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**Epping Forest District Council** 

Local Plan 2011 - 2033 - Examination In Public

Hearing Statement on behalf of Mr John Padfield (REF: 19LAD0069)

Matter 15: Places and Sites (Policies P1 - P15)

Introduction

1.1 This statement has been prepared on behalf of Barwood Land as incumbent land promoter on behalf of Mr

Padfield, in response to the Inspector's Questions for the following hearing session Matter 15: Places and

Sites (Policies P1 – P15) and relates to site allocation EPP.R1.

1.2 Submissions have been made at previous consultations on the draft Local Plan and this statement should

be viewed in the context of previous comments. The proposals for the site have been discussed with officers

at the Council.

**Site Selection** 

Issue 2: Are the Plan's policies for the specific places and sites within the District justified, effective and

consistent with national policy; and are the specific site allocations they include justified and

deliverable?

Policy P1: Epping

**General Matters** 

1. Should Part K concerning the Strategic Masterplan for South Epping recognise the constraint

presented by the National Grid High Voltage Electricity Overhead Line which crosses allocated

sites EPP.R1, R3 and E1? (Reps N Grid).

1.3 It is agreed that Part K concerning the Strategic Masterplan for South Epping recognise the constraint

presented by the National Grid High Voltage Electricity Overhead Line which crosses allocated sites EPP.R1,

and paragraph x of Part K adequately recognises the constraint presented by the Overhead Line.

2. Part K(iii) indicates that new primary school and early years provision could be achieved through

the relocation of Ivy Chimneys Primary School. Is this justified, because Essex County Council

contends that such a solution should not be investigated?



1.4 The Appendix to EB1508 sets out the agreed position between ECC and EFDC regarding the school and confirms the following policy wording for the SEMPA (South Epping Masterplan Area) (representation ref. 47 on page 4):

"(iii) a new primary school and early years childcare provision (including land provision of a minimum of 2.1 hectares); which could be accommodated through the relocation of Ivy Chimneys Primary School);"

### Site Specific Matters

- 3. EPP.R1 & R2 (South Epping Masterplan Area): Is this allocation justified in respect of the following matters:
  - a. Is the area a sustainable location for significant expansion considering its relationship to the existing town centre, particularly in respect of distance and topography? How will additional traffic be managed if it is necessary for new residents to use a car?
- 1.5 The site is in a sustainable location for expansion, being highly accessible to local opportunities for employment, primary schools and open space, accessible to retail and community provision, and has high quality road connections and public transport access. These facilities are all located either adjacent the site or within Epping town centre i.e. within walking and/or cycling distance to the site.
- 1.6 It is submitted that the site represents one of the more sustainable location for development within Epping which is in turn a highly sustainable location for growth within Epping Forest District. Epping as a main settlement, after Harlow, is the primary focus for development within the District. The role of the town is as a significant employment and strategic service centre and the proposed allocation supports this role.
- 1.7 The local highway and Public Rights of Way (PROW) networks provide good opportunities for pedestrian and cyclists on low speed residential roads with good connectivity to the local area.
- 1.8 Furthermore, the EPP.R1 site is served by 3 bus routes/services? operating at combined frequencies of approximately 4 buses every 2 hours through typical weekdays. These routes are served by bus stops at Centre Drive, immediately north of Ivy Chimneys Road junction (which are approximately 300 metres north of the centre of the EPP.R1 site), providing a very good alternative for walking trips to the local shops.
- 1.9 The nearest tube station is Epping tube station which is around a 15 minutes walk from the site.



- 1.10 The attached note and plan (Appendix 1) summarises key local facilities with distances measured from the centre of the EPP.R1 site to the nearest point on the local highway or pedestrian network and then along the highway / pedestrian network. The evidence in the Site Selection Report (EB805 demonstrates that the SEMPA is a highly sustainable location for significant expansion.
- 1.11 The Statement of Common Ground (between the parties and EFDC) states that the parties agree that the SEMPA (South Epping Masterplan Area) is a high sustainable location for significant expansion closet to Epping Underground Station and the town centre. The site also benefits from a number of PROWs and is in walking distance to existing facilities including a primary school and open space.
- 1.12 Furthermore, a new additional primary school and a new neighbourhood centre is proposed as part of the allocation in the adjacent site EPP.R2.
- 1.13 With regards to the question as to how will additional traffic be managed if it is necessary for new residents to use a car?, the Statement of Common Ground states that the parties agree that for the SEMPA in order to ensure that private car use is minimised as a result of development and that appropriate mitigation measures are provided, EFDC has agreed the following proposed amendments to the policy through a Draft Statement of Common Ground with ECC (EB1508A). Barwood Land and the other parties agree to the proposed new part D, amendments to part E and inclusion of a new Part N to the policy:

### "Sustainable Transport Choices

<u>D.</u> In accordance with Policy T 1, all development proposals must demonstrate opportunities to access jobs, services, education and leisure opportunities by means other than the car, both within Epping and to the Harlow and Gilston Garden Town will be provided and promoted. This will include the need to make provision for, improve and promote use of links to/enhance existing, cycling and walking networks and access to passenger transport services.

#### Infrastructure Requirements

- D.<u>E.</u> Infrastructure requirements must be delivered at a rate and scale to meet the needs that arise from the proposed development, in accordance with the Infrastructure Delivery Plan. Specifically, development proposals in Epping will be expected to contribute proportionately towards the following infrastructure items:
- (i) New primary school;
- (ii) Appropriate provision of health facilities;
- (iii) The provision of walking and cycling facilities, providing linkages both within the site and to external attractors;

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(iv) Enhancements to public transport provision or other initiatives which reduce the need to

travel by car;

(iii)(v) Highways and junction upgrades;

(iv)(vi) Upgrades to Lindsey Street electricity substation;

(v)(vii) Necessary upgrades to existing waste water infrastructure; and

(vi)(vii) Appropriate provision of green infrastructure and open space throughout the settlement.

N. The Strategic Masterplan for South Epping must incorporate measures to promote and encourage the use of sustainable methods of transportation and provide viable alternatives to single occupancy private car use. Such measures are to be planned in consultation with Essex County Council (and relevant passenger transport providers) through the production of the Strategic Masterplan. The proposed measures need to be underpinned by feasibility evidence that comprehensively

demonstrates the delivery of modal shift away from single occupancy private car use by way of

sustainable travel measures."

b. What are the implications of its location adjacent to the M25 for air quality and noise?

1.14 The attached note (Appendix 2) sets out the implications of the site's location adjacent to the M25 for

air quality and noise. Traffic along the M25 is the key source of noise to the site. WSP are advising on

the site and have advised that the development will be able to respond appropriately to this potential

source of noise through consideration of the proximity of dwellings to the road and the provision, as

necessary, of appropriate mitigation e.g. bunds/a barrier, to achieve acceptable noise levels within

homes and outside amenity areas. The design of the masterplan will also consider building orientation,

form, and heights to mitigate noise where necessary.

1.15 The Council has assessed noise as well, paragraph 4.18 on page A13 of the Site Selection Methodology

(EB805AK) provides information regarding the assessment of the impact of noise on proposed sites.

The Council concludes that it does not consider noise to be a critical constraint which would affect the

allocation of a site and that Local Plan policies will set out how such impacts can be mitigated. Noise is

not therefore considered to be a constraining factor in the development of the allocation site and will

not have any implications for the quantum of development proposed within EPP.R1.

1.16 In respect of air quality, the sites comprising the SEMPA were assessed by the Council at Stage 2 and

Stage 6.2 (Quantitative and Qualitative Assessment) of the site selection. While the site was found to

be in an area at risk of poor air quality, the assessment identified that the impacts could be mitigated



and air quality would not pose an insurmountable constraint to development at this location. This conclusion is supported by advice obtained from WSP on behalf of Barwood Land and the technical studies confirm that the potential impacts of development will be assessed and appropriate mitigation incorporated into the final proposals as necessary. Air Quality is not therefore considered to be a constraining factor in the development of the allocation site and will not have any implications for the quantum of development proposed within EPP.R1.

1.17 To ensure that noise and air quality issues are appropriately addressed at the site an appropriate buffer to protect the amenity of future residents with regards to noise and air quality from the M25 motorway will be included in the masterplan for the SEMPA. The buffer is likely to incorporate areas of public open space and a number of features such as tree planting, bunds, and/or noise reduction barriers, although the precise details will be determined through more detailed work to support the Strategic Masterplan and subsequent planning applications.

# c. What effect will the development have upon the vitality and viability of the existing town centre?

1.18 The new residents at the SEMPA will result in increased users (residents and worker) of the facilities (increased spend on goods and services) in the town and will therefore have a positive impact on the vitality and viability of the businesses and local services within the existing town centre.

## d. Is safe access onto Ivy Chimneys Road possible?

1.19 The attached note (Appendix 1) confirms that safe access onto Ivy Chimneys Road is possible.

#### e. Is this development deliverable in respect of restrictive covenants?

- 1.20 The draft Statement of Common Ground states that all parties consider the SEMPA site deliverable with respect to restrictive covenants. All parties are supportive of the allocations and are committed to working collaboratively to bring forward sustainable development in a coordinated manner.
- 1.21 A small part of the site at the western end of EPP.R1 is subject to a restrictive covenant limiting the use of the site to one dwelling house and domestic ancillary outbuildings. The parties agree that the covenant will be released by the Covenantee as they also have land interests within the EPP.R1 site

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allocation. The Council and the parties therefore do not consider that this represents a significant risk to the deliverability of the SEMPA.

- f. Is it financially viable in light of the constraint presented by the Central Line dividing the masterplan area? Is a "bridge" over the railway the only possible means of achieving connectivity (Part (vi)?
- 1.22 It is important to note that the two sites (EPP.R1 and EPP.R2) are currently connected by a footbridge over the Central Line, approximately 200 metres south of the site boundary at Bridge Hill. The bridge connects the established Public Right of Ways that extend through both sites and could be improved to include for example, a bike ramp for stairs to enable cyclists to easily use the footbridge, as each masterplan is developed with interconnecting links. The existing, and potentially improved bridge, would offer greater access to destinations further afield of each site, reducing the need for pedestrians and cyclists having to travel up Ivy Chimneys Road and / or Bridge Hill, therefore encouraging walking/cycling and discouraging the use of the car.
- 1.23 Furthermore, as set out above development proposals on the site will make provision for, improve and promote uses of links to / enhance existing cycling and walking networks and access to passenger transport services.
  - g. Is it justified to require the development to be phased?
- 1.24 Subject to the timely progress of the Masterplan, it is agreed that the allocation is capable of being delivered in line with the Council's Housing Trajectory as noted in the Housing Implementation Strategy Update (2019) as follows:

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
0	0	95	95	95	95	95	95	95	95	95	95	0

- h. What effect would the development of this area have on the purposes of the Green Belt?
- 1.25 The development at South Epping (EPP.R1) results in an alteration to the Green Belt surrounding Epping. The proposed alteration (Alteration 1) is documented in Appendix 2 to the Green Belt and District Open Land Background Paper Update (EB1608). The alteration proposed to the Green Belt was



informed by the findings of the Epping Forest District Green Belt Assessment: Stage 2 (EB705A) and the conclusions of the site selection process as set out in the Site Selection Report (EB805).

1.26 The Green Belt Review Stage 1 2015 (EB704A) was undertaken in 2015. The principal purpose of this review was to undertake a high level review of Green Belt land across the District to identify the contribution of the Green Belt towards national Green Belt purposes as set out in the NPPF 2012. Paragraph 5.38 concluded for the site:

"There are particular areas of parcels which performed less well than the rest of the parcel which are set out below and should be assessed in more detail in further phases of the Review: ...

DSR044 (South West of Epping) Although the overall parcel scored 'relatively strong' in relation to the fourth purpose the area South of Ivy Chimneys Road is considered to make 'no contribution' to the fourth purpose....."

- 1.27 The Green Belt Review Assessment Stage 2 was published in 2016 (EB705A). As noted above, all parcels at Stage 1 were assessed as making a 'relatively strong' or 'strong' contribution to at least one Green Belt purpose.
- The Stage 1 report listed a number of parcels where part of the parcel performed 'less well' than the rest of the parcel, and therefore warranting further analysis at Stage 2. The Table 2.2 Stage 1 parcels containing areas that perform less well than the parcel as a whole included DSR044 (South West of Epping) which states "Although the overall parcel scored 'relatively strong' in relation to the fourth purpose the area South of Ivy Chimneys Road is considered to make 'no contribution' to the fourth purpose."
- 1.29 Section 3 of the Epping Forest District Green Belt Assessment: Stage 2 (EB805) sets out the methodology followed in undertaking the assessment. This includes:
  - the rationale for not assessing parcels against purpose 5; and
  - Section 4 of the Green Belt Assessment: Stage 2 explains that the Council undertook a sensitivity test of the findings of the assessment, which considered the potential level of harm to the Green Belt taking account of Green Belt purposes 1, 2 and 4 (therefore excluding purpose 3). This was because purpose 3 "to assist in safeguarding the countryside from encroachment" continually applies in a District like Epping Forest and disguised the variation in relative performance against the other purposes of the Green Belt.



- 1.30 The Epping Forest District Green Belt Review Stage 2 Technical Annex (EB705B), Appendix B1.5.2 Results of Identifying Sites for Further Testing (EB805I) of the Site Selection Report states that the Council undertook further analysis that indicates that the Purpose 4 assessment contained in the Epping Forest District Green Belt Review Phase 2 was applied inconsistently across the parcels surrounding Epping. Parcel 044.2 gives only a limited contribution to the overall setting of the town and there is no visual relationship between these parcels and the historic parts of Epping, therefore, the loss of this area would be more limited when considering the effect on Purpose 4.
- 1.31 Furthermore, the Settlement Edge Landscape Sensitivity Study (EB712) considers that South Epping (Landscape Setting Area 4) in which the site is located has a low overall sensitive to change may be suitable for development in landscape terms and is considered to have a less significant role in contributing to the structure, character and setting of the settlement (paragraph 2.6.1);
- 1.32 The findings of the Green Belt and Landscape Sensitivity reviews are supported, it is also noted that M25 which constitutes one boundary to the site, was constructed many years after the Green Belt designation. This fact alone demonstrates that the site visually relates to Epping urban fringe far more closely than the Green Belt proper. The Green Belt boundary in question has been made redundant by a number of factors including the erection of homes to its northern boundary, the M25 to its southern boundary and the tube line to its eastern boundary, and the pressing need to deliver a great many homes in and around the most sustainable centres in the District.
- 1.33 It is submitted that the site represents a logical and easily assimilated potential development which has clear long term defensible boundaries and furthermore it would be possible to establish a further landscape structure at the periphery of the development.
- In summary, we consider the proposed allocation is *positively prepared, effective, justified and consistent with National Policy*. To this end we support the decision to remove this, and other suitable sites from the Green Belt. Paragraphs 156 and 157 of the NPPF (2012) lend further weight to the balance of planning considerations in supporting the allocation of the land for housing to enable a comprehensive planned development to be achieved and to deliver new housing. The combination of complimentary factors such as the Council's unmet housing need, the Green Belt review conclusions and the pressing need for housing in the District are considered to constitute the exceptional circumstances to warrant the site being allocated.



1.35 As stated in the NPPF (paragraph 17): "every effort should be made objectively to identify and meet the housing business and other development needs to the area, and respond positively to wider opportunities for growth." Development Plans therefore should take account of market signals and set out a clear strategy for allocating sufficient land which is suitable for development in their area. It is clear that EFDC have taken this obligation seriously. Indeed, in commissioning the Green Belt Review Assessments the Council have clearly identified the need for a comprehensive review. This rational and holistic approach is fully endorsed.

# **APPENDIX 1**

Barwood Land
Land South of Ivy Chimneys Road,
Epping
Accessibility Statement
April 2019



### **Barwood Land**

# Land South of Ivy Chimneys Road, Epping

# **Accessibility Statement**

April 2019



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### 1.0 INTRODUCTION AND BACKGROUND INFORMATION

- 1.1 Bancroft Consulting are appointed by Barwood Land to provide highways and transportation advice in respect of matters raised by the Planning Inspector in Epping Forest District Council's Examination of the District Local Plan, regarding the potential residential development to the south of Ivy Chimneys Road, Epping.

  Figure 1 shows a detailed site location plan.
- 1.2 By way of background, the site has been allocated for approximately 450 dwellings in Epping Forest District Council's submitted Local Plan. The site is referred to as 'EPP.R1' (Land south of Epping, West). Appendix A comprises a plan showing the location of Epping's proposed residential site allocations, which includes EPP.R1 along with EPP.R2 to the east of the railway line.
- 1.3 Prior to preparing this Accessibility Statement, Bancroft Consulting have been involved with this site since 2016, providing advice to the land owner on transport and access matters. This work has demonstrated that there are numerous opportunities to deliver vehicular accesses to the site albeit these would require the agreement of third parties.
- 1.4 It is understood that Barwood Land has identified a preferred access solution, which Bancroft Consulting proposes could be suitable (subject to further detailed design checks, land ownership agreements and approval from the Highway Authority), to serve the proposed development. Discussions with the relevant landowners are understood to be at an advanced stage.
- 1.5 This Accessibility Statement has been produced in response to Matter 15: Issue 2, Points 5a and 5d of the Planning Inspectors Matters, Issues & Questions document for Epping Forest District Council: Examination of the District Local Plan 2011-2033. A copy of this document has been included at **Appendix B**, which states the following regarding the specific points raised above:

"Site Specific Matters

5. **EPP.R1 & R2 (South Epping Masterplan Area)**: Is this allocation justified in respect of the following matters:



- a. Is the area a sustainable location for significant expansion considering its relationship to the existing town centre, particularly in respect of distance and topography? How will additional traffic be managed if it is necessary for new residents to use a car?
- d. Is safe access onto Ivy Chimneys Road possible?
- 1.6 The objective of this report is to respond to the Inspectors questions, seeking to demonstrate that the site is suitability located within close proximity to the local amenities within Epping, and that a safe and suitable access could be achieved. Each section within this report will provide a response to the specific points raised by the Planning Inspector above.
- 1.7 This Accessibility Statement takes into account current Government policy contained within the National Planning Policy Framework [NPPF] (MHCLG, February 2019). In respect of highways and transportation issues, Paragraph 108 of the NPPF sets out the following requirements:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location:
- b) safe and suitable access to the site can be achieved for all users; and
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."
- 1.8 Paragraph 109 of the NPPF states:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

1.9 Due regard is also given to the superseded Government policy contained within the 2012 version of the NPPF, in the context of which the Inspector will be



examining the Local Plan. Pertinent policies from this document, with respect to highway and transport matters, are set out at within Section 4 of the guidance, with paragraph 32 providing the main tool for determining the suitability of new development. The principles of paragraph 32 of the 2012 NPPF and paragraphs 108/109 are similar.

- 1.10 As well as the NPPF, due regard is given to current best practice and highway design guidance contained in the document 'Manual for Streets' [MfS] (DfT, 2007) and its companion document 'Manual for Streets 2 Wider Application of the Principles' [MfS2] (CIHT, September 2010). In addition, due regard has been given to Essex County Council's adopted design guidance 'The Essex Design Guide' (2018).
- 1.11 In addition to the previous assessments, a further site visit was undertaken on Tuesday 2 April 2019, to review the existing highway conditions and key pedestrian desire lines in the vicinity of the site. A further review of local amenities within Epping was also undertaken.



### 2.0 RESPONSE TO MATTER 15: ISSUE 2 / POINT 5A

"Is the area a sustainable location for significant expansion considering its relationship to the existing town centre, particularly in respect of distance and topography? How will additional traffic be managed if it is necessary for new residents to use a car?"

- 2.1 Looking at the first part of the above question, the site is located approximately 1.25 kilometres south of the centre of Epping Town Centre, taken as High Street / Station Road junction for the purpose of this response. National guidance recognises how 2 kilometres represents a maximum walking distance for commuting and school trips, whilst 800 metres represents a threshold for retail trips on foot. Figure 2 shows a local amenities plan for the area between the site and Epping Town Centre to the north. It shows how the site would be well placed to encourage walking and cycling trips for people commuting to work or school nearby, with opportunities including:
  - Epping Forest District Council
  - Tesco Superstore
  - Ivy Chimneys Primary School
  - Epping St John's School
- 2.2 Whilst the majority of shops within Epping are beyond the 800 metres, this should not automatically preclude abled bodied residents from undertaking this journey along Centre Drive and Station Road. Although there is some undulation on the approach to Epping, this route is subject to reasonably slow traffic speeds with good footways along the majority of its length (circa 2 metres wide) that are supported by street lighting and strict on-street parking controls to make crossing movements easier.
- 2.3 Notwithstanding this, the site is served by 3 bus routes operating at combined frequencies of approximately 4 services every 2 hours through typical weekdays. A copy of the latest bus route details is included at **Appendix C**. These routes are served by bus stops at Centre Drive, immediately north of Ivy Chimneys Road



junction, which are approximately 300 metres north of the centre of the site and should provide a very good alternative for walking trips to the local shops.

2.4 In addition to bus based public transport, Epping Underground Station is located approximately 950 metres to the north of the centre of the site. It can be accessed via Centre Drive and a bespoke footpath that provides a more direct connection than the alternative route via Station Road. London Underground operates the Central Line from Epping with regular and frequent services to Tottenham Court Road at around 10 minutes intervals throughout the week (circa 5am to 11:45pm).

# Highway Safety

- 2.5 A review of Personal Injury Accident details for the surrounding highway network has shown how despite the densely populated area, there is no evidence of a significant highway safety problem along Centre Drive and Station Road, particularly during the past 3 years. Figure 3 confirms that there have been only 5 recorded incidents along Ivy Chimneys Road and Centre Drive during the past 5 years, of which 2 involved pedestrians and cyclists. Figure 4 extends the search to include Epping Tube Station, where it is evident that 4 incidents occurred during the 5-year assessment period, each involving pedestrians. In considering the volume of pedestrians and vehicular activity at the station each day, it is not deemed to be a major problem.
- 2.6 Figures 5 to 8 provides further extracts of 'Crashmap' showing the number of incidents along the B1393 and Station Road, whereas Figures 9 and 10 show the incidents which involved pedestrians and cyclists within Epping Town Centre. A review of these figures shows that there are clear issues of concern within these areas, but nothing that would be specifically exacerbated by the potential development of site EPP.R1.

# Change in conditions

2.7 Based on initial calculations using local travel to work statistics compared alongside generic trip generation data, it is estimated that a development of 450



dwellings at this site would generate the following peak hour activity by each mode of travel.

Method of Travel	Modal Split	Peak hour	Daily	
	(%)			
Tube	31.4	119	1190	
Train	3.0	11	110	
Bus	1.3	49	490	
Taxi	1.4	53	530	
Motorcycle	0.9	3	30	
Car (single occupancy)	51.3	194	2000	
Car (passenger)	2.4	9	90	
Bicycle	0.5	2	20	
On Foot	7.1	27	270	
Other	0.6	2	20	

The above estimates are subject to agreement with the Local Highway Authority but reflect local travel patterns, whereby up to 31.4% of residents commute to work by tube, 7.1% walk and 51.5% drive (Source: National Statistics 'Method of Travel to Work' dataset QS701EW for Epping Forest 006 Middle Super Output Area).

- 2.8 The above highlights the extent of potential increases in activity arising from the development of 450 dwellings, alongside the existing infrastructure and typically acceptable distances for access. It also calculates how the site could generate up to 194 peak hourly and circa 2000 daily vehicle movements within the surrounding road network. This would equate to an increase of around 3 vehicles movements per minute within the surrounding roads based on car (single occupancy) results.
- 2.9 Figure 11 shows an initial distribution model for potential peak hour development traffic based on the Census 2011 'Location of usual residence and place of work by method of travel to work' dataset (WU03EW). The Census distribution model takes into account the usual place of work for residents of the Epping Forest 006 Middle Super Output Area (MSOA), who travel to work by car. All districts where less than 15 residents work were discounted. A copy of the results has been included at Appendix D. The Google Maps route planning software was then used to confirm the main routes that would be used to each destination with an arrival



time of 0900 hours. **Figure 11** demonstrates how 68.7% of movements would be associated with the west along Ivy Chimneys Road, 19.1% to the north via Centre Drive and 12.3% to the east via Bridge Hill. Based on a total increase of 194 hourly movements, this equates to specific increases of 133, 37 and 24 movements, respectively. Hence, it is unlikely that the site would generate significant increases to the north or south of the site.

- 2.10 An increase of 133 hourly movements to the west of the site along Ivy Chimneys Road would require further consultation with the Local Highway Authority. However, this would only equate to an increase of circa 2 vehicle movements per minute along what is already a well-used local road, and therefore unlikely to materially change the way it currently operates. It has been previously demonstrated how, despite the busy and constrained nature of Ivy Chimneys Road to the west of Centre Drive, there is no significant highway safety problem that requires immediate attention. Nevertheless, there could be opportunities to explore improvement schemes that include, parking layout, 20mph speed limit, pedestrian crossings, and horizontal traffic calming techniques, through this section.
- 2.11 Beyond this section of Ivy Chimneys Road, Figure 11 shows how the majority of peak hour movements (39.2%) would extend to and from the B1393 (west) and 16.7% of traffic would travel to and from the B1393 (east). On-site observations show that at this point there is a signalised junction which appears to operate satisfactorily, with no evidence of a highway safety issue. Nevertheless, there could be opportunities to make improvements to this junction through improved pedestrians crossings, improved signal timings and potential extension of the footways.
- 2.12 In considering the above traffic increases, it is important to bear in mind that these would only occur once the scheme had been fully built-out. In practice, the development would have a likely build out rate of circa 50 dwellings per annum. Taking the predicted peak hour traffic generation of 194 movements, this would equate to an annual increase of only 22 movements within the surrounding highway network.
- 2.13 It is unlikely that traffic conditions on Bridge Hill and Ivy Chimneys Road would change materially as a result of Local Plan developments and so the potential 9



year build out process should result in a steady increase in traffic flow conditions rather then the 'single hit' of 450 dwellings. Notwithstanding this, any application for site EPP.R1 would set out and agree an appropriate level of infrastructure improvements that would most likely be delivered early on in the scheme by way of a 'prior occupation' type of condition.

# Summary

- 2.14 In response to the specific concerns raised, the above details should provide confidence that the site would provide a good range of opportunities for safe access by non-car sustainable modes, be it walking / cycling trips to key destinations within Epping, walking and bus trips to local shops, or longer distance commuting journey using the underground. A scheme of 450 dwellings is unlikely to generate a significant change of activity along any of the surrounding roads and evidence from highway safety records confirms that the existing network largely accommodates pedestrians and cyclist movements without incident.
- 2.15 Whilst 450 dwellings could generate significant peak hour activity of up to 194 additional car movements, the majority of these would be associated with the B1393 (west) via Ivy Chimneys Road where approximately 133 movements are predicted. This moderate increase in activity is unlikely to create a highway safety problem, particularly where none currently exists, and it is envisaged that future discussions with the Local Highway Authority as part of any planning application could resolve any specific local concerns in the vicinity of the Ivy Chimneys Primary School.



### 3.0 RESPONSE TO MATTER 15: ISSUE 2 / POINT 5D

"Is safe access onto Ivy Chimneys Road possible?"

- 3.1 Ivy Chimneys Road has some existing layout challenges in respect of its alignment (horizontal and vertical), on-street parking, and the need to serve Ivy Chimneys Primary School, amongst other points. In working on this site, it has been visited on no fewer than three separate occasions, to assess prevailing conditions and opportunities for access. Vehicle speed surveys have been undertaken at Ivy Chimneys Road in the vicinity of the Centre Drive junction and also at the Meadow View access to the west. This has shown speeds of around 32 to 33mph at the western section and 24 to 28mph in the vicinity of Centre Drive, which reflects the topography and physical constraints at each location. **Figure 3** of this statement shows how there is no evidence of any ongoing highway safety problems along Ivy Chimneys Road with only 5 incidents in the vicinity of the site during a 5-year assessment.
- 3.2 Although the site has a number of accesses directly onto Ivy Chimneys Road/Bridge Hill, the Local Highway Authority's adopted design standards would require a 6 metres wide carriageway with 6 metres kerb radii and 2 metres wide footways to serve a major development. Whilst in theory this could mean two points of access would be required, in practice national design guidance advocates a more flexible approach in this regard based on consultation with the Local Fire Authority. Hence, a single point of access is considered to be sufficient in this instance. Consideration can be given to the provision of pedestrian/cycleway which could accommodate a fire appliance in the event of an emergency.
- 3.3 In considering the potential opportunities for access, assessment completed to date have established that delivery of a suitable access strategy would require the agreement of third-party landowner(s). However, taking on board the existing highway layout and traffic conditions, it is reasonable to conclude that designing compliant layouts could be achievable at a number of separate locations along lvy Chimneys Road and Bridge Hill.

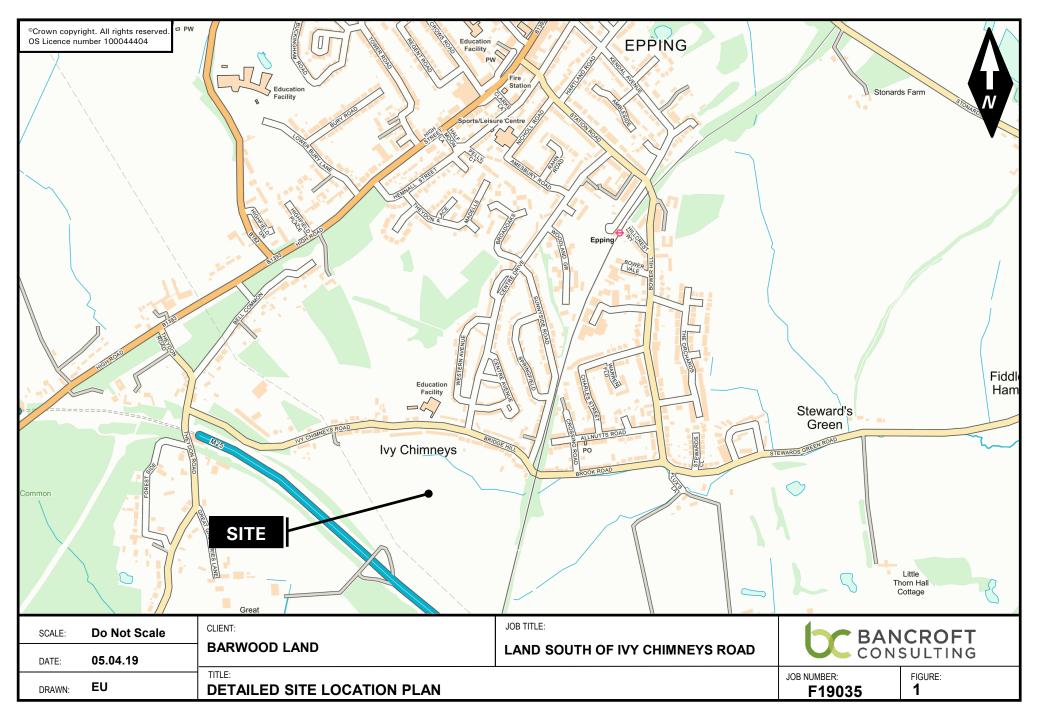


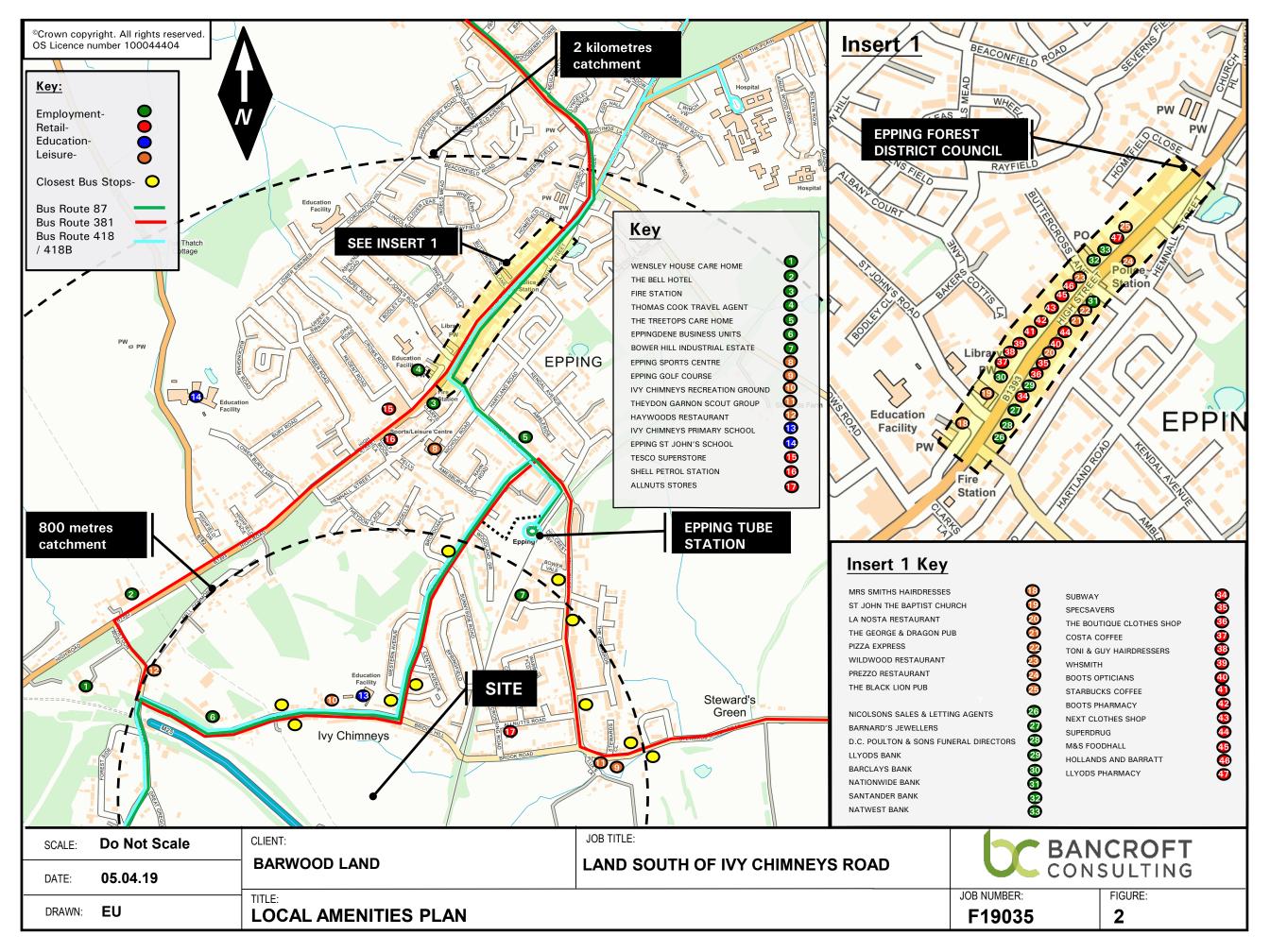
3.4 Barwood land has identified a preferred access solution however because the contractual position with third parties has yet to be concluded, the location and nature of this option must remain confidential at this stage. However, by satisfying the design requirements, it is reasonable to conclude that safe (and suitable) accesses are both achievable and deliverable. This is of course subject to final land agreements and further discussions with the Local Highway Authority as part of any subsequent planning application.

