

Sustainability Appraisal (SA) of the Brentwood Local Plan

SA Report
Non-technical Summary

January 2019

DOCUMENT DETAILS					
Rev	Date	Details	Prepared by	Reviewed by	Approved by
1	October 2018	Non-technical Summary of the SA Report presented to Extraordinary Council	Mark Fessey Associate Chris McNulty, Senior consultant	Steve Smith Technical Director	Steve Smith Technical Director
2	January 2019	Non-technical Summary of the SA Report published alongside the Proposed Submission Plan			

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Introduction

AECOM is commissioned to lead on Sustainability Appraisal (SA) in support of the emerging Brentwood Local Plan. Once in place, the Local Plan will establish a spatial strategy for growth and change in the Borough over the next 15 years, allocate sites to deliver the strategy and establish the policies against which planning applications will be determined.

SA is a mechanism for considering and communicating the likely effects of an emerging plan, and alternatives, with a view to minimising adverse effects and maximising the positives. SA for Local Plans is a legal requirement, in-line with the EU Strategic Environmental Assessment (SEA) Directive.

At the current time, the final draft ('proposed submission') version of the Local Plan is published for consultation, and the 'SA Report' is published alongside, with a view to informing the consultation.

This is a Non-technical Summary (NTS) of the SA Report.

Structure of the SA Report / this NTS

SA reporting essentially involves answering the following questions in turn:

1. What has plan-making / SA involved up to this point?
 - i.e. when preparing the draft plan.
2. What are the appraisal findings at this current stage?
 - i.e. in relation to the draft plan.
3. What are the next steps?

Each of these questions is answered in turn below. Firstly though there is a need to set the scene further by answering the question 'What's the scope of the SA?'

What's the scope of the SA?

The scope of the SA is essentially reflected in a list of sustainability topics and objectives. Taken together, this list indicates the parameters of SA, and provides a methodological 'framework' for appraisal.

Sustainability topics and objectives (the SA framework)

Topic	Objectives
Air quality	<ul style="list-style-type: none"> • Air pollution (and associated risks to health) must be an on-going consideration particularly that which results from traffic congestion in Brentwood Town Centre. • The health of those in the Borough must be protected from the adverse effects of development through avoidance or mitigation measures.
Biodiversity	<ul style="list-style-type: none"> • The Borough's existing natural assets need to be protected from the impacts of future development and where possible enhanced. • The Borough's network of green infrastructure should be protected, enhanced and strategically expanded to deliver benefits for people and wildlife. • Areas that are home to declining species or habitats should be a particular target for protection and ecological restoration.
Climate change mitigation	<ul style="list-style-type: none"> • With regionally high levels of domestic GHG emissions, it will be necessary to improve the energy efficiency of all buildings in the Borough. • A shift towards low carbon forms of transport will be required to reduce per capita emissions. • An opportunity exists to obtain a greater proportion of energy from renewable sources, and development should be constructed and situated in order to minimise resource use.

Topic	Objectives
	<ul style="list-style-type: none"> Businesses in the Borough should contribute to the creation of a low-carbon economy, including reduced levels of energy use in buildings and from transport.
Community and well-being	<ul style="list-style-type: none"> Reduce health inequalities, and inequalities more generally, with a particular focus on those areas suffering from the highest levels of deprivation. As the number of people aged over 85 in the Borough grows there will be a need for provision of services and suitable accommodation for older people. Ensure that Gypsy and Traveller communities have suitable access to services and healthcare and that sufficient sites are available to meet demand. Improve levels of educational performance in certain areas; and ensure that there is sufficient provision of education facilities across the Borough. Improve access to services and facilities in rural areas of the Borough. Improved open spaces and recreation facilities are a requirement in certain areas, with a particular focus on youth facilities needed in many places.
Economy and employment	<ul style="list-style-type: none"> Protect and support the Borough's smaller centres and parades. The competitiveness of key employment areas such as Brentwood Town Centre and Warley Business Park must be supported, including by promoting sites for high quality offices. Support investment that leads to high value, knowledge-based employment activities. Consider future opportunities and consequences associated with the Shenfield and Brentwood Crossrail link. Support a thriving town centre focused on Brentwood High Street through a good balance of retail (comparison and convenience), services, employment and residential.
Flooding	<ul style="list-style-type: none"> Reduce flood risk, including as climate change may increase risk. Protect and enhance existing natural flood risk management infrastructure and ensure all development incorporates SuDS to minimise flood risk.
Heritage	<ul style="list-style-type: none"> The Borough's heritage assets must be given protection relative to their importance. Areas of identified historic character should be protected as should the historic buildings that contribute most to local character. Development must be of an appropriate scale and design, respecting existing character.
Housing	<ul style="list-style-type: none"> Housing affordability is a significant issue for many in the Borough and demand for affordable housing is likely to continue to rise; as such there is a need to increase delivery of affordable and intermediate housing. New housing must be of an appropriate size, tenure and design so as to meet the needs of existing and future residents (including the elderly, disabled people and those in poor health) and ensure that people are able to remain in the Borough as their circumstances change.
Landscape	<ul style="list-style-type: none"> The Borough includes highly valued rural landscapes that require protection and careful management with a view to supporting distinctiveness. Urban fringe landscapes should also be a focus of careful planning.
Soils	<ul style="list-style-type: none"> Make best use of brownfield land and protect the resource of productive agricultural land.
Waste	<ul style="list-style-type: none"> A primary concern is to promote the integration of facilities to enable efficient recycling as part of new developments. Developers should be encouraged to adopt sustainable construction practices, including handling waste arisings, recycling, and disposal in a sustainable manner.
Water	<ul style="list-style-type: none"> Water quality is a concern, with a need to improve the ecological status of waterways. Deliver water efficiency measures, given serious water stress regionally.

