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Appendix to Additional Sustainability Appraisal of North Essex Local Plan Section 1

Detailed results of Stage 2 SA of alternative spatial strategies

Prepared by LUC
July 2019

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1 Results of Stage 2 - SA of alternative spatial strategies

- 1.1 This document is an appendix to the Additional Sustainability Appraisal (SA) of the North Essex Authorities (NEA) Section 1 Local Plan. It sets out the detailed Stage 2 sustainability appraisal (SA) findings for reasonable alternative spatial strategies for the Section 1 Local Plan.

West 1: Proportionate (percentage-based) growth

- 1.2 The rationale behind each of the proportionate growth scenarios (West 1 & 2 and East 1 & 2) is to test the potential for accommodating the development currently expected to be delivered through Garden Communities within the current plan period on land in and around existing settlements – thus avoiding the need to establish any new ‘stand-alone’ settlements or other strategic-scale developments, at least until 2033. The Inspector has specifically requested that this option is assessed as part of the additional SA work to help assess whether or not a strategy involving the creation of new settlements is appropriate in the current plan period.
- 1.3 Under this particular option, it is envisaged that all defined settlements in North Essex across all three authorities, regardless of their position within the Local Plan settlement hierarchies would accommodate a pro-rata share of the remainder of the North Essex housing requirement for the period 2019 to 2033 including an element of flexibility – a level of approximately 40,000 homes. This represents an approximate 18% increase in dwelling stock above 2019 levels and under this percentage-based approach, each defined settlement would accommodate an 18% increase in housing over 14 years (2019-2033).
- 1.4 Taking into account homes already expected on sites with planning permission or otherwise allocated in Section 2 plans, many of the existing settlements would not need to accommodate any additional housing as they are already expected to achieve or exceed their 18% dwelling stock quota through existing proposals. There are however some settlements that would be expected to accommodate additional housing allocations under this percentage-based proportionate approach to achieve the remainder of the requirement. For the settlements in the area west of Colchester, these are summarised, in broad terms, in the table below.

Table 1.1: Percentage Based Growth Alternative to Garden Communities

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Halstead	200-300	N/a	Existing employment allocations in Section 2 Local Plans to be retained and possibly expanded. Some of the additional development might be accompanied by a range of new small employment areas or expansion of existing areas.	Halstead bypass desirable but not likely to be deliverable given modest level of additional development that proportionate growth would bring. Infrastructure proposed as a result of proposals in the Section 2 Local Plans to be retained and, where necessary, expanded. The arrangement of additional growth, particularly across smaller villages, would result in numerous developments of insufficient scale to accommodate new facilities such as schools or health centres. Such infrastructure may need to be delivered through pooled financial contributions towards
Colchester	100-199 (each)	N/a		
Coggeshall				
Black Notley				
Rayne				
Sible Hedingham				
Great Horkesley				
Marks Tey				
Earls Colne	50-99 (each)	N/a		
Finchingfield				
Castle Hedingham				
Gosfield				
Panfield				
Wethersfield				
Copford and Copford Green				
West Bergholt				
Aldham	1-49 (each)	N/a		
Birch				
Easthorpe				
Great				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Wigborough				expanding existing facilities or delivering new shared facilities for which land would need to be identified and acquired.
Layer Breton				
Little Horkesley				
Messing-Cum-Inworth				
Mount Bures				
Peldon				
Salcott				
Wormingford				
Bures Hamlet				
Great Bardfield				
Great Yeldham				
Steeple Bumpstead				
Ashden				
Audley End				
Belchamp Otten				
Belchamp St Paul				
Belchamp Walter				
Blackmore End				
Bradwell				
Bulmer				
Bulmer Tey				
Colne Engaine				
Cornish Hall End				
Cressing				
Foxearth				
Gestingthorpe				
Great Maplestead				
Great Sailing				
Greenstead Green				
High Garret				
Helions Bumpstead				
Lamarsh				
Little Maplestead				
Little Yeldham				
Nounsley				
Pebmarsh				
Ridgewell				
Rivenhall				
Rivenhall End				
Shalford				
Shalford Church End				
Stambourne Chapelend Way				
Stambourne Dyers End				
Stistead				
Sturmer				
Surrex (Coggeshall)				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Terling				
Tilbury Juxta Clare				
Topplesfield				
White Colne				
White Notley				
Wickham St. Paul				

- 1.5 Baseline data in relation to this spatial strategy has been provided by the NEAs. Please see Chapter 2 for information about the existing dwelling stock in each settlement and the required additional dwellings as defined under the proportionate growth scenario. This data has been used to inform this assessment.

Relevant Context

- 1.6 The proportionate growth alternative to garden communities will result in increasing allocations to various existing settlements, in a manner informed by their current scale. In particular, Halstead is likely to increase in scale by 200-300 dwellings above the current level planned in the Section 2 Local Plan. In total the amount of housing being built at Halstead would be approximately 900-1000 dwellings within the plan period. Other settlements are also expected to accommodate more development than proposed in the Section 2 Plans. In particular, Colchester, Coggeshall, Black Notley, Great Horkesley, Marks Tey, Rayne and Sible Hedingham are all anticipated to grow by an additional 100-199 dwellings. Further to this, several other villages are also anticipated to increase by more than proposed in the submitted section 2 Local Plans, between 1-99 additional dwellings. These are set out in the table below. In total, 3060 additional dwellings are allocated under this spatial strategy. 1,210 of these are to be allocated to settlements at 100-300 dwellings, which is approximately 40% of the total. 1,850 of these are to be allocated to settlements at 100 dwellings or less, which is 60% of the total.

Assessment of Effects

- 1.7 This section sets out the detailed assessment of the likely effects of strategy West 1: proportionate (percentage-based) growth.
- 1.8 Table 1.2 below summarises the anticipated effects of this spatial strategy.

Table 1.2: Proportionate (percentage-based) growth assessment summary

SA Objective	Anticipated Effects from Strategy West 1 at the end of the plan period
SA1: Create safe environments which improve quality of life, community cohesion	--?/?
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++?
SA3: Improve health/reduce health inequalities	--/0?
SA4: To ensure and improve the vitality & viability of centres	--
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	-

SA Objective	Anticipated Effects from Strategy West 1 at the end of the plan period
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	--?/--?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+?
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0
SA13: To improve air quality	0/-?
SA14: To conserve and enhance the quality of landscapes	-?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--

1.9 Detailed Commentary on the effects identified in this table is set out below.

SA1: Create safe environments which improve quality of life, community cohesion

1.10 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

1.11 The Proportionate growth alternative to garden communities will lead to increased growth compared to that currently proposed in the submitted Section 2 Local Plans. It is considered likely that this will result in some of these settlements increasing by more than 10% compared to their current scale. This is the case at several settlements, including Halstead, Rayne, Coggeshall, Black Notley and Sible Hedingham. It is anticipated that this may cause changes to the existing character of settlements, and this may be perceived negatively by existing residents. This is considered likely to result in significant negative yet uncertain (--?) effects in relation to this element of SA Objective 1. The uncertainty arises as community reaction to new development is likely to vary from person to person and therefore the views may not necessarily be negative.

Effect on the new community

1.12 The policies within the submitted Section 1 Local Plan set out that all new development is anticipated to be designed in a sustainable manner, which includes community and stakeholder

empowerment in the design and delivery of the site; establishing a sustainable funding and governance mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets at an early stage of the delivery of development; provide sociable, vibrant and walkable neighbourhoods with equality of access for all; and Provide measures to support the new community. However, these aspirations have been prepared on the basis of development of large scale, strategic sites, which can offer greater opportunity to deliver these ambitions. Proportionate growth is likely to result in approximately 60% of development being provided at smaller sites (i.e. less than 2,000 dwelling capacity) where, due to lower levels of profit, investment and scrutiny through the planning process, these ambitions are likely to be more difficult to achieve. As such it is not known whether development in accordance with this spatial strategy would be able to foster a sense of community in an effective manner, resulting in uncertain (?) effects.

Conclusion

- 1.13 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/?).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.14 The Braintree Viability Study¹ and Colchester Viability Study² both indicate that development in these districts can viably provide policy compliant development, including affordable housing provision.
- 1.15 It is therefore considered that this proportionate growth spatial strategy is likely to result in significant positive (++?) effects in relation to this SA objective.
- 1.16 Because this proportionate growth spatial strategy allocates relatively small amounts of housing to numerous settlements, it is considered that this may result in development coming forward as small scale applications (non-major applications), which may not meet the threshold for affordable housing provision. This may result in reduced potential to secure affordable housing through the planning process – this creates uncertainty which is noted in the assessment outcome against this SA objective.

SA3: Improve health/reduce health inequalities

- 1.17 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.18 In terms of access to health facilities, there are existing primary health facilities in all of the settlements which would be expanded by 100 dwellings or more apart from Great Horkesley and Marks Tey.
- 1.19 In terms of expansion to meet needs of new development, the IDP for Braintree³ sets out that two new primary healthcare sites are being brought forward in Braintree town. It is considered likely that these will be able to provide for the relatively small amount of development (in the context of Braintree) allocated to this town under this spatial strategy.
- 1.20 The Colchester IDP⁴ sets out that within Colchester, a review of healthcare facilities will be undertaken at later phases of the development process.

¹ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

² https://www.braintree.gov.uk/downloads/file/6947/cbc0001_colchester_economic_viability_study_june_2017

³ https://www.braintree.gov.uk/downloads/file/6993/bdc012_braintree_infrastructure_delivery_plan

⁴ https://www.braintree.gov.uk/download/downloads/id/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_93_updated_october_2017.pdf

- 1.21 However, for the other settlements the IDPs for Braintree and Colchester do not consider the implications of this spatial strategy in relation to whether existing facilities can be expanded or not.
- 1.22 In addition, the smaller settlements which are due to receive less than 100 dwellings per settlement under this spatial strategy have not been individually reviewed, many of them do not offer existing primary healthcare facilities. These account for approximately 60% of the total housing allocation under this spatial strategy. This is likely to result in new houses that may be dependent on road based transport to access primary healthcare and recreational facilities, and also to result in further pressure on existing facilities in settlements where these currently exist. It is anticipated that at the end of the plan period, none of these settlements would be large enough to support new healthcare facilities under the current model of provision (see the assumptions and framework for the site specific assessments for information).
- 1.23 In summary, the uncertainty over whether health care facilities in some of the settlements to be expanded can be expanded, and the amount of housing which will be allocated to locations where there are no facilities, is considered likely to result in significant negative (--) effects.

Exposure to noise pollution

- 1.24 Some of the settlements which are required to increase in accordance with this spatial strategy are identified as having high exposure to noise pollution (in accordance with Defra strategic noise maps). These include Braintree, Colchester, Coggeshall, Great Notley and Rayne.
- 1.25 However, it does not appear that these settlements are completely surrounded by such areas, and it may be possible to avoid these areas. It may be possible to expand these settlements by avoiding these locations, and in addition, it may be possible to overcome impacts through site specific design and mitigation. As such, negligible yet uncertain (0?) effects are anticipated in relation to this element of SA3.

Conclusion

- 1.26 In summary, for reasons explained above this spatial strategy is considered likely to result in significant negative and negligible yet uncertain (--/0?) effects.

SA4: To ensure and improve the vitality & viability of centres

- 1.27 This proportionate growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.28 Specifically, this spatial strategy will increase development at some settlements which include town or local centres as defined in the submitted Section 2 Local Plans. Of the settlements which are expected to provide an additional 100 dwellings or more, these generally offer defined local or town centres – other than Rayne, Great Horkesley and Black Notley.
- 1.29 The other settlements where less than 100 extra dwellings generally lack defined local centre services and facilities. These settlements account for approximately 60% of the dwellings allocated under this spatial strategy. This is considered likely to reduce the potential for residents of the new houses in these settlements to access services, facilities and employment opportunities at the centres. Furthermore, it is assumed that small scale employment areas may accompany the dispersed development which is proposed under this spatial strategy, which is considered likely to compete with the vitality and viability of existing centres. Furthermore, it is assumed that small scale employment areas may accompany the dispersed development which is proposed under this spatial strategy, which is considered likely to compete with the vitality and viability of existing centres.
- 1.30 As such, it is considered that this spatial strategy may result in a development form which competes with existing facilities and services. Given that more than half of the development proposed under this strategy would be to locations without defined centres, significant negative (-) effects are anticipated in relation to this SA Objective.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.31 This proportionate growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.32 Specifically, this spatial strategy will increase development at some settlements which include town or local centres as defined in the submitted Section 2 Local Plans. Of the settlements which are expected to provide an additional 100 dwellings or more, these generally offer defined local or town centres or strategic employment sites – other than Rayne, Great Horkesley and Black Notley. These centres and employment sites offer a range of employment opportunities over requiring different skills and experience.
- 1.33 The other settlements where less than 100 extra dwellings are allocated generally lack defined centres and / or significant employment opportunities. These settlements account for approximately 60% of the dwellings allocated under this spatial strategy. This is considered likely to reduce the potential for residents of the new houses in these settlements to access a range of employment opportunities.
- 1.34 It is assumed that small scale employment areas may accompany the dispersed development which is proposed under this spatial strategy, which may help to provide employment opportunities nearer to homes. However due to the distribution of these employment sites away from centres, they are likely to be less accessible by sustainable modes and are likely to increase reliance on road based, private vehicles.
- 1.35 Overall, it is considered that this spatial strategy will increase the size of some settlements which offer existing employment opportunities, thereby helping to support these, and will also result in smaller employment sites coming forward. Having said this, the majority of development will be allocated to locations which do not offer a range of employment opportunities, resulting in dependence on road based private travel, which reduces accessibility overall. It is considered therefore that minor negative (-) effects are likely to arise in relation to this SA objective.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.36 A number of the settlements which are anticipated to be expanded to an extent greater than the submitted Section 2 Local Plans have allocated are within SSSI impact risk zones. Several of the settlements also contain areas which are designated as internationally, nationally or locally important wildlife or geological sites or ancient woodland. However, these designations do not cover large areas of the settlements and it is assumed that they would be avoided. However, it is clear that development under this spatial strategy would affect the SSSI impact risk zones and this is considered likely to result in minor negative yet uncertain (-?) effects in relation to this SA objective. The uncertainty arises because site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirement for all development to contribute to a Recreational Avoidance and Mitigation Strategy) mitigation measures may overcome these effects but this is not known.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.37 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.38 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), more than half of the growth under this spatial strategy is considered likely to be focussed to settlements which do not offer existing town or local centres or strategic employment sites. Furthermore, several of these settlements do not offer primary schools and many of them do not offer secondary schools.

- 1.39 It is therefore considered that this spatial strategy will result in a significant amount of new development in locations where people will not be in close proximity to services, facilities and employment opportunities. It is therefore likely that in many locations the new residents will need to travel outside of the settlement where the new houses are built to access services, facilities and employment opportunities, which is likely to result in a greater distance needing to be travelled and comparatively poorer infrastructure for sustainable modes (e.g. footways, crossings, etc.) for these journeys.
- 1.40 As such, in general terms, this is considered likely to mean that new residents of the majority of houses allocated under this strategy are likely to rely more on private, road based travel. This is likely to increase congestion. It is recognised that people could utilise public transport however due to the dispersed nature of the settlements which would be expanded under this spatial strategy, this is likely to be relatively low frequency services which may hinder uptake.
- 1.41 As such, significant negative yet uncertain (--) effects are anticipated in relation to this element of SA7. The uncertainty arises because of the difficulties in predicting where people will choose to travel to access services, facilities and employment, and how they will choose to travel there.

Longer journeys

- 1.42 It is considered that the most popular sustainable travel mode for longer journeys outside the settlements identified under this spatial strategy to be made by is public transport, on either bus or rail. This is in particular because data from NOMIS indicates that the top five out-commuting destinations from Braintree are Chelmsford, Uttlesford District, Colchester Borough, Westminster, and Maldon. For Colchester borough, the top five destinations are Tendring District, Braintree District, Westminster, Chelmsford and Ipswich. These are all too far away to facilitate walking or cycling.
- 1.43 Importantly, a number of the destinations described above have rail stations. This spatial strategy would allocate development to locations which both have and do not have access to the railway line. Specifically, Colchester and Braintree towns have railway stations. However, the majority of the growth under this spatial strategy would actually be to other settlements which do not have railway stations. It is recognised that people could utilise public transport however due to the dispersed nature of the settlements which would be expanded under this spatial strategy, this is likely to be relatively low frequency services which may hinder uptake.
- 1.44 Accordingly it is anticipated that this spatial strategy is likely to increase dependency on private road based transport to access employment and services outside of each individual settlement which is being expanded, resulting in significant negative yet uncertain (--) effects. The uncertainty arises because of the difficulties in predicting where people will choose to travel to access services, facilities and employment, and how they will choose to travel there.

Conclusion

- 1.45 This spatial distribution will result in a more than half of its overall housing provision being located in settlements which do not offer a high level of local services and facilities, and do not offer frequent and attractive public transport facilities. As such, significant negative yet uncertain effects are anticipated in relation to promoting sustainable travel behaviour for both short and long distance trips (---). Uncertainty arises due to the difficulties in predicting where people will choose to work and how they will choose to travel there.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.46 The implications of this spatial strategy in relation to promoting accessibility is set out in the commentary relating to SA7. This is not repeated here. Instead, the assessment under this SA objective relates to the ability of the proportionate growth spatial strategy to make efficient use of land and ensure the necessary infrastructure is delivered.
- 1.47 In relation to efficient use of land, it is considered likely that development proposals at existing settlements will be required to reflect the general character of that settlement⁵, in terms of

⁵ In accordance with the principles set out in Draft Section 1 Policies SP6 & LPP37.

factors that can influence density – such as scale, massing and plot sizes. Since this strategy is likely to result in development around the edges of settlements, it is considered that development density and efficiency of land use will reflect local circumstances. The local circumstances in relation to scale, massing and plot sizes of each settlement is not known, and therefore the performance of this spatial strategy in relation to efficient use of land is uncertain.

- 1.48 As set out in the commentary for SA2 (housing provision), the Braintree Viability Study⁶ and Colchester Viability Study⁷ both indicate that development in these districts can viably provide policy compliant development, including anticipated infrastructure provision. It is therefore considered likely that this spatial strategy would be able to provide requisite infrastructure – albeit this may not be in the settlement where the new houses are built (given the considerations set out in the commentary to SA7).
- 1.49 In accordance with the above, minor positive yet uncertain (+?) effects are anticipated in relation to this SA objective. The uncertainty arises because the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure that would be delivered will depend on specific proposals coming forward; and due to the uncertainty about development density.

SA9: To conserve and enhance historic and cultural heritage assets and townscape character

- 1.50 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.51 This spatial strategy directs growth to settlements which include designated heritage assets including scheduled monuments, registered parks and gardens, listed buildings and conservation areas.
- 1.52 In the absence of evidence about the significance of, and potential impact of developing near to these heritage assets, it is considered possible that development in these settlements may result in impacts to the setting of heritage assets. Although the site specific location of the development which would be allocated under this spatial strategy is not known, the significant number and distribution of heritage assets within the plan area are considered to make it likely that some growth would be within 500m of a designated heritage asset. As such, significant negative yet uncertain (--?) effects are anticipated in relation to this element of SA objective 9. The uncertainty arises because of the assumption about the location of development relative to heritage assets, and because site specific design and mitigation may suitably mitigate impacts.

Effects on townscape

- 1.53 As set out in the commentary which relates to SA1 (Community Cohesion), this spatial strategy will result in some settlements expanding by more than 10% of their current size within the plan period. It is anticipated that this is likely to have a significant effect on townscape, however, whether this is positive or negative will depend on the siting and design of this development. These details are not known at this stage and as such, the effects in relation to this element of SA9 are uncertain (?).

Conclusion

- 1.54 Overall, this spatial strategy is considered likely to result in mixed significant negative yet uncertain, and uncertain (--?/?) effects.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.55 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and the implications this

⁶ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

⁷ https://www.braintree.gov.uk/downloads/file/6947/cbc0001_colchester_economic_viability_study_june_2017

has on carbon emissions from transport. To avoid duplication, the effects in relation to these matters are not reassessed under this SA objective.

- 1.56 Instead, assessment under this SA objective relates to the built form of development, which is influenced by planning policy, appeal decisions and other material considerations such as the NPPF. In accordance with draft policies in the submitted Section 1 Local Plan, it is assumed that all development will be required to:
- Encourage appropriate energy conservation and efficiency measures⁸.
 - Include renewable energy technology to provide at least 20% of the projected energy requirements of major developments, and 10% of minor developments, unless viability evidence demonstrates otherwise⁹.
 - Avoid flood zones, be flood resilient and provide for sustainable urban drainage¹⁰.
- 1.57 It is also notable that this spatial strategy may result in development being provided through non-major planning applications, which currently have a lower target for renewable energy generation than major sites. This may lead to less renewable energy than other strategies which focus on major applications. It is also notable that the proportionate growth strategy may result in development being provided through non-major planning applications, which currently have a lower target for renewable energy generation than major applications. This may lead to less renewable energy than other strategies which focus on larger development sites. Furthermore, it is also considered that proportionate growth is considered likely to result in the delivery of small development sites, which will create difficulties in delivering centralised heat / hot water networks, which are a very effective way of reducing the carbon emissions of new development. Whilst these factors may influence matters relating to this SA objective, this is not known, raising uncertainty.
- 1.58 Due to the principles already present in draft policy, which is considered likely to apply to all sites regardless of location, it is considered that this spatial strategy is likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises due to the potential for this spatial strategy to result in non-major applications which may reduce the overall potential for energy efficiency and carbon savings.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.59 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.60 Source protection zones are present within Braintree and Colchester and in particular affect land within Braintree, Halstead and Sible Hedingham (the other settlements where less than 100 extra dwellings have not been individually assessed).
- 1.61 As such, it is considered that development at these settlements as would be required by this spatial strategy may result in impacts to these zones, resulting in minor negative yet uncertain (-?) effects. The uncertainty arises as specific design and mitigation may be able to overcome impacts.

Water scarcity and water treatment

- 1.62 With regard to water supply, and waste water treatment, the Braintree Water Cycle Study¹¹ and Colchester Water Cycle Study¹² do not review the potential implications of this proportionate growth spatial strategy, and therefore it is uncertain whether there would be sufficient water and waste treatment provided to meet the requirements of this spatial strategy. Therefore, the effects in relation to this are uncertain (?).

⁸ Consistent with policy LPP75 of the Submitted Section 1 Local Plan

⁹ Consistent with policy LPP77 of the Submitted Section 1 Local Plan

¹⁰ Consistent with policies LPP78, 79, and 80 of the Submitted Section 1 Local Plan

¹¹ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹² https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

Conclusion

- 1.63 This proportionate growth alternative to garden communities is considered likely to result in minor negative yet uncertain and uncertain effects (-?/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.64 A significant amount of Braintree District and Colchester Borough are identified as flood zone 2 or 3. However, none of the settlements which are anticipated to accommodate the dwellings allocated under this proportionate growth spatial strategy are significantly constrained by these flood zones.
- 1.65 Much of Sible Hedingham is considered to be at medium risk of ground water flooding. However, it may be possible to avoid impacts through site specific design and mitigation, or by locating development outside this risk area, to the low risk area.
- 1.66 Overall, it is considered likely that this spatial strategy will result in negligible (0) effects in relation to this SA objective. Although it is recognised that Sible Hedingham is constrained by medium risk of groundwater flooding, the housing allocated here is considered to be a relatively small amount of the overall development amount and is not considered sufficient to warrant a negative finding in this case.

SA13: To improve air quality

- 1.67 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.68 Colchester town includes AQMAs at the town centre. This spatial strategy will result in additional growth at Colchester, however the location of this is not known. However, it is assumed, given the large scale of Colchester and relatively small area covered by AQMAs that they can be avoided. There are no AQMAs in Braintree.
- 1.69 As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.70 As set out above, there are no designated air quality management areas within Braintree. However there are air quality management issues in Colchester town centre, and there is also an AQMA on the A12 on the northern edge of Colchester, near Eight Ash Green (the Lucy Lane AQMA), which is related to the traffic on this road travelling on the A12 between Braintree and Colchester, and the A120 between Colchester and Chelmsford.
- 1.71 Development allocated to Colchester town is considered likely to result in additional traffic utilising the town centre roads, thereby increasing traffic and vehicle emissions within the town centre AQMAs. Furthermore, Colchester is one of the top five most popular out-commuting destinations for Braintree residents (and vice versa) and if the current travel trends remain, it is considered that this spatial strategy would increase the number of people commuting to Colchester. This would potentially increase the traffic and vehicle emissions within the Lucy Lane and town centre AQMAs.
- 1.72 As such, this is considered likely to result in minor negative yet uncertain (-?) effects. The uncertainty arises as it is not known exactly how and where people will travel.

Conclusion

- 1.73 This spatial strategy is considered likely to result in mixed negligible and minor negative yet uncertain (0/-?) effects.

SA14: To conserve and enhance the quality of landscapes

- 1.74 No specific landscape sensitivity information in relation to the effects of this spatial strategy have been provided by the NEAs. However a review of designated landscape assets, including the Dedham Vale AONB which is to the north of Colchester and the Stour Valley Project Area (which is

to the north of Colchester and Braintree) identifies that the majority of settlements expected to grow as part of this spatial strategy are not considered likely to significantly affect these landscape designations. The exception to this is Colchester itself, which is within 5km of the Dedham Vale AONB boundary. In accordance with the assumptions framework, it is possible that development here might affect the setting of this AONB. As such, minor negative yet uncertain (-?) effects are anticipated. The uncertainty arises as site specific design and mitigation may reduce impacts to acceptable levels.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 1.75 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.76 A significant portion of the plan area is designated as a mineral safeguarding area due to the significant mineral resources which are present. Due to the fact that the minerals safeguarding areas are closely drawn to the existing settlements, it is considered extremely likely that development in accordance with the proportionate growth spatial strategy will lead to development on areas of mineral resource. However, it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 1.77 Much of the district is identified as Grade 1-3 agricultural land. This is also closely drawn to the existing settlements, meaning that development in accordance with the proportionate growth spatial strategy is likely to result in the loss of high quality agricultural land.

Conclusion

- 1.78 In accordance with the above, and due to the cumulative effects of loss of mineral resources and high quality agricultural land, it is considered that this spatial strategy will result in significant negative effects (--?/--) in relation to both elements of this SA objective. The uncertainty arises in relation to minerals as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

West 1: Proportionate (Percentage-based) Growth

- 1.79 This spatial strategy recorded significant positive effects for:
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (within the plan period)
- 1.80 The spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, within the plan period)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities within the plan period)
 - SA4: To ensure and improve the vitality and viability of centres (within the plan period)
 - SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
 - SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, within the plan period)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, within the plan period)
 - SA15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, within the plan period)

West 2: Proportionate (hierarchy-based) growth

- 1.81 Under this option, it is envisaged that development would be allocated to settlements in North Essex across all three authorities according to their position within the settlement hierarchy with the aim of directing growth towards the most sustainable locations.
- 1.82 Policy SP2 in the Section 1 Local, which sets out the spatial strategy for North Essex, states that existing settlements will be the principal focus for additional growth across North Essex within the Local Plan period with development being accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area. Under this hierarchy-based growth strategy, this principle is extended to deliver the full housing requirement for North Essex instead of part of the proposed growth being delivered through Garden Communities.
- 1.83 The hierarchy-based strategy involves 50% of the 40,000 homes between 2019 and 2033 going to the larger 'Tier 1' settlements of Colchester and Braintree; 20% to 'Tier 2' settlements such as Clacton, Harwich, Witham and Halstead; and 10% to 'Tier 3' settlements such as Frinton, Walton & Kirby Cross; Manningtree, Lawford & Mistley, Brightlingsea, Kelvedon and Hatfield Peverel. The remaining 15% would be delivered around smaller 'Tier 4' and 'Tier 5' settlements but growth is already accounted at this tier for through existing planning permissions and Section 2 housing allocations.
- 1.84 The Inspector has specifically requested that proportionate growth is assessed as part of the further SA work to help assess whether or not a strategy involving the creation of new settlements is appropriate in the current plan period. Hierarchy-based proportionate growth is a different interpretation to the proportionate growth option outlined under West 1. Appraising two different approaches ensures that proportionate growth has been properly and fully explored.
- 1.85 For the settlements in the area west of Colchester, the hierarchy-based distribution of growth is summarised, in broad terms, in the table below. This takes into account existing commitments and allocations proposed in the submitted Section 2 Local Plans.

Table 1.3: Hierarchy Based Growth Alternative to Garden Communities

Proposal/site	Dwellings to 2033	Total dwellings	Employment Assumptions	Strategy-specific infrastructure assumptions
Land east of Braintree [SUE2]	4,500-5,000	N/a	<p>The proposals for SUE2 include the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site.</p> <p>Approximately 10 hectares of B-use employment land in total is suggested as being deliverable as part of the Braintree scheme alongside 5,000 dwellings.</p> <p>Smaller employment sites of around 2ha</p>	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport, and Colchester Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout. RIS funded A12 upgrading 2022 to 2025 Bypass for Halstead
Hatfield Peverel	800 (each)	N/a		
Halstead				

Proposal/site	Dwellings to 2033	Total dwellings	Employment Assumptions	Strategy-specific infrastructure assumptions
			could be delivered alongside development at Hatfield Peverel and Halstead.	

- 1.86 Baseline data in relation to this spatial strategy has been provided by the NEAs. Please see Chapter 2 for information about the existing dwelling stock in each settlement and the required additional dwellings as defined under the proportionate growth scenario. This data has been used to inform this assessment.

Relevant Context

- 1.87 The Hierarchy-based growth alternative to garden communities will result in increasing allocations to three of the settlements west of Colchester, in a manner informed by their current function in terms of community services and facilities and employment opportunities. In particular, Braintree town is anticipated to increase in scale beyond the allocations set out in the Section 2 Local Plan by between 4,500 and 5,000 dwellings. It is envisaged that this would be accommodated at strategic site SUE2.
- 1.88 The Hierarchy-based growth spatial strategy also allocates 800 additional homes to Halstead and Hatfield Peverel (beyond the growth already allocated in the submitted Section 2 Local Plan. The location of this development is not defined, but it is assumed to be on sites located surrounding the settlements, most likely on the edge. Note that as there is a strategic site at Halstead (SUE1) and that as this strategy assumes that a bypass for Halstead is provided, this assessment assumes partial development within the site boundary for SUE1, however the specific area within this boundary is unknown.
- 1.89 Site SUE1 is a 348-hectare strategic site that would extend the urban edge of Halstead to the north, east and south. The site was not allocated in the North Essex Section 1 Local Plan, while the Braintree Section 2 Local Plan only allocated small-scale growth around and within Halstead to cater for local needs. The site is currently primarily arable land on the settlement edge. It wraps around the Bluebridge Industrial Estate on the eastern fringes of the town, and the land is currently in the ownership of multiple landholders. The River Colne bisects the site east-west. Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Significant nearby sites include: the Bluebridge Industrial Estate (adjacent to the site's western boundary); two smaller-scale sites in Earls Colne – Riverside Industrial Area and Atlas Works; Gosfield Airfield to the west; and the large-scale Earls Colne Airfield in a rural setting to the south. For public transport connections, following the closure of the Colne Valley and Halstead Railway (CVHR) in the 1960s, Halstead no longer benefits from any rail links. The nearest railway station is now in Braintree – approximately 10km to the south – from which connections can be made to London via a connection at Witham. For road connections, the A131 and the A1124 intersect in the centre of Halstead – the former bisects the site and the latter runs along parts of the site's western boundary. The A131 provides connections to Braintree to the south and Sudbury to the north and the A1124 provides links east to Colchester and north west toward Haverhill.
- 1.90 Site SUE2 is a strategic site located to the east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan as Land East of Braintree (including Temple Border. The entirety of the site is located within the Braintree District. The potential scale of development from this site is up to approximately 5,000 dwellings. There is another strategic site with the same border (SUE3) but extended further to the south east also, which would be a larger version of SUE2 and cater for up to 12,500 dwellings. The site is 161 Hectares and is comprised of almost entirely arable land with some small areas of woodland. The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield,

it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.

- 1.91 The total sizes of the settlements at the end of the plan period, assuming the extant planning commitments, allocations in the submitted Section 2 Local Plan and dwellings identified in this spatial strategy are built will be as set out in Table 1.4

Table 1.4: Total growth of settlements

Settlement	Number of dwellings (2019)	Dwellings to be constructed through commitments or Section 2 Local Plan allocations	Final dwelling number at the end of the plan period
Braintree	21,882	9,685	31,567
Halstead	5,820	1,457	7,277
Hatfield Peverel	1597	1,203	2,800

Assessment of Effects

- 1.92 This section sets out the detailed assessment of the likely effects of strategy West 2: Proportionate (hierarchy-based) growth.
- 1.93 Table 1.5 summarises the anticipated effects of this spatial strategy.

Table 1.5: Hierarchy-based growth assessment summary

SA Objective	Anticipated Effects from Strategy West 2 at the end of the plan period
SA1: Create safe environments which improve quality of life, community cohesion	--?/+
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	--?
SA3: Improve health/reduce health inequalities	+?/-
SA4: To ensure and improve the vitality & viability of centres	++?
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++?
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+?

SA Objective	Anticipated Effects from Strategy West 2 at the end of the plan period
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0
SA13: To improve air quality	0/0?
SA14: To conserve and enhance the quality of landscapes	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--

1.94 Detailed Commentary on the effects identified in this table is set out below.

SA1: Create safe environments which improve quality of life, community cohesion

1.95 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

1.96 The Hierarchy-based growth alternative to garden communities will lead to increased growth compared to that currently proposed in the submitted Section 2 Local Plans. This will result in all three of the settlements increasing by over 10% in size between 2019-2033. It is anticipated that this may cause changes to the existing character of settlements, and this may be perceived negatively by existing residents. This is considered likely to result in significant negative yet uncertain (--?) effects in relation to this element of SA Objective 1. The uncertainty arises as community reaction to new development is likely to vary from person to person and therefore the views may not necessarily be negative.

Effect on the new community

1.97 In accordance with the assumptions framework, all new development is anticipated to be designed in a sustainable manner, which includes Community and stakeholder empowerment in the design and delivery of the site; establishing a sustainable funding and governance mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets at an early stage of the delivery of development; provide sociable, vibrant and walkable neighbourhoods with equality of access for all; and Provide measures to support the new community. It is considered that development under this spatial strategy will be likely to result in minor positive (+) effects. It is anticipated that the scale of development at Braintree will be able to support new community meeting spaces and youth facilities, thereby this site would provide significantly community benefit. However, the development at Halstead and Hatfield Peverel is not considered likely to be able to support these services and so overall, it is considered that this

spatial strategy will result in minor positive effects in relation to this element of SA1.

Conclusion

- 1.98 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/+).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.99 As set out in the assumptions framework, it is considered that all new development proposed within the Section 1 Local Plans will be delivered in accordance with policies which will result in development being designed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 1.100 The Braintree Viability Study¹³ indicates that development in the district can viably provide policy compliant development, including affordable housing provision. The site information form sets out that site SUE2 at 5,000 dwelling capacity is likely to be viable, which includes the delivery of 30% affordable housing.
- 1.101 However, the site information form also suggests that development capacity may be limited by a number of factors, including the physical land take for the new route of the A120, which may prevent the site from being capable of delivering the full 5,000 dwelling capacity. Furthermore, the delivery of 4,500-5,000 dwellings within one site by the end of the plan period, which would be required under this spatial strategy, has not been evidenced as deliverable. As such, concerns arise relating to the delivery of the total housing required within the plan period under this spatial strategy. As a result, significant negative effects with uncertainty (--?) considered likely to arise, due to the potential failure to deliver housing need. The uncertainty stems from the fact that a higher delivery rate may be achievable, but has not been evidenced.

Conclusion

- 1.102 This spatial strategy is considered likely to result in significant negative (--?) effects.

SA3: Improve health/reduce health inequalities

- 1.103 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.104 All three settlements which would be expanded under this spatial strategy currently offer primary healthcare facilities. As such, development is being allocated to locations with existing health facilities, which should facilitate access to these, subject to the site specific location and accessibility at Hatfield Peverel in particular (as the development sites here are not defined).
- 1.105 In terms of expansion to meet needs of new development, the IDP for Braintree¹⁴ sets out that two new primary healthcare sites are being brought forward in Braintree town, and it is also important to note that as site SUE2 would be developed to a scale beyond 4,500 dwellings it would be able to support new health services, by itself (see the assumptions and framework for the site specific assessments for information).
- 1.106 However, the IDP does not set out what improvements, if any, would be required at Halstead or Hatfield Peverel and whether these are likely to be deliverable.
- 1.107 Minor positive yet uncertain (+?) effects are therefore anticipated, due to the fact that growth is allocated to settlements with health facilities, but that there is uncertainty about the ability of these to expand.

¹³ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

¹⁴ https://www.braintree.gov.uk/downloads/file/6993/bdc012_braintree_infrastructure_delivery_plan

Exposure to noise pollution

- 1.108 All three of the settlements which are required to increase in accordance with this spatial strategy are identified as having high exposure to noise pollution (in accordance with Defra strategic noise maps).
- 1.109 Approximately 21% of site SUE2 is at high risk from exposure to noise pollution. As such, as between 5-25% of land within the site that falls within a DEFRA strategic noise area of L_{night} ≥55.0, or L_{aeq} ≥60.0dB, minor negative effects (-) are anticipated in relation to this element of SA3. Effects at Halstead are considered likely to be negligible and although no specific development site has been identified at Hatfield Peverel, it may be possible to avoid the areas of highest noise pollution, as much of the town is not within these.

Conclusion

- 1.110 Mixed effects are anticipated in relation to this SA objective, these are minor positive and minor negative (+?/-).

SA4: To ensure and improve the vitality & viability of centres

- 1.111 This Hierarchy-based growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.112 Specifically, this spatial strategy will increase development at settlements which include town or local centres as defined in the submitted Section 2 Local Plans. As such, this spatial strategy is likely to support the existing facilities and services. Having said this, uncertainty is recognised due to the fact that the specific location of development sites is not known, and therefore there may be unidentified barriers between the sites and the centres, or unacceptable distances to facilitate use of active travel modes. As such significant positive yet uncertain (++) effects are anticipated in relation to this SA Objective.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.113 This Hierarchy-based growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there. In addition, it is anticipated that further employment will be delivered at Halstead and Hatfield Peverel under this spatial strategy, thereby increasing the total quantum, and potential accessibility to employment opportunities.
- 1.114 Specifically, this spatial strategy will increase development at settlements which include town or local centres as defined in the submitted Section 2 Local Plans and strategic employment sites. As such, this spatial strategy is likely to provide extra resource and custom for businesses, in a manner that supports existing centres, and potential opportunities for people to access work by more sustainable modes.
- 1.115 Having said this, uncertainty is recognised due to the fact that the specific location of development sites is not defined, and therefore there may be unidentified barriers between the sites and the centres and employment opportunities. As such significant positive yet uncertain (++) effects are anticipated in relation to this SA Objective.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.116 Approximately 2% of the area of site SUE2 south west of Braintree intersects with locally designated wildlife sites and Ancient Woodland (the north-west corner of the site is occupied by Templeborder Wood, which is a Braintree Local Wildlife Site and also contains Ancient Woodland). Further natural environment designations within the site boundaries include an area of the Priority Habitat (Deciduous Woodland) located on the north-east boundary of the site. There are also natural environment designations located within 400m of the site boundaries, including Lanham Wood, Links Wood and Templeborder Woods, all Local Wildlife Sites that contains Ancient

Woodland, and Priority Habitats (Deciduous Woodland and Traditional Orchard). Also, the site lies completely within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSIs.

- 1.117 Site SUE1 at Halstead intersects scattered areas of BAP Priority Habitat (totalling approximately 3% of the total site area). The most substantial of these is the coastal and floodplain grazing marsh around the River Colne valley. Within 400m of the site boundaries, in addition to further scattered areas of BAP Priority Habitat (largely deciduous woodland), lies two designated local wildlife sites (LWS) – Oxley/Birch Woods in the north and the Ramsey School’s ‘star stile mosaic’ to the west. In addition, most of the site lies within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI.
- 1.118 As such, development at Braintree and Halstead under this spatial strategy may result in impacts to these local designations and habitats. It is anticipated that negative effects may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, and predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 1.119 Whilst there are no designations within Hatfield Peverel, the whole settlement and its surroundings is completely within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSIs.
- 1.120 In accordance with the above, it is considered likely that minor negative yet uncertain (-?) effects are likely to arise in relation to this SA objective. The uncertainty arises because site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirement for all development to contribute to a Recreational Avoidance and Mitigation Strategy) mitigation measures may overcome these effects but this is not known.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.121 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.122 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), the growth under this spatial strategy is focussed to settlements which have existing town or local centres, employment sites or both. As such, in general terms, this is considered likely to mean that these areas will be accessible using sustainable travel modes from the development sites which would come forward under this spatial strategy.
- 1.123 Specifically, it is considered likely that as the development at Halstead and Hatfield Peverel both include town centres, this may result in opportunities for sustainable travel, due to the short distance between site and centre. However as the exact location of the development at these two settlements is not known, uncertainty arises as to whether these will be within acceptable distance to facilitate sustainable modes of travel.
- 1.124 In particular site SUE2 at Braintree is likely to be able to support employment provision of approximately 10 hectares, and a new secondary school – which will provide significant opportunities to access work or school by sustainable modes of travel, due to shorter distances (i.e. within the same development site).
- 1.125 In addition, infrastructure to be delivered as a part of this spatial strategy includes RTS linking Braintree Town, Braintree Freeport, and Colchester. This is considered likely to form an attractive alternative to using the private car, for shorter trips.
- 1.126 As such, this spatial strategy will focus development to a site which can support local centre services, and this site is near Braintree town, which has significant existing services and facilities – the provision of RTS linking Braintree to Colchester and other destinations enhances accessibility. Given that this strategy would result in the allocation of a significant number of

houses to Braintree compared to the other settlements, it is considered that the positive effects of RTS would be experienced by the clear majority of new dwellings allocated under this spatial strategy. For this reason, significant positive (++) effects are anticipated in relation to this element of SA7. The uncertainty arises because of the difficulties in predicting where people will choose to live and how they will choose to travel and due to the lack of information about the precise location of development sites in Hatfield Peverel and Halstead.

Longer journeys

- 1.127 This spatial strategy would allocate development to locations which both have and do not have access to the railway line. Specifically, Braintree and Hatfield Peverel have railway stations, and indeed, the majority of growth proposed under this spatial strategy would be located at Braintree.
- 1.128 For journeys to more distant destinations, the majority of site SUE2 at Braintree is not located within an acceptable or desirable walking distance of a railway station and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is located in the Braintree 012 MSOA, which consists of largely rural land to the east of Braintree. According to NOMIS, the largest proportion (9%) of commuter trips from the Braintree 012 are within the MSOA itself and the second largest proportion (8.5%) of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, it is considered that the provision of RTS linking the site to Braintree centre and other destinations is likely to facilitate the use of sustainable modes.
- 1.129 At Halstead, a review of commuter behaviour of the current community has been undertaken. This site is split between two middle super output areas (MSOAs) on the edges of Halstead, however a more representative indication of likely commuting patterns is assumed to be given by considering existing patterns from within the built-up area of Halstead itself (Braintree 004). The most popular destinations for commuters from Halstead are: Halstead itself (approximately 22%); central areas of Braintree (9%); and areas surrounding Halstead, including Sible Hedingham (4%). Based on this, it is likely that the significant proportion of commuting internally within Halstead could be made by sustainable means, however commutes out to Braintree and surrounding areas would likely generate traffic on the A131 and the A1124.
- 1.130 Hatfield Peverel is located on the railway line and has a station. As such, it is considered that this may facilitate the use of more sustainable modes for longer journeys. However it is also served by the A12 which would provide a convenient route for car travel, particularly if residents are commuting elsewhere. Further uncertainty arises in relation to the new Hatfield Peverel residents using rail as it will be affected by the proximity of the development to the rail station (and any access barriers such as the railway or strategic roads), and whether there will be sufficient rail capacity to accommodate growth at this settlement.
- 1.131 Due to the proposed provision of RTS linking Braintree Town, Braintree Freeport, and Colchester in order to support this spatial strategy, it is considered that longer journeys could be made from Braintree utilising either rail or RTS and Hatfield Peverel by Rail. This is considered likely to result in benefits against this SA objective. However it is important to note that Halstead does not have a rail connection and would not be linked to other settlements via a RTS.
- 1.132 In accordance with the above, overall, minor positive yet uncertain (++) effects are anticipated in relation to this spatial strategy. Despite Halstead being less well connected to more distant destinations, the majority of development is allocated to Braintree and Hatfield Peverel, which both have rail stations and Braintree will also be served by RTS. The uncertainty arises because of the difficulties in predicting where people will choose to live and how they will choose to travel. Further uncertainty also arises in relation to the potential for longer journeys to be taken by rail. The Braintree IDP¹⁵ sets out the Great Eastern Mainline operates at capacity on trains to and from London during peak times, which suggests that expansion would be necessary to cater to growth around Braintree.

¹⁵ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_june_17

Conclusion

- 1.133 It is anticipated and mixed significant positive yet uncertain and minor positive yet uncertain (++) effects are likely to occur.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.134 The implications of this spatial strategy in relation to promoting accessibility is set out in the commentary relating to SA7. This is not repeated here. Instead, the assessment under this SA objective relates to the ability of the proportionate growth spatial strategy to make efficient use of land and ensure the necessary infrastructure is delivered.
- 1.135 In relation to efficient use of land it is considered likely that development proposals at existing settlements will be required to reflect the general character of that settlement¹⁶, in terms of factors that can influence density – such as scale, massing and plot sizes. Since this strategy is likely to result in development around the edges of settlements, it is considered that development density and efficiency of land use will reflect local circumstances. The local circumstances in relation to scale, massing and plot sizes of each settlement is not known, and therefore the performance of this spatial strategy in relation to efficient use of land is uncertain.
- 1.136 As set out in the commentary for SA2 (housing provision), the Braintree Viability Study¹⁷ indicates that development in the district can viably provide policy compliant development, including anticipated infrastructure provision. However, this does not account for large, exceptional elements of infrastructure provision. This spatial strategy provides for several new such infrastructure items including:
- RTS links to Braintree Town, Braintree Freeport, and Colchester
 - Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020).
 - New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout.
 - RIS funded A12 upgrading 2022 to 2025
 - Bypass for Halstead
- 1.137 All of these are likely to reduce congestion. It is however unclear whether these items can be fully funded by the development proposals or whether additional funding is likely to be required. This is particularly the case at Halstead, where the amount of development here has not been demonstrated as being able to sufficiently fund the bypass. The site information form sets out that SUE2 at Braintree can viably support RTS, Millennium slipways, a new route of A120 to provide a free-flow link in place of the Galley's Corner roundabout and affordable housing (as well as other elements of sustainable development) without external funding or other improvement in viability. No specific mitigation is set out at Hatfield Peverel.
- 1.138 In accordance with the above, minor positive yet uncertain (+?) effects are anticipated in relation to this SA objective, due to the likely provision of infrastructure requirements which are required to support the spatial strategy. The uncertainty arises because the exact infrastructure requirements of a development, the capacity of existing infrastructure, and lack of evidence that the Bypass for Halstead is viable with the level of development which would be allocated under this spatial strategy. Uncertainty also arises due to the lack of information about development density.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.139 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

¹⁶ In accordance with the principles set out in Draft Section 1 Policies SP6 & LPP37.