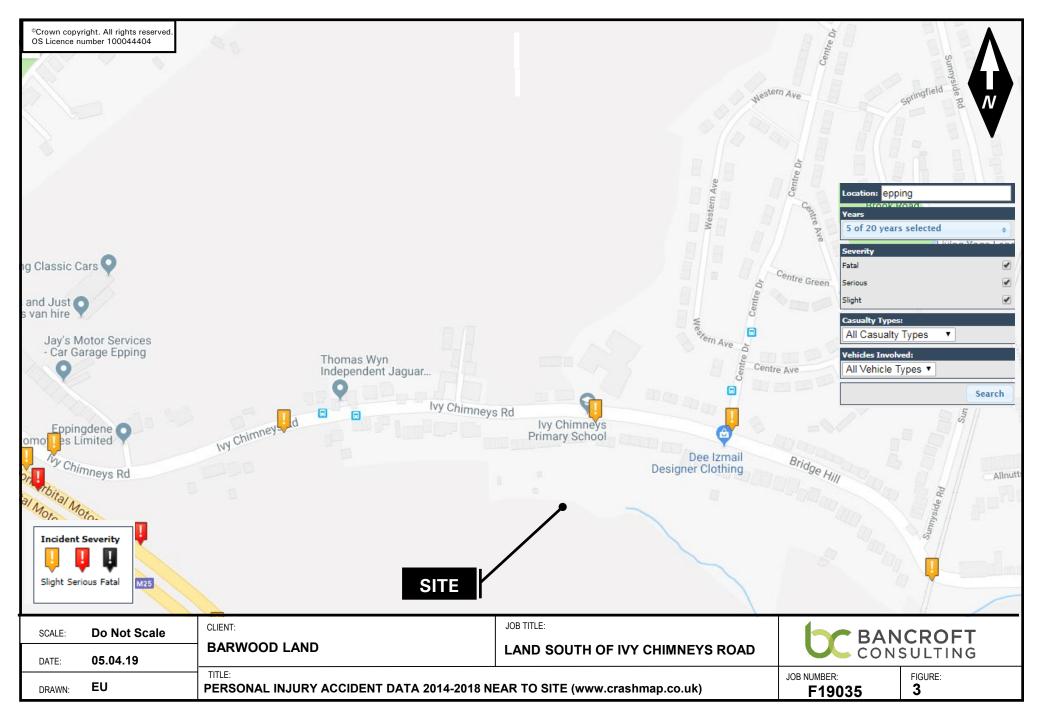


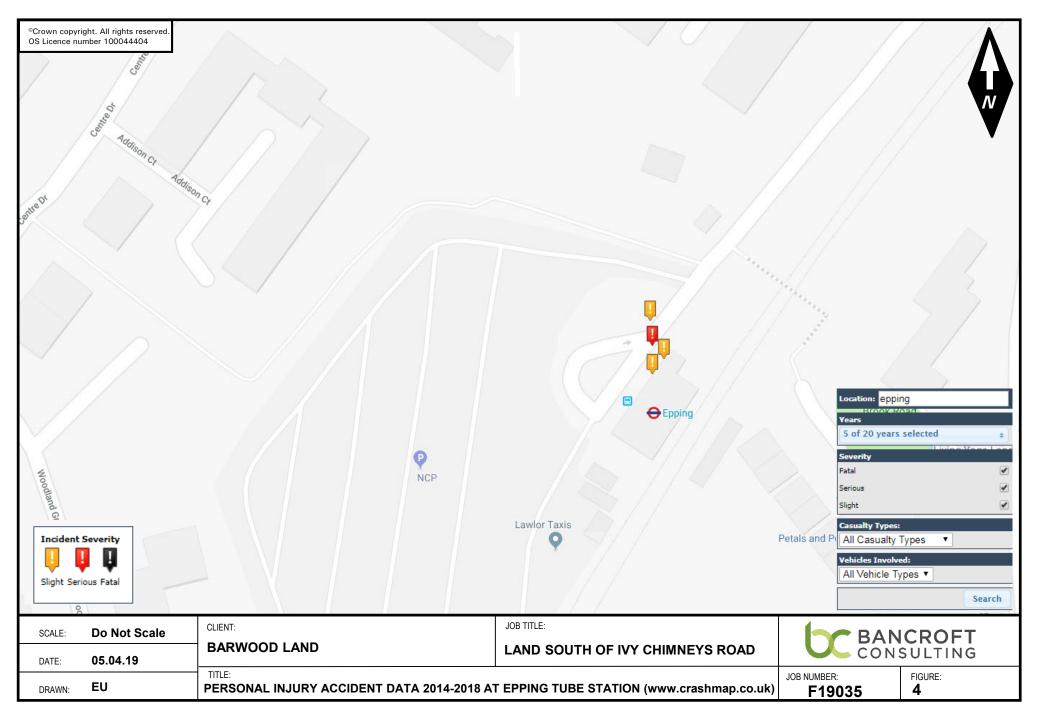
### 4.0 SUMMARY

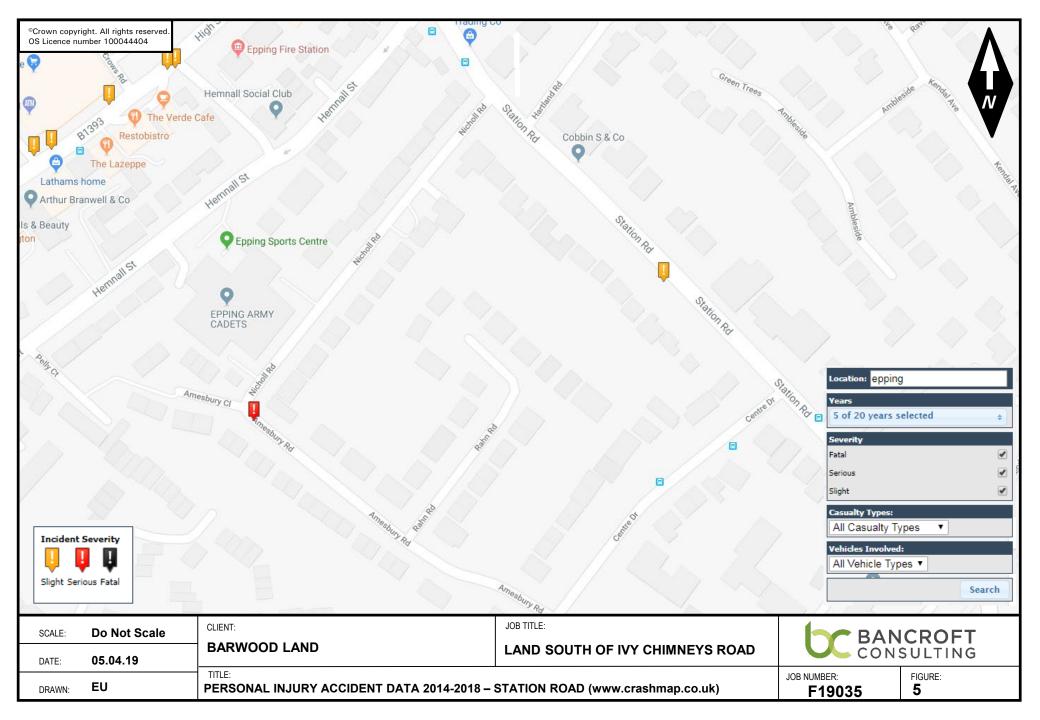
- 4.1 Bancroft Consulting were appointed by Barwood Land to provide highways and transportation advice in respect of matters raised by the Planning Inspector in the Epping Forest District Council's Examination of the submitted Local Plan, regarding the potential residential development to the south of Ivy Chimneys Road, Epping (EPP.R1). This Accessibility Statement has been produced in response to Matter 15: Issue 2, Point 5a and 5d of the Planning Inspectors Matters, Issues & Questions document for Epping Forest District Council: Examination of the District Local Plan 2011-2033.
- 4.2 In response to Point 5a raised by the Planning Inspector, this report demonstrates how the site would provide a good range of opportunities for access by non-car sustainable modes to key destinations within Epping, including a wide range of local amenities. It shows that there is no evidence of any existing highway safety issues relating to pedestrian and cycle movements in the vicinity of the site along Ivy Chimneys Road or via the key desire line along Centre Drive and Station Road.
- 4.3 In response to Point 5d raised by the Planning Inspector, this report outlines how a significant amount of work has been undertaken to identify a range of potentially deliverable access layout options for the site, which are both safe and suitable. This has shown how the number of potential options should provide confidence in securing suitable agreements with the corresponding third-party land owners and hence overall deliverability.
- 4.4 It is important to reiterate that there is no evidence of any ongoing highway safety problems along Ivy Chimneys Road and the predicted traffic increases of 194 peak hour movements is unlikely to materially change this position.

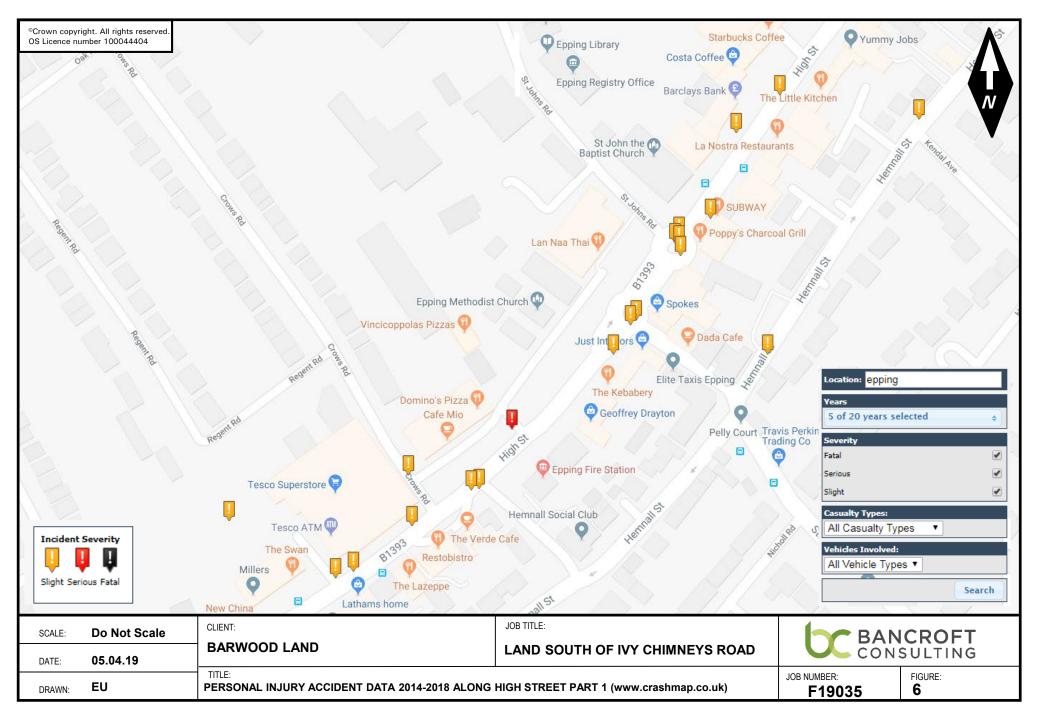


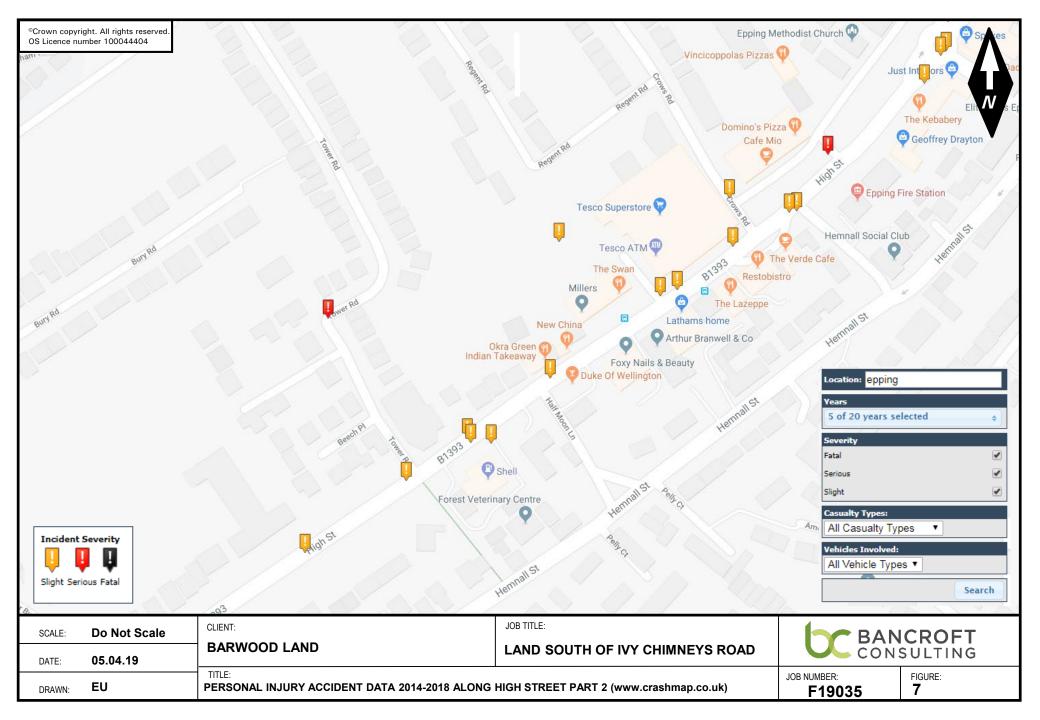


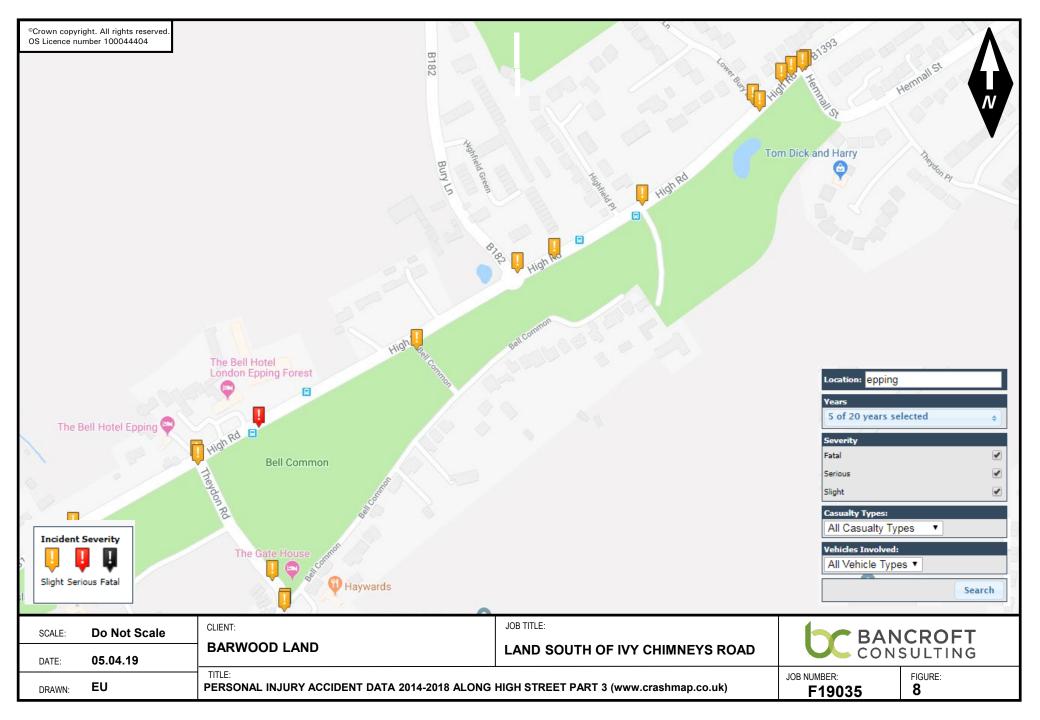


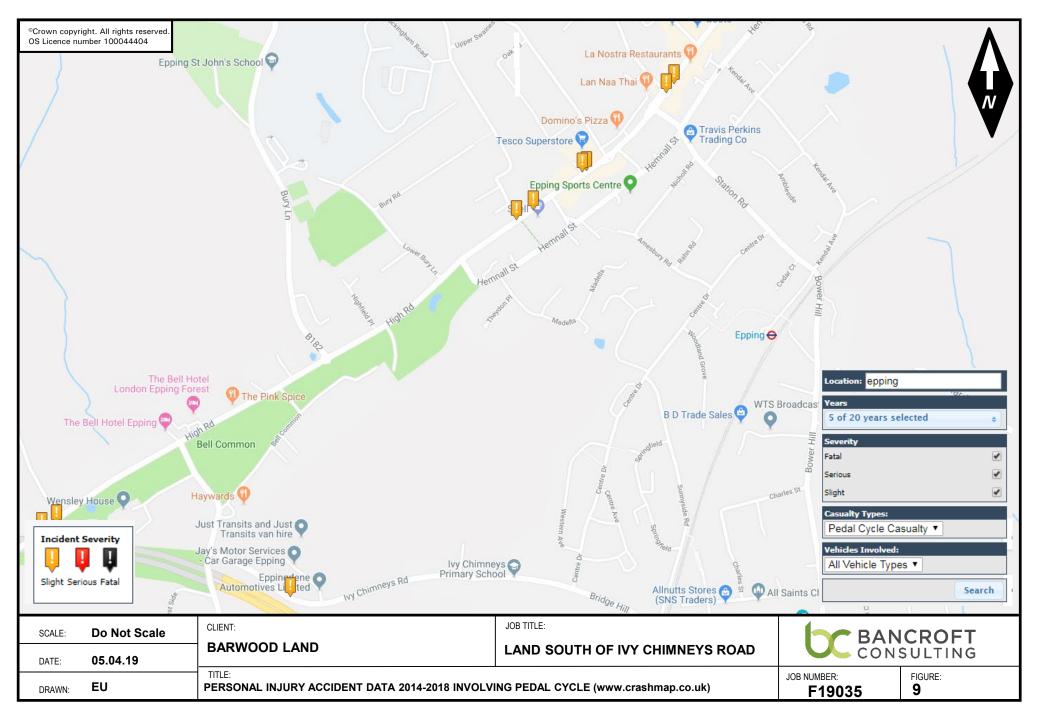


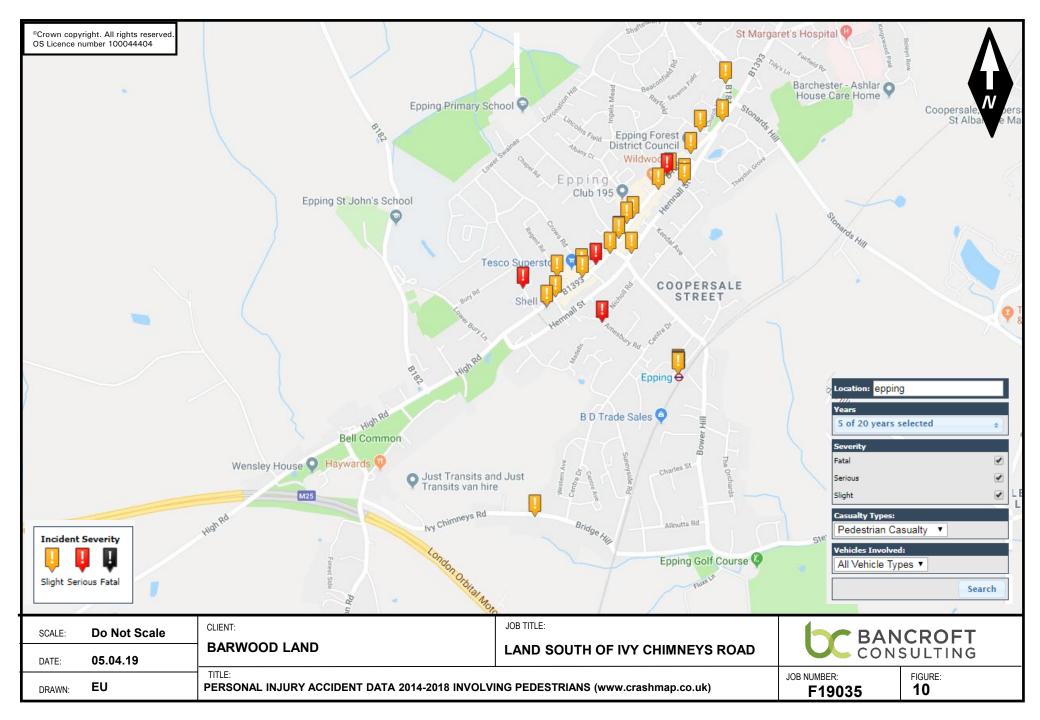


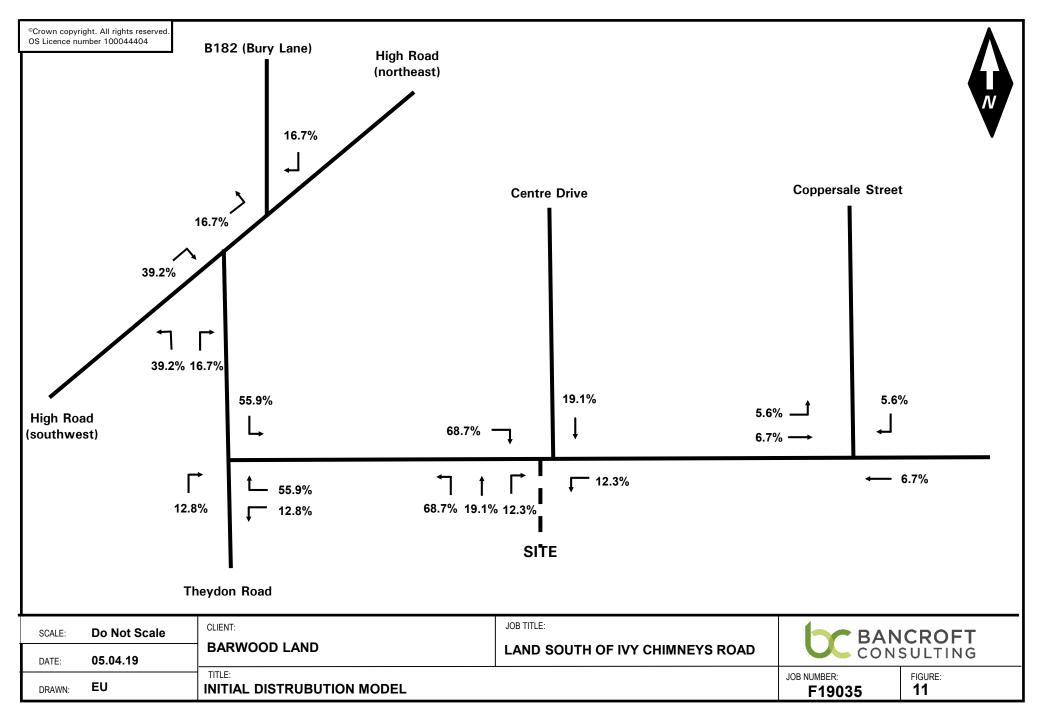


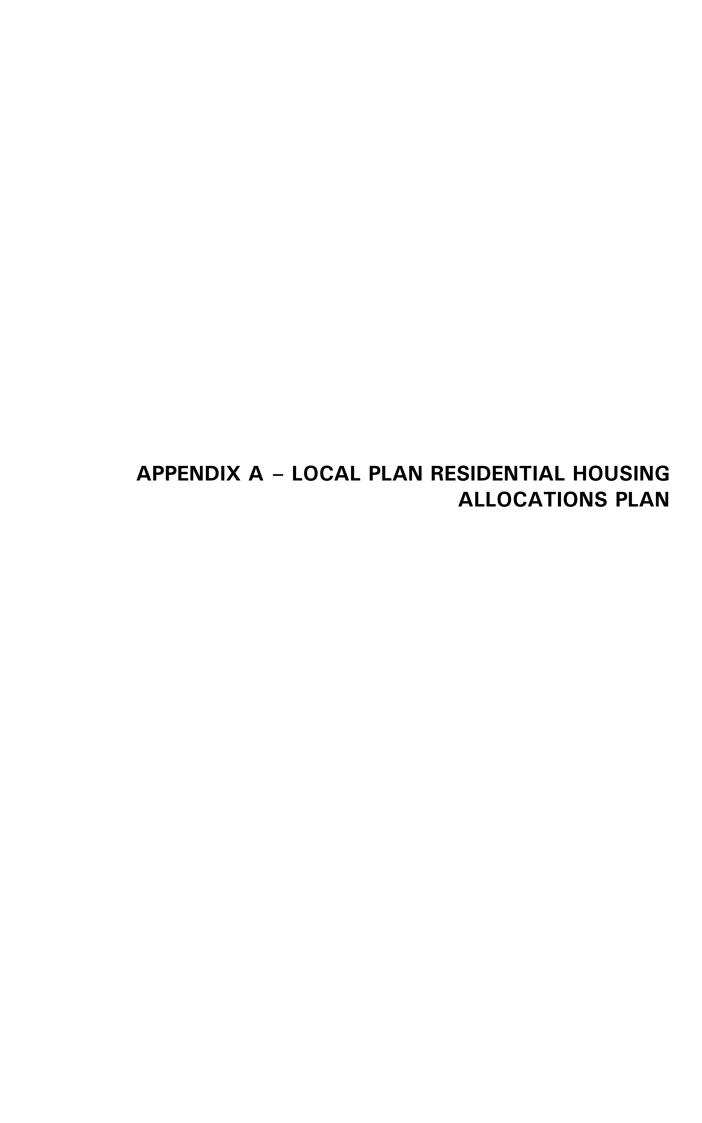


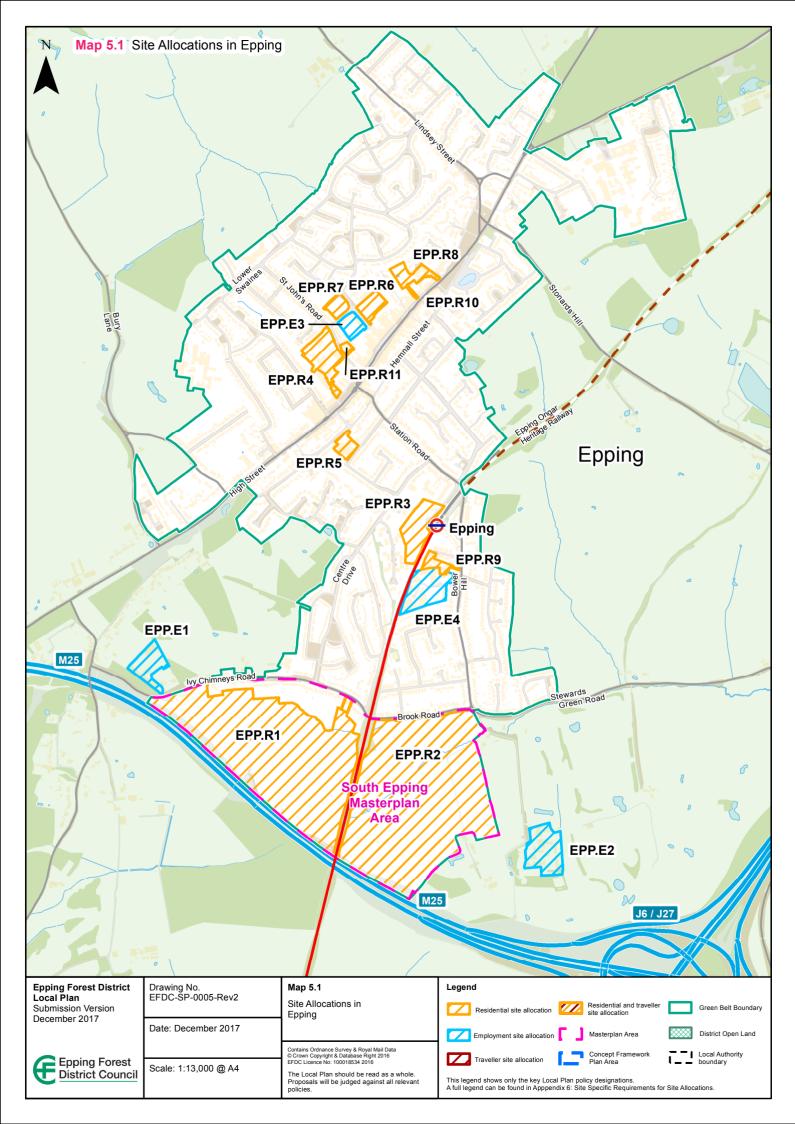












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### **EPPING FOREST DISTRICT COUNCIL: Examination of the District Local Plan,** 2011 – 2033.

Inspector: Louise Phillips MA (Cantab) MSc MRTPI

Programme Officer: Louise St John Howe, <a href="mailto:louise@poservices.co.uk">louise@poservices.co.uk</a>

### **INSPECTOR'S MATTERS, ISSUES & QUESTIONS**

This document sets out the 16 Matters and associated Issues and Questions (MIQs) which I have identified as being important to my determination of whether the submitted District Local Plan (the Plan) is legally compliant and sound.

The MIQs will form the basis of the forthcoming hearing sessions, but the purpose of any statements submitted in advance should be to focus, and potentially reduce, the number of issues for discussion.

Should the Council propose any changes to the Plan as a consequence of its response to my MIQs, these should be included in a schedule to be published before the hearing sessions commence.

### **MATTER 1: Legal Compliance**

## Issue 1: In preparing the Plan, has regard been had to national policies and advice; and to Neighbourhood Plans whether "made" or in preparation?

### National Policy and Advice

1. Is it necessary to highlight at the outset any significant inconsistencies with either national policy or guidance? Are they robustly justified?

### Neighbourhood Plans (NPs)

- 2. Are there any "made" NPs in the District? If so, has regard been had to them in preparing the Plan? Is there any specific conflict between any policies of the submitted Plan and any made NP?
- 3. Is it clear which of the Plan's policies constitute "strategic policies" for the purpose of NP preparation and examination? Should this be set out in Policy D6 or otherwise clarified?

### Issue 2: Is the Plan legally compliant in respect of how it accords with the Local Development Scheme (LDS) and the Statement of Community Involvement (SCI); and has the consultation carried out during its preparation been adequate?

- 1. Has the Plan been prepared in accordance with the adopted LDS, October 2017?
- 2. Has the Plan been prepared in accordance with the adopted SCI, 2013, particularly in respect of the following:

- a. How were local residents likely to be affected by proposed site allocations informed?
- b. Was the Regulation 19 version of the Plan adequately publicised compared to previous draft versions? Representations indicate that there were no newspaper articles, fliers, public meetings etc.
- c. Was the online version of the Regulation 19 Plan user-friendly? Did difficulties with document access unreasonably shorten the consultation period?
- d. Was it reasonable for the Regulation 19 comment period to be held over the Christmas holidays?
- e. Were hard copy versions of the Plan available at reasonable cost (£20)?
- f. Does the absence of Appendix B of the Site Selection Report (and potentially other documents) at the Regulation 19 stage contravene the requirements of the SCI? If so, what are the implications of this for the test of legal compliance?
- 3. Did the Council's consultation process prior to inviting representations on the Regulation 19 version of the Plan offer interested parties the opportunity for meaningful engagement? In particular:
  - g. How have the consultation responses made during the preparation of the Plan informed the submitted version, particularly in relation to the desire to protect open spaces and community facilities, and to increase local job and business growth?
  - h. Has the inclusion and exclusion of specific sites only at the Regulation 19 stage denied some interested parties this opportunity?
  - i. What action did the Council take to inform interested parties about significant changes to the Plan?

## Issue 3: Has the Duty to Cooperate, as required by S33A of the Planning and Compulsory Purchase Act, been met?

- 1. The strategic cross-boundary issues addressed by the Co-operation for Sustainable Development Board are set out in Section 3 of the Duty to Cooperate Statement, December 201 (EB119). Has the Duty to Cooperate been met in respect of these matters and are there any significant omissions?
- 2. In respect of the Harlow and Gilston Garden Town, how have the Member and Officer Boards cooperated on matters such as transport, infrastructure and service provision, including education, to ensure that the Duty is met?
- 3. Does the decision of Epping Forest District Council and/or the other Local Authorities comprising the Housing Market Area (HMA) not to meet the Objectively Assessed Need for housing as found by the Strategic Housing Market Assessment July 2017 (EB407) represent a failure of the Duty to Cooperate? What cooperation took place to seek to meet this need within the HMA?

### Issue 4: Has the Plan been informed by an adequate process of Sustainability Appraisal (SA)? Have the requirements of the SEA Directive and Regulations been met?

- 1. Is the SA comprehensive and satisfactory and has it sufficiently evaluated reasonable alternatives? In particular, I understand that a "dispersed" pattern of development was pursued as a result of the Community Choices consultation. Were alternative distributions considered through SA, such as a more concentrated pattern, or different dispersal patterns?
- 2. The SA Report of 2017 (EB204) indicates that the Plan will have either negative or minor negative effects in relation to the following SA objectives: biodiversity and green infrastructure; the historic environment; land and waste; and landscape. Have reasonable alternatives been considered to seek to avoid these effects and, if they are unavoidable, is the Plan justified?

