PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

A12 CHELMSFORD TO A120 WIDENING SCHEME

RELEVANT REPRESENTATION

ON BEHALF OF THE PARTNERS OF J A BUNTINGS AND SONS

CONTENTS

I. Introduction

1. This relevant representation (**"Representation"**) is made on behalf of the Executors of the Late Mr R Bunting, Mrs D. J Bunting, Mrs S. Bunting, Mrs T.J Holland, Mr M Bunting, Mrs M.D Wisbey and Mrs A. Wood, Partners of J A Bunting & Sons and landowners of Highfields Farm, Inworth Hall Farm, Ewell Hall and Hole Farm, Kelvedon (**"Landowners"**). The Landowners' farm extends to a total of circa. 930 acres (376 hectares) of land based at Highfields Farm, Inworth Hall Farm, Ewell Hall and Hole Farm, Kelvedon, Essex being some 700 acres of freehold owned land. The farm is mainly arable land down to a traditional cereal rotation.

2. The extent of the Landowners' land holding within and in proximity of the Order limits of the proposed A12 Chelmsford to A120 Widening Scheme (**"A12 Scheme"**) is shown on the plan enclosed at Appendix B (**"Land"**).

3. Land within the Landowners ownership which is proposed to be permanently acquired as part of the A12 Scheme, as identified in 2.7 Land Plans (TRO010060), consists of Land Plot Numbers 12/9a, 12/23a, 12/23b, 12/23c, 12/24a, 12/26a, 13/14a, 13/14b, 13/14d, 13/14e, 13/14f, 13/14h, 13/14k, 13/17a, 13/19a, 14/3a, 14/3c, 14/3i, 14/3k, 14/3m, 14/4a, 14/10a, 14/17b, 14/19a, 20/1a, 20/4a, 20/4b, 20/4e, 20/4f, 20/5a, 21/2a, 12/1h, 12/11a, 12/24a, 13/18a and 14/1a.

4. If the A12 Scheme receives consent based on the current plans, this would result in the Landowners losing approximately 220 acres (89 hectares) of highly productive farmland. This is nearly a third of their holding and thus would have catastrophic effects on the viability of their farming business, their livelihoods, and their homes.

5. The Landowners were first consulted in early 2020 and further consultation was undertaken in Summer 2021 and Winter 2021 by National Highways Limited (**"Promoter"**) in relation to the A12 Scheme. Detailed responses to the Summer 2021 and Winter 2021 consultations were provided on the Landowners' behalf based on the information available at the time (**"Consultation Responses"**). The Landowners have been clear with their intent throughout this period, they are looking to minimise the permanently acquired land and ensure all land is reinstated to agricultural use where not required for the operation of the A12 Scheme. The Landowners most recently met with Ardent and Costain on behalf of the Promoter in October 2022 to discuss the effects of the A12 Scheme and the points outlined in this representation were raised.

6. Further, as detailed in both Consultation Responses, the Landowners and Pigeon Investment Management Ltd (**"Pigeon"**) are jointly promoting land on the north and south sides of the A12 at Kelvedon, as identified on the plan enclosed at Appendix C (**"Site"**), for a high-quality landscape and design-led sustainable mixed residential and commercial scheme (**"Pigeon Scheme"**).

7. While the Site will continue to be farmed in the short-medium term, and the need to ensure that the Landowners can continue to farm the Land following completion of the A12 Scheme is therefore the main component of this Representation, the Site's location within the A12 corridor in a highly sustainable location adjacent to a designated growth location means that there is also a compelling case for employment and housing growth on the Site in the longer term.

8. The Pigeon Scheme, as detailed on the Concept Plan at Appendix D, is for:

8.1. a high-quality landscape and design-led sustainable commercial/logistics park, strategic landscaping, informal public open space, pedestrian/cycleways, green corridors and all associated infrastructure on land south of the A12; and

8.2. a high-quality landscape and design-led sustainable scheme comprising strategic landscaping, informal public open space, riverside walk, pedestrian/cycleways, green corridors, new homes and all associated infrastructure on land north of the A12.

9. While the Pigeon Scheme does not yet feature in the Local Plan, it is anticipated that a Local Plan review will be commenced in the short-medium term, given the Braintree Local Plan 2022 is based upon housing and employment needs evidence from 2015/2016 that no longer reflects current levels of need. Further, the Scheme Objectives for the A12 Scheme acknowledge the importance of supporting economic growth, as is consistent with the National Policy Statement for National Networks (**"NPS NN"**) (paragraphs 2.1, 4.3) and the Road Investment Strategy 2. Therefore, it is plainly in the interest of the Promoter, and the public interest, to make provision for future development in the design of the A12 Scheme.

10. Braintree District Council (**"Council"**) has an acknowledged housing land supply shortfall. The Council is currently only able to demonstrate 4.86 years of housing land supply (4,851 homes), against a target of at least 4,986 homes for the period 2022-2027. While the immediate effect of this is to engage paragraph 11(d) of the National Planning Policy Framework, it also provides a strong indication that the Council will need to bring forward a Local Plan review ahead of the statutory requirement to review the Local Plan at least every 5 years and allocate additional sites in order to meet local housing needs.

11. As a highly sustainable location adjacent to 'Kelvedon with Feering' (a designated Key Service Village in the adopted Braintree Local Plan 2022), both Kelvedon and neighbouring Feering will continue to be locations for future growth. As such, it is essential that the A12 Scheme does not prejudice the ability of highly sustainable locations, such as the Site to meet current and future housing needs.

12. There is also a compelling need for additional industrial and logistics space within the A12 corridor. The Industrial & Logistics Needs Assessment prepared by Savills (January 2022), included as Appendix E provides an evidence-based overview of the market potential for new industrial and logistics (I&L) development at the Site. It identifies a demand for I&L land of 92.8 ha over the current Local Plan period, which is at least between 38.2 ha and 65.3 ha higher than the requirements identified in the adopted Braintree and Colchester Local Plans (N.B. part of the Site falls within Colchester District).

13. The scale of the need for I&L land to meet both current and future demand, together with the Scheme Objectives for the A12 Scheme, which acknowledge the importance of supporting economic growth (as is consistent with paragraphs 2.1 and 4.3 of the National Policy Statement for National Networks (**"NPS NN"**) and the Road Investment Strategy 2), mean that it is plainly in the interest of the Promoter, and the public interest, to ensure that the A12 Scheme does not prejudice the delivery of I&L development on the Site in the longer term, while also ensuring that the impacts of the A12 Scheme on the existing agricultural use of the Land are minimised.

14. As such, the issues raised by this Representation principally concern the impact of the A12 Scheme on the existing agricultural use of the Land, but also concern the impact of the A12 Scheme on the proposed use of the Site for the Pigeon Scheme. As a result, the matters raised in this Representation relate to both the minimisation of impacts on the Landowners and on the promotion of the Pigeon Scheme.

15. For the reasons set out in this Representation, the Landowners object to the application seeking development consent for the A12 Scheme (**"Application"**).

II. Summary of Representation

16. The Promoter has not demonstrated that the conditions set out in section 122 of the Planning Act 2008 (**"2008 Act"**) and the associated tests within "*Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land*" (DCLG, September 2013) (**"Guidance"**), including in relation to the consideration of Human Rights, have been satisfied in respect of the Land. As a result, the provisions proposed to be included in the Order to authorise compulsory acquisition in respect of the Land should not be included in any Order granted by the Secretary of State.

17. The Promoter's failure to satisfy the conditions under section 122 of the 2008 Act, or comply with the Guidance, is a result of:

17.1. the failure to consider reasonable alternatives in respect of the attenuation ponds, borrow pits and ecological works proposed to be located on the Land;

17.2. the extent and types of proposed compulsory acquisition in relation to the Land not being proportionate; and

17.3. the failure to constructively engage with the Landowners to enable the acquisition of the Land by agreement.

18. As a result, the Promoter has not demonstrated that the Land is required for the A12 Scheme, or to facilitate or incidentally to the A12 Scheme, that the proposed acquisition is proportionate, that reasonable alternatives have been considered or that any attempt has been made to acquire the Land by agreement.

19. Given the lack of substantive response to the issues raised and information requested in the Consultation Responses, either in communications with the Landowners or in the Application documents, the Promoter has failed to carry out an adequate consultation exercise.

20. In detailing the above issues, this Representation is structured as follows:

20.1. **Section III** sets out the failure to consider reasonable alternatives in respect of the attenuation ponds, borrow pits and ecological works proposed to be located on the Land.

20.2. **Section IV** and **Appendix A** highlights the inadequacy of the reasons provided by the Promoter for the acquisition of the Land, with reference to the reasonable alternatives described in Section III.

20.3. **Section V** details the resulting failure to comply with the tests under section 122 of the 2008 Act and the Guidance, drawing on the issues identified in Sections III and IV.

20.4. **Section VI** highlights the inadequacy of the consultation carried out by the Promoter, with reference to the Gunning Principles.

20.5. **Section VII** deals with matters of highway design, the maintenance of access to the Land and other matters relating to the ongoing viability of the farm.

III. Failure to consider alternatives

21. As already noted, the Application fails to identify or consider reasonable alternatives in respect of the attenuation ponds, borrow pits and ecological works proposed to be located on the Land. This is particularly concerning given the reasonable alternatives already identified in the Consultation

Responses. The following analysis reiterates those reasonable alternatives with the benefit of the additional materials only now made available as part of the Application. As for the Consultation Responses, the Landowners have engaged WSP to advise on technical matters, including in relation to the attenuation ponds, borrow pits and ecological works. However, in light of the absence of information identified under the below, this analysis remains subject to the further consideration of that information, once provided.

Attenuation ponds

22. The A12 Scheme includes a number of attenuation ponds on the Land, with associated maintenance access strips, drainage pipework and manholes. It is proposed by the Promoter to permanently acquire land for both the attenuation ponds and the associated works. The siting of certain of the attenuation ponds within the Land and the proposed permanent acquisition of land for the associated works would prevent the re-use of the majority of the Land to the north of the A12 for agricultural purposes following the completion of the A12 Scheme. This is because it is most efficient to farm large blocks of land, while the drainage and acquisition strategy currently adopted by the Promoter leaves small, convoluted parcels which it would not be viable to farm. In addition, the attenuation ponds in the locations currently proposed would adversely affect the Pigeon Scheme by disproportionately reducing the available space for development.

23. As such, the Landowners object to the both the proposed compulsory acquisition and the proposed drainage design as it relates to the Land.

24. WSP UK Ltd (**"WSP"**) have undertaken a review of the proposed drainage works. The below paragraphs detail the amendments to the drainage works which would minimise the impact of the A12 Scheme on the Land, by reducing the required land take to maximise the farmable land returned to the Landowners. WSP's assessment confirms that these changes can be accommodated by the Promoter without compromising the drainage strategy for the A12 Scheme. As a result, the proposed amendments clearly merit consideration as reasonable alternatives for the purposes of the Guidance. Similarly, a change to the acquisition type in relation to the associated works for all attenuation ponds located on the Land is required, both from the perspective of it forming a reasonable alternative and in the context of the requirement for proportionality.

25. The amendments detailed below build on those already detailed in the Consultation Responses.

*Attenuation Ponds S3-OU7 & OU*8A and S3-OU8

26. The Landowners object to the proposals for Attenuation Pond S3-OU7 & OU8A (Work No. 64) and Attenuation Pond S3-OU8 (Work No. 65(a)) due to the excessive land take and resulting impact on both the ability to reuse the land in question for agriculture and the deliverability of the Pigeon Scheme. The Landowners propose an alternative of combining the aforementioned attenuation ponds in the location of Attenuation Pond *S3-OU7 & OU*8A (Work No. 64). WSP have undertaken a review of the information presented as part of the Application and, based upon site topography, this has been assessed as a viable alternative. The combined basin minimises land take (combining basins reduces overall footprint due to the requirement for side slopes to the ponds) and will create a larger block of farmable land.

27. The Landowners also object to the proposed maintenance access for Attenuation Ponds S3-OU7 & OU8A (Work No. 64) and Attenuation Pond S3-OU8 (Work No. 65(a), which is also being proposed as a public footpath. This objection is based upon the increased land take reducing available farmland and the public access impacting both the established game shoot and the ability to use the fields to breed pheasants. To avoid these impacts, the combined pond should be accessed/maintained directly from the proposed northern Junction 24 roundabout (Work No. 74(a)), with an access track being constructed north from the roundabout. In order to avoid prejudicing the

Landowners' ability to farm the Land or the viability of the Pigeon Scheme, the relocated access track should be acquired on the basis of temporary acquisition with permanent rights, subject to maintenance arrangements and a lift and shift provision.