¹⁷ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

Effects on cultural heritage assets

- 1.140 This spatial strategy directs growth to settlements which include designated heritage assets including scheduled monuments, registered parks and gardens, listed buildings and conservation areas.
- 1.141 In the absence of evidence about the significance of, and potential impact of developing near to these heritage assets, it is considered possible that development in these settlements may result in impacts to the setting of heritage assets. Although the site specific location of the development which would be allocated under this spatial strategy is not known, the significant number and distribution of heritage assets within the plan area are considered to make it likely that some growth would be within 500m of a designated heritage asset. As such, significant negative yet uncertain (--) effects are anticipated in relation to this element of SA objective 9. The uncertainty arises because of the assumption about the location of development relative to heritage assets, and because site specific design and mitigation may suitably mitigate impacts.

Effects on townscape

- 1.142 As set out in the commentary which relates to SA1 (Community Cohesion), this spatial strategy will result in the three settlements expanding by more than 10% of their current size within the plan period. It is anticipated that this is likely to have a significant effect on townscape, however, whether this is positive or negative will depend on the siting and design of this development. These details are not known at this stage and as such, the effects in relation to this element of SA9 are uncertain (?).

Conclusion

- 1.143 Overall, this spatial strategy is considered likely to result in mixed significant negative yet uncertain, and uncertain (--) effects.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.144 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and the implications this has on carbon emissions from transport. To avoid duplication, the effects in relation to these matters are not reassessed under this SA objective.
- 1.145 Instead, assessment under this SA objective relates to the built form of development, which is influenced by planning policy, appeal decisions and other material considerations such as the NPPF. In accordance with draft policies in the submitted Section 1 Local Plan, it is assumed that all development will be required to:
- Encourage appropriate energy conservation and efficiency measures¹⁸.
 - Include renewable energy technology to provide at least 20% of the projected energy requirements of major developments, and 10% of minor developments, unless viability evidence demonstrates otherwise¹⁹.
 - Avoid flood zones, be flood resilient and provide for sustainable urban drainage²⁰.
- 1.146 It is considered that as this spatial strategy focusses development to SUE2 which is a large site, and also allocates 800 dwellings to Halstead and Hatfield Peverel, it is considered likely that these would be provided by major development applications, which have a higher target for renewable energy generation than non-major applications. It may also be the case that larger development sites facilitate the provision of centralised heating and hot water systems.
- 1.147 Due to the principles already present in draft policy, which is considered likely to apply to all sites regardless of location, it is considered that this spatial strategy is likely to result in minor positive (+) effects in relation to this SA objective.

¹⁸ Consistent with policy LPP75 of the Submitted Section 1 Local Plan

¹⁹ Consistent with policy LPP77 of the Submitted Section 1 Local Plan

²⁰ Consistent with policies LPP78, 79, and 80 of the Submitted Section 1 Local Plan

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.148 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.149 Source protection zones are present within Braintree and in particular affect land within Braintree and Halstead (Hatfield Peverel does not intersect with any source protection zone).
- 1.150 As such, it is considered that development at these settlements as would be required by this spatial strategy may result in impacts to these zones, resulting in minor negative yet uncertain (-?) effects. The uncertainty arises as specific design and mitigation may be able to overcome impacts.

Water scarcity and water treatment

- 1.151 With regard to water supply, and waste water treatment, the Braintree Water Cycle Study²¹ does not review the potential implications of this Hierarchy-based growth spatial strategy, and therefore it is uncertain whether there would be sufficient water and waste treatment provided to meet the requirements of this spatial strategy. Therefore, the effects in relation to this are uncertain (?).

Conclusion

- 1.152 This proportionate growth alternative to garden communities is considered likely to result in minor negative yet uncertain and uncertain effects (-?/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.153 A significant amount of Braintree District is identified as flood zone 2 or 3. However, none of the settlements which are anticipated to accommodate the dwellings allocated under this Hierarchy-based growth spatial strategy are significantly constrained by these flood zones. In addition, sites SUE2 at Braintree, SUE1 at Halstead and the majority of Hatfield Peverel are not identified as being at significant risk from either groundwater or surface water flooding.
- 1.154 Overall, it is considered likely that this spatial strategy will result in negligible (0) effects in relation to this SA objective.

SA13: To improve air quality

- 1.155 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.156 There are no AQMAs in Braintree and therefore none of the dwellings allocated under this spatial strategy will intersect with an AQMA.
- 1.157 As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.158 As set out above, there are no designated air quality management areas within Braintree. A review of the commuting data for SUE2 at Braintree and SUE1 at Halstead indicate that the most popular employment destinations based on current trends are within Braintree, it is therefore envisaged that growth at Braintree and Halstead as required under this spatial strategy will not result in significant additional vehicle trips through AQMAs.
- 1.159 As such, this is considered likely to result in negligible yet uncertain (0?) effects. The uncertainty arises as it is not known exactly how and where people will travel.

²¹ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

Conclusion

- 1.160 This spatial strategy is considered likely to result in mixed negligible and negligible yet uncertain (0/0?) effects.

SA14: To conserve and enhance the quality of landscapes

- 1.161 Site SUE2 at Braintree has been assessed by landscape officers of the NEAs, and has been found to be of moderate strength landscape character, which is visually sensitive to large development due to the open landscape. It is suggested that new development should be small scale and in keeping with landscape character, maintain the landscape setting of settlements and maintain open views across the landscape. In light of this, it is considered that development of the site is likely to result in uncertain minor negative effects in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.162 Development at Halstead is approximately 4.3km west of the designated Stour Valley Project Area. The landscape surrounding the site – which consists of the LCA Wickham Farmland Plateau and the LCA Colne River Valley - has been assessed by landscape officers of the NEAs. The LCA Wickham Farmland Plateau was found to be of moderate strength landscape character and highly sensitive to visual intrusion due to wide views. The LCA Colne River Valley was found to be of strong landscape character, and highly sensitive to visual intrusion and loss of landscape integrity. In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?). The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.163 Hatfield Peverel is not located near any landscape designations. No evidence has been provided which assesses the landscape character around Hatfield Peverel and therefore the landscape impacts of a total of 2,800 dwellings here is not known.
- 1.164 Overall, the assessment finds significant negative yet uncertain (--?) effects in relation to this SA objective, due to the impacts of developing at Halstead, the uncertainty in relation to effects at Hatfield Peverel, and because impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 1.165 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.166 A significant portion of the plan area is designated as a mineral safeguarding area due to the significant mineral resources which are present. Due to the fact that the minerals safeguarding areas are closely drawn to the existing settlements, the development at all three settlements which would be expanded under this spatial strategy will result in the loss of mineral resources. However it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 1.167 Much of the district is identified as Grade 1-3 agricultural land. This is also closely drawn to the existing settlements, meaning that development in accordance with this spatial strategy is likely to result in the loss of high quality agricultural land.

Conclusion

- 1.168 In accordance with the above, and due to the cumulative effects of loss of mineral resources and high quality agricultural land, it is considered that this spatial strategy will result in significant negative effects (--?/--) in relation to both elements of this SA objective. The uncertainty arises in relation to mineral resources as it may be possible to extract some or all of the mineral resource

before development, depending on factors such as site layout and phasing of housing delivery.

West 2: Proportionate (Hierarchy-based) Growth

1.169 This spatial strategy recorded significant positive effects for:

- SA4: To ensure and improve the vitality and viability of centres (within the plan period)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (within the plan period)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, within the plan period)

1.170 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, within the plan period)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, within the plan period)
- SA14: To conserve and enhance the quality of the landscapes (within the plan period)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, within the plan period)

West of Colchester Spatial Strategy 3: West of Braintree GC (NEAGC1) + Colchester/Braintree GC (NEAGC2)

- 1.171 This option reflects what is already included in the submitted Section 1 Local Plan with development at two new Garden Communities, one west of Braintree and one on the Colchester/Braintree border around Marks Tey. In the submitted plan, each of these Garden Communities is expected to deliver 2,500 new homes within the remainder of the plan period to 2033. In terms of their long-term dwelling capacity, the Colchester Braintree borders proposal will potentially be more than double the size of that west of Braintree.
- 1.172 Under this option, the two garden communities are considered to be capable of developing as standalone communities. The connection of the proposed garden communities, along the A120 corridor, means that RTS is an option. The Concept Feasibility Study (EB/008) provides evidence that 2,500 dwellings can be delivered in each garden community within the plan period. The two garden communities proposed will deliver a total of 5,000 dwellings to the west of Colchester within the plan period, as justified under principles 1 and 3. The total dwellings figure, which is within the range in the Submission Local Plan, is taken from evidence in the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) assumptions.
- 1.173 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.6: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 3

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ²²
West of Braintree GC NEAGC1	2,500	10,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For West of Braintree, it suggests approximately 9ha by 2033, 31ha by 2050 and 39ha by 2071. For the Colchester/Braintree	<ul style="list-style-type: none"> • RTS links to Braintree Town, Braintree Freeport and Stansted • RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. • Strategic improvements to Marks Tey Railway Station. • New junctions. Widening, and rerouting of A12. • Bypass for A120.
Colchester/Braintree GC NEAGC2	2,500	21,000		

²² All spatial strategy options will deliver the following infrastructure: early years, primary & secondary schools, youth centre provision, open space, bus services, local centre facilities, healthcare facilities and community meeting spaces.

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ²²
			Borders, it suggests 8ha by 2033, 27ha by 2050 and 52ha by 2071.	

- 1.174 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with extant consents and the submitted Section 2 Local Plan allocations.

Relevant Context for this Spatial Strategy

- 1.175 This spatial strategy allocates a total of 5,000 dwellings to two new settlements which are on greenfield sites. Site NEAGC1 is located to the West of Braintree, and abuts the boundary of Braintree and Uttlesford Districts. The emerging Uttlesford Local Plan also includes a proposed contiguous allocation of 3,500²³ dwellings, which if planned as a single development site, would result in an overall development of 13,500 by the time the site is fully built out. The emerging Uttlesford plan sets out that 970 of these will be delivered by 2033 (the end of the plan period). This assessment identifies the potential cumulative effects of this proposed Uttlesford allocation as well as site NEAGC1.
- 1.176 The site is currently primarily arable land, and as it is a large site (496 ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. Broadfield Farm is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The legal agreement still has not been signed. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.
- 1.177 Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester DC and Braintree DC. Geographically, it is centrally located within the Plan area, and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden Community. The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.
- 1.178 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections.
- 1.179 Braintree town is located in between the two sites, and NEAGC2 is to the east of Colchester. The two sites are strategically linked via the A120, and although there is a rail connection between Marks Tey and Braintree, this requires a connection at Witham and is therefore indirect and relatively slow compared to road based transport.
- 1.180 In addition to these strategic sites, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. As a result of these 4,905 dwellings are anticipated to come forward in and around Braintree town (including east of

²³ Regulation 19 plan available from https://uttlesford.gov.uk/media/8248/Uttlesford-Regulation-19-Pre-submission-Local-Plan/pdf/Reg_19_local_plan_21.06.18_low_res_for_web.pdf

Great Notley), and 1,036 dwellings in Kelvedon and Feering, which is to the south of NEAGC2. Furthermore 10,313 dwellings are allocated to the urban area of Colchester.

Assessment of Effects

1.181 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 3

1.182 The table below summarises the anticipated effects of this spatial strategy.

Table 1.7: Assessment of West of Colchester Spatial Strategy 3

SA objective	Spatial Strategy West 3 at the end of the plan period	Spatial Strategy West 3 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	++/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+++?	++?/+++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/0?	0/0?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?

SA objective	Spatial Strategy West 3 at the end of the plan period	Spatial Strategy West 3 when fully built out
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.183 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.184 At the end of the plan period, and indeed, once fully built out, both sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the two sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.185 In accordance with the assumptions framework, and as confirmed in site information forms for sites, the original assessments assumed that all sites can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.186 The original assessment found that both sites are expected to deliver youth centre facilities and more general community meeting facilities as part of development, which is expected to result in enhanced opportunities for community cohesion. As such, effects in relation to the new community are expected to be significant positive for both of these sites, both at the end of the plan period and once fully built out, as the site information forms indicate that these facilities can be delivered at all potential dwelling capacities.
- 1.187 At both the end of the plan period and at final capacity, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to the new occupants of either site. Therefore, the findings of significant positive effects at the end of the plan period and significant positive effects at final capacity are not anticipated to change.

Conclusion

- 1.188 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.189 At the end of the plan period, both strategic sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible

neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, both sites were considered likely to result in significant positive yet uncertain (++) effects in relation to this SA objective. The uncertainty arises because the site information forms and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates ltd (June 2019) set out that both sites will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.

- 1.190 The combination of the two sites into a single spatial strategy option, and seen within the context of planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, significant positive effects are anticipated. As set out above, at around 2,500 dwellings, both sites are considered viable, and once fully built out, both sites are considered likely to be viable subject to external funding or other improvement in scheme viability.

Conclusion

- 1.191 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 1.192 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.193 At the end of the plan period, both sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.194 Once fully built out, both sites scored significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once they are both fully built out, either site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.195 Both at the end of the plan period and when fully built out, site NEAGC1 is anticipated to result in negligible effects in relation to exposure to noise pollution whilst NEAGC2 is anticipated to result in minor negative effects. This is due to the proximity to existing sources of noise pollution – NEAGC1 is not located in an area which is identified as being likely to suffer from noise

pollution, whilst site NEAGC2 intersects with areas identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB.

- 1.196 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC1 and NEAGC2 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.197 As these findings relate to the existing characteristics of the sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Taking account of the anticipated minor negative effects in relation to site NEAGC1 and NEAGC2, this spatial strategy is similarly considered likely to result in uncertain minor negative effects (-?).

Conclusion

- 1.198 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.
- 1.199 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.200 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.201 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments, proposed section 2 allocations and proposed Uttlesford allocations are anticipated to support existing centres. Furthermore, the combination of the two sites into a single spatial strategy will require the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.202 In accordance with the above, significant positive (++) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.203 The site assessment found that both sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. In addition, once fully built out, both sites are considered capable of supporting employment areas, which are built as part of the sites, of 10ha and above. This is considered likely to result in significant positive (++) effects.
- 1.204 Furthermore, the combination of the two sites into a single spatial strategy will require the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These are likely to increase accessibility between existing employment areas including Colchester and Braintree town centres, Braintree Freeport

and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations,

- 1.205 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.206 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.207 At both the end of the plan period and once fully built out both sites are considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. This is due to intersection with local wildlife sites including ancient woodland at NEAGC1 and a local wildlife site at NEAGC2 – as well as being in close proximity to Marks Tey Brick Pit SSSI.
- 1.208 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.209 Significant negative yet uncertain (--?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.210 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.211 Both sites are considered likely to result in minor positive yet uncertain effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. This spatial strategy also includes the provision of RTS – which will increase accessibility from the sites to the nearby centres at Braintree and Colchester, resulting in enhanced accessibility for shorter journeys. As RTS is anticipated by the end of the plan period, these positive effects are considered likely to occur at both the end of plan period and once fully built out.
- 1.212 Once fully built out, both sites are considered capable of supporting an employment area, within the site, of at least 10 hectares, and a new secondary school, resulting in significant positive effects. The provision of RTS further enhances accessibility to local services and facilities. Uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.213 For longer journeys, both sites are anticipated to have minor negative effects, due to the lack of options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out.
- 1.214 However, the provision of RTS linking the sites to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, and the strategic improvements to Marks Tey Railway Station are considered likely to improve the potential for journeys outside the site boundary to be made using

sustainable modes, resulting in significant positive effects in relation to this SA objective. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. Uncertainty arises due to the difficulties in predicting where people will choose to work and how they will choose to travel there. Uncertainty also arises over whether the improvements to Marks Tey Railway Station will be sufficient to cater to growth, considering that the station is already operating over capacity.

Conclusion

- 1.215 At the end of the plan period, this spatial strategy is considered likely to result in significant positive yet uncertain (++) effects (in relation to shorter journeys) and significant positive yet uncertain (++) effects (in relation to longer journeys).
- 1.216 Once fully built out, this spatial strategy is considered likely to result in significant positive yet uncertain (++) effects (in relation to shorter journeys) and significant positive yet uncertain (++) effects (in relation to longer journeys).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.217 In accordance with the site assessments, both sites NEAGC1 and NEAGC2 are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability such as inflation in house prices to deliver all infrastructure and policy compliant affordable housing. There is no evidence that the combination of the two sites to form a single spatial strategy will negate the requirement for improved viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans or Uttlesford Local Plan will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.218 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding or other improvement in viability has not been secured. These effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.219 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.220 Both sites are likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective, due to the proximity of the sites to designated heritage assets, including listed buildings, scheduled monuments and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

- 1.221 The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.222 Effects on townscape for both sites was scored as uncertain for the end of the plan period and once fully built out, as this depends on the quality of the development built within the sites. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.223 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.224 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, both sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.225 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.226 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.227 Both sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.228 The site assessment for NEAGC1 and NEAGC2 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree and Colchester Water Cycle Studies (WCS). However, the WCS for each district does not consider growth beyond the plan period. However, the Integrated Water Management Strategy (IWMS)²⁴, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1. NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible (0?) effects are expected at the end of the plan period and once fully built out.

²⁴ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

- 1.229 In regard to water treatment, the Braintree WCS suggests that water treatment facilities will require upgrading to accommodate growth at NEAGC1 during the plan period, but these upgrades are likely to be feasible. For NEAGC2, the site assessment found that water treatment facilities have sufficient headroom to accommodate growth at NEAGC2 within the plan period. As such, uncertain negligible effects (0?) are expected for this spatial strategy at the end of the plan period. Additionally, the IWMS indicates that water treatment facilities will also be able to cater to growth at these sites beyond the extent of the plan period and as such, uncertain negligible (0?) effects are also expected once fully built out.
- 1.230 These effects are also expected to apply when combining the sites into a single spatial strategy. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

Conclusion

- 1.231 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain negligible (0?) at the end of the plan period and uncertain once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.232 Very small proportions of both sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.233 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects in relation to this SA objective.

SA13: To improve air quality

- 1.234 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.235 Neither site intersects with any AQMAs and as such, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Potential contribution to road traffic within areas suffering from air pollution

- 1.236 According to NOMIS (2011 data), commuters currently living in the area of NEAGC1 generally travel to destinations which does not involve travelling through an AQMA, and as such, this site is considered to result in negligible effects in relation to this element of this SA objective, both at the end of the plan period and once fully built. NOMIS data indicates that commuters living in the area of NEAGC2 are likely to commute through the Lucy Lane North, Stanway AQMA on the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. Due to the potential increase in road traffic within these AQMAs, this site is anticipated to have minor negative yet uncertain (-?) effects. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester. As this spatial strategy includes NEAGC2, it is considered that the effects arising from NEAGC2 will also occur as a result of implementing this strategy.
- 1.237 Whilst the benefits of the proposed RTS and Strategic Improvements to West Tey Railway Station are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.238 This spatial strategy is anticipated to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMA and minor negative yet uncertain (--) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.239 Both sites were assessed by landscape officers of the NEAs, and found to be of moderate–strong landscape character. NEAGC 1 is visually sensitive in terms of the flat plateau landscape and skyline views from valley floor, and NEAGC2 is at risk from pressure for further development at Marks Tey into the farmed landscape, and to risks to the setting of traditional settlements. It is also sensitive to visual and auditory disturbance from the A120/A12 junction adjacent to the east of the site. In light of this and in line with the assumptions framework, it is considered that development of both sites would result in significant negative yet uncertain (--) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.240 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.241 This spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.242 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

Approximately 75% of site NEAGC1 and 65% of NEAGC2 fall within a mineral safeguarding area for sand and gravel deposits, meaning that the development of these sites could result in a significant sterilisation of mineral resources if these were not extracted before development. Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources for each site is considered to be significant negative yet uncertain (--). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.243 Approximately 95% of site NEAGC1 and 92% of NEAGC2 is Grade 1 or 2 agricultural land, and as such, a significant negative (--) effect is anticipated for both sites at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.244 This spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 3: West of Braintree Garden Community (NEAGC1) + Colchester/Braintree Garden Community (NEAGC2)

1.245 This spatial strategy recorded significant positive effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, at the end of the plan period and when fully built out)
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, both within the plan period and when fully built out)

1.246 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 4: West of Braintree GC (NEAGC1) + Monks Wood GC (ALTGC3) + Colchester/Braintree Borders GC (NEAGC2)

- 1.247 Under these options, there would be three new garden communities to the west of Colchester each of a smaller size overall than those proposed in the Section 1 Local Plan, but each expected to deliver around 2,000 homes in the remainder of the plan period to 2033. The three smaller garden communities would be west of Braintree, the Monks Wood site being promoted by Lightwood Strategic and at Marks Tey. The Inspector specifically requested that a range of options including more or fewer garden communities, including the Monks Wood proposal, are tested as he felt that these would be reasonable scenarios that the previous SA had failed to cover.
- 1.248 Under these scenarios, it is anticipated that each of the three locations could reasonably deliver 2,000 dwellings (in line with Principal 6 explained above) i.e. around 6,000 in total for the area west of Colchester – slightly higher than the 5,000 expected from the two Garden Communities currently proposed in the Section 1 Local Plan. This reflects the likely delivery within the plan period of 2,500 dwellings for each site as evidenced in the Concept Feasibility Study for West of Braintree and Braintree Colchester borders GCs and the viability and deliverability site information form for Monks Wood, but adding in an element of flexibility as three garden communities are proposed.
- 1.249 The size of each proposed garden community under this option is less than options involving 1 or 2 garden communities because, whilst planning for longer term development through the delivery of garden communities this option, if taken forward, will be combined with development to the east of Colchester. An option involving a lower scale of development enables the SA to draw out the different effects, both positive and negative, from smaller and larger garden communities.
- 1.250 The total dwelling figures for West 4 for West of Braintree (NEAGC1) is within the range of the amount proposed in the submitted Section 1 Local Plan and is taken from evidence in the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update report by Hyas Associates Ltd (June 2019). The total dwellings figure for Colchester/Braintree Borders (NEAGC2) is within the range of the amount proposed in the submitted Section 1 Local Plan and includes land that is being independently promoted by L&Q, Cirrus Land and Gateway 120. The AECOM Report on Infrastructure, Planning, Phasing and Delivery suggests that this land could form part of the earlier phases of development and could therefore be the areas of land likely to be preferred if a smaller version Colchester/Braintree Borders (NEAGC2) development was to progress. The total dwellings figure for Monks Wood reflects the scale of development being promoted as set out in the site information form which was confirmed with the promoters.
- 1.251 The spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.8: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 4

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
West of Braintree GC NEAGC1	2,000	10,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floor space requirements for the North Essex Garden Communities – Cebr note for the	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Stansted RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. Strategic improvements to
Colchester/Braintree Borders GC NEAGC2	2,000	17,000		

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
			North Essex Authorities recommends employment land figures for the Garden Community proposals. For West of Braintree, it suggests approximately 9ha by 2033, 31ha by 2050 and 39ha by 2071. For the Colchester/Braintree Borders, it suggests 8ha by 2033, 27ha by 2050 and 52ha by 2071.	Marks Tey Railway Station. <ul style="list-style-type: none"> • New junctions. Widening, and rerouting of A12. • Bypass for A120. • Sustainable transport link to Kelvedon Station • District centres
Monks Wood ALTGC3	2,000	5,500	<p>25h.2a for B 'uses' has been identified in the master plan /land use budget plan that underpins the Alder King Viability Report for Monks Wood (March 2019) at 5,500 homes. Estimated that 11ha would be delivered in the plan period up to 2033.</p> <p>Likewise, 16.2ha has been identified for Retail /District/Local Centre 'A' uses. Upper floors can provide alternative or additional B1 space to that within the 25.2ha referred to above</p>	

1.252 As this scenario includes strategic sites which have been assessed individually, this assessment utilizes and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

1.253 This spatial strategy allocates for a total of 6,000 dwellings to three new settlements which are on greenfield sites. Site NEAGC1 is located to the West of Braintree, and abuts the boundary of

Braintree and Uttlesford Districts. The emerging Uttlesford Local Plan also includes a proposed contiguous allocation of 3,500²⁵ dwellings, which if planned as a single development site, would result in an overall development of 13,500 by the time the site is fully built out. The emerging Uttlesford plan sets out that 970 of these will be delivered by 2033 (the end of the plan period). This assessment identifies the potential cumulative effects of this proposed Uttlesford allocation as well as site NEAGC1.

- 1.254 The site is currently primarily arable land, and as it is a large site (496 ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. Broadfield Farm is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The legal agreement still has not been signed. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.
- 1.255 Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester DC and Braintree DC. Geographically, it is centrally located within the Plan area, and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden Community. The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.
- 1.256 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections.
- 1.257 Site ALTGC3 ('Monks Wood') is a 909-hectare strategic site entirely within Braintree DC, centred around the existing Pattiswick Estate. The site is on the existing Pattiswick Estate and is currently largely arable land and scattered woodland blocks (mainly around the perimeter), with only a few isolated buildings. It lies between the town of Braintree to the west and the settlement of Coggeshall to the east, and is bound to the south by the strategic A120 road.
- 1.258 Rivenhall Airfield (the Bradwell Quarry) - the border of which lies around 1km from the site boundaries - is an allocated Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.
- 1.259 Braintree town is located between the sites, (NEAGC1 to the west and NEAGC2 and ALTGC03 to the east) and the A120 is adjacent to the southern boundary of all sites, providing strategic links to Colchester (east) and Stansted (west).
- 1.260 In addition to these strategic sites, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. As a result of these 4,905 dwellings are anticipated to come forward in and around Braintree town (including east of Great Notley), and 1,036 dwellings in Kelvedon and Feering, which is to the south of NEAGC2. Furthermore 10,313 dwellings are allocated to the urban area of Colchester.

Assessment of Effects

- 1.261 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 4.
- 1.262 The table below summarises the anticipated effects of this spatial strategy.

²⁵ Regulation 19 plan available from https://uttlesford.gov.uk/media/8248/Uttlesford-Regulation-19-Pre-submission-Local-Plan/pdf/Reg_19_local_plan_21.06.18_low_res_for_web.pdf

Table 1.9: Assessment of West of Colchester Spatial Strategy 4

SA objective	Spatial Strategy West 4 at the end of the plan period	Spatial Strategy West 4 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	++/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	+++?/+++?	+++?/+++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.263 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the

new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.264 At the end of the plan period, and indeed, once fully built out, all sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the three sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.265 In accordance with the assumptions framework, and as confirmed in the site information forms for these sites, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.266 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information forms, these sites are expected to provide both youth centres facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.
- 1.267 At both the end of the plan period and at final capacity, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to the new occupants of either site. Therefore, the findings of minor positive effects at the end of the plan period and significant positive effects at final capacity are not anticipated to change.

Conclusion

- 1.268 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.269 At the end of the plan period, all three sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, all sites were considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information forms and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) (in relation to NEAGC1 and NEAGC2) set out that all sites will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.270 The combination of the three sites into a single spatial strategy option, and seen within the context of planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, the site assessment findings are reflected in the findings for the strategy as a whole.

Conclusion

- 1.271 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 1.272 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.273 At the end of the plan period, all sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.274 Once fully built out, all sites are expected to have significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once they are all fully built out, all sites will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.275 Both at the end of the plan period and when fully built out, site NEAGC1 and ALTGC03 are expected to result in negligible effects in relation to exposure to noise pollution whilst NEAGC2 is anticipated to result in minor negative effects. This is due to the proximity to existing sources of noise pollution – less than 5% NEAGC1 and ALTGC01 are located in areas that would be likely to suffer from noise pollution, whilst site NEAGC2 intersects with areas identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq16} \geq 60.0$ dB.
- 1.276 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC1 and NEAGC2 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.277 As these site findings relate to the existing characteristics of the sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change effects in relation to either site. Taking account of the anticipated minor uncertain negative effects in relation to NEAGC1 and NEAGC2, this spatial strategy is similarly considered likely to result in uncertain minor negative effects (-?).

Conclusion

- 1.278 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.
- 1.279 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.280 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this, all sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.281 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments, proposed section 2 allocations and proposed Uttlesford allocations are anticipated to support existing centres. Furthermore, the combination of the three sites into a single spatial strategy will require the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions (widening and rerouting of the A12), a bypass for the A120 and a sustainable transport link to Kelvedon Station. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.282 In accordance with the above, significant positive (++) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.283 The site assessment found that all sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. In addition, once fully built out, all sites are considered capable of supporting employment areas, which are built as part of the sites, of 10ha and above. This is considered likely to result in significant positive (++) effects.
- 1.284 Furthermore, the combination of the three sites into a single spatial strategy will require the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These are likely to increase accessibility between existing employment areas including Colchester and Braintree town centres, Braintree Freeport and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations,
- 1.285 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.286 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.287 At both the end of the plan period and once fully built out, all sites are considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. This is due to intersection with local wildlife sites including ancient woodland at NEAGC1 and a local wildlife site at NEAGC2 – as well as being in close proximity to Marks Tey Brick Pit SSSI. For ALTGC03, this is due to intersection with intersection with a Local Wildlife Site.
- 1.288 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.289 Significant negative yet uncertain (--?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.290 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter Journeys

- 1.291 All sites are considered likely to result in minor positive yet uncertain (+?) effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. However, the provision of RTS is considered likely to increase accessibility for shorter journeys, resulting in significant positive yet uncertain (++?) effects. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.292 For longer journeys, all sites are anticipated to have uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out. The uncertainty arises due to the difficulties predicting exactly where and how people will travel in the area.
- 1.293 However, the provision of RTS linking the sites to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, and the strategic improvements to Marks Tey Railway Station and the sustainable travel link to Kelvedon Rail Station are considered likely to improve the potential for journeys outside the site boundary to be made using sustainable modes. It is considered that this will facilitate access to railway stations which can allow for more sustainable travel behaviour, resulting in uncertain significant positive effects (++?) in relation to this SA objective. RTS and the sustainable travel link to Kelvedon are anticipated to be in place prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there.

Conclusion

- 1.294 At the end of the plan period, this spatial strategy is considered likely to result in significant positive yet uncertain (++?) effects in relation to both shorter and longer journeys.
- 1.295 Once fully built out, this spatial strategy is considered likely to result in significant positive yet uncertain (++?) effects in relation to both shorter and longer journeys.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.296 In accordance with the site assessments, sites NEAGC1, NEAGC2 and ALTGC03 are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, all sites are reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that the combination of the three sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans or Uttlesford Local Plan will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.297 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite viability improvement has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.298 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.299 All sites are likely to result in significant yet uncertain (--?) effect in relation to this SA objective due to proximity of the sites to designated heritage assets, including listed buildings, scheduled monuments and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.300 The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.301 The effects on townscape for sites NEAGC2 and ALTGC3 were scored as uncertain (?) for the end of the plan period and once fully built out, as there is potential for existing townscapes to be significantly changed, but whether this change is positive or negative depends on the quality of the development built within the sites. NEAGC1 is expected to have negligible effects in relation to townscape due to it being placed a sufficient distance from existing settlements. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.302 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain (?) effect in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.303 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for all sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, all sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.304 At the end of the plan period and once fully built out this spatial strategy is considered likely to result in minor positive effects (+) in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.305 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.306 All sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is also considered likely to result in negligible effects (0).

Water scarcity and water treatment

- 1.307 The site assessment for NEAGC1 and NEAGC2 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree and Colchester Water Cycle Studies (WCS), resulting in uncertain negligible effects (0?). However, the WCS for each district did not consider growth beyond the plan period. The Integrated Water Management Strategy (IWMS)²⁶, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1. NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible (0?) effects are expected at the end of the plan period and once fully built out for NEAGC1 and NEAGC2. Given the level of growth assessed in the IWMS, the findings for water supply also apply to site ALTGC3, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.308 In regard to water treatment, the Braintree WCS suggests that water treatment facilities will require upgrading to accommodate growth at NEAGC1 during the plan period, but these upgrades are likely to be feasible. For NEAGC2, the site assessment found that water treatment facilities have sufficient headroom to accommodate growth at NEAGC2 within the plan period. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at these sites beyond the extent of the plan period. For site ALTGC3, the effects in relation to water treatment were considered to be uncertain (?) as it is not clear whether the site would be served by the Bocking WRC, which could cater to growth following upgrades, or the Coggeshall WRC, which the study does not provide sufficient evidence for to suggest it could cater to growth.
- 1.309 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?) at the end of the plan period and once fully built out.

²⁶ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Conclusion

- 1.310 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) at the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.311 Very small proportions of all sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, all sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.312 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.313 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMA and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.314 None of the sites intersect with any AQMAs and as such, all sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Potential contribution to road traffic within areas suffering from air pollution

- 1.315 According to NOMIS (2011 data), commuters currently living in the area of NEAGC1 and ALTGC03 generally travel to destinations which does not involve travelling through an AQMA, and as such, these sites are considered to result in negligible effects in relation to this element of this SA objective, both at the end of the plan period and once fully built. NOMIS data indicates that commuters living in the area of NEAGC2 are likely to commute through the Lucy Lane North, Stanway AQMA on the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. Due to the potential increase in road traffic within these AQMAs, this site is anticipated to have minor negative yet uncertain (-?) effects. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester. As this spatial strategy includes NEAGC2, it is considered that the effects arising from NEAGC2 will also occur as a result of implementing this strategy.
- 1.316 Whilst the benefits of the proposed RTS and Strategic Improvements to West Tey Railway Station are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.317 This spatial strategy is anticipated to result in mixed effects, including negligible effects (0) at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.318 All sites were assessed by landscape officers of the NEAs, and found to be of moderate–strong landscape character. NEAGC1 is visually sensitive in terms of the flat plateau landscape and skyline views from valley floor, and NEAGC2 is at risk from pressure for further development at

Marks Tey into the farmed landscape, and to risks to the setting of traditional settlements. It is also sensitive to visual and auditory disturbance from the A120/A12 junction adjacent to the east of the site. Site ALTGC3 is highly sensitive to change due to intrusion of development on the skyline and impacts on tranquillity. In light of this and in line with the assumptions framework, it is considered that development of all sites would result in significant negative yet uncertain (--) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

- 1.319 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.320 This spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.321 Approximately 75 % of site NEAGC1, 65% of NEAGC2 and 83% of ALTGC03 fall within a mineral safeguarding area for sand and gravel deposits, meaning that the development of these sites could result in a significant sterilisation of mineral resources if these were not extracted before development. Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources for each site is considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.322 Approximately 95% of site NEAGC1, 92% of NEAGC2 and 81% of ALTGC03 is Grade 1 or 2 agricultural land, and as such, a significant negative (--) effect is anticipated for all sites at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.323 This spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource. Significant negative effects (--) are expected, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 4: West of Braintree Garden Community (NEAGC1) + Monks Wood Garden Community (ALTGC3) + Colchester/Braintree Borders Garden Community (NEAGC2) – larger scale growth

- 1.324 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, at the end of the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)

- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, both within the plan period and when fully built out)

1.325 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 4a: West of Braintree GC (NEAGC1) + Monks Wood GC (ALTGC3) + Colchester/Braintree Borders GC (NEAGC2)

- 1.326 The total dwelling figures for West 4a for each of the three sites is 5,500. This allows the NEAs to consider the likely sustainability effects of smaller scale development and facilitates a direct comparison of these three sites.
- 1.327 This option is a sub option of strategy West 4, and as such reflects it, as a combination of three garden communities to the west of Colchester.
- 1.328 However the key difference is that the sites are provided at a reduced size overall than those proposed in the Section 1 Local Plan. Each are expected to deliver around 2,000 homes in the remainder of the plan period to 2033, and in terms of their long term dwelling capacity, within this spatial strategy, the three sites are assessed up to 5,500 dwellings each when fully built out in order consider the likely sustainability effects of smaller scale development.
- 1.329 The spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.10: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 4a

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
West of Braintree GC NEAGC1	2,000	5,500	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For West of Braintree, it suggests approximately 9ha by 2033. For the Colchester/Braintree Borders, it suggests 8ha by 2033. It is suggested that these figures are doubled to 18 and 16ha respectively to correspond with the	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Stansted RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. Strategic improvements to Marks Tey Railway Station. New junctions. Widening, and rerouting of A12. Bypass for A120. Sustainable transport link to Kelvedon Station District centres
Colchester/Braintree GC NEAGC2	2,000	5,500		

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
			fully built out scenario of 5,500 homes at each development.	
Monks Wood ALTGC3	2,000	5,500	25h.2a for B 'uses' has been identified in the master plan /land use budget plan that underpins the Alder King Viability Report for Monks Wood (March 2019) at 5,500 homes. Likewise, 16.2ha has been identified for Retail /District/Local Centre 'A' uses. Upper floors can provide alternative or additional B1 space to that within the 25.2ha referred to above.	

- 1.330 As this scenario includes strategic sites which have been assessed individually, this assessment utilizes and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.331 This spatial strategy allocates a total of 6,000 dwellings by the end of the plan period to three new settlements, which are located on greenfield sites. Site NEAGC1 is located to the West of Braintree, and abuts the boundary of Braintree and Uttlesford Districts. The emerging Uttlesford Local Plan also includes a proposed contiguous allocation of 3,500 dwellings, which if planned as a single development site, would result in an overall development of 9,000 by the time the site is fully built out. The emerging Uttlesford plan sets out that 970 of these will be delivered by 2033 (the end of the plan period). This assessment identifies the potential cumulative effects of this proposed Uttlesford allocation as well as site NEAGC1.
- 1.332 The site is currently primarily arable land, and as it is a large site (496 ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. Broadfield Farm is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The legal agreement still has not been signed. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.
- 1.333 Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester DC and Braintree DC. Geographically, it is centrally located within the Plan area, and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden

Community. The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.

- 1.334 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections.
- 1.335 Site ALTGC3 ('Monks Wood') is a 909-hectare strategic site entirely within Braintree DC, centred around the existing Pattiswick Estate. The site is on the existing Pattiswick Estate and is currently largely arable land and scattered woodland blocks (mainly around the perimeter), with only a few isolated buildings. It lies between the town of Braintree to the west and the settlement of Coggeshall to the east, and is bound to the south by the strategic A120 road.
- 1.336 Rivenhall Airfield (the Bradwell Quarry) - the border of which lies around 1km from the site boundaries - is an allocated Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.
- 1.337 Braintree town is located between the sites, (NEAGC1 to the west and NEAGC2 and ALTGC03 to the east) and the A120 is adjacent to the southern boundary of all sites, providing strategic links to Colchester (east) and Stansted (west).

In addition to these strategic sites, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. As a result of these 4,905 dwellings are anticipated to come forward in and around Braintree town (including east of Great Notley), and 1,036 dwellings in Kelvedon and Feering, which is to the south of NEAGC2. Furthermore 10,313 dwellings are allocated to the urban area of Colchester.

Assessment of Effects

- 1.338 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 4a.
- 1.339 The table below summarises the anticipated effects of this spatial strategy.

Table 1.11: Assessment of West of Colchester Spatial Strategy 4a

SA objective	Spatial Strategy West 4a at the end of the plan period	Spatial Strategy West 4a when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	++/-?
SA4: To ensure and improve the vitality & viability of centres	++	++

SA objective	Spatial Strategy West 4a at the end of the plan period	Spatial Strategy West 4a when fully built out
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/++?	++?/++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.340 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.341 At the end of the plan period, and indeed, once fully built out, all sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the three sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as

the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.342 In accordance with the assumptions framework, and as confirmed in the site information forms for these sites, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.343 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information forms, these sites are expected to provide both youth centres facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.
- 1.344 At both the end of the plan period and at final capacity, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to the new occupants of either site. Therefore, the findings of minor positive effects at the end of the plan period and significant positive effects at final capacity are not anticipated to change.

Conclusion

- 1.345 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.346 At the end of the plan period, all three sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, all sites were considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information forms and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) (in relation to NEAGC1 and NEAGC2) set out that all sites will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.347 The combination of the three sites into a single spatial strategy option, and seen within the context of planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, the site assessment findings are reflected in the findings for the strategy as a whole.

Conclusion

- 1.348 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.349 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.350 At the end of the plan period, all sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.351 Once fully built out, all sites are expected to have significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once they are all fully built out, all sites will be of a sufficient size (>4,500 dwellings) to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.352 Both at the end of the plan period and when fully built out, site NEAGC1 and ALTGC03 are expected to result in negligible effects in relation to exposure to noise pollution whilst NEAGC2 is anticipated to result in minor negative effects. This is due to the proximity to existing sources of noise pollution – less than 5% NEAGC1 and ALTGC01 are located in areas that would be likely to suffer from noise pollution, whilst site NEAGC2 intersects with areas identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq16} \geq 60.0$ dB.
- 1.353 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC1 and NEAGC2 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.354 As these site findings relate to the existing characteristics of the sites, the combination of the three sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change effects in relation to either site. Taking account of the anticipated uncertain minor negative effects in relation to NEAGC1 and NEAGC2, this spatial strategy is similarly considered likely to result in uncertain minor negative effects (-?).

Conclusion

- 1.355 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.
- 1.356 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.357 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this, all sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.358 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments, proposed section 2 allocations and proposed Uttlesford allocations are anticipated to support existing centres. Furthermore, the combination of the three sites into a single spatial strategy will require the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions (widening and rerouting of the A12), a bypass for the A120 and a sustainable transport link to Kelvedon Station. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.359 In accordance with the above, significant positive (++) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.360 The site assessment found that all sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. Once fully built out at 5,500 dwellings, NEAGC1 is capable of delivering 18ha of employment land and NEAGC2 is capable of delivering 8ha of employment land. Site ALTGC3 is capable of delivering around 25ha of employment land when fully built out at 5,500 dwellings (and 11ha at the end of the plan period), which is likely to provide a significant economic boost to the area. However, as the sites are considered here as a single spatial strategy, there is no increase in the minor positive effects expected on the basis of employment land provision, due to site NEAGC2 providing less than 10ha of employment land when fully built out at 5,500 dwellings.
- 1.361 The combination of the three sites into a single spatial strategy will require the provision a RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These are likely to increase accessibility between existing employment areas including Colchester and Braintree town centres, Braintree Freeport and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations,
- 1.362 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period, and therefore significant positive effects (++) are expected in relation to this objective.

Conclusion

- 1.363 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.364 At both the end of the plan period and once fully built out, all sites are considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. This is due to intersection with local wildlife sites including ancient woodland at NEAGC1 and a local wildlife site at NEAGC2 – as well as being in close proximity to Marks Tey Brick Pit SSSI. For ALTGC03, this is due to intersection with a Local Wildlife Site.
- 1.365 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.366 Significant negative yet uncertain (--?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.367 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter Journeys

- 1.368 All sites are considered likely to result in minor positive yet uncertain (+?) effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. However, the provision of RTS is considered likely to increase accessibility for shorter journeys, resulting in significant positive yet uncertain (++?) effects. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.369 For longer journeys, all sites are anticipated to have uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out. The uncertainty arises due to the difficulties predicting exactly where and how people will travel in the area.
- 1.370 However, the provision of RTS linking the sites to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, and the strategic improvements to Marks Tey Railway Station and the sustainable travel link to Kelvedon Rail Station are considered likely to improve the potential for journeys outside the site boundary to be made using sustainable modes. It is considered that this will facilitate access to railway stations which can allow for more sustainable travel behaviour, resulting in uncertain significant positive effects (++?) in relation to this SA objective. RTS and the sustainable travel link to Kelvedon are anticipated to be in place prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. Uncertainty also arises over the potential for a greater number of longer journeys to be taken by rail as the improvements to Marks Tey Railway Station may not be able to cater to all growth within this spatial strategy, considering the station is already operating over capacity.

Conclusion

- 1.371 At the end of the plan period, this spatial strategy is considered likely to result in significant positive yet uncertain (++?) effects in relation to both shorter and longer journeys.
- 1.372 Once fully built out, this spatial strategy is considered likely to result in significant positive yet uncertain (++?) effects in relation to both shorter and longer journeys.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.373 In accordance with the site assessments, sites NEAGC1, NEAGC2 and ALTGC03 are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, all sites are reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that the combination of the three sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans or Uttlesford Local Plan will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.374 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding or other improvement in viability has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.375 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.376 All sites are likely to result in significant yet uncertain (--?) effects in relation to this SA objective due to proximity of the sites to designated heritage assets, including listed buildings, scheduled monuments and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.377 The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.378 The effects on townscape for sites NEAGC2 and ALTGC3 were scored as uncertain (?) for the end of the plan period and once fully built out, as there is potential for existing townscapes to be significantly changed, but whether this change is positive or negative depends on the quality of the development built within the sites. NEAGC1 is expected to have negligible effects in relation to townscape due to it being placed a sufficient distance from existing settlements. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.379 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain (?) effect in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.380 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for all sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, all sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.381 At the end of the plan period and once fully built out this spatial strategy is considered likely to result in minor positive effects (+) in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.382 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.383 All sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the three sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is also considered likely to result in negligible effects (0).

Water scarcity and water treatment

- 1.384 The site assessment for NEAGC1 and NEAGC2 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree and Colchester Water Cycle Studies (WCS), resulting in uncertain negligible effects (0?). However, the WCS for each district did not consider growth beyond the plan period. The Integrated Water Management Strategy (IWMS)²⁷, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1. NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible (0?) effects are expected at the end of the plan period and once fully built out for NEAGC1 and NEAGC2. Given the level of growth assessed in the IWMS, the findings for water supply also apply to site ALTGC3, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.385 In regard to water treatment, the Braintree WCS suggests that water treatment facilities will require upgrading to accommodate growth at NEAGC1 during the plan period, but these upgrades are likely to be feasible. For NEAGC2, the site assessment found that water treatment facilities have sufficient headroom to accommodate growth at NEAGC2 within the plan period. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at these sites beyond the extent of the plan period. For site ALTGC3, the effects in relation to water treatment were considered to be uncertain (?) as it is not clear whether the site would be served by the Bocking WRC, which could cater to growth following upgrades, or the Coggeshall WRC, which the study does not provide sufficient evidence for to suggest it could cater to growth.
- 1.386 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?) at the end of the plan period and once fully built out.