## Issue 5: Have the requirements of the Conservation of Habitats and Species Regulations 2017 been met?

- 1. Is the Council's HRA process consistent with the *People Over Wind, Peter Sweetman v Coillte Teoranta Judgement*?
- 2. The Habitats Regulations Assessment of the Regulation 19 Local Plan (EB206 & 206A) identified that, without mitigation, the Plan would result in likely significant effects upon the Epping Forest SAC, either alone or in combination with other plans or projects, in respect of recreational pressure; urbanisation; and air quality.
  - a. Is it correct that no likely significant effects have been identified for the other relevant designated sites (Lee Valley SPA/Ramsar Site; or Wormley-Hoddesdonpark Woods SAC)?
  - b. Both Natural England and the Conservators of Epping Forest have raised concerns about how the "Baseline", "Do Minimum" and "Do Something" scenarios have been compared in the HRA process to identify likely significant effects. What is the relevance of these terms and is the HRA methodology valid in this respect?
  - c. Does the HRA process for screening Plan policies in or out of the assessment remain valid in light of up to date and emerging evidence on visitor behaviour and traffic impact? For example, recent visitor survey information seems to indicate that the Zone of Influence for recreational pressure on Epping Forest SAC is larger than was thought when the Plan was submitted. Has this resulted in any policies and/or site allocations being wrongly screened out of the assessment? If so, what should be done?
  - d. For each likely significant effect identified for Epping Forest SAC, has an appropriate assessment been carried out to ascertain that its integrity will not be adversely affected?
  - e. In preparing any appropriate assessment, has avoidance of harm been considered before mitigation or compensation? If not, should it have been?
  - f. For the purpose of any appropriate assessment, is it justified to defer consideration of the implications of allocated sites to the planning

- application stage, as suggested by Policy DM2? For example, how will any new green spaces required be found and secured if not through the plan-making process (e.g. in a SANG Strategy)?
- g. For the purpose of any appropriate assessment, is it justified to rely upon the *forthcoming* Mitigation Strategy to conclude that the integrity of the relevant sites will not be adversely affected given that the effectiveness of the Strategy cannot yet be fully appreciated?
- h. What is the scope of the forthcoming Mitigation Strategy and what type of mitigation is envisaged for each type of likely significant effect? How is this/could this be secured in the Plan? What progress has been made with the Mitigation Strategy and when will it be completed?
- i. Might certain proposals within the Mitigation Strategy itself, such as those for Wake Arms Roundabout, themselves have potentially significant effects upon designated sites which require appropriate assessment? If so, how and when will this be done?
- j. In the absence of a final Mitigation Strategy at this stage:
  - i. Is it necessary to modify the Plan to require development proposals to comply with its recommendations?
  - ii. Would this course of action be justified and effective, or is it essential for the Strategy to be completed before the Plan is adopted? Is it clear that the necessary mitigation could be implemented without threatening the delivery of the Plan's strategy?
  - iii. If it would be necessary, justified and effective to address the absence of the Mitigation Strategy through modifications to the Plan, what changes are needed? (In responding, the Council should have full regard to the representations of Natural England [19STAT0027] and the Conservators of Epping Forest [19STAT0035]).

## Issue 6: Is the Plan legally compliant in terms of how it seeks to address climate change?

1. Does the Plan include policies designed to secure that the development and use of land in the District contributes to the mitigation of, and adaptation to, climate change as required by Section 19(1A) of the PCPA?

## Issue 7: Is the Plan legally compliant in respect of superseded policies; mapping; and monitoring?

- 1. Does Appendix 2 need to explain which policies of the new Plan supersede which policies of the old plans? Could this be confusing and would it be sufficient to simply list the plans and policies to be superseded?
- 2. What does the "submission policies map" consist of? Is it just the single map of the whole district printed at 1:30,000 scale at A0 size, or does it include the A4 Maps within the Plan itself?
- 3. Is the geographic illustration of all relevant policies in the Plan shown on the submission policies map?

- 4. Whether or not the A4 maps in the Plan form part of the submission policies map, are the legends clear and comprehensive? Some of the legends include designations not shown on the maps and *vice versa*. For example, the legend for Map 2.2 includes Traveller allocations, but there are none on the map. By contrast, Map 2.2 includes diagonal green hatching and green and brown dots which are not on the legend. Should such inconsistencies be resolved throughout the plan?
- 5. Does the Plan include a Key Diagram as required by paragraph 157 of the NPPF?
- 6. Will the indicators in Appendix 3 enable the effectiveness of the Plan's policies to be monitored?

## MATTER 2: Context, Vision & Objectives and Sustainable Development

## Issue 1: Are the context, vision and objectives for the Plan accurate and comprehensive?

- 1. Does Figure 1.3 on page 7 accurately reflect the content of paragraph 1.36 in terms of the most common job types in the district? Figure 1.3 indicates that public administration, education and health industries employ the second largest number of people in the District, but this is not mentioned in paragraph 1.36.
- 2. Is Figure 1.5 on page 9 accurate in showing the period 2001 2013 on the x-axis rather than the period 2011 2033?
- 3. Do the vision and objectives adequately reflect the Plan's aims for air quality, green and blue infrastructure, protection of the landscape and biodiversity, and healthy living? Should specific reference be made to the aim of conserving or enhancing the historic environment, including archaeology?
- 4. Should the vision support the leisure and nature conservation aims of the Lee Valley Regional Park to fully reflect its statutory purpose? Does the supporting text in paragraphs 2.18-2.24 adequately reflect the strategic aims of the Park Authority's adopted vision? (Reps LVRPA).

## Issue 2: Is Policy SP1 concerning the presumption in favour of sustainable development necessary and consistent with national policy?

1. Does Policy SP1 add anything to, or seek to depart in any way, from national policy in paragraphs 11-16 of the NPPF? If not, is this policy necessary? If it is necessary, is it consistent with national policy?

### **MATTER 3: The Quantitative Requirements for Development**

Issue 1: Is the housing requirement for the plan period 2011-2033 appropriately defined having regard to the composition of the Housing Market Area (HMA); and the Objectively Assessed Need (OAN) for housing within the HMA?

### **HMA**

1. Is the HMA comprising Epping Forest, East Herts, Harlow and Uttlesford Councils justified? Should the HMA include Broxbourne Borough? How has the influence of neighbouring London Boroughs been taken into account?

### OAN for Housing and the Housing Requirement

For the period 2011-2033, the Strategic Housing Market Assessment July 2017 (EB407) found the OAN for the HMA as a whole to be 51,700 additional homes. The OAN for Epping Forest was found to be 12,573 new homes, amounting to 572 per annum.

- 2. Does the SHMA July 2017 identify the *full* OAN for housing for the HMA and for Epping Forest specifically?
  - a. Was the standard methodology recommended by the Planning Practice Guidance (PPG) followed? Are any departures, particularly in relation to how migration and market signals were taken into account, clearly explained and justified?
  - b. Has consideration been given to the high level of housing need in the neighbouring London Boroughs emerging through the London Plan? If not, are the figures justified?
- 3. What is the relevance of the OAN figure of 13,278 for Epping Forest DC referred to in paragraph 6.8 of the Sustainability Appraisal (EB204)?
- 4. Is it justified for the HMA as a whole, and for Epping Forest DC specifically, to plan for less than the OAN as established by the SHMA 2017, at 51,100 and 11,400 homes respectively?
  - a. Has the alternative of delivering the OAN been tested through Sustainability Appraisal? If not, is the SA process deficient?
  - b. Will the Plan in fact provide more housing than the OAN of 12,573 as found by the SHMA 2017 (13,152 indicated in Appendix 5)? If so, is it justified to set the requirement below this?

## Issue 2: Does the Plan include an appropriate target for accommodation for Gypsies & Travellers and Travelling Showpeople District?

1. Paragraph 2.46 indicates a need for 64 Gypsy & Traveller pitches and one Travelling Showpeople yard over the Plan period 2011-2033. Is this the full objectively assessed need as supported by evidence and does the Plan meet it? Should the requirement for the whole plan period (i.e. 64 pitches and 1 yard) be set out in Policy SP2(D) in the same way that it is for general housing in SP2(A)?

2. Paragraph 2.46 explains that the figures above do not include an allowance for those who need to live in a caravan but who do not meet the definition of Gypsies & Travellers in the Planning Policy for Traveller Sites (PPTS). How will the needs of other persons defined by Section 124 of the Housing and Planning Act be met?

## Issue 3: Is the Functional Economic Market Area (FEMA) upon which the Plan is based appropriately defined; and are the requirements for job growth and employment land set out in the Plan justified?

- 1. Has the FEMA, comprising Epping Forest, East Herts, Harlow and Uttlesford Councils been defined by reference to the advice in the PPG? Is it justified?
- 2. Have the conclusions of the Employment Needs Assessment (EB610) in respect of job change/growth and employment floorspace requirements for the FEMA as a whole and for Epping Forest specifically been arrived at by following the methodology recommended in the PPG? Are any departures clearly explained and justified? In particular, has the Assessment utilised an appropriate forecasting model? Was it justified to moderate the baseline utilised by the East of England Forecasting Model 2016? Has this resulted in the Plan proposing a level of job growth below that needed to balance the labour market? (Reps 19LAD0058)
- 3. Will the identified job growth/floorspace requirements across the FEMA as a whole, and in Epping Forest District specifically, be met? In particular:
  - a. Does the Plan seek to provide 10,800 jobs over the period 2011-2033 as indicated in paragraph 2.51?
  - b. Where is the evidence that 2,900 jobs have already been provided during the period 2011-2016, leaving 7,900 to be provided over the period 2016–2033?
  - c. Table 2.5 on page 30 appears to cover the period 2011-2033, but the land requirements only cover the period 2016-33. Why is this? Will sufficient land be provided for the full 10,800 new jobs required over the whole Plan period?
  - d. Is it justified to rely upon the regeneration of existing sites to deliver approximately half of the future accommodation needs (paragraph 2.50)? Is there evidence to demonstrate that this will be effective?
  - e. Should Table 2.5 be amended to clarify that 14Ha of land is needed for industrial uses rather than offices?
  - f. Should Policy SP2 set out how many new jobs are to be provided over the Plan period as well as how much land?

## Issue 4: Is the Plan justified, effective and consistent with national policy in respect of the approach to meeting identified needs for retail development?

4. Paragraph 3.53 of the Plan indicates that there is a net need for 39,700sqm of retail floorspace and that approximately 40% of that need will be met in Harlow. However, the Plan does not make any specific site allocations for the remaining 60%, or approximately 23,820sqm. In relation to this matter:

- a. To which period does the identified need for 39,700sqm of net additional floorspace relate?
- b. Is there evidence to demonstrate that 40% of this need will be met in Harlow during the relevant period?
- c. Why does the Plan not identify specific sites for the remaining 23,820sqm of necessary floorspace? Is this consistent with national policy in paragraph 23 of the NPPF?
- d. Is any departure from national policy in this respect justified and how will the Plan ensure that this need is met?

### **MATTER 4: The Spatial Strategy/Distribution of Development**

Issue 1: Does the distribution of development in the Plan place too much reliance upon the Garden Community Sites around Harlow at the expense of testing the capacity of the other settlements in the District?

- 1. How was the amount of housing proposed in the three Garden Town sites allocated in Policy SP5 determined (3,900 dwellings in total)?
- 2. Could a higher level have been accommodated and would this have reduced the impact of growth proposed elsewhere in the district?
- 3. Conversely, will the level of growth proposed elsewhere in the district be sufficient to support the vitality and viability of individual settlements over the Plan period?

### Issue 2: Beyond the Harlow area, is the distribution of development in the Plan justified having regard to the defined settlement hierarchy?

- 1. What are the key factors which informed the distribution of development in the Plan beyond the Harlow area?
- 2. How was the settlement hierarchy set out in Table 5.1 page 114 defined, and is it justified? Has the settlement hierarchy informed the distribution of development and if not, what is its purpose?
- 3. Is the settlement hierarchy justified in respect of how employment opportunities were taken into account e.g. in Nazeing?
- 4. Is it justified for North Weald Bassett (NWB) as a Large Village to be allocated more development than the Towns of Loughton, Waltham Abbey and Ongar? More generally, would the proposed growth of NWB be disproportionate, particularly when development at nearby Thornwood and Hastingwood is taken into account?
- 5. Is the relatively limited growth at Buckhurst Hill and Theydon Bois as Large Villages justified by comparison to that proposed at Nazeing and Thornwood as Small Villages?

## Issue 3: Is the distribution of employment land in the Plan justified in light of the distribution of housing?

1. In light of the housing growth proposed around Harlow, does the Plan's proposal to locate the majority of employment land at North Weald Bassett and Waltham Abbey risk creating unsustainable travel to work patterns? How will this be avoided? (Reps Harlow DC).

## Issue 4: Is the distribution of development justified in respect of the need for, and approach to, Green Belt release?

- 1. Paragraph 14 of the NPPF generally requires that a Local Plan should meet the objectively assessed development needs of the area. However, it also confirms (via footnote 9) that Green Belt is one of the constraints which indicates that development should be restricted. How has this tension been resolved in favour of the conclusion that there are exceptional circumstances to justify the alteration of Green Belt boundaries? In particular:
  - a. How do the specific development needs of the District weigh against the importance given to Green Belt protection?
  - b. What would be the consequences of not releasing Green Belt land to help meet development needs?
  - c. Have alternatives to Green Belt release been fully considered:
    - i. Has full use been made of previously developed land? Has a Brownfield Land Register been published and how has it been taken into account?
    - ii. Has the density of development been maximised, on brownfield and greenfield allocations?
    - iii. Could vacant homes be brought back into use? Have approximately 1000 properties in the Epping Area been empty for more than 6 months?
    - iv. Has the potential for windfall development during the Plan period been underestimated?
    - v. Could any other authority within the HMA have accommodated some of the District's housing need on non-Green Belt land?
- 2. Are the changes proposed to the Green Belt boundary informed by a robust assessment of the contribution made by individual sites to the purposes of the Green Belt (EB74A-B; and EB705A-B)? How were the findings of the Green Belt Review weighed in the balance with other planning considerations in the site selection process?
- 3. Is the scale of Green Belt release proposed at NWB, Thornwood and Waltham Abbey justified and proportionate to the size of the existing built up areas?
- 4. How have anomalies in the Green Belt boundary been identified and does the need to correct them amount to the exceptional circumstances necessary to alter the boundaries? Should sites with planning permission for residential development in the Green Belt (such as land north of Ivy Chimneys Road,

- Epping) be removed from the Green Belt? (See Reps 19LAD0022 re. land north of Ivy Chimneys Road, Epping).
- 5. Having regard to paragraph 85 of the NPPF, and to the potential for an increased level of housing need in the District to be identified in the future, how has the Council satisfied itself that Green Belt boundaries will not need to be altered at the end of the Plan period? Is it necessary to identify areas of safeguarded land between the urban area and the Green Belt?

## Issue 5: Is the distribution of development justified in respect of the approach to flood risk; and to protecting water quality?

### Flood Risk

- 1. Notwithstanding that the Plan requires all residential development on allocated sites to take place within Flood Zone 1, has the potential impact of climate change been allowed for in the site allocation process? Should the relevant policies in the Plan require all residential development to take place in Flood Zone 1, allowing for climate change? Should this requirement relate only to the housing and ancillary development itself, and permit associated development such as amenity open space to be provided in higher risk zones?
- 2. The following allocations include some land within or adjacent to Flood Zones 2/3: **SP5.2** (Water Lane Area); **SP5.3** (East of Harlow); **NWB.R3** (in North Weald Bassett); **NAZE.R1 & R4** (in Nazeing); and **LOU.R11** (in Loughton).
  - a. Do the above allocations pass the Sequential Test required by paragraph 100 of the NPPF?
  - b. Does the Strategic Flood Risk Assessment (Site Assessments) March 2018 (EB913) constitute a Level 2 Strategic Flood Risk Assessment? Has it considered site specific flood risk characteristics, including climate change?
  - c. Are the above allocations required to pass the Exception test and, if so, do they?
- 3. Document EB913 identifies several employment allocations in flood risk areas or which have watercourses running through them. Do these sites pass the Sequential Test and, if necessary, the Exception Test required by paragraph 100 of the NPPF?

### Water Quality and Wastewater Treatment

4. Is the level of growth and the distribution of development in the Plan justified in the absence of a specific strategic assessment to demonstrate that there is sufficient capacity in the water supply network and waste water treatment network to support it without detriment to the water environment? The Environment Agency has suggested that a Water Cycle Study could have been prepared, but that other evidence, including consultation with relevant service providers, could be sufficient. What is the evidence to demonstrate that the Plan is sound in this regard? Is the Council carrying out the three

actions suggested by the Environment Agency in its representations on Policy DM18?

5. Thames Water has identified that significant infrastructure upgrades will be required to the Abbess Roding Sewage Treatment Works (STW), the Epping STW, the North Weald STW, the Stanford Rivers STW and the Thornwood STW in order to support planned growth. Furthermore, the impact of cumulative development in nearby Council areas upon the Deephams STW and the Rye Meads STW will need to be kept under review. Capacity at the Theydon Bois STW and the Willingdale STW might also need to be reviewed. What work is being undertaken in respect of these matters to ensure that the Plan's allocations are deliverable at the appropriate time?

# Issue 6: Is the distribution of development justified in respect of its effect upon transport and other infrastructure in the District? Will the Plan be effective in securing the infrastructure necessary to support proposed growth?

### **Transport**

- 1. Have the transport impacts of the Plan as a whole been tested? Has all necessary mitigation been identified and is there confidence that it can be delivered in time to support the proposed growth? Are there any remaining uncertainties or shortcomings?
- 2. Is planned growth dependent upon a "step-change" towards sustainable travel? What does this mean and how will the Plan facilitate it? What has been done to assess the need for increased public transport and how will this be provided? How will success be monitored?

### Other Infrastructure

5. Does the Infrastructure Delivery Plan and Schedule (EB1101A & B) demonstrate that the development in the Plan can be served by adequate infrastructure at the appropriate time? Are there any significant omissions or funding gaps?

### MATTER 5: Site Selection Methodology and the Viability of Site Allocations

Site Selection

## Issue 1: Have the Plan's housing allocations been chosen on the basis of a robust assessment process?

- 1. The Council should provide a summary of the process by which the Plan's housing allocations were selected. In particular:
  - a. How was the initial pool of sites for assessment identified?
  - b. How was the Site Selection Methodology (SSM) utilised in the Site Selection Report 2018 (EB805) established and is it robust?

- c. What is the relationship between the SSM and the sequential approach to site selection set out in Policy SP2(A)?
- d. What was the role of the Sustainability Appraisal in selecting between the various sites?
- e. Was any other evidence taken into account in the site selection process? In particular, how has the historic environment been taken into account? Have Historic Impact Assessments been undertaken as recommended by Historic England and, if not, is this necessary?
- 2. How were the conclusions reached about individual sites checked for accuracy and consistency? Were sites visited or were they assessed through a desktop process? What has been done to check the assessments in specific cases where their accuracy has been challenged e.g. Site SR-0596? (Reps 19LAD0012).
- 3. As raised in Matter 1, Issue 2, some sites which were proposed for allocation in the Regulation 18 version of the Plan are not proposed in the Regulation 19/submitted version and vice versa. Is this due to changes in the site selection process, or something else? Are the different conclusions reached about the relevant sites fully explained and justified?
- 4. Having regard to Question 1c above, is the sequential approach to site allocation set out in Policy SP2(A) justified, particularly in respect of the value placed upon open spaces within settlements? How was the adequacy of remaining open space within a settlement measured (Policy SP2(A)(iv))?
- 5. Now that the site selection process is complete for the purpose of making allocations in the Plan, is it necessary to include the sequential approach within Policy SP2(A)?
- 6. Is it justified to allocate station car parks (EPP.R3; LOU.R1, LOU.R2; BUCK.R2; THYB.R2) and other car parks (EPP.R6, EPP.R7) for housing? Can adequate parking for both commuters and residents be provided; and how will short-term disruption to commuter parking during the construction phase be addressed?

## Issue 2: Have the Plan's allocations for Gypsies & Travellers and Travelling Showpeople been chosen on the basis of a robust assessment process?

- 1. The Council should provide a summary of the process by which the Plan's allocations for Gypsies & Travellers and Travelling Showpeople were selected. In particular:
  - a. How was the initial pool of sites for assessment identified?
  - b. How was the Traveller Site Selection Methodology (TSSM) utilised in the Site Selection Report 2018 (EB805) established and is it robust? Is it consistent with national policy in the Planning Policy for Traveller Sites?
  - c. What is the relationship between the TSSM and the sequential approach to site selection set out in Policy SP2(D)?

- d. What was the role of the Sustainability Appraisal in selecting between the various sites?
- e. Was any other evidence/factors taken into account in the site selection process?
- 2. Is the sequential approach to delivering accommodation for Gypsies & Travellers and Travelling Showpeople justified in respect of the following issues in particular:
  - a. How have the benefits of seeking to regularise existing unauthorised sites and sites with temporary permission been weighed against the potential harms, including to the countryside and Green Belt? Will this lead to the concentration of Traveller sites in certain areas, such as Roydon?
  - b. Is it justified to prioritise the provision of new sites in the countryside and Green Belt over making provision as part of the development of other allocated sites?

### Issue 3: Have the Plan's new employment allocations been chosen on the basis of a robust assessment process?

1. How were the five new employment site allocations chosen from the alternatives indicated to be suitable in the Employment Land Supply Assessment?

#### Viability

## Issue 4: At the broad strategic level, are the Plan's allocations financially viable?

1. Having regard to paragraph 173 of the NPPF, are the Plan's allocations for housing (including for Travellers) and employment financially viable, having regard to the normal cost of development and mitigation; and all relevant policy costs, including for affordable housing, space standards, building requirements, design and potential infrastructure contributions?

## MATTER 6: Housing Supply, including Sources of Supply; the Housing Trajectory; and the Five Year Supply.

## Issue 1: Will the Plan provide a land supply sufficient to deliver the housing requirement of at least 11,400 dwellings over the Plan period?

- 1. Table 2.3 on page 29 sets out the different components of the housing land supply for the period 2011-2033. Is data on housing completions and extant planning permissions now available up to 31 March 2018? If so, should the table be updated to reflect this? Should the table indicate how much housing is expected to be provided through allocations outside the Garden Communities? Should it be made clear whether the total housing supply for the Plan period will be above or below the requirement?
- 2. Policy SP2(c) indicates that additional housing could be delivered through Neighbourhood Plans and on rural exception sites in accordance with Policy

- H3. Is it possible to quantify this contribution and should it be reflected in Table 2.3?
- 3. Is the expected windfall allowance of 35 dwellings per annum for 11 years (385 in total) justified? Representations suggest that the figure might be either higher or lower.
- 4. In determining the contribution of allocated sites to the housing land supply, how have site densities been worked out? Is there any general risk that the capacity of sites has been over-estimated?

## Issue 2: Will the Plan ensure that there is a reasonable prospect of a five-year land supply being achieved upon adoption and throughout the lifetime of the Plan as required by paragraph 47 of the NPPF?

- 1. What is the five-year supply requirement upon adoption of the Plan having particular regard to the following:
  - a. With a requirement to provide 11,400 dwellings over the 22 year Plan period 2011-33, the annualised housing requirement would be 518 dwellings. What is the shortfall in delivery since the start of the Plan period (up to 31 March 2018 if appropriate); and how and over what period is it intended to make up for this? Is it justified not to seek to recover the shortfall within the first five-year period after the Plan is adopted?
  - b. What buffer should be included in the five-year supply requirement (moved forward from later in the Plan period) to ensure choice and competition in the market for land? Is the relevant buffer justified? The Housing Trajectory in Appendix 5 indicates that 5% has been added to the annualised requirement for every remaining year of the Plan period. Why is this?
- 2. On the basis of the answer to Question 1, will there be a five-year housing land supply upon adoption of the Plan? What evidence is there to support this? Can the Council produce a spreadsheet to show how individual sites are expected to contribute to delivery in each year? In particular:
  - a. If the Plan is not adopted until mid-late 2019, is it realistic to expect allocated sites to start delivering in 2018/19 and 2019/20?
  - b. Is it realistic to rely upon sites requiring the adoption of a Strategic Masterplan, including the Garden Town Sites, for the five year supply?

## Issue 3: Does the Plan meet the requirements of paragraph 10 of the Planning Policy for Traveller Sites (PPTS) in respect of delivery?

1. Is the plan consistent with paragraph 10 part a) of the PPTS? What is the five year requirement for the delivery of Traveller sites and will this be achieved upon adoption?

### MATTER 7: Place-Shaping & General Masterplan Approach

### Issue 1: Is the application of Policy SP3 to all allocated sites justified; and is it otherwise effective and consistent with national policy?

- 1. This policy begins with Part H. Should it begin with Part A?
- 2. Is this policy intended to apply to all allocated sites regardless of size? If so, should it be explained that not all will be expected, or able, to comply with all of the criteria? Should the policy also apply to windfall sites?
- 3. Are the densities required by Part I(ii) and (iii) justified having regard to the likely effect upon the character of the relevant areas? Is it clear to which areas of the District Part I(iii) and (iv) relate? Are "areas outside town and large village centres" in Part I(iii) different to "other areas of the District" in Part I(iv)?
- 4. Should the criteria include specific reference to the need to conserve or enhance the historic environment?
- 5. Part H(v) requires development to promote healthy and active lifestyles. Does the Plan as a whole respond sufficiently to the requirements of Section 8 of the NPPF on "promoting healthy communities" by facilitating social interaction and creating healthy, inclusive communities? Is a specific overarching policy on health and well-being required? (Reps ECC).

# Issue 2: Are the Plan's requirements for master-planning (as explained in paragraphs 2.89-2.102 and set out in Policies SP4, SP5 and certain Place policies) justified; and will they be effective in securing the timely delivery of comprehensively planned schemes?

- 1. Are the Plan's requirements for Strategic Masterplans, Concept Frameworks, Design Codes and Panel Review necessary and proportionate having regard to the resources available to developers and the Council alike? In particular:
  - a. Are the thresholds for requiring proposals to be informed by Panel Review of 50+ dwellings/5,000m commercial floorspace justified by the expected benefits?
  - b. Could the requirement for Strategic Masterplans to be adopted by the Council as Supplementary Planning Documents before planning applications can be determined delay the delivery of large sites (see paragraph 2.96)?
  - c. What is the intended status of the Concept Frameworks required by the Plan? How will they be "formally endorsed" by the Council?
  - d. What would happen in cases where landowners within Strategic Masterplan and Concept Framework areas cannot agree? Does this present a risk to the timely delivery of development?
- 2. Paragraph 2.94 explains that Strategic Masterplans will be produced by the landowners/promoters of the sites in partnership with the Council and relevant stakeholders. Is this process justified in cases where a Neighbourhood Plan is in preparation for the same area (see specifically

Chigwell Parish Council and Site CHIG.R6, the Limes Farm Masterplan Area)? How will duplication and/or policy conflict be avoided?

### **MATTER 8: Garden Town Communities**

## Issue 1: What is the "Garden Town" concept as applied to proposed allocations SP5.1, SP5.2 and SP5.3 and is this significant for planmaking purposes?

- 1. Are the four Garden Town Communities (including Gilston in East Herts) intended to function together in some way, or are the allocations essentially separate entities? Does this matter?
- 2. If the communities are intended to function together, is this possible in light of their physical separation? Will the requirement for separate Strategic Masterplans be effective in achieving coherent schemes?
- 3. Does the Garden Town approach have specific implications for how infrastructure needs are identified and provided? Have Harlow and Epping Forest Councils worked together constructively in making decisions about where to provide health and education infrastructure, for example?

### Issue 2: Are the Garden Town allocations deliverable in respect of their impact on transport infrastructure?

- 1. Are the requirements of Policy SP5 in relation to transport sufficient to mitigate the effects of the proposed development in all three communities upon existing Junction 7 of the M11 and to ensure that adequate financial contributions are made towards the provision of Junction 7a? Is it the case that the provision of Junction 7a and associated infrastructure is a prerequisite of development on these sites and, if so, is this sufficiently clear in the Plan?
- 2. More generally, are the highway and transport improvements sought by the policy expected in the form of physical works or financial contributions? Is this clear?
- 3. Essex County Council has indicated that the Latton Priory development could not deliver an essential north/south sustainable transport corridor. What difficulties does this present and can they be resolved?

## Issue 3: Are the criteria in Policy SP4 justified, effective and consistent with national policy?

1. Will the criteria within Policy SP4(C) ensure that sufficient regard is had to the historic environment, including built heritage; townscape; archaeology; and designed landscapes, in planning generally for the Garden Town Communities? (Reps HE).

### Issue 4: Are the site allocations (SP5.1, SP5.2 & SP5.3) in Policy SP5 sound and deliverable?

#### All sites

- 1. Should Policy SP5 and the relevant supporting text exclude reference to the size of schools to be provided for flexibility? Should a land area be specified instead? Should the policy make it clear that financial contributions could be sought towards school provision?
- 2. Will sufficient employment land be available in/near to the new Garden Town Communities to "enable residents to meet the majority of their day to day needs" within them and to "maximise the use of sustainable transport modes" as required by Policy SP4? Has consideration been given to providing more employment land (and less housing if necessary to achieve this) within the relevant allocations? (Reps Harlow and ECC).
- 3. What effect would the development of sites SP5.1, SP5.2 and SP5.3 have upon the purposes of the Green Belt? What would be the impact of Site SP5.2 (Water Lane Area) on the identity of Broadly Common and Old House Lane in Roydon Parish?
- 4. Do the maps of the Masterplan Areas require amendment to clarify that the "residential site allocations" are also expected to include land for schools and other services and infrastructure? (Reps ECC).

### Site SP5.1: Latton Priory

- 5. Will Policy SP5(F) effectively preserve or enhance the setting of designated and non-designated heritage assets to the south of the site, including Latton Farmhouse; Latton Priory; two scheduled monuments; and two moated sites? (Reps HE).
- Does the Masterplan Area shown on Map 2.2. provide sufficient points of access to achieve a sustainable connection route to the B1393 Epping Road? (Reps ECC).

### Site SP5.2: Water Lane Area

- 7. Is this site deliverable in respect of the multiple land ownerships involved? In particular, are the owners of the nurseries in the northern part committed to the development?
- 8. Historic England states that this site includes part of the Nazeing and South Roydon Conservation Area and three Grade II Listed Buildings. Has regard been had to them in making this allocation and will Policy SP5(G) ensure they are preserved or enhanced? Will the setting of the numerous heritage assets in close proximity also be preserved or enhanced? (Reps HE).

### Site SP5.3: East of Harlow

- 9. Map 2.1 shows that the Masterplan Area for this allocation crosses the boundary with Harlow. Have the Councils worked together to ensure complementary proposals for this area?
- 10.Are the requirements in Policy SP5(H) intended to apply to the whole Masterplan Area or only to the part within Epping Forest? Should this be clarified? In particular, is the "local centre" required by Part H(v) needed to support the whole area or just that in Epping Forest?
- 11.I understand that no firm decisions have been made about the preferred location for the new hospital campus or secondary school referred to in Part H(vi) and (viii) respectively. On this basis, is it justified to include these requirements in the Policy? What will happen to the land safeguarded for these purposes if ultimately it is not needed? Should this be clarified?
- 12. Should part H(xvi) concerning surface water run-off to Pincey Brook also require any increased volume of water discharging into the Brook to be mitigated? (See reps ECC).
- 13.Are the requirements of Part H(xii) concerning the highway works required too specific at this stage? Should this part be reworded to allow for detailed solutions to be determined at the planning application stage? (Reps ECC).

### **MATTER 9: District Open Land**

(Strategic matters concerning the Green Belt are addressed under Matter 4).

## Issue 1: Are the areas of District Open Land designated within the Plan justified and consistent with national policy?

- 1. Do the provisions of Policy SP6 concerning District Open Land (DOL) seek to do anything different to the policy on Local Green Space (LGS) in the NPPF (paragraphs 76-78)? If not, would it be clearer to use the LGS terminology?
- 2. If the DOL designation does not seek to depart from the LGS designation in national policy, does each site designated by the Plan (in NWB, Thornwood & Chigwell) meet the criteria in paragraphs 76-77 of the NPPF? Conversely, if the DOL designation seeks to do something different, are the designations justified with reference to the relevant criteria?

## MATTER 10: Natural Environment, Landscape Character and Green & Blue Infrastructure

## Issue 1: Is Policy SP7 justified, effective and consistent with national policy?

• No specific questions.

### **MATTER 11: Housing**

## Issue 1: Will Policy H1 be effective in securing an appropriate mix of housing?

- 1. Is Part A sufficiently specific in relation to the mix of housing required such that a potential developer would know how to react to the policy? Should it reflect up to date evidence on the actual mix required?
- 2. Does the policy, and the Plan generally, do enough to support the specific needs of older people?
- 3. Is Part D, which simply cross-refers to Policy H2, necessary? Could it be deleted for clarity/simplicity?
- 4. Does the policy require all new homes to meet the Optional Technical Standards M4(2) and/or M4(3) of the Building Regulations for accessible & adaptable dwellings and wheelchair user dwellings respectively? If so, is the need for these standards justified by evidence such as that suggested by the PPG? Should the policy allow for consideration of site specific factors which might render such standards unachievable or unviable?
- 5. In Part E, should the term "specialist accommodation" be defined? How will unmet need for specialist accommodation be identified? Is compliance with this part of the policy dependent upon development viability and the identification of a specific provider of the specialist accommodation?
- 6. Will the policy be effective in providing opportunities for self-build/custom housebuilding? Having regard to the duties set out in the Self-build and Custom Housebuilding Act 2015, should the Plan set out how many such homes it aims to deliver, and should it be stronger in terms of how the necessary land will be secured?

# Issue 2: Will Policy H2 be effective in securing the delivery of sufficient affordable housing of an appropriate type and size? Are the requirements for affordable housing provision from market sites justified by reference to evidence of development viability?

- 1. Paragraph 3.9 states that 2,851 affordable homes are required over the period 2016-2033. How many is the Plan aiming to provide as a result of Policy H2? If the requirement for 2,851 would not be met, has consideration been given to increasing the total housing requirement to help deliver more? Should the number of affordable homes expected to be delivered over the Plan period be specified in the policy for monitoring purposes?
- 2. Harlow DC has expressed concern that the Plan is silent on the matter of addressing unmet need for affordable housing in Harlow. What is the detail of this concern and is it an issue for the Plan?
- 3. Is the Plan/this policy justified, effective and consistent with national policy in respect of the need for Starter Homes?

- 4. Is the requirement for sites accommodating 11 or more dwellings to provide 40% of the units as affordable justified by viability evidence? As the threshold for making provision will be lower than the current plan level of 15 or more dwellings, is there a risk that the viability of sites providing 11-15 dwellings will be undermined in the short term? Is there a case for staggering the requirement so that it does not come into force immediately? (Reps 19LAD0022).
- 5. Is it justified to apply the requirements for affordable housing to all types of housing, including that falling within Use Class C3?
- 6. Does the requirement in Part A concerning build standards duplicate the requirements of Policy H1, Part A(v)? If so, should it be deleted?
- 7. Is there duplication between Part A and Part C of the Policy in respect of the mix of affordable homes required? Should the policy be more specific about the actual mix expected, or clarify where up to date evidence on this matter can be found? Is Part C justified in generally requiring the mix of affordable homes to reflect the mix of market housing? Would this meet the specific needs of those requiring affordable housing? Would it produce unnecessarily large houses that would not be genuinely affordable?
- 8. Part E of the policy indicates that the appropriate tenure mix is set out in the Policy, but it is not. Does this require correction?