Attenuation Pond OU14

28. Attenuation Pond OU14 (Work No. 77) is located between Water Course 21 and Water Course 21a just south of the A12. The Landowners object to the proposals for Attenuation Pond OU14 due to the excessive land take and resulting impact on both the ability to reuse the land in question for agriculture and the deliverability of the Pigeon Scheme.

29. WSP's analysis proposes that Attenuation Pond OU14 should be located closer to the road and that the design should be narrower and more linear. This would allow the maintenance track to move closer to the overbridge and reduces the land take for drainage attenuation purposes. The discharge rate and outfall location would not be affected by this modification. However, by reducing land take the proposed modification would reduce the impact of the A12 Scheme upon the Landowners' ability to re-use the land in question for agricultural purposes and upon the Pigeon Scheme following completion of construction of the A12 Scheme.

Borrow pits

30. The A12 Scheme proposes that Borrow Pit J is located on land south of the A12 and wholly within the Land. The Promoter is proposing to permanently acquire the land within which Borrow Pit J is located, permanently removing this land from arable production, and preventing a large part of the Land to the south of the A12 being used for agricultural purposes following completion of the A12 Scheme. Farming large intact rectangular parcels in close proximity to Inworth Hall Farm where grain stores and machinery are located is by far the more efficient (and therefore viable) method of farming, requiring less time and therefore fuel to turn machinery and to transport grain from field to store. As such, the A12 Scheme should be designed to minimise disturbance to the continued agricultural use of the Land by leaving larger blocks of farmland intact, thereby reducing the amount of farmland affected, to ensure the land continues to be economically viable to farm.

31. Since July 2021, WSP, on behalf of the Landowner, has sought to engage with the Promoter in an attempt to better understand the impacts of the borrow pits forming part of the A12 Scheme on the Land and the Pigeon Scheme. In particular, WSP have focussed on the impacts of Borrow Pit J, which is proposed to be located within the Land. However, further information is still awaited in relation to the below items, and is not provided within the Application documents:

31.1. All remaining ground investigation data for exploratory holes located within the Land. Borehole and trial pit logs have been provided, but not laboratory testing data, gas and groundwater monitoring data, CPT data, finalised and complete factual reports for all ground investigation works and AGS data. Freedom of Information requests were issued to the Promoter on 8 December 2021 and 18 March 2022 for the necessary information, both of which were refused.

31.2. All ground investigation data for the A12 Scheme, so as to enable consideration of possible treatment options for materials currently identified by the Promoter as 'unsuitable' and to enable more detailed consideration to be given to other, potentially more favourable, locations for borrow pits to be considered.

31.3. All ground investigation data from the borrow pits, so as to enable WSP to consider whether the extension or deepening of other borrow pits would represent a reasonable alternative.

31.4. Suitably detailed plans showing areas of cut and fill earthworks (including depths of cuttings, height of embankments and slope angles) for the carriageway and associated works, so as to enable an assessment by WSP of the options for suitable treatment of materials currently identified by the Promoter as 'unsuitable', so as to enable consideration of the potential to maximise the areas where Class 2 materials could be used as general fill.

32. In the absence of the above information, WSP does not presently have sufficient material to fully assess the proposed borrow pits, including Borrow Pit J. As a result, the Landowners maintain their objection to the location and treatment of Borrow Pit J, as well as the associated compulsory acquisition of land.

33. While the Landowner's position is reserved pending receipt of the above information, based on the currently available information, WSP note the following issues:

33.1. The Borrow Pits Report [APP-280] indicates that around 25% (400 000m3) of the material arising from the main A12 works would be considered unsuitable for use as engineered fill, with the resulting deficit being the main driver for the excavation of a series of borrow pits. The report also indicates that the deficit mainly relates to materials to be used as general fill for the construction of embankments. The Borrow Pits Report [APP-280] does not indicate the basis on why such materials are considered to be unsuitable for this purpose nor provide any comment on options for treatment or design that may enable such materials to be rendered suitable. This requires further interrogation, with potential treatment or design solutions forming reasonable alternatives to the compulsory acquisition of land for borrow pits.

33.2. The Borrow Pits Report [APP-280] indicates that the proposed embankments at Junction 21 and Junction 22 are the main areas where fill is required.

33.3. The Borrow Pits Report [APP-280] indicates that Borrow Pit J is the main resource of granular soils for the A12 Scheme. Available monitoring data suggests that Borrow Pit J is associated with a shallow groundwater level (likely to be in continuity with the River Blackwater to the North and its associated tributaries) and associated with relatively permeable soils. Further, according to the Environmental Statement, part of the Borrow Pit J area is associated with a former quarry which historically received waste materials. The extent, depth and nature of such waste does not appear to have been confirmed by ground investigation, as there was just one trial pit at this location, which terminated at 1m below ground level (bgl). However, it is indicated in the Borrow Pits Report [APP-280] that Borrow Pit J contains suspected asbestos. Such matters are discussed below in Section 32.5

33.4. The Borrow Pits Report [APP-280] indicates that the Borrow Pit J is anticipated to be excavated up to around 7m deep. A depth of up to around 14m is potentially inferred if Colemans Quarry is also to be backfilled by materials from Borrow Pit J. Given the anticipated ground and groundwater conditions indicated above, dewatering activities are likely to be required to achieve this. The design of these would need to be based on suitable ground investigation data, but WSP are of the opinion that significant dewatering activities may be required. As discussed in the Borrow Pits Report [APP-280], such operations would carry a risk of ground settlement occurring and potentially has implications associated with contamination migration, in light of the presence of waste materials in the Borrow Pit J area, as outlined above.

33.5. Given the anticipated shallow groundwater levels and the depths of excavation proposed at Borrow Pit J it is likely that a significant proportion of granular material arising will be unacceptable as Class 1 General Fill due to water (moisture) content values, unless suitably processed and/or treated.

33.6. Although a complete set of design information has not been provided, where shown, embankment slope angles of around 1V:3H or slacker are proposed by the Promoter. Subject to suitable analysis and design (for example, the use of geogrid reinforcement), such angles are not unreasonable for slopes typically formed from SHW Class 2 General Fill. As such, it may be possible to consider alternative borrow pit locations closer to areas of proposed filling operations as discussed in section 32.4 below.

33.7. The Borrow Pits Report [APP-280] indicates that around 600 000m3 of material is required for the main works (i.e. excluding any backfill at Colemans Quarry), but that 900 000m3 of material would be obtained from all the borrow pits combined (based on an excavation of up to around 7m at Borrow Pit J). As a result, the Borrow Pits Report [APP-280] envisages that around 300 000m³ more material will be excavated from the borrow pits than is needed for the main works. The report further indicates that the volume of suitable material arising from Borrow Pit J (based on a 7m maximum dig depth) is around 300 000m3. Given the surplus provision identified within the Borrow Pits report, there is no requirement for Borrow Pit J to facilitate the main works.

33.8. The Borrow Pits Report [APP-280] indicates that the existing excavation at Colemans Quarry might need to be backfilled as part of the proposed works, resulting in an additional 300 000m3 of material being needed. This seems to be driven by programme. It is unclear as to what actions are being taken to prevent this turn of events. The report suggests that such materials, if required, would be obtained from Borrow Pit J. Assuming the same excavation footprint, based on the Borrow Pits Report [APP-280] , this could result in a depth of up to around 14m bgl.

33.9. It is understood that the borrow pits are to be backfilled using materials considered 'unsuitable' as engineered fill. 'Unsuitable materials', as defined by Specification for Highway Works could include contaminated materials and materials that could be prone to ground gas generation. The relatively high permeability of the granular soils at Borrow Pit J should be noted, both in terms of groundwater and ground gasses. The granular materials at Borrow Pit J are likely to comprise River Terrace Deposits or Glaciofluvial Deposits and hence considered to be a Secondary A Superficial aquifer. Such groundwaters are likely to be in continuity with the surrounding surface waters (as outlined above). Therefore, the use of the materials as currently outlined in the Borrow Pits Report [APP-280] as backfill is not desirable.

34. While further information is required in order for a full response to be provided, the Landowners object to the borrow pit proposals for the reasons set out at paragraphs 34 - 36, below. This objection should be read in the context of the analysis in Appendix A of this Representation regarding the proposed acquisition type of plots 13/14h and 14/3c.

35. In light of the issues identified above, there has been a failure to consider reasonable alternatives to Borrow Pit J. Potential alternatives based on the information currently made available by the Promoter are given below:

35.1. As identified at paragraph 32.7, above, the volumes as presented in the Borrow Pits Report [APP-280] indicate that Borrow Pit J is not required, with a consequent reduction in cost, haulage volume and environmental impacts.

35.2. The project programme should be optimised so as to negate any programme-driven requirement to backfill Colemans Quarry as part of the A12 Scheme. This would limit the volume of materials needed for the A12 Scheme, negating the requirement for Borrow Pit J. There would also be a consequent reduction in the transportation of materials and a reduction in overall cost.

35.3. Consideration must be given to the treatment options to maximise the reuse of materials from the works forming part of the A12 Scheme. Enabling the use of materials presently identified by the Promoter to be unsuitable would reduce the requirement for excavation of materials from borrow pits, including at Borrow Pit J, with consequent environmental benefits and reduction of haulage volumes.

35.4. The design of embankments and fill materials to minimise the need for Class 1 General Fill and maximise the use of Class 2 General Fill should be reviewed. This could enable more materials to be used from Borrow Pits E and F (or other locations within the A12 Scheme) which are closer to Junctions 21 or Junction 22. This would minimise haulage and disruption. Given the nature of the proposed backfill materials for the borrow pits, borrow pits formed in cohesive soils (such as Borrow Pits E and F, as a source of Class 2 General Fill), would be likely to present reduced risks with regards to potential ground gas and groundwater contamination issues, when compared to Borrow Pit J.

35.5. The Promoter should assess the option of deepening Borrow Pits E and F, as the Borrow Pits report indicates that Borrow Pit E has a deeper groundwater level compared to Borrow Pit J while both Borrow Pits E and F do not appear to be affected by potential contamination concerns associated with waste materials. In the case of Borrow Pit E, this should result in reduced ground movements compared to Borrow Pit J and (given the potential sources of contamination outlined above, such as pits containing waste at Borrow Pit J) should result in reduced risks associated with contamination migration for both Borrow Pits E and F. Borrow Pits E and F are also located closer to Junction 21 which would minimise haulage and disruption when compared to the use of Borrow Pit J.

35.6. Based on anticipated ground conditions from desk study information, alternative borrow pit locations have been identified near the following chainages (chainages based on Figure 10.1 of the Environmental Statement). It is anticipated that these locations may yield the relevant materials at depths comparable to Borrow Pit J. As such, they require consideration as reasonable alternatives.

35.6.1. ch15600 – ch16400

35.6.2. ch19500 – ch21000

35.6.3. ch22450 – ch24000

35.6.4. ch24300 – ch25000

35.6.5. ch26000

35.7. All of the above locations are closer to the main fill areas proposed at Junction 21 and Junction 22 (when compared to Borrow Pit J) and so should result in reduced haulage and disruption. In addition, the following location is anticipated to be associated with similar ground conditions to Borrow Pit J.

34.7.1. ch32000 – ch34000

36. Should the ExA determine that the Promoter's analysis of the material requirements for the A12 Scheme is accurate, notwithstanding the points made above, as an alternative to the backfilling and restoration of Borrow Pit J, the Landowner would be willing to discuss either:

36.1. restoration of Borrow Pit J, provided this does not prejudice the re-use of the Site for agriculture and the future delivery of the Pigeon Scheme; or

36.2. use of the Site (south of the A12) for the borrow pits without restoration, provided they are not excavated below a depth that would prejudice the re-use of the Site for agriculture and the delivery of the Pigeon Scheme.

37. In addition, the Landowners would be willing to discuss the provision of the borrow pits on land south of the A12 (within the Site), such that they are shallower but take-up a larger footprint on land to the south of the A12 (within the Site), provided this would not prejudice the ability to re-use the land in question for agricultural purposes and the Pigeon Scheme following completion of construction of the A12 Scheme.

38. Any such arrangement would be conditional upon the land to be used for the borrow pits not being permanently acquired and not being used for ecological works (as detailed further at paragraphs 43 to 45 below).

39. Considering the above analysis, and subject to any further considerations arising from the provision of the requested information, the Landowners object to the proposed location and treatment of Borrow Pit J, as well as the associated compulsory acquisition of land.