²⁷ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Conclusion

- 1.387 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) at the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.388 Very small proportions of all sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, all sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.389 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.390 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMA and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMA

- 1.391 None of the sites intersect with any AQMA and as such, all sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Potential contribution to road traffic within areas suffering from air pollution

- 1.392 According to NOMIS (2011 data), commuters currently living in the area of NEAGC1 and ALTGC03 generally travel to destinations which does not involve travelling through an AQMA, and as such, these sites are considered to result in negligible effects in relation to this element of this SA objective, both at the end of the plan period and once fully built. NOMIS data indicates that commuters living in the area of NEAGC2 are likely to commute through the Lucy Lane North, Stanway AQMA on the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. Due to the potential increase in road traffic within these AQMA, this site is anticipated to have minor negative yet uncertain (-?) effects. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester. As this spatial strategy includes NEAGC2, it is considered that the effects arising from NEAGC2 will also occur as a result of implementing this strategy.
- 1.393 Whilst the benefits of the proposed RTS and Strategic Improvements to West Tey Railway Station are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMA.

Conclusion

- 1.394 This spatial strategy is anticipated to result in mixed effects, including negligible effects (0) at the end of the plan period and once fully built out in relation to intersection with AQMA and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.395 All sites were assessed by landscape officers of the NEAs, and found to be of moderate–strong landscape character. NEAGC1 is visually sensitive in terms of the flat plateau landscape and skyline views from valley floor, and NEAGC2 is at risk from pressure for further development at

Marks Tey into the farmed landscape, and to risks to the setting of traditional settlements. It is also sensitive to visual and auditory disturbance from the A120/A12 junction adjacent to the east of the site. Site ALTGC3 is highly sensitive to change due to intrusion of development on the skyline and impacts on tranquillity. In light of this and in line with the assumptions framework, it is considered that development of all sites would result in significant negative yet uncertain (--?) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

- 1.396 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.397 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.398 Approximately 75 % of site NEAGC1, 65% of NEAGC2 and 83% of ALTGC03 fall within a mineral safeguarding area for sand and gravel deposits, meaning that the development of these sites could result in a significant sterilisation of mineral resources if these were not extracted before development. Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources for each site is considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.399 Approximately 95% of site NEAGC1, 92% of NEAGC2 and 81% of ALTGC03 is Grade 1 or 2 agricultural land, and as such, a significant negative (--) effect is anticipated for all sites at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the three sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.400 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource. Significant negative effects (--) are expected, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 4a: West of Braintree Garden Community (NEAGC1) + Monks Wood Garden Community (ALTGC3) + Colchester Braintree Borders (NEAGC2) – smaller scale growth

- 1.401 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, at the end of the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
 - SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)

- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, both within the plan period and when fully built out)

1.402 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 5: Monks Wood GC (ALTGC3) + Colchester/Braintree GC (NEAGC2)

- 1.403 Under this option, there would be two Garden Communities to the west of Colchester but compared to West 3, the Garden Community West of Braintree would be substituted with the Monks Wood proposal from Lightwood Strategic so the strategy would include Monks Wood (ALTGC3) and the Colchester/Braintree Borders Garden Community at Marks Tey (NEAGC2).
- 1.404 This option would assume 2,500 homes being built at each of the two Garden Communities within the plan period to 2033 – delivering an equivalent number of homes to that already proposed through the Garden Communities in the submitted Section 1 Local Plan. Longer-term, a total of 26,500 homes are proposed.
- 1.405 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.12: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 5

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Monks Wood GC ALTGC3	2,500	5,500	25h.2a for B 'uses' has been identified in the master plan /land use budget plan that underpins the Alder King Viability Report for Monks Wood (March 2019) at 5,500 homes. Estimated that 11ha would be delivered in the plan period up to 2033. Likewise, 16.2ha has been identified for Retail /District/Local Centre 'A' uses. Upper floors can provide alternative or additional B1 space to that within the 25.2ha referred to above	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Stansted RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. Strategic improvements to Marks Tey Railway Station. New junctions. Widening, and rerouting of A12. Bypass for A120. Sustainable transport link to Kelvedon Station District centres
Colchester/Braintree GC NEAGC2	2,500	21,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North	

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
			Essex Authorities recommends employment land figures for the Garden Community proposals. For the Colchester/Braintree Borders, it suggests 4ha by 2033, 19ha by 2050 and 37ha by 2071. Totally built out, it is suggested that Colchester/Braintree borders scheme will likely deliver 37ha.	

- 1.406 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.407 Within the plan period this spatial strategy allocates a total of 5,000 dwellings to two new settlements which are on greenfield sites. Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester DC and Braintree DC. Geographically, it is centrally located within the Plan area, and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden Community. The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.
- 1.408 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections.
- 1.409 Site ALTGC3 ('Monks Wood') is a 909-hectare strategic site entirely within Braintree DC, centred around the existing Pattiswick Estate. The site is on the existing Pattiswick Estate and is currently largely arable land and scattered woodland blocks (mainly around the perimeter), with only a few isolated buildings. It lies between the town of Braintree to the west and the settlement of Coggeshall to the east, and is bound to the south by the strategic A120 road.
- 1.410 Rivenhall Airfield (the Bradwell Quarry) - the border of which lies around 1km from the site boundaries - is an allocated Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.
- 1.411 The A120 is adjacent to the southern boundary of ALTGC03 and bisects NEAGC2, providing links to Colchester to the east and Braintree to the west. There is a rail connection between Marks Tey and Braintree, but it requires a connection at Witham and is therefore indirect and relatively slow compared to road based transport.

- 1.412 In addition to these strategic sites, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. As a result of these 4,905 dwellings are anticipated to come forward in and around Braintree town (including east of Great Notley), and 1,036 dwellings in Kelvedon and Feering, which is to the south of NEAGC2. Furthermore 10,313 dwellings are allocated to the urban area of Colchester.

Assessment of Effects

- 1.413 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 6.
- 1.414 The table below summarises the anticipated effects of spatial strategy West 5.

SA objective	Spatial Strategy West 5 at the end of the plan period	Spatial Strategy West 5 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	++/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+?	++?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?

SA objective	Spatial Strategy West 5 at the end of the plan period	Spatial Strategy West 5 when fully built out
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.415 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.416 At the end of the plan period, and indeed, once fully built out, both sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the two sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.417 In accordance with the assumptions framework, and as confirmed in the site information forms for these sites, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.418 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information forms, these sites are expected to provide both youth centres facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.
- 1.419 At both the end of the plan period and at final capacity, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to the new occupants of either site. Therefore, the findings of significant positive effects at the end of the plan period and at final capacity are not anticipated to change.

Conclusion

- 1.420 For both the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.421 At the end of the plan period, both sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, both sites were considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information forms and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) (in relation to NEAGC2) set out that both sites will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.422 The combination of the two sites into a single spatial strategy option, and seen within the context of planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the sites would individually, and as such, significant positive effects are anticipated. As set out above, at around 2,500 dwellings, both sites are considered viable, and once fully built out, both sites are considered likely to be viable subject to external funding or other improvement in scheme viability.

Conclusion

- 1.423 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.424 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.425 At the end of the plan period, both sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.426 At the end of the plan period, both sites are expected to have significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once they are both fully built out, either site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.427 Both at the end of the plan period and when fully built out, site ALTGC03 is anticipated to result in negligible effects in relation to noise pollution, whilst NEAGC2 is anticipated to result in minor negative effects. This is due to the proximity to existing sources of noise pollution – less than 5% of ALTGC03 is located in an area which is identified as being likely to suffer from high levels of noise pollution, whilst site between 5-25% of NEAGC2 intersects with areas identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB.
- 1.428 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC2 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.429 As these findings relate to the existing characteristics of the sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Taking account of the anticipated minor negative effects in relation to site NEAGC2, this spatial strategy is similarly considered likely to result in uncertain minor negative effects (-?).

Conclusion

- 1.430 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.
- 1.431 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.432 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.433 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments, proposed section 2 allocations and proposed Uttlesford allocations are anticipated to support existing centres. Furthermore, the combination of the two sites into a single spatial strategy will require the provision of a new RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.434 In accordance with the above, significant positive (++) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.435 The site assessment found that both sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. Once fully built out, both sites are considered capable of supporting employment areas, which are built as part of the sites,

of 10ha and above. This is considered likely to result in significant positive (++) effects. In addition, it was found that both of these sites would also be likely to deliver 10Ha of employment land by the end of the plan period also.

- 1.436 Furthermore, the combination of the two sites into a single spatial strategy will require the provision a new RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 and a bypass for A120. These are likely to increase accessibility between existing employment areas including Colchester and Braintree town centres, Braintree Freeport and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations,
- 1.437 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.438 Given the positive effects of the transport interventions and the delivery of employment land as part of development, significant positive effects (++) are expected in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.439 At both the end of the plan period and once fully built out, both site are considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. This is due to intersection with a Local Wildlife Site and close proximity to Marks Tey Brick Pit SSSI for NEAGC2 and intersection with Local Wildlife Site at ALTGC03.
- 1.440 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designations and therefore the likely effects are not expected to change.

Conclusion

- 1.441 Significant negative yet uncertain (--?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.442 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.443 Both sites are considered likely to result in minor positive yet uncertain effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. This strategy involves the provision of RTS which is considered likely to increase the accessibility of the sites to surrounding centres, particularly including Braintree. As a result it is considered that this strategy will have significant positive yet uncertain (++) effects by the end of the plan period. The uncertainty arises due to the difficulty in predicting how and where people will travel.
- 1.444 Once fully built out, both sites are considered capable of supporting an employment area, within the site, of at least 10 hectares, and a new secondary school, which when combined with the RTS is considered to increase the sustainability of the sites – the finding remains significant positive yet uncertain (++) .The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.445 For longer journeys, both sites are expected to have uncertain minor negative effects (-?) due to the lack of sustainable travel options to the most popular commuting destinations according to NOMIS (based on current commuting patterns from the site areas). This is the case at the end of the plan period and once fully built out. The uncertainty arises due to the difficulty in predicting how and where people will travel.
- 1.446 However, the provision of RTS linking the sites to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, the strategic improvements to Marks Tey Railway Station and the sustainable transport link to Kelvedon are considered likely to improve the potential for journeys outside the site boundary to be made using sustainable modes, resulting in uncertain minor positive effects (+?) in relation to this SA objective. The uncertainty arises due to the difficulty in predicting how and where people will travel. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. A more positive effect could be identified if the sites were more accessible to rail stations. There is also further uncertainty present in relation to rail travel as the improvements to Marks Tey Railway Station may not be able to cater to growth outlined in the strategy, considering the station is already operating over capacity.

Conclusion

- 1.447 At the end of the plan period, this spatial strategy is considered likely to result in significant positive yet uncertain (++) effects (in relation to shorter journeys) and minor positive yet uncertain (+?) effects (in relation to longer journeys). The uncertainty arises due to the difficulty in predicting how and where people will travel.
- 1.448 Once fully built out, this spatial strategy is considered likely to result in mixed significant positive yet uncertain (++) effects (in relation to shorter journeys) and minor positive yet uncertain (+?) effects (in relation to longer journeys). The uncertainty arises due to the difficulty in predicting how and where people will travel.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.449 In accordance with the site assessments, both sites ALTGC03 and NEAGC2 are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that the combination of the two sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans or Uttlesford Local Plan will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.450 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding or other improvement in viability has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage assets and townscape character

- 1.451 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.452 Both sites are likely to result in significant negative yet uncertain (--) effects in relation to this SA objective, due to the proximity of the sites to designated heritage assets, including listed buildings, scheduled monuments and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.453 The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.454 Effects on townscape for both sites were considered to be uncertain (?) for the end of the plan period and once fully built out, as this depends on the quality of the development built within the sites. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.455 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.456 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, both sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.457 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.458 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.459 Both sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.460 The site assessment for NEAGC2 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree and Colchester Water Cycle Studies (WCS). However, the WCS for each district does not consider growth beyond the plan period. The Integrated Water Management Strategy (IWMS)²⁸, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible effects (0?) are expected. Given the scale of growth assessed in the study, the findings for water supply also apply to site ALTGC3, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.461 In regard to water treatment, the site assessment for NEAGC2 found that water treatment facilities have sufficient headroom to accommodate growth at the site within the plan period. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at NEAGC2 beyond the extent of the plan period. For site ALTGC3, the effects in relation to water treatment were considered to be uncertain (?) as it is not clear whether the site would be served by the Bocking WRC, which could cater to growth following upgrades, or the Coggeshall WRC, which the study does not provide sufficient evidence for to suggest it could cater to growth.
- 1.462 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a single spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?) at the end of the plan period and once fully built out.

Conclusion

- 1.463 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) at the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.464 Very small proportions of both sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.465 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.466 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.467 Neither site intersects with any AQMAs and as such, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

²⁸ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 1.468 NOMIS data indicates that commuters living in the area of ALTGC3 also generally do not travel to destinations which involve passing through an AQMA. However, NOMIS data indicates that commuters living in the area of NEAGC2 are likely to commute through the Lucy Lane North, Stanway AQMA on the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. Due to the potential increase in road traffic within these AQMAs, this site is anticipated to have minor negative yet uncertain (-?) effects. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester. As this spatial strategy includes NEAGC2, it is considered that the effects arising from NEAGC2 will also occur as a result of implementing this strategy.
- 1.469 Whilst the benefits of the proposed RTS and Strategic Improvements to West Tey Railway Station are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.470 This spatial strategy is anticipated to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.471 Both sites were assessed by landscape officers of the NEAs, and found to be of moderate–strong landscape character. NEAGC2 is at risk from pressure for further development at Marks Tey into the farmed landscape, and to risks to the setting of traditional settlements. It is also sensitive to visual and auditory disturbance from the A120/A12 junction adjacent to the east of the site. ALTGC3 is highly sensitive to change due to intrusion of development on the skyline and impacts on tranquillity. In light of this and in line with the assumptions framework, it is considered that development of both sites would result in significant negative yet uncertain (--?) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.472 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.473 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.474 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.475 Approximately 65% of NEAGC2 and 83% of ALTGC03 fall within a mineral safeguarding area for sand and gravel deposits, meaning that development of these sites could result in a significant sterilisation of mineral resources if these were not extracted prior to development. Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources for each site is considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects

relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.476 Approximately 92% of NEAGC2 and 81% of ALTGC03 is Grade 1 or 2 agricultural land, and as such, significant negative effects (--) are expected for both sites at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.477 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 5: Monks Wood Garden Community (ALTGC3) + Colchester/Braintree Borders Garden Community (NEAGC2)

- 1.478 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, both within the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
 - SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
 - SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- 1.479 The spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
 - SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
 - SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
 - SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 6: West of Braintree GC (NEAGC1) + Monks Wood GC (ALTGC3)

- 1.480 Under this option, there are two garden communities: the Colchester Braintree Borders Garden Community at Marks Tey would be substituted with Monks Wood and would be delivered alongside the Garden Community West of Braintree. The focus of growth would therefore shift westwards along the A120 corridor away from Colchester and more towards Braintree with the majority of development being within the Braintree district.
- 1.481 This option would assume 2,500 homes being built at each of the two Garden Communities within the plan period to 2033 – delivering an equivalent number of homes to that already proposed through the Garden Communities in the Section 1 Local Plan. Longer-term however, 15,000 homes are proposed.
- 1.482 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.13: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 6

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ²⁹
Monks Wood GC ALTGC3	2,500	5,500	25h.2a for B 'uses' has been identified in the master plan /land use budget plan that underpins the Alder King Viability Report for Monks Wood (March 2019) at 5,500 homes. Estimated that 11ha would be delivered in the plan period up to 2033. Likewise, 16.2ha has been identified for Retail /District/Local Centre 'A' uses. Upper floors can provide alternative or additional B1 space to that within the 25.2ha referred to above	<ul style="list-style-type: none"> • RTS links to Braintree Town, Braintree Freeport and Stansted • RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. • Strategic improvements to Marks Tey Railway Station. • New junctions. Widening, and rerouting of A12. • Bypass for A120. • Sustainable transport link to Kelvedon Station • District centres

²⁹ All spatial strategy options will deliver the following infrastructure: early years, primary & secondary schools, youth centre provision, open space, bus services, local centre facilities, healthcare facilities and community meeting spaces.

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ²⁹
West of Braintree NEAGC1	2,500	10,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For West of Braintree, it suggests approximately 9ha by 2033, 31ha by 2050 and 39ha by 2071.	

- 1.483 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.484 This spatial strategy allocates a total of 15,500 dwellings to two new settlements which are on greenfield sites. Site NEAGC1 is located to the West of Braintree, and abuts the boundary of Braintree and Uttlesford Districts. The emerging Uttlesford Local Plan also includes a proposed contiguous allocation of 3,500 dwellings, which if planned as a single development site, would result in an overall development of 13,500 by the time the site is fully built out. The emerging Uttlesford plan sets out that 970 of these will be delivered by 2033 (the end of the plan period). This assessment identifies the potential cumulative effects of this proposed Uttlesford allocation as well as site NEAGC1.
- 1.485 The site is currently primarily arable land, and as it is a large site (496 ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. Broadfield Farm is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The legal agreement still has not been signed. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.

- 1.486 Site ALTGC3 ('Monks Wood') is a 909-hectare strategic site entirely within Braintree DC, centred around the existing Pattiswick Estate. The site is on the existing Pattiswick Estate and is currently largely arable land and scattered woodland blocks (mainly around the perimeter), with only a few isolated buildings. It lies between the town of Braintree to the west and the settlement of Coggeshall to the east, and is bound to the south by the strategic A120 road.
- 1.487 Rivenhall Airfield (the Bradwell Quarry) - the border of which lies around 1km from the site boundaries - is an allocated Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.
- 1.488 Braintree town is located in between the two sites and the A120 is adjacent to the southern boundary of both sites, which strategically links the two provides a connection between Braintree and Colchester. Both sites are currently in poor proximity to rail connections.
- 1.489 In addition to these strategic sites, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. As a result of these 4,905 dwellings are anticipated to come forward in and around Braintree town (including east of Great Notley), and 1,036 dwellings in Kelvedon and Feering, which is to the south of NEAGC2. Furthermore 10,313 dwellings are allocated to the urban area of Colchester.

Assessment of Effects

- 1.490 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 6.
- 1.491 The table below summarises the anticipated effects of spatial strategy west 6.

SA objective	Spatial Strategy West 6 at the end of the plan period	Spatial Strategy West 6 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	++/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+++?	++?/+++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?

SA objective	Spatial Strategy West 6 at the end of the plan period	Spatial Strategy West 6 when fully built out
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/0	0/0
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.492 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.493 At the end of the plan period, and indeed, once fully built out, both sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the two sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.494 In accordance with the assumptions framework, and as confirmed in the site information forms for these sites, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.495 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information forms, these sites are expected to provide both youth centres facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.

- 1.496 At both the end of the plan period and at final capacity, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to the new occupants of either site. Therefore, the findings of minor positive effects at the end of the plan period and significant positive effects at final capacity are not anticipated to change.

Conclusion

- 1.497 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.498 At the end of the plan period, both sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, both sites were considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information forms and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) (in relation to NEAGC1) set out that both sites will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.499 The combination of the two sites into a single spatial strategy option, and seen within the context of planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, significant positive effects are anticipated. As set out above, at around 2,500 dwellings, both sites are considered viable, and once fully built out, both sites are considered likely to be viable subject to external funding or other improvement in scheme viability.

Conclusion

- 1.500 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.501 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.502 At the end of the plan period, both sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in

relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.

- 1.503 When fully built out, significant positive effects (++) are expected in relation to access to health and recreation facilities. The reasons for this included that once they are both fully built out, either site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to healthcare facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.504 Both at the end of the plan period and when fully built out, sit NEAGC1 is anticipated to result in negligible effects in relation to exposure to noise pollution. Site ALTGC3 is also anticipated to result negligible effects both at the end of the plan period and when fully built out. This is due to less than 5% of both sites being located within a DEFRA strategic noise area of Lnight \geq 55.0dB, or Laeq 16 60.0dB, and therefore the majority of the site is at low risk from exposure to noise pollution.
- 1.505 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC1 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.506 As these findings relate to the existing characteristics of the sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site.

Conclusion

- 1.507 At the end of the plan period minor positive effects (+) are anticipated in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are expected in relation to exposure to noise pollution.
- 1.508 At final capacity, significant positive effects (++) are expected in relation to access to health and recreation facilities and uncertain minor negative effects (-?) are expected in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.509 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.510 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments, proposed section 2 allocations and proposed Uttlesford allocations are anticipated to support existing centres.
- 1.511 Furthermore, the combination of the two sites into a single spatial strategy will require the provision of a new RTS, strategic improvements to Marks Tey Railway Station, new junctions and widening and rerouting of the A120, a bypass for the A120 and a sustainable transport link to Kelvedon Station. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.512 In accordance with the above, significant positive effects (++) are expected in relation to this SA objective at the end of the plan period and once full built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.513 The site assessment found that both sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. In addition, once fully built out, both sites are considered capable of supporting employment areas, which are built as part of the sites, of 10ha and above. This is considered likely to result in significant positive (++) effects.
- 1.514 Furthermore the combination of the two sites into a single spatial strategy will require the provision of a new RTS, strategic improvements to Marks Tey Railway Station, new junctions and widening and rerouting of the A120, a bypass for the A120 and a sustainable transport link to Kelvedon Station. These are likely to increase accessibility between existing employment areas including Colchester and Braintree town centres, Braintree Freeport and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations.
- 1.515 Given that the RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.516 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are expected in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.517 At both the end of the plan period and once fully built out both sites are considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. This is due to intersection with local wildlife sites including ancient woodland at NEAGC1 and due to intersection with a local wildlife site at ALTGC3.
- 1.518 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designations and therefore the likely effects are not expected to change.

Conclusion

- 1.519 Significant negative yet uncertain (--?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.520 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.521 Both sites are considered likely to result in minor positive yet uncertain effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. The provision of RTS is considered to increase the accessibility of the sites for shorter journeys, enabling residents of each site to access services and facilities at the existing centres of Braintree and Colchester. RTS is assumed to be in place by the end of the plan period

and therefore it is considered that this strategy will have significant positive yet uncertain (++) effects by the end of the plan period. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

- 1.522 Once fully built out, both sites are considered capable of supporting an employment area, within the site, of at least 10 hectares, and a new secondary school, resulting in uncertain significant positive effects (++) .The uncertainty arises due to the difficulty in predicting how and where people will choose to travel. The provision of RTS is only considered likely to enhance the accessibility of the sites for shorter journeys.

Longer journeys

- 1.523 For longer journeys, both sites are expected to have uncertain minor negative effects (-) due to the lack of sustainable travel options for to the most popular commuting destinations according to NOMIS (based on current commuting patterns from the site areas). This is the case at the end of the plan period and once fully built out.
- 1.524 However, the provision of RTS linking the sites to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, the strategic improvements to Marks Tey Railway Station and sustainable transport links to Kelvedon Station are considered likely to improve the potential for journeys outside the site boundary to be made using sustainable modes, resulting in uncertain minor positive effects (++) in relation to this SA objective. The uncertainty arises due to the difficulty in predicting how and where people will choose to travel. Uncertainty also arises as the improvements to Marks Tey railway station may not be able to cater to all growth within the spatial strategy, considering that the station is already operating over capacity. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out.

Conclusion

- 1.525 At the end of the plan period, the spatial strategy is considered likely to result in uncertain significant positive yet uncertain (++) effects in relation to both shorter and longer journeys.
- 1.526 Once fully built out, the spatial strategy is considered likely to result in uncertain significant positive yet uncertain (++) effects in relation to both shorter and longer journeys.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.527 In accordance with the site assessments, both sites NEAGC2 and ALTG3 are considered likely to result in minor positive yet uncertain (+) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that the combination of the two sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans or Uttlesford Local Plan will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.528 The spatial strategy is considered likely to result in minor positive yet uncertain (+) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding or

other improvement in viability has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage assets and townscape character

- 1.529 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.530 Both sites are likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective, due to the proximity of the sites to designated heritage assets, including listed buildings, scheduled monuments and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.531 The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.532 Effects on townscape for both sites was scored as uncertain (?) for the end of the plan period and once fully built out, as this depends on the quality of the development built within the sites. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.533 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.534 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, both sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.535 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.536 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.537 Both sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the two sites into a single spatial

strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.538 The site assessment for NEAGC1 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree Water Cycle Study (WCS). However, the WCS did not consider growth beyond the plan period. The Integrated Water Management Strategy (IWMS)³⁰, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible effects (0?) are expected. Given the scale of growth assessed in the study, the findings for water supply also apply to site ALTGC3, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.539 In regard to water treatment, the site assessment for NEAGC1 found that water treatment facilities have sufficient headroom to accommodate growth at the site within the plan period. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at NEAGC1 beyond the extent of the plan period. For site ALTGC3, the effects in relation to water treatment were considered to be uncertain (?) as it is not clear whether the site would be served by the Bocking WRC, which could cater to growth following upgrades, or the Coggeshall WRC, which the study does not provide sufficient evidence for to suggest it could cater to growth.
- 1.540 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a single spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?) at the end of the plan period and once fully built out.

Conclusion

- 1.541 Negligible effects (0) in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) at the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.542 Very small proportions of both sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.543 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.544 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.545 Neither site intersects with any AQMAs and as such, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

³⁰ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 1.546 According to NOMIS (2011 data), commuters currently living in the area of NEAGC1 generally travel to destinations which does not involve travelling through an AQMA, and as such, this site is considered to result in negligible effects (0) in relation to this element of this SA objective, both at the end of the plan period and once fully built. NOMIS data indicates that commuters living in the area of ALTGC3 also generally do not travel to destinations which involve passing through an AQMA. As such, this site is also expected to result in negligible effects. Therefore, the combined effects of including both these options into a single strategy are likely to be negligible in relation to traffic within AQMAs both at the end of the plan period and when fully built out.

Conclusion

- 1.547 The spatial strategy is anticipated to result in negligible effects (0) at the end of the plan period and when fully built out in relation to intersection with AQMAs and negligible (0) effects in relation to the potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.548 Both sites were assessed by landscape officers of the NEAs, and found to be of moderate–strong landscape character. NEAGC 1 is visually sensitive in terms of the flat plateau landscape and skyline views from valley floor, and ALTGC3 is highly sensitive to change due to intrusion of development on the skyline and impacts on tranquillity. In light of this and in line with the assumptions framework, it is considered that development of both sites would result in significant negative yet uncertain (--?) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.549 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.550 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.551 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.552 Approximately 75% of NEAGC1 and 83% of ALTGC03 fall within a mineral safeguarding area for sand and gravel deposits, meaning that development of these sites could result in a significant sterilisation of mineral resources if these were not extracted before the development, depending on factors such as site layout and phasing of housing delivery. As such, uncertain significant negative effects (--?) are expected. The effects were considered to be the same at the end of the plan period and once fully built out, because the location of development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.553 Approximately 95% of site NEAGC1 and 81% ALTGC03 are located on Grade 1 or 2 agricultural land, and as such, significant negative (--) effects are anticipated for both sites at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.554 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 6: West of Braintree Garden Community (NEAGC1) + Monks Wood Community (ALTGC3)

- 1.555 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, at the end of the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
 - SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
 - SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, both within the plan period and when fully built out)
- 1.556 The spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
 - SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
 - SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
 - SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 7: East of Braintree (SUE 2) + Kelvedon (VE1)

- 1.557 Under this option, there would be no stand-alone Garden Communities to the west of Colchester at all. This non-Garden Community option would be different to the proportionate growth scenarios in that it would involve targeted growth in the form of two strategic urban extensions – one to the east of Braintree and one to Kelvedon – both within Braintree district. The focus of growth would therefore move away from Colchester with development to the west at Braintree and further south along the A12 corridor at Kelvedon.
- 1.558 Traditionally growth has been delivered across the NEAs through planned urban extensions to existing settlements, this option is a continuation of this approach. Both options are proposed to deliver 2,500 dwellings each within the plan period and a further 2,500 dwellings each beyond the plan period. Whilst the Inspector did not specifically request that non-garden community options are appraised as part of the Additional SA, the NEAs consider that the appraisal and consideration of urban extensions as a spatial strategy option will provide a useful comparison to the options involving garden communities. Land east of Braintree and land at Kelvedon have been selected as these sites meet the strategy selection principles set out in Selection of Spatial Strategy Alternatives paper.
- 1.559 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.14: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 7

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ³¹
Land east of Braintree SUE2	2,500	5,000	The proposals for the site includes the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site. Approximately 10 hectares of B-use employment land in total is suggested as being deliverable as part of the Braintree scheme alongside 5,000 dwellings of which 5ha would be achieved in the plan period to 2033 alongside 2,500 dwellings.	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport, and Colchester Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout. The delivery of the Kings Dene scheme (Kelvedon) is not contingent upon the prior (or eventual) construction of the dualled A120 or the 'Option D' alignment, nor does it prejudice the delivery of this alignment.
Land at Kelvedon VE1	2,500	5,000	The proposals for Kings Dene include the provision of up to 36ha of employment land for B use class	<ul style="list-style-type: none"> RIS funded A12 upgrading 2022 to 2025 Alternative route from Coggeshall Road through the site to the A12 south west of Kelvedon. This

³¹ All spatial strategy options will deliver the following infrastructure: early years, primary & secondary schools, youth centre provision, open space, bus services, local centre facilities, healthcare facilities and community meeting spaces.

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ³¹
			employment use (B1, B2 and B8). This land is to be provided in a highly accessible location to the south west of the site between the A12 and railway line. To complement the proposed employment land provision, opportunities also exist to provide B1 and non B class employment generating uses around the rail station as part of mixed used district centre and within local centres.	provides the opportunity to remove through traffic from the restricted centre of Kelvedon and connect the Coggeshall traffic directly to the new A12 junction.

- 1.560 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed Section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.561 This spatial strategy allocates a total of 5,000 dwellings with the plan period to two extensions to settlements on greenfield sites.
- 1.562 Site SUE2 is a strategic site located to the east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan as Land East of Braintree (including Temple Border. The entirety of the site is located within the Braintree District. The potential scale of development from this site is up to approximately 5,000 dwellings.
- 1.563 The site is 161 hectares and is comprised of almost entirely arable land with some small areas of woodland. Braintree lies immediately to the west of the site. There are a number of smaller settlements in close proximity to the site, including Tye Green, Cressing, Black Notley, Bradwell and Stisted. The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford.
- 1.564 The site is not currently well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London – Ipswich line at Witham.
- 1.565 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. There is an allocation for up to 200 dwellings (18/00549 located around 1km south of the site, which is currently pending consideration.
- 1.566 There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).
- 1.567 Site VE1 is a 495-hectare strategic site location, and forms a disjointed extension to the existing settlement of Kelvedon (and adjacent Feering) across a number of different land ownerships. The site lies entirely within Braintree DC but is close to the intersection with two neighbouring

authorities - the border with Colchester BC lies around 1km from the site boundary, and Maldon DC (not one of the North Essex Authorities) lies less than 300m from the site boundary to the south east.

- 1.568 The site lies to the north and west of the existing settlement of Kelvedon and, in the south western part, is bisected by a stretch of the Great Eastern Mainline railway. The land is primarily arable land on the urban edge, and in some places borders existing linear housing developments. However in several places its boundaries are formed by transport infrastructure – including both the rail line and the A12 (London Road).
- 1.569 Aside from Kelvedon/Feering itself (approximately 2,462 total existing dwellings), the nearest settlements to the site are Coggeshall and Silver End, plus a number of other scattered smaller settlements. The nearest local centres to the site are in Kelvedon itself, Coggeshall (approximately 6.3km from the site's centre point) and a District Centre in Tiptree (approximately 5km from the site's centre point). The nearest town centres are in Witham (approximately 4.9km from the site's centre point) and Braintree (approximately 10km).
- 1.570 Aside from employment opportunities within town and local centres, there are a number of significant employment sites in the vicinity of VE1. These include a number of smaller-scale sites within and around Kelvedon – the Kelvedon Industrial Estate, Gold Key Industrial Estate, the 'Former Polish Campsite' site and London Road site – as well as larger zones on the fringes of Witham (the Eastways/Crittall Road/Waterside Park and Freebournes/Perry Road Industrial Estates). Further employment areas lie on the outskirts of Tiptree to the east – the Towerhouse Business Park and the Basket Works Site.
- 1.571 The site lies in close proximity to the A12 strategic road, linking Colchester in the north east with London to the south east (via Witham and Chelmsford). The junction with the B1024 lies on the site's boundary, and runs through the centre of Kelvedon and links the site to the nearby local centre in Coggeshall to the north. The site also lies in close proximity to Kelvedon rail station on the Great Eastern Mainline, which provides services north to Colchester (in 20-30 minutes) and southbound toward London (in less than one hour).
- 1.572 The only significant allocated sites in the vicinity of site VE1 are the cluster of sites on the edges of the settlement of Feering – these sites belong to the Crown Estate and are allocated in Braintree's Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).
- 1.573 The site also overlaps in the north with the Rivenhall Airfield Extraction site (the Bradwell Quarry). The site was allocated as a Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.

Assessment of Effects

- 1.574 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 7.
- 1.575 The table below summarises the anticipated effects of this spatial strategy.

Table 1.15: Assessment of West of Colchester Spatial Strategy 7

SA objective	Spatial Strategy West 7 at the end of the plan period	Spatial Strategy West 7 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++

SA objective	Spatial Strategy West 7 at the end of the plan period	Spatial Strategy West 7 when fully built out
SA3: Improve health/reduce health inequalities	+/-	++/-
SA4: To ensure and improve the vitality & viability of centres	+	+
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	+?/+?	++?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/0?	0/0?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.576 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.577 At the end of the plan period and once fully built out, both sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities. Although both sites are primarily agricultural land, there are a number of smaller settlements in close proximity of both sites, whose character and identity are likely to be compromised by much larger-scale development. Site SUE2 would be the first major intrusion into greenfield land east of the A120

Braintree bypass. Site VE1 would, in effect, be a substantial extension to the villages of Kelvedon/Feering which, when fully built out would triple the size of this settlement. Whilst this may provide additional demand for services and facilities within the existing village, it would significantly alter the character of the settlement and, when coupled with commitments and allocations in the Braintree Section 2 Local Plan, would lead to further urbanisation of the A12/mainline corridor. There would also be the temporary effects of construction, such as increased heavy traffic, light pollution, noise.

- 1.578 Although the two sites would have little in the way of relationship with one another (i.e. they would be largely independent from one another in terms of the role and function), the combined effect on existing communities of developing the two sites as part of a spatial strategy is considered to be significant negative yet uncertain (--?) both during the plan period and when fully built out.

Effect on the new community

- 1.579 Both at the end of the plan period and when fully built out, both sites are expected to result in significant positive effects (++) on the new community as the site information forms indicate that they will be able to accommodate youth centre and community meeting places provision as part of development.
- 1.580 Site SUE2 would be divorced from the existing built-up area of Braintree by the A120, and the mainline railway would act as a barrier between some of VE1 and the existing settlement of Kelvedon, both of which could work against integration between the new and existing communities. However, the new communities would be of a scale, when fully built out, to support their own services and facilities. Taking these factors into account, significant positive (++) effects are expected for the combined spatial strategy.

Conclusion

- 1.581 At the end of the plan period, mixed significant negative yet uncertain effects are anticipated in relation to the existing communities and significant positive effects are anticipated in relation to the new communities (--?/++).
- 1.582 At final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing communities and significant positive effects are anticipated in relation to the new communities (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.583 In accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 1.584 The site information forms for SUE2 and VE1 set out that development at both sites are likely to be viable, which includes the delivery of 30% affordable housing. In the case of SUE2 the site information form suggests that, despite there being no issue or constraints that would prevent the development from taking place, development capacity may be limited by a number of factors, including the physical land take for the new route of the A120, which may prevent the site from being capable of delivering the full 5,000 dwelling capacity. This is not anticipated to affect the delivery of 30% affordable housing, as the site information form confirms that the site is viable. Although less than 5,000 homes may be delivered at this site, the delivery of 2,500 would help to meet (and would not constrain delivery of) the housing need within the plan period.
- 1.585 At the end of the plan period, and once fully built out, both sites were considered likely to result in significant positive (++) effects in relation to this SA objective. The combination of the two sites into a single spatial strategy option, and seen within the context of planning commitments, proposed Section 2 Local Plan allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Conclusion

- 1.586 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective.

SA3: Improve health/reduce health inequalities

- 1.587 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.588 SUE2 does not have any existing health facilities within walking distance and, although there are health facilities in Kelvedon, these do not lie within 'acceptable' walking distance of the majority of VE1.
- 1.589 At the end of the plan period, both sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities, with uncertainty in relation to VE1. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development.
- 1.590 When fully built out, it is considered that both sites would be of sufficient scale to support a Primary Care Spoke, as well as recreational facilities, and therefore were considered to have significant positive (++) effects. In terms of an overall spatial strategy, the two sites are relatively independent of one another, and the other proposed allocations in the Section 2 Local Plans. However, this is not considered sufficient to change the overall score.

Exposure to noise pollution

- 1.591 Around 21% of site SUE2 is at high risk from exposure to noise pollution due to the presence of the A120 to the immediate north and west of the site. As such, as between 5-25% of land within the site that falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$, or $L_{aeq,16} \geq 60.0$ dB, minor negative effects (-) are expected in accordance with the assumptions framework.
- 1.592 As a result of nearby road and rail infrastructure, a total of approximately 10% of the site area for VE1 falls with a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB, and 13% falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB. As such, in accordance with the assumptions framework, a minor negative effect (-) is anticipated in relation to noise pollution, both at the end of the plan period and when fully built at all capacities.
- 1.593 These minor negative (-) effects at the end of the plan period and when fully built out are also expected for this spatial strategy option as a whole.

Conclusion

- 1.594 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and minor negative effects (-) are anticipated in relation to exposure to noise pollution.
- 1.595 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and minor negative effects (-) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.596 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.

- 1.597 The development of 5,000 homes at SUE2 may help to provide additional demand for services and facilities of Braintree town centre, although the site itself is some distance from the town centre but under this spatial strategy option would be accessible via the RTS.
- 1.598 The nearest local centre to VE1 is in Kelvedon although these are limited in terms of provision, and it is assumed that new services and facilities at VE1 would complement rather than compete with those that already exist in Kelvedon. The nearest town centres to the site are in Witham (approximately 4.9km from the site's centre point) and Braintree (approximately 10km), although the greater range of services at Chelmsford and Colchester may also prove attractive to residents, dispersing the effects.
- 1.599 Given that the two sites are relatively independent of one another, the potential for in-combination positive effects as a spatial strategy are reduced.
- 1.600 Overall, this spatial strategy option may provide some support for the vitality and viability of existing centres, as well as incorporating their own local services, but that these are likely to be minor positive (+) effects rather than significant, both at the end of the plan period and when fully built out.

Conclusion

- 1.601 In accordance with the above, minor positive (+) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.602 The site assessments found that both sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. In addition, once fully built out, both sites are considered capable of supporting employment areas, which are built as part of the sites, of 10ha and above. This is considered likely to result in significant positive (++) effects.
- 1.603 With respect to site SUE2, there are multiple existing employment areas located around 1.5km to the west of the site in Braintree, including mixed-use sites at Anglia Way, Lakes Road Industrial Park and Millennium Way Trade Centre, although not all within an acceptable walking distance. The site information form for the site indicates that development at both capacity options will include the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site.
- 1.604 With respect to VE2, there are existing employment areas surrounding the site including the Kelvedon Industrial Estate and Gold Key Industrial Estate within Kelvedon itself, and a cluster of larger industrial sites on the eastern fringes of the nearby town of Witham. The site information form anticipates that up to 36 hectares of employment land for B use class (B1, B2 and B8) will be provided within this site. This is likely to be provided in the south west of the site (between the A12 and railway line) and potentially in a mixed use district in the vicinity of Kelvedon station and within local centres. As such, the provision of this employment land is considered likely to result in permanently increased job provision in the local area.
- 1.605 For both sites, in accordance with the assumptions framework, it is also assumed that some employment opportunities will be provided within the local centre services and facilities in the development by the end of the plan period.
- 1.606 The two sites in combination are likely to deliver, under this spatial strategy, a considerable amount of additional employment land, and therefore, it is considered that this will give rise to significant positive effects (++) both within the plan period and when fully built out. The significant positive effects will be supported by proposed improvements to infrastructure within the plan period, including RTS links for SUE2 to Braintree Town, Braintree Freeport, and Colchester, additional capacity at Galleys Corner Roundabout, and for SUE2 upgrades to the A12.

Conclusion

- 1.607 Given the scale of employment land proposed, particularly under VE1, and the supporting transport infrastructure improvements, this spatial strategy option is considered to result in significant positive (++) effects, both within the plan period and when fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.608 Approximately 2% of the site area intersects with locally designated wildlife sites and Ancient Woodland (the north-west corner of the site is occupied by Templeborder Wood, which is a Braintree Local Wildlife Site and also contains Ancient Woodland). Further natural environment designations within the site boundaries include an area of the Priority Habitat (Deciduous Woodland) located on the north-east boundary of the site. There are also natural environment designations located within 400m of the site boundaries, including Lanham Wood, a Local Wildlife Site located adjacent to the south-eastern boundary of the site that contains Ancient Woodland and Priority Habitats adjacent to the north-east and southern boundary (Deciduous Woodland and Traditional Orchard respectively). Development of this site may result in impacts to these local designations and habitats, depending upon mitigation proposals. As such, uncertain minor negative effects are expected (-?) in relation to SUE2.
- 1.609 Within the site boundaries of VE1, there are small and isolated areas of deciduous woodland Priority Habitat. In the immediate vicinity of the site, in addition to further isolated areas of Priority Habitat, there are also very small areas of the Coggeshall Hall Farm and the Brockwell Meadows Local Wildlife Sites.
- 1.610 However, in line with the assumptions framework, as only a small proportion (less than 1%) of the development site falls within 400m of designated environmental sites or within Priority Habitat, negligible effects (0) are anticipated for SA Objective 6 for VE1, both at the end of the plan period and when fully built out.

Conclusion

- 1.611 Although there could be minor negative effects on biodiversity at SUE2 in its own, VE1 was identified as having potentially negligible effects. It is possible that the minor effects could be mitigated through the design of the development at SUE2, and therefore, in-combination a minor negative uncertain effect (-?) is recorded both within the plan period for this spatial strategy option, and when fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.612 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.613 Both sites are considered likely to result in minor positive yet uncertain (+?) effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site.
- 1.614 Barriers to access between the new sites and existing built up areas exist due to, in the case of SUE2, the A120 Braintree bypass and, for VE1, the mainline railway that bisects part of the site, and separates it from the existing local centre in Kelvedon. The site assessment form for VE1 found the potential for significant positive effects with uncertainty (++?) once fully built out, particularly given its significant employment land provision, but taken in combination and the barriers to movement with neighbouring existing built up areas, a minor positive but uncertain (+?) effect is considered appropriate overall.
- 1.615 Although the proposed provision of RTS is considered likely to link to SUE2, it does not link to Kelvedon therefore the concerns here remain. Overall it is considered that minor positive yet uncertain (+?) effects will arise at the end of the plan period. The uncertainty arises due to the difficulty in determining where and how people will travel. Once the sites are fully built out, they are of such scale to be able to support new primary healthcare facilities and significant

employment opportunities, as well as the other services and facilities described above. This is likely to result in even greater internalisation of journeys within the site, and significant positive effects with uncertainty (++) are anticipated for shorter journeys at these higher scales. Uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.616 For journeys to more distant destinations, the majority of SUE2 is not located within an acceptable or desired walking distance of a railway station and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken and suggests that the highest proportion of commuting trips in terms of destination are local or to Braintree town centre, although this could change with large numbers of new residents. The RTS would help to address these trips, but the lack of close access to a railway station with a frequent and direct service to destinations further afield hampers further transfers to sustainable modes of transport.
- 1.617 Conversely, VE1 is close to the mainline, although Kelvedon railway station is not within 'acceptable' walking distance of the majority of the site. This was considered likely to limit the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. If new residents follow existing commuting patterns for this area, many of the commuting journeys could in principle be completed by rail although the Great Eastern Mainline railway operates at capacity on trains to and from London in the peak hours. However, due to the fact that Kelvedon railway station is not within an 'acceptable' walking distance of the majority of the site, the potential for trips by rail will likely involve increased car journeys on local roads. Therefore, uncertain minor negative effects (-) are expected in relation to longer journeys. The uncertainty arises due to the difficulty in predicting how and where people will travel.
- 1.618 In terms of an overall coordinated spatial strategy, it is considered that the provision of RTS will increase accessibility of site SUE2, but that barriers at Kelvedon will remain. Overall, therefore the effects are increased to minor positive yet uncertain (++) due to the potential for sustainable travel that RTS will provide. RTS will likely be provided by the end of the plan period and so the minor positive effects also apply at this time for this spatial strategy.

Conclusion

- 1.619 At the end of the plan period, this spatial strategy is considered likely to result in minor positive yet uncertain (++) effects in relation to shorter and longer journeys.
- 1.620 Once fully built out this spatial strategy is considered likely to result in significant positive yet uncertain (++) effects in relation to shorter journeys and minor positive yet uncertain (++) effects in relation to longer journeys.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.621 In accordance with the site assessments, both sites SUE2 and VE1 are considered likely to result in minor positive yet uncertain (++) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.622 It is not clear whether the strategic infrastructure is required to deliver the developments. Some is planned anyway, such as the improvements to Galleys Corner roundabout at SUE2, and the RIS funded upgrade to the A12 for VE1. Other strategic infrastructure (e.g. the RTS for site SUE2) may require provision by, or contributions from, the site developers to enable them to come

forward. Also, it is not clear how capacity issues on the Great Eastern mainline at peak hours will be addressed.

- 1.623 In terms of an overall spatial strategy, there is little to link the two sites in terms of role and function, and their transport infrastructure.

Conclusion

- 1.624 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.625 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.626 Site SUE2 does not contain any designated heritage assets within its boundaries, although there are a number of designated heritage assets in close proximity, most of which are Grade II listed buildings. The Stage 1a assessment found that around 26% of the site is within 500m of heritage assets and over 70% of the site is within 1km of heritage assets. As a result, the site assessment recorded uncertain significant negative effects (--?) for this SA objective.
- 1.627 As with SUE2, site VE1 itself does not intersect with any designated heritage assets, but again there are a number of nearby designated assets. These include the Kelvedon Conservation Area (adjacent to the site boundary); two Grade I-listed buildings (the Parish Church of St Mary and '1-5 High Street'); and six Grade II*-listed buildings (Red House, St Mary's House, '26-30 High Street', Orchard House Post Office, Chambers Dormers Gables, and a cluster of buildings on Swan Street). All lie within 400m of the site boundary. Around 19% of the site area lies within 500m of a heritage asset, and a further 34% lies within 1km. The site assessment recorded uncertain significant negative effects (--?) for this SA objective for VE1 too.
- 1.628 Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.629 The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to these designated heritage assets. There is little allocated in the Section 2 Local Plans in close proximity to these sites, and so the effects are likely to be localised to the sites themselves.