### Issue 3: Is Policy H3 clear and effective?

- 1. Is Part A sufficiently clear about which "smaller settlements" the policy relates to? Indeed by reference to Policy SP2(c) is it clear where housing development will not normally be granted? In particular, does Part C(i) of Policy SP2 intend that windfall proposals outside defined development boundaries will not normally be permitted? If so, should this be made explicit?
- 2. Part A(ii) refers to both the "existing settlement" and the "nearby settlement". Should a single terminology be used?
- 3. Part A(ii) indicates that rural exception sites could be permitted in the Green Belt? Is this justified?
- 4. Part F of the Policy refers to viability appraisals submitted in accordance with Part D. Should this be Part E?

## Issue 4: Is the size limit for non-allocated sites Traveller Sites imposed by Policy H4 justified? Is the Policy otherwise justified, effective and consistent with national policy?

1. Is Part C justified in imposing a 0.5Ha limit on the size of non-allocated sites? Would this be sufficient to accommodate the accommodation and equipment

- often required by residents? Could the aims of the policy be achieved by removing the site size limit and retaining just the 5 pitch limit?
- 2. Part C cross-refers to Policy SP4. Is this correct?

### **MATTER 12: Employment**

### Issue 1: Are the requirements of Policy E1 justified, particularly in respect of financial contributions?

- 1. Is Policy E1 (and, in consequence, the employment sections of Policies SP2 and Policies P1-P15) intended to apply to employment sites for B Class uses? If so, is it justified to prevent the change of use of such sites to other employment generating uses outside the B classes? Would this be consistent with the requirements of paragraph 28 of the NPPF to support the diversification of rural businesses?
- 2. If it is justified to limit the definition of "employment uses" for the purpose of Policy E1 (and SP2 & P1-P15) to B-Class uses, should this be clarified in the policy wording?
- 3. Are the requirements of Part A(iii) concerning contributions to local employment training and small business growth programmes justified by reference to the tests in paragraph 204 of the NPPF? In particular, would they be justified in cases where an applicant had successfully demonstrated that there is no reasonable prospect of the site being used for employment purposes?

## Issue 2: Will Policy E2 be effective in protecting the vitality and vitality of the District's identified centres? Does it support the role of retail warehousing, if appropriate?

- 1. Will the application of the nationally set threshold of 2,500sqm for requiring an impact assessment of out of centre proposals be effective in protecting the vitality and viability of town centres? Having regard to the scale of the District's defined centres, should this threshold be lowered?
- 2. Is it necessary to recognise the contribution made by retail warehousing areas to customer choice and local employment opportunities? Will the Plan support the continued operation of these businesses and, if necessary, their growth and development. See representation 19LAD0014 concerning Homebase in Loughton.

# Issue 3: Will Policy E3 help to support the growth of the locally important glasshouse industry? Is the approach to this type of development consistent with that of surrounding authorities so that no disadvantage will result to operators in the District?

1. Is the approach of having a specific policy in the Plan concerning glasshouse development different from that employed by other nearby Planning Authorities facing similar issues? What cross-boundary working has taken

- place in relation to this matter and is it subject to the Duty to Cooperate? Does the inclusion of such a policy have the potential to disadvantage growers in the locality?
- 2. Is the aim of the Lea Valley Food Task Force to create a production base by 2035 which exceeds 2014 production levels by at least 20% realistic? In particular:
  - a. Will Policy E3 enable an increase in production in the Plan area to contribute towards this target?
  - b. Is the Council pursuing any of the three growth scenarios suggested by the report of the Laurence Gould partnership, 2012; and will a criteria based policy (as opposed to a site allocations policy) secure sufficient land for future development?
  - c. What is the Council's response to the suggestion of the Lea Valley Growers' Association that land suitable for glasshouse development is being lost to residential development and that some glasshouse sites are becoming landlocked by such development (e.g. Abbey View Produce in Waltham Abbey)?
  - d. Conversely, should consideration be given to releasing some derelict glasshouse sites for housing? (Reps 19LAD0062).
- 3. How will proposals for glasshouse and associated development in the Green Belt be assessed?
- 4. Is it envisaged that glasshouse and associated development could take place within, or otherwise affect, the Lee Valley Regional Park? If so, does the policy offer sufficient environmental protection to the Park, particularly in respect of the potential effects of low carbon energy generation facilities and Combined Heat and Power facilities? Are modifications required to secure the necessary protection? (Reps LVRPA).
- 5. Is Part B(i) of the policy clear in respect of whether or not proposals to convert existing buildings to on-site accommodation for nursery workers must demonstrate that the lack of such accommodation is rendering the use unviable?

### Issue 4: Is Policy E4 justified in terms of how it relates to tourismrelated development in the Green Belt; and should it include specific provisions to support the expansion of the Lee Valley White Water Centre which lies outside the District?

1. The Lee Valley White Water Centre in Broxbourne District is seen as a potential catalyst for sport and other tourism-related activities in the District (para. 3.70). Does the Plan do enough to support its expansion and development? Specifically, the Lee Valley Regional Park Authority has suggested that an "opportunity area" for expansion should be identified in the Plan – but would this be outside the District boundary? Is the Council working with Broxbourne in relation to this matter and are modifications required to the Plan to reflect any necessary actions?

2. How will proposals for tourism development in the Green Belt be assessed under the Plan generally and this policy specifically? Is it intended that proposals which might comply with Policy E4 would need to demonstrate very special circumstances under Policy DM4? If so is this justified? Has consideration been given to whether sites for tourism development in the Green Belt should be allocated, or otherwise supported? (Reps 19LAD0033).

### **MATTER 13: Transport**

### Issue 1: Has regard been had to the Mayor of London's draft Transport Strategy and London Plan in proposing Policy T1; and are its provisions clear and effective?

- 1. Does this policy take account of the strategic transport objectives in the Mayor of London's draft Transport Strategy and London Plan? Would the policy support the objectives of these documents in respect of transportation and have any specific conflicts been identified? (Reps TfL).
- 2. Should Part A, perhaps A(ii) make reference to the desirability of promoting safer routes to school and to establishing an attractive pedestrian environment around schools to encourage travel by non-car modes? (Reps ECC).
- 3. Is it clear what scale/type of development will be required to submit a Transport Statement or Assessment in accordance with Part D?
- 4. Are different parts of this policy intended to apply to development of different types/scales? If not, why are Part C and Part F, which both concern the circumstances in which development will be permitted, separate? Should amendments be made for clarity?

## Issue 2: Will Policy T2 be effective in protecting the land required for future transport schemes from development?

1. Is it necessary to list the particular schemes for which land is required to be safeguarded? Is the relevant land shown on the Policies Map?

### **MATTER 14: Infrastructure and Delivery**

## Issue 1: Will Policy D1 be effective in securing the infrastructure necessary to support development before it takes place?

- 1. Is Policy D1 clear that any infrastructure necessary to support a development must be provided up-front/in time to serve the development?
- 2. Should Part A and the relevant supporting text explain that infrastructure and services for which contributions etc. could be sought might be derived from made Neighbourhood Plans as well as from the Infrastructure Delivery Plan? (Reps Chigwell PC).

- 3. In Part B, how would a potential developer find out specifically which items of infrastructure might be required as part of their scheme? Is this clear?
- 4. In Part C, is it intended that all the clauses (i)-(iv) should apply for an exception to be considered on viability grounds? If Part C(i) did not apply, would this risk development proceeding that could not be supported by infrastructure? Would this be justified?

## Issue 2: Are the requirements of Policy D2 concerning health Impact Assessments (HIA) justified, effective and consistent with national policy?

- 1. Is it clear in the policy wording and the supporting text that the purpose of HIA concerns wider health and well-being matters beyond health infrastructure?
- 2. Essex County Council has indicated that the Department of Health does not issue guidance on HIA. Do the references within the policy require updating? Is specific guidance on the matters to be covered required within the Plan itself?
- 3. What type of information is expected in a HIA and how will developments respond to their recommendations?
- 4. Is there value in requiring HIAs for allocated sites, or should the health impacts already have been assessed through the plan-making process?
- 5. Is the threshold for the production of an HIA at 50 dwellings proportionate?

## Issue 3: Is Policy D3 justified in requiring developers to fund improvements to utilities infrastructure where capacity issues exist?

1. Is it correct that utility providers have a duty to provide services to new development? If so, is Part B justified?

### Issue 4: Is Policy D4 effective?

- 1. For the purpose of Parts B and C, how will a developer know specifically whether and what community infrastructure is required as part of the scheme?
- 2. In relation to Part C, is it necessary to define strategic, larger and smaller developments, or is this clear elsewhere in the Plan?
- 3. What is the purpose of having separate criteria in parts G and H? Are they intended to apply to different types of development? Why is marketing required in Part H but not Part G?

## Issue 5: Are Policies D5-D7 justified, effective and consistent with national policy?

No specific questions.

### **MATTER 15: Places and Sites (Policies P1-P15)**

## Issue 1: Are Policies P1-P15 justified, effective and consistent with national policy in the following general areas:

- 1. Does Appendix 6: Site Specific Requirements, constitute policy or supporting text? If policy, is this clear? Is the wording within Part A of each policy P1-P15 sufficient to ensure that the site specific requirements contained in Appendix 6 can be enforced, or should Appendix 6 itself contain a policy? E).
- 2. Are all of the "Infrastructure Requirements" included within Policies P1-P15 intended to apply to every allocated site within each policy? Is this justified with reference to the tests in paragraph 204 of the NPPF?
- 3. Do the infrastructure requirements within Policies P1-P15 reflect the full need for primary and secondary school expansion? (Reps ECC).
- 4. Do the infrastructure requirements within Policies P1-P15 reflect the full need for improved pedestrian/cycle links? (Reps ECC).
- 5. Are the general requirements in relation to flood risk and air quality in each of policies P1-P15 necessary in light of the requirements of Policies DM15 and DM22 respectively?
- 6. Where the residential site allocations shown on the Maps are expected to accommodate other uses, such as schools and other services and facilities, should this be made clear on the Map Legends? In the case of schools specifically, is it necessary for the Maps to show a specific land allocation?
- 7. Where is Stapleford Airfield? Having regard to paragraph 33 of the NPPF, what is the role of this airfield and does it have any growth or other planning-related requirements which should be addressed in the Plan?

Issue 2: Are the Plan's policies for the specific places and sites within the District justified, effective and consistent with national policy; and are the specific site allocations they include justified and deliverable?

### Policy P1: Epping

#### General Matters

1. Should Part K concerning the Strategic Masterplan for South Epping recognise the constraint presented by the National Grid High Voltage Electricity Overhead Line which crosses allocated sites EPP.R1, R3 and E1? (Reps N Grid).

- 2. Part K(iii) indicates that new primary school and early years provision could be achieved through the relocation of Ivy Chimneys Primary School. Is this justified, because Essex County Council contends that such a solution should not be investigated?
- 3. Should Part K(viii) require the conservation or enhancement of the relevant heritage assets in order to comply with legislation and national policy? Will this be possible? (Reps HE).
- 4. What is the "Proposed Secondary Frontage" shown on Map 5.2?

### Site Specific Matters

- 5. **EPP.R1 & R2 (South Epping Masterplan Area):** Is this allocation justified in respect of the following matters:
  - a. Is the area a sustainable location for significant expansion considering its relationship to the existing town centre, particularly in respect of distance and topography? How will additional traffic be managed if it is necessary for new residents to use a car?
  - b. What are the implications of its location adjacent to the M25 for air quality and noise?
  - c. What effect will the development have upon the vitality and viability of the existing town centre?
  - d. Is safe access onto Ivy Chimneys Road possible?
  - e. Would the relatively small amount of employment land required within the neighbourhood centre have any particular value?
  - f. Is this development deliverable in respect of restrictive covenants?
  - g. Is it financially viable in light of the constraint presented by the Central Line dividing the masterplan area? Is a "bridge" over the railway the only possible means of achieving connectivity (Part (vi)?
  - h. Is it justified to require the development to be phased?
  - i. What effect would the development of this area have on the purposes of the Green Belt?
- 6. **EPP.R5** (**Epping Sports Centre**): The development requirements in Appendix 6 include that the sports centre should not be closed, or the redevelopment of the site commenced, until a suitable replacement facility is delivered and operational. Does/should the Plan find a suitable alternative location for such a facility? If not, is the allocation justified and deliverable?
- 7. **EPP.R8 (Civic Offices):** Has account been taken of the fact that the Civic Offices are now Listed?
- 8. **EPP.R11 (Epping Library):** Is the loss of the library justified?

### **Policy P2: Loughton**

#### General Matters

- 1. Can Junction 5 of the M11 accommodate the proposed level of development? Can any necessary mitigation be achieved? (Reps HE).
- 2. Should the Primary Shopping Areas and Primary Frontages in Loughton High Road (Map5.4) and Loughton Broadway (Map 5.5) include the Sainsbury's stores in order to reflect their contribution to the retail character of the area?

### Site Specific Matters

- 3. **LOU.R1 & R2 (Underground Cap Park Sites):** Can the quantity of development proposed be achieved without excessively high-rise development? Could high rise development be accommodated here if necessary in compliance with Policy DM9? (Reps Loughton TC).
- 4. **LOU.R5** (Jessel Green Masterplan Area): Is this allocation justified with particular reference to the value of the site as open space to the local community?
  - a. Was the open space integral to the design and layout of the original estate? If so, would its development now be harmful to the character and appearance of the area?
  - b. Would open space provision within Loughton remain acceptable with the development of this site? By what standard? Is appropriate alternative space available to existing residents who specifically use Jessel Green?
  - c. Is it justified to allocate the site before the outcome of the Town/Village Green application is known? If the application succeeds, what would be the implications for this allocation?
  - d. Is the Council as landowner committed to the delivery of this site?
  - e. How have consultation responses made during the preparation of the Plan been taken into account in making the decision to allocate this site?
- 5. What effect would the development of Site **LOU.E2** have on the purposes of the Green Belt?

### **Policy P3: Waltham Abbey**

### General Matters

- 1. Can the M25, particularly Junction 26, accommodate the level of growth proposed at Waltham Abbey? (Reps HE).
- 2. Is the relationship between Waltham Abbey and the Lee Valley Regional Park adequately reflected within Policy P3 and the accompanying allocations? Are any specific planning provisions required to support the improvement of visitor facilities in the River Lee Country Park (the Bittern Information Point), the Lee Valley Park Farms, or the Royal Gunpowder Mills Site? (Reps LVRPA).

- 3. Should the vision for Waltham Abbey offer more support for smaller industrial and commercial sites to provide local employment opportunities? Is this achievable through the Plan?
- 4. Is it justified to refer specifically to the expansion of two primary schools in Part F, or should the requirement be more flexible? (Reps ECC).
- 5. What is the justification for Part G concerning the relocation and expansion of a local secondary school? Essex County Council contends that this has no evidential basis

### Site Specific Matters

- 6. **Waltham Abbey North Masterplan Area:** Is part N(vi) intended to preclude vehicular access from Parklands? If so, is this justified?
- 7. **WAL.R4** (**Fire Station**): This site is adjacent to the Waltham Abbey Conservation Area which also contains numerous other designated heritage assets. Should the Development Requirements in Appendix 6 include a section on heritage similar to that included for Site R5? Should the heritage entry (for Sites R4 and R5) acknowledge that the Conservation Area is on the Heritage at Risk Register? (Reps HE).
- 8. **WAL.R5 (Community Centre):** Can sufficient car parking for the community centre and residential development proposed be accommodated without detriment to highway safety in Saxon Way, Norman Close and Tudor Way due to excessive on-street parking?
- 9. **WAL.E3 (Land at Woodgreen Road):** Should the Development Requirements in Appendix 6 reflect the location of the site adjacent to Upshire Conservation Area? (Reps HE).
- 10.**WAL.E6 (Galley Hill Road Industrial Estate):** Is it intended that this site should be allocated only for B2/B8 uses as suggested in paragraph 5.53, or for all the B Class uses as suggested in Part D of the policy? Would it be justified to allocate the site to include *sui generis* uses in view of the existing range of uses upon it?
- 11. What effect would the development of the following sites have on the purposes of the Green Belt: **WAL.E5-E6**; **WAL.R1-R3** & **R6**; and **T1**?

### **Policy P4: Ongar**

### General Matters

1. Paragraph 5.63 indicates that the Plan makes ten residential allocations in Ongar, but only eight are included in the Policy. Does this require correction?

- 2. Should the Primary Shopping Area and Primary Frontage in the District Centre include the Sainsbury's store to reflect its contribution to the retail character of the area?
- 3. Will the local cemetery be full within 20-30 years? Is this a matter which the Plan should address?

### Site Specific Matters

- 4. **ONG.R1 & R.2 (West Ongar Concept Framework Area):** Having regard to representations 19LAD0020 and 19LAD0070, is there any reason to be concerned that a Concept Framework for a comprehensive scheme cannot be achieved? Would the sites be deliverable as separate entities? Is it justified to require a single, shared vehicular access to serve both sites?
- 5. Do the proposals for Ongar take account of, and seek to address, capacity issues at the Health Centre? Is Site **ONG.R3** (South West of Fyfield Rd) needed for this purpose? (Reps Ongar PC).
- 6. How is it proposed to address capacity issues on the Chelmsford Road approach of Four Wantz Roundabout at Junction 12 of the A414? Is site **ONG.R4 (North of Chelmsford Rd)** deliverable in respect of its impact upon this roundabout? (Reps Chelmsford CC and Ongar PC).
- 7. **ONG.R6 (Stanford Rivers Rd/Brentwood Rd):** Can vehicular access to this site be achieved without risk to highway safety? (Reps Ongar PC). Can development conserve the significance of Grade II listed Dyers & Marden Ash House as buildings marking the entrance to Ongar from the south?
- 8. What effect would the development of the following sites have on the purposes of the Green Belt: **ONG.R1 R7?** In particular, would **R1 & R2** close an important gap between two separate parts of the settlement?

### **Policy P5: Buckhurst Hill**

Site Specific Matters

- 1. **BUCK.R1** (**Powell Rd**): Can the significance of locally listed 1 Powell Road be conserved or enhanced in light of the scale of the development proposed within its grounds? What effect would the development have upon the purposes of the Green Belt? Has the capacity of windfall sites been accurately estimated? Should the development requirements in Appendix 6 require a new defensible Green Belt boundary along the short northern boundary of the site as well as the eastern boundary? (Reps BHPC).
- 2. **BUCK.R2 (Queen Rd Car Park):** Can the required number of parking spaces for London Underground Customers be provided? Will the scheme be financially viable in light of the contributions required? Will it be viable to provide affordable housing in line with Policy H2 of the Plan? (Reps BHPC).

3. **BUCK.R3** (Lower Queens Rd Stores): What is the nature of the existing development upon this site and is it genuinely available/developable in light of the existing uses, including residential? What arrangements are necessary to relocate current shopkeepers and residents and would this represent fair treatment? Is there any specific reason to consider that this allocation might not be financially viable? Should the development requirements in respect of design seek to avoid high-rise development?

### Policy P6: North Weald Bassett (NWB)

#### General Matters

- 1. Highways England has commented that the level of growth proposed here is likely to have an impact upon Junction 7 of the M11. Is this proposed to be mitigated by the provision of Junction 7a, or is something more required?
- 2. Is improved/increased public transport provision necessary to accommodate the scale of development proposed here and in Thornwood? Should Part F make reference to the need to deliver this type of infrastructure? (NWB PC).

### Site Specific Matters

- 3. Was the development of North Weald Golf Club on Rayley Lane considered as an alternative to sites allocated within the Masterplan Area? Why was it rejected? Why is site **R3**, about which there are many objections in the representations, considered preferable?
- 4. **Both Masterplan Areas:** Should Part L(vi) require the conservation or enhancement of the relevant heritage assets in order to accurately reflect the requirements of legislation and national policy? Should a similar criterion be added to Part O to ensure that the historic environment and individual heritage assets are considered through the preparation of the North Weald Airfield Masterplan? (Reps HE).
- 5. **NW Airfield Masterplan Area:** Please could the Council clarify the nature of this area. What is the current nature/use of this extensive site? What is proposed to be retained and what/where is new development proposed? Is this clearly expressed on Map 5.12 which shows the majority of the masterplan area as "white land"? Part O(iii) requires provision to be made for c.10Ha of employment land whereas paragraph 5.96 refers to 40,000Ha. Which is correct?
- 6. **NWB.R1 & NWB.T1:** Is Map 5.12 accurate in showing the same site area for these allocations? Similarly, does the map of the NWB Masterplan Area in Appendix 6 require amendment because it presently does not show a Traveller site allocation at all? Is clarification required about where the Traveller site is expected to be provided? If it is expected to be provided as part of NWB.R1 specifically, is this justified?

7. What effect would the development of the following sites have on the purposes of the Green Belt: **NWB.E3 & E4**; and **NWB.R1-R5 & T1?** Would a defensible boundary be achieved for **NWB.R1**?

### **Policy P7: Chiqwell**

### General Matters

- 1. Paragraph 5.104 indicates that the Plan makes twelve residential allocations in Chigwell, but only eleven are included in the Policy. Does this require correction?
- 2. What is the significance of the "Community Hub" referred to by Chigwell Parish Council? Should Part C refer to this, or is it to be delivered in some other way? Should reference to the Hub be made in the vision on page 147?

### Site Specific Matters

- 3. **CHIG.R6** (Limes Farm Masterplan Area): Do the requirements of Parts G-J adequately reflect the aims of the Chigwell Neighbourhood Plan in preparation? Is this allocation justified in respect of its impact on open space provision in the locality? Were smaller scale alternatives which might have avoided the loss of open space considered, and why were they rejected?
- 4. **CHIG.R7 (Chigwell Convent):** Is this allocation justified in light of the proposal to designate it as a Local Green Space in the emerging Chigwell Neighbourhood Plan (NP)? How has the Council worked positively and proactively with the NP body to seek to address this potential conflict between the Plan and the NP as set out in the Planning Practice Guidance (Paragraph: 009 Reference ID: 41-009-20160211)? Is this allocation justified in respect of its effect upon the setting of heritage assets? (Reps Chigwell PC).
- 5. **CHIG.R8** (Fencepiece Rd) and R11 (Hainault Rd): Are the development requirements in Appendix 6 concerning access accurate? Do they reflect the conclusions of previous appeal decisions and the Highway Authority? (Reps 19LAD0046)?
- 6. What effect would the development of the following sites have on the purposes of the Green Belt: **CHIG.R1**; **R2**; **R4**; **and R5**? Has the supply of brownfield sites been exhausted, including the potential for conversion of larger dwellings?

### **Policy P8: Theydon Bois**

Site Specific Matters

### 1. THYB.R1 (Forest Drive):

- a. Will the density of development be in keeping with that on Forest Drive and Dikes Avenue?
- b. Should the Development Requirements in Appendix 6 refer to the need to enable access to the railway?

- c. Should they recognise the importance of existing trees and hedgerows to the north and west of the site and of the brook along the northern boundary? (Reps TBPC).
- d. Is the requirement in Appendix 6 to integrate the "permissive path" within the development unduly prescriptive? Would it be sufficient to require a pedestrian route to be provided through the site?
- e. What is the justification for requiring contributions to Controlled Parking Zones in the vicinity of the site?
- 2. **THYB.R3 (Coppice Row):** Should the Development Requirements in Appendix 6 reflect the need to conserve or enhance Grade II listed Baldocks? Should they refer to the prominent location of the site overlooking the Village Green, around which numerous heritage assets are dispersed? (Reps HE & TBPC).
- 3. What effect would the development of **THYB.R1** have on the purposes of the Green Belt?

### **Policy P9: Roydon**

#### General Matters

- Does the vision for Roydon require amendment to clarify that the glasshouse industry is based in the wider Parish area rather than the village? Similarly, should it be clarified in paragraph 5.128 that allocations for Traveller accommodation are proposed in Roydon Parish?
- 2. Is the relationship between the settlement of Roydon and the Lee Valley Regional Park adequately reflected within Policy P9 and the accompanying allocations? Are any specific planning provisions required to support access into the Park from the station and, if so, will the Plan facilitate this?

### Site Specific Matters

- 3. **ROYD.R1 (Old Coal Yard) & R2 (Kingsmead School):** Should the "Development Requirements" in Appendix 6 refer to the location of these sites within Groundwater Source Protection Zones 1 and 3 respectively and indicate the implications for construction works in order to avoid pollution of the public water supply? (Reps Affinity Water).
- 4. What effect would the development of the following sites have on the purposes of the Green Belt: **ROYD.R1**; **R2**; **R3**; **R4**?

### Policy P10: Nazeing

#### General Matters

1. The Vision for Nazeing in paragraph 5.133 refers to the provision of a new community centre as a focal point. How will this be delivered if it is not a requirement for the Concept Framework Plan? What would be the effect of a new facility upon the centre at St Giles Church?

2. Is the relationship between the settlement of Nazeing and the Lee Valley Regional Park adequately reflected within Policy P9 and the accompanying allocations? Are any specific planning provisions required to support access into the Park and, if so, will the Plan facilitate this? In particular, is it a responsibility of the Plan to facilitate improvements to the Crooked Mile as a key route serving the River Lee Country Park? (Reps LVRPA).

### Site Specific Matters

- 3. **Site NAZE.R1:** Is it correct to describe this site as "Land at Perry Hill" rather than "St. Leonards Road"?
- 4. **Sites NAZE.E6 (Millbrook Business Park) and E7 (Winston Farm):**These sites are adjacent to the Nazeing and South Roydon Conservation Area which contains numerous other designated heritage assets. Should the Site Descriptions in Appendix 6 reflect this? Should it be noted that the Conservation Area is on the Heritage at Risk register? (Reps HE).
- 5. Should a site at Sedge Green (identified in the Employment Land review 2017 as ELR-0099) be designated for employment use in Part C and on Map 5.16? Representation 19LAD0002 states that it is in storage rather than residential use.
- 6. What effect would the development of the following sites have on the purposes of the Green Belt: NAZE.R1; R2; R3; R4; & E1? Has regard been had to previously developed nursery sites in the Green Belt before greenfield sites in accordance with SP2? (Reps 19LAD0027). Would NAZE.R2 have a defensible boundary relating to physical features? Is the estimated density justified and achievable?

### **Policy P11: Thornwood**

### General Matters

- 1. Paragraph 5.147 indicates that the Plan makes three residential allocations in Thornwood, but only two are included in the Policy. Does this require correction?
- 2. Is improved/increased public transport provision necessary to accommodate the scale of development proposed both here and in North Weald Bassett? Should Part D make reference to the need to deliver this type of infrastructure? (NWB PC).

### Site Specific Matters

- 3. **THOR.R1 (Tudor House):** Is this allocation justified in respect of the potential for increased flooding in Brookfield?
- 4. Should "Marlow" on High Road Thornwood be designated as an existing employment site?

5. What effect would the development of the following sites have on the purposes of the Green Belt: **THOR.R1**; **R2**; **& E1**?

### <u>Policy P12: Coopersale, Fyfield, High Ongar, Lower Sheering, Moreton, Sheering and Stapleford Abbots</u>

#### General Matters

1. Will sufficient school places be available to meet needs arising from the proposed development in Sheering and Lower Sheering? (Reps Hertfordshire CC).

### Site Specific Matters

2. **LSHR.E1 (The Maltings):** This site lies within the Lower Sheering Conservation Area, which is on the Heritage at Risk register. It also contains two listed buildings and other buildings which have group value. Should the Site Description in Appendix 6 note this and require development to conserve and enhance the assets and their settings? (Reps HE).

### 3. STAP.R1 (Oakfield Rd):

- a. Would development of this site lead to the coalescence of Stapleford Abbotts and Havering Atte Bower?
- b. Would it be harmful in respect of encroachment into the countryside, having regard to its previous use as grazing land?
- c. What work has been done to establish that safe access to the site can be achieved?
- d. Does a gas pipeline cross the site? If so, has this constraint been taken into account in estimating its capacity and should this be noted in the development requirements in Appendix 6?
- e. Why was this site considered to be unsuitable for development in the 2016 version of the Plan and what has changed? (Reps SAPC).
- 4. **LSHR.R1 (Lower Sheering):** Historic England has expressed concern about the effect of this development upon the setting of the Grade II\* Listed Lodges at the south entrance to the park at Great Hyde Hall. Could the site be developed without harm to their significance? (Reps HE).
- 5. **MORE.T1 (Lakeview):** This site appears quite large relative to the size of the settlement. Is the allocation consistent with paragraph 14 of the Planning Policy for Traveller Sites which requires that the scale of Traveller sites should not dominate the settled community? Is it intended that this site should remain within the Green Belt?
- 6. What effect would the development of the following sites have on the purposes of the Green Belt: FYF.R1; HONG.R1; STAP.R1 & R3; LSHR.R1; and SHR.R1, R2 & R3?

# <u>Policies P13 – P 15: Rural Sites in the East, West and South of the District</u>

- 1. **RUR.E11 (Quickbury Farm):** Is it justified to designate this site as an existing rural employment site or is it actually in agricultural use? (Reps 19LAD0024).
- 2. **RUR.T1 (Sons Nursery) & T2 (Ashview):** I understand that temporary planning permissions were granted on these sites in the Green Belt in light of the personal circumstances of the occupants. Is the allocation of these sites for permanent development justified in respect of the impact upon the Green Belt; and is it likely to be possible for future applicants to demonstrate that very special circumstances exist to outweigh the harm to the Green Belt and any other harm? (Reps Roydon PC).
- 3. What effect would the development of the following sites have on the purposes of the Green Belt: **RUR.R1** and **RUR.E19**? Are these the only Green Belt Releases proposed in the rural areas (Policies P13-P15)?

#### **MATTER 16: Development Management Policies** (DM1 - DM22)

Issue 1: Are the Development Management Policies in the Plan justified, effective and consistent with national policy in respect of the specific matters set out below? Are there any other issues concerning their soundness?

#### Policy DM1: Habitat Protection & Improving Biodiversity

- 1. Has account been taken of the Lee Valley Biodiversity Action Plan during the preparation of the Plan? Does the Plan adequately reflect this document and should reference be made to it as Key Evidence in paragraph 4.8? (Reps LVRPA).
- 2. In Part A, is it justified to require all development to seek to deliver net biodiversity gain? Would this be possible for applications concerning minor alterations to existing buildings, or advertisements for example?

#### Policy DM2: Epping Forest SAC and the Lee Valley SPA

- 3. Will Policy DM1 and DM2 taken together provide adequate protection for the whole of Epping Forest, including the Parts outside the SAC? In seeking to protect the Forest via two separate policies, is there a risk that the approach could become disjointed?
- 4. Is it sufficiently clear, either in the Policy or supporting text, which/where developments are likely to have a significant effect?
  - a. In Part E, is the 400m radius for requiring developments to mitigate the effects of urbanisation justified in terms of the specific likely effect upon this particular designated site?

- b. Is it necessary in Part C to be more specific about the Zone of Influence for recreational pressure?
- c. Are any specific provisions required in respect of the effects caused by air pollution?
- d. Is it necessary to set any exclusion zone within which no development can occur?
- 5. In practice, how will the mitigation sought by Part D secured? If financial contributions are required, is this clear in the policy?

#### Policy DM3: Landscape Character, Ancient Landscapes & Geodiversity

6. Is the wording of the policy itself sufficiently detailed to be effective in protecting the landscape from significant harm? Should it, for example, incorporate some of the requirements of the supporting text (such as that in paragraph 4.31); and is it clear about what will be expected of developments on the edge of settlements? (Reps TBPC).

#### **Policy DM4: Green Belt**

- 7. This policy essentially repeats policy in the NPPF, but does not duplicate it entirely. Is it intended to do anything different? If not, would it avoid duplication/confusion to state that development will protect the purposes of the Green Belt in the manner required by national policy?
- 8. Are there any specific proposals to expand existing schools in the Green Belt? If so:
  - a. Would the provisions of DM4 in respect of inappropriate development risk frustrating these plans?
  - b. Is it justified to expect such proposals to seek to demonstrate that very special circumstances exist to displace the presumption against inappropriate development or should some specific exception be made? Would such an exception be consistent with national policy?
  - c. Should existing school sites be excluded from the Green Belt?

#### Policy DM5: Green and Blue Infrastructure

9. Should Part A (i) require designs to have regard to improving the connectivity of habitats? (EA Reps).

#### Policy DM6: Designated and Undesignated Open Spaces

- 10. Having regard to paragraph 73 of the NPPF, has a robust assessment of the need for open space, sports and recreational facilities been carried out? Is it justified to base the requirements upon nationally adopted standards rather than local ones and should the appropriate standards be set out in Policy?
- 11. Which policy in the Plan deals with needs for built facilities for sport and recreation, rather than open space?

- 12.In Part A, is it intended that financial contributions could be sought towards open space provision? If so, is this clear?
- 13.In Part B, is it justified for either B(i) or B(ii) to apply rather than both? By what standard would it be decided that an open space was surplus to requirements?
- 14.Paragraph 4.52 refers to Local Green Spaces (LGS), but Policy SP6 refers to District Open Land. Should the terminology be consistent? Should this policy define the process by which LGS/DOL could be sought and if not, should paragraph 4.52 be deleted?

#### **Policy DM7: Heritage Assets**

- 15.In order to accurately reflect the relevant statutory obligations, should Part A of the Policy require development proposals to "...conserve <u>or</u> enhance the character <u>or</u> appearance and function of heritage assets..."? Should the requirements noted in the supporting text for the preparation of heritage statements (para. 4.60) and archaeological evaluations (para. 4.63) be written into the policy itself to ensure effectiveness? Should the Policy be retitled "Historic Environment"? (Reps HE).
- 16.I understand that the Heritage Asset Review suggested the establishment of "Areas of Townscape Merit". What would be the purpose of such a "designation"; why was it decided to omit them; and is the Plan sound in their absence? (Reps Loughton TC).
- 17. Should this Policy offer specific protection to "Protected Lanes"? (Reps TBPC).

#### Policy DM8: Heritage at Risk

• No specific questions.