Ecological works

Attenuation Ponds

40. As detailed in Environmental Statement: Chapter 9 - Biodiversity [APP-076], the A12 Scheme attenuation ponds are proposed to be surrounded by ecological works constituting wildflower and grassland areas, together with areas of woodland planting and areas of intermittent trees and shrubs. The Landowners object to the provision of these features on the Land, as in the locations and with the permanent compulsory acquisition currently proposed, they will disproportionately reduce the extent of land that can be re-used for agricultural purposes and prejudice the delivery of the Pigeon Scheme by reason of increased land take.

41. Compliance with Biodiversity Net Gain policies and achievement of a 10% net gain (as per Environment Act 2021) is not a requirement for Nationally Significant Infrastructure Projects. However, through the indicative Landscape Masterplan the A12 Scheme achieves a 25% net gain in habitats, 36% net gain in hedgerows and 156% net gain in rivers. Measures included within the Landscape Masterplan could be scaled back to return arable farmland to cultivation, whilst still achieving net gain and compliance with the Environment Act 2021 threshold of 10%. However, the relevant provisions are not yet in force and as such, there is no statutory requirement for the increase referred to.

42. As shown by the analysis at paragraphs 21 to 28, above, in relation to the relocation of the attenuation ponds, there are clear reasonable alternatives to the provision of ecological works at the locations currently proposed by the Application. Further, as the attenuation ponds are situated on arable farmland, which has negligible ecological importance and low distinctiveness under DEFRA's biodiversity net gain metric, associated habitats could be situated in other arable farmland within the Land to achieve the same result.

43. These alternatives constitute more proportionate reasonable alternatives for the purposes of the Guidance and would reduce the impact of the A12 Scheme on both the re-use of the Land for agriculture and the development of the Site in relation to the Pigeon Scheme.

Borrow Pits

44. From paragraph 9.13.1 of APP-076, it is understood that Borrow Pit J would, post-construction, provide for habitats as ecological enhancement, but that the A12 Scheme would already achieve a greater than 10% increase in biodiversity units under the current DEFRA metric without the need for the ecological works associated with Borrow Pit J.

45. The 10% threshold referred to is that specified in the Environment Act 2021, although the relevant provisions are not yet in force. As such, there is no statutory requirement for the increase referred to and, in any event, the ecological works at Borrow Pit J are not required to satisfy such an increase. Further, the ecological works are not required to achieve the A12 Scheme's ecological mitigation requirements.

46. Therefore, the Landowners object to the proposed use of the Land for ecological works associated with Borrow Pit J, as it will reduce the extent of the Land that can be re-used for agricultural purposes and prejudice the delivery of the Pigeon scheme.

IV. Proposed Compulsory Acquisition

47. The table at Appendix A draws on the information provided at Annex A to the Statement of Reasons [APP-042] to provide an analysis of the reasons provided by the Promoter for the proposed compulsory acquisition of the Land.

48. As shown by the analysis in Appendix A, no adequate justification has been provided by the Promoter for each plot of land currently identified for potential acquisition or temporary possession, or over which the Promoter seeks the power to acquire rights. Rather, Annex A of [APP-042] simply lists the DCO Works proposed to be constructed in each plot, with no analysis as to proportionality, in terms of the extent or nature of the proposed acquisition.

49. Appendix A details the lack of justification for compulsory acquisition of each plot, highlighting the failure to demonstrate that the Land is required to facilitate or incidentally to the A12 Scheme or that the proposed acquisition is proportionate.

V. Non-compliance with section 122 of the 2008 Act and the Guidance

50. Section 122 of the 2008 Act states that:

> "*(1) An order granting development consent may include provision authorising the compulsory acquisition of land only if the Secretary of State is satisfied that the conditions in subsections (2) and (3) are met.*
>
> *(2) The condition is that the land—*
>
> *(a) is required for the development to which the development consent relates,*
>
> *(b) is required to facilitate or is incidental to that development, or*
>
> *(c) is replacement land which is to be given in exchange for the order land under section 131 or 132.*
>
> *(3) The condition is that there is a compelling case in the public interest for the land to be acquired compulsorily.*"

51. The Guidance clarifies that, in respect of land required for the development, the test is whether the land is needed for the development, with the land to be acquired being no more than is reasonably required for the development. In respect of land required to facilitate or that is incidental to the development, the Guidance provides that the test is whether the development could only be carried out to a satisfactory standard if the land in question were to be compulsorily acquired. In addition, it states that the land should be both proportionate and necessary for the specified purpose.

52. The Guidance also sets out the general factors which the Secretary of State will take into account in determining whether those conditions have been satisfied. These include the following considerations:

52.1. all reasonable alternatives to compulsory acquisition have been explored, including modifications to the scheme;

52.2. the applicant is clear on how they intend to use the land;

52.3. the purposes for the inclusion of compulsory acquisition powers are legitimate and sufficiently justify any interferences with human rights; and

52.4. applicants should seek to acquire land by negotiation wherever practicable.

53. The Promoter has not specified whether each plot is required for the development or is incidental to or required to facilitate the development. In either case, it is evident from the analysis provided at Appendix A to this representation that the Promoter has failed to adequately justify the requirement for the inclusion of compulsory acquisition powers on a plot-by-plot basis, or to set out why the nature and extent of those powers should be considered proportionate.

54. In the absence of any such justification, the Landowners have provided an analysis in column four of Appendix A. Alongside the description of the reasonable alternatives provided at section III, this demonstrates that the extent of the Land over which powers of compulsory acquisition are proposed is neither needed for the development or of such a nature that the development could only be carried out to a satisfactory standard if the land in question were to be compulsorily acquired.

55. Further, in light of the analysis at Appendix A and the reasonable alternatives presented at Section III above, it is clear that the proposed powers are not proportionate, and that the Promoter has failed to explore all reasonable alternatives, including the modifications to the Scheme proposed in both the Consultation Responses and this Representation.

56. While the Landowners have sought to engage with the Promoter, engagement to date has been limited and substantive responses to the Consultation Responses and other requests for information have not been received. As a result, it cannot be said that the Promoter has sought to acquire land by negotiation wherever practicable.

57. For these reasons, the Promoter has not demonstrated that the conditions set out in section 122 of the 2008 Act and the associated tests within the Guidance, including in relation to the consideration of Human Rights, have been satisfied in respect of the Land. As a result, the provisions proposed to be included in the Order to authorise compulsory acquisition in respect of the Land should not be included in any Order granted by the Secretary of State.

VI. Inadequacy of consultation

58. As detailed at paragraph 4, above, the Consultation Responses were submitted on the Landowners' behalf in respect of both the Summer 2021 and Winter 2021 consultation exercises. However, no substantive response from the Promoter was received in relation to either consultation. Further, there is no evidence within the Consultation Report [APP-045] as to how the Consultation Responses were taken into account. The Consultation Responses were submitted with the intention of shaping the design of the A12 Scheme prior to the submission of the Application. As such, it is disappointing that no attempts were made by the Promoter to consider or discuss the proposals detailed in the Consultation Responses.

59. The lack of information provided alongside the consultation exercises (as identified in the Consultation Responses) and the failure to take account of the Consultation Responses means that the Promoter's consultation in respect of the A12 Scheme fails to satisfy the "*intelligent consideration*" or "*conscientious consideration*" Gunning Principles.

VII. Highway design, access, and other matters

60. Junction 24 is proposed as a two-tiered dumb-bell layout west of Inworth Road. A single link road would provide access between the proposed Junction 24 and neighbouring towns, such as Kelvedon and Tiptree, via a new roundabout on the locally realigned B1023 Inworth Road. The junction is proposed to be in cutting, with the A12 mainline travelling over the dumb-bell link road.

61. In principle, the Inscribed Circle Diameter (**"ICD"**) of proposed Junction 24 enables an additional arm to be provided on both the northern and southern roundabouts as shown on the plan at Appendix F. This would enable access to be gained to both the northern and southern aspects of the Pigeon Scheme at a future date.

62. However, in light of the iterative nature of the design of the proposed Junction 24, it is understood that the layout may be subject to further changes as the design of the junction progresses to detailed design. Therefore, the Landowners' right to object to the design of the dumb-bell roundabouts, if the ICD or wider design is amended so that the provision of additional arms would no longer be possible, is reserved.

63. It is also necessary to ensure that certain aspects of the design for proposed Junction 24 enable the continued unhindered access for farming purposes, are compatible with the access proposals for the Pigeon Scheme and minimise the land take of the A12 Scheme. Therefore, the Landowners object to the A12 Scheme pending the following elements being secured within an amended design for proposed Junction 24 prior to the determination of the Application:

63.1. The proposed link road between the southern roundabout of the Junction 24 dumb-bell and Inworth Road will result in a parcel of the Landowners' land (plot 14/3f) being severed from the main land holding, as the current field access will be removed as part of the A12 Scheme. An access track appears to be indicated from the Inworth Roundabout (Work No. 74(c)) but confirmation is required that this access will provide access to this parcel in perpetuity such that it enables the Landowners to continue to use the land for agricultural purposes following construction of the A12 Scheme. The width of this proposed access needs to be suitable for large agricultural machinery (including combines, tractors and trailers and sprayers). It would be the Landowners preference to retain permanent ownership of said access with it acquired on a temporary basis as part of the A12 Scheme with permanent rights granted to the promoter.

63.2. In relation to the public footpath referred to at paragraph 26, above, it would be the Landowners preference for this access to provide an agricultural access to their retained farmland to the north of the A12.

63.3. In addition to the access referred to in Paragraph 62.2, in order to aid with continued operation of the farm and links between the northern and southern farm holdings an access is also requested by the Landowners from the south-west of the southern roundabout of Junction 24 (Work No. 74(a)) to Land Plot 14/3c.

63.4. A number of new public rights of way are proposed by the Promoter as part of the A12 Scheme. The Landowners object to these and request all new public rights of way over the Land are removed. These works are not required for the delivery of the Scheme and it is considered unreasonable to permanently acquire land for these purposes. The Landowners run an established game shoot on the farm and any new public rights of way are likely to have

negative impacts on the shoot. There are also health and safety issues with providing public access in the vicinity of the shoot.

63.5. The Landowners understand that National Highways are now providing an access for their Land directly off the proposed slip road adjacent to Essex County Fire and Rescue Service Headquarters (south of the Snivellers Lane Bridge). However, full details of this are outstanding. The Landowners request full details of this access are provided prior to the determination of the Application and reserve the right to comment or object dependent upon these details.

63.6. The Landowners have an existing concrete access track to the south of the proposed Essex Fire and Rescue access road (Work No. 52) situated alongside the proposed A12 slip road. It remains unclear from the current land use plans whether our clients will be retaining ownership of this track. The Landowners preference is to retain the freehold ownership of this track for access and maintenance purposes.

63.7. The Landowners have an existing agricultural access from the A12 slip road to the west of Land Plot 12/9a. It remains unclear from the current land use plans whether the Landowners will retain access off the slip road to the farmland to the south. It is the Landowners preference to retain freehold ownership of this access which must be suitable for modern agricultural machinery. The Promoter could show this retained access more clearly on the land use plans. The Landowners request full details of this access are provided prior to the determination of the Application and reserve the right to comment or object dependent upon these details.

63.8. The current Scheme proposals do not indicate an access to the Landowners severed land south of the Promoters proposed new public right of way (Work No. 50) to the south of Land Plot 12/9a. The Landowners require adequate access from the proposed attenuation pond service road. This land has access frontage to the River Blackwater.

63.9. The current A12 Scheme does not indicate an access to the Landowners retained land to the south-east of Land Plot 12/9a. The access track proposed as Work No. 51(b) should be extended to the south to provide access to this land. The Landowners use this land for haymaking and growing cricket bat willows therefore access must be suitable for large farm machinery and lorries for carting timber.

63.10. A minimum 6 metre access width is required between the extents of the Promoters proposed land acquisition and the Landowners cottages along Ewell Hall Chase. This is to the north-east of Land Plot 13/14a (Work No. 57). This access will need to be retained by the Landowner in order to carry out future maintenance to their property.

63.11. The Landowners access must be maintained along Ewell Hall Chase including Ewell Overbridge which is to be replaced as part of the Scheme (Work No. 76) throughout construction and in perpetuity. This is the main north-south farm access linking the Landowners farming operations either side of the A12.