PLAN-MAKING / SA UP TO THIS POINT

An important element of the required SA process involves appraising 'reasonable alternatives' in time to inform development of the draft plan, and then publishing information on reasonable alternatives for consultation alongside the draft plan.

As such, Part 1 of the SA Report explains how work was undertaken to develop and appraise a range of alternative approaches to site allocation, or 'spatial strategy alternatives', in time to inform the Proposed Submission Plan. Specifically, Part 1 of the report -

- 1) explains the process of **establishing** the reasonable spatial strategy alternatives;
- 2) presents the outcomes of **appraising** the reasonable spatial strategy alternatives; and
- 3) explains reasons for **establishing** the preferred spatial strategy option, in light of the appraisal.

Establishing reasonable alternatives

Chapter 5 of the main report explains how reasonable alternatives were established subsequent to a lengthy process of gathering evidence and examining/refining options. Chapter 5 is structured as follows -

Section 5.1 Introduces the process.

Section 5.2 Presents a brief discussion of **high-level** considerations, in particular focusing on the matters of objectively assessed housing needs (OAHN) / local housing need (LHN); other strategic considerations with a bearing on the **quantum** of homes to be provided for through the plan (notably unmet needs arising from elsewhere in South Essex); and high-level considerations in respect of the **broad distribution** of housing.

Section 5.3 Introduces the **strategic site options** that are available, and hence might potentially feature within reasonable spatial strategy alternatives, concluding that only two locations reasonably in contention, namely Dunton Hills Garden Village (DHGV) and West Horndon (three options).

Section 5.4 Introduces the **smaller site options** that have emerged as reasonably in contention through the Council's Housing and Economic Land Availability Assessment (HELAA).

Section 5.5 Draws together information from the three steps discussed above to arrive at **sub-area options**. The conclusion reached (see Table 5.4 of the main report) is that -

- There are options for the Brentwood main urban area that should be reflected across the reasonable spatial strategy alternatives. Specifically, there is the option of allocating the package of sites identified as preferred at the Extraordinary Council meeting of November 8th 2018; or there are higher growth options involving allocation of one or more omission sites. Four omission sites are highlighted as reasonably in contention: Honeypot Lane (200 homes); Sawyers Hall Farm (450 homes); St. Faith's (750 homes); and West of Ongar Road (800 homes).
- There are options for the A127 corridor that should be reflected across the reasonable spatial strategy alternatives. Specifically, there is the option of allocating the package of sites identified as preferred at the Extraordinary Council meeting of November 8th 2018 (i.e. West Horndon Industrial Estate and DHGV); or there are higher or lower growth options, which could involve one or two omission sites. The omission sites are West Horndon East (600 homes) and West (900 homes).
- There is only one option for Ingatestone and the villages that reasonably needs to be reflected across the reasonable spatial strategy alternatives (i.e. the allocations at these locations should be held constant) namely the approach identified as preferred at the Extraordinary Council meeting of November 8th 2018

Section 5.6 Draws together information from the above steps, and applies a series of rules/assumptions, in order to establish borough-wide **reasonable spatial strategy alternatives** for appraisal.