#### **Policy DM9: High Quality Design**

- 18. Should this policy specifically require proposals to have regard to and respond to the historic environment where appropriate? (Reps HE).
- 19. For effectiveness, should paragraph 4.69 make reference to the Essex Design Guide? (Reps ECC).
- 20.Should Part A, perhaps A(v) require design measures to promote healthy communities as suggested by paragraph 4.70 of the supporting text? (Reps ECC).
- 21. Does this policy, and the plan generally, make sufficient provision for inclusive design and accessible environments in accordance with paragraphs 57, 58, 61 and 69 of the NPPF?

#### Policy DM10: Housing Design & Quality

- 22.Does Part A seek to introduce the optional Nationally Described Space Standard? Should this terminology be used? Is this justified by evidence relating to need, viability and whether a transitional period for implementation is required? In respect of viability, what cost has been ascribed to meeting this standard for assessment purposes?
- 23. To which external open space standards does Part A of the policy refer?
- 24. Would part E concerning the appearance of residential extensions fit better as part of Policy DM9? (Reps TBPC).

#### Policy DM11: Waste Recycling Facilities in New Development

• No specific questions.

#### Policy DM12: Subterranean Basement Development & Lightwells

- 25.Will Part B(ii) be effective in securing basement development of a subordinate scale in cases where the garden area is large relative to the size of the building? (Reps TBPC).
- 26. What is expected in a Basement Construction Management Statement as required by Part F in respect of the level of engineering detail sought, and when would it be appropriate to provide one? Should this be explained in the supporting text, perhaps in para. 4.85?
- 27.Does the Policy and supporting text provide adequate guidance to developers about the issues which might need to be addressed for proposals affecting the historic environment? Should it refer to the need to consider archaeology, the historic fabric of heritage assets and the effect of an altered layout etc? (Reps HE).

#### **Policy DM13: Advertisements**

28.Is the 'blanket' approach in part (v) concerning illuminated signs in residential areas justified? Should this part of the policy be expressed in terms of its apparent aim to protect residential amenity/living conditions?

#### **DM14: Shopfronts and On-Street Dining**

29. Should Part A(ii) refer to the conservation of "*historic* materials and features" rather than "original"? (Reps HE).

#### **DM15: Managing and Reducing Flood Risk**

30. Has regard been had to the Essex SuDS Design Guide and to the Environment Agency Risk of Flooding from Surface Water Maps in preparing

- the Plan, in particular Policies DM15-19? Should these documents be added to the list of Key Evidence in the relevant supporting text? (Reps ECC).
- 31.In Part B, is it necessary for development on allocated sites to demonstrate that the Sequential Test has been passed or has this already been established through the plan-making process? Should the requirement for new development in Flood Zones 2 and 3 to pass the Sequential Test in fact apply only to "windfall" development? Is it necessary for development on both allocated sites and windfall sites to demonstrate that the Exception Test has been passed if necessary? Does the wording of Part B require clarification?
- 32.In requiring proposals within Flood Zones 2 and 3a to be informed by a site specific Flood Risk Assessment, is part C consistent with footnote 20 of the NPPF which requires this in a wider range of circumstances? (Reps ECC).

#### **DM16: Sustainable Drainage Systems**

- 33. What is meant by a "drainage hierarchy"? Are any of the methods in Part A permissible solutions, or is (ii) only permissible if (i) is not possible, and so on? Is this clear? Likewise, are the solutions in Part B only permissible if those in Part A are not possible?
- 34.Is Part D(i) intended to be applicable only to major greenfield sites?
  Likewise, is Part D(ii) only intended to apply to major greenfield
  developments? Is the term 'major' defined? Please note that the wording of
  Part D(ii) is not particularly clear towards the end of the paragraph. Are
  some words missing?
- 35. Should the provisions of part D(i) and (ii) apply when sites discharge to a watercourse as well as to a sewer? (Reps ECC).
- 36. Should the supporting text provide some indication of the circumstances in which it might be justified for a development to increase the run-off rate above greenfield levels (Part D(iv))? (Reps ECC).

#### **DM17: Protecting and Enhancing Watercourses and Flood Defences**

37. Should the supporting text explain that any reduction in the 8m buffer zone required for development adjacent to a main river or ordinary watercourse would require robust justification? Should it explain that the consent of the Environment Agency is required for any works within the byelaw distance of a main river (generally 8m)? (EA Reps).

# <u>DM18: On-Site Management and Reuse of Waste Water and Water Supply</u>

38. Thames Water has indicated that Part B of the policy should be revised to reflect changes to the way that water and wastewater infrastructure is to be

delivered from April 2018. Briefly, what are the changes and are revisions to the policy wording necessary to ensure that it is effective?

39.Is it necessary to amend the wording of the second sentence in paragraph 4.131 for clarity?

#### **DM19: Sustainable Water Use**

40. Is it justified to refer to the Code for Sustainable Homes in paragraph 4.139?

#### **DM20: Low Carbon and Renewable Energy**

- 41. Should the supporting text make reference to the exemptions which apply to designated and non-designated heritage assets in respect of the need to comply with the energy efficiency requirements of the Building Regulations? (Reps HE).
- 42.Is Part D, which requires Strategic Masterplans to demonstrate how infrastructure for district heating could be incorporated, justified by reference to viability? For example, it has been suggested that a development of 950 dwellings such as proposed at South Epping would be too small to viably deliver a district heating scheme. (Reps 19LAD0056).

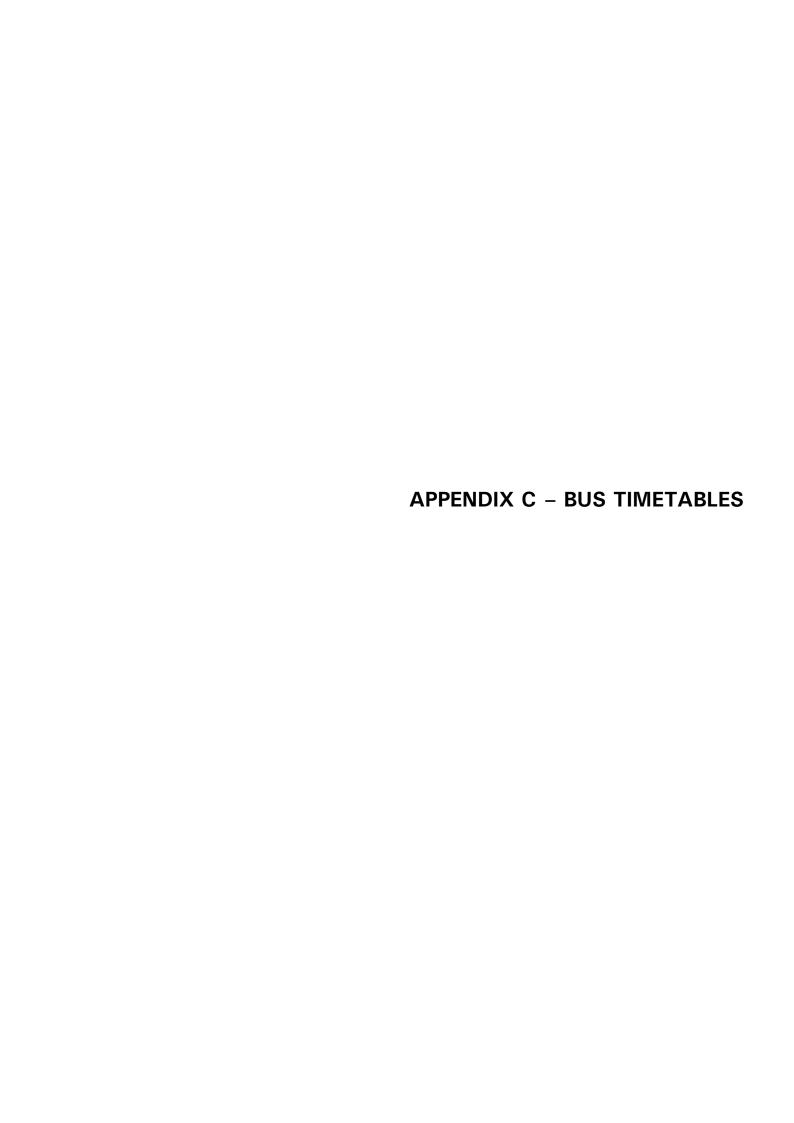
### **DM21: Local Environmental Impacts, Pollution and Land Contamination**

43. Should Part E, or at least the supporting text, explain that proposals will need to demonstrate that modern construction techniques will be compatible with the preservation or enhancement of an affected heritage asset, including its historic fabric? (Reps HE).

#### **DM22: Air Quality**

- 44. Are any specific provisions required for proposals within the Bell Common Air Quality Management Area (AQMA)?
- 45.Is it necessary to designate any further AQMAs in order to protect the health of residents across the whole of the District away from the Epping Forest SAC? What would be the trigger and the process for designating further AQMAs?

Louise Phillips
INSPECTOR
November 2018.



# Mondays to Fridays

Harlow Town Centre, Bus Station (Stand 5)	dep							18:19	19:19
Harlow, o/s Leisure Centre								18:20	19:20
Brays Grove, adj Tumbler Road								18:24	19:24
Brays Grove, opp Baileys								18:25	19:25
Brays Grove, o/s School								18:27	19:27
Potter Street, opp Larkswood								18:29	19:29
Potter Street, adj The Red Lion								18:30	19:30
Potter Street, adj Park Avenue								18:31	19:31
Thornwood, o/s McDonalds								18:33	19:33
Thornwood, opp Horseshoes Farm								18:34	19:34
Thornwood, opp Rye Hill Road								18:35	19:35
Thornwood, opp Upland Road								18:36	19:36
Thornwood Common, opp Carpenters Arms								18:37	19:37
Epping, o/s Brickfield Business Centre								18:40	19:40
B1026 inside St. Margaret's Hospital, Epping		07:03	09:03	11:03	13:03	15:03	17:03	18:43	19:43
Epping, o/s St. Margaret's Hospital - main Rd		07:03	09:03	11:03	13:03	15:03	17:03	18:43	19:43
Epping, opp Maltings Lane		07:04	09:04	11:04	13:04	15:04	17:04	18:44	19:44
Epping, opp Council Offices		07:07	09:07	11:07	13:07	15:07	17:07	18:47	19:47
Epping, opp Church		07:08	09:08	11:08	13:08	15:08	17:08	18:48	19:48
Epping, opp Nicholl Road		07:08	09:08	11:08	13:08	15:08	17:08	18:48	19:48
Epping, o/s Woodlands		07:09	09:09	11:09	13:09	15:09	17:09	18:49	19:49
Epping, o/s Railway Station	arr	07:11	09:11	11:11	13:11	15:11	17:11	18:51	19:51
Epping, o/s Railway Station	dep	07:13	09:13	11:13	13:13	15:13	17:13	18:53	19:53
Epping, opp Woodlands		07:13	09:13	11:13	13:13	15:13	17:13	18:53	19:53
Epping, adj Woodland Grove		07:14	09:14	11:14	13:14	15:14	17:14	18:54	19:54
Epping, adj Sunnyside Road		07:15	09:15	11:15	13:15	15:15	17:15	18:55	19:55
Epping, opp Western Avenue		07:16	09:16	11:16	13:16	15:16	17:16	18:56	19:56
Ivy Chimneys, opp Meadow View		07:18	09:18	11:18	13:18	15:18	17:18	18:58	19:58
Ivy Chimneys, opp Fishers Lane		07:18	09:18	11:18	13:18	15:18	17:18	18:58	19:58
Theydon Bois, o/s Golf Club		07:20	09:20	11:20	13:20	15:20	17:20	19:00	20:00
Theydon Bois, opp Little Gregories		07:21	09:21	11:21	13:21	15:21	17:21	19:01	20:01
Theydon Bois, adj Morgan Crescent		07:22	09:22	11:22	13:22	15:22	17:22	19:02	20:02
Theydon Bois, o/s Village Hall		07:23	09:23	11:23	13:23	15:23	17:23	19:03	20:03
Theydon Bois, opp Theydon Bois Green		07:24	09:24	11:24	13:24	15:24	17:24	19:04	20:04
Theydon Bois, opp Coopersale Lane		07:26	09:26	11:26	13:26	15:26	17:26	19:06	20:06
Abridge, opp Piggotts Farm		07:31	09:31	11:31	13:31	15:31	17:31	19:11	20:11
Abridge, opp The Blue Boar		07:32	09:32	11:32	13:32	15:32	17:32	19:12	20:12

Abridge, adj Log Cabin Cafe	07:3	3 09:33	11:33	13:33	15:33	17:33	19:13	20:13
Abridge, o/s Caravan Park	07:3	3 09:33	11:33	13:33	15:33	17:33	19:13	20:13
Chigwell, Rolls Park Corner (NW-bound)	07:3	7 09:37	11:37	13:37	15:37	17:37	19:17	20:17
Debden, opp Debden Station	07:3	09:39	11:39	13:39	15:39	17:39	19:19	20:19
Debden, adj Borders Lane	07:4	09:40	11:40	13:40	15:40	17:40	19:20	20:20
Debden, opp Ibbetson Path	07:4	09:40	11:40	13:40	15:40	17:40	19:20	20:20
Loughton, adj Hatfields	07:4	L 09:41	11:41	13:41	15:41	17:41	19:21	20:21
Loughton, opp Newmans Close	07:4	09:42	11:42	13:42	15:42	17:42	19:22	20:22
Loughton, opp Durnell Way	07:4	3 09:43	11:43	13:43	15:43	17:43	19:23	20:23
Loughton, o/s Oakview School	07:4	1 09:44	11:44	13:44	15:44	17:44	19:24	20:24
Loughton, opp West View	07:4	09:45	11:45	13:45	15:45	17:45	19:25	20:25
Loughton, o/s Traps Hill Library	07:4	09:46	11:46	13:46	15:46	17:46	19:26	20:26
Loughton, opp Morrisons	07:4	09:46	11:46	13:46	15:46	17:46	19:26	20:26
Loughton, opp Forest Road	07:4	7 09:47	11:47	13:47	15:47	17:47	19:27	20:27
Loughton, nr The Crown	07:4	09:49	11:49	13:49	15:49	17:49	19:29	20:29
Loughton, Loughton Station (Stop C)	arr 07:5	09:50	11:50	13:50	15:50	17:50	19:30	20:30

# Saturdays

Harlow Town Centre, Bus Station (Stand 5)	dep							18:19	19:19
Harlow, o/s Leisure Centre	иер							18:20	19:20
Brays Grove, adj Tumbler Road								18:24	19:24
Brays Grove, opp Baileys								18:25	19:25
Brays Grove, o/s School								18:27	19:27
Potter Street, opp Larkswood								18:29	19:29
Potter Street, adj The Red Lion								18:30	19:30
Potter Street, adj Park Avenue								18:31	19:31
Thornwood, o/s McDonalds								18:33	19:33
Thornwood, opp Horseshoes Farm								18:34	19:34
Thornwood, opp Rye Hill Road								18:35	19:35
Thornwood, opp Upland Road								18:36	19:36
Thornwood Common, opp Carpenters Arms								18:37	19:37
Epping, o/s Brickfield Business Centre								18:40	19:40
B1026 inside St. Margaret's Hospital, Epping		07:03	09:03	11:03	13:03	15:03	17:03	18:43	19:43
Epping, o/s St. Margaret's Hospital - main Rd		07:03	09:03	11:03	13:03	15:03	17:03	18:43	19:43
Epping, opp Maltings Lane		07:04	09:04	11:04	13:04	15:04	17:04	18:44	19:44
Epping, opp Council Offices		07:07	09:07	11:07	13:07	15:07	17:07	18:47	19:47
Epping, opp Church		07:08	09:08	11:08	13:08	15:08	17:08	18:48	19:48
Epping, opp Nicholl Road		07:08	09:08	11:08	13:08	15:08	17:08	18:48	19:48
Epping, o/s Woodlands		07:09	09:09	11:09	13:09	15:09	17:09	18:49	19:49
Epping, o/s Railway Station	arr	07:11	09:11	11:11	13:11	15:11	17:11	18:51	19:51
Epping, o/s Railway Station	dep	07:13	09:13	11:13	13:13	15:13	17:13	18:53	19:53
Epping, opp Woodlands		07:13	09:13	11:13	13:13	15:13	17:13	18:53	19:53
Epping, adj Woodland Grove		07:14	09:14	11:14	13:14	15:14	17:14	18:54	19:54
Epping, adj Sunnyside Road Epping, opp Western Avenue		07:15 07:16	09:15 09:16	11:15 11:16	13:15 13:16	15:15 15:16	17:15 17:16	18:55 18:56	19:55 19:56
Ivy Chimneys, opp Meadow View		07:18	09:18	11:18	13:18	15:18	17:18	18:58	19:58
lvy Chimneys, opp Fishers Lane		07:18	09:18	11:18	13:18	15:18	17:18	18:58	19:58
Theydon Bois, o/s Golf Club		07:20	09:20	11:20	13:20	15:20	17:20	19:00	20:00
Theydon Bois, opp Little Gregories		07:21	09:21	11:21	13:21	15:21	17:21	19:01	20:01
Theydon Bois, adj Morgan Crescent		07:22	09:22	11:22	13:22	15:22	17:22	19:02	20:02
Theydon Bois, o/s Village Hall		07:23	09:23	11:23	13:23	15:23	17:23	19:03	20:03
Theydon Bois, opp Theydon Bois Green		07:24	09:24	11:24	13:24	15:24	17:24	19:04	20:04
Theydon Bois, opp Coopersale Lane		07:26	09:26	11:26	13:26	15:26	17:26	19:06	20:06
Abridge, opp Piggotts Farm		07:31	09:31	11:31	13:31	15:31	17:31	19:11	20:11
Abridge, opp The Blue Boar		07:32	09:32	11:32	13:32	15:32	17:32	19:12	20:12

Abridge, adj Log Cabin Cafe	07:3	3 09:33	11:33	13:33	15:33	17:33	19:13	20:13
Abridge, o/s Caravan Park	07:3	3 09:33	11:33	13:33	15:33	17:33	19:13	20:13
Chigwell, Rolls Park Corner (NW-bound)	07:3	7 09:37	11:37	13:37	15:37	17:37	19:17	20:17
Debden, opp Debden Station	07:3	09:39	11:39	13:39	15:39	17:39	19:19	20:19
Debden, adj Borders Lane	07:4	09:40	11:40	13:40	15:40	17:40	19:20	20:20
Debden, opp Ibbetson Path	07:4	09:40	11:40	13:40	15:40	17:40	19:20	20:20
Loughton, adj Hatfields	07:4	L 09:41	11:41	13:41	15:41	17:41	19:21	20:21
Loughton, opp Newmans Close	07:4	09:42	11:42	13:42	15:42	17:42	19:22	20:22
Loughton, opp Durnell Way	07:4	3 09:43	11:43	13:43	15:43	17:43	19:23	20:23
Loughton, o/s Oakview School	07:4	1 09:44	11:44	13:44	15:44	17:44	19:24	20:24
Loughton, opp West View	07:4	09:45	11:45	13:45	15:45	17:45	19:25	20:25
Loughton, o/s Traps Hill Library	07:4	09:46	11:46	13:46	15:46	17:46	19:26	20:26
Loughton, opp Morrisons	07:4	09:46	11:46	13:46	15:46	17:46	19:26	20:26
Loughton, opp Forest Road	07:4	7 09:47	11:47	13:47	15:47	17:47	19:27	20:27
Loughton, nr The Crown	07:4	09:49	11:49	13:49	15:49	17:49	19:29	20:29
Loughton, Loughton Station (Stop C)	arr 07:5	09:50	11:50	13:50	15:50	17:50	19:30	20:30

# Mondays to Fridays

Loughton, Loughton Station (Stop C)	dep	08:10	10:10	12:10	14:10	16:10	18:10
Loughton, o/s Sainsburys Store		08:10	10:10	12:10	14:10	16:10	18:10
Loughton, opp The Crown		08:11	10:11	12:11	14:11	16:11	18:11
Loughton, adj Forest Road		08:12	10:12	12:12	14:12	16:12	18:12
Loughton, o/s Morrisons		08:13	10:13	12:13	14:13	16:13	18:13
Loughton, opp Traps Hill Library		08:13	10:13	12:13	14:13	16:13	18:13
Loughton, adj West View		08:15	10:15	12:15	14:15	16:15	18:15
Loughton, opp Oakview School		08:16	10:16	12:16	14:16	16:16	18:16
Loughton, adj Durnell Way		08:17	10:17	12:17	14:17	16:17	18:17
Loughton, adj Newmans Close		08:17	10:17	12:17	14:17	16:17	18:17
Loughton, opp Hatfields		08:18	10:18	12:18	14:18	16:18	18:18
Debden, opp Newmans Lane		08:18	10:18	12:18	14:18	16:18	18:18
Debden, adj Ibbetson Path		08:20	10:20	12:20	14:20	16:20	18:20
Debden, o/s Debden Station		08:20	10:20	12:20	14:20	16:20	18:20
Chigwell, Rolls Park Corner (NE-bound)		08:22	10:22	12:22	14:22	16:22	18:22
Abridge, opp Caravan Park		08:25	10:25	12:25	14:25	16:25	18:25
Abridge, opp Log Cabin Cafe		08:26	10:26	12:26	14:26	16:26	18:26
Abridge, o/s The Blue Boar		08:26	10:26	12:26	14:26	16:26	18:26
Abridge, o/s Piggotts Farm		08:27	10:27	12:27	14:27	16:27	18:27
Theydon Bois, adj Coopersale Lane		08:30	10:30	12:30	14:30	16:30	18:30
Theydon Bois, adj Theydon Bois Green		08:32	10:32	12:32	14:32	16:32	18:32
Theydon Bois, opp Village Hall		08:32	10:32	12:32	14:32	16:32	18:32
Theydon Bois, opp Morgan Crescent		08:33	10:33	12:33	14:33	16:33	18:33
Theydon Bois, o/s Little Gregories		08:34	10:34	12:34	14:34	16:34	18:34
Theydon Bois, opp Golf Club		08:35	10:35	12:35	14:35	16:35	18:35
Ivy Chimneys, adj Fishers Lane		08:37	10:37	12:37	14:37	16:37	18:37
Ivy Chimneys, adj Meadow View		08:38	10:38	12:38	14:38	16:38	18:38
Epping, adj Western Avenue		08:39	10:39	12:39	14:39	16:39	18:39
Epping, opp Sunnyside Road		08:40	10:40	12:40	14:40	16:40	18:40
Epping, opp Woodland Grove		08:41	10:41	12:41	14:41	16:41	18:41
Epping, o/s Woodlands		08:42	10:42	12:42	14:42	16:42	18:42
Epping, o/s Railway Station	arr	08:43	10:43	12:43	14:43	16:43	18:43
Epping, o/s Railway Station	dep	08:45	10:45	12:45	14:45	16:45	18:45
Epping, opp Woodlands		08:46	10:46	12:46	14:46	16:46	18:46
Epping, adj Nicholl Road		08:47	10:47	12:47	14:47	16:47	18:47
Epping, auj Nicholi Road Epping, o/s Church		08:48	10:48	12:48	14:48	16:48	<b>18:48</b> 18:49

Epping, adj Maltings Lane	08:51	10:51	12:51	14:51	16:51	18:51
B1026 inside St. Margaret's Hospital, Epping	08:53	10:53	12:53	14:53	16:53	18:53
Epping, o/s St. Margaret's Hospital - main Rd						18:53
Epping, opp Brickfield Business Centre						18:55
Thornwood Common, adj Carpenters Arms						19:00
Thornwood, adj Upland Road						19:00
Thornwood, opp Cross Keys						19:01
Thornwood, o/s Horseshoes Farm						19:02
Thornwood, opp McDonalds						19:03
Potter Street, opp Park Avenue						19:05
Potter Street, nr The Red Lion						19:06
Potter Street, adj Larkswood						19:06
Brays Grove, opp School						19:07
Brays Grove, o/s Baileys						19:09
Brays Grove, opp Tumbler Road						19:12
Harlow, opp Leisure Centre						19:14
Harlow Town Centre, Bus Station (Stand 5)	arr					19:17

# Saturdays

Loughton, Loughton Station (Stop C)	dep	08:10	10:10	12:10	14:10	16:10	18:10
Loughton, o/s Sainsburys Store		08:10	10:10	12:10	14:10	16:10	18:10
Loughton, opp The Crown		08:11	10:11	12:11	14:11	16:11	18:11
Loughton, adj Forest Road		08:12	10:12	12:12	14:12	16:12	18:12
Loughton, o/s Morrisons		08:13	10:13	12:13	14:13	16:13	18:13
Loughton, opp Traps Hill Library		08:13	10:13	12:13	14:13	16:13	18:13
Loughton, adj West View		08:15	10:15	12:15	14:15	16:15	18:15
Loughton, opp Oakview School		08:16	10:16	12:16	14:16	16:16	18:16
Loughton, adj Durnell Way		08:17	10:17	12:17	14:17	16:17	18:17
Loughton, adj Newmans Close		08:17	10:17	12:17	14:17	16:17	18:17
Loughton, opp Hatfields		08:18	10:18	12:18	14:18	16:18	18:18
Debden, opp Newmans Lane		08:18	10:18	12:18	14:18	16:18	18:18
Debden, adj Ibbetson Path		08:20	10:20	12:20	14:20	16:20	18:20
Debden, o/s Debden Station		08:20	10:20	12:20	14:20	16:20	18:20
Chigwell, Rolls Park Corner (NE-bound)		08:22	10:22	12:22	14:22	16:22	18:22
Abridge, opp Caravan Park		08:25	10:25	12:25	14:25	16:25	18:25
Abridge, opp Log Cabin Cafe		08:26	10:26	12:26	14:26	16:26	18:26
Abridge, o/s The Blue Boar		08:26	10:26	12:26	14:26	16:26	18:26
Abridge, o/s Piggotts Farm		08:27	10:27	12:27	14:27	16:27	18:27
Theydon Bois, adj Coopersale Lane		08:30	10:30	12:30	14:30	16:30	18:30
Theydon Bois, adj Theydon Bois Green		08:32	10:32	12:32	14:32	16:32	18:32
Theydon Bois, opp Village Hall		08:32	10:32	12:32	14:32	16:32	18:32
Theydon Bois, opp Morgan Crescent		08:33	10:33	12:33	14:33	16:33	18:33
Theydon Bois, o/s Little Gregories		08:34	10:34	12:34	14:34	16:34	18:34
Theydon Bois, opp Golf Club		08:35	10:35	12:35	14:35	16:35	18:35
Ivy Chimneys, adj Fishers Lane		08:37	10:37	12:37	14:37	16:37	18:37
Ivy Chimneys, adj Meadow View		08:38	10:38	12:38	14:38	16:38	18:38
Epping, adj Western Avenue		08:39	10:39	12:39	14:39	16:39	18:39
Epping, opp Sunnyside Road		08:40	10:40	12:40	14:40	16:40	18:40
Epping, opp Woodland Grove		08:41	10:41	12:41	14:41	16:41	18:41
Epping, o/s Woodlands		08:42	10:42	12:42	14:42	16:42	18:42
Epping, o/s Railway Station	arr	08:43	10:43	12:43	14:43	16:43	18:43
Epping, o/s Railway Station	dep	08:45	10:45	12:45	14:45	16:45	18:45
Epping, opp Woodlands		08:46	10:46	12:46	14:46	16:46	18:46
Epping, adj Nicholl Road		08:47	10:47	12:47	14:47	16:47	18:47
Epping, o/s Church		08:48	10:48	12:48	14:48	16:48	18:48
Epping, o/s Council Offices		08:49	10:49	12:49	14:49	16:49	18:49

Epping, adj Maltings Lane	08:51	10:51	12:51	14:51	16:51	18:51
B1026 inside St. Margaret's Hospital, Epping	08:53	10:53	12:53	14:53	16:53	18:53
Epping, o/s St. Margaret's Hospital - main Rd						18:53
Epping, opp Brickfield Business Centre						18:55
Thornwood Common, adj Carpenters Arms						19:00
Thornwood, adj Upland Road						19:00
Thornwood, opp Cross Keys						19:01
Thornwood, o/s Horseshoes Farm						19:02
Thornwood, opp McDonalds						19:03
Potter Street, opp Park Avenue						19:05
Potter Street, nr The Red Lion						19:06
Potter Street, adj Larkswood						19:06
Brays Grove, opp School						19:07
Brays Grove, o/s Baileys						19:09
Brays Grove, opp Tumbler Road						19:12
Harlow, opp Leisure Centre						19:14
Harlow Town Centre, Bus Station (Stand 5)	arr					19:17

Arriva Herts and Essex

# Mondays to Fridays

Debden, adj Lenthall Rd	dep 07	7:10	08:10	09:10	10:10	11:10	12:10	13:10	14:10	15:10	16:10	17:10	18:20	19:10
Debden, opp Chigwell Lane	C	07:11	08:11	09:11	10:11	11:11	12:11	13:11	14:11	15:11	16:11	17:11	18:21	19:11
Loughton, opp Oakwood Ind Estate	C	07:11	08:11	09:11	10:11	11:11	12:11	13:11	14:11	15:11	16:11	17:11	18:21	19:11
Loughton, adj Marlescroft Way	07	7:12	08:12	09:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:12	18:22	19:12
Loughton, opp River Way	C	07:13	08:13	09:13	10:13	11:13	12:13	13:13	14:13	15:13	16:13	17:13	18:23	19:13
Loughton, opp Alderton Way	C	07:13	08:13	09:13	10:13	11:13	12:13	13:13	14:13	15:13	16:13	17:13	18:23	19:13
Loughton, adj South View	C	07:14	08:14	09:14	10:14	11:14	12:14	13:14	14:14	15:14	16:14	17:14	18:24	19:14
Loughton, opp Stonards Hill	C	07:14	08:14	09:14	10:14	11:14	12:14	13:14	14:14	15:14	16:14	17:14	18:24	19:14
Loughton, Roding Road (NW-bound)	C	07:15	08:15	09:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:25	19:15
Loughton, Loughton Station (Stop A)	07	7:17	08:17	09:17	10:17	11:17	12:17	13:17	14:17	15:17	16:17	17:17	18:27	19:17
Loughton, o/s Sainsburys Store	C	07:18	08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:28	19:18
Loughton, opp The Crown	C	07:19	08:19	09:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	17:19	18:29	19:19
Loughton, adj Forest Road		07:20	08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:30	19:20
Loughton, o/s Morrisons	0	7:23	08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:33	19:23
Loughton, opp Traps Hill Library		07:23	08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:33	19:23
Loughton, adj West View	0	07:24	08:24	09:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:34	19:24
Loughton, adj Alderton Rise		07:26	08:26	09:26	10:26	11:26	12:26	13:26	14:26	15:26	16:26	17:26	18:36	19:26
Loughton, opp The Lindens		07:26	08:26	09:26	10:26	11:26	12:26	13:26	14:26	15:26	16:26	17:26	18:36	19:26
Loughton, adj Parkmead	07	7:28	08:28	09:28	10:28	11:28	12:28	13:28	14:28	15:28	16:28	17:28	18:38	19:28
Loughton, adj Deepdene Road		07:29	08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:29	17:29	18:39	19:29
Loughton, adj Deepdene Path		07:29	08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:29	17:29	18:39	19:29
Loughton, opp Chequers Road		07:30	08:30	09:30	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:40	19:30
Loughton, o/s Playing Fields		07:31	08:31	09:31	10:31	11:31	12:31	13:31	14:31	15:31	16:31	17:31	18:41	19:31
Loughton, Ladyfields (E-bound)		07:31	08:31	09:31	10:31	11:31	12:31	13:31	14:31	15:31	16:31	17:31	18:41	19:31
Debden, opp Torrington Drive		7:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:43	19:33
Debden, opp Burton Road		07:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:43	19:33
Debden, adj Vere Road		07:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:43	19:33
Debden, adj Etheridge Green		07:34	08:34	09:34	10:34	11:34	12:34	13:34	14:34	15:34	16:34	17:34	18:44	19:34
Debden, Mannock Drive (N-bound)		07:35	08:35	09:35	10:35	11:35	12:35	13:35	14:35	15:35	16:35	17:35	18:45	19:35
Debden, opp Goldingham Avenue		07:36	08:36	09:36	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:36	18:46	19:36
Debden, opp The Cottage Loaf		07:36	08:36	09:36	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:36	18:46	19:36
Debden, opp Colbrook Lane		07:37	08:37	09:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:47	19:37
Debden, opp Castell Road		07:37	08:37	09:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:47	19:37
Debden, adj Chandler Road		07:38	08:38	09:38	10:38	11:38	12:38	13:38	14:38	15:38	16:38	17:38	18:48	19:38
Debden, adj Droveway			08:39	09:39	10:39	11:39	12:39	13:39	14:39	15:39	16:39	17:39	18:49	19:39
Theydon Bois, opp Morgan Crescent	07	7:47	08:47	09:47	10:47	11:47	12:47	13:47	14:47	15:47	16:47	17:47	18:57	19:47
Theydon Bois, o/s Little Gregories	C	07:48	08:48	09:48	10:48	11:48	12:48	13:48	14:48	15:48	16:48	17:48	18:58	19:48