63.12. The Landowners request that an upgraded farm access is provided directly off Inworth Road through Land Plot 14/3m. The Landowners propose using this access as their main farm access to the buildings and farmyard at Inworth Hall Farm located to the west. The upgrade of this access would prevent large lorries and machinery going through Inworth village. Current access for the grain lorries, combine and tractors is off Inworth Road (with poor visibility) onto Windmill Hill then into the farm entrance. The proposed A12 Scheme will result in increased traffic flows along Inworth Road (with this becoming the main Kelevedon A12 junction). The upgraded access proposed by the Landowners would provide increased visibility improving highway safety.

63.13. The Promoter must ensure that all existing services (i.e. electric and water) remain connected during and after construction. Plans showing the location of private services have been submitted to National Highways as previously requested by the Promoter. This is essential to the operation of the farm and there are also a number of residential premises which need to be considered.

63.14. The proposed flood mitigation area located within Land Plot 20/4e lies higher than the road surface. The functionality of this needs to be investigated by the Promoter.

APPENDIX A

APPENDIX A – STATEMENT OF REASONS ANALYSIS

Permanent acquisition of all interests in land			
Land Plan Sheet/Plot Number	**DCO Work No.**	**Purpose for which the land is stated to be required**	**Landowners' analysis**
12/9a	24(g), 45(a), 50, 51(a), 51(b), 52, U129, U137, U140, T37	Ecology Mitigation 24(g): The alteration of the A12 of 1832 metres in length, widening of the existing carriageways, new carriageways, including retaining earth structures, noise barriers, noise and visual bunds, tie in works and demolition of the residential properties known as Badger (previously Erimyka) and Hair Lodge, Rivenhall End. 45(a): The alteration of the A12 of 2882 metres in length, widening of the existing carriageways, new carriageways, including the demolition of Brick Kiln Farm, retaining earth structures and tie in works. 50: A new public footpath from the existing Footpath (246_19) to the footway adjacent to the B1024, including the provision of means of access to adjoining land and the relocation of Ashmans Farm Footbridge. 51(a): An attenuation pond and associated outfall. 51(b): An access track of 268 metres in length from the existing B1024 south of the altered A12 carriageway (Work No. 45(a)). 52: The construction of the New Essex Fire and Rescue Access Road including the provision of means of access to adjoining land. U129: The diversion of buried communications cable ducts of approximately 500 metres in length between Hole Farm and a	The extent of acquisition in respect of this Land Plot extends beyond that necessary for the Work No's identified. As a result, it is not proportionate. The Promoter has neither identified reasonable alternatives nor set out why the relevant land is required. The proposed acquisition in respect of this Plot requires reconsideration to minimise the land permanently acquired.

		point northeast of the junction of Cranes Lane and the B1024, Kelvedon. U137: The diversion of buried communications cable ducts of approximately 5400 metres in length between Rivenhall Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. U140: The diversion of buried communications cable ducts of approximately 5200 metres in length between Rivenhall Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. T37: A haul road of approximately 1300 metres in length between Ashmans Bridge and the proposed Highfields Lane Overbridge replacement (Work No. 55(b)) and the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon, including a temporary access and egress onto the A12 southbound carriageway at a point to the west of the proposed realigned Highfield Lane, Kelvedon.	
13/14a	45(a), 45(b), 57, U136, U136A, T38	45(a): The alteration of the A12 of 2882 metres in length, widening of the existing carriageways, new carriageways, including the demolition of Brick Kiln Farm, retaining earth structures and tie in works. 45(b): The construction of four slip roads to and from Junction 24 roundabouts (Work No. 45(b)) and associated demolition works to the existing A12. 57: The construction of an attenuation pond including associated outfall and access track from Ewell Hall Chase, to the north of the altered A12 carriageway (Work No. 45(a)). U136: The diversion of buried and overhead 11kV electricity cable ducts of approximately 400 metres in length between Koorbaes Cottages, off Highfields Lane to the south of the A12, and Bridgefoot Farm, Kelvedon.	The extent of acquisition in respect of this Land Plot extends beyond that necessary for the Work No's identified. As a result, it is not proportionate. The Promoter has neither identified reasonable alternatives nor set out why the relevant land is required. The proposed acquisition in respect of this Plot requires reconsideration so as to minimise the land permanently acquired.

		U136A: The diversion of a buried water main of approximately 350 metres in length north-east of Maldon Road, Kelvedon and crossing under the A12. T38: A haul road of approximately 950 metres in length between the proposed Highfields Overbridge Replacement (Work No. 55(b)) and the proposed Ewell Overbridge Replacement (Work No. 76), including a temporary access and egress onto the A12 northbound carriageway at a point to the east of the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon. Access / working room for construction of temporary soil storage bunds and soil storage area during construction works.	
13/14h	45(a), 45(b), 59, 60, U136, U137, U140, T37, T39, T40	45(a): The alteration of the A12 of 2882 metres in length, widening of the existing carriageways, new carriageways, including the demolition of Brick Kiln Farm, retaining earth structures and tie in works. 45(b): The construction of four slip roads to and from Junction 24 roundabouts (Work No. 45(b)) and associated demolition works to the existing A12. 59: A borrow pit (Borrow Pit-J) to the south of the altered A12 carriageway (Work No. 45(a)). 60: A new public footpath between Highfields Lane (Work No. 55(c)) and the replacement Ewell Overbridge (Work No.76), including the provision of means of access to the borrow pit restoration adjoining land (Work No. 59) and the ponds (Work No 77 and Work No. 58). U136: The diversion of buried and overhead 11kV electricity cable ducts of approximately 400 metres in length between Koorbaes Cottages, off Highfields Lane to the south of the A12, and Bridgefoot Farm, Kelvedon.	The Landowner objects to the permanent acquisition of this Land Plot for Work No. 59. The requirement for Borrow Pit J has not been fully justified and alternative borrow pit locations have not been fully considered, as identified in the body of this representation. As a result, the Promoter has not demonstrated that the land is required. The Promoter has not attempted to acquire rights to undertake these works by agreement nor have they considered temporary acquisition, as a reasonable alternative. The Landowner also objects to the acquisition for Work No. 60 and the creation of all public rights of way through their Land ownership.

		U137: The diversion of buried communications cable ducts of approximately 5400 metres in length between Rivenhall Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. U140: The diversion of buried communications cable ducts of approximately 5200 metres in length between Rivenhall Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. T37: A haul road of approximately 1300 metres in length between Ashmans Bridge and the proposed Highfields Lane Overbridge replacement (Work No. 55(b)) and the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon, including a temporary access and egress onto the A12 southbound carriageway at a point to the west of the proposed realigned Highfield Lane, Kelvedon. T39: A haul road of approximately 2500 metres in length between Borrow Pit J (Work No. 59) and B1023, Inworth Road including a temporary access and egress onto the A12 southbound carriageway at a point to the east of the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon. T40: The temporary works associated with Borrow Pit J (Work No. 59) including, access routes, temporary diversion of public and private rights of way, controlled pedestrian crossing, water management, soil storage and material processing areas, Kelvedon. Temporary storage, laydown areas, access and working space to facilitate the construction of Ewell Bridge.	
13/19a	57	57: The construction of an attenuation pond including associated outfall and access track from Ewell Hall Chase, to the north of the altered A12 carriageway (Work No. 45(a)).	This small piece of land forms part of Ewell Chase (the access to the east). The land should be temporarily possessed with the permanent acquisition of rights

14/3a	45(a), 45(b), 58, 64, 65(a), 65(b), 74(a), 76, U141, U141A, U142, T38, T42, T43	45(a): The alteration of the A12 of 2882 metres in length, widening of the existing carriageways, new carriageways, including the demolition of Brick Kiln Farm, retaining earth structures and tie in works. 45(b): The construction of four slip roads to and from Junction 24 roundabouts (Work No. 45(b)) and associated demolition works to the existing A12. 58: The construction of an attenuation pond including associated outfall, northwest of realigned Ewell Road (Work No. 76) and a maintenance lay-by on Ewell Hall Chase. 64: The construction of an attenuation pond including associated outfall, to the north of Ewell Hall Chase. 65(a): An attenuation pond including associated outfall. 65(b): An access track of 639 metres in length from Inworth Road to Work No. 64 and provision of means of access to adjoining land. 74(a): Northern and southern roundabouts of J24, and a connecting underbridge. 76: The demolition of the existing Ewell Bridge and the construction of a new bridge (replacement Ewell Overbridge) over the altered A12 (Work No. 45(a)), including the construction of the realigned Ewell Road, a new public footpath connecting Footpath (92_95) to Footpath (92_15), the construction of private means of access to adjoining land and the provision of means of access to the ponds (Work No. 58). U141: The diversion of a buried water main of approximately 400 metres in length from the A12 northbound verge to the A12 southbound verge, between the proposed Ewell	The Landowner objects to the following Work No's: 65(a) - For the reasons detailed at paragraph 25 above, this attenuation pond should be combined with that proposed in Work No. 64 in the location of Work No.64. The land associated with Work No. 65(a) should not be acquired by the Promoter. 65(b) - For the reasons detailed at paragraph 26, this access track should be amended so Work No. 64 is accessed directly from the Junction 24 Northern Roundabout (Work No. 74(a)). The land associated with Work No. 65(b) should not be acquired by the Promoter. It is also proposed to make the track a public footpath, the Landowner also objects to this and the creation of all public rights of way through their land ownership.

		Overbridge Replacement (Work No. 76) and the proposed Junction 24 Underbridge, (Work No. 74(a)) Kelvedon. U141A: The diversion of a foul sewer of approximately 125 metres in length north of the A12, between the proposed Junction 24 Northern Roundabout (Work No. 74(a)) and the B1023 Inworth Road, Kelvedon, adjacent to Domsey Brook. U142: The diversion of a foul sewer of approximately 150 metres in length along Domsey Brook to the north of the A12, between the proposed Junction 24 Underbridge (Work No. 74(a)) and B1023 Inworth Road, Kelvedon. T38: A haul road of approximately 950 metres in length between the proposed Highfields Overbridge Replacement (Work No. 55(b)) and the proposed Ewell Overbridge Replacement (Work No. 76), including a temporary access and egress onto the A12 northbound carriageway at a point to the east of the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon. T42: A temporary carriageway of approximately 225 metres in length the south of the existing A12, at the proposed junction 24 northern roundabout (Work No. 74(a)), Kelvedon. T43: A haul road of approximately 900 metres in length between Ewell Overbridge Replacement (Work No. 76) and B1023, Inworth Road, Kelvedon including a temporary access and egress onto the A12 northbound carriageway at points to the east and west of the proposed Junction 24 Underbridge (Work No. 74(a)), Kelvedon. Access / working room for construction of temporary soil storage bunds and soil storage area during construction works.	

		Temporary storage, laydown areas, access and working space to facilitate the construction of Junction 24 Underbridge.	
14/3c	45(a), 45(b), 59, 60, 70, 71, 72(a), 72(b), 73, 74(a), 74(b), 74(c), 75, 76, 76A, 77, 122, U137, U140, U141, U143, U145A, U146, U146B, U146C, U147, U148, U154, T39, T40, T41	45(a): The alteration of the A12 of 2882 metres in length, widening of the existing carriageways, new carriageways, including the demolition of Brick Kiln Farm, retaining earth structures and tie in works. 45(b): The construction of four slip roads to and from Junction 24 roundabouts (Work No. 45(b)) and associated demolition works to the existing A12. 59: A borrow pit (Borrow Pit-J) to the south of the altered A12 carriageway (Work No. 45(a)). 60: A new public footpath between Highfields Lane (Work No. 55(c)) and the replacement Ewell Overbridge (Work No.76), including the provision of means of access to the borrow pit restoration adjoining land (Work No. 59) and the ponds (Work No 77 and Work No. 58). 70: The construction of an attenuation pond including associated outfall and an access track form the realigned North Inworth Road, to the north of Inworth Roundabout (Work No. 74(c)). 71: The construction of an attenuation pond including associated outfall to the west of Inworth Road including an access track from Inworth Roundabout (Work No. 74(c)) and access to adjoining land. 72(a): An attenuation pond and associated outfall. 72(b): An access track of 217 metres in length from the New Inworth Link (Work No. 74(b)). 73: Flood mitigation area to the south of Inworth Road.	The Landowner objects to the permanent acquisition of this Land Plot for Work No. 59. The requirement for Borrow Pit J has not been fully justified and alternative borrow pit locations have not been fully considered, as identified in the body of this representation. As a result, the Promoter has not demonstrated that the land is required. The Promoter has not attempted to acquire rights to undertake these works by agreement nor have they considered temporary acquisition, as a reasonable alternative. The Landowner also objects to the acquisition for Work No. 60 and the creation of all public rights of way through their Land ownership.