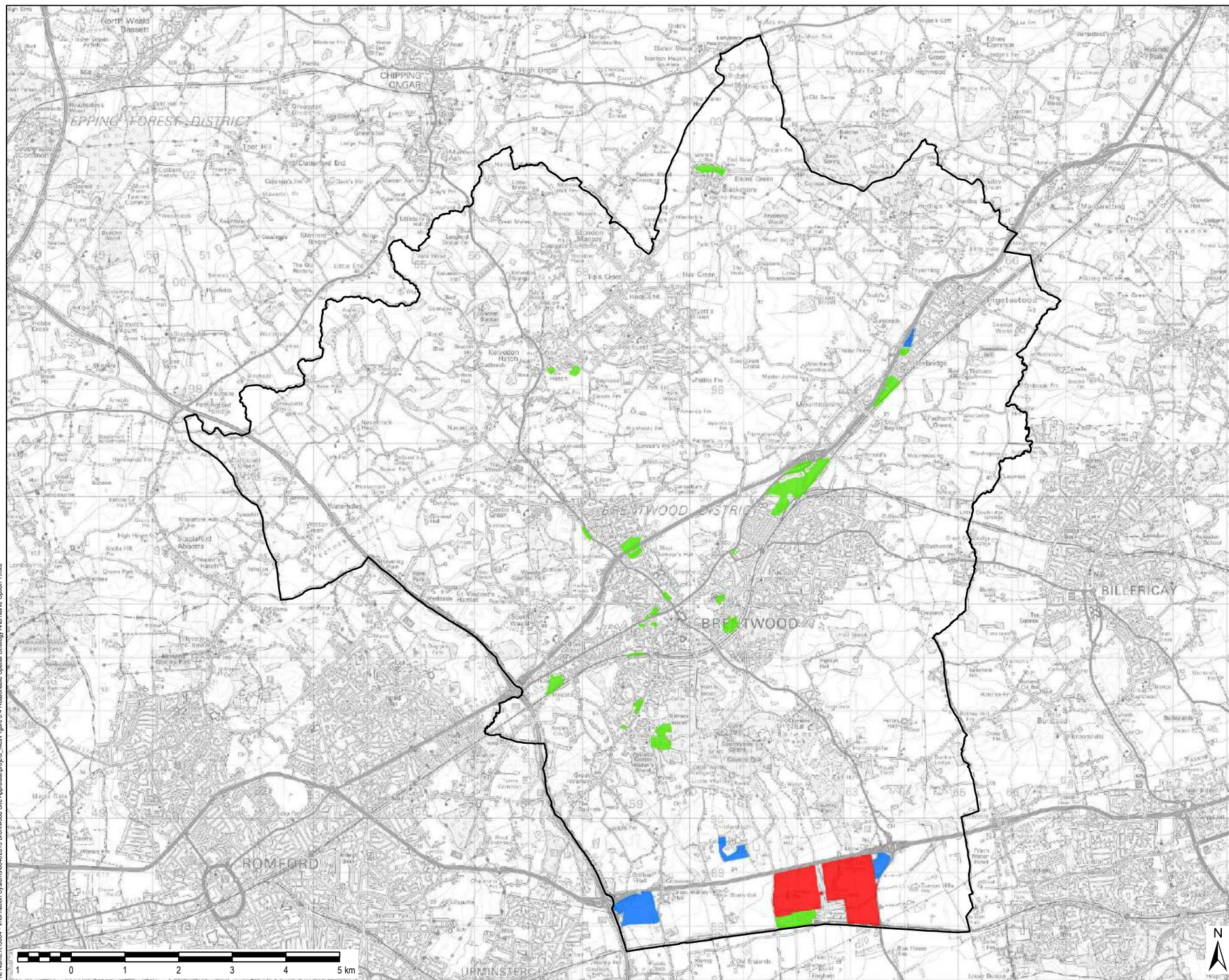
The reasonable spatial strategy alternatives (January 2019)

				Option 1 WH East WH West	Option 2 Brentwood	Option 3 DHGV	Option 4 Brentwood WH East	Option 5 Brentwood WH West	Option 6 DHGV WH West	Option 7 Brentwood WH East WH West
Completions ¹				363	363	363	363	363	363	363
Commitments ²				926	926	926	926	926	926	926
Windfall ³				410	410	410	410	410	410	410
Allocations	Constants	Brentwood / Shenfield	Urban brownfield	1,152	1,152	1,152	1,152	1,152	1,152	1,152
			Urban greenfield	75	75	75	75	75	75	75
			Green Belt	1240	1240	1240	1240	1240	1240	1240
		West Horndon	Urban brownfield	580	580	580	580	580	580	580
		Villages	Ingatestone GB	218	218	218	218	218	218	218
			Northern Village GB	123	123	123	123	123	123	123
	Variables	Brentwood	Honeypot Lane		200		200	200		200
			Sawyers Hall Farm		450		450	450		450
			St. Faiths		750		750	750		750
			West of Ongar Road		800		800	800		800
		A127	West Horndon East	600			600			600
			West Horndon West	900				900	900	900
			Dunton Hills GV			2700			2700	
	Total dwellings				6587	7287	7787	7887	8187	8687
Total dwellings per annum (dpa)				387	429	458	464	482	511	517
% over LHN (assuming LHN is 350 dpa)				11%	22%	31%	33%	38%	46%	48%
% over LHN (assuming LHN is 454 dpa)				-15%	-6%	1%	2%	6%	13%	14%

¹ i.e. homes built since the start of the plan period.

² i.e. homes on sites with planning permission or neighbourhood plan allocations (of which there are none in this case).

³ i.e. homes anticipated to come forward on unallocated sites.