Effects on townscape

- 1.630 With regards to townscape, SUE2 is within 500m of the edge of Braintree. However, Braintree is of a sufficient size compared to proposed development capacity for the site to assume that development will not significantly change the character of the existing town. The site assessment concluded that negligible (0) effects are expected for all site capacity options in relation to this SA objective.
- 1.631 The boundary of VE1 is directly adjacent to the existing settlement of Kelvedon with Feering, including the aforementioned Kelvedon Conservation Area. In line with the stated assumptions, the development of this site is likely to significantly change the character of Kelvedon and Feering. However whether this change will be positive or negative will depend on the quality of the design of the new development, therefore the effect on townscape is anticipated to be uncertain (?).

- 1.632 The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.633 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (---?) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.634 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, both sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the two sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.635 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.636 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.637 Both sites do not fall within source protection zones, and therefore they were considered as separate sites, to result in negligible effects. The combination of the two sites into a single spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.638 With regard to water supply, the Braintree Water Cycle Study³² identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that site SUE2 and VE1 were not allocated by the Section 1 Plan and therefore the specific proposals at this location were not taken into account for the WCS.
- 1.639 The Integrated Water Management Strategy (IWMS)³³, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to sites SUE2 and VE1, but with uncertainty due to the fact that the effects of these sites were not specifically assessed as part of the study.
- 1.640 Site VE1 lies between the Witham WRC and the Coggeshall WRC. Witham WRC has sufficient headroom to cater to 2,200 dwellings within the plan period, with sufficient residual headroom

³² https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

³³ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

after to accommodate around 4,240 dwellings. However, the Braintree WCS did not provide sufficient evidence to suggest that Coggeshall WRC would be able to accept additional wastewater from VE1, either within the plan period or when fully built out and therefore uncertain effects (?) are expected for VE1. For SUE2, the site assessment found that wastewater facilities have sufficient headroom to accept growth from SUE2 during the plan period, but the WCS does not assess growth beyond 2033. As such, uncertain negligible effects (0?) are expected for SUE2 at the end of the plan period and uncertain effects are expected once fully built out (?).

- 1.641 Uncertain effects (?) are expected when combining these sites into a single spatial strategy, both at the end of the plan period and once fully built out. Uncertainty also arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

Conclusion

- 1.642 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) for both the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.643 SUE2 does not contain any land located within Flood Zone 2 or 3 or any land at medium or high risk from ground water flooding. There are small patches of land distributed throughout the site (<5%) at risk from surface water flooding. As set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 1.644 A very small proportion of VE1 (less than 1%) intersects with Environment Agency Flood Zones 2 and 3. All areas of the site are identified as being at low risk of ground water flooding, and < 25% of the site area is at risk of flooding from surface water. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 1.645 As a result, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.646 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects in relation to this SA objective.

SA13: To improve air quality

- 1.647 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.648 Neither site intersects with any AQMAs and as such, both sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Potential contribution to road traffic within areas suffering from air pollution

- 1.649 According to NOMIS, the largest proportion (9%) of commuter trips from the area within which SUE2 is located are within the area itself and the second largest (8.5%) proportion of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, if the new community follows the commuting behaviour of the present community, most of this commuter traffic is likely to be carried by local roads and the A120. There are no AQMAs in this area and so it is considered that the development of the site SUE2 is likely to result in uncertain negligible effects (0?) in relation to this SA objective. The uncertainty arises as it is not known exactly how and where people will

travel, particularly given that new residents may adopt different travel patterns from existing residents.

- 1.650 Current major commuting destinations for the area of VE1 are nearby local centres (Coggeshall, Kelvedon with Feering etc.), London, Witham, Chelmsford and central Colchester. The only designated AQMAs within and en route to these destinations are in central Colchester (approximately 4% of commuters from this MSOA travel to Colchester for work). While there is an existing regular rail link between Kelvedon and Colchester, Kelvedon station (as outlined under SA Objective 7) is not within 'acceptable' walking distance of the majority of the site, making it more likely that journeys will be made by private car.
- 1.651 Given the relatively small proportion of commuters who commute from the area to Colchester, and the presence of the rail link (albeit not within walking distance of the majority of the site), negligible effects with uncertainty (0?) are anticipated in relation to this part of the SA objective. The uncertainty arises as it is not known exactly how and where people will travel.
- 1.652 As such, overall negligible effects (0/0?) are anticipated in relation to SA Objective 12, both at the end of the plan period and at all fully built capacity options.
- 1.653 Whilst the benefits of the proposed RTS and are considered likely to reduce use of private vehicles, particularly for Site SUE2, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.654 This spatial strategy is anticipated to result in negligible effects (0) on air quality, both at the end of the plan period and when fully built out, although with respect to generating traffic through AQMAs, this is uncertain (0?).

SA14: To conserve and enhance the quality of landscapes

- 1.655 Neither SUE2 nor VE1 are located near any designated landscapes or proposed extensions to these.
- 1.656 The landscape of SUE2 has been assessed by landscape officers of the NEAs, and has been found to be of moderate character strength, which is visually sensitive to large development due to the open landscape. It is suggested that new development should be small scale and in keeping with landscape character, maintain the landscape setting of settlements and maintain open views across the landscape. As such, and in line with the stated assumptions, significant negative effects are expected in relation to this SA objective, both at the end of the plan period and once fully built out.
- 1.657 The area surrounding VE1 was found to be of moderate landscape character, with high sensitivity to large-scale new development. Key issues identified included: new development in the open landscape, visibility from the river floor, and increased traffic on lanes. In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA Objective 14, both at the end of the plan period and when fully built at all scales.
- 1.658 In both instances, there is uncertainty about the effects as the impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.
- 1.659 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.660 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.661 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.662 Approximately 90% of SUE2 and nearly the whole of VE1 are located within mineral safeguarding areas for sand and gravel deposits, meaning that the development of this site could result in a significant sterilisation of mineral resource. As such, uncertain significant negative effects (--?) are expected in relation to SA objective 15. Uncertainty in the score reflects that it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 1.663 The entirety of SUE2 and nearly all of VE1 are located on Grade 2 agricultural land, meaning the development of the site would result in the loss of a significant amount of high quality agricultural land. In light of the above, significant negative effects (--) are expected for both sites, alone and in-combination.

Conclusion

- 1.664 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 7: East of Braintree (SUE2) + Kelvedon (VE1)

- 1.665 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, both within the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- 1.666 The spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
 - SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
 - SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 8: Halstead (SUE1) and proportionate growth

- 1.667 This option involves development of one garden community (SUE1) alongside further proportionate growth which is a combination of (SUE2) and Hatfield Peverel. The Inspector asked for a range of garden community options to be appraised, including 1, 2 or more garden communities. As the housing requirement to the west of Colchester under Principle 3 is for approximately 5,000 dwellings in the plan period and one strategic site [i.e. at Halstead] is only realistically capable of delivering 2,500 dwellings within the plan period, the remaining development would be delivered through proportionate growth around existing settlements. The total dwellings for site SUE1 at Halstead reflects what the site promoter believes is achievable on the site, as set out in the site information form.
- 1.668 The proportionate growth for other settlements west of Colchester follows the 'hierarchy-based' approach as explained under the West 2 option which, when compared to the 'percentage-based' approach spreads development very thinly across rural settlements. Where a strategic site is being proposed alongside proportionate hierarchy-based growth, the amount of development proposed under proportionate growth is set at half of what is proposed under option West 2. Essentially, this option would direct development to Halstead, Braintree and, to a lesser extent, Hatfield Peverel and would deliver approximately 5,500 homes which reflects, broadly the scale of growth required west of Colchester to meet housing needs in line with Principle 3 of the NEA Selection of Spatial Strategy Alternatives Paper.
- 1.669 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.16: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 8

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Land at Halstead [SUE1]	2,500	8,000	<p>SUE1 provides an opportunity to enhance accessibility to (and/or expand) the Bluebridge Industrial Estate. 2ha of employment land suggested.</p> <p>The proposals for the Braintree site include the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site. 5ha of employment land suggested alongside 2,500 homes.</p> <p>Smaller employment sites of around 1ha could be delivered</p>	<ul style="list-style-type: none"> • Full Halstead Bypass • Restore and restore dismantled railway Colchester Road to Tidings Hill as a new cycle and pedestrian route. • RTS links to Braintree Town, Braintree Freeport, and Colchester • Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). • New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout. • RIS funded A12 upgrading 2022 to 2025 • Bypass for Halstead
Land east of Braintree [SUE2]	2,500	N/a		
Hatfield Peverel	400	N/a		

1.670	A s			alongside development at Hatfield Peverel.	
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this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.671 This spatial strategy allocates a total of 5,400 dwellings to one new settlement and proportionate growth around existing settlements on greenfield sites. Site SUE1 is a 348-hectare strategic site that would extend the urban edge to the north, east and south of the existing secondary settlement of Halstead. The site was not allocated in the North Essex Section 1 Local Plan, while the Braintree Section 2 Local Plan only allocated small-scale growth around and within Halstead to cater for local needs. The site lies within the Braintree district and has capacity for up to 8,000 dwellings once fully built out.
- 1.672 The site is currently primarily arable land on the settlement edge. It wraps around the Bluebridge Industrial Estate on the eastern fringes of the town, and the land is currently in the ownership of multiple landholders. The River Colne bisects the site east-west. Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Significant nearby sites include: the Bluebridge Industrial Estate (adjacent to the site's western boundary); two smaller-scale sites in Earls Colne – Riverside Industrial Area and Atlas Works; Gosfield Airfield to the west; and the large-scale Earls Colne Airfield in a rural setting to the south.
- 1.673 For public transport connections, following the closure of the Colne Valley and Halstead Railway (CVHR) in the 1960s, Halstead no longer benefits from any rail links. The nearest railway station is now in Braintree - approximately 10km to the south – from which connections can be made to London via a connection at Witham.
- 1.674 For road connections, the A131 and the A1124 intersect in the centre of Halstead – the former bisects the site and the latter runs along parts of the site's western boundary. The A131 provides connections to Braintree to the south and Sudbury to the north and the A1124 provides links east to Colchester and north west toward Haverhill.
- 1.675 There are no large-scale residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary, or within 1km of the site. However there are a cluster of small-scale sites within and around Halstead have been allocated by the Section 2 Local Plan that account for total growth of around 650 dwellings. The Section 2 Plan for Braintree DC also proposes a 2-hectare extension to the Bluebridge Industrial Estate (Policy LPP 2).
- 1.676 SUE2, considered in this assessment as a location for proportionate growth of 2,500 dwellings by the end of the plan period, is a strategic site located to the east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan but not taken forward.
- 1.677 The site is 161 Hectares and is comprised of almost entirely arable land with some small areas of woodland. The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 1.678 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. There is an allocation for up to 200 dwellings (18/00549) located around 1km south of the site, which is currently pending consideration.
- 1.679 There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).

- 1.680 Hatfield Peverel is a Tier 3 settlement of approximately 1,640 dwellings, and is considered in this assessment for proportionate growth of 400 dwellings.

Assessment of Effects

- 1.681 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 8.
- 1.682 The table below summarises the anticipated effects of this spatial strategy.

Table 1.17: Assessment of West of Colchester Spatial Strategy 8

SA objective	Spatial Strategy West 8 at the end of the plan period	Spatial Strategy West 8 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/+	--?/+
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++
SA3: Improve health/reduce health inequalities	+/-	+/-
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	+?/+?	+?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0

SA objective	Spatial Strategy West 8 at the end of the plan period	Spatial Strategy West 8 when fully built out
SA13: To improve air quality	0/0?	0/0?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.683 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.684 At the end of the plan period and once fully built out, site SUE1 was considered likely to result in significant negative yet uncertain (--?) effects on existing communities. The proportionate growth by the end of the plan period for SUE2 and Hatfield Peverel is also likely to result in uncertain significant negative effects (--?). This is due to the impacts of large development sites near to existing settlements, which are comparatively smaller. This uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of the SUE1 and proportionate growth at SUE 2 and Hatfield Peverel into a single spatial strategy option, also seen in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.685 At the end of the plan period both sites were considered likely to result in minor positive (+) effects to the new community, due to the provision of facilities and services which is assumed in accordance with the assumptions framework.
- 1.686 At full capacity, SUE1 was considered likely to result in significant positive effects (++) , due to the fact that, at this capacity, the site is large enough to provide a critical mass to support both new youth centre facilities and community meeting spaces. In addition, site information forms for SUE1 and SUE2 indicated that these sites would also be able to support youth centre and community meeting spaces provision at 2,500 dwellings, resulting in significant positive effects (++) at the end of the plan period in relation to this SA objective for SUE1 and SUE2.
- 1.687 However, Hatfield Peverel is not considered likely to be able to support these services resulting in no increase to the minor positive effects expected. The proportionate growth at Hatfield Peverel forms part of this spatial strategy and, as such, the effects expected for the strategy overall are restricted to minor positive at the end of the plan period and once fully built out.

Conclusion

- 1.688 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/+) at the end of the plan period and once fully built out.

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.689 At the end of the plan period, and once fully built out, site SUE1 was considered likely to result in significant positive (++) effects in relation to this SA objective. The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and

affordable housing to policy compliant levels; and because the site information forms set out that this site is likely to be able to viably provide 30% affordable housing. The assessment for SUE2 also found significant positive effects are expected by the end of the plan period in accordance with the above.

- 1.690 The 400 homes allocated to Hatfield Peverel in this spatial strategy are considered likely to be deliverable during the plan period (whilst also providing policy compliant affordable housing as the Braintree Viability Study³⁴ indicates development in this area is viable); resulting in significant positive effects also in accordance with the above.
- 1.691 The combination of SUE1 and proportionate growth at SUE 2 and Hatfield Peverel into a single spatial strategy option, and seen with the context of planning commitments proposed Section 2 Local Plan allocations, will result in similar effects as the sites would individually, and as such, this assessment finding for this spatial strategy reflects the findings for each individual strategic site.

Conclusion

- 1.692 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective.

SA3: Improve health/reduce health inequalities

- 1.693 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.694 At the end of the plan period, the delivery of SUE1 and proportionate growth at SUE2 and Hatfield Peverel are all likely to result in minor positive effects (+) in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of SUE1 and proportionate growth at SUE2 and Hatfield Peverel into a single spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.695 Once fully built out, SUE1 is likely to result in significant positive effects (++) in relation to access to health and recreation facilities. The reasons for this included that, once fully built out, the site will be able to support a new primary healthcare facility, which will create easier access to health care for residents at the site. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of SUE1 and proportionate growth at SUE2 and Hatfield Peverel into a single spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to either site. However, proportionate growth at SUE2 and Hatfield Peverel is not likely to be of a large enough scale (<4,500 dwellings) to support the delivery of new healthcare facilities. Therefore, the effects when fully built out for this strategy are restricted to minor positive (+).

Exposure to noise pollution

- 1.696 Approximately 3% of the site area of SUE1 falls within a DEFRA strategic noise area of Night ≥ 55.0 dB, or Laeq,16 ≥ 60.0 dB. As such, it was considered that effects would be negligible in relation to noise pollution at this site, both at the end of the plan period and once fully built out. However, approximately 21% of site SUE2 is located with a DEFRA strategic noise area of Night

³⁴ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

>=55.0 dB, or Laeq,16 >= 60.0 dB. As such, minor negative effects are expected for this site, both at the end of the plan period and once fully built out. No specific development site has been identified at Hatfield Peverel and therefore it may be possible to avoid the areas of highest noise pollution, as much of the town is not within these.

Conclusion

- 1.697 Minor positive and minor negative effects (+/-) are expected for this spatial strategy at the end of the plan period and once fully built out.

SA4: To ensure and improve the vitality & viability of centres

- 1.698 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this all sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out. In terms of proportionate growth locations, it is considered that this will increase dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.699 The spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in houses delivered through the existing planning commitments and proposed section 2 allocations are anticipated to support existing centres. Furthermore, the combination of the sites into a single spatial strategy will require the provision of a full Halstead Bypass, creation of a pedestrian and cycle route from Colchester Road to Tidings Hill, RTS links to Braintree Town/Braintree Freeport/Colchester, millennium slipways at Galleys Corner Roundabout, a new route of the A120 and RIS funded A12 upgrading. The delivery of this transport infrastructure will provide greater accessibility between development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.700 In accordance with the above, significant positive effects (++) are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.701 The site assessment found that both SUE1 and SUE 2 would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period. Similarly, it is expected that growth at Hatfield Peverel will increase the local workforce and it is also indicated that small employment sites of around 1ha could be delivered around the development, resulting in minor positive effects (+) in relation to this SA objective. Once SUE1 is fully built out, it is considered likely that it will be able to support the delivery of over 10ha of employment land. However, this is not the case at the proportionate growth sites where growth is not considered for beyond the end of the plan period.
- 1.702 The combination of the sites into a single spatial strategy will require the provision of a full Halstead bypass, new cycle and pedestrian routes, RTS links to Braintree town, Braintree Freeport and Colchester, millennium slipways at Galleys Corner Roundabout, a new route of the A120 in place of Galley's Corner roundabout and RIS funded A12 upgrading. These transport interventions are likely to increase the skills and potential catchment of employment areas and will provide greater accessibility between development locations and employment destinations.

- 1.703 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.704 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.705 At both the end of the plan period and once fully built out, both SUE1 and SUE2 are considered likely to result in uncertain minor negative effects (-?) in relation to this SA objective. For SUE1, this is due to over 5% of the site being located within 400m of local wildlife sites and the whole of the site being located within a SSSI IRZ. The whole of SUE2 and Hatfield Peverel are also located within a SSSI IRZ for residential development.
- 1.706 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.707 Uncertain minor negative effects (-?) are expected both at the end of the plan period and once fully built out in relation to this SA objective for this spatial strategy.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.708 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.709 All sites are considered likely to result in minor positive yet uncertain (+?) effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. The proposed RTS may increase accessibility of site SUE2 at Braintree, however will not improve accessibility at Halstead. Almost half of the dwellings allocated under this spatial strategy are in Halstead. As such, the assessment remains minor positive yet uncertain (+?).
- 1.710 Once fully built out, SUE1 is considered to be of a sufficient scale (>4,500 dwellings) to deliver a new secondary school and the Stage 1a assessment found that the majority of the site is within an acceptable distance of employment centres. Additionally, phased provision of secondary school facilities is also anticipated at the end of the plan period for SUE1. This is likely to enhance opportunities for sustainable travel within the site, resulting in beneficial effects, particularly in combination with RTS. However, the two sites for proportionate growth are not likely to support the delivery of these facilities (at the end of the plan period and once fully built out and, as such, there is no change to the minor positive yet uncertain (+?) effects expected for the overall spatial strategy. Uncertainty also arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.711 For longer journeys, sites SUE1 and SUE2 are expected to result in uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out. Hatfield Peverel is located on the railway line and has a station. As such, it is considered that this may facilitate the use of more sustainable modes for longer journeys. However it is also served by the A12 which would provide a convenient route

for car travel, particularly if residents are commuting elsewhere. Further uncertainty arises in relation to the new Hatfield Peverel residents using rail as it will be affected by the proximity of the development to the rail station (and any access barriers such as the railway or strategic roads), and whether there will be sufficient rail capacity to accommodate growth at this settlement.

- 1.712 However, the provision of RTS linking the sites to Braintree town, Braintree Freeport and Colchester is likely to improve the potential for longer journeys from SUE2 at Braintree in particular to be made using sustainable modes. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. However, the development at Halstead will still not be supported by opportunities to undertake longer journeys by sustainable modes. Overall therefore minor positive effects are anticipated in relation to longer journeys at the end of the plan period and once fully built out. Uncertainty also arises due to the difficulty in predicting how and where residents will travel.

Conclusion

- 1.713 At the end of the plan period and once fully built out, this spatial strategy is considered likely to result in minor positive yet uncertain effects (+?) in relation to shorter journeys; and minor positive yet uncertain effects (+?) in relation to longer journeys.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.714 All sites are considered likely to result in uncertain minor positive effects (+?) in relation to this SA objective, both at the end of the plan period and once fully built out. For SUE1 and SUE2, the site information forms indicated that either site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability to deliver transport infrastructure. At Hatfield Peverel, no specific infrastructure requirements have been set out. There is no evidence that the combination of the sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.715 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.716 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.717 The sites are likely to result in uncertain significant negative effects (--?) in relation to this SA objective, both at the end of the plan period and once fully built out. This is due to the site's proximity to heritage assets, which development may result in adverse effects on. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is present for proportionate growth at Hatfield Peverel in relation to heritage assets as the specific location of development at this location is not known at this stage.

- 1.718 The combination of the sites into a single spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.719 Site SUE2 is within 500m of the town of Braintree, but Braintree is of a sufficient size compared to the growth proposed for the end of plan period (2,500 dwellings) to assume that development will not significantly change the character of the existing town, resulting in negligible effects. SUE1 is adjacent to the existing settlement of Halstead and, as such, the development of this site is likely to significantly change the character of Halstead, but whether this change will be positive or negative will depend on the quality of design of the new development. Therefore, uncertain effects are expected (?). This is also the case for proportionate growth at Hatfield Peverel where the growth planned for the end of the plan period will increase the size of the settlement by over 10%.
- 1.720 The combination of the sites into a single spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to townscape

Conclusion

- 1.721 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain effects (?) in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.722 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, sites SUE1 and SUE2 were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the sites into a single spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms. It is assumed that proportionate growth at Hatfield Peverel will also be delivered in line with the above considerations.

Conclusion

- 1.723 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.724 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.725 For SUE1, approximately 1% of the site's area intersects with source protection zone 1 (SPZ1) and a further 11% intersects with source protection zone 2 (SPZ2). However, in line with the stated assumptions, this is not a sufficient amount for development to result in adverse effects on water quality and therefore negligible effects are expected (0), both at the end of the plan period and once fully built out. In the case of SUE2 and Hatfield Peverel, negligible effects are also expected in relation to this SA objective as these areas do not intersect with any source protection zones.

Water scarcity and water treatment

- 1.726 With regard to water supply, the Braintree Water Cycle Study identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth

allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that SUE1, SUE2 and Hatfield Peverel were not allocated by the Section 1 Plan and therefore the specific proposals at this location were not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.

- 1.727 The Integrated Water Management Strategy (IWMS)³⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to site SUE1, but with uncertainty due to the fact that the effects of these sites were not specifically assessed as part of the study.
- 1.728 For SUE1, the site assessment found that there is insufficient evidence relating to specific growth at SUE1 to determine whether wastewater facilities could accept all wastewater from this development, either within the plan period or when fully built out. This is also the case for Hatfield Peverel. As such, uncertain effects (?) are expected for both these sites at the end of the plan period and once fully built out. For SUE2, the site assessment found that there is sufficient headroom in wastewater facilities to cater to growth up to 2033, but not at higher capacities as the WCS only considers growth within the plan period.
- 1.729 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?).

Conclusion

- 1.730 Negligible effects (0) in relation to water quality are expected both at the end of the plan period and once fully built out and uncertain effects (?) are expected in relation to water scarcity and treatment for both the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.731 Small proportions (<5%) of sites SUE1 and SUE2 are within flood zones 2 or 3 and negligible proportions of either site are at risk from ground or surface water flooding. Hatfield Peverel is also not significantly constrained by flood zones or risk from ground or surface water flooding. As such, negligible effects are expected in relation to this SA objective, both at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.732 Both at the end of the plan period and once fully built out, this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.733 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.734 None of the sites intersect with any AQMAs and as such, they are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

³⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 1.735 According to NOMIS, commuters currently living in the area of SUE1 generally travel to destinations that do not involve travelling through an AQMA. There are no designated air quality management areas within Braintree and therefore commuters travelling from SUE2 or Hatfield Peverel also do not generally travel to destinations that require travelling through an AQMA. As such, uncertain negligible effects (0?) are expected for this spatial strategy in relation to this SA objective. The uncertainty arises as it is not known exactly how and where people will travel.

Conclusion

- 1.736 This spatial strategy is anticipated to result in negligible effects (0) at the end of the plan period and once fully built out in relation to intersection with AQMAs and uncertain negligible effects (0?) in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.737 The area of site SUE1 has been assessed by landscape officers of the NEAs and has been found to be of moderate strength landscape character but highly sensitive to visual intrusion due to wide views at Wickham Farmland Plateau. The area also includes Colne River Valley, which was found to be of strong landscape character and highly sensitive to visual intrusion and loss of landscape integrity. As such, uncertain significant effects (--?) are expected in relation to this SA objective for SUE1, both at the end of the plan period and once fully built out. The uncertainty arises because landscape impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping. Land at SUE2 was found to be of moderate strength landscape character and Hatfield Peverel is not located near any landscape designations. No evidence has been provided which assesses the landscape character around Hatfield Peverel.
- 1.738 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.739 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.740 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.741 Approximately 80% of SUE1 is within a mineral safeguarding area and 90% of SUE2 is located within a mineral safeguarding area. As such, uncertain significant negative effects (--?) are expected as development of these sites would result in the sterilisation of a significant amount of mineral resources. This is also the case at Hatfield Peverel where there are mineral safeguarding areas located around the settlement. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.742 Approximately 23% of SUE1 is located on Grade 2 agricultural land and a further 67% is located on Grade 3 agricultural land. However, the entirety of SUE2 is located on Grade 2 agricultural land, which means that development would result in the loss of a significant amount of high quality agricultural land. As such, significant negative effects (--) are expected for SUE2 at the end of the plan period. It is expected that development at Hatfield Peverel is likely to result in the

loss of Grade 1-3 agricultural land around the settlement, resulting in significant negative effects by the end of the plan period. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.743 The spatial strategy is anticipated to result in uncertain significant negative effects (--?) and significant negative effects (--) at the end of the plan period in relation to mineral resources and agricultural land respectively. The same effects are also expected once fully built out.

West 8: Land at Halstead (SUE1) + Proportionate Growth

- 1.744 This spatial strategy recorded significant positive effects for:

- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)

- 1.745 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 9: West of Braintree GC (NEAGC1) and proportionate growth

- 1.746 This option involves development of one garden community (NEAGC1) and proportionate growth (SUE2, Hatfield Peverel and Halstead). The Inspector asked for a range of garden community options to be appraised, including 1, 2 or more garden communities. As the housing requirement to the west of Colchester is for approximately 5,000 dwellings in the plan period and one site is only capable of delivering 2,500 dwellings in the plan period, proportionate growth is also required under this option. The total dwellings figure, which is within the range in the Submission Local Plan, is taken from evidence in the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update report by Hyas Associates and thus reflects the most up to date position in respect of viability assumptions.
- 1.747 The proportionate –hierarchy-based growth that would be delivered alongside the Garden Community would result in a strong focus of development around Braintree with major developments to the east and the west. This option could deliver around 6,000 homes which reflects, broadly the scale of growth required west of Colchester to meet housing needs in line with Principle 3. The following table sets out the specific capacities which will be tested under this scenario.
- 1.748 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.18: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 9

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
West of Braintree GC NEAGC1	2,500	10,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For West of Braintree, it suggests approximately 9ha by 2033, 31ha by 2050 and 39ha by 2071. The proposals for the Braintree site includes the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Stansted. RTS links to Braintree Town, Braintree Freeport, and Colchester Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout. RIS funded A12 upgrading 2022 to 2025 Bypass for Halstead
Land east of Braintree [SUE2]	2,500	N/a		
Hatfield Peverel	400 (each)	N/a		
Halstead				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
			<p>to the site. 5ha of employment land suggested alongside 2,500 homes.</p> <p>Smaller employment sites of around 1ha could be delivered alongside development at Hatfield Peverel and Halstead.</p>	

- 1.749 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.750 This spatial strategy allocates a total of 5,800 dwellings by the end of the plan period to one new settlement and proportionate growth around existing settlements on greenfield sites. Site NEAGC1 is located to the West of Braintree, and abuts the boundary of Braintree and Uttlesford Districts. The emerging Uttlesford Local Plan also includes a proposed contiguous allocation of 3,500³⁶ dwellings, which if planned as a single development site, would result in an overall development of 13,500 by the time the site is fully built out. The emerging Uttlesford plan sets out that 970 of these will be delivered by 2033 (the end of the plan period). This assessment identifies the potential cumulative effects of this proposed Uttlesford allocation as well as site NEAGC1.
- 1.751 The site is currently primarily arable land, and as it is a large site (496 ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. Broadfield Farm is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The legal agreement still has not been signed. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.
- 1.752 SUE2, considered in this assessment as a location for proportionate growth of 2,500 dwellings by the end of the plan period, is a strategic site located to the east of Braintree. It was promoted for inclusion in the submitted Section 1 Local Plan but not taken forward.
- 1.753 The site is 161 Hectares and is comprised of almost entirely arable land with some small areas of woodland. The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 1.754 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. There is an allocation for up to 200 dwellings (18/00549) located

³⁶ Regulation 19 plan available from https://uttlesford.gov.uk/media/8248/Uttlesford-Regulation-19-Pre-submission-Local-Plan/pdf/Reg_19_local_plan_21.06.18_low_res_for_web.pdf

around 1km south of the site, which is currently pending consideration. There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).

- 1.755 Hatfield Peverel is a Tier 3 settlement of approximately 1,640 dwellings, and is considered in this assessment for proportionate growth of 400 dwellings as part of this spatial strategy. Halstead is a Tier 2 settlement of approximately 5,820 dwellings, and is considered in this assessment for proportionate growth of 400 dwellings also as part of this spatial strategy.

Assessment of Effects

- 1.756 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 9.
- 1.757 The table below summarises the anticipated effects of this spatial strategy.

Table 1.19: Assessment of West of Colchester Spatial Strategy 9

SA objective	Spatial Strategy West 9 at the end of the plan period	Spatial Strategy West 9 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/+	--?/+
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	+/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+?	++?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?	-?/?

SA objective	Spatial Strategy West 9 at the end of the plan period	Spatial Strategy West 9 when fully built out
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/0?	0/0?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.758 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.759 At the end of the plan period and once fully built out, NEAGC1 was considered likely to result in significant negative yet uncertain (--?) effects on existing communities. The proportionate growth by the end of the plan period at SUE2 and Hatfield Peverel is also likely to result in uncertain significant negative effects due to the growth proposed being significant compared to existing settlements in the area (or Hatfield Peverel itself). The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of NEAGC1 and proportionate growth at SUE2, Hatfield Peverel and Halstead into a single spatial strategy option, also seen in the context of the surrounding planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.
- 1.760 The growth proposed at Halstead is less than 10% of the settlement's existing dwelling stock and therefore the effects are reduced to uncertain minor negative (-?) for the end of the plan period. However, the effects of the overall strategy on existing settlements are anticipated to be significant negative yet uncertain, as outlined above.

Effect on the new community

- 1.761 At the end of the plan period, all sites are considered likely to result in minor positive effects (+) in relation to the new community, due to the provision of facilities and services, which is assumed in accordance with the assumptions framework.
- 1.762 When fully built out, it is considered likely that NEAGC1 will be able to support the delivery of youth centre facilities and community meeting spaces. As such, significant positive effects (++) are expected when fully built out for NEAGC1 in relation to the new community. However, whilst SUE2 indicates that it can support the delivery of youth centre facilities and community meeting spaces by the end of the plan period, the development at Halstead and Hatfield Peverel is not considered likely to be able to support these services, and so overall it is considered that this spatial strategy will result in minor positive effects (+) in relation to impacts on the new community.

Conclusion

- 1.763 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/+).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.764 As set out in the assumptions framework, it is considered that all new development proposed within the Section 1 Local Plans will be delivered in accordance with policies which will result in development being designed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 1.765 The Braintree Viability Study³⁷ indicates that development in the district can viably provide policy compliant development, including affordable housing provision. The site information form sets out that site NEAGC1 at 2,500 and 10,000 dwellings capacity is likely to be viable, which includes the delivery of 30% affordable housing. As such, significant positive effects (++) are expected by the end of the plan period. However, when fully built out it is considered that NEAGC1 will require external funding or another mechanism to uplift scheme viability, if it is to provide all requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++) effects once fully built out. The assessment for SUE2 also found significant positive effects are expected by the end of the plan period in accordance with the above, without uncertainty.
- 1.766 The 400 homes allocated to Hatfield Peverel and Halstead in this spatial strategy are considered likely to be deliverable during the plan period (whilst also providing policy compliant affordable housing as the Braintree Viability Study³⁸ indicates development in these areas is viable); resulting in significant positive effects also in accordance with the above.
- 1.767 The combination of NEAGC1 and proportionate growth at SUE 2, Hatfield Peverel and Halstead into a single spatial strategy option, and seen with the context of planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, will result in similar effects as the sites would individually, and as such, the assessment for this spatial strategy reflects the site assessment assessments for NEAGC1 and SUE2.

Conclusion

- 1.768 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing at site NEAGC1, resulting in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 1.769 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.770 At the end of the plan period, the delivery of NEAGC1 and proportionate growth at SUE2, Hatfield Peverel and Halstead are all likely to result in minor positive effects (+) in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of NEAGC1 and proportionate growth at SUE2, Hatfield Peverel and Halstead into a single spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the

³⁷ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

³⁸ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.

- 1.771 For Hatfield Peverel and Halstead, there is uncertainty present in the effects (+?) as there are existing health facilities within these settlements, but it is not clear whether these will be able to expand. In addition, the IDP does not set out what improvements, if any, would be required at Halstead or Hatfield Peverel and whether these are likely to be deliverable.
- 1.772 Once fully built out, NEAGC1 is likely to result in significant positive effects (++) in relation to access to health and recreation facilities. The reasons for this included that, once fully built out, the site is of a sufficient size to support a new primary healthcare facility, which will create easier access to health care for residents at the site. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of NEAGC1 and proportionate growth at SUE2 and Hatfield Peverel into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to either site. However, proportionate growth at SUE2, Hatfield Peverel and Halstead is not likely to be of a large enough scale (>4,500 dwellings) to support the delivery of new healthcare facilities. Therefore, the effects when fully built out for this strategy are restricted to uncertain minor positive (+?).

Exposure to noise pollution

- 1.773 At site NEAGC1, less than 50% of the site falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and as less than 5% of the site falls within either a DEFRA strategic noise area of Lnight >=55.0 dB, or Laeq,16 >= 60.0 dB. As such, negligible effects are expected in relation to noise pollution, both at the end of the plan period and once fully built out. However, approximately 21% of site SUE2 is located with a DEFRA strategic noise area of Lnight >=55.0 dB, or Laeq, 16 >= 60.0 dB. As such, minor negative effects (-) are expected for this site, both at the end of the plan period and once fully built out. Negligible effects are expected at Halstead and no specific development site has been identified at Hatfield Peverel and therefore it may be possible to avoid the areas of highest noise pollution, as much of the town is not within these.
- 1.774 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC1 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.

Conclusion

- 1.775 Mixed effects are anticipated in relation to this SA objective, which are minor positive and uncertain minor negative (+/-?).

SA4: To ensure and improve the vitality & viability of centres

- 1.776 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this all sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out. In terms of proportionate growth locations, it is considered that this will increase dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.777 The spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in houses delivered through the existing planning commitments and proposed section 2 allocations are anticipated to support existing centres. Furthermore, the combination of the sites into a single spatial strategy will require the provision of a RTS link to Braintree Town/Braintree Freeport/Colchester/Stansted, millennium slipways at Galleys Corner Roundabout, a bypass for Halstead, a new route of the A120 and RIS funded A12 upgrading. The delivery of this transport infrastructure will provide greater accessibility between development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of

these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.778 In accordance with the above, significant positive effects (++) are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.779 The site assessment found that both NEAGC1 and SUE2 would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period. Similarly, it is expected that growth at Hatfield Peverel and Halstead will increase the local workforce and provide new employment opportunities as part of the development.
- 1.780 The combination of the sites into a single spatial strategy will require the provision of a full Halstead bypass, RTS links to Braintree town, Braintree Freeport, Colchester and Stansted, millennium slipways at Galleys Corner Roundabout, a new route of the A120 and RIS funded A12 upgrading. The transport interventions are likely to increase the skills and potential catchment of employment areas and will provide greater accessibility between the developments and employment destinations.
- 1.781 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.782 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.783 Both at the end of the plan period and once fully built out, both NEAGC1 and SUE2 are anticipated to result in uncertain minor negative effects (-?) in relation to this SA objective. For both NEAGC1 and SUE, this is due to over 50% of the site being located within a SSSI IRZ. Both Hatfield Peverel and Halstead also lie with an IRZ for a SSSI.
- 1.784 The combination of the sites into a single spatial strategy, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not likely to reduce impacts on these designation, therefore the likely effects are not anticipated to change.

Conclusion

- 1.785 Uncertain minor negative effects (-?) are expected both at the end of the plan period and once fully built out in relation to this SA objective for this spatial strategy.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.786 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.787 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), the growth under this spatial strategy is focussed to

settlements which have existing town or local centres, employment sites or both. As such, in general terms, this is considered likely to mean that these areas will be accessible using sustainable travel modes from the development sites which would come forward under this spatial strategy.

- 1.788 In particular, sites NEAGC1 and SUE2 within Braintree are likely to be able to support employment provision of approximately 10 hectares, and a new secondary school – which will provide significant opportunities to access work school by sustainable modes of travel, due to shorter distances (i.e. within the same development site).
- 1.789 In addition, infrastructure to be delivered as a part of this spatial strategy includes RTS linking Braintree Town, Braintree Freeport, and Colchester. This is considered likely to form an attractive alternative to using the private car, for shorter trips.
- 1.790 It is considered likely that the development at Halstead and Hatfield Peverel will both be in close proximity to existing town centres. However as the exact location of the development at these two settlements is not known, uncertainty arises as to whether these will be within acceptable distance to facilitate sustainable modes of travel.
- 1.791 As such, this spatial strategy will focus development on sites which can support local centre services, and this site is near Braintree town, which has significant existing services and facilities – the provision of RTS linking Braintree to Colchester and other destinations enhances accessibility. Given that this strategy would result in the allocation of a significant number of houses to the Braintree area, it is considered that the positive effects of RTS would be experienced by the clear majority of new dwellings allocated under this spatial strategy. For this reason, significant positive (++) effects are anticipated in relation to this element of SA7. The uncertainty arises because of the difficulties in predicting where people will choose to live and how they will choose to travel and due to the lack of information about the precise location of development sites in Hatfield Peverel and Halstead. Uncertainty also arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.792 For longer journeys, sites NEAGC1 and SUE2 are expected to result in uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out. It is possible growth at Halstead could contribute to increased traffic on the A131 and the A1124. However Hatfield Peverel is located on the railway line and has a station – as such, it is considered that this may facilitate the use of more sustainable modes for longer journeys. However it is also served by the A12 which would provide a convenient route for car travel, particularly if residents are commuting elsewhere. Further uncertainty arises in relation to the new Hatfield Peverel residents using rail as it will be affected by the proximity of the development to the rail station (and any access barriers such as the railway or strategic roads), and whether there will be sufficient rail capacity to accommodate growth at this settlement.
- 1.793 Nevertheless, despite unfavourable current commuting patterns, the provision of the RTS linking the sites to Braintree town, Braintree Freeport, Colchester and Stansted is likely to improve the potential for journeys outside the site boundary to be made using sustainable modes, resulting in uncertain minor positive effects (+?) in relation to this SA objective. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. Uncertainty arises due to the difficulty in predicting how and where residents will travel and the effects of rail capacity.

Conclusion

- 1.794 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in mixed uncertain significant positive effects (++) in relation to shorter journeys) and minor positive yet uncertain effects (+?) (in relation to longer journeys).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.795 All sites are considered likely to result in uncertain minor positive effects (+?) in relation to this SA objective, both at the end of the plan period and once fully built out. For NEAGC1 and SUE2, the site information forms indicated that either site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability to deliver transport infrastructure. Further uncertainty is also present at the settlement locations for proportionate growth. There is a lack of evidence that the Bypass for Halstead is viable with the level of development proposed. At Hatfield Peverel, no specific infrastructure requirements have been set out. There is no evidence that the combination of the sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.796 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.797 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.798 The sites are likely to result in uncertain significant negative effects (--?) in relation to this SA objective, both at the end of the plan period and once fully built out. This is due to their proximity to heritage assets, where development may result in adverse effects. The uncertainty arises because the details of any mitigation strategies of the potential effects will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is present for proportionate growth at Hatfield Peverel and Halstead in relation to heritage assets as the specific location of development at these locations is not known at this stage.
- 1.799 The combination of the sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.800 Site NEAGC1 is over 500m from any existing settlements and therefore negligible effects are expected in relation to impacts on townscape, both at the end of the plan period and once fully built out. Site SUE2 is within 500m of the town of Braintree, but Braintree is of a sufficient size compared to the growth proposed for the end of plan period (2,500 dwellings) to assume that development will not significantly change the character of the existing town, resulting in negligible effects. Uncertain effects (?) are expected at Hatfield Peverel in relation to impacts on townscape as the growth planned for the end of the plan period will increase the size of the settlement by over 10%. The uncertainty arises because the nature of the change (positive/negative) will depend on the quality of design of the new development. Halstead is of a sufficient size that the growth planned for the end of the plan period is not expected to significantly change the existing townscape.

- 1.801 The combination of the sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to change the effects in relation to townscape

Conclusion

- 1.802 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain effects (?) in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.803 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition, the site information forms for both sites confirm that they can deliver policy compliant sustainable development. As such, sites NEAGC1 and SUE2 were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations and proposed Uttlesford allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms. It is assumed that proportionate growth at Hatfield Peverel and Halstead will also be delivered in line with the above considerations.

Conclusion

- 1.804 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.805 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.806 Site NEAGC1, site SUE2 and Hatfield Peverel are all located entirely outside of source protection zones (SPZs). However, SPZs are present within Braintree and affect land around Halstead. As Halstead forms part of this spatial strategy, uncertain minor negative effects (-?) are expected in relation to water quality. The uncertainty arises as specific design and mitigation may be able to overcome impacts.

Water scarcity and water treatment

- 1.807 With regard to water supply, the Braintree Water Cycle Study identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that, SUE2, Hatfield Peverel and Halstead were not allocated by the Section 1 Plan and therefore the specific proposals at this location were not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 1.808 The Integrated Water Management Strategy (IWMS)³⁹, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to the proportionate growth

³⁹ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

locations, but with uncertainty due to the fact that the effects of these sites were not specifically assessed as part of the study.

- 1.809 In regard to water treatment, the Braintree WCS suggests that water treatment facilities will require upgrading to accommodate growth at NEAGC1 during the plan period, but these upgrades are likely to be feasible. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at NEAGC1 beyond the extent of the plan period. For SUE2, the site assessment found that there is sufficient headroom in wastewater facilities to cater to growth up to 2033. The water cycle study for Braintree indicates that Halstead WRC (following upgrades) would be able to cater to the proportionate growth outlined in this strategy up to the end of the plan period, but there is insufficient evidence to suggest that wastewater facilities could cater to growth at Hatfield Peverel.
- 1.810 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all site can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?)

Conclusion

- 1.811 Uncertain minor negative effects (-?) are expected in relation water quality, both at the end of the plan period and once fully built out and uncertain effects (?) are expected in relation to water scarcity and treatment, for both the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.812 A very small proportion of NEAGC1 (less than 0.2%) intersects with Environment Agency Flood Zones 2 and 3, which is considered to be a negligible amount. In addition, only small areas of the site (<25%) are at medium risk of ground water flooding and only small areas of the site (<25%) are at risk of surface water flooding. There are also negligible levels of flood risk within SUE2, Hatfield Peverel and Halstead.
- 1.813 As such, this spatial strategy is likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

SA13: To improve air quality

- 1.814 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.815 There are no AQMAs in Braintree and therefore none of the dwellings allocated under this spatial strategy will intersect with an AQMA.
- 1.816 As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.817 As set out above, there are no designated air quality management areas with Braintree and, as such, the most popular commuting destinations for residents in the area of NEAGC1, SUE2, Hatfield Peverel and Halstead generally do not involve travelling through an AQMA. Therefore, uncertain negligible effects (0?) are expected for this spatial strategy, both at the end of the plan period and once fully built out. The effects are uncertain as it is not known exactly how and where people will travel.

Conclusion

- 1.818 This spatial strategy is anticipated to result in negligible effects (0) at the end of the plan period and once fully built out in relation to intersection with AQMAs and uncertain negligible effects (0?) in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.819 The area around the site NEAGC1 has been assessed by landscape officers of the NEAs and has been found to be of moderate-strong landscape character, which is visually sensitive in terms of the flat plateau landscape and skyline views from the valley floor. Land at Halstead was found to be of strong landscape character in the area of Colne River Valley. Land at SUE2 was found to be of moderate strength landscape character and Hatfield Peverel is not located near any landscape designations. No evidence has been provided which assesses the landscape character around Hatfield Peverel. In light of the above, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are expected for this spatial strategy in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping and also due to a lack of evidence for Hatfield Peverel.
- 1.820 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.821 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.822 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.823 Approximately 75% of NEAGC1 and 90% of SUE2 are located within a mineral safeguarding area. As such, uncertain significant negative effects (--?) are expected as development of these sites would result in the sterilisation of a significant amount of mineral resources. This may also be the case at Hatfield Peverel and Halstead where there are mineral safeguarding areas located around the settlements. The uncertainty arises as it may be possible to extract some or all of the mineral resources before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.824 Approximately 95% of NEAGC1 is located on Grade 1 or Grade 2 agricultural land and the entirety of SUE2 is located on Grade 2 agricultural land, which means that development of these sites would result in the loss of a significant amount of high quality agricultural land. Development at Halstead and Hatfield Peverel is likely to result in the loss of Grade 1-3 agricultural land around the settlement, resulting in significant negative effects by the end of the plan period also.
- 1.825 Overall, significant negative effects are expected for this spatial strategy in relation to agricultural land, both at the end of the plan period and once fully built out. Given that these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.826 This spatial strategy is anticipated to result in uncertain significant negative effects (--?) in relation to mineral resources, and significant negative effects (--) in relation to agriculture, both at the end of the plan period and once fully built out.