		74(a): Northern and southern roundabouts of J24, and a connecting underbridge. 74(b): New link road (Inworth Link) from the southern roundabout of J24 to the new Inworth Roundabout (Work No. 74(c)). 74(c): And new roundabout on Inworth Road (Inworth Roundabout) including the realigned Kelvedon Road, realigned Inworth Road and segregated left turn lane from Inworth Road to the Inworth Link Work No. 74(b)). 75: Flood mitigation area to the south of J24 southbound on-slip (Work No. 45) and a proposed flood bund. 76: The demolition of the existing Ewell Bridge and the construction of a new bridge (replacement Ewell Overbridge) over the altered A12 (Work No. 45(a)), including the construction of the realigned Ewell Road, a new public footpath connecting Footpath (92_95) to Footpath (92_15), the construction of private means of access to adjoining land and the provision of means of access to the ponds (Work No. 58). 76A: The construction of new public footpath connecting Footpath (92_20) to Footpath (92_25), Kelvedon. 77: The construction of an attenuation pond including associated outfall and an access track of 123 metres in length from the realigned Ewell Road, southeast of Ewell Overbridge replacement (Work No. 76). 122: Improvements to Inworth Road including localised widening of the carriageway and provision of means of access to adjoining land. U137: The diversion of buried communications cable ducts of approximately 5400 metres in length between Rivenhall	

		Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. U140: The diversion of buried communications cable ducts of approximately 5200 metres in length between Rivenhall Bridge and a point to the north of Domsey Brook Bridge, Kelvedon. U141: The diversion of a buried water main of approximately 400 metres in length from the A12 northbound verge to the A12 southbound verge, between the proposed Ewell Overbridge Replacement (Work No. 76) and the proposed Junction 24 Underbridge, (Work No. 74(a)) Kelvedon. U143: The diversion of a buried water main of approximately 200 metres in length between Brick Kiln Farm, B1023 Inworth Road, Kelvedon and a point north of Park Bridge. U145A: The diversion of a buried raw water main of approximately 100 metres in length beneath Park Bridge on B1023 Inworth Road, Kelvedon. U146: The diversion of buried communications cable ducts of approximately 100 metres in length along the realigned Kelvedon Road. U146B: The diversion of a buried water main of approximately 225 metres in length between The Laurels and Park Farm on the B1023 Inworth Road, Kelvedon. U146C: The diversion of a buried sewer of approximately 525 metres in length between Inworth Hall and Park Farm on the B1023 Inworth Road, Kelvedon. U147: The diversion of buried communications cable ducts of approximately 350 metres in length between The Laurels, B1023 Inworth Road, Kelvedon and Rowan Lodge, B1023 Inworth Road, Kelvedon.	

		U148: The diversion of a buried water main of approximately 100 metres in length crossing the proposed New Inworth Link (Work No. 74(b)). U154: The diversion of buried communications cable ducts of approximately 1900 metres in length between Brick Kiln Farm B1023 Inworth Road, Kelvedon and the proposed Feering East Roundabout (Work No. 82(a)). T39: A haul road of approximately 2500 metres in length between Borrow Pit J (Work No. 59) and B1023, Inworth Road including a temporary access and egress onto the A12 southbound carriageway at a point to the east of the proposed realigned Highfield Lane (Work No. 55(c)), Kelvedon. T40: The temporary works associated with Borrow Pit J (Work No. 59) including, access routes, temporary diversion of public and private rights of way, controlled pedestrian crossing, water management, soil storage and material processing areas, Kelvedon. T41: A temporary carriageway of approximately 250 metres in length the south of the existing A12, at the proposed junction 24 southern roundabout (Work No. 74(a)), Kelvedon. Temporary PRoW / footpath / footway diversion route. Access / working room for construction of drainage infrastructure. Access / working room for the construction of a new roundabout on existing A12 and associated improvement works (Work No. 37(a)). Access / storage / working room for the construction of a retaining structure.	

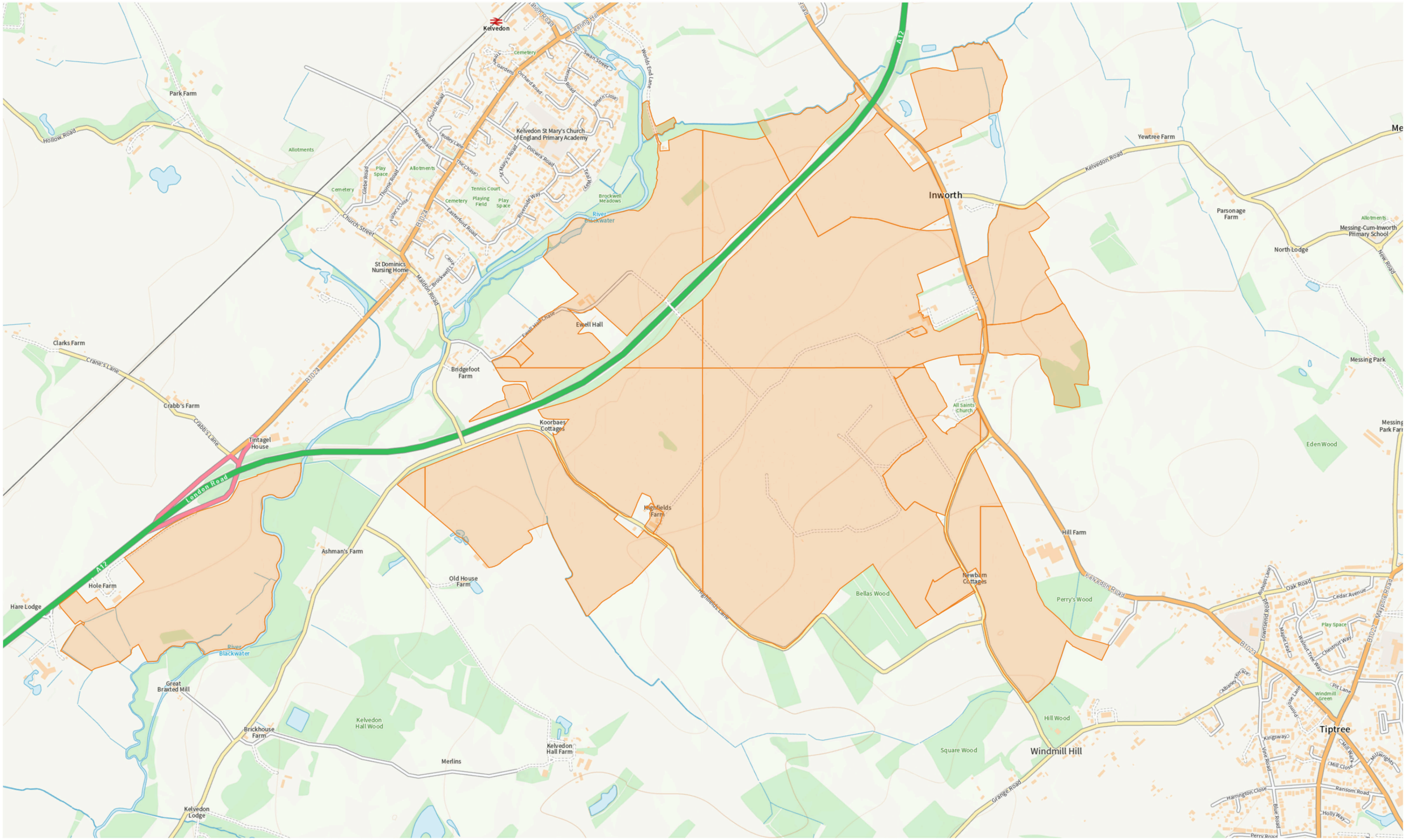
		Temporary storage, laydown areas, access and working space to facilitate the construction of Ewell Bridge. Temporary storage, laydown areas, access and working space to facilitate the construction of Junction 24 Underbridge.	
14/3k	67(b), 69(a), 69(b), T45	67(b): The realignment of Domsey Brook. 69(a): An attenuation pond including associated outfall. 69(b): An access track of 257 metres in length from the existing Inworth Road. T45: A haul road of approximately 700 metres in length between B1023, Inworth Road, Kelvedon and to the north of the proposed Domsey Brook Bridge (Work No. 67(a)), Kelvedon, including the provision of a temporary bridge over Domsey Brook.	The extent of acquisition in respect of this Land Plot extends beyond that necessary for the Work No's identified. As a result, it is not proportionate. The Promoter has neither identified reasonable alternatives nor set out why the relevant land is required. The proposed acquisition in respect of this Plot requires reconsideration to minimise the land permanently acquired.
14/3m	122	122: Improvements to Inworth Road including localised widening of the carriageway and provision of means of access to adjoining land. Access / working room for construction of drainage infrastructure.	The widening works to Inworth Road do not appear to extend to the full width of this Plot. Land not required should not be permanently acquired.
14/4a	65(a), T43	65(a): An attenuation pond including associated outfall. T43: A haul road of approximately 900 metres in length between Ewell Overbridge Replacement (Work No. 76) and B1023, Inworth Road, Kelvedon including a temporary access and egress onto the A12 northbound carriageway at points to the east and west of the proposed Junction 24 Underbridge (Work No. 74(a)), Kelvedon.	This Plot does not appear to be necessary for the attenuation pond and as such should not be acquired by the Promoter.
20/4e	114, 122	114: A flood mitigation area including realigned ditch to the south of All Saints' Church, Inworth and east of Inworth Road.	The Landowner believes this land to sit higher than the adjacent carriageway and such be unsuitable for flood mitigation. The Promoter

		122: Improvements to Inworth Road including localised widening of the carriageway and provision of means of access to adjoining land.	needs to review this and if unsuitable land is not to be acquired as part of the Scheme (or extent reduced to only enable Work No. 122).
20/4f	113	113: A flood mitigation area including realigned ditch to the south of Windmill Hill, Inworth. Temporary PRoW / footpath / footway diversion route.	It is unclear why this small parcel of land is required and why the works cannot be carried out solely in Land Plot 20/10a. The Promoter should not acquire this parcel unless it can be demonstrated that it is required.
21/2a	64, 65(b), U141A	64: The construction of an attenuation pond including associated outfall, to the north of Ewell Hall Chase. 65(b): An access track of 639 metres in length from Inworth Road to Work No. 64 and provision of means of access to adjoining land. U141A: The diversion of a foul sewer of approximately 125 metres in length north of the A12, between the proposed Junction 24 Northern Roundabout (Work No. 74(a)) and the B1023 Inworth Road, Kelvedon, adjacent to Domsey Brook.	The Landowners object to the permanent acquisition for Work No. 65(b). As detailed at paragraph 26, above, access should be obtained directly from proposed Junction 25 (Work No. 74(a)).
13/18a	57	57: The construction of an attenuation pond including associated outfall and access track from Ewell Hall Chase, to the north of the altered A12 carriageway (Work No. 45(a)).	This small sliver of land forms part of Ewell Chase (the access to the east). The land should be temporarily possessed with the permanent acquisition of rights

APPENDIX B

J A BUNTING & SONS

The land app



Produced on Nov 29, 2021.

FOR IDENTIFICATION PURPOSES ONLY

500 m
Scale 1:12500 (at A3)

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APPENDIX C

Notes

1. This drawing and the works depicted thereon are the copyright of Pigeon . Unauthorised reproduction infringes copyright.
2. Do not scale from this drawing.

Key

- Site Boundary
- Unregistered Land
- Cottage 1 Tugela
- Cottage 2 Belmont

Rev	Date	Description
D	04/05/2022	Telecom mast boundary amended
C	04/05/2022	Land omitted for telecom mast
B	14/07/2021	Colour wash added for domestic access and retained land, land excluded from around Highfield Lane
A	12/07/2021	Adjustments to boundary around Ewell Hall

Pigeon

Pigeon Investment Management Ltd
Linden Square
146 King's Road
Bury St Edmunds
IP33 3DJ

Project

KELVEDON, INWORTH ROAD

Drawing Title

SITE BOUNDARY

Drawn	Check	Scale	@
JK	EL	1:7000	A3
Date		Drawing No.	Rev
12/02/2021		0105-001	D

APPENDIX D

Pigeon

Concept Plan

Key:

- Existing PROW
- Proposed pedestrian/ cycle ways
- Proposed 'Green' Pedestrian/ Cycle Corridors
- Emergency access to Ewell Hall Chase/Maldon Road
- Proposed Main Roads/ Junctions/ Roundabouts
- Proposed Highways England Junction
- New Tree Planting
- Existing Woodland and Hedges
- New Homes
- Proposed Commercial/ Logistics
- Strategic Landscaping
- Amenity Space/SUDS
- Riverside Country Park
- Landscape Bund
- Strategic Growth Location

Not to Scale

Project: Kelvedon

Date: Nov '22

APPENDIX E

Kelvedon

Industrial & Logistics Needs Assessment

savills

Table of Contents

Executive Summary

This reports provides an evidence based overview of the market potential for new industrial & logistics (I&L) development at a site in Kelvedon (the Subject Site).