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Project Title
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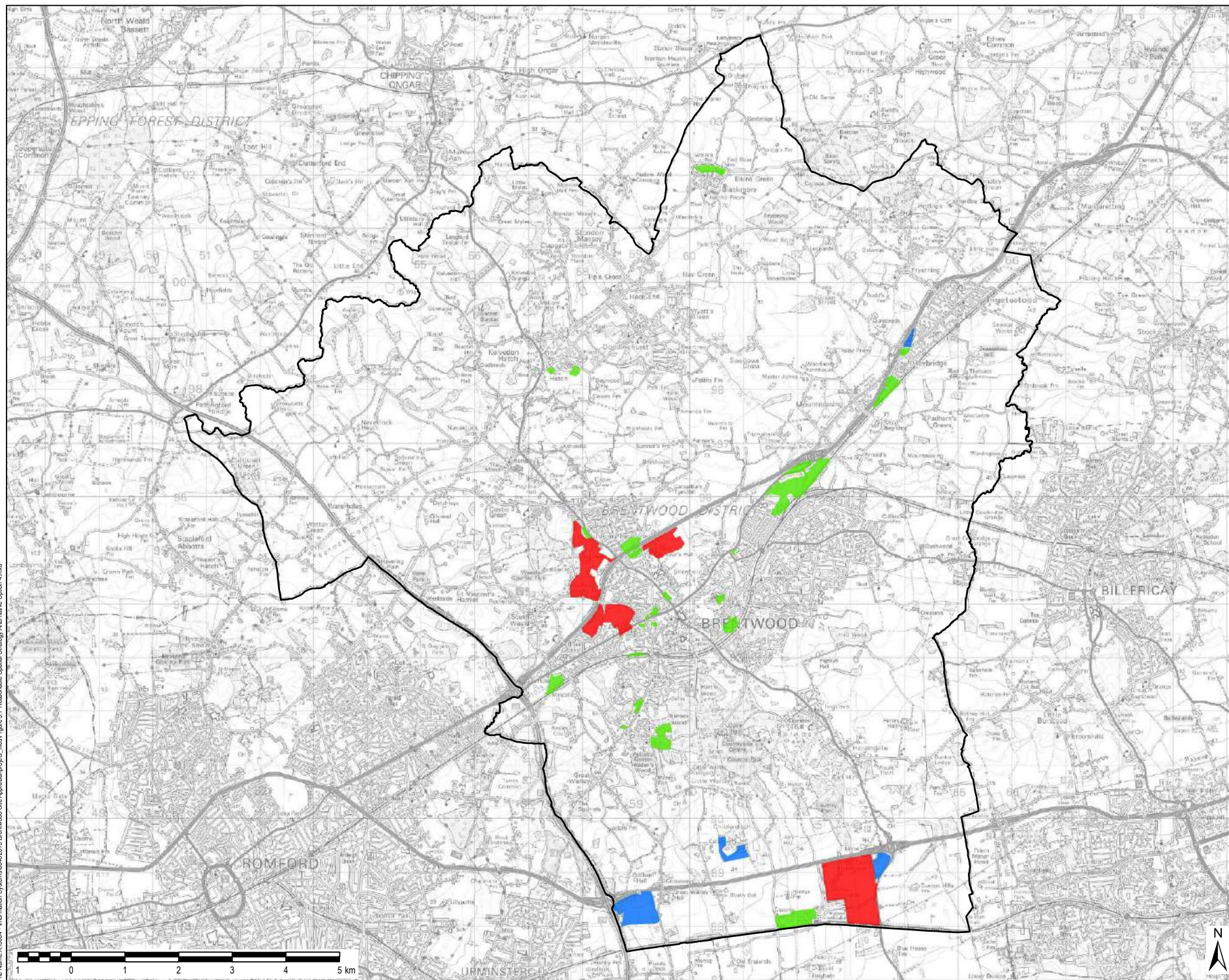
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