West 9: West of Braintree (NEAGC1) + Proportionate Growth

- 1.827 This spatial strategy recorded significant positive effects for:

- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)

1.828 This spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 10: Colchester/Braintree Borders GC (NEAGC2) and proportionate growth

- 1.829 This option involves development of one garden community (NEAGC2) and proportionate growth (SUE2, Hatfield Peverel and Halstead).
- 1.830 The Inspector asked for a range of garden community options to be appraised, including one, two or more garden communities. As the housing requirement to the west of Colchester is for approximately 5,000 dwellings in the plan period and the Colchester/Braintree Borders Garden Community is only capable of delivering 2,500 dwellings in the plan period, proportionate growth is also required under this option to make up the remainder. The remainder under this option is formed by applying half the development expected under the hierarchy based approach to proportionate growth as set out per West 2. The total dwellings figure, which is within the range in the Submission Local Plan, is taken from evidence in the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update Report by Hyas Associates (June 2019).
- 1.831 The proportionate –hierarchy-based growth that would be delivered alongside the Garden Community would result in development east of Braintree and a smaller amount of development at Halstead and Hatfield Peverel. This option could deliver around 6,000 homes which reflects broadly the scale of growth required west of Colchester to meet housing needs in line with Principle 3 of the NEA Selection of Spatial Strategy Alternatives paper. The following table sets out the specific capacities which will be tested under this scenario. This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.20: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 10

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Colchester/Braintree Borders garden community NEAGC2	2,500	21,000	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For the Colchester/Braintree Borders Garden Community, it suggests 8ha by 2033, 27ha by 2050 and 52ha by 2071. The proposals for the Braintree site include the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site. 5ha of employment land suggested alongside 2,500	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Stansted RTS links to Colchester and Braintree, with potential to link to London Stansted Airport. Strategic improvements to Marks Tey Railway Station. New junctions. Widening, and rerouting of A12. Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). New route of A120 to provide a free-flow link in place of
Land east of Braintree [SUE2]	2,500	N/A		
Hatfield Peverel	400 (each)	N/A		
Halstead				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
			homes. Smaller employment sites of around 1ha could be delivered alongside development at Hatfield Peverel and Halstead.	the Galley's Corner roundabout. <ul style="list-style-type: none"> • RIS funded A12 upgrading 2022 to 2025 • Bypass for Halstead

- 1.832 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.833 This spatial strategy allocates a total of 5,800 dwellings to one new settlement, one urban extension and a smaller amount of growth at two villages in Braintree District. Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester BC and Braintree DC. Geographically, it is centrally located within the Plan area, and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden Community. The potential scale of development from this site, as outlined in the Local Plan, is for 15,000-24,000 homes, with the expectation that 2,500 of those will be delivered within the plan Period (up to 2033). The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.
- 1.834 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections.
- 1.835 To the south west of the site (at a distance of approximately 500m from the site boundary) there is a cluster of sites on the edges of the settlement of Feering belonging to the Crown Estate and allocated for Braintree's Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).
- 1.836 Site SUE2 is a strategic site located immediately to the east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan as Land East of Braintree (including Temple Border). The entirety of the site is located within the Braintree District. The site is 161 Hectares and is comprised of almost entirely arable land with some small areas of woodland.
- 1.837 The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 1.838 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. There is an allocation for up to 200 dwellings (18/00549 located around 1km south of the site, which is currently pending consideration).
- 1.839 There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).

- 1.840 Sites NEAGC2 and SUE2 are linked via the A120, and although there is a rail connection between Marks Tey and Braintree, this requires a connection at Witham and is therefore indirect and relatively slow compared to road based transport.
- 1.841 Halstead is a secondary settlement to the north of Braintree. Whilst this spatial strategy does not include any strategic sites at Halstead, there is a proposed strategic site (SUE1) here. As such, it has been assumed that the 400 dwellings to be delivered at Halstead, would likely be located in the same sort of area proposed for SUE1, i.e. on the southern or eastern side of the existing built up area, which is primarily arable land. Halstead does not have a train station but is crossed by the A131 and the A1124. There are a cluster of small-scale sites within and around Halstead have been allocated by the Section 2 Local Plan that account for total growth of around 650 dwellings. The Section 2 Plan for Braintree DC also proposes a 2-hectare extension to the Bluebridge Industrial Estate (Policy LPP 2).
- 1.842 Hatfield Peverel is a village in the south of Braintree District. It is relatively well-connected for its size, with a train station on the northern edge of the village and the A12 running through the north of the village. The former Arla Dairy site and adjacent land near the station is proposed to be allocated in the Braintree Section 2 Local Plan.

Assessment of Effects

- 1.843 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 10.
- 1.844 The table below summarises the anticipated effects of this spatial strategy.

Table 1.21: Assessment of West of Colchester Spatial Strategy 10

SA objective	Spatial Strategy West 10 at the end of the plan period	Spatial Strategy West 10 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/+	--?/+
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-?	+/-?
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/++?	++?/++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+

SA objective	Spatial Strategy West 10 at the end of the plan period	Spatial Strategy West 10 when fully built out
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?	-?/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.845 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.846 At the end of the plan period, and indeed, once fully built out, the two strategic sites were considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. An additional 400 dwellings at Halstead would represent growth of just under 10%, although effects on the existing community may depend to some extent on how this growth comes forward, with a number of smaller sites likely to be less disruptive than one or two larger sites. However, growth of 400 dwellings at Hatfield Peverel would represent growth of the village by more than 20% and is therefore likely to be viewed more negatively by the existing community. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The combination of these sites into a single spatial strategy option, also seen in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the sites would individually.

Effect on the new community

- 1.847 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that development at the strategic sites (NEAGC2 and SUE2) can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within each site. Therefore, it is considered that community cohesion within the new development is likely to occur. Both strategic sites are also expected to include youth centre and community meeting facilities provision, which is likely to provide opportunities for enhanced community cohesion, leading to significant positive effects (++) both by the end of the plan period and when fully built out. However, the development at Halstead and Hatfield Peverel is not considered likely to be able to support these services, and therefore, the effects of the overall spatial strategy are limited to minor positive (+).

Conclusion

- 1.848 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/+), both at the end of the plan period and once fully built out.

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.849 At the end of the plan period, both strategic sites are considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information forms confirm that the sites will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity.
- 1.850 The 400 homes allocated to Hatfield Peverel and Halstead in this spatial strategy are considered likely to be deliverable during the plan period (whilst also providing policy compliant affordable housing as the Braintree Viability Study⁴⁰ indicates development in these areas is viable); resulting in significant positive effects also in accordance with the above.
- 1.851 Once fully built out, site NEAGC2 is considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information form and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates ltd (June 2019) sets out that this site will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.

Conclusion

- 1.852 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing at site NEAGC2, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.853 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.854 There are currently no existing healthcare facilities within the strategic sites, and both are within 'unacceptable' walking distance of existing GP surgeries and health centres. There are doctors' surgeries in both Halstead and Hatfield Peverel, but accessibility to these depends on the locations of new development. There is also a hospital in Halstead.
- 1.855 At the end of the plan period, both strategic sites are considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development.
- 1.856 The IDP for Braintree⁴¹ sets out that two new primary healthcare sites are being brought forward in Braintree, and it is anticipated that the low level of additional housing required by this strategy

⁴⁰ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

⁴¹ https://www.braintree.gov.uk/downloads/file/6993/bdc012_braintree_infrastructure_delivery_plan

is likely to be accommodated here. As such it is considered likely that the new residents of Braintree would be adequately served by health facilities. The IDP does not set out what improvements, if any, would be required at Halstead or Hatfield Peverel.

- 1.857 As such it is likely that development in accordance with this spatial strategy is likely to increase settlements where there are existing health facilities, or support the provision of new facilities. As such minor positive (+) effects are anticipated in relation to this element of SA objective 3.
- 1.858 Once fully built out, NEAGC2 scored significant positive effects in relation to access to health and recreation facilities. The reasons for this included that once it is both fully built out, it will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. However, overall effects are still considered to be minor positive at the end of the plan period, because there will be a large amount of development at SUE2 that will not be supported by additional, bespoke new primary healthcare facilities.

Exposure to noise pollution

- 1.859 Both at the end of the plan period and when fully built out, both strategic sites are anticipated to result in minor negative effects. This is due to the proximity to existing sources of noise pollution – both sites intersect with areas identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB. For site NEAGC2, this effect is uncertain because it is recognised that the road widening planned for this stretch of the A12 may impact on local noise levels, however it is unclear what impact this will have and how successfully it can be mitigated. Small areas of land around Halstead and Hatfield Peverel fall within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, and/or within an area of $L_{night} 50.0-54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB, but given the small area these cover it is likely that new development can avoid these areas.
- 1.860 Additionally, there is potential for adverse aircraft noise pollution on future residents of NEAGC2 from current flight operations at Andrewsfield Airfield, but this is uncertain in the absence of noise contour maps or similar data. As such, there are additional uncertain minor negative effects (-?) for this spatial strategy in relation to noise pollution.
- 1.861 Overall, given that the strategic sites include areas of existing noise pollution and there is some potential for development at Halstead and Hatfield Peverel to be within areas of existing noise pollution, overall minor negative uncertain effects (-?) are recorded in relation to exposure to noise pollution.

Conclusion

- 1.862 At the end of the plan period and when fully built out, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and minor negative uncertain effects (-?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.863 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both strategic sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.864 The spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in houses delivered through the existing planning commitments and proposed section 2 allocations are anticipated to support existing centres. Furthermore, the combination of the sites into a single spatial strategy will require the provision of a RTS link to Braintree Town/Braintree Freeport/Colchester/Stansted, millennium slipways at Galleys Corner Roundabout, Strategic improvements to Marks Tey railway station, a bypass for Halstead, a new route of the A120 and RIS funded A12 upgrading. The delivery of this transport infrastructure will provide greater accessibility between development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are

built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.865 In accordance with the above, significant positive (++) effects are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.866 All sites would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period. In addition, site NEAGC2 is expected to provide approximately 8ha and SUE2 is expected to provide 4ha of employment land by the end of the plan period, and smaller employment sites of around 1ha could be delivered alongside development at Hatfield Peverel and Halstead. Once fully built out, site NEAGC2 would be expected to provide 15 ha employment land.
- 1.867 Furthermore, the spatial strategy requires the provision of a RTS, strategic improvements to Marks Tey Rail Station, new junctions, widening, and rerouting of the A12 millennium slipways at Galleys Corner Roundabout, new route of A120m upgrading of A12 and a bypass for Halstead. These are likely to increase accessibility to and between existing employment areas including Colchester and Braintree town centres, Braintree Freeport and Stansted Airport, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations.
- 1.868 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.869 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.870 Approximately 2% of the area of site SUE2 south west of Braintree intersects with locally designated wildlife sites and Ancient Woodland (the north-west corner of the site is occupied by Templeborder Wood, which is a Braintree Local Wildlife Site and also contains Ancient Woodland). Further natural environment designations within the site boundaries include an area of the Priority Habitat (Deciduous Woodland) located on the north-east boundary of the site. There are also natural environment designations located within 400m of the site boundaries, including Lanham Wood, Links Wood and Templeborder Woods, all Local Wildlife Sites that contains Ancient Woodland, and Priority Habitats (Deciduous Woodland and Traditional Orchard). Also, the site lies completely within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSIs.
- 1.871 Site NEAGC2 intersects with one local wildlife site (LWS) – the Little Tey Churchyard in the parish of Marks Tey, but this intersection amounts to less than 1% of the site's area. In total, approximately 7% of the site area falls within 400m of a locally designated wildlife site or ancient woodland. In addition, the entire site falls into SSSI impact risk zones (IRZ) for residential developments of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI. The site also includes isolated areas of deciduous woodland BAP priority habitat. Development around Halstead and Hatfield Peverel also has potential to intersect with BAP habitats and both lie within SSSI IRZs for residential development of 100 dwellings or more.

Conclusion

- 1.872 Due to the proximity of the sites to locally designated wildlife sites and intersection with IRZs at all locations, minor negative yet uncertain (-?) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.873 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.874 Both strategic sites are expected to include suitable provision of services and facilities within new local centres, which will serve the day to day needs of residents. New development around Hatfield Peverel and Halstead could be within an 'acceptable' distance of the local or town centres, depending on its location.
- 1.875 In addition, both strategic sites NEAGC2 and SUE2 are expected to provide approximately 4ha of employment land each by the end of the plan period, and smaller employment sites of around 1ha could be delivered alongside development at Hatfield Peverel and Halstead.
- 1.876 In addition, infrastructure to be delivered as a part of this spatial strategy includes RTS links to Braintree Town, Braintree Freeport, and Colchester. This is considered likely to form an attractive alternative to using the private car, for shorter trips. RTS is considered likely to be in place before the end of the plan period. Therefore, as RTS will connect the two major sites, a significant amount of the new residents will benefit from it, and significant positive (++?) effects are anticipated in relation to this element of SA7 at the end of the plan period. Uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.877 Once fully built out, site NEAGC2 would be expected to provide a new secondary school and 15Ha employment land. This will provide more opportunities to access work by sustainable modes of transport within these developments/settlements.

Longer journeys

- 1.878 For longer journeys, the eastern edge of site NEAGC2 is adjacent to Marks Tey railway station. However given the configuration and scale of the site, the existing station is not considered to be within 'acceptable' walking distance of the site. In combination with severance challenges posed by road and rail infrastructure (limiting the possibilities for active travel), this may lead to increased car use and increased congestion for both internal and external journeys. Similarly, the majority of the of site SUE2 is not located within an acceptable or desired walking distance of a railway station and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys.
- 1.879 The nearest railway station to Halstead is at Braintree, is around 10km away. This is likely to severely limit the potential for trips by sustainable modes of transport. Hatfield Peverel is served by a railway station, providing a sustainable link to Braintree, Chelmsford and Colchester, but it is also served by the A12 which would provide a convenient route for car travel, particularly if residents are commuting elsewhere. Further uncertainty arises in relation to the new Hatfield Peverel residents using rail as it will be affected by the proximity of the development to the rail station (and any access barriers such as the railway or strategic roads), and whether there will be sufficient rail capacity to accommodate growth at this settlement.
- 1.880 However, the provision of RTS linking the site SUE2 and NEAGC2 to Stansted Airport, Braintree town, Braintree Freeport, and Colchester, and the strategic improvements to Marks Tey Railway Station are considered likely to improve the potential for journeys to destinations further afield to be made using sustainable modes. Given the significant proportion of new dwellings are within these sites, significant positive yet uncertain effects (++?) are anticipated in relation to this SA objective. These improvements are anticipated to be complete prior to the end of the plan period,

therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. Uncertainty arises due to the difficulty in predicting how and where people will travel.

Conclusion

- 1.881 This spatial strategy is considered likely to result in significant positive yet uncertain (++?) effects in relation to both shorter and longer journeys - both at the end of the plan period and once built out. The uncertainty arises due to the difficulties in determining how and where people will travel.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.882 In accordance with the site assessments, both sites SUE2 and NEAGC2 are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms provided by the NEAs set out that either site are likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. The Braintree Viability Study⁴² indicates that development in the district can viably provide policy compliant development, including anticipated infrastructure provision. However, this does not account for large, exceptional elements of infrastructure provision, including those required as part of this spatial strategy. Whilst the strategy-specific infrastructure assumptions are likely to reduce congestion, it is unclear whether these items can be fully funded by the development proposals or whether additional funding is likely to be required. This is certainly the case at Halstead, where the level of development here may not be able to sufficiently fund the bypass. The site information form sets out that SUE2 at Braintree can viably support RTS, Millennium slipways, a new route of A120 to provide a free-flow link in place of the Galley's Corner roundabout and affordable housing (as well as other elements of sustainable development) –without external funding. No specific mitigation is set out at Hatfield Peverel.

Conclusion

- 1.883 In accordance with the above, minor positive yet uncertain (+?) effects are anticipated in relation to this SA objective, due to the likely provision of infrastructure requirements which are required to support the spatial strategy. The uncertainty arises because the exact infrastructure requirements of a development, the capacity of existing infrastructure, and lack of evidence that the Bypass for Halstead is viable with the level of development which would be allocated under this spatial strategy.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.884 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.885 Both strategic sites are likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective, due to the proximity of the sites to designated heritage assets, including listed buildings, archaeological assets and registered parks and gardens. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application. In addition, development at Halstead and Hatfield Peverel has potential for negative impacts on the historic environment, depending on the exact location and design of development.

⁴² https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

Effects on townscape

- 1.886 With regards to townscape effects of site NEAGC2, the site wraps around the existing settlement of Marks Tey, and there are a number of conservation areas within 1km of the site's boundary. Given the valued conservation nature of these surrounding areas, and the scale of the proposed site, this development is likely to significantly change the character of nearby settlements. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?). Site SUE2 was considered to have negligible effects on townscape. The effects of development at Halstead are likely to be limited, given that it is an increase of less than 10% of the existing size of the town, but effects may be more pronounced with an additional 400 dwellings at Hatfield. However, at both Halstead and Hatfield Peverel, changes to townscape are not expected to be significant, even in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations.

Conclusion

- 1.887 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.888 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and the implications this has on carbon emissions from transport. To avoid duplication, the effects in relation to these matters are not reassessed under this SA objective.
- 1.889 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition for both sites, the site information forms confirm that they can deliver policy compliant sustainable development. As such, both strategic sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The effects for development at Hatfield Peverel and Halstead are less certain, as they may come forward as a series of smaller developments, but positive effects are expected overall.

Conclusion

- 1.890 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.891 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.892 Source protection zones are present within Braintree and in particular affect land within Braintree and Halstead (Hatfield Peverel and site NEAGC2 do not intersect with any source protection zones). As development at some sites within this spatial may result in impacts to these zones, minor negative yet uncertain (-?) effects are recorded. The uncertainty arises as specific design and mitigation may be able to overcome impacts.

Water scarcity and water treatment

- 1.893 The site assessment for NEAGC2 found that there is sufficient water supply to cater to growth that was planned in 2017, according to the Braintree and Colchester Water Cycle Studies (WCS). However, the WCS for each district does not consider growth beyond the plan period and specific growth at SUE2, Hatfield Peverel and Halstead was not considered as part of the Braintree WCS.

- 1.894 The Integrated Water Management Strategy (IWMS)⁴³, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to the proportionate growth locations, but with uncertainty due to the fact that the effects of these sites were not specifically assessed as part of the study.
- 1.895 In regard to water treatment, the site assessment for NEAGC2 found that water treatment facilities have sufficient headroom to accommodate growth at the site within the plan period. Additionally, the IWMS indicates that water treatment facilities will be able to cater to growth at NEAGC2 beyond the extent of the plan period. For SUE2, the site assessment found that there is sufficient headroom in wastewater facilities to cater to growth up to 2033. The water cycle study for Braintree indicates that Halstead WRC (following upgrades) would be able to cater to the proportionate growth outlined in this strategy up to the end of the plan period, but there is insufficient evidence to suggest that wastewater facilities could cater to growth at Hatfield Peverel.
- 1.896 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?).

Conclusion

- 1.897 Minor negative uncertain (-?) effects in relation to water quality are anticipated both at the end of the plan period and once fully built out and the effects in relation to water scarcity and treatment are uncertain (?) for both the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.898 Very small proportions of both strategic sites are within flood zones 2 or 3, or are at risk from ground or surface water flooding. Similarly, there are small areas around Halstead and Hatfield Peverel within flood zones 2 or 3, or are at risk from ground or surface water flooding. As a result, all sites are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out. Given these effects relate to the physical extent of the sites, the combination of the two sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.899 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects in relation to this SA objective.

SA13: To improve air quality

- 1.900 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.901 Neither strategic site intersects with any AQMAs and there are no AQMAs in Braintree, therefore none of the dwellings allocated under this spatial strategy will intersect with an AQMA.
- 1.902 As such, negligible (0) effects are anticipated in relation to this element of SA13.

⁴³ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 1.903 A review of the commuting data for SUE2 at Braintree and SUE1 at Halstead indicate that the most popular employment destinations based on current trends are within Braintree, it is therefore envisaged that growth at Braintree, Hatfield Peverel and Halstead will not result in significant additional vehicle trips through AQMAs.
- 1.904 NOMIS data indicates that commuters living in the area of NEAGC2 are likely to commute through the Lucy Lane North, Stanway AQMA on the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. Due to the potential increase in road traffic within these AQMAs, this site is anticipated to have minor negative yet uncertain (-?) effects. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester. As this spatial strategy includes NEAGC2, it is considered that the effects arising from NEAGC2 will also occur as a result of implementing this strategy.
- 1.905 Whilst the benefits of the proposed RTS and Strategic Improvements to West Tey Railway Station are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.906 This spatial strategy is anticipated to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.907 Site NEAGC2 was assessed by landscape officers of the NEAs to be of strong landscape character away from the road and rail corridor along the A12, with the road and rail corridor being of moderate/weak character. Site SUE2 was considered to be of moderate character strength. Development around Halstead could be in either LCA Wickham Farmland Plateau (moderate strength character) or LCA Colne River Valley (strong landscape character). Both LCAs are highly sensitive to visual intrusion. Hatfield Peverel has not been assessed.
- 1.908 As large areas of strong and moderate landscape character and areas that are highly sensitive to visual intrusion would be affected by this spatial strategy, it is considered that development would result in significant negative yet uncertain (--?) effects, both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

Conclusion

- 1.909 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 1.910 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.911 Approximately 65% of NEAGC2 and 90% of site SUE2 fall within a mineral safeguarding area for sand and gravel deposits, meaning that the development of these sites could result in a significant sterilisation of mineral resources if these were not extracted before development. In addition, a large area of land around Halstead and Hatfield Peverel lie within a minerals safeguarding area for sand and gravel and the remaining areas generally lie along river corridors.
- 1.912 Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources for each site is considered to be significant negative yet uncertain (--?). The uncertainty

arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 1.913 Much of Braintree district, is identified as Grade 1-3 agricultural land. This is also closely drawn to the existing settlements, meaning that development in accordance with this spatial strategy is likely to result in the loss of high quality agricultural land.

Conclusion

- 1.914 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

West 10: Colchester/Braintree Borders Garden Community (NEAGC2) + Proportionate Growth

- 1.915 This spatial strategy recorded significant positive effects for:

- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, both within the plan period and when fully built out)

- 1.916 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

West of Colchester Spatial Strategy 11: Monks Wood GC (ALTGC3) and proportionate growth

- 1.917 This option involves development of one garden community (ALTGC3) and proportionate growth (SUE2, Hatfield Peverel and Halstead).
- 1.918 The Inspector asked for a range of garden community options to be appraised, including one, two or more garden communities. As the housing requirement to the west of Colchester is for approximately 5,000 dwellings in the plan period and the Monks Wood development is considered capable of delivering 2,500 dwellings in the plan period, proportionate growth is also required under this option to make up the remainder. The remainder under this option is formed by applying half the development expected under the hierarchy based approach to proportionate growth as set out per West 2. The proportionate –hierarchy-based growth that would be delivered alongside the Garden Community would result in development east of Braintree and a smaller amount of development at Halstead and Hatfield Peverel. This option could deliver around 6,000 homes which reflects, broadly the scale of growth required west of Colchester to meet housing needs in line with Principle 3 of the NEAs Spatial Strategy Options Paper document. The total dwellings reflect what the site promoter believes is achievable on the site, as set out in the site information forms.
- 1.919 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.22: Site capacities, employment and infrastructure assumptions for West of Colchester Spatial Strategy 11

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Monks Wood ALTGC3	2,000	5,500	<p>25h.2a for B 'uses' has been identified in the master plan /land use budget plan that underpins the Alder King Viability Report for Monks Wood (March 2019) at 5,500 homes. Estimated that 11ha would be delivered in the plan period up to 2033. Likewise, 16.2ha has been identified for Retail /District/Local Centre 'A' uses. Upper floors can provide alternative or additional B1 space to that within the 25.2ha referred to above.</p> <p>The proposals for the Braintree site includes the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site. 5 ha of employment land suggested alongside 2,500 homes.</p> <p>Smaller employment sites of around 1ha could be delivered alongside development at Hatfield Peverel and Halstead.</p>	<ul style="list-style-type: none"> RTS links to Braintree Town, Braintree Freeport and Colchester Sustainable transport link to Kelvedon Station Realignment and upgrading of A120 route and junctions to accommodate traffic generated. Millennium slipways at Galleys Corner Roundabout are required to provide additional capacity for initial phases (funded and expected to be constructed June 2020). New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout. RIS funded A12 upgrading 2022 to 2025
Land east of Braintree [SUE2]	2,500	N/A		
Hatfield Peverel	400 (each)	N/A		
Halstead				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
				<ul style="list-style-type: none"> Bypass for Halstead

- 1.920 As this scenario includes strategic sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.921 This spatial strategy allocates a total of 5,300 dwellings across various locations at the end of the plan period (2033) – the development is allocated to one new settlement (2,000 at Monks Wood/ALTGC3) and proportionate growth around existing settlements on greenfield sites. At fully built capacity, the strategy accommodates a total of 8,800 dwellings (with 5,500 of those at the new settlement at ALTGC3).
- 1.922 Site ALTGC3 is a 909 hectare strategic sites within Braintree DC centred around the existing Pattiswick Estate, which lies to the east of Braintree. The site is currently largely arable land and scattered woodland blocks and is bound to the south by the strategic A120 road. The nearest train station to ALTGC3 is in Kelvedon, providing links south toward London (via Chelmsford) and east to Colchester, however western parts of the site are closer to the two Braintree stations (Braintree and Braintree Freeport). For road connections, the major transport route serving the site is the A120 trunk road (single carriageway) which lies immediately south of the site, and connects the towns of Braintree and Colchester (via Coggeshall and Marks Tey). There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary, or within 1km of the site.
- 1.923 SUE2, considered in this assessment as a location for proportionate growth of 2,500 dwellings by the end of the plan period, is a strategic site located on the eastern fringes of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan but not taken forward. The site is 161 Hectares and is comprised of almost entirely arable land with some small areas of woodland. The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 1.924 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the boundaries of ALTGC3. However there is an allocation for up to 200 dwellings (18/00549) located around 1km south of the site, which is currently pending consideration. There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).
- 1.925 Hatfield Peverel is a Tier 3 settlement of approximately 1,640 dwellings, and is considered in this assessment for proportionate growth of 400 dwellings as part of this spatial strategy. Halstead is a Tier 2 settlement of approximately 5,820 dwellings, and is considered in this assessment for proportionate growth of 400 dwellings also as part of this spatial strategy.

Assessment of Effects

- 1.926 This section sets out the detailed assessment of the likely effects of West of Colchester Spatial Strategy 11.

1.927 The table below summarises the anticipated effects of this spatial strategy.

Table 1.23: Assessment of West of Colchester Spatial Strategy 11

SA objective	Spatial Strategy West 11 at the end of the plan period	Spatial Strategy West 11 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/+	--?/+
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+?/-	+?/-
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+?	++?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?	-?/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/0?	0/0?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.928 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.929 At the end of the plan period and once fully built out, ALTGC3 was considered likely to result in significant negative yet uncertain (--?) effects on existing communities. The proportionate growth by the end of the plan period at SUE2 and Hatfield Peverel is also likely to result in uncertain significant negative effects due to the growth proposed being significant compared to existing settlements in the area (or Hatfield Peverel itself). The uncertainty results from the fact that some people may in fact welcome the facilities and services provided within the new sites. The combination of the SUE1 and proportionate growth at SUE2, Hatfield Peverel and Halstead into a single spatial strategy option will result in similar effects as the sites would individually and, as such, this assessment finding is not considered likely to change.
- 1.930 The growth proposed at Halstead is less than 10% of the settlement's existing dwelling stock and therefore the effects are reduced to uncertain minor negative (-?) for the end of the plan period. However, the effects of the overall strategy on existing settlements are anticipated to be significant negative yet uncertain both at the end of the plan period and when fully built, as outlined above.

Effect on the new community

- 1.931 At the end of the plan period, all sites are considered likely to result in minor positive effects (+) in relation to the new community, due to the provision of facilities and services, which is assumed in accordance with the assumptions framework.
- 1.932 When fully built out, it is considered likely that ALTGC3 will be able to support the delivery of youth centre facilities and community meeting spaces at all capacity options. As such, significant positive effects (++) are expected both at the end of the plan period when fully built out for ALTGC3 in relation to the new community. However, whilst SUE2 indicates that it can support the delivery of youth centre facilities and community meeting spaces by the end of the plan period, the development at Halstead and Hatfield Peverel is not considered likely to be able to support these services, and so overall it is considered that this spatial strategy will result in minor positive effects (+) in relation to impacts on the new community.

Conclusion

- 1.933 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and minor positive (--?/+).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.934 As set out in the assumptions framework, it is considered that all new development proposed within the Section 1 Local Plans will be delivered in accordance with policies which will result in development being designed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 1.935 The Braintree Viability Study⁴⁴ indicates that development in the district can viably provide policy compliant development, including affordable housing provision. The site information form sets out that site ALTGC3 at 2,500 and 5,000 dwellings capacity is likely to be viable (once supported by the infrastructure assumed in this assessment), which includes the delivery of 30% affordable housing. As such, significant positive effects (++) are expected by the end of the plan period in accordance with the above. However the assessment also identified uncertainty for ALTGC3 at approximately 5,000 dwellings (5,500 was appraised), because the site information form sets out that at this scale, this site will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.

⁴⁴ https://www.braintree.gov.uk/downloads/file/6948/bdc008_braintree_economic_viability_study_june_2017

- 1.936 The assessment for SUE2 also found significant positive effects are expected by the end of the plan period in accordance with the above. The 400 homes allocated to Hatfield Peverel and Halstead each in this spatial strategy are likely to be deliverable during the plan period, resulting in significant positive effects also in accordance with the Braintree viability study reported above.
- 1.937 As such, the combination of ALTGC3 and proportionate growth at SUE2, Hatfield Peverel and Halstead into a single spatial strategy option will result in similar effects as the sites would individually, and as such, this assessment finding reflects the individual site assessment for ALTGC3 and SUE2.

Conclusion

- 1.938 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 1.939 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.940 At the end of the plan period, the delivery of ALTGC3 and proportionate growth at SUE2, Hatfield Peverel and Halstead are all likely to result in minor positive effects (+) in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information forms, they are anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the combination of ALTGC3 and proportionate growth at SUE2, Hatfield Peverel and Halstead into a single spatial strategy option is not considered likely to change the effects in relation to either site. Therefore, the findings of minor positive effects (+) at the end of the plan period are not anticipated to change.
- 1.941 For Hatfield Peverel and Halstead, there is uncertainty present in the effects (+?) as there are existing health facilities within these settlements, but it is not clear whether these will be able to expand. In addition. The IDP does not set out what improvements, if any, would be required at Halstead or Hatfield Peverel and whether these are likely to be deliverable.
- 1.942 Once fully built out, ALTGC3 is likely to result in significant positive effects (++) in relation to access to health and recreation facilities. This is largely because the site is of a sufficient size to support a new primary healthcare facility, which will create easier access to health care for residents at the site. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of ALTGC3 and proportionate growth at SUE2 and Hatfield Peverel into a single spatial strategy option is not considered likely to change the effects in relation to either site. However, proportionate growth at SUE2, Hatfield Peverel and Halstead (totalling 3,300 dwellings across all sites) is not likely to be of a large enough scale (>4,500 dwellings) to support the delivery of new healthcare facilities. Therefore, the effects when fully built out for this strategy are restricted to uncertain minor positive (+?).

Exposure to noise pollution

- 1.943 At site ALTGC3, less than 50% of the site falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and as less than 5% of the site falls within either a DEFRA strategic noise area of Lnight >=55.0 dB, or Laeq,16 >= 60.0 dB. As such, negligible effects are expected in relation to noise pollution, both at the end of the plan period and once fully built out.

However, approximately 21% of site SUE2 is located with a DEFRA strategic noise area of Night ≥ 55.0 dB, or Laeq, 16 ≥ 60.0 dB. As such, minor negative effects (-) are expected for this site, both at the end of the plan period and once fully built out. Negligible effects (0) are expected at Halstead and no specific development site has been identified at Hatfield Peverel and therefore it may be possible to avoid the areas of highest noise pollution, as much of the town is not within these. Taking a precautionary approach, overall minor negative effects are anticipated for this option in relation to noise pollution.

Conclusion

- 1.944 Mixed effects are anticipated in relation to this SA objective, which are minor positive and minor negative, with some uncertainty (+?/-).

SA4: To ensure and improve the vitality & viability of centres

- 1.945 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this all sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out. In terms of proportionate growth locations, it is considered that this will increase dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.946 The spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centres will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres. Furthermore, the combination of the sites into a single spatial strategy will require the provision of a RTS link to Braintree Town/Braintree Freeport/Colchester, a sustainable transport link to Kelvedon Station, millennium slipways at Galleys Corner Roundabout, the realignment of the A120 route, a bypass for Halstead, a new route of the A120 and RIS-funded A12 upgrading. The delivery of this transport infrastructure will provide greater accessibility between development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective, both at the end of the plan period and once fully built out.

Conclusion

- 1.947 In accordance with the above, significant positive effects (++) are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.948 The site assessment found that both ALTGC3 and SUE2 would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period. Similarly, it is expected that growth at Hatfield Peverel and Halstead will increase the local workforce and provide new employment opportunities as part of the development.
- 1.949 The combination of the sites into a single spatial strategy will require the provision of a RTS link to Braintree Town/Braintree Freeport/Colchester, a sustainable transport link to Kelvedon Station, millennium slipways at Galleys Corner Roundabout, the realignment of the A120 route, a bypass for Halstead, a new route of the A120 and RIS-funded A12 upgrading. The transport interventions are likely to increase the skills and potential catchment of employment areas and will provide greater accessibility between the developments and employment destinations.
- 1.950 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of these sites by the end of the plan period.

Conclusion

- 1.951 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.952 Both at the end of the plan period and once fully built out, site ALTGC3 is expected to result in significant negative yet uncertain effects (--?) in relation to this SA objective, due to a significant proportion of the area intersecting with locally designated wildlife sites. However site SUE2 is anticipated to result in only uncertain minor negative effects (-?), which is due to the presence of local designation within 400m of the site (which also overlaps by a very small amount – less than 5%).
- 1.953 Taking a precautionary approach, the combination of the sites into a single spatial strategy is not likely to reduce impacts on these designations, therefore the likely effects will remain as significant negative with uncertainty, based on the area of greatest potential harm.

Conclusion

- 1.954 Uncertain minor negative effects (--?) are expected both at the end of the plan period and once fully built out in relation to this SA objective for this spatial strategy.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.955 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.956 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), the growth under this spatial strategy is focussed on settlements which have existing town or local centres, employment sites or both. As such, in general terms, this is considered likely to mean that these areas will be accessible using sustainable travel modes from the development sites which would come forward under this spatial strategy.
- 1.957 In particular, sites ALTGC3 and SUE2 within Braintree are likely to be able to support employment provision of over 10 hectares, and a new secondary school on each site – which will provide significant opportunities to access work school by sustainable modes of travel, due to shorter distances and greater internalisation of journeys.
- 1.958 In addition, infrastructure to be delivered as a part of this spatial strategy includes the RTS linking Braintree Town, Braintree Freeport, and Colchester. This is considered likely to form an attractive alternative to using the private car for shorter trips.
- 1.959 It is considered likely that the developments at Halstead and Hatfield Peverel will both be in close proximity to existing town centres. However as the exact location of the development at these two settlements is not known, uncertainty arises as to whether these will be within acceptable distance to facilitate sustainable modes of travel.
- 1.960 As such, this spatial strategy will focus development on sites which can support local centre services. In addition, the provision of the RTS linking Braintree to Colchester and other destinations enhances accessibility to existing services and facilities in Braintree town. Given that this strategy would result in the allocation of a significant number of houses to the Braintree area, it is considered that the positive effects of RTS would be experienced by the majority of new dwellings allocated under this spatial strategy. For this reason, significant positive (++) effects are anticipated in relation to this element of SA7. The uncertainty arises due to the lack of information about the precise location of development sites in Hatfield Peverel and Halstead and from the fact that the exact infrastructure requirements of a development, the capacity of existing

infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 1.961 For longer journeys, sites ALTGC3 and SUE2 are both expected to result in uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns from the site areas. This is the case at the end of the plan period and once fully built out. It is possible growth at Halstead could contribute to increased traffic on the A131 and the A1124. Hatfield Peverel is located on the railway line and has a station but it is also served by the A12 which would provide a convenient route for car travel, particularly if residents are commuting elsewhere. Further uncertainty arises in relation to the new Hatfield Peverel residents using rail as it will be affected by the proximity of the development to the rail station (and any access barriers such as the railway or strategic roads), and whether there will be sufficient rail capacity to accommodate growth at this settlement.
- 1.962 Nevertheless, despite unfavourable current commuting patterns, the provision of the RTS linking the sites to Braintree town, Braintree Freeport and Colchester is likely to improve the potential for journeys outside the site boundary to be made using sustainable modes, resulting in uncertain minor positive effects (+?) in relation to this SA objective for this spatial option. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out. Uncertainty arises due to the difficulties in predicting how and where people will travel.

Conclusion

- 1.963 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in uncertain significant positive effects (++?) in relation to shorter journeys, and minor positive yet uncertain effects (+?) in relation to longer journeys).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.964 All sites are considered likely to result in uncertain minor positive effects (+?) in relation to this SA objective, both at the end of the plan period and once fully built out. For ALTGC3 and SUE2, the site information forms indicated that either site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, both sites are reliant on external funding or other improvement in viability to deliver transport infrastructure. Further uncertainty is also present at the settlement locations for proportionate growth. There is a lack of evidence that the Bypass for Halstead is viable with the level of development proposed, while at Hatfield Peverel, no specific infrastructure requirements have been set out. There is no evidence that the combination of the sites to form a single spatial strategy will negate the requirement for external funding or other improvement in viability. As such, the anticipated effects are not considered likely to change.

Conclusion

- 1.965 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.966 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.967 Sites ALTGC3 and SUE1 are both considered likely to result in uncertain significant negative effects (--?) in relation to this SA objective, both at the end of the plan period and once fully built out. This is due to their proximity to heritage assets, where development may result in adverse effects. The uncertainty arises because the details of any mitigation strategies of the potential effects will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is present for proportionate growth at Hatfield Peverel and Halstead in relation to heritage assets as the specific location of development at these locations is not known at this stage.
- 1.968 The combination of the sites into a single spatial strategy is not considered likely to change the anticipated effects in relation to these designated heritage assets.

Effects on townscape

- 1.969 The boundary of site ALTGC3 lies less than 200m from the settlement of Coggeshall (which includes the Coggeshall Conservation Area), leading to anticipated uncertain effects (?) on townscape depending on the quality of design at the new development. Similarly, uncertain effects (?) are expected at Hatfield Peverel in relation to townscape, as the growth planned for the end of the plan period will increase the size of the settlement by over 10%. Site SUE2 lies within 500m of the town of Braintree, however Braintree is of a sufficient size relative to the proposed growth at the end of plan period (2,500 dwellings) to assume that development will not significantly change the character of the existing town, resulting in negligible effects (0). Halstead is of a sufficient size that the growth planned for the end of the plan period is not expected to significantly change the existing townscape.
- 1.970 The combination of the sites into a single spatial strategy is not considered likely to change the aforementioned effects in relation to townscape and, taking a precautionary approach, uncertain effects are anticipated.

Conclusion

- 1.971 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and uncertain effects (?) in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.972 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition, the site information forms for both sites confirm that they can deliver policy compliant sustainable development. As such, sites ALTGC3 and SUE2 were considered likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out. The combination of the sites into a single spatial strategy is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms. It is assumed that proportionate growth at Hatfield Peverel and Halstead will also be delivered in line with the above considerations.

Conclusion

- 1.973 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.974 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.975 Site ALTGC3, site SUE2 and the settlement of Hatfield Peverel are all located entirely outside of source protection zones (SPZs). However, SPZs are present within Braintree and affect land

around Halstead. As Halstead forms part of this spatial strategy, uncertain minor negative effects (-?) are expected in relation to water quality. The uncertainty arises as specific design and mitigation may be able to overcome impacts.

Water scarcity and water treatment

- 1.976 With regard to water supply, the Braintree WCS identified that there is sufficient water supply accounting for the growth that was planned in 2017, up to the end of the plan period. However, it should be noted that specific growth at ALTGC3, SUE2, Hatfield Peverel and Halstead was not included as part of the WCS.
- 1.977 The Integrated Water Management Strategy (IWMS)⁴⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to site ALTGC3, but with uncertainty due to the fact that the effects of these sites were not specifically assessed as part of the study.
- 1.978 In regard to water treatment, the site assessment found that it was not clear whether ALTGC3 would be served by the Bocking or Coggeshall WRC. The Bocking WRC (following upgrades) would be able to cater to growth at ALTGC3 during the plan period. Whilst the WCS indicates that expansion would be possible at Coggeshall to cater to growth during the plan period, the growth assumed was only 1,350 additional dwellings. For SUE2, the site assessment found that there is sufficient headroom in wastewater facilities to cater to growth up to 2033. The water cycle study for Braintree indicates that Halstead WRC (following upgrades) would be able to cater to the proportionate growth outlined in this strategy up to the end of the plan period, but there is insufficient evidence to suggest that wastewater facilities could cater to growth at Hatfield Peverel.
- 1.979 Given that the evidence does not sufficiently demonstrate whether or not the scale of growth proposed at all sites can be delivered, the same uncertainty exists when combining the sites into a spatial strategy, and therefore effects in relation to water scarcity and water treatment are uncertain (?).

Conclusion

- 1.980 Uncertain minor negative effects (-?) are expected in relation to water quality, both at the end of the plan period and once fully built out and uncertain effects (?) are expected in relation to water scarcity and treatment, for both the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.981 A negligible proportion of ALTGC3 (less than 1%) intersects with Environment Agency Flood Zones 2 and 3. In addition, the entire site is identified as being at low risk of ground water flooding, and only small areas of the site (<25%) are at risk of surface water flooding. There are also negligible levels of flood risk within SUE2, Hatfield Peverel and Halstead.
- 1.982 As such, this spatial strategy is likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

SA13: To improve air quality

- 1.983 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

⁴⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Intersection with AQMAs

- 1.984 There are no AQMAs in Braintree and therefore none of the dwellings allocated under this spatial strategy will intersect with an AQMA.
- 1.985 As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.986 As set out above, there are no designated air quality management areas with Braintree and, as such, the most popular commuting destinations for residents in the area of ALTGC3, SUE2, Hatfield Peverel and Halstead generally do not involve travelling through an AQMA. Therefore, uncertain negligible effects (0?) are expected for this spatial strategy, both at the end of the plan period and once fully built out. The effects are uncertain as it is not known exactly how and where people will travel.

Conclusion

- 1.987 This spatial strategy is anticipated to result in negligible effects (0) at the end of the plan period and once fully built out in relation to intersection with AQMAs, and uncertain negligible effects (0?) in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.988 The area around the site ALTGC3 has been assessed by landscape officers of the NEAs and has been found to be of either strong or moderate-strong landscape character (depending on the LCA in question). Land at Halstead was found to be of strong landscape character in the area of Colne River Valley, while land at SUE2 was found to be of moderate strength landscape character. Hatfield Peverel is not located near any landscape designations, and no evidence has been provided which assesses the landscape character around the settlement. In light of the above, and with the stated assumptions, significant negative effects with uncertainty (--?) are expected for this spatial strategy in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping, in addition to the lack of evidence for Hatfield Peverel.
- 1.989 Given these effects relate to the physical extent of the sites and the design of the development within them, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.990 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.991 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.992 Approximately 83% of ALTGC3 and 90% of SUE2 are located within a mineral safeguarding area. As such, uncertain significant negative effects (--?) are expected, as development of these sites would result in the sterilisation of a significant amount of mineral resources. This may also be the case at Hatfield Peverel and Halstead, where there are mineral safeguarding areas located in the vicinity of the settlements. The uncertainty arises as it may be possible to extract some or all of the mineral resources before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown. Given these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

High quality agricultural land

- 1.993 Approximately 81% of ALTGC3 is located on Grade 1 or Grade 2 agricultural land and the entirety of SUE2 is located on Grade 2 agricultural land, which means that development of either of these sites would result in the loss of a significant amount of high quality agricultural land. Development at Halstead and Hatfield Peverel is also likely to result in the loss of some Grade 1-3 agricultural land around the settlement, similarly resulting in significant negative effects by the end of the plan period.
- 1.994 Overall, significant negative effects are expected for this spatial strategy in relation to agricultural land, both at the end of the plan period and once fully built out. Given that these effects relate to the physical extent of the sites, the combination of the sites into a spatial strategy is not considered likely to change these effects.

Conclusion

- 1.995 This spatial strategy is anticipated to result in uncertain significant negative effects (--) in relation to mineral resources, and significant negative effects (--) in relation to agriculture, both at the end of the plan period and once fully built out.

West 11: Monks Wood Garden Community (ALTGC3) + Proportionate Growth

- 1.996 This spatial strategy recorded significant positive effects for:
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
 - SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, both within the plan period and when fully built out)
- 1.997 This spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
 - SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
 - SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
 - SA15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

East 1: Proportionate (percentage-based) growth

- 1.998 The rationale behind each of the proportionate growth scenarios (West 1 & 2 and East 1 & 2) is to test the potential for accommodating the development currently expected to be delivered through Garden Communities within the current plan period on land in and around existing settlements – thus avoiding the need to establish any new ‘stand-alone’ settlements or other strategic-scale developments, at least until 2033. The Inspector has specifically requested that this option is assessed as part of the further SA work to help demonstrate whether or not a strategy involving the creation of new settlements is justified in the current plan period.
- 1.999 Under this particular option, it is envisaged that all defined settlements in North Essex across all three authorities, regardless of their position within the Local Plan settlement hierarchies would accommodate a pro-rata share of the remainder of the North Essex housing requirement for the period 2019 to 2033 including an element of flexibility – a level of approximately 40,000 homes. This represents an approximate 18% increase in dwelling stock above 2019 levels and under this percentage-based approach, each defined settlement would accommodate an 18% increase in housing over 14 years (2019-2033).
- 1.1000 Taking into account homes already expected on sites with planning permission or otherwise allocated in Section 2 plans, many of the existing settlements would not need to accommodate any additional housing as they are already expected to achieve or exceed their 18% dwelling stock quota through existing proposals. There are however some settlements that would be expected to accommodate additional housing allocations under this percentage-based proportionate approach to achieve the remainder of the requirement. For the settlements in the area east of Colchester, these are summarised, in broad terms, in the table below.

Table 1.24: Percentage Based Growth Alternative to Garden Communities

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Clacton	1,000-2,000	N/a	Existing employment allocations in Section 2 Local Plans to be retained and possibly expanded. The Section 2 Local Plan for Tendring already includes a significant over-allocation of employment land to bring choice to the market. Employment land proposals for Clacton and Harwich in particular would have to be brought forward at an accelerated rate to support additional housing growth proposed under this scenario.	The link road currently proposed for north Clacton as part of the Hartley Gardens Strategic Development in Tendring’s Section 2 Local Plan would need to be funded and brought forward early to enable the rate of development to be accelerated and to enable the additional 1,000-2,000 homes to be delivered before 2033.
Harwich	500-999 (each)	N/a		
Frinton/Walton				
Brightlingsea	300-499	N/a		
West Mersea	200-299 (each)	N/a		
Wivenhoe				
St. Osyth	100-199 (each)	N/a	Some of the other additional developments	Increased development around Tendring’s coastal towns would also require the £1million
Thorrington				

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions	
			might be accompanied by a range of new small employment areas or expansion of existing areas.	upgrade to the A133/A120 roundabout at Frating to be undertaken early within the current plan period.	
Little Clacton	50-99 (each)	N/a			Generally, infrastructure proposed as a result of proposals in the Section 2 Local Plans to be retained and, where necessary, expanded or accelerated.
Dedham					
Ardleigh					
Bradfield					
Kirby-le-Soken					
Little Oakley					
Dedham Heath					
Abberton and Langenhoe	10-49 (each)	N/a			
Boxted					
Beaumont-Cum-Moze					
Great Bromley					
Great Holland					
Little Bentley					
Little Bromley					
Ramsey Village					
Tendring					
Wix					
Wrabness					
East Mersea					
Fingringhoe					

1.1001 Baseline data in relation to this spatial strategy has been provided by the NEAs. Please see Chapter 2 for information about the existing dwelling stock in each settlement and the required additional dwellings as defined under the proportionate growth scenario. This data has been used to inform this assessment.