The I&L market has been expanding for a number of years and the pandemic has accelerated existing growth trends, increasing demand for I&L floorspace. For example, the share of internet sales has increased from 19% before the pandemic to now around 26% and is expected to continue to grow, reaching 37% by 2025. This has significant implications for future I&L demand given that e-commerce requires around 3 times the logistics space of traditional bricks-and-mortar retailers.

The Subject Site is well placed to tap into this growth of the I&L sector, given its adjacency to the A12 that puts it in reach of a large base of potential customers and suppliers.

Our analysis of market data indicates that the local market has been supply constrained since 2016. Current I&L availability is only 4.7%, which is below the 8% market equilibrium level. 8% availability is commonly referred to as the level where a market is broadly in balance (i.e. frictional capacity) in terms of supply and demand. The low availability in the local market is restricting demand and is limiting market churn and economic growth.

We reviewed the relevant councils' employment evidence base and found a number of methodological shortcomings and inconsistencies in their employment land needs estimations. These were addressed by applying Savills own demand methodology to calculate future I&L demand.

Savills demand methodology is NPPG–compliant as it builds on past trends, adjusting for historic supply shortages and the subsequent loss in demand. We refer to this as 'suppressed demand' which is added to the historic demand trend as a top-up. As a final step we also factor in future e-commerce growth.

Based on the Savills demand methodology, **we estimate a demand for I&L land of 92.8 ha over the plan period, which is at least between 38.2 ha and 65.3 ha higher than the requirements identified in the Local Plans**. We conclude that on the basis of strong, unmet I&L need across the local market, the proposed I&L development on the Subject Site is needed and well positioned to cater for the booming I&L market.

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1 Introduction

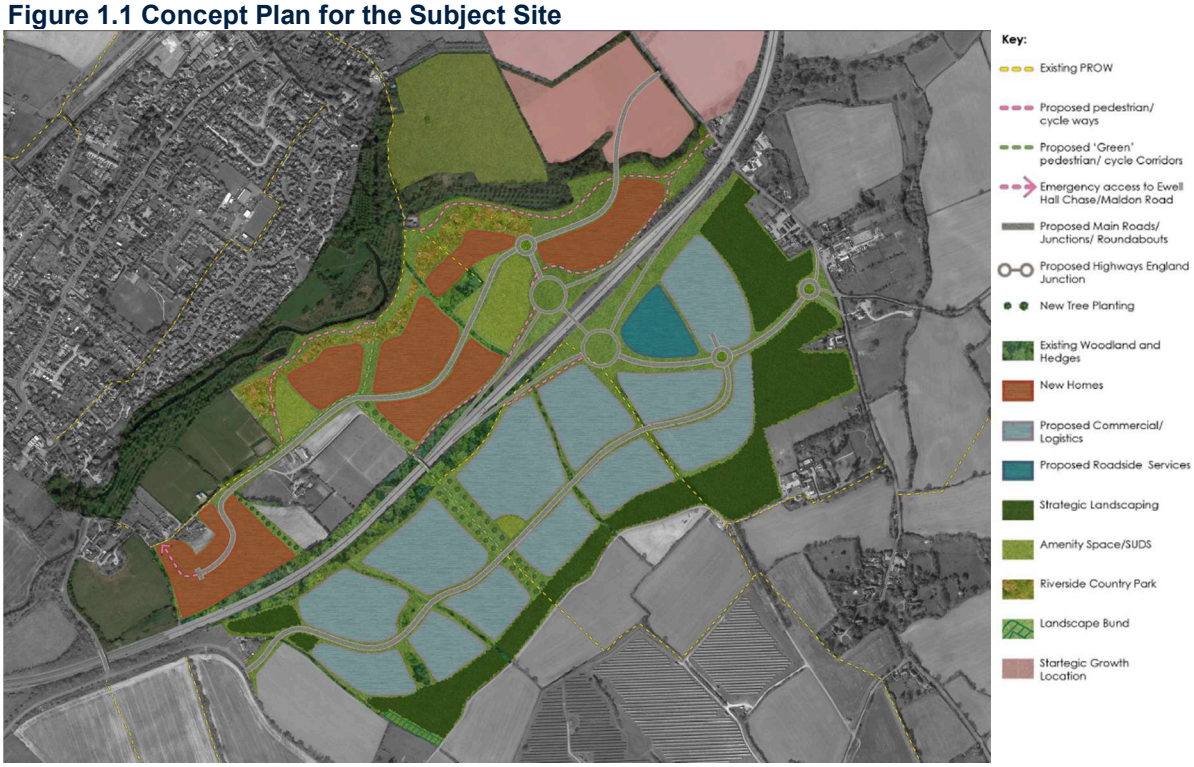
1.1 Purpose

1.1.1 The aim of this report is to provide an evidence based overview of the market potential for new industrial & logistics (I&L) development at a site in Kelvedon (the Subject Site), which largely falls within the District of Braintree and has a smaller portion falling within the Borough of Colchester.

1.2 Subject Site

1.2.1 The Subject Site is approximately 122 ha in size and spans across both sides of the A12, south of Kelvedon. The concept plan prepared for the site, as shown in **Figure 1.1**, is for a mixed-use development with residential units in the portion north of the A12 and commercial development in the southern portion. The parcels of land reserved for the commercial development comprise a total of 32.25 ha and are targeted to industrial and logistics (I&L) users, taking advantage of the strong growth of the sector, as we discuss in **Section 2**.

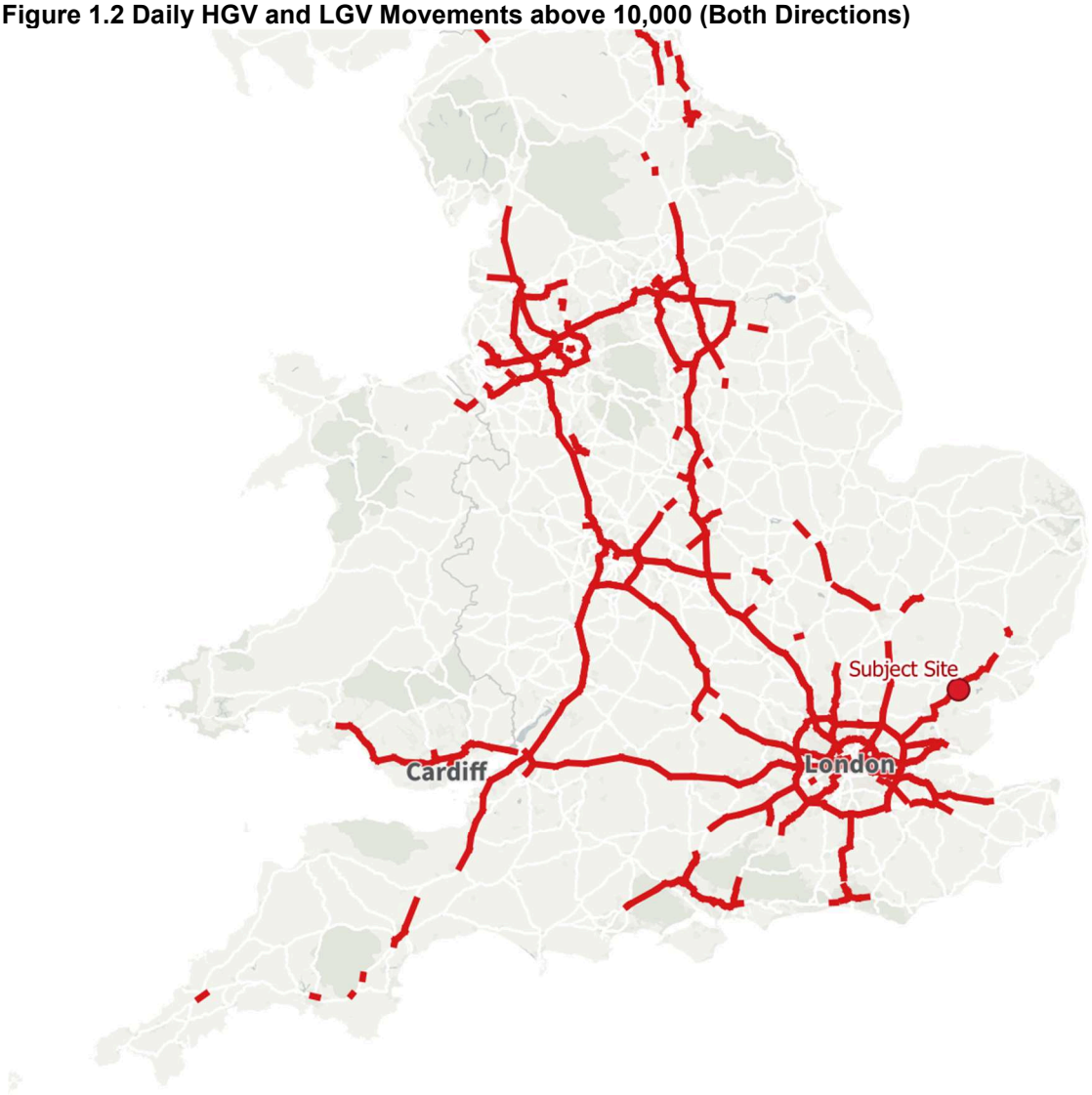
Figure 1.1 Concept Plan for the Subject Site



Source: Pigeon

1.2.2 As illustrated in **Figure 1.2**, the A12 is one of the busiest commercial corridors in the UK (with more than 10,000 daily movements of HGVs and LGVs in both directions) connecting London to the East. This underlines the strategic significance of the Subject Site's location for I&L uses as it enables access to a large customer base as well as suppliers.

Figure 1.2 Daily HGV and LGV Movements above 10,000 (Both Directions)



Source: Savills (2021): DfT

1.3 Reader Note

1.3.1 When we refer to the industrial and logistics (I&L) sector we mean Light Industrial (formally B1c use class now part of Class E), General Industry (B2 use class) and Storage and Distribution (B8 use class). Effectively the primary use classes that require shed-type units (including ancillary offices) and associated yard spaces. These use classes typically cover the diverse range of industrial, manufacturing and logistics companies that operate within England.

2 I&L Growth Drivers

2.1 Introduction

2.1.1 In this section we contextualise some of key trends that have been driving growth in the I&L sector. Not only has the sector been outperforming other commercial sectors in the UK for some time, but it is also critical national infrastructure that supports the functioning of our economy and the way we live our lives.

2.1.2 The food we eat, the products and services we purchase, the materials used to build new homes and new infrastructure, even the vaccines that give us protection from Covid are stored, manufactured and distributed from warehouses and factories to 'us' the end customer. Without these facilities and the increasingly efficient supply chains that link them with suppliers and end customers, the delivery of our purchases would be much slower, more expensive and we would have less choice.

2.1.3 The Subject Site, by way of its strategic location on the A12, is ideally placed to cater for the strong growth of the I&L sector and the well paid and diverse jobs it supports.

2.1 Current trends are providing a boost to I&L demand

2.1.1 The I&L sector is facing an era of unprecedented change. The past decade has seen the industry undergo a remarkable transformation, reshaping operating models and occupier requirements in ways that are only starting to become recognisable as an industry-wide phenomenon. Logistics uses in particular have shown strong performance for a number of years, but the Covid-19 pandemic has exacerbated existing trends. This has driven demand up even further for logistics floorspace while adversely impacting others commercial sectors such as retail and offices.

2.1.2 The shift in habits we have been witnessing – first of all the extraordinary growth in **online retailing** – is likely to be structural rather than temporary, meaning that as the country's population continues to grow, so will I&L floorspace need to support household consumption and other sectors of the economy. Statistics collected by the ONS from November 2006 show that the share of internet sales has consistently increased over time and it was at 19% before the onset of the Covid-19 pandemic. During the pandemic, due to lockdowns and restrictions this figure considerably increased and is around 26% as of October 2021[1]. The growth in online shopping has significant implications on future I&L demand given that e-commerce requires around 3 times the logistics space of traditional bricks-and-mortar retailers[2].