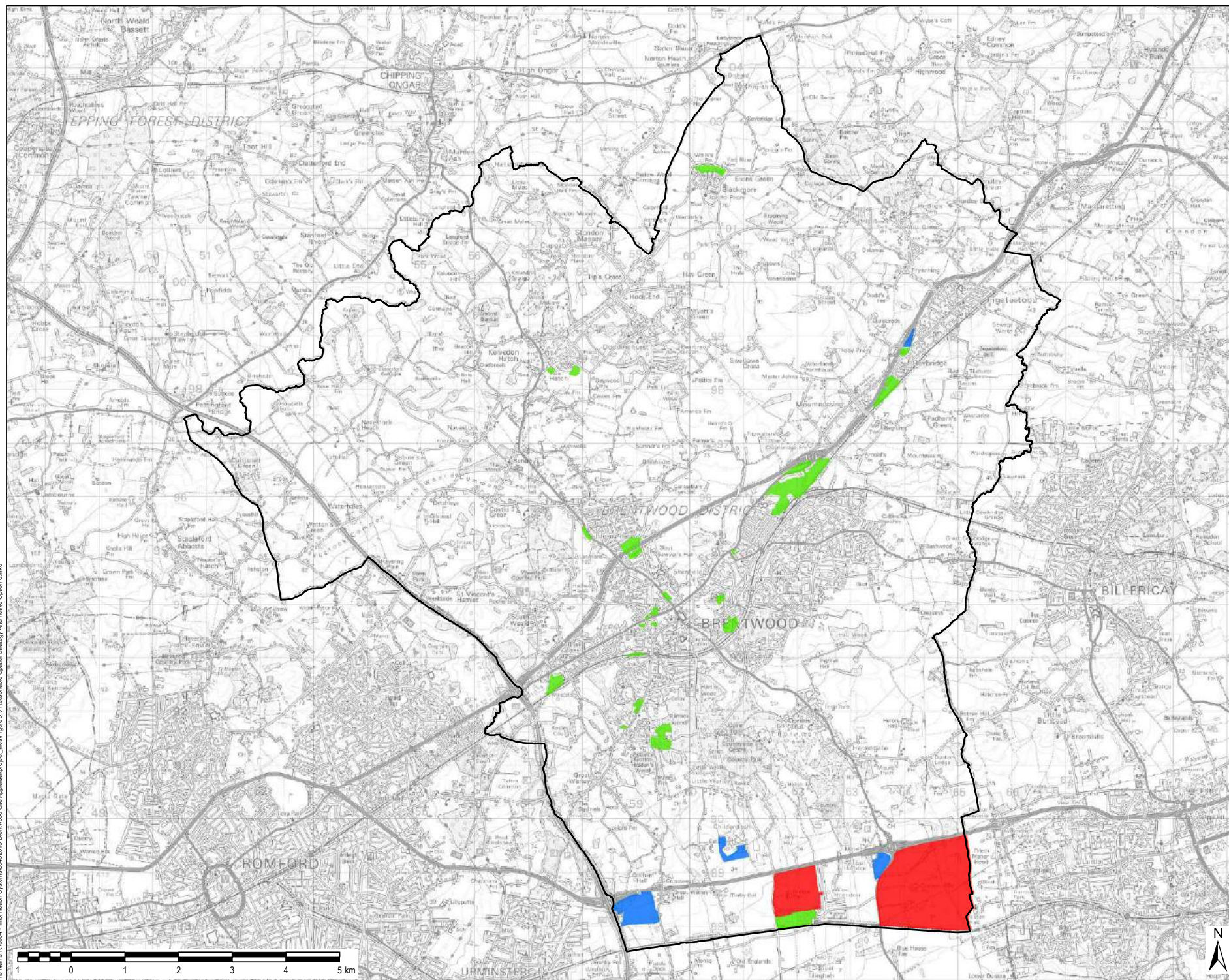
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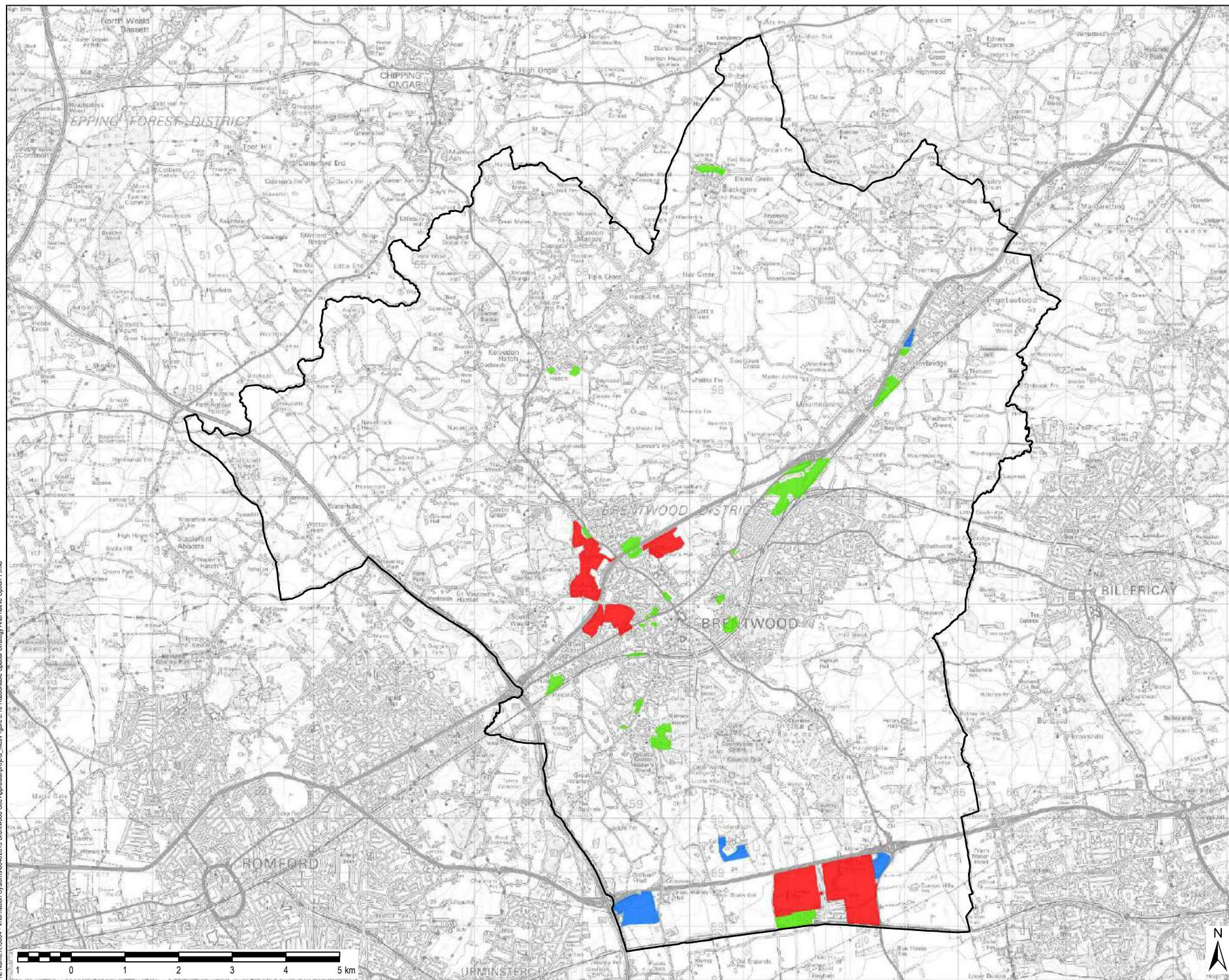
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Appraising reasonable alternatives