Relevant Context

- 1.1002 This 'East' proportionate growth alternative to garden communities will result in increasing allocations to various existing settlements, in a manner informed by their current scale. This growth would be in addition to the planning commitments, and proposed allocations in the submitted Section 2 Local Plans. In particular, the following settlements would be expanded under this spatial strategy as set out in Table 1.25.

Table 1.25: Growth at relevant settlements under this spatial strategy

Settlement	Number of dwellings (2019)	Dwellings to be constructed through commitments or Section 2 Local Plan allocations	Maximum number of dwellings allocated under East 1	Maximum final dwelling number at the end of the plan period accounting for this spatial strategy
Clacton-on-Sea	28,328	2,858	2,000	33,186
Harwich & Dovercourt	9,666	804	999	11,469
Frinton, Walton & Kirby Cross	10,595	897	999	12,491
Brightlingsea	4,127	139	499	4,765
West Mersea	3,576	224	499	4,099
Wivenhoe	3,560	302	299	4,161
St. Osyth	2,435	293	199	2,927
Thorrington	918	20	199	1,137
Total	63,205	5,537	5,493	74,235

- 1.1003 Other settlements in the 'East of Colchester' area are anticipated to grow by a maximum total of 1,350 dwellings.

Assessment of Effects

- 1.1004 This section sets out the detailed assessment of the likely effects of strategy East 1: proportionate (percentage-based) growth.
- 1.1005 The table below summarises the anticipated effects of this spatial strategy.

Table 1.26: Proportionate growth assessment summary

SA Objective	Anticipated Effects from Strategy West 1 at the end of the plan period
SA1: Create safe environments which improve quality of life, community cohesion	--?/?
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	--
SA3: Improve health/reduce health inequalities	--?/0
SA4: To ensure and improve the vitality & viability of centres	-

SA Objective	Anticipated Effects from Strategy West 1 at the end of the plan period
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	+?
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	-?/-?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	-?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+?
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0
SA13: To improve air quality	0/-?
SA14: To conserve and enhance the quality of landscapes	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--

1.1006 Detailed commentary on the effects identified in this table is set out below.

SA1: Create safe environments which improve quality of life, community cohesion

1.1007 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

1.1008 This proportionate growth alternative to garden communities will lead to increased growth compared to that currently proposed in the submitted Section 2 Local Plans. It is considered likely that this will result in all of the settlements required to accommodate an additional 100 or more dwellings increasing by more than 10% compared to their current scale. It is anticipated that this may cause changes to the existing character of settlements, and this may be perceived negatively by existing residents. This is considered likely to result in significant negative yet uncertain (--?) effects in relation to this element of SA Objective 1. The uncertainty arises as community reaction to new development is likely to vary from person to person and therefore the views may not necessarily be negative.

Effect on the new community

- 1.1009 The policies within the submitted Section 1 Local Plan set out that all new development is anticipated to be designed in a sustainable manner, which includes community and stakeholder empowerment in the design and delivery of the site; establishing a sustainable funding and governance mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets at an early stage of the delivery of development; provide sociable, vibrant and walkable neighbourhoods with equality of access for all; and Provide measures to support the new community. However, these aspirations have been prepared on the basis of development of large scale, strategic sites, which can offer greater opportunity to deliver these ambitions. Proportionate growth is likely to result in development being provided at smaller sites where, due to lower levels of profit, investment and scrutiny through the planning process, these ambitions are likely to be more difficult to achieve. As such it is not known whether development in accordance with this spatial strategy would be able to foster a sense of community in an effective manner, resulting in uncertain (?) effects.

Conclusion

- 1.1010 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and uncertain (--?/?).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.1011 The Colchester Viability Study⁴⁶ indicates that development in Colchester Borough can viably provide policy compliant development, including affordable housing provision. It is assumed that all growth under this spatial strategy within Colchester will therefore be viable and able to support affordable housing.
- 1.1012 However, in accordance with the viability report for the submitted Tendring Section 2 Local Plan⁴⁷, Clacton-on-Sea and Frinton & Kirkby Cross are both within the 'Eastern' Value Area of the district. More than half of the additional houses allocated under this strategy are located at these settlements. According to the viability report, the eastern area is where viability is the most marginal and there is, therefore, a higher likelihood of needing to negotiate a lower level of affordable housing on a case-by-case scenario (as has been the case at Rouses Farm 17/01229/OUT for 950 dwellings where 20% affordable housing has been negotiated). The Council's housing trajectory contained within its latest SHLAA work and the submitted Section 2 Local Plan reflects the advice of developers over the rate of completions expected on certain sites. Furthermore, since 2001, housebuilding around Clacton-on-Sea has averaged around 200 homes a year, so to deliver a total of approximately 5,000 dwellings at Clacton within the plan period would require an approximate 180% increase in the rate of housebuilding which, whilst not impossible, is likely to be highly challenging.
- 1.1013 As such, significant concerns arise about the potential for this spatial strategy to provide development at the appropriate rate to meet the housing requirement, and to provide affordable housing to policy compliant levels in the less viable areas. In addition, this strategy may result more applications which are under the threshold for affordable housing provision.
- 1.1014 In accordance with the above, significant negative (--) effects are anticipated in relation to this SA objective.
- 1.1015 Because this proportionate growth spatial strategy allocates relatively small amounts of housing to numerous settlements, it is considered that this may result in development coming forward as small scale applications, which may not meet the threshold for affordable housing provision. This may result in reduced potential to secure affordable housing through the planning process – however this is uncertain and has not affected the assessment outcome in relation to this SA Objective.

⁴⁶ https://www.braintree.gov.uk/downloads/file/6947/cbc0001_colchester_economic_viability_study_june_2017

⁴⁷ https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/Economic%20Viability%20Study%20-%20June%202017.pdf

Conclusion

- 1.1016 Overall, this spatial strategy is anticipated to result in significant negative effects in relation to this SA objective, both at the end of the plan period and once fully built out.

SA3: Improve health/reduce health inequalities

- 1.1017 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.1018 In terms of access to health facilities, all of the settlements which would be expected to increase by an additional 100 dwellings or more currently have primary health services and facilities, with the exception of Thorrington. The Infrastructure Delivery Plan (IDP) for Tendring⁴⁸, sets out that there is scope to expand some of the existing health / GP facilities in Tendring. There are existing GPs and Doctors Surgeries in Clacton-on-Sea, Harwich and Dovercourt, Frinton, Walton & Kirby Cross, and several other settlements in the district. However the IDP contains little detail about the deliverability of providing expanded health facilities, setting out that each significant site will be reviewed, presumably at a later stage of the planning process.
- 1.1019 Furthermore, many of the settlements which will be expanded under this spatial strategy include formal and informal recreation spaces, however these will come under increasing pressure from these developments. The IDP does not set out how recreational facilities will be provided to support growth, stating that "it is not possible to assign costs the provision".
- 1.1020 It is notable that this proportionate growth spatial strategy would allocate approximately a fifth of the total housing to locations which do not presently offer primary healthcare facilities or formal recreation facilities (according to GIS based data provided by the NEAs). This is likely to result in new houses that may be dependent on road based transport to access primary healthcare and recreational facilities, and also to result in further pressure on existing facilities in settlements where these currently exist. This is considered likely to result in significant negative yet uncertain (---?) effects. The uncertainty is identified because a more up to date evidence base may show that sufficient expansion of facilities is possible.

Exposure to noise pollution

- 1.1021 A review of the Defra strategic noise maps shows that the majority of the settlements in this area are not significantly constrained by areas of high exposure to noise pollution. As such, noise pollution is not considered likely to significantly affect health and wellbeing of occupants of new development provided at these settlements, resulting in negligible effects (0).

Conclusion

- 1.1022 Significant negative yet uncertain effects are considered likely in relation to accessing health and recreation facilities, due to the dispersed nature of the spatial strategy which is likely to lead to a fifth of the total allocation being reliant on road based transport to access these. These effects also result from the fact that the IDP does not demonstrate whether existing facilities will be able to accommodate the additional growth proposed by this strategy – the uncertainty about this is recognised. In relation to exposure to noise pollution, negligible effects are anticipated. Overall therefore the effects are significant negative yet uncertain and negligible (---/0).

SA4: To ensure and improve the vitality & viability of centres

- 1.1023 This proportionate growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.1024 This spatial strategy will increase development at some settlements which include town or local centres as defined in the submitted Section 2 Local Plans. Indeed, under this spatial strategy

⁴⁸ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

approximately 77% of new dwellings will be allocated to settlements which have a defined town or local centre. It is considered likely that by being in the same settlement as these centres, that this will facilitate access to them (although this is uncertain as specific development locations are not identified). However, this conversely means that almost a quarter of the additional houses allocated under this spatial strategy will be in locations away from policy defined centres. This is considered likely to reduce the potential for residents of the new houses in these settlements to access services, facilities and employment opportunities at the centres.

- 1.1025 It is assumed that small scale employment areas may accompany the dispersed development which is proposed under this spatial strategy, which is considered likely to compete with the vitality and viability of existing centres.
- 1.1026 As such, it is considered that this spatial strategy may result in a development form which competes with existing facilities and services, and reduces potential accessibility to them, resulting in minor negative (-) effects in relation to this SA Objective.

Conclusion

- 1.1027 The effects of this spatial strategy are expected to minor negative (-) in relation to SA objective 4 within the plan period, no effects following the plan period are defined.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.1028 This proportionate growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.1029 Specifically, this spatial strategy will increase development at settlements which include town or local centres as defined in the submitted Section 2 Local Plans and / or strategic employment sites. Indeed, under this spatial strategy approximately 77% of new dwellings will be allocated to such settlements. It is considered likely that by being in the same settlement as employment opportunities, that this will facilitate access to them. However, this conversely means that almost a quarter of the additional houses allocated under this spatial strategy will be in settlements which do not offer significant employment opportunities, which is likely to restrict access for those persons in these dwellings.
- 1.1030 It is assumed that small scale employment areas may accompany the dispersed development which is proposed under this spatial strategy, which may help to provide employment opportunities nearer to homes. However due to the distribution of these employment sites away from centres, they are likely to be less accessible by sustainable modes and are likely to increase reliance on private, road based vehicles.
- 1.1031 It is also noted that this spatial strategy would increase development at Harwich and Dovercourt, which may support businesses at Harwich Port which is an international gateway.
- 1.1032 Overall, it is considered that this spatial strategy will increase the size of settlements which offer existing employment opportunities, thereby helping to support these, and will also result in smaller employment sites coming forward. In addition, allocating additional development to Harwich is considered likely to help to support the businesses related to the port. Having said this, uncertainty is recognised due to the fact that the specific location of development sites is not defined, and therefore there may be unidentified barriers between the sites and the centres and employment opportunities. It is also recognised that approximately a quarter of new houses will not be based in locations where there are significant existing employment opportunities.

Conclusion

- 1.1033 The effects of this spatial strategy are expected to minor positive yet uncertain (+?) in relation to this SA objective within the plan period, no effects following the plan period are defined.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.1034 A number of the settlements which are anticipated to be expanded, under this spatial strategy, to an extent greater than the submitted Section 2 Local Plans have allocated are within SSSI impact risk zones. Several of the settlements also contain areas which are designated as internationally, nationally or locally important wildlife or geological sites or ancient woodland.
- 1.1035 Specifically, West Mersea lies at the confluence of the Colne and Blackwater Estuaries. Both the Colne and Blackwater Estuaries are Special Protection Areas, Ramsar sites and part of the Essex Estuaries SAC. Development of this settlement at the scale proposed (an increase of up to just over 500 new homes in total) is considered likely to lead to increased disturbance of these designations.
- 1.1036 Furthermore, Wivenhoe is a riverside town which is bordered by the River Colne to the west. The Colne Estuary Special Protection Area and Ramsar site, which is also part of the Essex Estuaries SAC, and is a Marine Conservation Zone is located to the south of the town. Furthermore the Upper Colne Marshes SSSI falls to the immediate southwest. Development in Wivenhoe at the scale required by this spatial strategy (an increase of up to 600 homes) is considered likely to lead to increased disturbance of these designations.
- 1.1037 In addition, Clacton-on-Sea includes some areas which are identified as local wildlife sites, and in addition there are some SSSIs surrounding (and within) the town which may be affected by development here. These include, to the east, the Holland Haven Marshes and Holland on Sea Cliff SSSIs, to the south, the Clacton Cliffs and Foreshore and Holland on Sea Cliffs SSSIs. It is considered possible that the amount of development which would be allocated to Clacton under this strategy (up to just under 5,000 new homes) could affect these SSSIs and local wildlife sites.
- 1.1038 There are several areas designated as local wildlife sites in Brightlingsea, which in addition, is also close to the Colne Estuary – it is considered that the amount of development which would be allocated to Brightlingsea under this spatial strategy (over 600 new houses) may affect the international designations nearby (SAC, SPA, Ramsar, MCZ), and this is also designated as SSSI.
- 1.1039 Finally, the development of approximately 1800 dwellings at Harwich and Dovercourt could potentially also affect designations in this area, including Hamford Water (SAC, SPA, Ramsar, Important Bird Area, Marine pSPA, SSSI), the Stour and Orwell Estuaries (Ramsar, SPA, Important Bird Area, SSSI), Little Oakley Channel Deposit SSSI (a geological SSSI), Stour and Copperas Woods SSSI and the Harwich Foreshore SSSI. There are also a number of local wildlife sites within these settlements which may be affected.
- 1.1040 Development at some of the other, settlements such as Frinton, Walton & Kirby Cross, Kirkby-le-Soken, Little Oakley, St Osyth, Bradfield and Dedham Heath may also affect nearby international designations.
- 1.1041 It is important to note however, that site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirements for all development to contribute to a Recreational disturbance Avoidance and Mitigation Strategy) mitigation measures may overcome the effects, but this is not known. However, it is understood that Development of the scale proposed under this option has not been considered as part of the development of the Essex Coast RAMS.
- 1.1042 In accordance with the above, significant negative yet uncertain (--) effects are anticipated in relation to this SA objective. The uncertainty arises due to the potential for mitigation to change anticipated effects.

Conclusion

- 1.1043 The effects of this spatial strategy are expected to uncertain significant negative (--) in relation to this SA objective within the plan period, no effects following the plan period are defined.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.1044 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.1045 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), an implication of this spatial strategy is that approximately a quarter of the growth allocated will be at settlements which do not have a defined local centre or strategic employment site. Furthermore, several of these settlements do not offer primary schools and many of them do not offer secondary schools. There is also unlikely to be sufficient capacity at existing schools to support growth at these locations.
- 1.1046 It is therefore considered that this spatial strategy will result in a significant amount of new development in locations where people will not be in close proximity to services, facilities and employment opportunities. It is therefore likely that in many locations the new residents will need to travel outside of the settlement where the new houses are built to access services, facilities and employment opportunities, which is likely to result in a greater distance needing to be travelled and comparatively poorer infrastructure for sustainable modes (e.g. footways, crossings, etc.) for these journeys.
- 1.1047 As such, in general terms, this is considered likely to mean that new residents of the majority of houses allocated under this strategy are likely to rely more on private, road based travel. This is likely to increase congestion. It is recognised that people could utilise public transport however due to the dispersed nature of the settlements which would be expanded under this spatial strategy, this is likely to be relatively low frequency services which may hinder uptake.
- 1.1048 In accordance with the above, minor negative yet uncertain (-?) effects are anticipated in relation to this SA objective. The uncertainty arises because of the difficulties in predicting where people will choose to travel to access services, facilities and employment, and how they will choose to travel there.

Longer journeys

- 1.1049 It is considered that the most popular sustainable travel mode for longer journeys outside the settlements identified under this spatial strategy to be made by is public transport, on either bus or rail. This is in particular because data from NOMIS indicates that the top five out-commuting destinations from Tendring are Colchester Borough, Ipswich, Westminster, Braintree and Chelmsford. For Colchester borough, the top five destinations are Tendring District, Braintree District, Westminster, Chelmsford and Ipswich. These are all too far away to facilitate walking or cycling.
- 1.1050 Importantly, all of these destinations are connected to the railway network. In terms of rail, this spatial strategy would allocate development to locations which both have and do not have access to the railway line. Specifically, Clacton-on-Sea, Frinton, Walton & Kirby Cross, Wivenhoe, Wrabness and Harwich & Dovercourt have access to railway stations, however even if development is located at these settlements it does not necessarily mean that it will be within a suitably close distance to facilitate the use of rail. It is also important to note that this would result in around 40% of new growth being located in settlements which are not readily accessible to the railway network. Additionally, services on this railway line are currently infrequent, which creates greater uncertainty over whether there would be sufficient rail capacity to support development.
- 1.1051 In terms of buses, this spatial strategy would allocate a significant number of dwellings (around a quarter) to smaller more rural settlements, which are likely to have less frequent (and therefore less attractive) bus opportunities than larger settlements, which is likely to hinder use of buses.
- 1.1052 Accordingly it is anticipated that this spatial strategy is likely to increase dependency on private road based transport to access employment and services outside of the settlement which would be expanded under this spatial strategy, resulting in minor negative yet uncertain (-?) effects. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there.

Conclusion

- 1.1053 This spatial distribution will result in a significant proportion its overall housing provision being located in settlements which do not offer a high level of local services and facilities, and do not offer frequent and attractive public transport facilities. As such, minor negative yet uncertain effects are anticipated in relation to promoting sustainable travel behaviour for both short and

long distance trips (-?/-?). Uncertainty arises due to the difficulties in predicting where people will choose to work and how they will choose to travel there.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.1054 The implications of this spatial strategy in relation to promoting accessibility is set out in the commentary relating to SA7. This is not repeated here. Instead, the assessment under this SA objective relates to the ability of this proportionate growth spatial strategy to make efficient use of land and ensure the necessary infrastructure is delivered.
- 1.1055 In relation to efficient use of land, it is considered likely that development proposals at existing settlements will be required to reflect the general character of that settlement⁴⁹, in terms of factors that can influence density – such as scale, massing and plot sizes. Since this strategy is likely to result in development around the edges of settlements, it is considered that development density and efficiency of land use will reflect local circumstances. The local circumstances in relation to scale, massing and plot sizes of each settlement is not known, and therefore the performance of this spatial strategy in relation to efficient use of land is uncertain.
- 1.1056 As set out in the commentary for SA2 (housing provision), the Colchester Viability Study⁵⁰ indicates that development in Colchester Borough can viably provide policy compliant development, including affordable housing provision. It is assumed that all growth under this spatial strategy within Colchester will therefore be viable and able to support infrastructure contributions.
- 1.1057 However the Tendring Viability Study⁵¹ identifies that Clacton-on-Sea and Frinton & Kirkby Cross are both within the 'Eastern' Value Area of the district. A significant portion of the development allocated under this spatial strategy (about a third) is focussed to these settlements. Due to this low level of viability, concerns arise in relation to the capability of this spatial strategy to deliver the supporting infrastructure.
- 1.1058 In accordance with the above, minor negative yet uncertain (-?) effects are anticipated in relation to this SA objective. The uncertainty arises because the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure that would be delivered will depend on specific proposals coming forward; and due to the uncertainty about development density.

Conclusion

- 1.1059 The effects of this spatial strategy are expected to uncertain minor negative (-?) in relation to this SA objective within the plan period, no effects following the plan period are defined.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.1060 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.1061 This spatial strategy directs growth to settlements which include designated heritage assets including scheduled monuments, registered parks and gardens, listed buildings and conservation areas.
- 1.1062 In the absence of evidence about the significance of, and potential impact of developing near to these heritage assets, it is considered possible that development in these settlements may result in impacts to the setting of heritage assets. Although the site specific location of the development which would be allocated under this spatial strategy is not known, the significant number and

⁴⁹ In accordance with the principles set out in Draft Section 1 Policies SP6 & LPP37.

⁵⁰ https://www.braintree.gov.uk/downloads/file/6947/cbc0001_colchester_economic_viability_study_june_2017

⁵¹ https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/Economic%20Viability%20Study%20-%20June%202017.pdf

distribution of heritage assets within the plan area are considered to make it likely that some growth would be within 500m of a designated heritage asset. As such, significant negative yet uncertain (--) effects are anticipated in relation to this element of SA objective 9. The uncertainty arises because of the assumption about the location of development relative to heritage assets, and because site specific design and mitigation may suitably mitigate impacts.

Effects on townscape

- 1.1063 As set out in the commentary which relates to SA1 (Community Cohesion), this spatial strategy will result in some settlements expanding by more than 10% of their current size within the plan period. It is anticipated that this is likely to have a significant effect on townscape, however, whether this is positive or negative will depend on the siting and design of this development. These details are not known at this stage and as such, the effects in relation to this element of SA9 are uncertain (?).

Conclusion

- 1.1064 Overall, this spatial strategy is considered likely to result in mixed significant negative yet uncertain, and uncertain (--) effects.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.1065 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and the implications this has on carbon emissions from transport. To avoid duplication, the effects in relation to these matters are not reassessed under this SA objective.
- 1.1066 Instead, assessment under this SA objective relates to the built form of development, which is influenced by planning policy, appeal decisions and other material considerations such as the NPPF. In accordance with draft policies in the submitted Section 1 Local Plan, it is assumed that all development will be required to:
- Encourage appropriate energy conservation and efficiency measures⁵².
 - Include renewable energy technology to provide at least 20% of the projected energy requirements of major developments, and 10% of minor developments, unless viability evidence demonstrates otherwise⁵³.
 - Avoid flood zones, be flood resilient and provide for sustainable urban drainage⁵⁴.
- 1.1067 It is considered that the proportionate growth strategy may result in development being provided through non-major planning applications, which currently have a lower target for renewable energy generation than major applications. This may lead to less renewable energy than other strategies which focus on larger development sites. Furthermore, it is also considered that proportionate growth is considered likely to result in the delivery of small development sites, which will create difficulties in delivering centralised heat / hot water networks, which are a very effective way of reducing the carbon emissions of new development. Whilst these factors may influence matters relating to this SA objective, this is not known, raising uncertainty.
- 1.1068 Due to the principles already present in draft policy, which is considered likely to apply to all sites regardless of location, it is considered that this spatial strategy is likely to result in minor positive yet uncertain (+) effects in relation to this SA objective. The uncertainty arises due to the potential for this spatial strategy to result in non-major applications which may reduce the overall potential for energy efficiency and carbon savings.

Conclusion

- 1.1069 The effects of this spatial strategy are anticipated to be uncertain minor positive (+) in relation to this SA objective.

⁵² Consistent with policy LPP75 of the Tendring Section 2 Local Plan

⁵³ Consistent with policy LPP77 of the Tendring Section 2 Local Plan

⁵⁴ Consistent with policies LPP78, 79, and 80 of the Tendring Section 2 Local Plan

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.1070 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.1071 Source protection zones are present within Colchester and Tendring and with particular relevance to the settlements to which development is allocated under this spatial strategy, intersect with Dedham only.
- 1.1072 As such, it is considered that development at Dedham as would be required by this spatial strategy may result in impacts to these zones, however, Dedham is to accommodate up to 99 dwellings which is a small proportion of the overall housing allocated by this strategy. As such, negligible (0) effects are anticipated in relation to this element of SA11.

Water scarcity and water treatment

- 1.1073 With regard to water supply, and waste water treatment, the Colchester Water Cycle Study⁵⁵ and Tendring Water Cycle Study⁵⁶ do not review the potential implications of this proportionate growth spatial strategy, and therefore it is uncertain whether there would be sufficient water and waste treatment provided to meet the requirements of this spatial strategy. Therefore, the effects in relation to this are uncertain (?).

Conclusion

- 1.1074 This spatial strategy is considered likely to result in negligible and uncertain effects (0/?), in relation to this SA objective.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.1075 Whilst there are significant areas within Colchester and Tendring which are identified as flood zone 2 or 3, it is considered likely, from a review of the settlements, that there are sufficient opportunities for development to avoid these areas, so that the significant majority (if not all) of the development required under the proportionate growth spatial strategy could be located in flood zone 1.
- 1.1076 In addition, none of the settlements required to expand under this spatial strategy are significantly constrained by medium or high risk of groundwater flooding.

Conclusion

- 1.1077 Overall, it is considered likely that this spatial strategy will result in negligible (0) effects in relation to this SA objective.

SA13: To improve air quality

- 1.1078 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.1079 None of the settlements which are required to increase in size under this spatial strategy contain AQMAs. As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.1080 Colchester, Chelmsford, Ipswich and Westminster are within the top five most popular out-commuting destinations for Tendring residents. These all have defined AQMAs. Given that this proportionate growth allocates development based on the current settlement size, it is considered

⁵⁵ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

⁵⁶ https://www.braintree.gov.uk/downloads/file/7115/tdc014_tendring_district_council_water_cycle_study_sept_2017

appropriate to assume that proportionate growth would carry on existing trends, and therefore it is likely to increase the number of people commuting to these destinations.

1.1081 Also, it is considered that development around Colchester (for example at Dedham, West Mersea and Wivenhoe) is likely to result in some increased traffic in Colchester town centre, which is identified as AQMAs.

1.1082 As such, this is considered likely to result in minor negative yet uncertain (-?) effects. The uncertainty arises as it is not known exactly how and where people will travel.

Conclusion

1.1083 This spatial strategy is considered likely to result in mixed negligible and minor negative yet uncertain (0/-?) effects.

SA14: To conserve and enhance the quality of landscapes

1.1084 No specific landscape sensitivity information in relation to the effects of this spatial strategy have been provided by the NEAs. However a review of designated landscape assets, including the Dedham Vale AONB which is to the north of Colchester and the Stour Valley Project Area (which is to the north of Colchester and Braintree) identifies that Dedham and Dedham Vale (which are both within the Dedham Vale AONB) are both anticipated to increase in scale under this spatial strategy. Furthermore, Bradfield and Wrabness are also expected to expand, and both lie within the Suffolk Coast and Heaths AONB extension.

1.1085 Furthermore, West Mersea and Wivenhoe are constrained by coastal protection belt and much of Tendring is identified as Coastal Protection Belt and Strategic Green Gap. Development in accordance with this spatial strategy is likely to result in intrusion into these landscape designations.

Conclusion

1.1086 As such, significant negative yet uncertain (--?) effects are anticipated in relation to this SA objective. The uncertainty arises as site specific design and mitigation may reduce impacts to acceptable levels.

SA15: To safeguard and enhance the quality of soil and mineral deposits

1.1087 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

1.1088 A significant portion of the plan area is designated as a mineral safeguarding area due to the significant mineral resources which are present. Due to the fact that the minerals safeguarding areas are closely drawn to the existing settlements, it is considered extremely likely that development in accordance with the proportionate growth spatial strategy will lead to development on areas of mineral resource. It may however be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

1.1089 Much of the district is identified as Grade 1-3 agricultural land. This is also closely drawn to the existing settlements, meaning that development in accordance with the proportionate growth spatial strategy is likely to result in the loss of high quality agricultural land.

Conclusion

1.1090 In accordance with the above, and due to the cumulative effects of loss of mineral resources and high quality agricultural land, it is considered that this spatial strategy will result in significant negative effects (--?/-) in relation to both elements of this SA objective. The uncertainty in relation to mineral resources arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

East 1: Proportionate (Percentage-based) Growth

1.1091 This spatial strategy recorded significant positive effects for:

- None identified

1.1092 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, within the plan period)
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (within the plan period)
- SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, within the plan period)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

East 2: Proportionate (hierarchy-based) growth

- 1.1093 Under this option, it is envisaged that development would be allocated to settlements in North Essex across all three authorities according to their position within the settlement hierarchy with the aim of directing growth towards the most sustainable locations.
- 1.1094 Policy SP2 in the Section 1 Local, which sets out the spatial strategy for North Essex, states that existing settlements will be the principal focus for additional growth across North Essex within the Local Plan period with development being accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area. Under this hierarchy-based growth strategy, this principle is extended to deliver the full housing requirement for North Essex instead of part of the proposed growth being delivered through Garden Communities.
- 1.1095 The hierarchy-based strategy involves 50% of the 40,000 homes between 2019 and 2033 going to the larger 'Tier 1' settlements of Colchester; 20% to 'Tier 2' settlements such as Clacton, Harwich, Witham and Halstead; and 10% to 'Tier 3' settlements such as Frinton, Walton & Kirby Cross; Manningtree, Lawford & Mistley, Brightlingsea. The remaining 15% would be delivered around smaller 'Tier 4' and 'Tier 5' settlements but with growth already accounted for through existing planning permissions and Section 2 housing allocations.
- 1.1096 The Inspector has specifically requested that proportionate growth is assessed as part of the further SA work to help demonstrate whether or not a strategy involving the creation of new settlements is justified in the current plan period. Hierarchy based proportionate growth is a different interpretation to the proportionate growth option outlined under East 1. Appraising two different approaches ensures that proportionate growth has been properly and fully explored. For the settlements in the area east of Colchester, the hierarchy-based distribution of growth is summarised, in broad terms, in the table below.

Table 1.27: Hierarchy Based Growth Alternative to Garden Communities

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Brightlingsea	900-1,000	N/a	Existing Section 2 Local Plan allocations for the Harwich area would need to deliver faster than currently anticipated. Additional employment land circa 3-4ha would be required at Brightlingsea to achieve a level of self-containment – particularly given the town's transport limitations.	Major transport infrastructure improvement for Brightlingsea would be required to enable it to accommodate such a high level of additional development and this might involve re-opening the historic railway line to Wivenhoe or constructing a second access road to the town.
Harwich & Dovercourt	300-400	N/a		
Frinton, Walton & Kirby Cross	100-299	N/a		

- 1.1097 Baseline data in relation to this spatial strategy has been provided by the NEAs. Please see Chapter 2 for information about the existing dwelling stock in each settlement and the required additional dwellings as defined under the proportionate growth scenario. This data has been used to inform this assessment.

Relevant Context

- 1.1098 The Hierarchy-based growth alternative to garden communities will result in increasing allocations to three of the settlements east of Colchester, in a manner informed by their current function in terms of community services and facilities and employment opportunities. In particular, Brightlingsea is anticipated to expand by the largest amount, between 900-1,000 dwellings. Harwich and Dovercourt are also due to expand, by 300-400 dwellings. Finally, Frinton, Walton & Kirkby Cross are anticipated to expand by between 100-299 dwellings. Throughout this assessment, these aggregations of settlements are referred to as individual settlements, due to the fact that because of their relationship and history of development, they generally form contiguous urban areas.
- 1.1099 This strategy allocates housing in addition to the submitted Section 2 Local Plans. For the settlements in the area east of Colchester, the hierarchy-based distribution of growth is summarised, in broad terms, in the table below. This takes into account existing commitments and allocations proposed in the submitted Section 2 Local Plans.

Table 1.28: Total growth of settlements

Settlement	Number of dwellings (2019)	Dwellings to be constructed through commitments or Section 2 Local Plan allocations	Maximum allocation under this spatial strategy	Final dwelling number at the end of the plan period
Brightlingsea	4,127	139	1000	5,266
Harwich & Dovercourt	9,666	804	400	10,870
Frinton, Walton & Kirby Cross	10,595	897	299	11,791

Assessment of Effects

- 1.1100 This section sets out the detailed assessment of the likely effects of strategy East 2: Proportionate (hierarchy-based) growth.
- 1.1101 The table below summarises the anticipated effects of this spatial strategy.

Table 1.29: East 2 Hierarchy-based growth assessment summary

SA Objective	Anticipated Effects from Strategy West 2 at the end of the plan period
SA1: Create safe environments which improve quality of life, community cohesion	--?/?
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	--
SA3: Improve health/reduce health inequalities	?/0
SA4: To ensure and improve the vitality & viability of centres	++?
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures	++?

SA Objective	Anticipated Effects from Strategy West 2 at the end of the plan period
the economic benefits of international gateways	
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/-?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	-?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0
SA13: To improve air quality	0/-?
SA14: To conserve and enhance the quality of landscapes	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	-?/--

1.1102 Detailed Commentary on the effects identified in this table is set out below.

SA1: Create safe environments which improve quality of life, community cohesion

1.1103 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

1.1104 The Hierarchy-based growth alternative to garden communities will lead to increased growth compared to that currently proposed in the submitted Section 2 Local Plans. This will result in all three of the settlements increasing by over 10% in size between 2019-2033. It is anticipated that this may cause changes to the existing character of settlements, and this may be perceived negatively by existing residents. This is considered likely to result in significant negative yet uncertain (--?) effects in relation to this element of SA Objective 1. The uncertainty arises as community reaction to new development is likely to vary from person to person and therefore the views may not necessarily be negative.

Effect on the new community

- 1.1105 The policies within the submitted Section 1 Local Plan set out that all new development is anticipated to be designed in a sustainable manner, which includes community and stakeholder empowerment in the design and delivery of the site; establishing a sustainable funding and governance mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets at an early stage of the delivery of development; provide sociable, vibrant and walkable neighbourhoods with equality of access for all; and Provide measures to support the new community. However, these aspirations have been prepared on the basis of development of large scale, strategic sites, which can offer greater opportunity to deliver these ambitions.
- 1.1106 This spatial strategy is likely to result in development being provided at smaller sites (i.e. less than 2,000 in capacity) where, due to lower levels of profit, investment and scrutiny through the planning process, these ambitions are likely to be more difficult to achieve. As such it is not known whether development in accordance with this spatial strategy would be able to foster a sense of community in an effective manner, resulting in uncertain (?) effects.

Conclusion

- 1.1107 This spatial strategy is considered likely to result in mixed effects, which are significant negative yet uncertain and uncertain (--/?/?).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.1108 The strategy requires 5,000 dwellings to be allocated west of Colchester and 2,500 east of Colchester, making a total of 7,500 dwellings. This approach is proposed to deliver around 1,700 additional homes in the area east of Colchester, which is lower than the 2,500 homes required.
- 1.1109 In addition, the viability report for the submitted Tendring Section 2 Local Plan⁵⁷, sets out that Frinton & Kirkby Cross are both within the 'Eastern' Value Area of the district. Around a quarter of the growth proposed under this strategy is within this area. According to the viability report, the eastern area is where viability is the most marginal and there is, therefore, a higher likelihood of needing to negotiate a lower level of affordable housing on a case-by-case scenario (as has been the case at Rouses Farm 17/01229/OUT for 950 dwellings where 20% affordable housing has been negotiated).
- 1.1110 In addition, several environmental and infrastructure constraints, as set out in this assessment, demonstrate difficulties which may hinder delivery of development at Brightlingsea in particular.
- 1.1111 As such, this spatial strategy will not allocate sufficient housing to meet the objectively assessed need for the NEA plan area, may not result in policy compliant affordable housing delivery due to viability issues and may not be deliverable due to environmental infrastructure constraints.
- 1.1112 As such significant negative effects (--) are anticipated.

Conclusion

- 1.1113 Both at the end of the plan period and once fully built out, this spatial strategy is anticipated to have significant negative effects (--) in relation to this SA objective.

SA3: Improve health/reduce health inequalities

- 1.1114 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

⁵⁷ https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/Economic%20Viability%20Study%20-%20June%202017.pdf

Access to health and recreation facilities

- 1.1115 All three settlements which would be expanded under this spatial strategy currently offer primary healthcare facilities. As such, development is being allocated to locations with existing health facilities, which may facilitate access to these, subject to the site specific location and accessibility - as specific development sites under this strategy have not been identified.
- 1.1116 In terms of expansion to meet needs of new development, the Infrastructure Delivery Plan (IDP) for Tendring⁵⁸, sets out that there is scope to expand some of the existing health / GP facilities in Tendring, but contains little detail about the delivery mechanisms and providing expanded health facilities, setting out that each significant site will be reviewed, presumably at a later stage of the planning process.
- 1.1117 All of the settlements to be expanded include formal and informal recreation spaces, however these will come under increasing pressure from these developments. However the IDP does not set out how recreational facilities will be provided to support growth, stating that "it is not possible to assign costs the provision".
- 1.1118 Due to the lack of evidence about the improvement / expansion of health and recreation facilities to accommodate the demands of new development, and the location of the development to be allocated under this spatial strategy, uncertain (?) effects are identified.

Exposure to noise pollution

- 1.1119 A review of the Defra strategic noise maps shows that none of the settlements which would be expanded under this spatial strategy are significantly constrained by areas of high exposure to noise pollution. As such, noise pollution is not considered likely to significantly affect health and wellbeing of occupants of new development provided at these settlements, resulting in negligible effects (0).

Conclusion

- 1.1120 Mixed effects are anticipated in relation to this SA objective, these are uncertain and negligible (?/0).

SA4: To ensure and improve the vitality & viability of centres

- 1.1121 This Hierarchy-based growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there.
- 1.1122 Specifically, this spatial strategy will increase development at settlements which include town or local centres as defined in the submitted Section 2 Local Plans. As such, this spatial strategy is likely to support the existing facilities and services. Having said this, uncertainty is recognised due to the fact that the specific location of development sites is not defined, and therefore there may be unidentified barriers between the sites and the centres.
- 1.1123

Conclusion

- 1.1124 This spatial strategy is expected to have significant positive yet uncertain effects (++?) in relation to this SA objective.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.1125 This Hierarchy-based growth alternative to garden communities will result in increased dwelling numbers at existing settlements, which will provide increased population and therefore customers and potential employees for shops, services and businesses currently located there. In addition, it is anticipated that a further 3-4Ha of employment will be delivered at Brightlingsea under this spatial strategy, thereby increasing the total quantum, and potential accessibility to employment opportunities.

⁵⁸ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

1.1126 Specifically, this spatial strategy will increase development at settlements which include town or local centres as defined in the submitted Section 2 Local Plans and strategic employment sites. As such, this spatial strategy is likely to provide extra resource and custom for businesses, in a manner that supports existing centres. It is also noted that this spatial strategy would increase development at Harwich and Dovercourt, which may support businesses at Harwich Port which is an international gateway. Having said this, uncertainty is recognised due to the fact that the specific location of development sites is not defined, and therefore there may be unidentified barriers between the sites and the centres and employment opportunities.

Conclusion

1.1127 This spatial strategy is expected to have significant positive yet uncertain effects (++?) in relation to this SA objective.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

1.1128 A number of the settlements which are anticipated to be expanded, under this spatial strategy, to an extent greater than the submitted Section 2 Local Plans have allocated are within SSSI impact risk zones. Several of the settlements also contain areas which are designated as internationally, nationally or locally important wildlife or geological sites or ancient woodland.

1.1129 Brightlingsea is close to the Colne Estuary which is designated as SPA, SAC, MCZ, Ramsar and SSSI. It is considered that the amount of development which would be allocated to Brightlingsea under this spatial strategy (up to 1,000 new houses) may affect this and several local wildlife sites which are located around the existing urban area. However it is possible that site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirements for all development to contribute to a Recreational disturbance Avoidance and Mitigation Strategy) mitigation measures may overcome the effects, but this is not known.

1.1130 Frinton, Walton & Kirkby Cross are located to the south of Hamford Water, which is designated as SAC, SPA, Ramsar, Important Bird Area, Marine pSPA, SSSI. It is considered that the amount of development which would be allocated to Frinton, Walton & Kirkby Cross under this spatial strategy (up to 299 new houses) may affect this and several local wildlife sites which are located around the existing urban area. However it is possible that site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirements for all development to contribute to a Recreational disturbance Avoidance and Mitigation Strategy) mitigation measures may overcome the effects, but this is not known.

1.1131 Harwich & Dovercourt are located to the north of Hamford Water, which is designated as SAC, SPA, Ramsar, Important Bird Area, Marine pSPA, SSSI; and to the south of the Stour and Orwell Estuaries (Ramsar, SPA, Important Bird Area, SSSI). It is considered that the amount of development which would be allocated to Harwich & Dovercourt under this spatial strategy (up to 400 new houses) may affect these and several local wildlife sites which are located around the existing urban area. However it is possible that site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirements for all development to contribute to a Recreational disturbance Avoidance and Mitigation Strategy) mitigation measures may overcome the effects, but this is not known.

1.1132 In accordance with the above, it is considered likely that significant negative yet uncertain (--?) effects are likely to arise in relation to this SA objective. The uncertainty arises because site-specific (e.g. master planning that avoids sensitive areas) or plan-wide (e.g. requirement for all development to contribute to a Recreational disturbance Avoidance and Mitigation Strategy) mitigation measures may overcome these effects but this is not known.

Conclusion

1.1133 This spatial strategy is expected to have uncertain significant negative effects in relation to this SA objective.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.1134 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.1135 As set out in the commentary relating to SA4 (vitality & viability of centres) and SA5 (achieve a prosperous and sustainable economy), the growth under this spatial strategy is focussed to settlements which have existing town or local centres, employment sites or both. As such, in general terms, this is considered likely to mean that these areas will be accessible using sustainable travel modes from the development sites which would come forward under this spatial strategy. Specifically, this may result in opportunities for sustainable travel, due to the short distance between site and centre. However as the exact location of the development at these two settlements is not known, uncertainty arises as to whether these will be within acceptable distance to facilitate sustainable modes of travel.
- 1.1136 As such, this spatial strategy will focus development to locations which can support local centre services. For this reason, significant positive (++) effects are anticipated in relation to this element of SA7. The uncertainty arises because of the difficulties in predicting where people will choose to live and how they will choose to travel and due to the lack of information about the precise location of development sites under this spatial strategy.

Longer journeys

- 1.1137 It is considered that the most popular sustainable travel mode for longer journeys outside the settlements identified under this spatial strategy to be made by is public transport, on either bus or rail. This is in particular because data from NOMIS indicates that the top five out-commuting destinations from Tendring are Colchester Borough, Ipswich, Westminster, Braintree and Chelmsford. For Colchester borough, the top five destinations are Tendring District, Braintree District, Westminster, Chelmsford and Ipswich. These are all too far away to facilitate walking or cycling.
- 1.1138 Whilst Harwich & Dovercourt and Frinton, Walton & Kirby Cross have rail stations, and may therefore result in potential for people to use rail for longer journeys, Brightlingsea is not connected to the rail network at all. More than half the growth under this spatial strategy is allocated to Brightlingsea and therefore it is considered that more than half of the new dwellings under allocated under this spatial strategy will be dependent on private, road based transport. In order to support this spatial strategy, it is recognised that to overcome capacity constraints at Brightlingsea, significant transport interventions are required, this being either a second road access to Brightlingsea or by re-opening the railway line up to Wivenhoe. It is noted that in order to use the new railway, residents of new development (if located on the outskirts of Brightlingsea) would need to travel into the town centre to travel back on themselves to reach Colchester, and therefore the attractiveness of such a scheme is questionable. The provision of a second road is considered unlikely to facilitate sustainable travel – although this could free up capacity for buses, no RTS is proposed under this spatial strategy and therefore the attractiveness of this is likely to be limited. Services on this railway line are currently infrequent, which creates uncertainty over whether there would be sufficient rail capacity to accommodate development in the area.
- 1.1139 In summary, it is considered likely that this spatial strategy is likely to lead to people using private road based transport, leading to minor negative yet uncertain (-?) effects. The uncertainty arises because of the difficulties in predicting where people will choose to live and how they will choose to travel and due to the lack of information about the precise location of development sites under this spatial strategy.

Conclusion

- 1.1140 It is anticipated and mixed significant positive yet uncertain and minor negative yet uncertain (++)/-?) effects are likely to occur.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.1141 The implications of this spatial strategy in relation to promoting accessibility is set out in the commentary relating to SA7. This is not repeated here. Instead, the assessment under this SA objective relates to the ability of the proportionate growth spatial strategy to make efficient use of land and ensure the necessary infrastructure is delivered.
- 1.1142 In relation to efficient use of land it is considered likely that development proposals at existing settlements will be required to reflect the general character of that settlement⁵⁹, in terms of factors that can influence density – such as scale, massing and plot sizes. Since this strategy is likely to result in development around the edges of settlements, it is considered that development density and efficiency of land use will reflect local circumstances. The local circumstances in relation to scale, massing and plot sizes of each settlement is not known, and therefore the performance of this spatial strategy in relation to efficient use of land is uncertain.
- 1.1143 As set out in the commentary for SA2 (housing provision), the Tendring Viability Study⁶⁰ identifies that Frinton & Kirkby Cross are within the 'Eastern' Value Area of the district. A significant portion of the development allocated under this spatial strategy (approximately a quarter) is focussed to these settlements.
- 1.1144 In addition, the spatial options strategy paper from the NEAs sets out that the deliverability of major new transport infrastructure required to support the allocation of up to 1,000 additional dwellings at Brightlingsea is unlikely.
- 1.1145 Due to the low level of viability affecting some of the east of Colchester area, and uncertainties surrounding the deliverability of infrastructure to support growth at Brightlingsea, concerns arise in relation to the capability of this spatial strategy to deliver the supporting infrastructure.
- 1.1146 In accordance with the above, minor negative yet uncertain (-?) effects are anticipated in relation to this SA objective. The uncertainty arises because the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure that would be delivered will depend on specific proposals coming forward; and due to the uncertainty about development density.

Conclusion

- 1.1147 This spatial strategy is expected to have uncertain minor negative effects (-?) in relation to this SA objective.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.1148 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.1149 This spatial strategy directs growth to settlements which include designated heritage assets including scheduled monuments, registered parks and gardens, listed buildings and conservation areas.
- 1.1150 In the absence of evidence about the significance of, and potential impact of developing near to these heritage assets, it is considered possible that development in these settlements may result in impacts to the setting of heritage assets. Although the site specific location of the development which would be allocated under this spatial strategy is not known, the significant number and distribution of heritage assets within the plan area are considered to make it likely that some growth would be within 500m of a designated heritage asset. As such, significant negative yet uncertain (--?) effects are anticipated in relation to this element of SA objective 9. The

⁵⁹ In accordance with the principles set out in Draft Section 1 Policies SP6 & LPP37.

⁶⁰ https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/Economic%20Viability%20Study%20-%20June%202017.pdf

uncertainty arises because of the assumption about the location of development relative to heritage assets, and because site specific design and mitigation may suitably mitigate impacts.

Effects on townscape

- 1.1151 As set out in the commentary which relates to SA1 (Community Cohesion), this spatial strategy will result in the three settlements expanding by more than 10% of their current size within the plan period. It is anticipated that this is likely to have a significant effect on townscape, however, whether this is positive or negative will depend on the siting and design of this development. These details are not known at this stage and as such, the effects in relation to this element of SA9 are uncertain (?).