Theydon Bois, opp Golf Club		07:49	08:49	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:59	19:49
Ivy Chimneys, adj Fishers Lane		07:50	08:50	09:50	10:50	11:50	12:50	13:50	14:50	15:50	16:50	17:50	19:00	19:50
Ivy Chimneys, adj Meadow View		07:51	08:51	09:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	19:01	19:51
Epping, adj Western Avenue		07:52	08:52	09:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	17:52	19:02	19:52
Epping, opp Sunnyside Road		07:53	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	17:53	19:03	19:53
Epping, opp Woodland Grove		07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:54	16:54	17:54	19:04	19:54
Epping, o/s Woodlands		07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:54	16:54	17:54	19:04	19:54
Epping, o/s Railway Station	arr	07:55	08:55	09:55	10:55	11:55	12:55	13:55	14:55	15:55	16:55	17:55	19:05	19:55
Epping, o/s Railway Station	dep	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:05	19:10	20:00
Epping, opp Woodlands		08:01	09:01	10:01	11:01	12:01	13:01	14:01	15:01	16:01	17:01	18:06	19:11	20:01
Epping, adj Nicholl Road		08:02	09:02	10:02	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:07	19:12	20:02
Epping, o/s Church		08:03	09:03	10:03	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:08	19:13	20:03
Epping, o/s Council Offices		08:03	09:03	10:03	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:08	19:13	20:03
Epping Green, adj Green Close		08:12	09:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:12	18:17	19:22	20:12
Sumners Farm, opp Parsloe Road		08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:23	19:28	20:18
Sumners Farm, Sumners Farm (NE-bound)		08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:23	19:28	20:18
Sumners Farm, opp Thurstans		08:19	09:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	17:19	18:24	19:29	20:19
Kingsmoor, o/s St. Jame's School		08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:25	19:30	20:20
Stewards, Peterswood School (E-bound)		08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:25	19:30	20:20
Stewards, Peterswood School (N-bound)		08:21	09:21	10:21	11:21	12:21	13:21	14:21	15:21	16:21	17:21	18:25	19:30	20:21
Staple Tye, opp Longbanks		08:21	09:21	10:21	11:21	12:21	13:21	14:21	15:21	16:21	17:21	18:25	19:30	20:21
Staple Tye, o/s Shopping Centre		08:22	09:22	10:22	11:22	12:22	13:22	14:22	15:22	16:22	17:22	18:26	19:31	20:22
Staple Tye, o/s BP Garage		08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:28	19:33	20:23
Great Parndon, adj Milwards Southern Way		08:24	09:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:29	19:34	20:24
Sumners, Water Lane (SW-bound)		08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:25	17:25	18:30	19:35	20:25
Sumners, adj Dunstalls		T					T	T		16:25	17:25	18:30	19:35	20:25
Sumners, opp The Herald					- 1			- 1		16:25	17:25	18:30	19:35	20:25
Sumners, opp Taylifers		- 1			- 1			- 1		16:26	17:26	18:31	19:36	20:26
Sumners, opp Hull Grove									1	16:27	17:27	18:32	19:37	20:27
Sumners, o/s The Herald					- 1		- 1	- 1		16:27	17:27	18:32	19:37	20:27
Sumners, opp Dunstalls										16:28	17:28	18:33	19:38	20:28
Katherines, opp Tithelands		- 1						- 1		16:29	17:30	18:35	19:40	20:30
Katherines, o/s Katherines School										16:30	17:31	18:36	19:41	20:31
Katherines, o/s Katherines Hatch		- 1	1							16:31	17:32	18:37	19:42	20:32
Katherines, adj Peacocks										16:31	17:32	18:37	19:42	20:32
Katherines, Brookside (S-bound)										16:31	17:32	18:37	19:42	20:32
Sumners, Water Lane (NE-bound)		08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:32	17:33	18:38	19:43	20:33
Harlow, Third Avenue (NE-bound)		08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:36	17:37	18:42	19:47	20:37
Harlow Town Centre, Bus Station (Stand 7)	arr	08:32	09:32	10:32	11:32	12:32	13:32	14:32	15:32	16:39	17:40	18:45	19:50	20:40

Arriva Herts and Essex

# Saturdays

Debden, adj Lenthall Rd	dep	07:10	08:10	09:10	10:10	11:10	12:10	13:10	14:10	15:10	16:10	17:10	18:10	19:10
Debden, opp Chigwell Lane		07:11	08:11	09:11	10:11	11:11	12:11	13:11	14:11	15:11	16:11	17:11	18:11	19:11
Loughton, opp Oakwood Ind Estate		07:11	08:11	09:11	10:11	11:11	12:11	13:11	14:11	15:11	16:11	17:11	18:11	19:11
Loughton, adj Marlescroft Way		07:12	08:12	09:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:12	18:12	19:12
Loughton, opp River Way		07:13	08:13	09:13	10:13	11:13	12:13	13:13	14:13	15:13	16:13	17:13	18:13	19:13
Loughton, opp Alderton Way		07:13	08:13	09:13	10:13	11:13	12:13	13:13	14:13	15:13	16:13	17:13	18:13	19:13
Loughton, adj South View		07:14	08:14	09:14	10:14	11:14	12:14	13:14	14:14	15:14	16:14	17:14	18:14	19:14
Loughton, opp Stonards Hill		07:14	08:14	09:14	10:14	11:14	12:14	13:14	14:14	15:14	16:14	17:14	18:14	19:14
Loughton, Roding Road (NW-bound)		07:15	08:15	09:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:15	19:15
Loughton, Loughton Station (Stop A)		07:17	08:17	09:17	10:17	11:17	12:17	13:17	14:17	15:17	16:17	17:17	18:17	19:17
Loughton, o/s Sainsburys Store		07:18	08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:18	19:18
Loughton, opp The Crown		07:19	08:19	09:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	17:19	18:19	19:19
Loughton, adj Forest Road		07:20	08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:20	19:20
Loughton, o/s Morrisons		07:23	08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:23	19:23
Loughton, opp Traps Hill Library		07:23	08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:23	19:23
Loughton, adj West View		07:24	08:24	09:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:24	19:24
Loughton, adj Alderton Rise		07:26	08:26	09:26	10:26	11:26	12:26	13:26	14:26	15:26	16:26	17:26	18:26	19:26
Loughton, opp The Lindens		07:26	08:26	09:26	10:26	11:26	12:26	13:26	14:26	15:26	16:26	17:26	18:26	19:26
Loughton, adj Parkmead		07:28	08:28	09:28	10:28	11:28	12:28	13:28	14:28	15:28	16:28	17:28	18:28	19:28
Loughton, adj Deepdene Road		07:29	08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:29	17:29	18:29	19:29
Loughton, adj Deepdene Path		07:29	08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:29	17:29	18:29	19:29
Loughton, opp Chequers Road		07:30	08:30	09:30	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:30	19:30
Loughton, o/s Playing Fields		07:31	08:31	09:31	10:31	11:31	12:31	13:31	14:31	15:31	16:31	17:31	18:31	19:31
Loughton, Ladyfields (E-bound)		07:31	08:31	09:31	10:31	11:31	12:31	13:31	14:31	15:31	16:31	17:31	18:31	19:31
Debden, opp Torrington Drive		07:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:33	19:33
Debden, opp Burton Road		07:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:33	19:33
Debden, adj Vere Road		07:33	08:33	09:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:33	19:33
Debden, adj Etheridge Green		07:34	08:34	09:34	10:34	11:34	12:34	13:34	14:34	15:34	16:34	17:34	18:34	19:34
Debden, Mannock Drive (N-bound)		07:35	08:35	09:35	10:35	11:35	12:35	13:35	14:35	15:35	16:35	17:35	18:35	19:35
Debden, opp Goldingham Avenue		07:36	08:36	09:36	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:36	18:36	19:36
Debden, opp The Cottage Loaf		07:36	08:36	09:36	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:36	18:36	19:36
Debden, opp Colbrook Lane		07:37	08:37	09:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:37	19:37
Debden, opp Castell Road		07:37	08:37	09:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:37	19:37
Debden, adj Chandler Road		07:38	08:38	09:38	10:38	11:38	12:38	13:38	14:38	15:38	16:38	17:38	18:38	19:38
Debden, adj Droveway		07:39	08:39	09:39	10:39	11:39	12:39	13:39	14:39	15:39	16:39	17:39	18:39	19:39
Theydon Bois, opp Morgan Crescent		07:47	08:47	09:47	10:47	11:47	12:47	13:47	14:47	15:47	16:47	17:47	18:47	19:47
Theydon Bois, o/s Little Gregories		07:48	08:48	09:48	10:48	11:48	12:48	13:48	14:48	15:48	16:48	17:48	18:48	19:48

Theydon Bois, opp Golf Club		07:49	08:49	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:49	19:49
Ivy Chimneys, adj Fishers Lane		07:50	08:50	09:50	10:50	11:50	12:50	13:50	14:50	15:50	16:50	17:50	18:50	19:50
Ivy Chimneys, adj Meadow View		07:51	08:51	09:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	18:51	19:51
Epping, adj Western Avenue		07:52	08:52	09:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	17:52	18:52	19:52
Epping, opp Sunnyside Road		07:53	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	17:53	18:53	19:53
Epping, opp Woodland Grove		07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:54	16:54	17:54	18:54	19:54
Epping, o/s Woodlands		07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:54	16:54	17:54	18:54	19:54
Epping, o/s Railway Station	arr	07:55	08:55	09:55	10:55	11:55	12:55	13:55	14:55	15:55	16:55	17:55	18:55	19:55
Epping, o/s Railway Station	dep	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	19:55
Epping, opp Woodlands		08:01	09:01	10:01	11:01	12:01	13:01	14:01	15:01	16:01	17:01	18:01	19:01	19:56
Epping, adj Nicholl Road		08:02	09:02	10:02	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:02	19:02	19:57
Epping, o/s Church		08:03	09:03	10:03	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:03	19:03	19:58
Epping, o/s Council Offices		08:03	09:03	10:03	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:03	19:03	_
Epping Green, adj Green Close		08:12	09:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:12	18:12	19:12	
Sumners Farm, opp Parsloe Road		08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:18	19:18	
Sumners Farm, Sumners Farm (NE-bound)		08:18	09:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:18	19:18	
Sumners Farm, opp Thurstans		08:19	09:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	17:19	18:19	19:19	
Kingsmoor, o/s St. Jame's School		08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:20	19:20	
Stewards, Peterswood School (E-bound)		08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:20	19:20	
Stewards, Peterswood School (N-bound)		08:21	09:21	10:21	11:21	12:21	13:21	14:21	15:21	16:21	17:21	18:21	19:21	
Staple Tye, opp Longbanks		08:21	09:21	10:21	11:21	12:21	13:21	14:21	15:21	16:21	17:21	18:21	19:21	
Staple Tye, o/s Shopping Centre		08:22	09:22	10:22	11:22	12:22	13:22	14:22	15:22	16:22	17:22	18:22	19:22	
Staple Tye, o/s BP Garage		08:23	09:23	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:23	18:23	19:23	
Great Parndon, adj Milwards Southern Way		08:24	09:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:24	19:24	
Sumners, Water Lane (SW-bound)		08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:25	17:25	18:25	19:25	
Sumners, Water Lane (NE-bound)		08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:25	17:25	18:25	19:25	
Harlow, Third Avenue (NE-bound)		08:29	09:29	10:29	11:29	12:29	13:29	14:29	15:29	16:29	17:29	18:29	19:29	
Harlow Town Centre, Bus Station (Stand 7)	arr	08:32	09:32	10:32	11:32	12:32	13:32	14:32	15:32	16:32	17:32	18:32	19:32	
, , ,			00.02				10.02			10.02	17.02	10.02	13.02	

Arriva Herts and Essex

# Mondays to Fridays

Harlow Town Centre, Bus Station (Stand 7)	dep	06:35	07:35	08:47	09:42	10:42	11:42	12:42	13:42	14:42	15:42	16:52	17:52	18:52
Harlow, Third Avenue (SW-bound)		06:37	07:37	08:49	09:44	10:44	11:44	12:44	13:44	14:44	15:44	16:54	17:54	18:54
Sumners, Water Lane (SW-bound)		06:40	07:40	08:53	09:48	10:48	11:48	12:48	13:48	14:48	15:48	16:58	17:58	18:58
Sumners, adj Dunstalls		06:40	07:40											
Sumners, opp The Herald		06:41	07:41	- 1				- 1						
Sumners, opp Taylifers		06:41	07:41											
Sumners, opp Hull Grove	05:		07:42	I										
Sumners, o/s The Herald	05:	39 06:42	07:42											
Sumners, opp Dunstalls	05:	39 06:43	07:43											
Katherines, opp Tithelands	05:		07:44											
Katherines, o/s Katherines School	05:		07:45											
Katherines, o/s Katherines Hatch	05:4		07:46											
Katherines, adj Peacocks	05:		07:46											
Katherines, Brookside (S-bound)	05:		07:47											
Sumners, Water Lane (NE-bound)	05:4	4 06:49	07:49		09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:59	17:59	18:59
Great Parndon, opp Milwards Southern Way	05:		07:49	08:54	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:59	17:59	18:59
Staple Tye, opp BP Garage	05:4	6 06:51	07:51	08:56	09:51	10:51	11:51	12:51	13:51	14:51	15:51	17:01	18:01	19:01
Staple Tye, opp Shopping Centre	05:4		07:52		09:52	10:52	11:52	12:52	13:52	14:52	15:52			19:02
Staple Tye, adj Longbanks	05:		07:52	08:57	09:52	10:52	11:52	12:52	13:52	14:52	15:52	17:02	18:02	19:02
Stewards, Peterswood School (S-bound)	05:		07:52	08:57	09:52	10:52	11:52	12:52	13:52	14:52	15:52	17:02	18:02	19:02
Stewards, Peterswood School (W-bound)	05:		07:53	08:58	09:53	10:53	11:53	12:53	13:53	14:53	15:53	17:03	18:03	19:03
Kingsmoor, opp St. Jame's School	05:		07:53	08:58	09:53	10:53	11:53	12:53	13:53	14:53	15:53	17:03	18:03	19:03
Sumners Farm, adj Thurstans	05:		07:54	08:59	09:54	10:54	11:54	12:54	13:54	14:54	15:54	17:04	18:04	19:04
Sumners Farm, adj Parsloe Road	05:		07:56	09:01	09:56	10:56	11:56	12:56	13:56	14:56	15:56	17:06	18:06	
Epping Green, opp Green Close	05:		07:59	09:04	09:59	10:59	11:59	12:59	13:59	14:59	15:59	17:09		19:09
Epping, opp Council Offices	06:		08:08	09:13	10:08	11:08	12:08	13:08	14:08	15:08	16:08	17:18	18:18	19:18
Epping, opp Church	06:0	4 07:09	08:09	09:14	10:09	11:09	12:09	13:09	14:09	15:09	16:09	17:19		19:19
Epping, opp Nicholl Road	06:		08:09	09:14	10:09	11:09	12:09	13:09	14:09	15:09	16:09	17:19	18:19	19:19
Epping, o/s Woodlands	06:		08:10	09:15	10:10	11:10	12:10	13:10	14:10	15:10	16:10	17:20	18:20	19:20
Epping, o/s Railway Station	<i>arr</i> 06:	06 07:12	08:12	09:17	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:22	18:22	19:22
Epping, o/s Railway Station	dep	07:15	08:15	09:20	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:25	18:25	
Epping, opp Woodlands		07:15	08:15	09:20	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:25	18:25	
Epping, adj Woodland Grove		07:15	08:15	09:20	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:25	18:25	
Epping, adj Sunnyside Road		07:16	08:16	09:21	10:16	11:16	12:16	13:16	14:16	15:16	16:16	17:26	18:26	
Epping, opp Western Avenue		07:17	08:17	09:22	10:17	11:17	12:17	13:17	14:17	15:17	16:17	17:27	18:27	
Ivy Chimneys, opp Meadow View		07:18	08:18	09:23	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:28	18:28	
Ivy Chimneys, opp Fishers Lane		07:19	08:19	09:24	10:19	11:19	12:19	13:19	14:19	15:19	16:19	17:29	18:29	

Theydon Bois, o/s Golf Club	07:20	08:20	09:25	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:30	18:30
Theydon Bois, opp Little Gregories	07:21	08:21	09:26	10:21	11:21	12:21	13:21	14:21	15:21	16:21	17:31	18:31
Theydon Bois, adj Morgan Crescent	07:23	08:23	09:28	10:23	11:23	12:23	13:23	14:23	15:23	16:23	17:33	18:33
Debden, opp Droveway	07:30	08:30	09:35	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:40	18:40
Debden, opp Chandler Road	07:30	08:30	09:35	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:40	18:40
Debden, adj Castell Road	07:31	08:31	09:36	10:31	11:31	12:31	13:31	14:31	15:31	16:31	17:41	18:40
Debden, o/s Davenant School	07:32	08:32	09:37	10:32	11:32	12:32	13:32	14:32	15:32	16:32	17:42	18:41
Debden, adj Colbrook Lane	07:33	08:33	09:38	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:43	18:41
Debden, o/s The Cottage Loaf	07:34	08:34	09:39	10:34	11:34	12:34	13:34	14:34	15:34	16:34	17:44	18:42
Debden, adj Goldingham Avenue	07:35	08:35	09:40	10:35	11:35	12:35	13:35	14:35	15:35	16:35	17:45	18:42
Debden, Mannock Drive (W-bound)	07:36	08:36	09:41	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:46	18:43
Debden, opp Etheridge Green	07:37	08:37	09:42	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:47	18:43
Debden, opp Vere Road	07:38	08:38	09:43	10:38	11:38	12:38	13:38	14:38	15:38	16:38	17:48	18:44
Debden, nr Rectory Lane	07:40	08:40	09:45	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:50	18:45
Loughton, Ladyfields (W-bound)	07:40	08:40	09:45	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:50	18:45
Loughton, opp Playing Fields	07:41	08:41	09:46	10:41	11:41	12:41	13:41	14:41	15:41	16:41	17:51	18:46
Loughton, adj Chequers Road	07:42	08:42	09:47	10:42	11:42	12:42	13:42	14:42	15:42	16:42	17:52	18:47
Loughton, opp Deepdene Path	07:42	08:42	09:47	10:42	11:42	12:42	13:42	14:42	15:42	16:42	17:52	18:47
Loughton, opp Deepdene Road	07:43	08:43	09:48	10:43	11:43	12:43	13:43	14:43	15:43	16:43	17:53	18:48
Loughton, opp Parkmead	07:44	08:44	09:49	10:44	11:44	12:44	13:44	14:44	15:44	16:44	17:54	18:49
Loughton, adj The Lindens	07:45	08:45	09:50	10:45	11:45	12:45	13:45	14:45	15:45	16:45	17:55	18:50
Loughton, opp Alderton Rise	07:45	08:45	09:50	10:45	11:45	12:45	13:45	14:45	15:45	16:45	17:55	18:50
Loughton, opp West View	07:47	08:47	09:52	10:47	11:47	12:47	13:47	14:47	15:47	16:47	17:57	18:52
Loughton, o/s Traps Hill Library	07:48	08:48	09:53	10:48	11:48	12:48	13:48	14:48	15:48	16:48	17:58	18:53
Loughton, opp Morrisons	07:49	08:49	09:54	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:59	18:54
Loughton, opp Forest Road	07:51	08:51	09:56	10:51	11:51	12:51	13:51	14:51	15:51	16:51	18:01	18:55
Loughton, nr The Crown	07:53	08:53	09:58	10:53	11:53	12:53	13:53	14:53	15:53	16:53	18:03	18:56
Loughton, Loughton Station (Stop A)	07:56	08:56	10:01	10:56	11:56	12:56	13:56	14:56	15:56	16:56	18:06	18:58
Loughton, Roding Road (SE-bound)	07:57	08:57	10:02	10:57	11:57	12:57	13:57	14:57	15:57	16:57	18:07	18:59
Loughton, opp South View	07:58	08:58	10:03	10:58	11:58	12:58	13:58	14:58	15:58	16:58	18:08	19:00
Loughton, adj Alderton Way	07:59	08:59	10:04	10:59	11:59	12:59	13:59	14:59	15:59	16:59	18:09	19:01
Loughton, adj River Way	08:00	09:00	10:05	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:10	19:01
Loughton, opp Marlescroft Way	08:02	09:02	10:07	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:12	19:03
Loughton, adj Oakwood Ind Estate	08:02	09:02	10:07	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:12	19:03
Debden, adj Chigwell Lane	08:03	09:03	10:08	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:13	19:04
Debden, adj Lenthall Rd	arr 08:05	09:05	10:10	11:05	12:05	13:05	14:05	15:05	16:05	17:05	18:15	19:05

Arriva Herts and Essex

# Saturdays

Harlow Town Centre, Bus Station (Stand 7)	dep	07:42	08:42	09:42	10:42	11:42	12:42	13:42	14:42	15:42	16:42	17:42	18:42
Harlow, Third Avenue (SW-bound)		07:44	08:44	09:44	10:44	11:44	12:44	13:44	14:44	15:44	16:44	17:44	18:44
Sumners, Water Lane (SW-bound)		07:48	08:48	09:48	10:48	11:48	12:48	13:48	14:48	15:48	16:48	17:48	18:48
Sumners, Water Lane (NE-bound)		07:49	08:49	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:49
Great Parndon, opp Milwards Southern Way		07:49	08:49	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:49
Staple Tye, opp BP Garage		07:51	08:51	09:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	18:51
Staple Tye, opp Shopping Centre		07:52	08:52	09:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	17:52	18:52
Staple Tye, adj Longbanks		07:52	08:52	09:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	17:52	18:52
Stewards, Peterswood School (S-bound)		07:52	08:52	09:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	17:52	18:52
Stewards, Peterswood School (W-bound)		07:53	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	17:53	18:53
Kingsmoor, opp St. Jame's School		07:53	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	17:53	18:53
Sumners Farm, adj Thurstans		07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:54	16:54	17:54	18:54
Sumners Farm, adj Parsloe Road		07:56	08:56	09:56	10:56	11:56	12:56	13:56	14:56	15:56	16:56	17:56	18:56
Epping Green, opp Green Close		07:59	08:59	09:59	10:59	11:59			14:59	15:59	16:59		18:59
Epping, opp Council Offices		08:08	09:08	10:08	11:08	12:08	13:08	14:08	15:08	16:08	17:08	18:08	19:08
Epping, opp Church	07:11	08:09	09:09	10:09	11:09	12:09	13:09	14:09	15:09	16:09	17:09	18:09	19:09
Epping, opp Nicholl Road	07:11	08:09	09:09	10:09	11:09	12:09	13:09	14:09	15:09	16:09	17:09	18:09	19:09
Epping, o/s Woodlands	07:12	08:10	09:10	10:10	11:10	12:10	13:10	14:10	15:10	16:10	17:10	18:10	19:10
= ' ' D'' O' ''	07 4 4		00 40	4040		40 40	4040	4 4 4 6	4 - 4 0				
Epping, o/s Railway Station	<i>arr</i> 07:14	08:12	09:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12			19:12
Epping, o/s Railway Station	dep 07:15	08:15	09:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:15	19:12
Epping, o/s Railway Station Epping, opp Woodlands	<b>dep 07:15</b> 07:15	<b>08:15</b>	<b>09:15</b>	<b>10:15</b>	<b>11:15</b> 11:15	<b>12:15</b> 12:15	<b>13:15</b> 13:15	<b>14:15</b> 14:15	<b>15:15</b> 15:15	<b>16:15</b>	<b>17:15</b> 17:15	<b>18:15</b>	19:12
Epping, o/s Railway Station Epping, opp Woodlands Epping, adj Woodland Grove	dep     07:15       07:15     07:15	<b>08:15</b> 08:15 08:15	<b>09:15</b> 09:15 09:15	<b>10:15</b> 10:15 10:15	<b>11:15</b> 11:15 11:15	<b>12:15</b> 12:15 12:15	<b>13:15</b> 13:15 13:15	<b>14:15</b> 14:15 14:15	<b>15:15</b> 15:15 15:15	<b>16:15</b> 16:15 16:15	<b>17:15</b> 17:15 17:15	<b>18:15</b> 18:15 18:15	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road	dep     07:15       07:15     07:15       07:16     07:16	08:15 08:15 08:15 08:16	09:15 09:15 09:15 09:16	10:15 10:15 10:15 10:16	11:15 11:15 11:15 11:16	12:15 12:15 12:15 12:16	13:15 13:15 13:15 13:16	14:15 14:15 14:15 14:16	15:15 15:15 15:15 15:16	16:15 16:15 16:15 16:16	17:15 17:15 17:15 17:16	18:15 18:15 18:15 18:16	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue	dep     07:15       07:15     07:15       07:16     07:17	08:15 08:15 08:15 08:16 08:17	09:15 09:15 09:15 09:16 09:17	10:15 10:15 10:15 10:16 10:17	11:15 11:15 11:15 11:16 11:17	12:15 12:15 12:15 12:16 12:17	13:15 13:15 13:15 13:16 13:17	14:15 14:15 14:15 14:16 14:17	15:15 15:15 15:15 15:16 15:17	16:15 16:15 16:15 16:16 16:17	17:15 17:15 17:15 17:16 17:17	18:15 18:15 18:15 18:16 18:17	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View	dep         07:15           07:15         07:15           07:16         07:17           07:17         07:18	08:15 08:15 08:15 08:16 08:17 08:18	09:15 09:15 09:15 09:16 09:17 09:18	10:15 10:15 10:15 10:16 10:17 10:18	11:15 11:15 11:15 11:16 11:17 11:18	12:15 12:15 12:15 12:16 12:17 12:18	13:15 13:15 13:15 13:16 13:17 13:18	14:15 14:15 14:16 14:17 14:18	15:15 15:15 15:15 15:16 15:17 15:18	16:15 16:15 16:15 16:16 16:17 16:18	17:15 17:15 17:15 17:16 17:17 17:18	18:15 18:15 18:15 18:16 18:17 18:18	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane	dep     07:15       07:15     07:15       07:16     07:17       07:18     07:19	08:15 08:15 08:15 08:16 08:17 08:18 08:19	09:15 09:15 09:15 09:16 09:17 09:18 09:19	10:15 10:15 10:15 10:16 10:17 10:18 10:19	11:15 11:15 11:15 11:16 11:17 11:18 11:19	12:15 12:15 12:15 12:16 12:17 12:18 12:19	13:15 13:15 13:15 13:16 13:17 13:18 13:19	14:15 14:15 14:15 14:16 14:17 14:18 14:19	15:15 15:15 15:15 15:16 15:17 15:18 15:19	16:15 16:15 16:15 16:16 16:17 16:18 16:19	17:15 17:15 17:15 17:16 17:17 17:18 17:19	18:15 18:15 18:15 18:16 18:17 18:18 18:19	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club	dep 07:15 07:15 07:15 07:16 07:17 07:18 07:19 07:20	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories	dep     07:15       07:15     07:16       07:17     07:18       07:19     07:20       07:21	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent	dep     07:15       07:15     07:15       07:16     07:17       07:18     07:19       07:20     07:21       07:23     07:23	08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21	10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23	13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:23	15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23	16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21	18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:23	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23	11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:23	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:23	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:23	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:30         07:30	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:30	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23 10:30	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23 11:30	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23 12:30	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23 13:30	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:30	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:30	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:23 17:30	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23 18:30	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road  Debden, adj Castell Road	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:31         07:31	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:30 08:30 08:31	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30 09:30 09:31	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:30 10:30 10:31	11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:30 11:30 11:31	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:30 12:30 12:31	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23 13:30 13:30 13:31	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:30 14:30 14:31	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30 15:30	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:30 16:30 16:30	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:30 17:30 17:31	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:30 18:30 18:31	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road  Debden, o/s Davenant School	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:31         07:32	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:30 08:30 08:31 08:32	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30 09:30 09:31 09:32	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23 10:30 10:30 10:31 10:32	11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23 11:30 11:30 11:31 11:32	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:30 12:30 12:31 12:32	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23 13:30 13:30 13:31 13:32	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:30 14:30 14:31 14:32	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30 15:30 15:31	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:30 16:30 16:31 16:32	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:30 17:30 17:31 17:32	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:30 18:30 18:31 18:32	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road  Debden, adj Castell Road  Debden, o/s Davenant School  Debden, adj Colbrook Lane	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:31         07:32           07:32         07:33	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:30 08:30 08:31 08:32 08:33	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30 09:31 09:32 09:33	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23 10:30 10:31 10:32 10:33	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23 11:30 11:30 11:31 11:32 11:32	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23 12:30 12:31 12:32 12:33	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23 13:30 13:30 13:31 13:32 13:33	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:23 14:30 14:30 14:31 14:32 14:33	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30 15:30 15:31 15:32 15:33	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:23 16:30 16:30 16:31 16:32 16:33	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:23 17:30 17:30 17:31 17:32 17:32	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23 18:30 18:30 18:31 18:32 18:33	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road  Debden, adj Castell Road  Debden, o/s Davenant School  Debden, adj Colbrook Lane  Debden, o/s The Cottage Loaf	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:31         07:32           07:33         07:33           07:34         07:34	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:33 08:30 08:31 08:32 08:33 08:34	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30 09:30 09:31 09:32 09:33 09:34	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23 10:30 10:30 10:31 10:32 10:33 10:34	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23 11:30 11:30 11:31 11:32 11:32 11:33	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23 12:30 12:30 12:31 12:32 12:33 12:34	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:33 13:30 13:31 13:32 13:33 13:34	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:23 14:30 14:30 14:31 14:32 14:33 14:34	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30 15:30 15:31 15:32 15:33 15:34	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:23 16:30 16:30 16:31 16:32 16:32	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:23 17:30 17:30 17:31 17:32 17:32 17:33	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23 18:30 18:30 18:31 18:32 18:32	19:12
Epping, o/s Railway Station  Epping, opp Woodlands  Epping, adj Woodland Grove  Epping, adj Sunnyside Road  Epping, opp Western Avenue  Ivy Chimneys, opp Meadow View  Ivy Chimneys, opp Fishers Lane  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, adj Morgan Crescent  Debden, opp Droveway  Debden, opp Chandler Road  Debden, adj Castell Road  Debden, o/s Davenant School  Debden, adj Colbrook Lane	dep         07:15           07:15         07:15           07:16         07:17           07:18         07:19           07:20         07:21           07:23         07:30           07:31         07:32           07:32         07:33	08:15 08:15 08:15 08:16 08:17 08:18 08:19 08:20 08:21 08:30 08:30 08:31 08:32 08:33	09:15 09:15 09:15 09:16 09:17 09:18 09:19 09:20 09:21 09:23 09:30 09:31 09:32 09:33	10:15 10:15 10:15 10:16 10:17 10:18 10:19 10:20 10:21 10:23 10:30 10:31 10:32 10:33	11:15 11:15 11:15 11:16 11:17 11:18 11:19 11:20 11:21 11:23 11:30 11:30 11:31 11:32 11:32	12:15 12:15 12:15 12:16 12:17 12:18 12:19 12:20 12:21 12:23 12:30 12:31 12:32 12:33	13:15 13:15 13:15 13:16 13:17 13:18 13:19 13:20 13:21 13:23 13:30 13:30 13:31 13:32 13:33	14:15 14:15 14:15 14:16 14:17 14:18 14:19 14:20 14:21 14:23 14:30 14:30 14:31 14:32 14:33	15:15 15:15 15:15 15:16 15:17 15:18 15:19 15:20 15:21 15:23 15:30 15:30 15:31 15:32 15:33	16:15 16:15 16:15 16:16 16:17 16:18 16:19 16:20 16:21 16:23 16:30 16:30 16:31 16:32 16:33	17:15 17:15 17:15 17:16 17:17 17:18 17:19 17:20 17:21 17:23 17:30 17:30 17:31 17:32 17:32	18:15 18:15 18:15 18:16 18:17 18:18 18:19 18:20 18:21 18:23 18:30 18:30 18:31 18:32 18:33	19:12

Debden, opp Etheridge Green	07:37	08:37	09:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:37
Debden, opp Vere Road	07:38	08:38	09:38	10:38	11:38	12:38	13:38	14:38	15:38	16:38	17:38	18:38
Debden, nr Rectory Lane	07:40	08:40	09:40	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:40
Loughton, Ladyfields (W-bound)	07:40	08:40	09:40	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:40
Loughton, opp Playing Fields	07:41	08:41	09:41	10:41	11:41	12:41	13:41	14:41	15:41	16:41	17:41	18:41
Loughton, adj Chequers Road	07:42	08:42	09:42	10:42	11:42	12:42	13:42	14:42	15:42	16:42	17:42	18:42
Loughton, opp Deepdene Path	07:42	08:42	09:42	10:42	11:42	12:42	13:42	14:42	15:42	16:42	17:42	18:42
Loughton, opp Deepdene Road	07:43	08:43	09:43	10:43	11:43	12:43	13:43	14:43	15:43	16:43	17:43	18:43
Loughton, opp Parkmead	07:44	08:44	09:44	10:44	11:44	12:44	13:44	14:44	15:44	16:44	17:44	18:44
Loughton, adj The Lindens	07:45	08:45	09:45	10:45	11:45	12:45	13:45	14:45	15:45	16:45	17:45	18:45
Loughton, opp Alderton Rise	07:45	08:45	09:45	10:45	11:45	12:45	13:45	14:45	15:45	16:45	17:45	18:45
Loughton, opp West View	07:47	08:47	09:47	10:47	11:47	12:47	13:47	14:47	15:47	16:47	17:47	18:47
Loughton, o/s Traps Hill Library	07:48	08:48	09:48	10:48	11:48	12:48	13:48	14:48	15:48	16:48	17:48	18:48
Loughton, opp Morrisons	07:49	08:49	09:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:49
Loughton, opp Forest Road	07:51	08:51	09:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	18:51
Loughton, nr The Crown	07:53	08:53	09:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	17:53	18:53
Loughton, Loughton Station (Stop A)	07:56	08:56	09:56	10:56	11:56	12:56	13:56	14:56	15:56	16:56	17:56	18:56
Loughton, Roding Road (SE-bound)	07:57	08:57	09:57	10:57	11:57	12:57	13:57	14:57	15:57	16:57	17:57	18:57
Loughton, opp South View	07:58	08:58	09:58	10:58	11:58	12:58	13:58	14:58	15:58	16:58	17:58	18:58
Loughton, adj Alderton Way	07:59	08:59	09:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59
Loughton, adj River Way	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
Loughton, opp Marlescroft Way	08:02	09:02	10:02	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:02	19:02
Loughton, adj Oakwood Ind Estate	08:02	09:02	10:02	11:02	12:02	13:02	14:02	15:02	16:02	17:02	18:02	19:02
Debden, adj Chigwell Lane	08:03	09:03	10:03	11:03	12:03	13:03	14:03	15:03	16:03	17:03	18:03	19:03
Debden, adj Lenthall Rd	<i>arr</i> 08:05	09:05	10:05	11:05	12:05	13:05	14:05	15:05	16:05	17:05	18:05	19:05