2.1.3 While the proportion of online retailing may soften slightly as the UK economy opens up, most commentators agree that online retailing will continue to grow from a higher base than before the pandemic due to behavioural changes such as increased home working and continued demand for rapid parcel deliveries. Forrester Research, a respected source of future online retail projections, estimate that online retail will continue to grow but from higher base into the future at 32% in 2022 and steadily growing to 37% in 2025 (**Figure 2.1**).

[1] ONS (2021), Internet sales as a percentage of total retail sales (ratio) (%)
[2] Prologis (2016), Global E-Commerce Impact on Logistics Real Estate. Online Article: https://www.prologis.com/about/logistics-industry-research/global-e-commerce-impact-logistics-real-estate

Figure 2.1 Internet Sales as a % of Retail Sales, 2006-2025

Source: ONS, Retail Sales Index Time Series, Forrester Research, Savills 2021

2.1.4 Significant growth is forecast across all **freight** modes (**Figure 2.2**) which will increase demand for I&L space in the future. Freight arriving and leaving the UK needs to be sorted, packaged and distributed via a network of freight handling infrastructure (i.e. ports, airports, rail freight interchanges and motorways) and conveniently located I&L premises in order to reach end customers.

Figure 2.2 Projected growth in freight by Mode

Source: DfT, MDS Transmodal, Boeing, Savills

2.1.5 Brexit and Covid-19 have highlighted the level of interconnectedness of international supply chains and their fragility when one or more links break. Companies have started building up greater resilience in their operating models by moving operations either back to the UK (**re-shoring**) or closer by (**near-shoring**) as a means to minimise future supply-chain-induced disruptions. According to a survey carried out in July 2020 by the Institute for Supply Management, 20% of firms are planning to or have already started to near-shore or re-shore. These findings are corroborated by a survey carried out by Savills whereby over 80% of respondents expected the Covid pandemic to either 'greatly increase' or 'somewhat increase' on-shoring. This is likely to lead to higher domestic inventory requirements, further increasing long-term demand for I&L space.

Near-shoring definition	Re-shoring definition
Transferring a business operation to a nearby country as opposed to a more distant one (i.e. off-shoring)	Moving a business that had gone overseas back to the country from which it had originally relocated

2.1.6 Increases in demand and occupancy could also arise due to higher levels of **stockpiling**. For example, businesses may find it too risky to have a single warehouse serving their customer base compared to a

multiple stocking solution. Therefore, instead of concentrating in one location, some firms might seek to spread their inventory over different regions, but in smaller spaces.

2.1.7 The image below, provides a visual representation of some of the major trends driving growth in the I&L sector. While e-commerce grabs most of the headlines for driving growth in the sector, there are several growth drivers at play as illustrated below. Combined these growth drivers are resulting in unpreceded demand for I&L premises. Savills July 2021 Big Shed Briefing[3] reports that halfway into 2021 24 million sqft (gross) of warehouse space has been transacted, setting a new H1[4] take-up record and being 82% above the long-term H1 average.

Figure 2.3 I&L Growth Drivers

Source: Savills

2.2 The I&L sector is a major contributor to the national economy

2.2.1 The I&L sector is a significant employer of at least 3.8 million people in England and produces £232 billion of GVA. Over the last 10 years the logistics component of the I&L sector has grown by 26% compared to only 14% across the economy as a whole (**Figure 2.4**).

2.2.2 Notwithstanding its importance in terms of employment and GVA contribution, the sector is subject to a number of misconceptions about average pay levels, skills required and types of spaces provided.

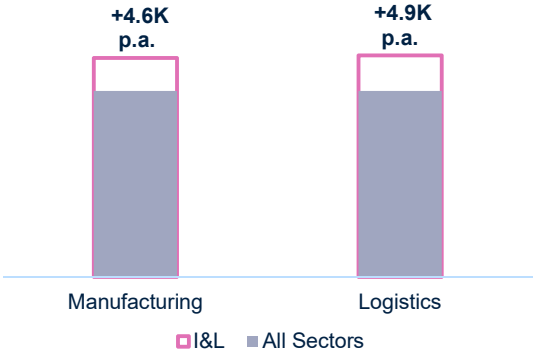
2.2.3 Average pay is higher than the UK average. Data from the Office for National Statistics (ONS) show wages above average at +£4,600 for Manufacturing and +£4,900 for Logistics. Again, the logistics component of the sector is performing above average, with wages between 2019 and 2020 having increased more than in other sectors (+6 growth in logistics vs +4%).

[3] The Big Shed Briefing focuses on large units typically of 100,000 sqft plus
[4] H1: first half of the year

Figure 2.4 Jobs Growth in England (2010-20)

Source: ONS, Workforce Jobs by Industry and Region

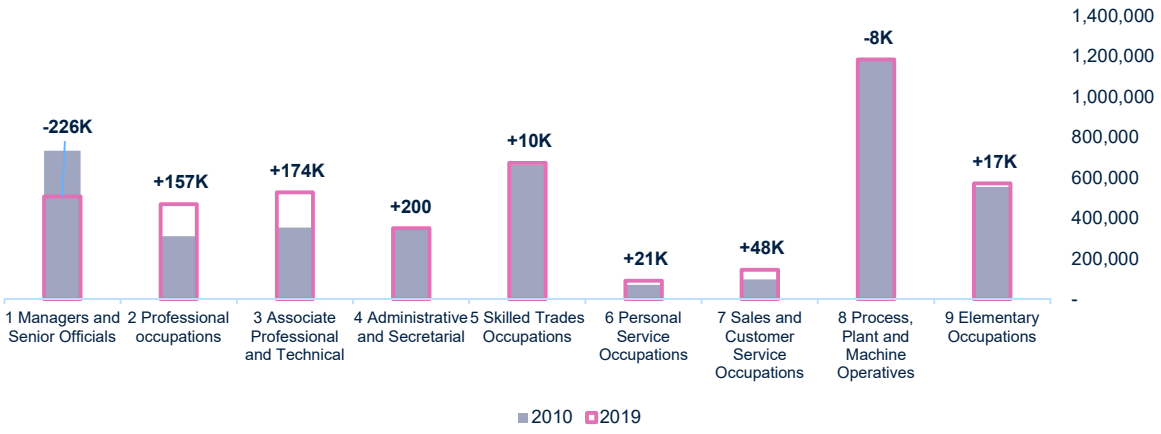
Figure 2.5 I&L jobs pay more (2020)



Source: ONS ASHE

2.2.4 I&L jobs have also become increasingly diverse over the last decade. **Figure 2.6** shows the change in the share of occupations in I&L in 2010 and 2019. While at the beginning of the decade we see a much more polarised distribution, with a higher share of managers at one end of the spectrum and more routine occupations at the other end, today we see a higher share of Professional and Associate Professional and Technical roles, typically associated with higher-skilled engineering and technological professions in response to increase automation and robotics in the sector and more advanced supply chain processes. These office-based roles are increasingly co-locating alongside production and logistics uses as it is convenient for these people to be closer to the operations they control and analyse.

Figure 2.6 Occupational Distribution in Manufacturing, Transport & Storage



Source: ONS APS, Savills 2020

2.2.5 This increased occupational diversity means the I&L sector can play an important role in re-employing people that have lost jobs in other sectors of the economy as a result of the Covid-19 pandemic.

2.2.6 The Government's Coronavirus Job Retention Scheme (CJRS) has helped cushion the impact of economic contraction on the job market, with the latest statistics released in November 2021[5] reporting 5,600 jobs furloughed across Braintree and Colchester. However, in spite of this effort, data on Claimant

[5] Coronavirus Job Retention Scheme (CJRS) Statistics: 4 November 2021, Table 12

Count for the two districts shows a rapid increase in the number of claimants. The Claimant Count measures the number of people claiming benefit principally for the reason of being unemployed. While in the second half of 2021, the number of claimants started to decrease, as of October 2021 the Count still totalled 7,760 claimants, which is over 1.6 times the Count as of March 2020 (+3,035 claimants). The growing I&L sector can help to re-employ these local people.

3 I&L Market Assessment

3.1 Property Market Area

3.1.1 The Subject Site is within the local authorities of Braintree and Colchester. For our market assessment we have defined the site's Property Market Area (PMA) following discussions with Savills industrial agents and reviewing existing employment evidence documents of the two local authorities. A PMA is the 'area of search' of I&L companies that would consider locating/relocating on the Subject Site, and therefore includes locations in direct competition with the Subject Site for the attraction of I&L occupiers.

3.1.2 The evidence base documents for the two local authorities provide differing versions of PMAs. The 2015 Employment Land Needs Assessment for Braintree defined Braintree's PMA (referred to as a FEMA) to include Braintree, Chelmsford, Colchester and Uttlesford. The 2015 Employment Land Needs Assessment for Colchester defined a larger area based on wider economic linkages that includes Chelmsford, Braintree, Tendring, Maldon, Babergh, Ipswich, Uttlesford and Chelmsford.

3.1.3 Given the strategic importance for motorway and A road access to I&L occupiers, Savills PMA for the Subject Site focuses on the A12 corridor within Braintree and Colchester local authorities. The rationale is to capture the areas of the A12 corridor which are in direct competition with potential occupiers of the Subject Site.

3.1.4 Chelmsford's market is generally more expensive than Braintree's and somewhat orientated towards serving London, therefore we do not consider it in direct competition with the Subject Site. Further along the A12, north-east beyond Colchester, we enter the Ipswich/Suffolk market which we consider a different market area, oriented more to serving the north-east as well as those occupiers who want to be close to Felixstowe, Harwich and Ipswich ports. The Uttlesford's market to the west is dominated by the M11 corridor and Stansted airport. While we acknowledge the M11 corridor and Stansted markets are extremely supply constrained, pushing occupiers to consider imperfect locations, Braintree is up to 30-40 minutes away during peak time which will limit the amount of spill over demand from this corridor. Finally Maldon and Tendring are much smaller markets which we do not consider competing with the Subject Site for strategic I&L investment.

Figure 3.1 Property Market Area and Subject Site Location

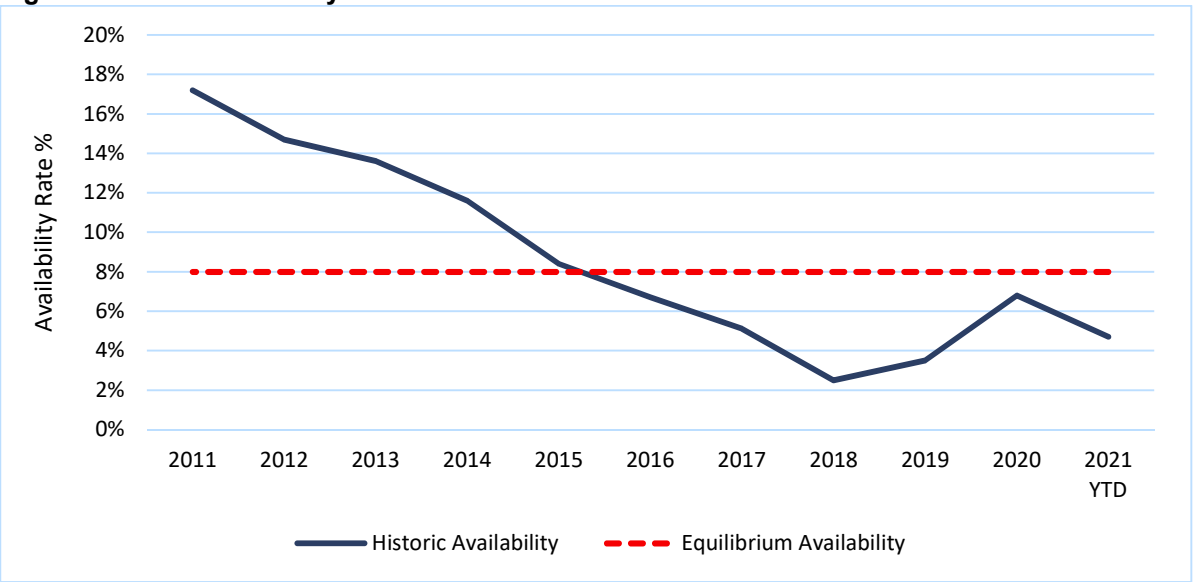
Source: Savills

3.2 Market Supply & Demand Factors

3.2.1 There are 11.6 million sqft of I&L floorspace across the PMA and an availability rate of 4.7%, which is below the 8% market equilibrium level. 8% availability is commonly referred to as the level where a market is broadly in balance (i.e. frictional capacity) in terms of supply and demand (as sourced in publications such as the GLA's Land for Industry and Transport SPG, 2012). Below this level available supply becomes tight and rents increase as strong occupier demand compete for limited available stock.