Conclusion

- 1.1152 Overall, this spatial strategy is considered likely to result in mixed significant negative yet uncertain, and uncertain (--?/?) effects.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.1153 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and the implications this has on carbon emissions from transport. To avoid duplication, the effects in relation to these matters are not reassessed under this SA objective.
- 1.1154 Instead, assessment under this SA objective relates to the built form of development, which is influenced by planning policy, appeal decisions and other material considerations such as the NPPF. In accordance with draft policies in the submitted Section 1 Local Plan, it is assumed that all development will be required to:
- Encourage appropriate energy conservation and efficiency measures⁶¹.
 - Include renewable energy technology to provide at least 20% of the projected energy requirements of major developments, and 10% of minor developments, unless viability evidence demonstrates otherwise⁶².
 - Avoid flood zones, be flood resilient and provide for sustainable urban drainage⁶³.
- 1.1155 It is considered that the proportionate growth strategy may result in development being provided through non-major planning applications, which currently have a lower target for renewable energy generation than major applications. This may lead to less renewable energy than other strategies which focus on larger development sites. Furthermore, it is also considered that proportionate growth is considered likely to result in the delivery of small development sites, which will create difficulties in delivering centralised heat / hot water networks, which are a very effective way of reducing the carbon emissions of new development. Whilst these factors may influence matters relating to this SA objective, this is not known, raising uncertainty.
- 1.1156 Due to the principles already present in draft policy, which is considered likely to apply to all sites regardless of location, it is considered that this spatial strategy is likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises due to the potential for this spatial strategy to result in non-major applications which may reduce the overall potential for energy efficiency and carbon savings.

Conclusion

- 1.1157 This spatial strategy is anticipated to result in uncertain minor positive effects in relation to this SA objective.

⁶¹ Consistent with policy LPP75 of the Tendring Section 2 Local Plan

⁶² Consistent with policy LPP77 of the Tendring Section 2 Local Plan

⁶³ Consistent with policies LPP78, 79, and 80 of the Tendring Section 2 Local Plan

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.1158 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.1159 None of the settlements which would be expanded under this spatial strategy intersect with source protection zones. As such, negligible (0) effects are anticipated in relation to this element of SA11.

Water scarcity and water treatment

- 1.1160 With regard to water supply, and waste water treatment, the Tendring Water Cycle Study⁶⁴ does not review the potential implications of this proportionate growth spatial strategy, and therefore it is uncertain whether there would be sufficient water and waste treatment provided to meet the requirements of this spatial strategy. Therefore, the effects in relation to this are uncertain (?).

Conclusion

- 1.1161 This spatial strategy is considered likely to result in negligible and uncertain effects (0/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.1162 Whilst there are significant areas within Tendring which are identified as flood zone 2 or 3, it is considered likely, from a review of the settlements, that there are sufficient opportunities for development to avoid these areas, so that the significant majority (if not all) of the development required under the proportionate growth spatial strategy could be located in flood zone 1.

- 1.1163 In addition, none of the settlements required to expand under this spatial strategy are significantly constrained by medium or high risk of groundwater flooding.

Conclusion

- 1.1164 Overall, it is considered likely that this spatial strategy will result in negligible (0) effects in relation to this SA objective.

SA13: To improve air quality

- 1.1165 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.1166 None of the settlements which are required to increase in size under this spatial strategy contain AQMAs. As such, negligible (0) effects are anticipated in relation to this element of SA13.

Potential contribution to road traffic within areas suffering from air pollution

- 1.1167 Colchester, Chelmsford, Ipswich and Westminster are within the top five most popular out-commuting destinations for Tendring residents. These all have defined AQMAs. This strategy involves increasing the size of Brightlingsea which is considered likely to result in commuting to Colchester to access employment and higher order services and facilities. This is likely to result in increased traffic within Colchester which it is considered is likely to negatively affect AQMAs here, resulting in minor negative yet uncertain (-?) effects in relation to this element of SA13. The uncertainty arises due to the difficulty in determining how and where people will travel.

Conclusion

- 1.1168 This spatial strategy is considered likely to result in mixed negligible and minor negative yet uncertain (0/-?) effects.

⁶⁴ https://www.braintree.gov.uk/downloads/file/7115/tdc014_tendring_district_council_water_cycle_study_sept_2017

SA14: To conserve and enhance the quality of landscapes

- 1.1169 No specific landscape sensitivity information in relation to the effects of this spatial strategy have been provided by the NEAs. However a review of designated landscape assets, including the proposed extension to Suffolk Coast and Heaths AONB which is to the north of Tendring, is approx. 1.2km from Harwich & Dovercourt. Development here may negatively affect the setting of this area, however this is uncertain as site specific design may mitigate effects.
- 1.1170 In addition, there are several areas identified as strategic green gaps. These are found neighbouring Harwich & Dovercourt and Frinton, Walton & Kirby Cross. It is possible that development under this spatial strategy could result in the loss of these areas, leading to settlement coalescence. However this is not certain as the specific sites which will be developed under this spatial strategy are not known.
- 1.1171 As such, significant negative yet uncertain (--?) effects are anticipated in relation to this SA objective. The uncertainty arises as site specific design and mitigation may reduce impacts to acceptable levels and due to the uncertainty regarding the location of development under this spatial strategy.

Conclusion

- 1.1172 Both at the end of the plan period and once fully built out, this spatial strategy is anticipated to result in uncertain significant negative effects (--?) in relation to this SA objective.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 1.1173 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.1174 A significant portion of the plan area is designated as a mineral safeguarding area due to the significant mineral resources which are present. Due to the fact that the minerals safeguarding areas are closely drawn to the existing settlements, the development at Brightlingsea in particular is likely to result in the loss of mineral resources. The other two settlements however are not significantly constrained by mineral resources. As such, minor negative yet uncertain (-?) effects are anticipated in relation to this element of SA15, the uncertainty arises as the specific location of development under this spatial strategy is not known, and because it may be possible to extract minerals prior to development, depending on site specific circumstances.

High quality agricultural land

- 1.1175 Much of the district is identified as Grade 1-3 agricultural land. This is closely drawn to the existing settlements, meaning that development in accordance with this spatial strategy is likely to result in the loss of high quality agricultural land.

Conclusion

- 1.1176 In accordance with the above, and due to the cumulative effects of loss of mineral resources and high quality agricultural land, it is considered that this spatial strategy will result in minor negative yet uncertain and significant negative effects (-?/--) in relation to both elements of this SA objective. The uncertainty arises in relation to mineral resources due to the lack of information relating to the final sites which will be developed and because as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

East 2: Proportionate (Hierarchy-based) Growth

- 1.1177 This spatial strategy recorded significant positive effects for:
- SA4: To ensure and improve the vitality and viability of centres (within the plan period)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (within the plan period)

- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, within the plan period).

1.1178 This spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities (within the plan period)
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (within the plan period)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (within the plan period)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, within the plan period)
- SA14: To conserve and enhance the quality of the landscapes (within the plan period)
- SA 15: To safeguard and enhance the quality of soil and minerals (in relation to soil resources, within the plan period)

East of Colchester Spatial Strategy 3: Tendring/Colchester Borders GC (NEAGC3)

- 1.1179 This option reflects what is already included in the submitted Section 1 Local Plan with development at a Garden Community, east of Colchester. In the submitted plan, this Garden Community is expected to deliver 2,500 new homes within the remainder of the plan period to 2033.
- 1.1180 In terms of overall dwelling capacity, the Tendring Colchester borders garden community proposal will deliver 7,500 dwellings which is within the range in the Submission Local Plan and taken from evidence in the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update report by Hyas Associates Ltd (June 2019) thus reflects the most up to date position.
- 1.1181 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.30: Site capacities, employment and infrastructure assumptions for East of Colchester Spatial Strategy 3

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Tendring/Colchester Borders GC NEAGC3	2,500	7,500	Evidence base document entitled 'Reconciliation of Cebr and Cambridge Econometrics Employment Scenarios and Floorspace Requirements for the North Essex Garden Communities – Cebr note for the North Essex Authorities recommends employment land figures for the Garden Community proposals. For the Tendring/Colchester Borders Garden Community, it suggests approximately 7ha by 2033, 21ha by 2050 and 22ha by 2071.	<ul style="list-style-type: none"> RTS links to Colchester Town with potential to link to Braintree and London Stansted Airport. A120 to A133 link road with new junctions.

- 1.1182 As this scenario includes a strategic site which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.1183 This spatial strategy allocates a total of 2,500 dwellings to one new settlement on a greenfield site. Site NEAGC3 is located to the east of Colchester with the majority of the site located within

the Tendring District, but the south westernmost part of the site is located with the Colchester Borough. The potential scale of development from this site is up to approximately 7,500 dwellings once fully built. The site is also 50m along Bromley Road from a permitted residential site of 145 dwellings. In total, the maximum potential scale of development from this site and the neighbouring site along Bromley Road is up to approximately 7,645 dwellings once fully built.

- 1.1184 The site is currently primarily arable land, and as it is a large site (519 ha) it includes some existing individual residential properties and businesses, which are generally dispersed reflecting the rural character of the area. The University of Essex Colchester Campus adjoins the southwest of the site and Colchester is the nearest town defined in the draft Colchester Section 2 Local Plan, the centre of which is approximately 5km west of the centre of site NEAGC3 and approximately 3km west of the site boundary.
- 1.1185 The A133 crosses the south of the site and travels in an east-west alignment, connecting Colchester to the west and Clacton-on-Sea to the southeast. The A120 bounds the north of the site and travels in an east-west alignment, running from the northern boundary of Colchester to the west to Harwich to the east, and connecting to the A12, providing strategic links to settlements to the west such as Braintree and Chelmsford. As a greenfield site, the area is not well served by existing facilities and services. The nearest railway station to the site is Hythe, which is approximately 3km from the centre of the site, and which connects to the main London to Ipswich line at Colchester.
- 1.1186 Slough Farm, located beyond the A120 approximately 200m north of the site, and Sunnymead, Elmstead & Heath Farms, located approximately 900m southeast of the site, are allocated Minerals Extraction Sites in the Essex Minerals Local Plan.
- 1.1187 In addition to this strategic site, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. This includes a total of 10,313 dwellings allocated to the urban area of Colchester. Overall, there are 7,853 dwellings to be delivered as new allocations in the Colchester Section 2 Local Plan, which includes 250 at Wivenhoe and 40 at Rowhedge to the south of NEAGC3.

Assessment of Effects

- 1.1188 This section sets out the detailed assessment of the likely effects of East of Colchester Spatial Strategy 3.
- 1.1189 The table below summarises the anticipated effects of this spatial strategy.

Table 1.31: Assessment of East of Colchester Spatial Strategy 3

SA objective	Spatial Strategy East 3 at the end of the plan period	Spatial Strategy East 3 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+/-	++/-
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++

SA objective	Spatial Strategy East 3 at the end of the plan period	Spatial Strategy East 3 when fully built out
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/+?	++?/+?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/0?	0/0?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

1.1190 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

1.1191 At the end of the plan period, and indeed, once fully built out, the site was considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new sites. The delivery of the site as a spatial strategy option, also seen in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effects on the new community

1.1192 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling

capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

- 1.1193 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.

Conclusion

- 1.1194 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.1195 At the end of the plan period, this strategic site is considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information form confirms that the site will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, the site is considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information form and the North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates Ltd (June 2019) set out that it will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.1196 The delivery of the site as a spatial strategy option, and seen within the context of planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the site would individually, and as such, this assessment results reflect the site assessment findings.

Conclusion

- 1.1197 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.1198 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.1199 At the end of the plan period, the site was considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information form, it is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development sites, the delivery of the site as a spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely

to change the effects in relation to either site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.

- 1.1200 At the end of the plan period, the site was considered likely to result in significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once they are both fully built out, either site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development sites, the combination of the two sites into a single spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.1201 Both at the end of the plan period and when fully built out, site NEAGC3 is expected to result in minor negative effects (-) in relation to exposure to noise pollution. This is due to proximity to existing sources of noise pollution. Over 15% of NEAGC3 falls within an area identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB.

Conclusion

- 1.1202 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and minor effects (-) are anticipated in relation to exposure to noise pollution.
- 1.1203 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and minor negative effects (-) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.1204 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this both sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.1205 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centre will be related to the scale of development. In addition, it is considered that people from these sites will also travel to existing centres, and those living in the houses delivered through the existing planning commitments proposed section 2 allocations are anticipated to support existing centres. Furthermore, the delivery of the site as a spatial strategy will be supported by RTS links to Colchester town with potential links to Braintree and Stansted Airport and a new link road with new junctions between the A120 and A133. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the sites are built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.1206 In accordance with the above, significant positive effects (++) are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.1207 The site assessment found that the site would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period. In addition, once fully built out, the site is considered capable of supporting the delivery of over 10ha of employment land. This is considered likely to result in significant positive effects.

- 1.1208 Furthermore, the delivery of the site as a spatial strategy option will require the provision of new RTS links to Colchester town with potential links to Braintree and London Stansted Airport and a new link road with new junctions between the A120 and A133. These are likely to increase accessibility between existing employment areas including, Colchester and Braintree town centres, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations.
- 1.1209 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of this site by the end of the plan period.

Conclusion

- 1.1210 Given the positive effects of the transport interventions and delivery of over 10ha employment land, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.1211 At both the end of the plan period and once fully built, the site is considered likely to result in uncertain minor negative effects (-?) in relation to this SA objective due less than 5% of the site intersecting with Local Wildlife Sites, but over 5% of the site falling within 400m of a Local Wildlife sites and the whole of the site falling within a SSSI impact risk zone (IRZ) where residential development of 100 units or more could cause harm.
- 1.1212 The delivery of this site as a spatial strategy, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.1213 Uncertain minor negative effects (-?) are expected both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.1214 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.1215 The site assessment concluded that minor positive yet uncertain effects at the end of the plan period are anticipated in relation to shorter journeys – due to the provision of community facilities in the centre of each site. However, this site as part of a wider spatial strategy includes RTS links between the site and Colchester town, and possibly Braintree and London Stansted Airport. This is considered likely to increase the accessibility of the site, leading to significant positive yet uncertain (++) effects. The uncertainty arises due to the difficulties in determining where and how people will travel. As the RTS is to be in place by the end of the plan period these effects arise at the end of the plan period and once fully built out.
- 1.1216 Once fully built out, the site is also considered capable of supporting an employment area of at least 10ha and a new secondary school, resulting in further internalisation of trips, similarly resulting in similar effects.

Longer journeys

- 1.1217 For longer journeys, the site is expected to have uncertain minor negative effects, due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns in the site area. The uncertainty arises due to the difficulties in determining where and how people will travel. This is the case at the end of the plan period and once fully built out.

- 1.1218 However, the provision of RTS links to Colchester Town with potential links to Braintree and London Stansted is likely to improve the potential for journeys outside the site boundary to be made using sustainable modes, resulting in uncertain minor positive effects (+?) in relation to this SA objective. The uncertainty arises due to the difficulties in determining where and how people will travel. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the sites are fully built out.

Conclusion

- 1.1219 At the end of the plan period and once fully built out, this spatial strategy is considered likely to result in mixed significant positive yet uncertain (++?) effects (in relation to shorter journeys) and minor positive yet uncertain (+?) effects (in relation to longer journeys).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.1220 In accordance with the site assumptions, the site NEAGC3 is considered likely to result in minor positive yet uncertain (+?) effects in relation to this objective. This is because the site information forms provided by the NEAs set out that the site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, the site will be reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that delivery of the site as a spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.1221 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.1222 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.1223 The site was considered likely to result in uncertain significant negative effects in relation to this SA objective due to over 5% of the site area being within 500m of heritage assets. These effects are anticipated at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.
- 1.1224 The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to these designated heritage assets.

Effects on townscape

- 1.1225 The effects on townscape for this site were considered to be uncertain for the end of the plan period and once fully built out, as this depends on the quality of the development built within the

sites. The delivery of the site a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.1226 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (---?) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.1227 In accordance with assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms that they can deliver policy compliant sustainable development. As such, the site was considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to alter its ability to deliver in accordance with these policies / the position confirmed in the site information form.

Conclusion

- 1.1228 At the end of the plan period, and once fully built out, this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.1229 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.1230 The site does not fall within any source protection zones, and therefore it was considered to have negligible effects (0) in relation to water quality. The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.1231 The site assessment for NEAGC3 identified that there is sufficient water supply accounting for growth that was planned in 2017 to support housing delivery up to the end of the plan period, according to the Colchester and Tendring Water Cycle Studies. The Integrated Water Management Strategy (IWMS)⁶⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1. NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures.
- 1.1232 The site assessment identified that the Colchester Water Recycling Centre (WRC) has sufficient headroom to accept all additional wastewater from NEAGC3 during the plan period and, as such, uncertain negligible effects (0?) are expected at the end of the plan period for this spatial strategy. Additionally, the IWMS indicates that the Colchester WRC will also be able to cater to growth at NEAGC3 beyond the extent of the plan period and, as such, uncertain negligible effects are also expected once fully built out for this spatial strategy. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

⁶⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Conclusion

- 1.1233 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built. Uncertain negligible effects (0?) effects are expected in relation to water scarcity and water treatment for the end of the plan period and once fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.1234 The site is not located within any Environment Agency Flood Zones and less than 25% of the site's area is at medium risk from ground water flooding or surface water flooding. As a result of this, the site is considered likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

Conclusion

- 1.1235 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.1236 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.1237 The site does not intersect with any AQMAs and, as such, the site is considered likely to result in negligible effects in relation to this SA objective, both at the end of the plan period and once fully built out.

Potential contribution to road traffic within areas suffering from air pollution

- 1.1238 According to NOMIS data, commuters living in the area of NEAGC3 travel to the centre of Colchester, which contains AQMAs. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads, including the B1027, the B1028 the A113 and the A120, and will pass through the Central Corridors, East St and the adjoining lower end of Ipswich Rd and Harwich Rd/St. Andrew's Avenue Junction AQMAs within Colchester. Due to the potential for an increase in road traffic within these AQMAs, the site is anticipated to have uncertain minor negative effects (-?) in relation to this SA objective, both at the end of the plan period and once fully built out. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.
- 1.1239 Whilst the benefits of the proposed RTS are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.1240 This spatial strategy is likely to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.1241 The area has been assessed by landscape officers of the NEAs, and has been found to be of moderate landscape character, which is highly sensitive to visual intrusion in the Bromley Heath Plateau landscape area and vulnerable to large new development especially along Salary Brook, close to traditional settlements and in open landscapes. In light of this and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (NEAGC3a/b/c/d) is likely to result in uncertain significant negative (--?) effects in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

Conclusion

- 1.1242 This spatial strategy is considered likely to result in minor negative yet uncertain (-?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.1243 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.1244 Approximately 96% of NEAGC3 is within a mineral safeguarding area for sand and gravel deposits, meaning that development of the site could result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 1.1245 Approximately 80% of the site is Grade 1 or Grade 2 agricultural land, and as such, a significant negative (--) effect is anticipated for both sites at the end of the plan period and once fully built out.

Conclusion

- 1.1246 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

East 3: Tendring/Colchester Borders Garden Community (NEAGC3)

- 1.1247 This spatial strategy recorded significant positive effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, both within the plan period and when fully built out)
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA3: Improve health/reduce health inequalities (with respect to access to health facilities and recreation, when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for shorter journeys, when fully built out)

- 1.1248 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)

- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

East of Colchester Spatial Strategy 4: Colchester North-East Urban Extension (ALTGC07)

- 1.1249 Under this option, there would be no stand-alone Garden Community to the east of Colchester at all. This non-Garden Community option would be different to the proportionate growth scenarios in that it would involve targeted growth in the form of a strategic urban extension to the north-east of Colchester. This site could deliver 2,500 dwellings within the plan period and an additional 1,500 dwellings beyond the plan period.
- 1.1250 Traditionally growth has been delivered across the NEAs through planned urban extensions to larger settlements, this option is a continuation of this approach. Whilst the Inspector did not specifically request that non-garden community options are appraised as part of the Additional SA, the NEAs consider that the appraisal and consideration of urban extensions as a spatial strategy option will provide a useful comparison to the options involving garden communities. This site has been selected as an option as it is being actively promoted and is effectively an urban extension to north-east Colchester.
- 1.1251 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.32: Site capacities, employment and infrastructure assumptions for East of Colchester Spatial Strategy 4

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Colchester North-East ALTGC07	2,500	4,000	None as the site is within walking distance to existing employment provision, including but not limited to, Severalls Business Park.	<ul style="list-style-type: none"> Bullock Wood, which borders part of the site's western boundary, is a SSSI and ancient woodland. The site promoter recognises that this would require a minimum 15m stand off from built development which can be sensitively designed to incorporate this stand-off. Link road between Ipswich Road and Harwich Road. RTS links to Colchester

- 1.1252 As this scenario includes a strategic site which has been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations.

Relevant Context for this Spatial Strategy

- 1.1253 This spatial strategy allocates a total of 2,500 dwellings to an urban extension on a greenfield site. Site ALTGC07 is located to the east of Colchester and is split between two authority areas, with the northern half of the site being located in the Tendring District and the southern half of

the site being located in the Colchester Borough. The potential scale of development from this site is up to approximately 4,000 dwellings once fully built. The north-western boundary of the site is adjacent to a site permitted for up to 120 dwellings (North of Betts Colchester Fringe).

- 1.1254 The entirety of the site (132 ha) is located on arable land with a small local road located in the north eastern corner of the site. The A120 runs adjacent to the northern boundary of the site, connecting the area to settlements to the east and west. The eastern boundary of the site is adjacent to the A137 which provides access to Colchester town and settlements to the north and south. Land within the site boundaries is not currently well connected by local roads due to it being occupied by agricultural land, which also means that it is not currently well served by existing services and facilities. The nearest railway station is Hythe, which is located around 3km south of the site and connects to the main London-Ipswich line at Colchester.
- 1.1255 Wick Farm, located 1km to the north, and Martell's Quarry, located around 1.5km to the north-east of the site are allocated Minerals Extraction Sites in the Essex Minerals Local Plan.
- 1.1256 In addition to this strategic site, existing planning commitments and proposed Section 2 Local Plan allocations will contribute a significant amount of growth to the area. This includes a total of 10,313 dwellings allocated to the urban area of Colchester. Overall, there are 7,853 dwellings to be delivered as new allocations in the Colchester Section 2 Local Plan.

Assessment of Effects

- 1.1257 This section sets out the detailed assessment of the likely effects of East of Colchester Spatial Strategy 4.
- 1.1258 The table below summarises the anticipated effects of this spatial strategy.

Table 1.33: Assessment of East of Colchester Spatial Strategy 4

SA objective	Spatial Strategy East 4 at the end of the plan period	Spatial Strategy East 4 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++
SA3: Improve health/reduce health inequalities	+/-	++/-
SA4: To ensure and improve the vitality & viability of centres	++	++
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	++	++
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	+++?/?	+++?/?

SA objective	Spatial Strategy East 4 at the end of the plan period	Spatial Strategy East 4 when fully built out
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/0	--?/0
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/0?	0/0?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.1259 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.1260 At the end of the plan period, and indeed, once fully built out, the site was considered likely to result in significant negative yet uncertain (--?) effects on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may however welcome the facilities and services provided within the new site. The delivery of the site as a spatial strategy option, also seen in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations will result in similar effects as the site would individually, and as such, this assessment finding is not considered likely to change.

Effects on the new community

- 1.1261 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 1.1262 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new

community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.

Conclusion

- 1.1263 At the end of the plan period and at final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.1264 At the end of the plan period, this strategic site is considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information form confirms that the site will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, the site is considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information form sets out that it will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.
- 1.1265 The delivery of the site as a spatial strategy option, and seen within the context of planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the site would individually, and as such, this assessment results reflect the site assessment findings.

Conclusion

- 1.1266 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.1267 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.1268 At the end of the plan period, the site was considered likely to result in minor positive (+) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information form, it is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development site, the delivery of the site as a spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to the site. Therefore, the findings of minor positive effects at the end of the plan period are not anticipated to change.
- 1.1269 At the end of the plan period, the site was considered likely to result in significant positive (++) effects in relation to access to health and recreation facilities. The reasons for this included that once fully built out, the site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development site, the

delivery of the site as a spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to the site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.1270 Both at the end of the plan period and when fully built out, site ALTGC03 is expected to result in minor negative effects in relation to noise pollution as over 5% of the site's area is located within an area identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB.

Conclusion

- 1.1271 At the end of the plan period, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and minor effects (-) are anticipated in relation to exposure to noise pollution.
- 1.1272 At final capacity, significant positive effects (++) are anticipated in relation to access to health and recreation facilities and minor negative effects (-) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.1273 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this, the site was assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.1274 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centre will be related to the scale of development. In addition, it is considered that people from this site will also travel to existing centres, and those living in the houses delivered through the existing planning commitments proposed section 2 allocations are anticipated to support existing centres. Furthermore, the delivery of the site as a spatial strategy will be supported by a link road between Ipswich Road and Harwich Road and RTS links to Colchester. These will also provide greater accessibility between existing development areas and existing settlements, thereby increasing the workforce available to, and potential catchment of each of these centres. Given that RTS is to be provided before the end of the plan period, and is likely to increase in frequency as the site is built out, it is therefore considered that this spatial strategy will result in significant positive effects (++) in relation to this SA objective at the end of the plan period and once fully built out.

Conclusion

- 1.1275 In accordance with the above, significant positive effects (++) are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.1276 The site assessment found that the site would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period. However, the site information form indicated that there will be no delivery of employment land as part of development, resulting in no increase to the minor positive effects expected.
- 1.1277 The delivery of the site as a spatial strategy option will require the provision of new RTS links to Colchester and a new link road between Ipswich Road and Harwich Road. These are likely to increase accessibility between existing employment areas, including Colchester town centre, thereby increasing the skills and potential catchment of each of these employment areas. These will also provide greater accessibility between existing development areas and these key employment destinations.

- 1.1278 Given that RTS is anticipated to be provided before the end of the plan period, it is therefore considered that this spatial strategy will further improve the performance of this site by the end of the plan period, resulting in significant positive effects (++), both at the end of the plan period and when the site is fully built out.

Conclusion

- 1.1279 Given the positive effects of the transport interventions, significant positive effects (++) from this spatial strategy are anticipated in relation to this SA objective at the end of the plan period and once fully built out.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.1280 At both the end of the plan period and once fully built out, the site is considered likely to result in uncertain significant negative effects (--?) in relation to this SA objective due to the site completely isolating Bullock Wood SSSI from surrounding habitats and associated ecological networks, given that the boundary of the SSSI already adjoins Colchester urban fringe and development is already permitted to the north of the SSSI.
- 1.1281 The delivery of this site as a spatial strategy, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.1282 Uncertain significant negative effects (--?) are expected, both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.1283 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.1284 The site is considered likely to result in minor positive yet uncertain effects at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of each site. However the provision of RTS into Colchester Town is likely to facilitate the use of sustainable transport for shorter journeys, resulting in significant positive yet uncertain (++?) effects. The uncertainty arises from the difficulties in determining how and where people will travel. The RTS is envisaged to be provided by the end of the plan period so these effects arise at the beginning of the plan period and once fully built out.

Longer journeys

- 1.1285 For longer journeys, the site is expected to have uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns in the area of the site. This is the case at the end of the plan period and once fully built out.
- 1.1286 However, the provision of RTS links to Colchester Town are likely to improve the potential for journeys outside the site boundary to destinations further afield to be made using sustainable modes, resulting in uncertain minor positive effects (+?) in relation to this SA objective. These improvements are anticipated to be complete prior to the end of the plan period, therefore the positive benefits are considered to apply at this time, and once the site is fully built out. Uncertainty arises due to the difficulty in predicting how and where residents are likely to travel.

Conclusion

- 1.1287 At the end of the plan period, this spatial strategy is considered likely to result in mixed significant positive yet uncertain (++?) effects (in relation to shorter journeys) and minor positive yet uncertain effects (+?) (in relation to longer journeys). The same effects are also expected to apply for when the site is fully built out in relation to this SA objective.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.1288 In accordance with the site assumptions, the site ALTGC07 is considered likely to result in minor positive yet uncertain (+?) effects in relation to this objective. This is because the site information forms provided by the NEAs set out that the site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. In addition, when fully built out, the site will be reliant on external funding to deliver all infrastructure. There is no evidence that delivery of the site as a spatial strategy will negate the requirement for external funding, and similarly, no evidence that proposed allocations in the Section 2 Local Plans will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.1289 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.1290 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.1291 The site considered likely to result in uncertain significant negative effects (--?) in relation, for both the end of the plan period and once fully built out, as over 50% of the site is within 500m of designated heritage assets. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 1.1292 The effects on townscape for this site were considered to be negligible (0), both at the end of the plan period and once fully built out. The site is within 500m of Colchester, but Colchester is of a sufficient size to suggest that development at the site would not have significant effects on the existing townscape. The delivery of the site a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.1293 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to impacts on cultural heritage assets and negligible (0) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.1294 In accordance with assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms that they can deliver policy compliant sustainable development. As such, the site was considered likely to result in minor positive (+) effects, at the end of the plan

period and once fully built out. The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to alter its ability to deliver in accordance with these policies / the position confirmed in the site information form.

Conclusion

- 1.1295 At the end of the plan period and once fully built out, this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.1296 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.1297 The site does not fall within any source protection zones, and therefore it was considered to have negligible effects (0) in relation to water quality. The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is also considered likely to result in negligible (0) effects.

Water scarcity and water treatment

- 1.1298 The site assessment for ALTGC7 identified that there is likely to be an adequate water supply to cater to growth during the plan period, according to the Colchester and Tendring Water Cycle Studies. However, the study is based on assumptions of growth from 'preferred development allocations' within Tendring and Colchester's Local Plans. This includes NEAGC3, a strategic site allocated in the Section 1 Local Plan with capacity for up to 8,000 dwellings, which is located to the east of Colchester. Due to the similar locations of NEAGC3 and ALTGC7, these water cycle studies can be considered a suitable evidence base to use, but with uncertainty as growth at ALTGC7 was not specifically assessed as part of the study.
- 1.1299 The Integrated Water Management Strategy (IWMS)⁶⁶, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to site ALTGC7, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.1300 With regard to water treatment, it is reasonable to assume that as ALTGC7 is in a similar location to NEAGC3, it would also be served by the Colchester WRC. The WCS sets out that there is sufficient headroom at Colchester WRC to cater to all growth during the plan period and, as such, uncertain negligible effects (0?) are expected for this spatial strategy at the end of the plan period. Additionally, the IWMS indicates that the Colchester WRC will be able to cater to growth beyond the extent of the plan period also and, as such, the effects are also expected to be uncertain negligible once fully built out. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because specific growth at ALTGC7 was not assessed as part of the study.

Conclusion

- 1.1301 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built. Uncertain negligible effects (0?) effects are expected in relation to water scarcity and water treatment at the end of the plan period and once fully built out.

⁶⁶ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.1302 The site is not located within any Environment Agency Flood Zones and less than 25% of the site's area is at medium risk from ground water flooding or surface water flooding. As a result of this, the site is considered likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

Conclusion

- 1.1303 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.1304 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.1305 The site does not intersect with any AQMAs and, as such, the site is considered likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

Potential contribution to road traffic within areas suffering from air pollution

- 1.1306 According to NOMIS, one of the top destinations for commuters living in the area of ALTGC07 is Colchester town centre, which contains AQMAs. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads, and will result in increased vehicular trips through these AQMAs (Harwich Rd/St. Andrew's Avenue Junction; East St and the adjoining lower end of Ipswich Rd; the Central Corridors). As such, uncertain minor negative (-?) effects are expected in relation to this SA objective, both at the end of the plan period and once fully built out. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.
- 1.1307 Whilst the benefits of the proposed RTS are considered likely to reduce use of private vehicles, there is no evidence that this will reduce the effect on nearby AQMAs.

Conclusion

- 1.1308 This spatial strategy is likely to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.1309 The area of the site has been assessed by landscape officers of the NEAs and has been found to be of moderate strength character and highly sensitive to development. In light of this and in line with the assumptions framework, it is considered that development of the site is likely to result in uncertain significant negative effects (--?), both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

Conclusion

- 1.1310 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.1311 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.1312 The vast majority of ALTGC07 is within a mineral safeguarding area for sand and gravel deposits, meaning that development of the site could result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 1.1313 Approximately 80% of the site is Grade 1 or Grade 2 agricultural land, and as such, significant negative (--) effects are anticipated at the end of the plan period and once fully built out.

Conclusion

- 1.1314 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

East 4: Colchester North-East Urban Extension (ALTGC7)

- 1.1315 This spatial strategy recorded significant positive effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, both within the plan period and when fully built out)
- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
- SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (both within the plan period and when fully built out)

- 1.1316 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

East of Colchester Spatial Strategy 5: Tendring Central Garden Village (VE5)

- 1.1317 This option involves the delivery of a Garden Community (VE5) in Tendring district, adjacent to the A120 but detached from Colchester and Clacton. The site information form confirms that 2,500 dwellings can be delivered within the plan period, with a further 2,500 dwellings beyond the plan period. This is an alternative garden community to the proposed garden community in the Submission Local Plan and is the only alternative garden community proposed east of Colchester.
- 1.1318 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.34: Site capacities, employment and infrastructure assumptions for East of Colchester Spatial Strategy 5

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Strategy-specific infrastructure assumptions
Tendring Central Garden village VE5	2,500	5,000	In addition to the existing employment areas (Penguin Books, Manheim Auctions etc.): B1, B2 & B8: 29.85 ha. Village Centre: 4.59 ha.	Project includes delivery of omni-directional access between the A120 and A133 at the Oasis (Trunk Road) Junction. Community Woodland The site information form states that improvements to the B1029 to a new Metro Plan Station at Thorrington will be delivered. This assumption can, however, only be made under options involving both Tendring Central and the Metro Plan but should not be considered under this option, which involves Tendring Central only.

- 1.1319 As this scenario includes a strategic site which has been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed section 2 allocations. However, there are no significant residential/employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs, or proposed allocations by the NEA Section 2 Local Plans, within the site boundary or within 1km of the site.

Relevant Context for this Spatial Strategy

- 1.1320 This spatial strategy allocates a total of 2,500 dwellings to one new settlement on a greenfield site. Site VE5 is a 221-hectare strategic site at Frating, within Tendring BC and lies to the east of Colchester. The potential scale from development of the site is up to approximately 5,000 dwellings once fully built.

- 1.1321 This spatial strategy allocates a total of 2,500 dwellings to one new settlement on a greenfield site. Site VE5 is a 221-hectare strategic site at Frating, within Tendring BC and lies to the east of Colchester. The potential scale from development of the site is up to approximately 5,000 dwellings once fully built.
- 1.1322 The centre of the site is primarily arable land, with the edges occupied by existing industrial units and low-density linear and dispersed housing developments. The site overlaps in the south with the existing settlement of Frating (approximately 236 existing dwellings). For public transport connections, the site is not within walking distance of rail links. The nearest train station to the site is in Great Bentley, around 3.2km from the centre-point of the site. This line provides links both westbound to Colchester and southbound to Clacton-on-Sea (and Frinton-on-Sea). Alternatively Hyth Station, on the eastern fringes of Colchester, lies approximately 7.8km to the west of the site's centre-point.
- 1.1323 For road connections, the site lies at the strategic intersection between two trunk roads – the A120 and the A133, the junction of which lies on the northern boundary of the site. The site is bisected north-south by the A133, which provides connections west to Colchester (via the bypass) and south to Clacton-on-Sea. The A120 links Colchester to the international port at Harwich. The stretch of the A133 bounding the south of the site also provides connections into central Colchester, via the neighbouring settlement of Elmstead Market.
- 1.1324 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. The large-scale 'Frating Employment Area' takes up the southern part of the site, bound to the south and east by the A133. The nearest employment areas outside the site are located on the eastern fringes of Colchester (several sites) and the Plough Road Centre in the neighbouring village of Great Bentley.

Assessment of Effects

- 1.1325 This section sets out the detailed assessment of the likely effects of East of Colchester Spatial Strategy 5.
- 1.1326 The table below summarises the anticipated effects of this spatial strategy.

Table 1.35: Assessment of East of Colchester Spatial Strategy 5

SA objective	Spatial Strategy East 5 at the end of the plan period	Spatial Strategy East 5 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	--?/++	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++?
SA3: Improve health/reduce health inequalities	+?/--	++?/--
SA4: To ensure and improve the vitality & viability of centres	+	+
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	+	++

SA objective	Spatial Strategy East 5 at the end of the plan period	Spatial Strategy East 5 when fully built out
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	-?	-?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	++?/-?	++?/-?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+	+
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	0/?	0/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	0	0
SA13: To improve air quality	0/-?	0/-?
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.327 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.328 At the end of the plan period, and indeed, once fully built out, the site was considered likely to result in significant negative yet uncertain effects (--?) on existing communities, due to the impacts of such large scale sites near to existing settlements which are comparatively smaller. The uncertainty results from the fact that some people may welcome the facilities and services provided within the new sites. The delivery of the site as a spatial strategy option, also seen in the context of the surrounding planning commitments and proposed Section 2 Local Plan allocations will result in similar effects as the sites would individually, and as such, this assessment finding is not considered likely to change.

Effect on the new community

- 1.329 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling

capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

- 1.330 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply at the end of the plan period and once fully built out.

Conclusion

- 1.331 At the end of the plan period and once fully built out, At final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.332 At the end of the plan period, this strategic site is considered likely to result in significant positive effects (++). The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels; and because the site information form confirms that the site will not require external funding (or other improvement to viability) at around 2,500 dwelling capacity. Once fully built out, the site is considered likely to result in significant positive yet uncertain (++?) effects in relation to this SA objective. The uncertainty arises because the site information form sets out that it will require external funding or other improvement to viably provide requisite infrastructure and policy compliant affordable housing.

- 1.333 The delivery of the site as a spatial strategy option, and seen within the context of planning commitments and proposed Section 2 Local Plan allocations, will result in similar effects as the site would individually, and as such, this assessment results reflect the site assessment findings.

Conclusion

- 1.334 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective within the plan period. Uncertainty is present in relation to the strategy once fully built out, due to the need for external funding or other improvement in viability to deliver requisite infrastructure and policy compliant affordable housing, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 1.335 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.336 At the end of the plan period, the site was considered likely to result in uncertain minor positive (+?) effects in relation to access to health and recreation facilities. The reasons for this include that, in accordance with the site information form, it is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. As these matters relate to the internal and site specific provision of the development site, the delivery of the site as a spatial strategy option, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to the site. Therefore, the findings of minor

positive effects at the end of the plan period are not anticipated to change. The uncertainty arises from questions over the possibilities to mitigate the severance challenge posed by strategic road infrastructure as part of site design and layout.

- 1.337 At the end of the plan period, the site was considered likely to result in uncertain significant positive (++?) effects in relation to access to health and recreation facilities. The reasons for this included that once fully built out, the site will be able to support bespoke new primary healthcare facilities. This is considered likely to further enhance access to health facilities. As above, because this consideration relates to the internal and site specific provision of the development site, the delivery of the site as a spatial strategy option, also seen in the context of the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to either site. Therefore, the findings of significant positive effects at the end of the plan period are not anticipated to change.

Exposure to noise pollution

- 1.338 Both at the end of the plan period and once fully built out, site VE5 is expected to result in significant negative effects (--) in relation to noise pollution as over 25% of the site's area is located within an area identified by DEFRA as being subject to noise levels of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB.

Conclusion

- 1.339 At the end of the plan period, uncertain minor positive effects (+?) are anticipated in relation to access to health and recreation facilities and significant negative effects (--) are anticipated in relation to exposure to noise pollution.
- 1.340 At final capacity, uncertain significant positive effects (++?) are anticipated in relation to access to health and recreation facilities and significant negative effects (--) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.341 In accordance with the site information forms it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within new local centres. As a result of this, the site was assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out.
- 1.342 This spatial strategy will result in the provision of new centre facilities, which it is assumed will be viable, given that the scale of the new centre will be related to the scale of development. In addition, it is considered that people from this site will also travel to existing centres, and those living in the houses delivered through the existing planning commitments proposed section 2 allocations are anticipated to support existing centres. The delivery of the site as a spatial strategy option will be supported by the delivery of omni-directional access between the A120 and A133 at the Oasis (Trunk Road) Junction. However, this level of transport infrastructure delivery is not substantial enough to result in an increase to the minor positive effects expected.

Conclusion

- 1.343 In accordance with the above, minor positive effects (+) are expected in relation to this SA objective at the end of the plan period and once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.344 The site assessment found that the site would result in an increase in the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective at the end of the plan period.
- 1.345 When fully built out, the site information form for VE5 indicated that it will be possible to deliver over 10ha of employment land as part of the development. As such, this is likely to make a significant contribution to the local economy, resulting in significant positive effects (++) in relation to this SA objective when fully built out.

- 1.346 The delivery of the site as a spatial strategy option will be supported by the provision of omnidirectional access between the A120 and A133 at the Oasis (Trunk Road) Junction, which will be delivered by the end of the plan period. This will provide some improvement in accessibility to existing development areas and key employment destinations. However, it is not substantial enough to result in an increase to the minor positive effects expected in relation to this SA objective at the end of the plan period.

Conclusion

- 1.347 Minor positive effects (+) are expected for the end of the plan period and significant positive effects (++) are expected once the site is fully built out in relation to this SA objective.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.348 At both the end of the plan period and once fully built out, the site is considered likely to result in uncertain minor negative effects (-?) as the site falls within an SSSI impact risk zone (IRZ).
- 1.349 The delivery of this site as a spatial strategy, also seen in the context of the planning commitments and proposed Section 2 Local Plan allocations, is not likely to reduce impacts on these designations, therefore the likely effects are not anticipated to change.

Conclusion

- 1.350 Uncertain minor negative effects (-?) are expected, both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.351 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.352 The site is considered likely to result in minor positive yet uncertain effects (+?) at the end of the plan period in relation to shorter journeys – due to the provision of community facilities in the centre of the site. The uncertainty arises due to the difficulties in determining how and where people will travel.
- 1.353 Once fully built out, the site is likely to result in uncertain significant positive effects (++) as it is of a sufficient capacity (>4,500 dwellings) to deliver a new secondary school and will also deliver over 10ha of employment land onsite. In addition, it is also expected that phased provision of secondary school facilities will occur at the site by the end of the plan period, which means that the effects are also expected to be uncertain significant positive at this scale of development. The combination of these increases the potential for sustainable travel for shorter journeys.

Longer journeys

- 1.354 For longer journeys, the site is expected to have uncertain minor negative effects (-?), due to the lack of sustainable options to travel to the most popular commuting destinations, based on current commuting patterns in the area of the site. This is the case at the end of the plan period and once fully built out.
- 1.355 The transport infrastructure to be delivered as part of this spatial strategy is not likely to result in commuters (or people wanting to access higher order services) using more sustainable modes of transport and, as such, there is no change to the negative effects expected.

Conclusion

- 1.356 At the end of the plan period and once fully built out, this spatial strategy is considered likely to result in mixed significant positive yet uncertain (++) effects (in relation to shorter journeys) and minor negative yet uncertain effects (-?) (in relation to longer journeys).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.357 In accordance with the site assumptions, the site VE5 is considered likely to result in minor positive yet uncertain (+?) effects in relation to this objective. This is because the site information forms provided by the NEAs set out that the site is likely to be able to viably support the requisite infrastructure requirements. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity option VE5c (4,500 dwellings) as the site information form sets out that external funding or other improvement in viability is required to deliver omni-directional access between the A120 and A133 at the Oasis (Trunk Road) Junction.
- 1.358 In addition, when fully built out, the site will be reliant on external funding or other improvement in viability to deliver all infrastructure. There is no evidence that delivery of the site as a spatial strategy will negate the requirement for external funding or other improvement in viability, and similarly, no evidence that proposed allocations in the Section 2 Local Plans will be able to contribute towards this infrastructure (although this may be the case). As such, the likely effects are not considered to change.

Conclusion

- 1.359 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, and that requisite external funding has not been secured. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.360 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.361 The site is considered likely to result in uncertain significant negative effects (--?) in relation this SA objective as over 70% of the site area falls within 500m of heritage assets. The effects are expected at the end of the plan period and once fully built out. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 1.362 The effects on townscape for this site were considered to be uncertain (?) as the settlement of Frating is within the site boundaries, which means that development of the site is likely to result in significant changes to the existing character of Frating. Whether this change will be positive or negative will depend on the quality of the design of the new development. The delivery of the site a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to change the effects in relation to townscape.

Conclusion

- 1.363 Both at the end of the plan period and once fully built out, this spatial strategy is expected to have significant negative yet uncertain effects (--?) in relation to impacts on cultural heritage and assets and uncertain effects (?) in relation to impacts on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.364 In accordance with assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms that they can deliver policy compliant sustainable development. As such, the site was considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The delivery of the site as a spatial strategy, in addition to the planning commitments and proposed Section 2 Local Plan allocations, is not considered likely to alter its ability to deliver in accordance with these policies / the position confirmed in the site information form.

Conclusion

- 1.365 At the end of the plan period and once fully built out, this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.366 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.367 In total, approximately 20 % of the site area overlaps with Zone 3 of a Source Protection Zone (SPZ). However given that this is below the threshold of 25% set out in the assumptions framework, negligible effects (0) are anticipated in relation to water quality.

Water scarcity and water treatment

- 1.368 With regard to water supply, the Tendring Water Cycle Study (WCS) identifies the Water Recycling Centre (WRCs) which will serve proposed future development within the District, as per the Section 1 Local Plan (up to 2033). The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site VE5 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 1.369 The Integrated Water Management Strategy (IWMS)⁶⁷, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the scale of growth assessed in the study, the findings for water supply are assumed to also apply to site VE5, but with uncertainty due to the fact that the effects of this site were not specifically assessed as part of the study.
- 1.370 The Great Bromley WRC is geographically the closest to the site, however the study and is identified as having 'flow and treatment capacity for all proposed growth with some flow capacity for further growth' and a residual housing capacity is calculated as 300. However, the WCS only considers housing growth of 73 dwellings during the plan period, which, when combined with residual housing capacity, is less than the potential dwelling capacity for this site at the end of the plan period and once fully built out. As such, the effects for the spatial strategy at the end of the plan period and once fully built out are expected to be uncertain (?).

Conclusion

- 1.371 Negligible (0) effects in relation to water quality are anticipated both at the end of the plan period and once fully built. Uncertain effects (?) effects are expected in relation to water scarcity and water treatment for the end of the plan period and when fully built out.

⁶⁷ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.372 The site does not intersect with Environment Agency Flood Zones 2 and 3. Similarly, only negligible areas of the site are at medium risk of groundwater flooding and < 25% of the site area is at risk of flooding from surface water. It is therefore considered that the effects in relation to SA Objective 12 are likely to be negligible (0) at the end of the plan period and once fully built out.