### Mondays to Fridays

Harlow Town Centre, Bus Station (Stand 13)	dep		09:04	11:03	13:02	14:55	16:45	18:39
Harlow Town Centre, Bus Station (Stand 11)	dep	06:55	ı	ı		ı	ı	Ī
Harlow Town Centre, opp Bus Garage		06:56	09:05	11:04	13:03	14:56	16:46	18:40
Harlow, opp PAH Fourth Avenue		06:57	09:06	11:05	13:04	14:57	16:47	18:41
Harlow, adj Helions Road		06:58	09:07	11:06	13:05	14:58	16:48	18:42
Pinnacles, opp Seedbed Centre		06:59	09:08	11:07	13:06	14:59	16:49	18:43
Pinnacles, adj GSK Fourth Avenue		06:59	09:08	11:07	13:06	14:59	16:49	18:43
Pinnacles, o/s Pitney Bowes		07:00	09:09	11:08	13:07	15:00	16:50	18:44
Roydon, opp Village Hall		07:04	09:13	11:12	13:11	15:04	16:54	18:48
Roydon, o/s Telephone Exchange		07:05	09:14	11:13	13:12	15:05	16:55	18:49
Roydon, adj Kingsmead Close		07:05	09:14	11:13	13:12	15:05	16:55	18:49
Halls Green, adj Old House Lane		07:12	09:17	11:16	13:15	15:08	16:58	18:52
Tylers Cross, Tylers Cross (S-bound)		07:15	09:19	11:18	13:17	15:10	17:00	18:54
Broadley Common, o/s Ada Cole Stables		07:19	09:21	11:20	13:19	15:12	17:02	18:56
Sumners Farm, adj Parsloe Road		07:20	09:22	11:21	13:20	15:13	17:03	18:57
Epping Green, opp Green Close		07:22	09:24	11:23	13:22	15:15	17:05	19:00
Epping, opp Council Offices		07:31	09:33	11:32	13:31	15:24	17:14	19:09
Epping, opp Church		07:32	09:34	11:33	13:32	15:25	17:15	19:10
Epping, opp Tesco Store		07:36	09:38	11:37	13:36	15:29	17:19	19:14
High Rd oppj Bury Lane, Epping		07:37	09:39	11:38	13:37	15:30	17:20	19:15
Epping, adj Bell Common		07:39	09:41	11:40	13:39	15:32	17:22	19:17
Ivy Chimneys, adj Fishers Lane		07:40	09:42	11:41	13:40	15:33	17:23	19:18
Ivy Chimneys, adj Meadow View		07:41	09:43	11:42	13:41	15:34	17:24	19:19
Epping, adj Western Avenue		07:43	09:45	11:44	13:43	15:36	17:26	19:21
Epping, opp Sunnyside Road		07:44	09:46	11:45	13:44	15:37	17:27	19:22
Epping, opp Woodland Grove		07:45	09:47	11:46	13:45	15:38	17:28	19:23
Epping, o/s Woodlands		07:46	09:48	11:47	13:46	15:39	17:29	19:24
Epping, adj The Orchards		07:47	09:49	11:48	13:47	15:40	17:30	19:25
Epping, opp Allnutts Road		07:47	09:49	11:48	13:47	15:40	17:30	19:25
Epping, adj Stewards Green		07:48	09:50	11:49	13:48	15:41	17:31	19:26
Fiddlers Hamlet, opp The Merry Fiddlers		07:50	09:52	11:51	13:50	15:43	17:33	19:28
Coopersale, Piazza (N-bound)	arr	07:54	09:56	11:55	13:54	15:47	17:37	19:32

### Saturdays

Harlow Town Centre, Bus Station (Stand 13)	dep 11:00	12:50	14:45	16:40
Harlow Town Centre, opp Bus Garage	11:01		14:46	16:41
Harlow, opp PAH Fourth Avenue	11:02	12:52	14:47	16:42
Harlow, adj Helions Road	11:03	12:53	14:48	16:43
Pinnacles, opp Seedbed Centre	11:04		14:49	16:44
Pinnacles, adj GSK Fourth Avenue	11:04	12:54	14:49	16:44
Pinnacles, o/s Pitney Bowes	11:05	12:55	14:50	16:45
Roydon, opp Village Hall	11:09		14:54	16:49
Roydon, o/s Telephone Exchange	11:10	13:00	14:55	16:50
Roydon, adj Kingsmead Close	11:10	13:00	14:55	16:50
Halls Green, adj Old House Lane	11:13	13:03	14:58	16:53
Tylers Cross, Tylers Cross (S-bound)	11:15	13:05	15:00	16:55
Broadley Common, o/s Ada Cole Stables	11:17	13:07	15:02	16:57
Sumners Farm, adj Parsloe Road	11:18	13:08	15:03	16:58
Epping Green, opp Green Close	11:20	13:10	15:05	17:00
Epping, opp Council Offices	11:29	13:19	15:14	17:09
Epping, opp Church	11:30	13:20	15:15	17:10
Epping, opp Tesco Store	11:34	13:24	15:19	17:14
High Rd oppj Bury Lane, Epping	11:35	13:25	15:20	17:15
Epping, adj Bell Common	11:37	13:27	15:22	17:17
Ivy Chimneys, adj Fishers Lane	11:38	13:28	15:23	17:18
Ivy Chimneys, adj Meadow View	11:39		15:24	17:19
Epping, adj Western Avenue	11:41		15:26	17:21
Epping, opp Sunnyside Road	11:42		15:27	17:22
Epping, opp Woodland Grove	11:43		15:28	17:23
Epping, o/s Woodlands	11:44	13:34	15:29	17:24
Epping, adj The Orchards	11:45	13:35	15:30	17:25
Epping, opp Allnutts Road	11:45		15:30	17:25
Epping, adj Stewards Green	11:46		15:31	17:26
Fiddlers Hamlet, opp The Merry Fiddlers	11:48	13:38	15:33	17:28
Coopersale, Piazza (N-bound)	arr 11:50	13:40	15:35	17:30

Mondays to Fridays

Coopersale, Piazza (S-bound)	dep	07:55	10:02	12:01	14:00	15:50	17:40	19:35
Fiddlers Hamlet, o/s The Merry Fiddlers		07:59	10:06	12:05	14:04	15:54	17:44	19:39
Epping, opp Stewards Green		08:00	10:07	12:06	14:05	15:54	17:45	19:40
Epping, adj Allnutts Road		08:01	10:08	12:07	14:06	15:55	17:46	19:41
Epping, opp The Orchards		08:02	10:09	12:08	14:07	15:55	17:47	19:42
Epping, opp Woodlands		08:03	10:10	12:09	14:08	15:56	17:48	19:43
Epping, adj Woodland Grove		- 1	10:10	12:09	14:08	15:56	17:48	19:43
Epping, adj Sunnyside Road			10:11	12:10	14:09	15:57	17:49	19:44
Epping, opp Western Avenue		- 1	10:12	12:11	14:10	15:59	17:50	19:45
Ivy Chimneys, opp Meadow View			10:14	12:13	14:12	16:01	17:52	19:47
Ivy Chimneys, opp Fishers Lane			10:15	12:14	14:13	16:02	17:53	19:48
Epping, opp Bell Common			10:17	12:16	14:15	16:04	17:55	19:50
Epping, adj Bury Lane			10:18	12:17	14:16	16:05	17:56	19:51
Epping, o/s Tesco Store			10:20	12:19	14:18	16:08	17:58	19:53
Epping, adj Nicholl Road		08:07	- 1	1	T	1	1	
Epping, o/s Church		08:10	10:24	12:23	14:22	16:12	18:02	19:57
Epping, o/s Council Offices		08:10	10:24	12:23	14:22	16:12	18:02	19:57
Epping Green, adj Green Close		08:20	10:34	12:33	14:32	16:22	18:12	20:07
Sumners Farm, opp Parsloe Road		08:21	10:35	12:34	14:33	16:23	18:13	20:08
Broadley Common, opp Ada Cole Stables		08:22	10:36	12:35	14:34	16:24	18:14	20:09
Tylers Cross, Tylers Cross (N-bound)		08:24	10:38	12:37	14:36	16:26	18:16	20:11
Halls Green, opp Old House Lane		08:25	10:39	12:38	14:37	16:27	18:17	20:12
Roydon, opp Kingsmead Close		08:29	10:42	12:41	14:40	16:30	18:20	20:15
Roydon, opp Telephone Exchange		08:30	10:43	12:42	14:41	16:31	18:21	20:16
Roydon, o/s Village Hall		08:30	10:43	12:42	14:41	16:31	18:21	20:16
Pinnacles, opp Pitney Bowes		08:34	10:47	12:46	14:45	16:35	18:25	20:20
Pinnacles, opp GSK Fourth Avenue		08:35	10:48	12:47	14:46	16:36	18:26	20:21
Pinnacles, o/s Seedbed Centre		08:35	10:48	12:47	14:46	16:36	18:26	20:21
Harlow, o/s PAH Fourth Avenue		08:37	10:50	12:49	14:48	16:38	18:28	20:23
Harlow Town Centre, o/s Bus Garage		08:38	10:51	12:50	14:49	16:39	18:29	20:24
Harlow Town Centre, Bus Station (Stand 11)	arr							20:26
Harlow Town Centre, Bus Station (Stand 13)	arr	08:40	10:53	12:52	14:51	16:41	18:31	

### Saturdays

Coopersale, Piazza (S-bound)	dep 10:00	11:56	13:45	15:40
Fiddlers Hamlet, o/s The Merry Fiddlers	10:04	11:58	13:49	15:44
Epping, opp Stewards Green	10:05	11:59	13:50	15:45
Epping, adj Allnutts Road	10:06	12:00	13:51	15:46
Epping, opp The Orchards	10:07	12:01	13:52	15:47
Epping, opp Woodlands	10:08	12:02	13:53	15:48
Epping, adj Woodland Grove	10:08	12:02	13:53	15:48
Epping, adj Sunnyside Road	10:09	12:03	13:54	15:49
Epping, opp Western Avenue	10:10	12:04	13:55	15:50
Ivy Chimneys, opp Meadow View	10:12	12:06	13:57	15:52
Ivy Chimneys, opp Fishers Lane	10:13	12:07	13:58	15:53
Epping, opp Bell Common	10:15	12:09	14:00	15:55
Epping, adj Bury Lane	10:16	12:10	14:01	15:56
Epping, o/s Tesco Store	10:18	12:12	14:03	15:58
Epping, o/s Church	10:22	12:16	14:07	16:02
Epping, o/s Council Offices	10:22	12:16	14:07	16:02
Epping Green, adj Green Close	10:32	12:26	14:17	16:12
Sumners Farm, opp Parsloe Road	10:33	12:27	14:18	16:13
Broadley Common, opp Ada Cole Stables	10:34	12:28	14:19	16:14
Tylers Cross, Tylers Cross (N-bound)	10:36	12:30	14:21	16:16
Halls Green, opp Old House Lane	10:37	12:31	14:22	16:17
Roydon, opp Kingsmead Close	10:40	12:34	14:24	16:20
Roydon, opp Telephone Exchange	10:41	12:35	14:25	16:21
Roydon, o/s Village Hall	10:41	12:35	14:26	16:21
Pinnacles, opp Pitney Bowes	10:45	12:39	14:30	16:25
Pinnacles, opp GSK Fourth Avenue	10:46	12:40	14:30	16:26
Pinnacles, o/s Seedbed Centre	10:46	12:40	14:31	16:26
Harlow, o/s PAH Fourth Avenue	10:48	12:42	14:32	16:28
Harlow Town Centre, o/s Bus Garage	10:49	12:43	14:34	16:29
Harlow Town Centre, Bus Station (Stand 13)	arr 10:51	12:45	14:36	16:31

# Sundays

Loughton, Loughton Station (Stop A)	dep	08:34	10:34	12:34	14:34	16:34	18:34	20:34
Loughton, o/s Sainsburys Store	p	08:34	10:34			16:34		20:34
Loughton, opp The Crown		08:34		12:34			18:34	20:34
Loughton, adj Forest Road		08:35	10:35	12:35	14:35	16:35	18:35	20:35
Loughton, o/s Morrisons		08:36	10:36		14:36		18:36	20:36
Loughton, opp Traps Hill Library		08:36	10:36	12:36	14:36	16:36	18:36	20:36
Loughton, adj West View		08:37	10:37	12:37	14:37	16:37	18:37	20:37
Loughton, opp Oakview School		08:38	10:38	12:38	14:38	16:38	18:38	20:38
Loughton, adj Durnell Way		08:38	10:38	12:38	14:38	16:38	18:38	20:38
Loughton, adj Newmans Close		08:39	10:39	12:39	14:39	16:39	18:39	20:39
Loughton, opp Hatfields		08:39	10:39	12:39	14:39	16:39	18:39	20:39
Debden, opp Newmans Lane		08:39	10:39	12:39	14:39	16:39	18:39	20:39
Debden, adj Ibbetson Path		08:40	10:40	12:40	14:40		18:40	20:40
Debden, opp Torrington Drive		08:41	10:41		14:41		18:41	20:41
Debden, opp Burton Road		08:41	-			16:41		20:41
Debden, nr Rectory Lane		08:43	10:43	12:43			18:43	
Debden, o/s Debden Station		08:43	10:43	12:43	14:43	16:43	18:43	20:43
Chigwell, Rolls Park Corner (NE-bound)		08:45	10:45	12:45	14:45	16:45	18:45	20:45
Abridge, opp Caravan Park		08:49	10:49		14:49		18:49	20:49
Abridge, opp Log Cabin Cafe		08:50	10:50		14:50		18:50	20:50
Abridge, o/s The Blue Boar		08:50		12:50				20:50
Abridge, o/s Piggotts Farm		08:51				16:51		20:51
Theydon Bois, adj Coopersale Lane		08:54	10:54	12:54	14:54		18:54	20:54
Theydon Bois, adj Theydon Bois Green		08:56	10:56	12:56	14:56	16:56	18:56	20:56
Theydon Bois, opp Village Hall		08:56	10:56	12:56	14:56	16:56	18:56	20:56
Theydon Bois, opp Morgan Crescent		08:56	10:56	12:56	14:56	16:56	18:56	20:56
Theydon Bois, o/s Little Gregories		08:57	10:57		14:57		18:57	
Theydon Bois, opp Golf Club  Ivy Chimneys, adj Fishers Lane		08:58 08:59	10:58	12:58 12:59	14:58 14:59		18:58 18:59	20:58
						16:59 <b>17:00</b>		20:59
lyy Chimneye adi Meadow View							10.00	21.00
Ivy Chimneys, adj Meadow View		09:00	11:00	13:00	15:00		19:00	21:00
Epping, adj Western Avenue		<b>09:00</b> 09:01	<b>11:00</b> 11:01	<b>13:00</b> 13:01	<b>15:00</b> 15:01	17:01	19:01	21:01
Epping, adj Western Avenue Epping, opp Sunnyside Road		<b>09:00</b> 09:01 09:02	11:00 11:01 11:02	13:00 13:01 13:02	15:00 15:01 15:02	17:01 17:02	19:01 19:02	21:01 21:02
Epping, adj Western Avenue Epping, opp Sunnyside Road Epping, opp Woodland Grove		09:00 09:01 09:02 09:03	11:00 11:01 11:02 11:03	13:00 13:01 13:02 13:03	15:00 15:01 15:02 15:03	17:01 17:02 17:03	19:01 19:02 19:03	21:01 21:02 21:03
Epping, adj Western Avenue Epping, opp Sunnyside Road Epping, opp Woodland Grove Epping, o/s Woodlands		09:00 09:01 09:02 09:03 09:03	11:00 11:01 11:02 11:03 11:03	13:00 13:01 13:02 13:03 13:03	15:00 15:01 15:02 15:03 15:03	17:01 17:02 17:03 17:03	19:01 19:02 19:03 19:03	21:01 21:02 21:03 21:03
Epping, adj Western Avenue Epping, opp Sunnyside Road Epping, opp Woodland Grove Epping, o/s Woodlands Epping, o/s Railway Station		09:00 09:01 09:02 09:03 09:03	11:00 11:01 11:02 11:03 11:03	13:00 13:01 13:02 13:03 13:03 13:04	15:00 15:01 15:02 15:03 15:03 15:04	17:01 17:02 17:03 17:03 <b>17:04</b>	19:01 19:02 19:03 19:03 19:04	21:01 21:02 21:03 21:03 <b>21:04</b>
Epping, adj Western Avenue Epping, opp Sunnyside Road Epping, opp Woodland Grove Epping, o/s Woodlands Epping, o/s Railway Station Epping, opp Woodlands		09:00 09:01 09:02 09:03 09:03 09:04	11:00 11:01 11:02 11:03 11:03 11:04	13:00 13:01 13:02 13:03 13:03 13:04	15:00 15:01 15:02 15:03 15:03 15:04	17:01 17:02 17:03 17:03 <b>17:04</b>	19:01 19:02 19:03 19:03 <b>19:04</b>	21:01 21:02 21:03 21:03 <b>21:04</b> 21:04
Epping, adj Western Avenue Epping, opp Sunnyside Road Epping, opp Woodland Grove Epping, o/s Woodlands Epping, o/s Railway Station		09:00 09:01 09:02 09:03 09:03 09:04 09:04	11:00 11:01 11:02 11:03 11:03 11:04 11:04 11:05	13:00 13:01 13:02 13:03 13:03 13:04 13:04 13:05	15:00 15:01 15:02 15:03 15:03 15:04 15:04 15:05	17:01 17:02 17:03 17:03 <b>17:04</b>	19:01 19:02 19:03 19:03 <b>19:04</b> 19:04	21:01 21:02 21:03 21:03 <b>21:04</b> 21:04 21:05

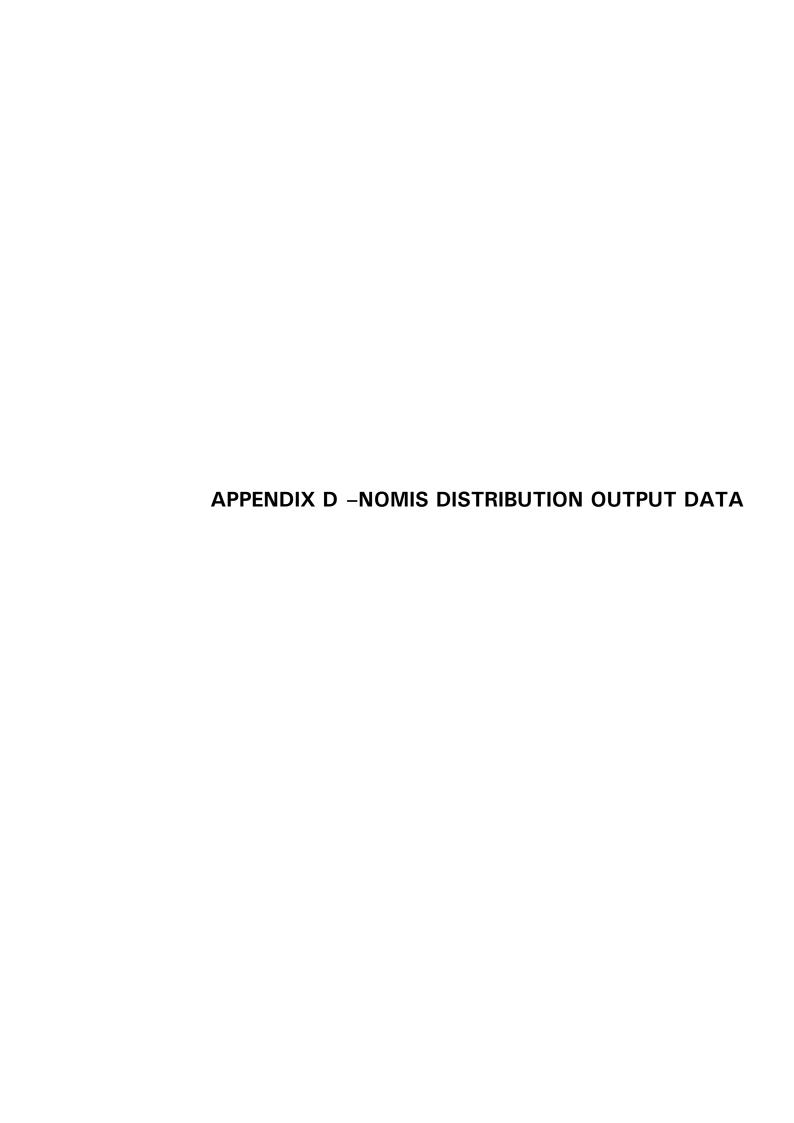
Epping, o/s Council Offices	09:06	11:06	13:06	15:06	17:06	19:06	21:06
Epping, adj Maltings Lane	09:07	11:07	13:07	15:07	17:07	19:07	21:07
B1026 inside St. Margaret's Hospital, Epping	09:09	11:09	13:09	15:09	17:09	19:09	21:09
Epping, o/s St. Margaret's Hospital - main Rd	09:09	11:09	13:09	15:09	17:09	19:09	21:09
Epping, opp Brickfield Business Centre	09:10	11:10	13:10	15:10	17:10	19:10	21:10
Thornwood Common, adj Carpenters Arms	09:12	11:12	13:12	15:12	17:12	19:12	21:12
Thornwood, adj Upland Road	09:12	11:12	13:12	15:12	17:12	19:12	21:12
Thornwood, opp Cross Keys	09:14	11:14	13:14	15:14	17:14	19:14	21:14
Thornwood, o/s Horseshoes Farm	09:15	11:15	13:15	15:15	17:15	19:15	21:15
Thornwood, opp McDonalds	09:17	11:17	13:17	15:17	17:17	19:17	21:17
Potter Street, opp Park Avenue	09:19	11:19	13:19	15:19	17:19	19:19	21:19
Potter Street, nr The Red Lion	09:21	11:21	13:21	15:21	17:21	19:21	21:21
Potter Street, adj Larkswood	09:21	11:21	13:21	15:21	17:21	19:21	21:21
Brays Grove, opp School	09:22	11:22	13:22	15:22	17:22	19:22	21:22
Brays Grove, o/s Baileys	09:23	11:23	13:23	15:23	17:23	19:23	21:23
Brays Grove, opp Tumbler Road	09:25	11:25	13:25	15:25	17:25	19:25	21:25
Harlow, opp Leisure Centre	09:28	11:28	13:28	15:28	17:28	19:28	21:28
Harlow Town Centre, Bus Station (Stand 13)	arr 09:30	11:30	13:30	15:30	17:30	19:30	21:30

Arriva Herts and Essex

# Sundays

Harlow, o's Leisure Centre   97:36   99:36   11:36   13:36   15:36   17:36   19:39	Harlow Town Centre, Bus Station (Stand 13)	dep	07:35	09:35	11:35	13:35	15:35	17:35	19:35
Brays Grove, ops Baileys Brays Grove, o's School Brays	Harlow, o/s Leisure Centre		07:36	09:36	11:36	13:36	15:36	17:36	19:36
Brays Grove, o's School   97:41   99:41   11:41   13:41   15:41   17:41   19:41   Potter Street, opp Larkswood   97:42   99:42   11:42   13:42   15:42   17:42   19:42   Potter Street, app Tarkswood   97:43   99:43   11:43   13:43   15:43   17:43   19:43   Potter Street, app Tark Avenue   97:44   99:44   11:44   13:44   15:44   17:44   19:44   Thornwood, ops McDonalds   97:46   99:46   11:46   13:46   15:46   17:46   19:46   Thornwood, opp Rye Hill Road   97:48   99:48   11:49   13:49   15:49   17:49   19:49   Thornwood, opp Rye Hill Road   97:49   99:49   11:49   13:49   15:49   17:49   19:49   Thornwood, opp Rye Hill Road   97:59   99:55   11:55   13:55   17:50   19:50   Thornwood Common, opp Carpenters Arms   97:52   99:52   11:52   13:52   15:52   17:52   19:55   Thornwood Common, opp Carpenters Arms   97:55   99:55   11:55   13:55   15:55   17:55   19:55   Epping, ops Maltings Lane   97:56   99:55   11:55   13:55   15:55   17:56   19:56   Epping, opp Council Offices   97:57   99:57   11:57   13:57   15:57   17:57   19:57   Epping, opp Nichoil Road   97:58   99:58   11:58   13:58   15:58   17:58   19:58   Epping, op Rallway Station   97:59   99:59   11:59   13:59   15:59   17:59   19:59   Epping, o's Woodland Grove   Epping, adj Woodland Grove   Epping, adj Sunnyside Road   88:01   10:01   12:01   14:01   16:01   18:01   20:04   14:04   16:04   18:04   20:04   14:04   16:04   18	Brays Grove, adj Tumbler Road		07:39	09:39	11:39	13:39	15:39	17:39	19:39
Potter Street, app Larkswood   97:42   99:42   11:42   13:42   15:42   17:42   19:42   Potter Street, adj The Red Lion   97:43   99:43   11:43   13:43   15:43   17:43   19:43   Potter Street, adj Park Avenue   97:44   99:44   11:44   13:44   15:44   17:44   19:44   Thornwood, of McDonalds   97:46   99:46   11:46   13:46   15:46   17:46   19:46   Thornwood, opp Hye Hill Road   97:49   99:49   11:43   13:43   15:43   17:43   19:48   Potter Street, adj Park Avenue   97:49   99:49   11:49   13:49   15:49   17:49   19:49   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   99:50   11:50   13:50   15:50   17:50   19:50   Potter Street, adj Park Avenue   97:50   97	Brays Grove, opp Baileys		07:40	09:40	11:40	13:40	15:40	17:40	19:40
Potter Street, adj The Red Lion	Brays Grove, o/s School		07:41	09:41	11:41	13:41	15:41	17:41	19:41
Potter Street, adj Park Avenue Thornwood, o's McDonalds Thornwood, o's McDonalds Thornwood, o's McDonalds Thornwood, o's McDonalds Thornwood, oph Phoreshoes Farm Thornwood, oph Phoreshoes Farm Thornwood, oph Phoreshoes Farm Thornwood, oph Phoreshoes Farm Thornwood, oph Upland Road Thornwood, oph Upland Road Thornwood Oph Malting All Thornwood Road Thornwood Road Thornwood Oph Malting All Thornwood Road Thornwood Road Thornwood Oph Malting All Thornwood Road Thor			07:42	09:42	11:42	13:42	15:42	17:42	19:42
Thornwood, o/s McDonalds Thornwood, o/s McDonalds Thornwood, opp Horseshoes Farm Thornwood, opp Horseshoes Farm Thornwood, opp Horseshoes Farm Thornwood, opp We Hill Road Thornwood, opp We Hill Road Thornwood, opp Upland Road Thornwood Common, opp Carpenters Arms Thornwood Common, opp Carpenters Thornwood Common, opp Carpens Abridge, opp Pigotits Farm Abridge, opp Pigotits Farm Abridge, opp Pigotits Farm Abridge, opp Coopersale Lane Abridge, opp Coopersale Lane Abridge, opp Coopersale Lane Abridge, opp Coope	Potter Street, adj The Red Lion		07:43	09:43	11:43	13:43	15:43	17:43	19:43
Thornwood, opp Horseshoes Farm Thornwood, opp Pye Hill Road Thornwood, opp Under Road Thornwood, opp Under Road Thornwood, opp Under Road Thornwood, opp Under Road Thornwood Common, opp Carpenters Arms Thornwood Common, op			07:44	09:44	11:44	13:44	15:44	17:44	19:44
Thornwood, opp Rye Hill Road Thornwood, opp Upland Road Thornwood Common, opp Carpenters Arms Thornwood Common, opp Carpenters Arms Epping, o's Brickfield Business Centre Fpping, o's Brickfield Business Centre Epping, opp Maltings Lane Epping, opp Maltings Lane Epping, opp Carpenters Arms Epping, opp Maltings Lane Epping, opp Council Offices Epping, opp Council Offices Epping, opp Church Epping, opp Church Epping, opp Nicholl Road Epping, op S Woodland Grove Epping, of S Railiway Station Epping, adj Woodland Grove Epping, adj Sunnyside Road Epping, adj Sunnyside Road Epping, opp Mestern Avenue Ny Chimneys, opp Meadow View Ivy Chimneys, opp Meadow View Ivy Chimneys, opp Meadow View Theydon Bois, of Solif Club Theydon Bois, opp Lifte Gregories Theydon Bois, opp The Blue Boar Abridge, opp Piggotts Farm Abridge, opp The Blue Boar Abridge, op Caravan Park Abridge, op Caravan Park B1026 Inside St. Margaret's Hospital Arms Agridge, adj Log 2d I 11:50 13:50 13:50 13:50 13:50 13:55 15:55 17:55 19	,		07:46	09:46	11:46		15:46	17:46	
Thornwood, opp Upland Road Thornwood Common, opp Carpenters Arms Thornwood Carpenters Arms Thornwood Common, opp Carpenters Arms Thornwood Carpenters Thornwood Carpent			07:48	09:48				17:48	19:48
Thornwood Common, opp Carpenters Arms   67:52   69:52   11:52   13:52   15:52   17:52   19:52   18:50   18:5			07:49	09:49					
Epping, o/s Brickfield Business Centre   07:53	· · · ·								
B1026 inside St. Margaret's Hospital, Epping   07:55   09:55   11:55   13:55   17:55   19:55   19:55   Epping, opp Maltings Lane   07:56   09:56   11:56   13:56   15:56   17:56   19:56   Epping, opp Council Offices   07:57   09:57   11:57   13:57   15:57   17:57   19:57   Epping, opp Church   07:58   09:58   11:58   13:58   15:58   17:58   19:58   Epping, opp Nicholi Road   07:58   09:58   11:58   13:58   15:58   17:58   19:58   Epping, of S Woodlands   07:59   09:59   11:59   13:59   15:59   17:59   19:59   Epping, of S Railway Station   08:00   10:00   12:00   14:00   16:00   18:00   20:00   Epping, adj Sunnyside Road   08:01   10:01   12:01   14:01   16:01   18:01   20:01   Epping, opp Western Avenue   08:02   10:02   12:02   14:02   16:02   18:02   20:02   Epping, opp Meadow View   08:04   10:04   12:04   14:04   16:04   18:04   20:04   Epping, opp Meadow View   08:04   10:04   12:04   14:05   16:05   18:05   20:05   Epping, opp Little Gregories   08:06   10:06   12:06   14:06   16:06   18:06   20:06   Epping, opp Meadow View   08:04   10:04   12:04   14:04   16:04   18:04   20:04   Epping, opp Meadow View   08:04   10:04   12:04   14:06   16:06   18:06   20:06   Epping, opp Meadow View   08:04   10:04   12:04   14:06   16:06   18:06   20:06   Epping, opp Little Gregories   08:06   10:06   12:06   14:06   16:06   18:06   20:06   Epping, opp Meadow View   08:07   10:07   12:07   14:07   16:07   18:07   20:07   Epping, opp Theydon Bois, ofs Village Hall   08:07   10:07   12:07   14:07   16:07   18:07   20:07   Epping, opp Theydon Bois, opp Coopersale Lane   08:09   10:09   12:09   14:09   16:09   18:09   20:09   Epping, opp The Blue Boar   08:13   10:13   12:13   14:13   16:13   18:13   20:13   Epping, opp The Blue Boar   08:14   10:14   12:14   14:14   16:14   18:14   20:14   Epping, opp The Blue Boar   Epping, opp Caravan Park   08:14   10:14   12:14   14:14   16:14   18:14   20:14   Epping, opp The Blue Boar   O8:08   O8:14   10:14   12:14   14:14   16:14   18:14   20:14   Epping, opp The Blue Boar   O8:			07:52	09:52					
Epping, opp Maltings Lane Epping, opp Council Offices Epping, opp Council Offices Epping, opp Church Epping, opp Nicholl Road Epping, of S Woodlands Epping, of S Woodland Grove Epping, adj Woodland Grove Epping, adj Sunnyside Road Epping, opp Western Avenue By Chimneys, opp Meadow View Elyv Chimneys, opp Meadow View Elyv Chimneys, opp Fishers Lane Theydon Bois, of Solf Club Theydon Bois, of Solf Club Theydon Bois, opp Little Gregories Theydon Bois, opp Theydon Bois Green Theydon Bois, opp Theydon Bois Green Abridge, opp Piggotts Farm Abridge, opp The Blue Boar Abridge, op P The Blue Boar Abridge, op S Caravan Park  Epping, opp Maltings Lane Epping, opp Coopersale Lane Abridge, of S Caravan Park  O7:58 09:58 11:58 13:58 15:58 17:58 19:58 P7:59 19:59 P7:59 11:59 13:59 P7:59 19:59 P7:5	11 0							17:53	19:53
Epping, opp Council Offices   07:57   09:57   11:57   13:57   17:57   19:57   Epping, opp Church   07:58   09:58   11:58   13:58   15:58   17:58   19:58   Epping, opp Nicholl Road   07:58   09:58   11:58   13:58   15:58   17:58   19:58   Epping, o/s Woodlands   07:59   09:59   11:59   13:59   15:59   17:59   19:59   Epping, o/s Railway Station   08:00   10:00   12:00   14:00   16:00   18:00   20:00   16:00   16:00   18:00   20:00   16:00   16:00   18:00   10:00			07:55	09:55					
Epping, opp Church         07:58         09:58         11:58         13:58         15:58         17:58         19:58           Epping, opp Nicholl Road         07:58         09:58         11:58         13:58         15:58         17:58         19:58           Epping, of Woodlands         07:59         09:59         11:59         13:59         15:59         17:59         19:59           Epping, adj Woodland Grove         08:09         10:00         12:00         14:00         16:00         18:00         20:00           Epping, adj Woodland Grove         08:00         10:00         12:00         14:00         16:00         18:00         20:00           Epping, adj Woodland Grove         08:01         10:01         12:01         14:01         16:00         18:00         20:00           Epping, adj Woodland Grove         08:02         10:01         12:01         14:01         16:01         18:00         20:00           Epping, adj Woodland Grove         08:04         10:01         12:01         14:01         16:01         18:02         20:00           Epping, adj Woodland Grove         08:04         10:01         12:02         14:02         16:02         18:02         20:02           10:02	11 07 11		07:56	09:56	11:56	13:56	15:56	17:56	19:56
Epping, opp Nicholl Road Epping, o/s Woodlands Epping, o/s Woodlands Epping, o/s Railway Station Epping, adj Woodland Grove Epping, adj Woodland Grove Epping, adj Sunnyside Road Epping, adj Sunnyside Road Epping, opp Western Avenue Epping, opp Western Avenue Epping, opp Fishers Lane Ivy Chimneys, opp Fishers Lane Theydon Bois, off Club Theydon Bois, opp Little Gregories Theydon Bois, opp Theydon Bois Green Theydon Bois, opp Theydon Bois Green Abridge, opp Pigotts Farm Abridge, adj Log Cabin Cafe Abridge, adj Log Cabin Cafe Abridge, off Scaravan Park  Psping, o/s Woodlands 07:59 09:59 11:59 13:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:59 09:59 11:59 13:59 15:59 17:59 19:59 07:50 09:59 11:59 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 08:			07:57	09:57					
Epping, o/s Woodlands       07:59       09:59       11:59       13:59       15:59       17:59       19:59         Epping, o/s Railway Station       08:00       10:00       12:00       14:00       16:00       18:00       20:00         Epping, adj Woodland Grove       08:00       10:00       12:00       14:00       16:00       18:00       20:00         Epping, adj Sunnyside Road       08:01       10:01       12:01       14:01       16:01       18:01       20:01         Epping, opp Western Avenue       08:02       10:02       12:02       14:02       16:02       18:02       20:02         Ivy Chimneys, opp Meadow View       08:04       10:04       12:04       14:04       16:04       18:04       20:04         Ivy Chimneys, opp Fishers Lane       08:04       10:04       12:04       14:04       16:04       18:04       20:04         Theydon Bois, o/s Golf Club       08:05       10:05       12:05       14:05       16:05       18:04       20:04         Theydon Bois, opp Little Gregories       08:06       10:05       12:05       14:05       16:05       18:06       20:05         Theydon Bois, oylidage Hall       08:07       10:07       12:07       14:07       16:0			07:58	09:58	11:58	13:58	15:58	17:58	19:58
Epping, o/s Railway Station         08:00         10:00         12:00         14:00         16:00         18:00         20:00           Epping, adj Woodland Grove         08:00         10:00         12:00         14:00         16:00         18:00         20:00           Epping, adj Sunnyside Road         08:01         10:01         12:01         14:01         16:01         18:01         20:01           Epping, opp Western Avenue         08:02         10:02         12:02         14:02         16:02         18:02         20:02           Ivy Chimneys, opp Meadow View         08:04         10:04         12:04         14:04         16:04         18:04         20:04           Ivy Chimneys, opp Fishers Lane         08:04         10:04         12:04         14:04         16:04         18:04         20:04           Theydon Bois, o/s Golf Club         08:05         10:05         12:05         14:05         16:04         18:04         20:04           Theydon Bois, app Little Gregories         08:06         10:06         12:05         14:05         16:05         18:05         20:05           Theydon Bois, app Theydon Bois Green         08:07         10:07         12:07         14:07         16:07         18:07         20:07			07:58	09:58				17:58	19:58
Epping, adj Woodland Grove Epping, adj Sunnyside Road Epping, adj Sunnyside Road Epping, opp Western Avenue 88:02 10:02 12:02 14:02 16:02 18:02 20:02 10:02 10:02 12:02 14:02 16:02 18:02 20:02 10:02			07:59	09:59					
Epping, adj Sunnyside Road Epping, opp Western Avenue Beping, opp Western Avenue Besing Description			08:00	10:00	12:00	14:00	16:00	18:00	20:00
Epping, opp Western Avenue       08:02       10:02       12:02       14:02       16:02       18:02       20:02         Ivy Chimneys, opp Meadow View       08:04       10:04       12:04       14:04       16:04       18:04       20:04         Ivy Chimneys, opp Fishers Lane       08:04       10:04       12:04       14:04       16:04       18:04       20:04         Theydon Bois, oys Golf Club       08:05       10:05       12:05       14:05       16:05       18:05       20:05         Theydon Bois, opp Little Gregories       08:06       10:06       12:06       14:06       16:06       18:06       20:06         Theydon Bois, adj Morgan Crescent       08:07       10:07       12:07       14:07       16:07       18:07       20:07         Theydon Bois, o's Village Hall       08:07       10:07       12:07       14:07       16:07       18:07       20:07         Theydon Bois, opp Theydon Bois Green       08:08       10:08       12:08       14:08       16:07       18:07       20:07         Theydon Bois, opp Coopersale Lane       08:09       10:09       12:09       14:09       16:09       18:09       20:09         Abridge, opp The Blue Boar       08:12       10:12       12:12	11 0.		08:00						
Ivy Chimneys, opp Meadow View         08:04         10:04         12:04         14:04         16:04         18:04         20:04           Ivy Chimneys, opp Fishers Lane         08:04         10:04         12:04         14:04         16:04         18:04         20:04           Theydon Bois, o/s Golf Club         08:05         10:05         12:05         14:05         16:05         18:05         20:05           Theydon Bois, opp Little Gregories         08:06         10:06         12:06         14:06         16:06         18:06         20:06           Theydon Bois, adj Morgan Crescent         08:07         10:07         12:07         14:07         16:07         18:07         20:07           Theydon Bois, o/s Village Hall         08:07         10:07         12:07         14:07         16:07         18:07         20:07           Theydon Bois, opp Theydon Bois Green         08:08         10:08         12:08         14:08         16:08         18:08         20:08           Theydon Bois, opp Coopersale Lane         08:09         10:09         12:09         14:09         16:09         18:09         20:09           Abridge, opp Piggotts Farm         08:12         10:12         12:12         14:12         16:12         18:12         20:12			08:01	10:01	12:01	14:01	16:01	18:01	20:01
Ivy Chimneys, opp Fishers Lane	11 0 11		08:02	10:02					
Theydon Bois, o/s Golf Club  Theydon Bois, o/s Golf Club  Theydon Bois, opp Little Gregories  Theydon Bois, opp Little Gregories  O8:06 10:06 12:06 14:06 16:06 18:06 20:06  Theydon Bois, adj Morgan Crescent  O8:07 10:07 12:07 14:07 16:07 18:07 20:07  Theydon Bois, o/s Village Hall  O8:08 10:08 12:08 14:08 16:08 18:08 20:08  Theydon Bois, opp Theydon Bois Green  O8:09 10:09 12:09 14:09 16:09 18:09 20:09  Abridge, opp Piggotts Farm  O8:12 10:12 12:12 14:12 16:12 18:12 20:12  Abridge, adj Log Cabin Cafe  O8:14 10:14 12:14 14:14 16:14 18:14 20:14  Abridge, o/s Caravan Park  O8:14 10:14 12:14 14:14 16:14 18:14 20:14			08:04	10:04	12:04	14:04	16:04	18:04	20:04
Theydon Bois, opp Little Gregories Theydon Bois, adj Morgan Crescent Theydon Bois, adj Morgan Crescent Theydon Bois, o/s Village Hall Theydon Bois, opp Theydon Bois Green Theydon Bois, opp Coopersale Lane Abridge, opp The Blue Boar Abridge, o/s Caravan Park  Theydon Bois, o/s Caravan Park  O8:06 10:06 12:06 14:06 16:06 18:06 20:06 18:07 10:07 12:07 14:07 16:07 18:07 18:07 20:07 10:07 12:08 14:08 16:08 18:08 10:08 12:08 14:08 16:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:08 18:08 10:09 10:			08:04	10:04					
Theydon Bois, adj Morgan Crescent Theydon Bois, o/s Village Hall Theydon Bois, o/s Village Hall O8:07 10:07 12:07 14:07 16:07 18:07 20:07  Theydon Bois, opp Theydon Bois Green O8:08 10:08 12:08 14:08 16:08 18:08 20:08  Theydon Bois, opp Coopersale Lane O8:09 10:09 12:09 14:09 16:09 18:09 20:09  Abridge, opp Piggotts Farm O8:12 10:12 12:12 14:12 16:12 18:12 20:12  Abridge, opp The Blue Boar O8:13 10:13 12:13 14:13 16:13 18:13 20:13  Abridge, adj Log Cabin Cafe O8:14 10:14 12:14 14:14 16:14 18:14 20:14	•		08:05	10:05					
Theydon Bois, o/s Village Hall  Theydon Bois, opp Theydon Bois Green  Theydon Bois, opp Coopersale Lane  Abridge, opp The Blue Boar  Abridge, adj Log Cabin Cafe  Abridge, o/s Caravan Park  D8:07 10:07 12:07 14:07 16:07 18:07 20:07  10:08 12:08 14:08 16:08 18:08 20:08  10:09 10:09 12:09 14:09 16:09 18:09 20:09  10:09 10:09 12:09 14:12 16:12 18:12 20:12  10:12 12:12 14:12 16:12 18:12 20:12  10:13 10:14 12:14 14:14 16:14 18:14 20:14				10:06					
Theydon Bois, opp Theydon Bois Green       08:08       10:08       12:08       14:08       16:08       18:08       20:08         Theydon Bois, opp Coopersale Lane       08:09       10:09       12:09       14:09       16:09       18:09       20:09         Abridge, opp Piggotts Farm       08:12       10:12       12:12       14:12       16:12       18:12       20:12         Abridge, opp The Blue Boar       08:13       10:13       12:13       14:13       16:13       18:13       20:13         Abridge, adj Log Cabin Cafe       08:14       10:14       12:14       14:14       16:14       18:14       20:14         Abridge, o/s Caravan Park       08:14       10:14       12:14       14:14       16:14       18:14       20:14					-				
Theydon Bois, opp Coopersale Lane  08:09 10:09 12:09 14:09 16:09 18:09 20:09  Abridge, opp Piggotts Farm  08:12 10:12 12:12 14:12 16:12 18:12 20:12  Abridge, opp The Blue Boar  08:13 10:13 12:13 14:13 16:13 18:13 20:13  Abridge, adj Log Cabin Cafe  08:14 10:14 12:14 14:14 16:14 18:14 20:14  Abridge, o/s Caravan Park  08:09 10:09 12:09 14:09 16:09 18:09 20:09  10:09 12:09 14:09 16:09 18:09 20:19  10:01 12:01 14:12 16:12 18:12 20:14	· · · · · · · · · · · · · · · · · · ·								
Abridge, opp Piggotts Farm  08:12 10:12 12:12 14:12 16:12 18:12 20:12  Abridge, opp The Blue Boar  08:13 10:13 12:13 14:13 16:13 18:13 20:13  Abridge, adj Log Cabin Cafe  08:14 10:14 12:14 14:14 16:14 18:14 20:14  Abridge, o/s Caravan Park  08:12 10:12 12:12 14:12 16:12 18:12 20:12  08:13 10:13 12:13 14:13 16:13 18:13 20:13  08:14 10:14 12:14 14:14 16:14 18:14 20:14									
Abridge, opp The Blue Boar 08:13 10:13 12:13 14:13 16:13 18:13 20:13  Abridge, adj Log Cabin Cafe 08:14 10:14 12:14 14:14 16:14 18:14 20:14  Abridge, o/s Caravan Park 08:14 10:14 12:14 14:14 16:14 18:14 20:14	• • • • • • • • • • • • • • • • • • • •								
Abridge, adj Log Cabin Cafe 08:14 10:14 12:14 14:14 16:14 18:14 20:14  Abridge, o/s Caravan Park 08:14 10:14 12:14 14:14 16:14 18:14 20:14	0 / 11 00								
Abridge, o/s Caravan Park 08:14 10:14 12:14 14:14 16:14 18:14 20:14	- · · · ·								
Chigwell, Rolls Park Corner (NW-bound) 08:18 10:18 12:18 14:18 16:18 18:18 20:18									
	Chigwell, Rolls Park Corner (NW-bound)		08:18	10:18	12:18	14:18	16:18	18:18	20:18