The table below presents summary appraisal findings in relation to the alternatives introduced above.

The appraisal table comprises a row for each of the sustainability topics that make up the SA framework (see above). Within each row the alternatives are categorised in terms of potential to result in 'significant effects' (using red / green) and also ranked in order of relative performance (with ' = ' used to denote instances where the alternatives perform on a par, i.e. it not possible to differentiate between them).

Summary appraisal of the reasonable spatial strategy alternatives (January 2019)

Topic	Rank of performance / categorisation of effects						
	Opt 1 WH East WH West	Opt 2 Brentwood	Opt 3 DHGV	Opt 4 Brentwood WH East	Opt 5 Brentwood WH West	Opt 6 DHGV WH West	Opt 7 Brentwood WH East WH West
Air quality	★1	4	2	5	5	3	6
Biodiversity	3	4	★1	6	5	2	7
Climate change	★1	3	★1	3	2	★1	★1
Community & well-being	2	5	★1	5	4	2	3
Cultural heritage	2	2	★1	3	2	★1	3
Economy & employment	2	3	★1	3	2	★1	3
Flooding	=						
Housing	7	6	5	4	3	2	★1
Landscape	★1	2	3	5	4	7	6
Soils	=						
Waste	=						
Water	★1	2	3	4	5	6	7

Conclusion

A headline conclusion is that a strategy involving one or more strategic allocations within the A127 corridor performs well, relative to the alternative of supporting higher growth at Brentwood, in respect of a number of objectives. It does not automatically follow that a strategy involving higher growth at the Brentwood is relatively unsustainable overall; however, it is an indication. The appraisal has highlighted limited benefits to supporting higher growth at Brentwood, and some significant draw-backs, most notably in respect of 'air quality' and 'biodiversity', with significant negative effects predicted in both respects. However, the appraisal findings do reflect the merits of the particular package of sites assumed to deliver higher growth. There will be alternative packages of sites that perform better in certain respects.

Focusing on growth options within Brentwood, there are essentially three urban extension options that might be considered 'strategic', in that they will be of a scale sufficient to deliver strategic infrastructure upgrades, and hence a degree of 'planning gain' (one of the three sites might alternatively be split into its two component parts, but such an approach is found to perform relatively poorly through the appraisal). One of these three schemes (Honeypot Lane / St Faiths; c.900 homes) potentially stands out as performing well, on the basis of its relative merits in respect of Green Belt containment and proximity to Brentwood Town Centre; however, there are also a range of draw-backs, most notably in terms of traffic/air quality and biodiversity. Also, this area drains to the more constrained Brentwood Waste Water Treatment Works (WwTW).

