Alternatives 1 and 2 perform better than Alternative 3.

Appendix 1 revisits the appraisal presented within Table 6.1 of the SA Report under ENV1. The conclusion reached in Appendix 1 is that Reasonable Alternative 3 performs worst in terms of additional car movements generated and Alternative 1 performs best.

Designated heritage assets

A concern raised by the Green Party is that: *"Under ENV5, no assessment of the impact of the development options on the historic environment was made in relation to Conservation Areas, Registered Historic Parks and Gardens and listed buildings."*

It is true that no specific reference was made to designated historic assets in Table 6.1. There was the potential to appraise the alternatives in terms of the number of designated assets that would fall within the 'footprint' of development; however, it was considered that this was not appropriate given the high level (i.e. non-site-specific) nature of the alternatives.¹¹ Rather, it was deemed appropriate to focus on issues relating to landscape character and historic landscape character given that evidence-base was available (including in the form of the Greater Norwich Historic Characterisation and Sensitivity Assessment, 2009). The only specific 'asset' that is referred to is the former USSAF base at Rackheath. This site is not designated but was worthy of mention as there is confidence regarding the potential for impacts (associated with Reasonable Alternative 1).

¹⁰ Indeed, the whole of the City Centre is set to be designated as an AQMA – see <http://www.norwich.gov.uk/Environment/Pollution/pages/AirPollutionAndAirQuality.aspx>

¹¹ Information on designated historic assets was, however, presented in Section 3.4.8 of the SA Report.

Access to key employment locations

A concern raised by the Green Party is that:

"[The discussion under] SOC6 is wholly inaccurate, stating that alternatives 1 and 2 would have excellent access to large employment locations... and therefore provide better access overall to new employment than Alternative 3.

On closer scrutiny however, it becomes clear that Alternatives 1 and 2 have good access to the airport, Rackheath and Broadland Business Park jobs growth – around 45% of the employment land within the NPA (JCS Policy 9), excluding the City Centre (which is given no developable land area for employment, to which access from all areas should be considered equal). Access to the remaining 55% of jobs growth land (as well as the significant amount of existing jobs) in the south-west would be poor at best.

However, Alternative 3 offers good access the for the 7,000 new homes in the southwest to Broadland Business Park (via the A47 Southern Bypass), Wymondham, Hethel and the Norwich Research Park - totalling 69% of the developable land area for employment, as well as the City Centre. The 1,200 new homes in the north-west will have good access to the new growth at the airport and the City Centre. The 1,200 new homes in the north-east will have good access to the airport, Broadland Business Park and the City Centre. Overall, Alternative 3 seems to provide the most appropriate balance and distribution of housing with good access to new jobs growth, yet was given the lowest assessment rating of the three options in terms of access to jobs. Furthermore, it is likely that Alternative 3 currently has the best access to existing jobs, in addition to good access to jobs growth."

A discussion of the potential to access key employment locations (also taking into account likely future growth at these locations) by non-car means is presented above (see Appendix 1). The conclusion reached is that Alternative 1 performs best, and Alternative 3 performs least well. Extending the definition of 'good access' to also include 'access by private car' does perhaps result in Reasonable Alternative 3 being cast in a slightly better light; however, this is marginal. It is considered that all locations are adequately located in terms of 'potential to drive to key employment locations', i.e. this is not a sustainability issue that should be a focus of SA. It is suggested that an overriding consideration should be the potential to access employment locations by non-car means (which is a social issue as well as an environmental issue, given that some employees may not have access to a car) and hence it was appropriate to conclude (under SOC6 in Table 6.1) that: *"Reasonable Alternative 3 performs less well because the SW sector, although well related to major employment locations, is not as well related as the NE sector; and because the NW sector is not well related to major employment locations."*

Conclusion

The discussion in this Appendix has sought to respond to a number of concerns raised by the Green Party regarding the substantive focus of / analysis presented within Table 6.1 ('Appraisal of reasonable alternatives') of the SA Report published/submitted alongside the Part JCS. In each instance, it is considered that the appraisal presented within Table 6.1 was broadly appropriate, i.e. there were no major shortcomings. The appraisal presented in Table 6.1 focused on issues¹² identified through scoping (focusing-in on issues of particular relevance given the nature of the alternatives at hand and the need to be concise) and drew on the evidence-base that was available. That said, the appraisal findings are there to be questioned and discussed.

¹² The SEA Directive requires that appraisal focuses on the issues and objectives identified through scoping. It does not seek to prescribe particular issues that should be a focus of appraisal (beyond requiring that there must be a focus on 'the environment'). Annex 1(f) does list some sustainability issues, but these are suggested issues only. Specifically, Annex 1(f) states that there should be a focus on *"the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors"* (our emphasis).