Debden, opp Debden Station	08:19	10:19	12:19	14:19	16:19	18:19	20:19
Debden, opp Torrington Drive	08:20	10:20	12:20	14:20	16:20	18:20	20:20
Debden, opp Burton Road	08:20	10:20	12:20	14:20	16:20	18:20	20:20
Debden, nr Rectory Lane	08:21	10:21	12:21	14:21	16:21	18:21	20:21
Debden, adj Borders Lane	08:21	10:21	12:21	14:21	16:21	18:21	20:21
Debden, opp Ibbetson Path	08:22	10:22	12:22	14:22	16:22	18:22	20:22
Loughton, adj Hatfields	08:22	10:22	12:22	14:22	16:22	18:22	20:22
Loughton, opp Newmans Close	08:23	10:23	12:23	14:23	16:23	18:23	20:23
Loughton, opp Durnell Way	08:24	10:24	12:24	14:24	16:24	18:24	20:24
Loughton, o/s Oakview School	08:24	10:24	12:24	14:24	16:24	18:24	20:24
Loughton, opp West View	08:25	10:25	12:25	14:25	16:25	18:25	20:25
Loughton, o/s Traps Hill Library	08:26	10:26	12:26	14:26	16:26	18:26	20:26
Loughton, opp Morrisons	08:26	10:26	12:26	14:26	16:26	18:26	20:26
Loughton, opp Forest Road	08:27	10:27	12:27	14:27	16:27	18:27	20:27
Loughton, nr The Crown	08:28	10:28	12:28	14:28	16:28	18:28	20:28
Loughton, Loughton Station (Stop A)	arr 08:29	10:29	12:29	14:29	16.20	18:29	20:29



# WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level) ONS Crown Copyright Reserved [from Nomis on 5 April 2019]

All usual residents aged 16 and over in employment the week before the census Persons
2011
Driving a car or van

population units date

method of travel to work

place of work : 2011 super output area - middle layer	usual E02004532 : Epping Forest 006
E02004527 : Epping Forest 001	32
E02004528 : Epping Forest 002	13
E02004529 : Epping Forest 003	19
E02004530 : Epping Forest 004	9
E02004531 : Epping Forest 005	96
E02004532 : Epping Forest 00€	83
E02004533 : Epping Forest 007	4
E02004534 : Epping Forest 008	7
E02004535 : Epping Forest 009	10
E02004536 : Epping Forest 010	18
E02004537 : Epping Forest 011	37
E02004538 : Epping Forest 012	30
E02004539 : Epping Forest 013	7
E02004540 : Epping Forest 014	26
E02004541 : Epping Forest 015	16
E02004542 : Epping Forest 016	13
E02004543 : Epping Forest 017	2

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

#### WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population All usual residents aged 16 and over in employment the week before the census

units Persons date 2011

#### usual residence

abaai rebiaen				-	
place of work : 2011 census merged local authority district	E02004532 : Epping Forest 006	% Split	Route		
Basildon	19	1.8%	R1	Route 1:	Ivy Chimneys Road (W), Theydon Road (N), B1393 High Road (S)
Brentwood	22	2.0%	R2	Route 2:	Ivy Chimneys Road (E), Stewards Green Road (E), Mount Road (E)
Chelmsford	19	1.8%	R3	Route 3:	Ivy Chimneys Road (E), Stewards Green Road (E), Coopersale Street (N)
<b>Epping Forest</b>	422	39.3%	see tab 2	Route 4:	Ivy Chimneys Road (W), Theydon Road (N), B1393 High Road (NE), B182 Bury L
Harlow	114	10.6%	R4	Route 5:	Ivy Chimneys Road (E), Bower Hill (N),
Uttlesford	26	2.4%	R5	Route 6:	Ivy Chimneys Road (W), Theydon Road (S)
Broxbourne	42	3.9%	R4		
East Hertfordshire	23	2.1%	R4		
Welwyn Hatfield	14	1.3%	R1		
Barking and Dagenham	27	2.5%	R6		
Camden	11	1.0%	R6		
Enfield	35	3.3%	R1	R1	39.2%
Haringey	13	1.2%	R1	R2	6.7%
Havering	31	2.9%	R2	R3	5.6%
Newham	38	3.5%	R1	R4	16.7%
Redbridge	82	7.6%	R6	R5	19.1%
<b>Tower Hamlets</b>	32	3.0%	R1	R6	12.8%
Waltham Forest	85	7.9%	R1		100.0%
Westminster, City of London	20	1.9%	R1		
Total	1,075				

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

### WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

ONS Crown Copyright Reserved [from Nomis on 5 April 2019]

population All usual residents aged 16 and over in employment the week before the census

units Persons date 2011

method of travel to work Driving a car or van

#### usual residence

place of work : 2011 super output area - middle layer	Location	E02004532 : Epping Forest 006	%Split			
E02004527 : Epping Forest 001	North Weald	32	7.6%	3.0%	R3	3.0%
E02004528 : Epping Forest 002	Villages to West	13	3.1%	1.2%	R1	1.2%
E02004529 : Epping Forest 003	Villages to East	19	4.5%	1.8%	R2	1.8%
E02004530 : Epping Forest 004	Chipping Ongar	9	2.1%	0.8%	R3	0.8%
E02004531 : Epping Forest 005	Epping	96	22.7%	8.9%	R5	16.7%
E02004532 : Epping Forest 006	Epping	83	19.7%	7.7%	NЭ	10.7/0
E02004533 : Epping Forest 007	Waltham Abbey	4	0.9%	0.4%		
E02004534 : Epping Forest 008	Waltham Abbey	7	1.7%	0.7%	R1	2.0%
E02004535 : Epping Forest 009	Waltham Abbey	10	2.4%	0.9%		
E02004536 : Epping Forest 010	Villages to South	18	4.3%	1.7%	R6	1.7%
E02004537 : Epping Forest 011	Loughton	37	8.8%	3.4%		
E02004538 : Epping Forest 012	Loughton	30	7.1%	2.8%		
E02004539 : Epping Forest 013	Loughton	7	1.7%	0.7%	R1	12.2%
E02004540 : Epping Forest 014	Loughton	26	6.2%	2.4%	ΝŢ	12.270
E02004541 : Epping Forest 015	Buckhurst Hill	16	3.8%	1.5%		
E02004542 : Epping Forest 016	Chigwell	13	3.1%	1.2%		
E02004543 : Epping Forest 017	Hainault	2	0.5%	0.2%		
Total		422	100.0%	39.3%		

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

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# **APPENDIX 2**



# **Epping Forest District Council Local Plan Examination**

DATE	24 April 2019	CONFIDENTIALITY	Public	
SUBJECT	Epping Forest District Council Local Plan Examination – Inspectors Matters, Issues and Questions			

#### 1. Introduction

This memorandum is to provide a response in relation to the site-specific matters in relation to air quality and noise, as follows:

# 5b. What are the implications of its location adjacent to the M25 for air quality and noise? Air Quality

The site (EPP.R1) is located to the north of the M25 motorway where air quality conditions will be influenced by local transport emissions. The key air pollutants of concern associated with vehicle emissions are nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).

It is anticipated that the M25 will be located approximately 80m away from the proposed dwellings near the southern and western boundaries. The influence of the traffic emissions associated with the M25 at the site can be addressed by a study undertaken by Air Quality Consultants Ltd¹ (available from Defra's Local Air Quality Management (LAQM) support website²), in which the pattern of decline of NO₂ with distance from the kerb has been determined from monitoring data. According to the study, NO₂ concentrations rapidly decline towards background level as the distance from the kerb increases, shown in Figure 1, extracted from AQC's study. This is further illustrated in Figure 2 which indicates the reducing road contribution ('road-increment') to NO₂ concentrations with distance from the kerb. The contribution rapidly declines to about 50% of the total kerbside level by 25m and less than 25% of the total by 80m, dropping to nominal levels beyond 140m.

On this basis, it is likely that the pollutant concentrations at the vicinity of the proposed residential plots close to the southern boundary would be at acceptable levels. This will be confirmed in due course by ongoing air quality investigations.

<sup>&</sup>lt;sup>1</sup> Air Quality Consultants (2008). Nitrogen Dioxide Concentrations and Distance from Roads.

<sup>&</sup>lt;sup>2</sup> https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html



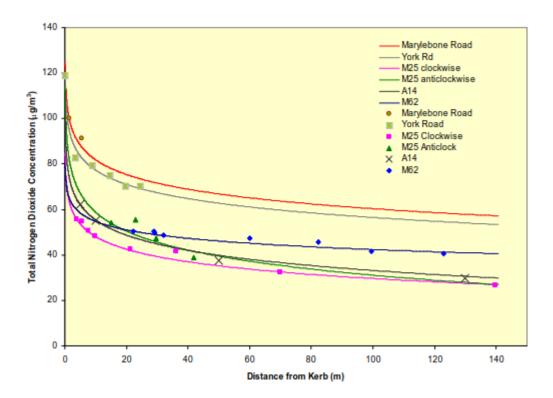


Figure 1 Total measured concentrations (µg/m³) against distance from kerb (m)

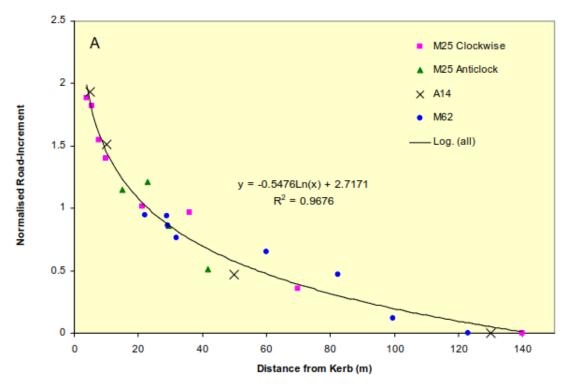


Figure 2 Normalised Road-Increment against distance from kerb (m)



As part of the on-going air quality investigations, a site-specific monitoring survey will continue be undertaken for informing the baseline conditions, as the local monitoring undertaken by the Epping Forest District Council does not cover areas near or within the site. The duration of the monitoring survey is for an initial period of 3 months (with a potential extension to a 6-month period). Initial monitoring results will be reviewed and further advice will be provided in relation to the monitoring duration and locations. The survey commenced in February 2019 with a total of 10 monitoring locations selected, as shown in Appendix A. Furthermore, a modelling study will also be undertaken using the dispersion model ADMS-Roads. This model uses detailed information regarding traffic flows on the local network, surface roughness and local meteorological conditions to predict NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations at specific receptor locations. The findings from the above assessment will then be used to compare with the UK Air Quality Strategy<sup>3</sup> air quality objectives.

In conclusion, there are a number of measures available to mitigate air quality if non-compliance is identified, such as landscape buffer. Air quality is therefore not considered to be a barrier to development in this location.

#### **Noise**

## Target internal and external noise criteria

The following internal and external noise criteria are appropriate for the proposed residential development on site. These criteria are in line with relevant guidance documents including BS 8233:2014<sup>4</sup>, WHO Guidelines for Community Noise<sup>5</sup> and the more recently published ProPG: Planning and Noise<sup>6</sup>.

Table 1 Internal and external noise criteria for residential development

	DAYTIME	NIGHT-TIME	
	L <sub>Aeq,16h</sub>	L <sub>Aeq,8h</sub>	Typical L <sub>AFMax</sub>
Internal noise levels	35 dB	30 dB	45 dB
External noise levels	55 dB	-	

### Existing noise climate

A 3D noise model using traffic data for the M25 from the Department of Transport has been prepared to predict road traffic noise levels across the site, in the absence of the proposed development. The daytime and night-time noise contours for the existing noise climate are presented in Appendix B.

### Design of Masterplan

It is acknowledged that the site is adjacent to the M25 and therefore the noise levels, particularly along the southern boundary, are high. However, noise has been a consideration from the beginning of this project and masterplans will be drawn up to respond to the potential impact of noise.

In order to achieve the target external noise criterion (as presented in Table 1), a bund/barrier is proposed along the southern boundary of the land to the west of the tube line. In addition, any gardens/balconies will

<sup>&</sup>lt;sup>3</sup> Defra (2007). The Air Quality Strategy for England, Scotland, Wales and Norther Ireland (Volumes 1 and 2).

<sup>&</sup>lt;sup>4</sup> BS 8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings

<sup>&</sup>lt;sup>5</sup> World Health Organisation (WHO) Guidelines for Community Noise (1999)

<sup>&</sup>lt;sup>6</sup> Professional Practice Guidance on Planning and Noise: New Residential Development (May 2017)



be located facing north behind residential buildings situated on the southern boundary, where the external noise level is anticipated to achieve the target external noise criterion (55 dB L<sub>Aeq,16h</sub>). The noise contour plots with bund/barrier along the southern boundary are included in Appendix C.

Based on the predicted daytime and night-time noise contours with the bund/barrier included along the southern boundary, it is expected that the internal noise criteria can be achieved taking into account the design of the building envelope. Where possible, non-habitable rooms (e.g. kitchens, hallways, bathrooms) would be located on the façade facing the M25 with more sensitive spaces (living rooms and bedrooms) located on the quieter northern facing façade. In any event, it is considered that a typical building envelope construction (thermal double glazed units and acoustic trickle vents) would provide sufficient sound insulation to achieve the target internal noise criteria, as presented in Table 1.

#### Conclusions

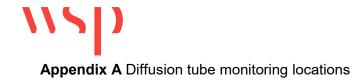
It is concluded, that whilst the site is located adjacent to the M25, acoustic design measures are available to achieve the target internal and external noise criteria, which have been adopted in line with relevant guidance and best practice documents. It is therefore considered that the site is suitable for residential development in terms of noise, subject to suitable mitigation measures being applied.

#### **APPENDICES**

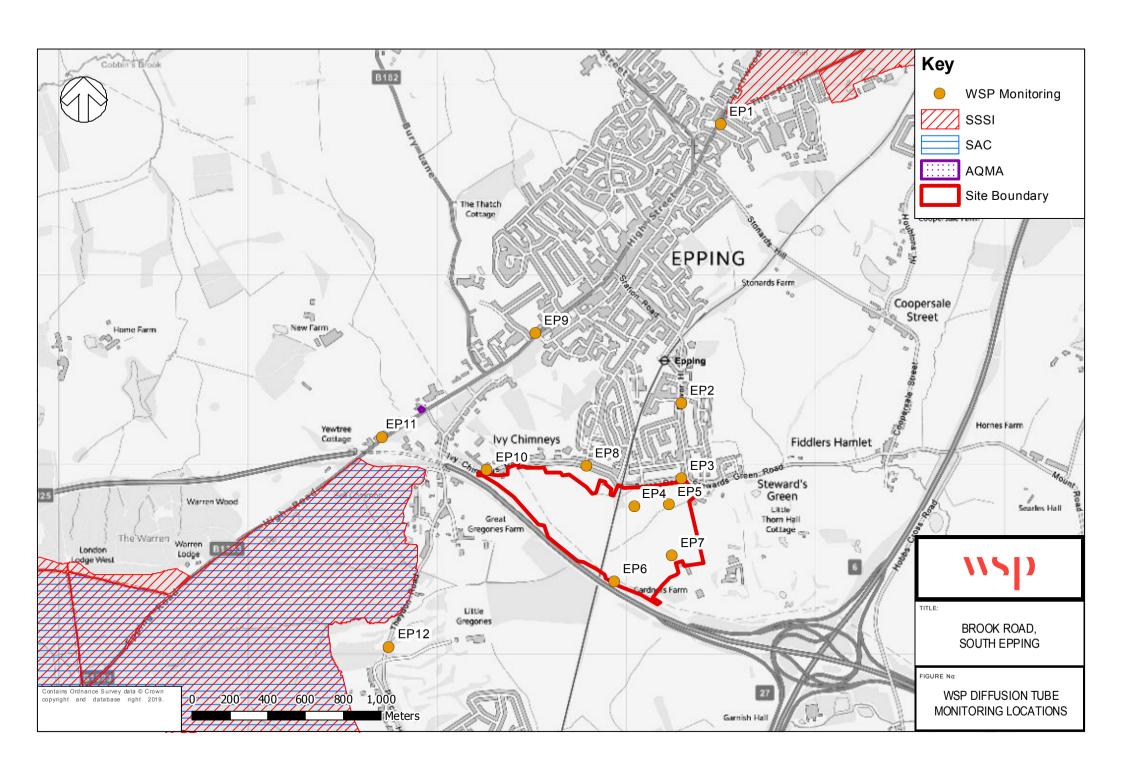
Appendix A Diffusion tube monitoring locations

**Appendix B** Daytime and Night-time Noise Contour Map – no mitigation

**Appendix C** Daytime and Night-time Noise Contour Map – 8m high bund/barrier



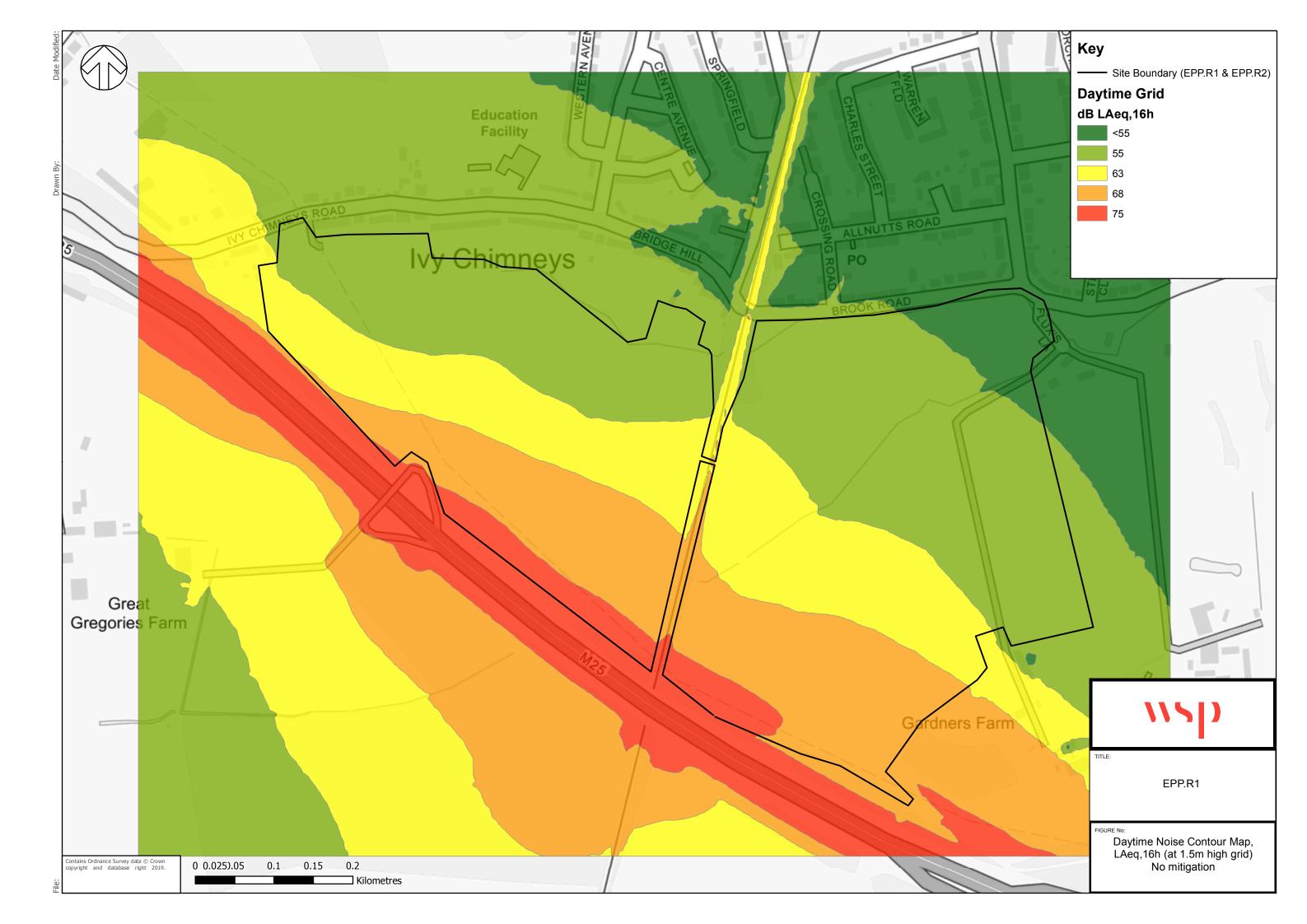


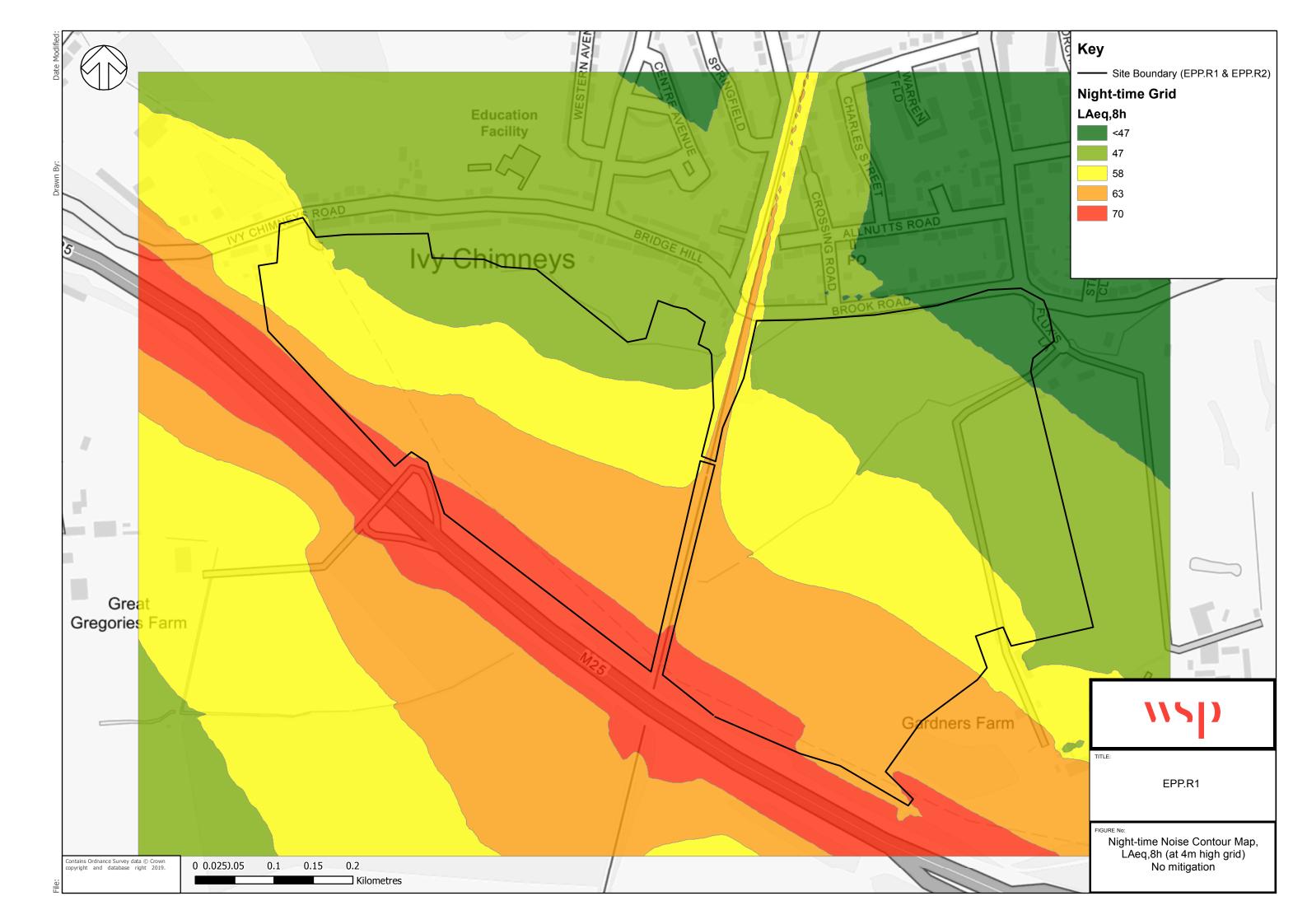




**Appendix B** Daytime and Night-time Noise Contour Map – no mitigation









**Appendix C** Daytime and Night-time Noise Contour Map – 8m high bund/barrier