Focusing on the A127 corridor, a strategy involving DHGV (Option 3) is found to out-perform a strategy involving growth to the east and west of West Horndon (Option 1) other than in respect of -

- **Landscape** - this finding relates to the fact that Option 1 would involve lower growth overall, relative to Option 3, i.e. growth at DHGV would be on a larger scale (in particular once account is taken of the potential for significant growth beyond the plan period) and also the findings of two key studies that serve to indicate that West Horndon has greater capacity than DHGV, in both landscape (less so land to the northeast of the village) and Green Belt terms. Option 1 would nonetheless result in significant negative effects, given the extent of Green Belt loss and impacts to landscapes at the edge of existing settlements.
- **Air quality** - West Horndon is judged to be the preferable location from a perspective of wishing to minimise car dependency / distance travelled by car, given the rail station, and in turn is judged to be the preferable location in respect of 'air quality' (noting that growth along the A127 corridor can be expected to lead to increased traffic in the Brentwood town centre Air Quality Management Area, AQMA); however, there is some uncertainty in respect of this conclusion, given the potential to deliver significant upgrades to walking/cycling and public transport infrastructure through a focus at DHGV, as well as to deliver employment and a local centre (to include a secondary school) on-site.

There are three final points to note -

- **Housing** - the appraisal conclusion in respect 'Housing' reflects the overall quantum of homes provided for, rather than the spatial distribution (as per 'Landscape'). Higher growth options are judged to be preferable given: A) uncertainty in respect of the LHN figure (350 dpa or 454 dpa); B) the need to provide for a 'buffer' over-and-above LHN in order to ensure a robust housing supply trajectory (recognising the risk of unanticipated delays to deliver at one or more sites); and C) the risk (less likely) of the Brentwood Local Plan having to provide for unmet needs arising from elsewhere in South Essex. All options are judged to result in significant positive effects on balance; however, this conclusion is uncertain in respect of the lower growth options, recognising the LHN uncertainty in particular.
- **Soils** - the alternatives are judged to perform broadly on a par, with all predicted to result in significant negative effects, given the risk of significant loss of best and most versatile agricultural land. It might be suggested that lower growth is preferable; however, this might increase pressure for growth at locations outside of Brentwood Borough where agricultural land quality is higher. The nationally available dataset shows there to be some areas of higher quality (grade 2), and also highest quality (grade 1), agricultural land in South Essex, and there are also extensive areas of higher quality (grade 2) land in Epping Forest and Chelmsford Districts to the north - see Appendix II.
- **Water** - the Council's Water Cycle Study (WCS) serves to suggest that Waste Water Treatment Works (WwTW) capacity is a constraint to growth locally, which in turn serves to indicate that lower growth is preferable. Whilst there are a range of mitigation measures that can be implemented, all might be associated with risks and uncertainties, and hence there is an argument for seeking to avoid the problem in the first instance. In respect of spatial distribution, there is some reason to suggest that growth at Brentwood is preferable to growth along the A127 corridor; however, it is difficult to draw strong conclusions. In respect of effect significance, whilst there can be no certainty in the absence of detailed evidence, it is appropriate to 'flag' the risk of higher growth options resulting in significant negative effects.

Establishing the preferred option

The following text is the response of Council Officers to the alternatives appraisal, i.e. reasons for supporting the preferred option in-light of the alternatives appraisal.

The preferred approach is Option 3, which involves allocating Dunton Hills Garden Village only, in addition to the sites that are a 'constant' across the reasonable alternatives, and thereby putting in place an overall land supply sufficient to provide for up to 458 dpa .

The appraisal finds Option 3 to have pros and cons, as per all the alternatives; however, it is apparent that Option 3 performs well in terms of the majority of sustainability objectives, which itself is a strong indicator of overall sustainability.

The appraisal highlights certain concerns regarding Dunton Hills Garden Village, but the Council believes there to be good potential to address issues through targeted infrastructure delivery and careful masterplanning. In this respect, the Council would wish to highlight that:

- Work has progressed on a masterplan with facilitated support from Design Council caber which has resulted in a series of clearly defined 'localised' garden village principles for the site. Some of the principles focus upon the use of the landscape to help inform the future built form and the need to ensure that green infrastructure is central to the scheme.
- Economies of scale to fund infrastructure will be realised, and infrastructure planning from an early stage in the project will ensure facilities such as schools, open spaces, active travel options, recreational and community facilities are built in at the start. One of the clear sustainability benefits of the project is the opportunity to plan comprehensively for infrastructure growth rather than through piecemeal incremental development.
- The concept of the garden village is far removed from 'houses in fields' and requires a real commitment to balancing housing and community needs, the quality of the environment and local employment opportunities. Dunton Hills will deliver housing, a new village centre, supporting infrastructure and new employment space. It is an integrated project and should be viewed holistically.
- A core principle of garden settlements (from their early conceptualisation) is the focus upon public health and creating places which support healthier living. Within the Dunton Hills project there is a focus upon green infrastructure, open spaces, recreation and supporting active travel (cycling and walking). It is built into the core masterplanning ideas and provides a marked departure from traditional urban extension schemes with their reliance upon private cars.
- The new village is located within close proximity to West Horndon railway station and strong cycling and walking linkages will be built between the new village and this public transport hub which will also be supported with an enhanced range of bus services.
- Dunton Hills is strategically well located within the A127 growth corridor and is within close proximity to existing employment opportunities plus major new employment allocations on site and at East Horndon plus within a short distance of the proposed new Brentwood Enterprise Park. The Council is keen to ensure that all the major development opportunities within this corridor are well supported by public transport connections and green transport corridors for cycling and walking.
- Wastewater treatment capacity is a constraint, but the WCS discusses potential measures to address this, including use of high water efficiency standards, which can be achieved through a focus on sustainable design and construction measures at Dunton Hills.