Conclusion

- 1.373 Both at the end of the plan period and once fully built out this spatial strategy is anticipated to result in negligible effects (0) in relation to this SA objective.

SA13: To improve air quality

- 1.374 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.375 The site does not intersect with any AQMAs and, as such, the site is considered likely to result in negligible effects (0) in relation to this SA objective, both at the end of the plan period and once fully built out.

Potential contribution to road traffic within areas suffering from air pollution

- 1.376 According to NOMIS data, popular commuting destinations for existing residents in the area of VE5 include areas in the centre of Colchester. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads, and will result in increased vehicular trips through AQMAs located within the centre. As such, uncertain minor negative (-?) effects are expected in relation to this SA objective, both at the end of the plan period and once fully built out. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.

Conclusion

- 1.377 This spatial strategy is likely to result in mixed effects, including negligible (0) effects at the end of the plan period and once fully built out in relation to intersection with AQMAs and minor negative yet uncertain (-?) effects in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.378 The area of the site has been assessed by landscape officers of the NEAs and has been found to be of moderate strength landscape character with high sensitivity to new development. In light of this and in line with the assumptions framework, it is considered that development of the site is likely to result in uncertain significant negative effects (--?), both at the end of the plan period and once fully built out. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

Conclusion

- 1.379 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.380 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.381 Approximately 50% of the site is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect was considered to be the same at the end of the plan period and once fully built out, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 1.382 Almost the entirety of the site consists of Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. As such, significant negative (--) effects are anticipated at the end of the plan period and once fully built out.

Conclusion

- 1.384 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the development of a large area of land safeguarded for its mineral resource; and significant negative (--) effects are anticipated, both at the end of the plan period and once fully built out, due to the loss of high quality agricultural land.

East 5: Tendring Central Garden Village (VE4)

- 1.385 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, both within the plan period and when fully built out)
 - SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to access to healthcare facilities and recreation, when fully built out)
 - SA4: To ensure and improve the vitality and viability of centres (both within the plan period and when fully built out)
 - SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways (when fully built out)
- 1.386 The spatial strategy recorded significant negative effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, both within the plan period and when fully built out)
 - SA3: Improve health/reduce health inequalities (with respect to exposure to noise, both within the plan period and when fully built out)
 - SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
 - SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
 - SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

East of Colchester Spatial Strategy 6: CAUSE Metro Plan (C1 + C2 + C3 + C4)

- 1.387 The Inspector has indicated that CAUSE's Metro Plan should be appraised as a spatial strategy option. This option represents both a short term and long term alternative to the garden communities proposed by the NEAs and the alternative garden community proposed under option East 5. Within the plan period, 2,800 dwellings are suggested, based on an average of 700 new homes being delivered at each of the four settlements and which will provide the East Colchester requirement with added flexibility. The longer term option, proposes 8,000 dwellings, which is comparable in scale to the Tendring/Colchester Borders Garden Community.
- 1.388 Given the multitude of ownerships within the 800m circle around the four railway stations, the amalgamation and acquisition of the necessary land to deliver schools and health facilities would be one of the main infrastructure challenges facing this strategy.
- 1.389 This spatial strategy will be assessed both at the end of the plan period and once fully built out. The following table sets out the specific capacities which will be tested under this scenario.

Table 1.36: Site capacities, employment and infrastructure assumptions for East of Colchester Spatial Strategy 6

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ⁶⁸
Alresford CAUSE	700	2,000	CAUSE's 1000 home appraisal allows for 6.5% employment land, the same proportion as for West Tey. In addition there will be agglomeration benefits arising from the excellent connectivity between Colchester, Clacton and the Metro villages which will create local jobs better than standalone settlements connected mainly to London. The Metro settlements will also provide support for existing businesses in adjacent villages. For the purposes of the SA, the following employment land provision by the end of the plan period is assumed: C1: CAUSE Alresford –	<ul style="list-style-type: none"> Increased frequency of trains utilising the Colchester to Clacton/Walton branch line – as advised by CAUSE's transport advisor. Early years, schools and health provision would be delivered in a way that be accessed via the branch line services. It would be expected that each settlement would deliver a new primary school and early years facility, but only one new health facility and one new secondary school would be delivered and these would be located at one or two of the villages concerned – potentially the two central villages of Great Bentley and Weeley.
Great Bentley CAUSE	700	2,000		
Weeley CAUSE	700	2,000		
Thorpe-le-Soken CAUSE	700	2,000		

⁶⁸ All spatial strategy options will deliver the following infrastructure: early years, primary & secondary schools, youth centre provision, open space, bus services, local centre facilities, healthcare facilities and community meeting spaces.

Proposal/site	Dwellings to 2033	Total dwellings	Employment assumptions	Infrastructure assumptions ⁶⁸
			<p>approximately 8ha</p> <p>C2: CAUSE Great Bentley – approximately 8ha</p> <p>C3: CAUSE Weeley – approximately 9ha</p> <p>C4: CAUSE Thorpe-le Soken – approximately 12ha</p> <p>Area shown for 2,000 dwellings was calculated by LUC by multiplying 6.5% per the SIF by the area of each CAUSE site polygon in GIS</p>	

1.390 As this scenario includes four CAUSE Metro Plan sites which have been assessed individually, this assessment utilises and builds on those findings, adapting this to account for the employment and infrastructure assumptions in the table above. This assessment also takes into account other cumulative effects with the proposed Section 2 allocations.

Relevant Context for this Spatial Strategy

1.391 An alternative spatial strategy for housing growth to that put forward by the NEAs in the submitted Section 1 Local Plan is put forward by CAUSE and comprises the following key elements:

- 1) The underused resource of the Colchester-Clacton electrified railway provides the opportunity to create a sustainable and integrated chain of settlements ('Metro Villages' that together function as a 'Metro Town') linking jobs, housing and infrastructure, and could deliver a significant number of dwellings within a 10-minute walking catchment of high quality public transport within the 15-year plan period. Each 'pearl' on the necklace would support low order services such as primary schools, doctor's surgeries and shops. High order services would be accessed via public transport connectivity to urban centres.
- 2) The University of Essex and its Knowledge Gateway could provide the focus for an eastward urban extension to Colchester, delivering up to 2,000 dwellings, facilitated by the delivery of a A120/A133 link road. This would support a high quality 10-minute express bus service linking to the town centre and to a new railway station serving the university. The new station would be justified primarily by the fast-growing, road-dependent university rather than by housing.
- 3) There could be some proportional growth of other settlements in Colchester Borough/Tendring District. For example, a modest development within a 10-minute walking catchment of Marks Tey Station, that would be sufficiently small-scale not to overload the trunk roads and main line train services. Proportionate growth would also include brownfield sites, farmsteads and smaller sites.

1.392 To test the Metro Plan proposal through the SA in a consistent way with other reasonable alternatives it was necessary to define the areas of land that could contribute to the spatial strategy proposed by CAUSE.

1.393 To test land that could contribute to element 1 of the CAUSE alternative spatial strategy LUC, together with the NEAs, mapped all potential development land within a 10 minute walking

catchment of the four stations on the Colchester-Clacton railway line identified by CAUSE as locations for development within the plan period, i.e. Alresford, Great Bentley, Weeley, and Thorpe-le-Soken. Specifically, the additional SA of the Local Plan Section 1 tested all land that is:

- within 800 metres of each of these stations, to represent a 10 minute walking catchment; and
- additional to the sites already proposed to be allocated by Sections 2 of the Local Plans; and
- additional to developments that are already committed.

- 1.394 The exclusion of Section 2 Local Plan allocations and committed sites is consistent with the basis on which other strategic site options have been identified by the NEAs for testing in the additional SA of the Section 1 Local Plan. Also for consistency with the other strategic site options, land subject to environmental constraints such as flood risk were not excluded from the areas of land to be tested. Instead, the presence of such environmental constraints was highlighted through the SA process taking a proportionate view on whether such features can be avoided or mitigated.
- 1.395 In relation to element 2 of the CAUSE alternative spatial strategy, it is understood that element 1 is not reliant on a new railway station at the University of Essex Colchester campus. Nevertheless, CAUSE believes that a branch line station could be built at the University within the Plan period and would provide significant benefits for all parties – Wivenhoe, road users, local villages, the University and the rail franchise – whether the Metro Plan goes ahead or not. To test land that could contribute to element 2 of the CAUSE alternative spatial strategy LUC will assess the Tendring Colchester Borders Garden Community to the east of Colchester at an additional size option of 2,000 dwellings (see stage 1 site assessment of ALTGC10).
- 1.396 Land contributing to element 3 of the CAUSE alternative spatial strategy is not unique to that strategy. Strategic sites at Marks Tey and around Colchester (including within Tendring District) have already been identified by the NEAs for testing through Stage 1 of the additional SA of the Local Plan Section 1.
- 1.397 The Metro Plan proposal assumes that rail services between Colchester and Clacton will be reorganised from a commuter service to Colchester and onwards to London to a locally focussed 'shuttle' service and a new timetable providing trains every 15 minutes.
- 1.398 The Inspector has indicated that the additional SA work should appraise options both in their entirety (i.e. as fully built out) and on the basis of what is expected to be delivered by the end of the Plan period. Based on their understanding of the available land within 800 m of the Metro Plan stations, the NEAs believe that is reasonable to assume that 2,000 dwellings (on a fully built out basis) could eventually be accommodated per village. It is noted that CAUSE believes that the bottom up approach it is taking to the Metro Plan has no need to look beyond the plan period because the transport investment is already in place. It should be noted that the total of 8,000 dwellings beyond the end of the plan period has been included as an option to allow comparison between the options involving garden communities and strategic urban extensions. The development proposed in the plan period can be delivered as a standalone proposal.
- 1.399 For the purposes of the SA, this spatial strategy presumes that it will deliver 700 dwellings at each of the four CAUSE Metro Plan sites, resulting in 2,800 dwellings in total. It also presumes that, beyond the plan period a further 5,200 dwellings could be delivered, resulting in 8,000 dwellings in total, with 2,000 dwellings at each of the four sites.
- 1.400 Working from west to east, the four sites comprise C1 (CAUSE Alresford), C2 (CAUSE Great Bentley), C3 (CAUSE Weeley) and C4 (CAUSE Thorpe-le-Soken). Brief contextual descriptions for each are provided below.
- 1.401 Site C1 (CAUSE Alresford) is a 119-hectare site that 'wraps around' the existing village of Alresford (approximately 935 dwellings) and currently consists of arable land and blocks of woodland, as well as a cluster of lakes used for fishing in the north west. Alresford station is relatively central in the village. The B1027 runs north-west to south-east to the north-east of the village, linking into the A133 near the University of Essex. Wivenhoe lies 2km to the west, and Brightlingsea about 4km to the south.
- 1.402 Site C2 (CAUSE Great Bentley) is also a 119 hectare site. The village of Great Bentley (approximately 1,053 existing dwellings) forms part of the northern part of the site, with the area

to the west, south and east being the areas that would represent the opportunities for development. Great Bentley is accessed by local roads to the A133.

- 1.403 Site C3 (CAUSE Weeley) is a 132 hectare site that occupies an area of land lying in between the villages of Weeley (approximately 580 existing dwellings) and the smaller Weeley Heath (approximately 317 existing dwellings) to the south. The site is primarily arable land with scattered woodland blocks surrounding the urban edge. The A133 trunk road lies immediately west of the site boundary. The site boundary skirts around and excludes the Weeley Bridge Holiday Park (a 'park dean' development) to the north of the railway line. Weeley station lies at the southern boundary of Weeley village.
- 1.404 Site C4 (CAUSE Thorpe-le-Soken) lies adjacent to the village of Thorpe-le-Soken to the south. The site is focussed around Thorpe-le-Soken railway station, which sits within the small cluster of dwellings at 'Thorpe Station & Maltings' (approximately 22 existing dwellings) and around 800m–1km south of the larger settlement of Thorpe-le-Soken itself (approximately 935 existing dwellings). The site is primarily arable land with scattered woodland blocks and agricultural buildings.
- 1.405 There are no major employment sites within the four study areas, although Great Bentley has a small employment area, where adjoin land has permission for a mixed use development including 150 homes and a small extension to the employment area. The nearest major opportunities for employment being in or on the edges of Colchester and Clacton-on-Sea, plus some employment sites at Brightlingsea, Frating Green, Kirby Cross, Walton-on-the-Naze, and Frinton-on-Sea.
- 1.406 Development is already planned for through commitments and allocations in the Tendring Section 2 Local Plan at Alresford (c 275 dwellings), Great Bentley (c 275 dwellings plus employment space), Weeley (a mixed-use development with capacity for at least 280 new homes, 1 hectare of employment land, 1 hectare of public open space, and land for a new primary school/childcare facility), and Thorpe-le-Soken (187 dwellings).

Assessment of Effects

- 1.407 This section sets out the detailed assessment of the likely effects of East of Colchester Spatial Strategy 6.
- 1.408 The table below summarises the anticipated effects of this spatial strategy.

Table 1.37: Assessment of East of Colchester Spatial Strategy 6

SA objective	Spatial Strategy East 6 at the end of the plan period	Spatial Strategy East 6 when fully built out
SA1: Create safe environments which improve quality of life, community cohesion	-?/+	--?/++
SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	++	++
SA3: Improve health/reduce health inequalities	+/0?	+/0?
SA4: To ensure and improve the vitality & viability of centres	+	++?
SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	?	+?

SA objective	Spatial Strategy East 6 at the end of the plan period	Spatial Strategy East 6 when fully built out
SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	--?	--?
SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	?/+?	+?/++?
SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	+?	+?
SA9: To conserve and enhance historic and cultural heritage and assets and townscape character	--?/?	--?/?
SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation	+	+
SA11: To improve water quality and address water scarcity and sewerage capacity	-?/?	-?/?
SA12: To reduce the risk of fluvial, coastal and surface water flooding	-?	-?
SA13: To improve air quality	0/0	0/0
SA14: To conserve and enhance the quality of landscapes	--?	--?
SA15: To safeguard and enhance the quality of soil and mineral deposits?	--?/--	--?/--

SA1: Create safe environments which improve quality of life, community cohesion

- 1.409 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 1.410 Once fully built out, all four sites were considered likely to result in significant negative yet uncertain (--?), due to the impacts of development on the smaller communities that currently exist. All would more than double in size if fully built-out by 2,000 dwellings each, and in some cases the increase in dwellings would be much higher. During the plan period, the effects are likely to be less significant (-?). However, there is a considerable degree of uncertainty in this assessment, as this will depend on people's perceptions, and the way that development comes forward. CAUSE advocates a local community-led approach through neighbourhood planning.

Effect on the new community

- 1.411 At the end of the plan period all four sites were considered likely to result in minor positive (+) effects to the new community, due to the provision of facilities and services which is assumed in accordance with the assumptions framework.

- 1.412 At full capacity, all four sites were considered likely to result in significant positive (++) effects, due to the fact that these are large enough to provide a critical mass to support both new youth facilities and community meeting spaces, as well as support for existing services and facilities.
- 1.413 Over time it is likely that the existing and new communities would become more cohesive and integrated, given that they would remain at a village scale.

Conclusion

- 1.414 At the end of the plan period, mixed minor negative yet uncertain effects are anticipated in relation to the existing community and minor positive effects are anticipated in relation to the new community (-?/+).
- 1.415 At final capacity, mixed significant negative yet uncertain effects are anticipated in relation to the existing community and significant positive effects are anticipated in relation to the new community (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 1.416 At the end of the plan period, and once fully built out, all four sites were considered likely to result in significant positive (++) effects in relation to this SA objective. The reasons for this include that, in accordance with the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels. The site information forms provided by CAUSE also suggest that 30% 'social' housing is viable and deliverable.
- 1.417 Across all four sites it would be possible to deliver the additional housing required for east of Colchester within the plan period.

Conclusion

- 1.418 This spatial strategy option will be able to provide safe, accessible neighbourhoods, an appropriate mix of housing tenures, and be able to viably provide affordable housing to meet policy requirements, resulting in significant positive (++) effects in relation to this SA objective.

SA3: Improve health/reduce health inequalities

- 1.419 As set out in the assumptions framework, a mixed score (e.g. +/-) is given against this SA objective based on an assessment of whether the strategy would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 1.420 The settlements of Alresford, Great Bentley and Thorpe-Le-Soken all contain a GP practice, but Weeley does not have healthcare facilities. In Alresford and Great Bentley, the GP practices would be within acceptable walking distance. It is unlikely that additional healthcare facilities would be provided either within then plan period or when fully built out, given that the minimum threshold for new healthcare facilities is 4,500 dwellings. The most accessible general hospital to the Alresford site is Colchester General Hospital and Clacton Hospital is the most accessible to the other CAUSE sites.
- 1.421 Development at all four villages would give easy access to the surrounding countryside, which is an important recreational resource, and some of the villages already contain open space and local recreational facilities appropriate at a village scale, especially Alresford and Great Bentley. However, none of the sites are linked into dedicated cycle networks.
- 1.422 In accordance with the site information form, it is assumed that CAUSE sites would be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development.

- 1.423 An overall assessment of minor positive (+), both within the plan period and when fully built out is considered appropriate, given that not all sites would have local access to healthcare facilities, but that access to local recreation and countryside would be available.

Exposure to noise pollution

- 1.424 Both at the end of the plan period and when fully built out, all four sites are considered to result in negligible effects in relation to exposure to noise pollution, although it is not known if this will change should rail services increase.

Conclusion

- 1.425 At the end of the plan period and when fully built out, minor positive effects (+) are anticipated in relation to access to health and recreation facilities and negligible effects (0?) are anticipated in relation to exposure to noise pollution.

SA4: To ensure and improve the vitality & viability of centres

- 1.426 In accordance with the site information forms it is considered that all four sites will be supported by suitable provision of services and facilities within new local centres. Existing villages and services will also be supported by the new development in the early years and when fully built out. As a result of this all four sites were assessed as likely to result in minor positive (+) effects, both at the end of the plan period and once fully built out. However once fully built out it is anticipated that improved rail service frequency will improve accessibility to other centres in the NEA plan area, and this will result in significant positive (++?) effects in relation to this element of SA4. However, the effects are uncertain as it is not clear at this stage if there will be sufficient improvements to rail capacity to support all development within this spatial strategy.

Conclusion

- 1.427 In accordance with the above, minor positive (+) effects are anticipated in relation to this SA objective at the end of the plan period and uncertain significant positive (++?) effects are anticipated once fully built out.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 1.428 There are no major employment sites within or planned for the four sites, and the main employment locations can be found in Colchester and Clacton-on-Sea. The site information forms suggest that 6.5% of each site could be considered available for employment uses, which amounts approximately 8 hectares at Alresford, 8 hectares at Great Bentley, 12 ha at Weeley, and 9 hectares at Thorpe-le-Soken. Individually, only the 12 ha at Weeley would register a significant positive effect using the SA assumptions, although in-combination, when fully built-out the total employment land would be 37 hectares.
- 1.429 However, given the locations of the villages, and the access by minor roads (with the exception of Weeley), it is considered that delivery of this scale of employment land could be unrealistic. In any event, they would not be well located to the main centres of population and strategic transport networks.

Conclusion

- 1.430 Given the uncertainty of the delivery of the employment uses associated with each site, and that they would not be well located to the main centres of population it is considered that a minor positive (+?) effect is a reasonable assessment of the potential effects on this SA objective once fully built out. Within the plan period the effects are uncertain (?).

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 1.431 The CAUSE Alresford site intersects with three designated local wildlife sites (LWS), two of which are brownfield sites as a legacy of the area's quarrying history:
- the Villa Farm Quarry in the west of the site (a brownfield site and disused sand and gravel pit with ponds grassland, scrub and an area of ancient woodland);

- the Alresford Lodge Pits in the south west (a brownfield site and disused gravel pit made up of ponds, areas of reed, woodland, scrub and accompanying grassland); and
 - Crestland Wood in the south (a block of ancient woodland).
- 1.432 In addition, the site is within 400m of a further four Local Wildlife Sites and the large-scale Colne Estuary SSSI lies approximately 550m from the site boundary to the south and west. The site falls within associated IRZs for residential development, highlighting the potential for impacts on the interest features of the SSSI and/or the interest features of the co-located European sites. In total, approximately 40% of the site area lies within 400m of a designated site.
- 1.433 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.
- 1.434 In total, approximately 13% of the site area overlaps with locally designated protected areas, and a further 68% lies within 400m of a locally designated site.
- 1.435 The site assessment form concluded that a significant negative yet uncertain (--?) effect is anticipated in relation to the CAUSE Alresford development site.
- 1.436 The CAUSE Great Bentley site intersects with one designated Local Wildlife Site along Bentley Brook – a linear corridor of habitats which runs across the west of the site. The site also lies within 400m of three other protected sites or BAP priority habitats. The large-scale Colne Estuary SSSI lies approximately 2.1km from the site boundary to the south and the site falls within associated IRZs for residential development, highlighting the potential for impacts on the interest features of the SSSI and/or the interest features of the co-located European sites.
- 1.437 The site assessment form concluded that a minor negative yet uncertain (-?) effect is anticipated in relation to the CAUSE Great Bentley site.
- 1.438 The CAUSE Weeley site intersects to the south with one designated Local Wildlife Site – Gutteridge Wood (containing ancient woodland) – and several areas of BAP priority habitat (at Gutteridge Wood and two other small areas of deciduous woodland. The site also lies within 400m of a number of further protected sites, including Weeleyhall Wood SSSI.
- 1.439 In total, approximately 5% of the site area overlaps with local wildlife sites and a further 74% of the site falls within 400m of them. The site lies within the IRZs for several SSSIs.
- 1.440 As such, development of this site may result in impacts to these designations and habitats and the site assessment recorded a significant negative yet uncertain (--?) effect for the CAUSE Weeley site in accordance with the site assessment assumptions.
- 1.441 The CAUSE Thorpe-le-Soken site intersects with a number of designated Local Wildlife Sites and BAP priority habitats. The Upper Holland Brook LWS weaves through the site from south east to north west and also contains areas of BAP priority habitat of coastal and floodplain grazing marsh in the south east of the site. Within the site there are also numerous areas of BAP priority deciduous woodland habitat, and a small area of traditional orchard. Within 400m of its boundaries are two further Local Wildlife Sites and further patches of deciduous woodland. In total, 5.3% of the site area overlaps with LWS, and 9.2% of the site area overlaps with BAP Priority Habitat.
- 1.442 The site is also located within IRZs for residential development associated with several SSSIs, including those associated with Holland Haven Marshes SSSI, approximately 1.4km to the south east, and Weeleyhall Wood SSSI, approximately 800m to the west. This highlights the potential for impacts on the interest features of SSSIs and/or the interest features of the co-located European sites.
- 1.443 The site assessment form concluded significant negative yet uncertain (--?) effects for the CAUSE Thorpe-le-Soken development site.
- 1.444 Although the development sites are separated from one another, the cumulative effects of development on ecological networks, and taking into account that development at more than one site may affect individual biodiversity features means that an in-combination significant but uncertain effect (--?) is recorded. The effects on the existing habitats at the CAUSE sites may

result from, amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.

Conclusion

- 1.445 Significant negative yet uncertain (--) effects are anticipated both at the end of the plan period and once fully built out.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 1.446 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 1.447 Taking into account existing services and facilities, and the likely new services and facilities that would be provided at each site, given their scale of development, the site assessment forms for each of the CAUSE sites recorded minor positive but uncertain effects. This is because, although there would be a range of services and facilities within walking distance, the amount of employment land at three of the four sites would be less than 10 hectares, and none would be able to support a secondary school on their own. Therefore it is likely that people would need to travel further afield to access employment opportunities, and for pupils to go to secondary school.
- 1.448 Taking into account the combination of the four sites, when fully built out, the sites would be able to support a secondary school to service all four sites. Assuming this is built within one of the four settlements, it would mean that pupils from the other three settlements would need to travel outside of their own location by train, bus or by car. It may also be possible for new residents to access employment opportunities that are delivered at the new developments, with the option of train or bus. The site information forms suggest that the developments could support new bus services.
- 1.449 However, given the uncertainties over delivery it is considered that minor positive but uncertain (+?) effects would arise in relation to shorter journeys for the sites in-combination, both at the end of the plan period and when fully built out.

Longer journeys

- 1.450 For longer journeys, all of the site assessments recorded significant positive but uncertain (++) effects for the four site options. This is because a significant proportion of the likely commuting destinations would be accessible by train, and each site has a railway station within walking distance at the centre of the development location on the Colchester to Clacton-on-Sea railway line. This is one of the key principles underpinning the CAUSE Metro Plan proposals. The uncertainty arises due to the difficulties of determining how and when people will travel and as it is not clear at this stage if the proposed increased frequency of trains will be sufficient to support development.
- 1.451 Currently typical commuting destinations include other sites in the CAUSE suite of sites, especially Alresford and Great Bentley, the University of Essex campus, Wivenhoe, Colchester and Clacton-on-Sea. Other commuting destinations, such as Frating employment centre, and employment sites to the north and on the periphery of Colchester, are more likely to be accessed by car.
- 1.452 The attractiveness of the use of train would be dependent upon improved frequency of services, as proposed by CAUSE. The new developments would probably also support new or enhanced bus services, providing potential flexibility in terms of travel patterns. Improvements to both these forms of sustainable transport are likely to occur when demand levels are at a sufficient level, which suggests that they are more likely when fully built out, rather than during the plan period.
- 1.453 In-combination, it is considered that a significant positive but uncertain effect (++) when fully built out, but during the plan period, when only 700 dwellings are built at each site, the effects

will be minor positive but uncertain (+?). The uncertainty arises due to the difficulties of determining how and when people will travel.

Conclusion

- 1.454 At the end of the plan period, this spatial strategy is considered likely to result in uncertain (+?) effects (in relation to shorter journeys) and minor positive yet uncertain (+?) effects (in relation to longer journeys).
- 1.455 Once fully built out, this spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects (in relation to shorter journeys) and significant positive yet uncertain (++) effects (in relation to longer journeys).
- 1.456 In all cases the uncertainty arises due to the difficulties of determining how and when people will travel.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 1.457 In accordance with the site assessments, all four sites are considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective, both at the end of the plan period and once fully built out. This is because the site information forms set out that all sites are likely to be able to viably support the requisite infrastructure requirements. With respect to the four CAUSE sites, the additional infrastructure requirements were not considered to be very demanding, with no need for major infrastructure improvements. Most of the investment would be in new community facilities. The main improvement would be to the frequency of train services, and hence potentially additional rolling stock, rather than new major road or rail infrastructure.
- 1.458 The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Conclusion

- 1.459 The spatial strategy is considered likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The effects are anticipated for the end of the plan period and once fully built out.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 1.460 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 1.461 For CAUSE Alresford, the site overlaps a Grade II listed building (Milestone On Western Verge Approximately 100 Metres South East Of Junction With Cockaynes Lane). One Scheduled Monument (Remains of St Peter's Church) lies less than 100m south of the site boundary, and further grade II listed buildings are present in Alresford village and in the 0-500m and 500-1,000 buffers surrounding the site. There is also a Grade II* listed building within 500-1,000m of the site boundary. In total, approximately 82% of the site area falls within 500m of a heritage asset, and a further 18% lies between 500m and 1km from an asset.
- 1.462 For CAUSE Great Bentley, the site overlaps in limited areas with the Great Bentley Conservation Area, and the Grade I-listed Church of St Mary lies on the edge of the site boundary. Various Grade II-listed buildings are present within 0-500m and 500-1,000 m of the site boundary, the greatest concentration of these being within the conservation area. In total, approximately 89% of the site area lies within 500m of a designated heritage asset, and a further 11% lies within 500m to 1km of asset.

- 1.463 For CAUSE Weeley, the site overlaps with no designated heritage assets. However one Grade II*-listed building (the Church of St Andrew) and a number of Grade II-listed buildings within 500m of the site boundary. In total, approximately 56% of the site area falls within 500m of a heritage asset, and a further 42% lies between 500m and 1km from an asset.
- 1.464 For CAUSE Thorpe-le-Soken, there is a significant overlap in the north between this site and the Thorpe-le-Soken Conservation Area, as well as small areas of the Thorpe-le-Soken Station and Maltings Conservation Site, which would be surrounded by the development at this site. In addition, a number of Grade-II listed buildings in the village of Thorpe-le-Soken lie within 500m of the site boundaries (The Parish Church of St Michael, the Bell Hotel, and The Abbey), and further buildings within 1km of the site boundaries (the 'Comarques' building). In total, approximately 83% of the site area falls within 500m of a heritage asset, and a further 17% falls within 500m to 1km of an asset.
- 1.465 In line with stated assumptions, and taking a precautionary approach to this assessment, potential significant negative effects (--) at all the sites. Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 1.466 The CAUSE sites lie either adjacent to or in close proximity to the villages of Alresford, Great Bentley, Weeley and Weeley Heath, and Thorpe-le-Soken Station and Maltings.
- 1.467 Given the proximity of existing settlements, the building out of the developments is likely to significantly change the character of the local townscape. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).

Conclusion

- 1.468 Both at the end of the plan period and once fully built out, this spatial strategy is considered likely to result in significant negative yet uncertain (--) effects in relation to impacts on cultural heritage assets and uncertain (?) effects in relation to impact on townscape.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 1.469 In accordance with the assessment framework, all the sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition, the site information form confirms that they can deliver policy compliant sustainable development. As such, both sites were considered likely to result in minor positive (+) effects, at the end of the plan period and once fully built out. The combination of the four sites into a single spatial strategy, in addition to the planning commitments, proposed Section 2 Local Plan allocations, is not considered likely to alter their ability to deliver in accordance with these policies / the position confirmed in the site information forms.

Conclusion

- 1.470 At the end of the plan period, and once fully built out this spatial strategy is considered likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 1.471 As set out in the assumptions framework, a mixed score (e.g. +/-) against SA objective 11 will be reported based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 1.472 At CAUSE Great Bentley, a small isolated part of the site overlaps with a Source Protection Zone (SPZ) Zone 1, a significant proportion of the site overlaps with Zones 2 and 3 of the nearby SPZ. As such a minor negative effect with uncertainty (-?) was recorded in relation to groundwater resources in the site assessment form. The uncertainty arises because site specific mitigation may overcome significant issues.

- 1.473 The other three sites lie entirely outside source protection zones, and as such it is not considered likely that the development of the sites will affect groundwater resources and therefore negligible effects (0) are anticipated in relation to ground water.

Water scarcity and water treatment

- 1.474 With regard to water supply, the Tendring Water Cycle Study (WCS)⁶⁹ identifies that there is sufficient water supply to cater to proposed growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that the CAUSE sites were not allocated in the Section 1 Local Plan, and as such their specific locations were not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to the four CAUSE sites.
- 1.475 In regard to water treatment, the site assessment for two of the CAUSE (Great Bentley and Thorpe-le-Soken) found that there is sufficient headroom in wastewater treatment facilities to cater to growth during the plan period. However, in general, the information in the WCS is insufficient to assess growth at these sites in relation to wastewater. Given this uncertainty, it is considered prudent to record the effects as uncertain when combining the sites into a single spatial strategy (?).

Conclusion

- 1.476 A source protection zone only applies to CAUSE Great Bentley, but it is considered appropriate to consider this as a potential risk and therefore a minor adverse effect with uncertainty (-?). Given that it is not possible to be definitive about the capacity of WRCs to manage the development across all four sites, the effects with respect to water quality are uncertain (?), both within the plan period and when fully built out.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 1.477 A small proportion of the CAUSE Alresford site area intersects with Environment Agency Flood Zones 2 and 3 around Sixpenny Brook, which runs through the southwest edge of the site. None of the site is identified as being at medium or high risk of ground water flooding, and only very small parts of the site (< 25%) are identified as being at risk of flooding from surface water. In accordance with the SA assumptions, the site assessment considered that the effects are anticipated to be negligible (0).
- 1.478 A very small proportion of the CAUSE Great Bentley site intersects with Environment Agency Flood Zones 2 and 3 around Bentley Brook in the west of the site, and < 25% of the site is identified as being at risk of flooding from surface water. However approximately 32% of the site is identified as at medium risk of ground water flooding. In accordance with the SA assumptions, the site assessment considered that the effects are likely to be minor negative with uncertainty (-?).
- 1.479 A small proportion of the CAUSE Weeley site area intersects with Environment Agency Flood Zones 2 and 3 around Weeley Brook, which bisects the site east-west. Only a small area of the site (under 25%) is identified as being at medium risk of ground water flooding, and < 25% of the site area is identified as being at risk of flooding from surface water. In accordance with the SA assumptions, the site assessment considered that the effects to be negligible (0).
- 1.480 Part of the CAUSE Thorpe-le-Soken site (11%) intersects with Environment Agency Flood Zones 2 and 3 around Holland Brook, which bisects the site. However no part of the site is identified as being of high risk of groundwater flooding, and <25% of the site is identified as being at high risk of flooding from surface water. In accordance with the SA assumptions, the site assessment considered that the effects to be minor negative with uncertainty (-?).
- 1.481 All strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

⁶⁹ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

Conclusion

- 1.482 Although the site assessments for CAUSE Alresford and Weeley recorded negligible effects for flood risk, minor negative uncertain effects (-?) were recorded for CAUSE Great Bentley and Thorpe-le-Soken. In line with the precautionary principle, it is considered that this should be reflected in the in-combination effects for this spatial strategy, resulting in minor negative uncertain effects (-?), at the end of the plan period and when fully built out.

SA13: To improve air quality

- 1.483 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 1.484 None of the four CAUSE sites intersects with any AQMAs and as such, all of them are considered likely to result in negligible (0) effects in relation to this SA objective, at the end of the plan period and once fully built out.

Potential contribution to road traffic within areas suffering from air pollution

- 1.485 Although some journeys to Colchester by car arising from the four CAUSE sites could result in traffic passing through the AQMA in the town centre, the provision of alternative modes of transport, particularly by rail, the site assessment forms considered the effects to be negligible (0).

Conclusion

- 1.486 This spatial strategy is anticipated to result in negligible effects (0), at the end of the plan period and once fully built out in relation to intersection with AQMAs and negligible effects (0) in relation to potential contribution to road traffic within areas suffering from air pollution – both at the end of the plan period and once fully built out.

SA14: To conserve and enhance the quality of landscapes

- 1.487 None of the CAUSE sites are located near any designated landscapes or proposed extensions to these.
- 1.488 The area around CAUSE Alresford is of moderate landscape character strength and highly sensitive to visual intrusion due to wide views. In light of this, and in line with the stated SA assumptions, significant negative effects with uncertainty (--?) were recorded.
- 1.489 The area around CAUSE Great Bentley is of moderate landscape character which is moderately sensitive to change. In light of this and in line with the stated assumptions, minor negative effects with uncertainty (-?) were recorded.
- 1.490 The area around CAUSE Weeley is of strong landscape character and moderately sensitive to change. The Clacton and the Sokens Clay Plateau has a weak/poor landscape character but is highly sensitive to visual intrusion by large-scale new development and vertical structures. In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) were recorded.
- 1.491 The area around CAUSE Thorpe-le-Soken is of strong landscape character and highly sensitive to change. The Holland Valley System is of strong landscape character and moderately sensitive to change. In light of this and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated
- 1.492 There is uncertainty about the effects at all the sites as they will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

Conclusion

- 1.493 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective – both at the end of the plan period and once fully built out.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 1.494 As set out in the assumptions framework, a mixed score (e.g. +/-) will be reported against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 1.495 Development of sites that contain mineral resources can result in their sterilisation of not extracted before development.
- 1.496 A significant proportion of the CAUSE Alresford site (>25%) is within a mineral safeguarding area for sand and gravel deposits and parts are also permitted for minerals extraction. Given that more than 25% of the site is within a safeguarding area, the effect was anticipated to be significant negative with uncertainty (--?).
- 1.497 Approximately 73% of the CAUSE Great Bentley site is within a mineral safeguarding area for sand and gravel deposits. Due to the large area of mineral resources that may be affected, the effect is considered to be significant negative with uncertainty (--?).
- 1.498 A number of small areas around the edges of the CAUSE Weeley site (covering approximately 13% of the site) lie within a mineral safeguarding area for sand and gravel deposits. In accordance with the SA assumptions, the effects are anticipated to be minor negative with uncertainty (-?).
- 1.499 Isolated areas within the CAUSE Thorpe-le-Soken site (covering approximately 16% of the site in total) lie within a mineral safeguarding area for sand and gravel deposits. In line with the assumptions framework, the effects at both capacity options are anticipated to be minor negative with uncertainty (-?) in relation to mineral resources.
- 1.500 The uncertainty for all sites arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 1.501 More than 25% of the CAUSE Alresford site is classified as Grade 2 agricultural land and the remainder is Grade 3, meaning that the building out of this site would result in the loss of a significant amount of very good quality agricultural land. In light of the above, a significant negative (--) was recorded.
- 1.502 Approximately 51% of the CAUSE Great Bentley site is Grade 2 agricultural land, with the remainder (49%) designated as Grade 3 agricultural land, resulting in a significant negative (--) effect is anticipated in relation to agricultural land.
- 1.503 The entirety of the CAUSE Weeley site is classified as Grade 3 agricultural land, meaning that development of this site would result in the loss of some good to moderate quality agricultural land, resulting in a minor negative (-) effect.
- 1.504 Only a negligible proportion of the site (in the south) consists of Grade 2 agricultural land, with the remainder either Grade 3 (approximately 69%) or Grade 4 (30%). Given that >25% of the site area falls within Grade 3 agricultural land, a minor negative (-) effect is anticipated.

Conclusion

- 1.505 This spatial strategy is considered likely to result in significant negative yet uncertain (--?) effects in relation to mineral deposits, both at the end of the plan period and once fully built out, due to the in-combination development of a large area of land safeguarded for its mineral resource. It also is considered likely to result in significant negative (--) effects, both at the end of the plan period and once fully built out, due to the in-combination loss of high quality agricultural land.

East 6: CAUSE Metro Plan (C1, C2, C3 & C4)

- 1.506 This spatial strategy recorded significant positive effects for:
- SA1: Create safe environments which improve quality of life, community cohesion (in terms of the new community, when fully built out)

- SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford (both within the plan period and when fully built out)
- SA4: To ensure and improve the vitality and viability of centres (when fully built out)
- SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion (for longer journeys, when fully built out)

1.507 The spatial strategy recorded significant negative effects for:

- SA1: Create safe environments which improve quality of life, community cohesion (with respect to the impact on existing communities, when fully built out)
- SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological resources (both within the plan period, and when fully built out)
- SA9: To conserve and enhance historic and cultural heritage and assets and townscape character (with respect to heritage assets, both within the plan period and when fully built out)
- SA14: To conserve and enhance the quality of the landscapes (both within the plan period and when fully built out)
- SA 15: To safeguard and enhance the quality of soil and minerals (for both soils and minerals, both within the plan period and when fully built out)

Dwellings data for proportionate growth

- 2.1 Dwellings data in relation to the proportionate growth spatial strategy has been provided by the NEAs. Table 2.1 sets out the existing dwelling stock in each settlement and the required additional dwellings as defined under the proportionate growth scenario. This data has been used to inform this assessment.

Table 2.1: Dwellings data for proportionate growth

Settlement	Estimated existing dwelling stock 2019	Proportionate 18% increase between 2019 and 2033	Number of dwellings to be delivered by commitments & Section 2 allocations 2019-2033	Proportionate Growth Scenario (rounded)	Hierarchy-based growth scenario (rounded)
Tier 1 (all figures rounded to the nearest 10 units)					
Tier 1 settlements to deliver 50% of 40,000 homes i.e. 20,000 between 2 settlements.					
Colchester (including Stanway, Myland, East Donyland, Braiswick and Ardleigh Colchester Fringe)	58,651	10,557	10,313	160	0
Braintree (including Bocking and Great Notley)	21,882	3,939	4905	0	4,780
Tier 2 (all figures rounded to the nearest 10 units)					
Tier 2 settlements to deliver 20% of 40,000 homes i.e. 8,000 homes between 4 settlements.					
Clacton on Sea	28,328	5,099	2858	1,500	0
Harwich & Dovercourt	9,666	1,740	804	620	340
Witham	11,793	2,123	2548	0	0
Halstead	5,820	1,048	664	260	790
Tier 3 (all figures rounded to the nearest 10 units)					
Tier 3 settlements to deliver 15% of 40,000 homes i.e. 5,000 homes between 5 settlements.					
Frinton, Walton & Kirby Cross	10,595	1,907	897	670	300
Manningtree, Lawford & Mistley	3,987	718	993	0	210
Brightlingsea	4,127	743	139	400	1,060
Tier 4 (all figures rounded to the nearest 10 units)					
Tier 4 settlements to deliver 4,000 homes (10% of total requirement) through existing planning permissions and Section 2 Allocations.					
Kelvedon with Feering	2,462	443	1036	0	160
Hatfield Peverel	1,597	287	263	20	940

Settlement	Estimated existing dwelling stock 2019	Proportionate 18% increase between 2019 and 2033	Number of dwellings to be delivered by commitments & Section 2 allocations 2019-2033	Proportionate Growth Scenario (rounded)	Hierarchy-based growth scenario (rounded)
Alresford	935	168	265	0	0
Elmstead Market	877	158	212	0	0
Great Bentley	1,053	190	281	0	0
Little Clacton	1,452	261	182	50	0
St. Osyth	2,435	438	293	100	0
Thorpe le Soken	935	168	221	0	0
Weeley	580	104	332	0	0
Abberton and Langenhoe	439	79	63	10	0
Boxted	576	104	40	40	0
Copford and Copford Green	671	121	2	80	0
Chappel and Wakes Colne	444	80	37	30	0
Dedham	492	89	3	60	0
Eight Ash Green	740	133	231	0	0
Fordham	341	61	21	30	0
Great Horkesley	1,060	191	45	100	0
Great Tey	393	71	45	20	0
Langham	430	77	80	0	0
Layer de la Haye	729	131	72	40	0
Marks Tey	1,140	205	35	110	0
Rowhedge	1,037	187	214	0	0
Tiptree	4,139	745	917	0	0
West Bergholt	1,411	254	139	80	0
West Mersea	3,576	644	224	280	0
Wivenhoe	3,560	641	302	230	0
Coggeshall	2,215	399	108	190	0
Earls Colne	1,641	295	191	70	0
Sible Hedingham	1,995	359	116	160	0
<u>Tier 5 (all figures rounded to the nearest 10 units)</u>	Tier 5 settlements to deliver 2,000 homes (5% of total requirement) through existing planning permissions and Section 2 Allocations.				
Ardleigh (Village)	917	165	43	80	0
Beaumont Cum Moze	136	24	1	20	0
Bradfield	521	94	9	60	0
Frating	236	42	70	0	0
Great Bromley	422	76	26	30	0
Great Holland	353	64	15	30	0
Great Oakley	446	80	89	0	0
Kirby le Soken	618	111	15	60	0

Settlement	Estimated existing dwelling stock 2019	Proportionate 18% increase between 2019 and 2033	Number of dwellings to be delivered by commitments & Section 2 allocations 2019-2033	Proportionate Growth Scenario (rounded)	Hierarchy-based growth scenario (rounded)
Little Bentley	127	23	3	10	0
Little Bromley	107	19	27	10	0
Little Oakley	500	90	4	60	0
Ramsey Village	123	22	8	10	0
Tendring	281	51	22	20	0
Thorpe Station & Maltings	22	4	0	0	0
Thorrington	918	165	20	100	0
Weeley Heath	317	57	68	0	0
Wix	330	59	7	40	0
Wrabness	176	32	21	10	0
Aldham	217	39	5	20	0
Birch	340	61	2	40	0
Dedham Heath	400	72	0	50	0
Easthorpe	100	18	0	10	0
East Mersea	121	22	4	10	0
Fingringhoe	334	60	5	40	0
Great Wigborough	103	19	3	10	0
Layer Breton	125	23	3	10	0
Little Horkesley	78	14	0	10	0
Messing-cum-Inworth	179	32	0	20	0
Mount Bures	95	17	1	10	0
Peldon	239	43	1	30	0
Salcott	121	22	5	10	0
Wormingford	189	34	1	20	0
Bures Hamlet	346	62	9	40	0
Cressing Tye Green	548	99	351	0	0
Finchingfield	630	113	10	70	0
Great Bardfield	586	105	56	30	0
Great Yeldham	729	131	71	40	0
Rayne	955	172	3	110	0
Silver End	1,551	279	541	0	0
Steeple Bumpstead	681	123	64	40	0
Ashen	144	26	2	20	0
Audley End	50	9	0	10	0
Belchamp Otten	72	13	0	10	0
Belchamp St Paul	168	30	1	20	0
Belchamp Walter	155	28	3	20	0
Blackmore End	160	29	0	20	0

Settlement	Estimated existing dwelling stock 2019	Proportionate 18% increase between 2019 and 2033	Number of dwellings to be delivered by commitments & Section 2 allocations 2019-2033	Proportionate Growth Scenario (rounded)	Hierarchy-based growth scenario (rounded)
Black Notley	1,033	186	11	120	0
Bradwell	223	40	10	20	0
Bulmer	136	24	0	20	0
Bulmer Tey	133	24	0	20	0
Castle Headingham	548	99	1	60	0
Colne Engaine	402	72	8	40	0
Cornish Hall end	150	27	0	20	0
Cressing	226	41	1	30	0
Foxearth	162	29	1	20	0
Gestingthorpe	143	26	1	20	0
Gosfield	649	117	28	60	0
Great Maplestead	165	30	3	20	0
Great Sailing	139	25	0	20	0
Greenstead Green	273	49	1	30	0
High Garret	321	58	2	40	0
Helions Bumpstead	188	34	2	20	0
Lamarsh	86	15	0	10	0
Little Maplestead	116	21	1	10	0
Little Yeldham	128	23	4	10	0
Nounsley	269	48	0	30	0
Panfield	387	70	1	50	0
Pebmarsh	236	42	2	30	0
Ridgewell	226	41	24	10	0
Rivenhall	163	29	3	20	0
Rivenhall End	159	29	0	20	0
Shalford	157	28	17	10	0
Shalford Church End	200	36	0	20	0
Stambourne Chapelend Way	86	15	1	10	0
Stambourne Dyers End	85	15	0	10	0
Stistead	271	49	5	30	0
Sturmer	197	35	9	20	0
Surrex (Coggeshall)	222	40	0	30	0
Terling	316	57	0	40	0
Tilbury Juxta Clare	100	18	0	10	0
Toppesfield	223	40	1	30	0
White Colne	213	38	0	30	0
Wethersfield	569	102	6	60	0
White Notley	229	41	2	30	0

Settlement	Estimated existing dwelling stock 2019	Proportionate 18% increase between 2019 and 2033	Number of dwellings to be delivered by commitments & Section 2 allocations 2019-2033	Proportionate Growth Scenario (rounded)	Hierarchy-based growth scenario (rounded)
Wickham St Paul	145	26	7	10	0
TOTALS	219,844	39,572	31,832	7,660	8,580

LUC

July 2019