Finally, there is a need to respond explicitly to the relative merits of the alternative (non-preferred options), as highlighted through the appraisal:

- Lower growth (Options 1 and 2) - there is a need to provide for a land supply significantly in excess of the '2016-based' LHN figure of 350 dpa for the reasons discussed above, including the need to be mindful of the higher '2014-based' LHN figure.
- Additional strategic growth at Brentwood (Options 2, 4, 5 and 7) - a primary concern is in respect of traffic congestion (also noting the two air quality management areas), with a secondary concern relating to the capacity of existing community infrastructure to absorb additional growth. All of the sites available and deliverable at the current time are subject to constraints, and are of an insufficient scale to deliver strategic infrastructure upgrades.

- West Horndon (Options 1, 4, 5, 6, 7) - the Council would favour a strategic scheme involving growth both to the East and West, but equally considers the opportunity associated with growth at this location to be less than the opportunity that presents itself at Dunton Hills Garden Village, where there is the opportunity for a larger and more comprehensive scheme. The Council notes that Thurrock Council is exploring the option of developing West Horndon as a large new settlement, but concludes that this proposal is at such an early stage of formulation that it cannot be considered to be a potential issue or constraint in respect of delivering Dunton Hills Garden Village.

APPRAISAL FINDINGS AT THIS STAGE

Part 2 of the SA Report answers the question – *What are appraisal findings at this stage?* – by presenting an appraisal of the Proposed Submission Plan. Appraisal findings are presented as a series of narratives under the ‘SA framework’ headings, followed by an overall conclusion. The overall conclusion is as follows -

The appraisal identifies the likelihood of significant **positive** effects in respect of **housing** (as the proposal is to provide for LHN in full, albeit there is uncertainty ahead of Government confirming the LHN figure), and also finds the plan to perform well (but not to a ‘significant’ extent) in respect of: **climate change mitigation** (four strategic scale schemes are proposed that should lend themselves to delivery of low carbon infrastructure etc.); **community and wellbeing** (amongst other things, the scale of DHGC leads to an opportunity to deliver a range of other community infrastructure, including a secondary school, and detailed site specific policy has been established leading to confidence that the opportunity will be realised); and **economy and employment** (employment land targets will be met in total quantitative terms, and the spatial strategy involving a major focus on the A127 corridor is tentatively supported). Also, limited concerns are highlighted in respect of **biodiversity**, **heritage** and **flood risk**, which might be contrasted to a ‘future baseline’ (or ‘reference case’) situation whereby there is unplanned development (or at least less planned development) leading to greater impacts/risk.

However, significant **negative** effects are predicted in respect of **landscape** (as a number of the proposed allocations will lead to an impact to valued landscapes, most notably DHGV); and **soils** (given the likelihood of significant loss of ‘best and most versatile’ agricultural land). Also, notable tensions are highlighted in respect of **air quality** (as there will be increased traffic through the Brentwood AQMAs), **water quality** (as there is a need to rely on upgrades to WwTWs and other measures, in order to ensure no adverse effects to water quality within receiving watercourses); and **traffic congestion**, which in turn potentially leads to negative implications in respect of ‘community and wellbeing’ and ‘economy and employment’.

There will be the potential to make further improvements to the plan during the course of the Examination in Public (EiP), at which time account should also be taken of the specific recommendations that are made within the appraisal above, which mostly relate to potential ways of increasing the stringency of development management policy (albeit it is recognised that there is a need to balance policy stringency with viability and deliverability considerations).

Next steps

Part 3 of the SA Report answers– *What happens next?* – by discussing plan finalisation and monitoring.

Plan finalisation

Once the period for representations on the Proposed Submission Plan / SA Report has finished the main issues raised will be identified and summarised by the Council, who will then consider whether in-light of representations received the plan can still be deemed ‘sound’. If this is the case, the Plan will be submitted for Examination, alongside a statement setting out the main issues raised during the consultation.

Monitoring

Appendix 3 of the plan document proposes a monitoring framework, whilst Chapter 12 of the main report makes a number of recommendations for further bolstering this list of proposed indicators and targets, specifically in relation to agricultural land, air pollution, biodiversity, low carbon infrastructure, Dunton Hills Garden Village and wastewater treatment works capacity.