3.2.2 As shown in **Figure 3.2**, availability across the PMA has been below the 8% equilibrium level since 2016, for nearly 6 years. This means that the PMA I&L market has been supply constrained for a considerable period of time which in turn suppresses demand as not all occupiers can find space to meet their needs. As a result they are either forced to remain in their existing premises even if not ideal for their operational requirements, or alternatively have to leave the PMA to find a suitable premises elsewhere, taking the jobs and investment they generate with them. In **Section 4.3** we explain what are the market signals of supply constraints and provide an estimation of suppressed demand at PMA level.

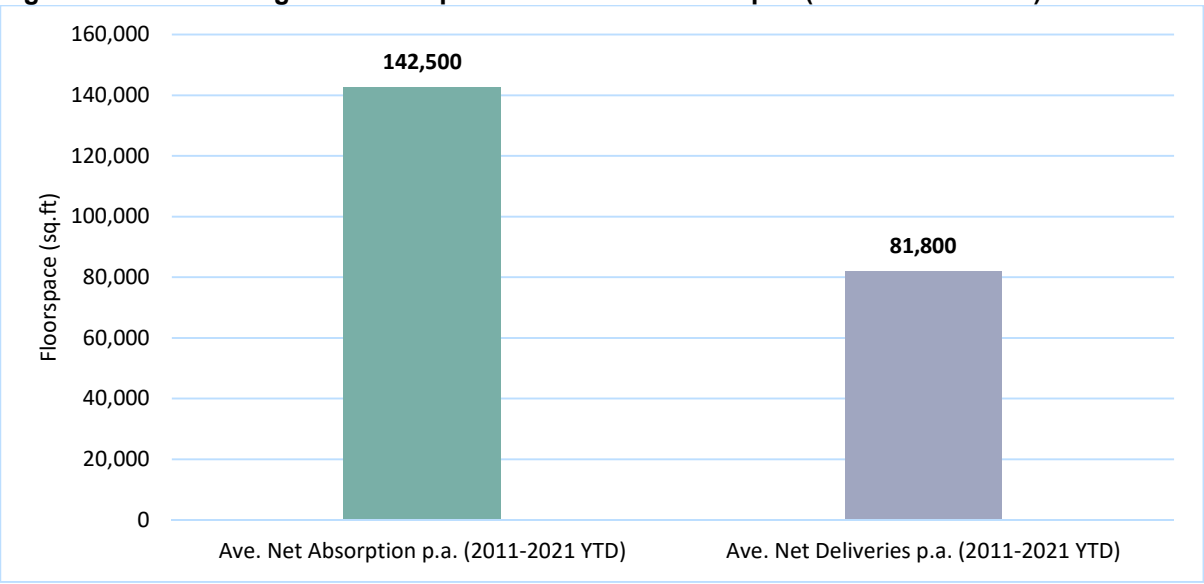
Figure 3.2 PMA Availability Rate since 2011



Source: Costar, Savills

3.2.3 Over the last decade net absorption has averaged 142,500 sqft p.a. while net deliveries of stock has averaged 81,800 sqft per annum (negative) since 2011. Net absorption is a leading measure of demand, comparing occupied space (move-ins) versus vacated space (move-outs). On the other hand net deliveries is a measure of supply and registers the change in inventory. The lower average net deliveries against the average net absorption indicates that supply has not kept pace with demand.

Figure 3.3 PMA Average Net Absorption and Net Deliveries p.a. (2011 to 2021 YTD)

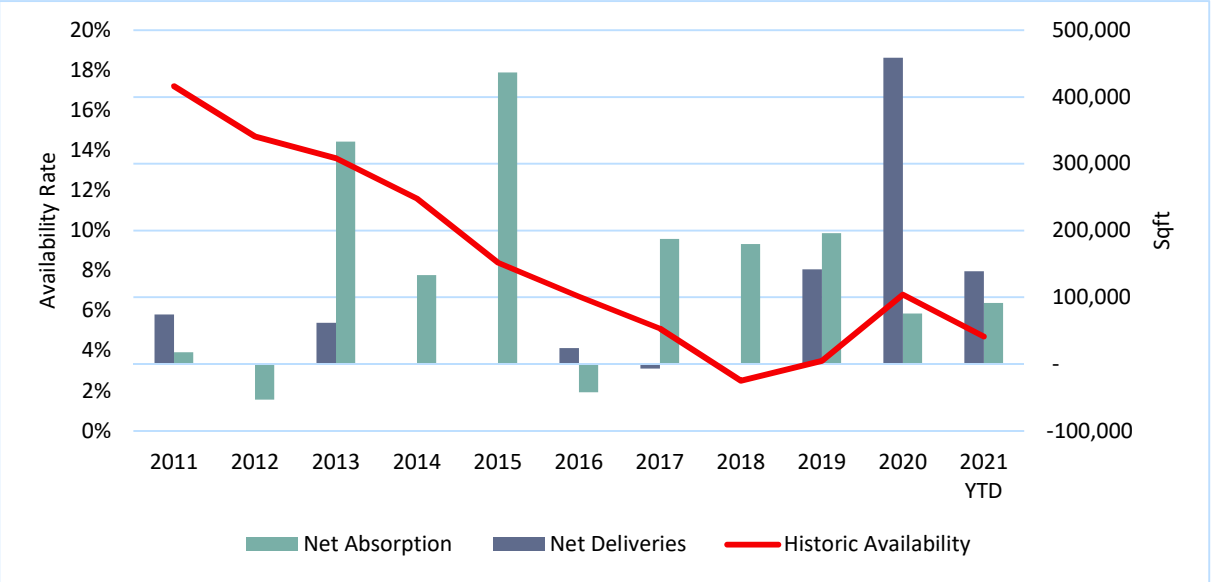


Source: Costar, Savills

3.2.4 **Figure 3.4** shows net absorption and net deliveries on an annual basis since 2011. It clearly shows that the lack of new floorspace has progressively reduced the availability rate. Over the last three years net deliveries increased, peaking in 2020 at around 458,500 sqft of new floorspace. However this recent increase has not been sufficient to bring the market back to a supply / demand balance, with availability remaining well below the 8% equilibrium level. As outlined in **Section 2**, the I&L sector is the strongest

commercial sector in the UK and has been for some time. However for demand to be accommodated new land needs to come forward to increase supply. The Subject Site's location on one of the business commercial corridors in the UK means that it is ideally located to help meet some of the anticipated future I&L demand in the PMA, which we quantify in **Section 4**.

Figure 3.4 PMA Net Absorption and Net Deliveries p.a. vs Availability Rate since 2011

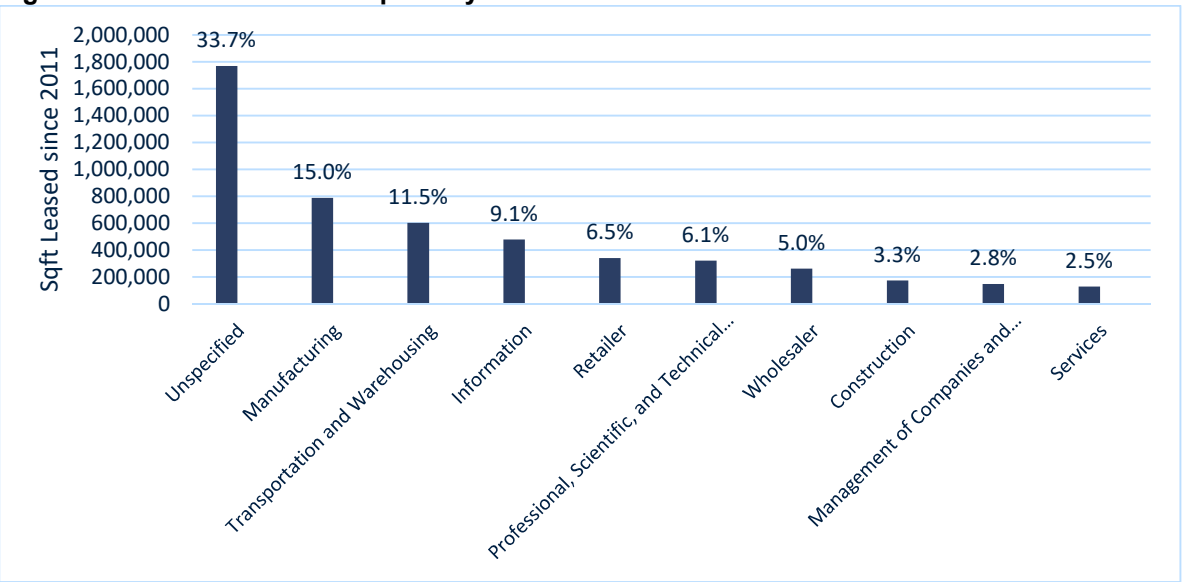


Source: Costar, Savills

3.2.5 To better understand the nature of demand across the PMA over the last decade, we look at lease transactions by sector since 2011 – illustrated in **Figure 3.5**. The chart shows that the manufacturing sector contributed to the majority of floorspace leased (at least 15%), followed by Transport & Warehousing (11.5%) and Information (9.1%).

3.2.6 The sectors which are typically linked to e-commerce are Retail, Transport and Warehousing and Wholesale. In markets that have managed to take advantage of the increase in e-commerce related activities, the combined take-up of these sector tends to be in the region of at least 40%-50%. Across the PMA these sectors account only for 23% despite being in close proximity to major conurbations such as London and the A12 which, as shown in **Figure 1.2**, is a strategically important movement corridor. This suggests that the PMA has not significantly tapped into the growth opportunity posed by the expansion of e-commerce, but it could play a bigger role in the future if the local I&L market is supplied with the right sites in the right locations.

Figure 3.5 PMA Leased Floorspace by Sector since 2011



Source: Costar, Savills

3.2.7 Finally another key market indicator for understanding the relationship between supply and demand is rental growth. When demand outstrips supply, rental growth is typically higher as occupiers vie for limited stock. This in turn drives ups rents. Conversely when there is sufficient supply to accommodate demand rental growth is lower, typically tracking inflation more closely.

3.2.8 Rents across the PMA have grown by 77% since 2011, more than twice the rate of inflation over the same period at 25%.[6] As seen in **Table 3.1** rental growth has been much stronger in the more recent period between 2016 to 2021 (+41%) than in the preceding six years between 2011 to 2016 (+26%). This broadly corresponds to when I&L availability across the PMA dropped below the 8% equilibrium rate indicating a supply constrained market (see **Figure 3.2** above). This further evidences that the PMA's I&L market has become increasingly supply constrained in recent times, a situation that will only worsen further given the strength of the sector.

Table 3.1 Annual Rental Growth – PMA

Period	Market Rent	Rental Growth
2021 YTD	£8.35	
2020	£7.79	
2019	£7.36	
2018	£6.92	2016 to 2021 = 41%
2017	£6.44	
2016	£5.93	
2015	£5.47	
2014	£5.07	2011 to 2016 = 26%
2013	£4.91	
2012	£4.81	
2011	£4.71	

Source: Costar, Savills

[6] According to the Bank of England inflation calculator between 2011 and 2021 (https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator)

4 Future I&L Land Demand

4.1 Introduction

4.1.1 The purpose of this section is to estimate I&L land demand across the PMA. We first review the council's evidence base and then compare it against Savills I&L demand estimation.

4.1.2 Based on Savills demand methodology, we estimate a demand for I&L land of **92.8 ha** over the plan period**,** which is **at least between 38.2 ha and 65.3 ha higher than the requirements identified in the Local Plans**.

4.2 Existing Evidence Base

4.2.1 The Local Plans for Braintree and Colchester cover the period 2013 and 2033 and consist of two sections. Section 1 is a shared strategic plan for North Essex authorities, which include Braintree, Colchester and Tendring. Section 1 was adopted in February 2021. Section 2 is local-authority-specific and provides details on policies, maps and sites for development, housing, employment, regeneration etc. Section 2 is currently under inspector examination.

4.2.2 Policy SP 5 of Section 1 sets out the employment land requirements for each local authority, presented as a range: from a low end of a baseline scenario to an upper end of a higher growth scenario. The land requirements for Braintree and Colchester are summarised in **Table 4.1** below. These land requirements are for office, research & development, industrial, storage and distribution uses. The document does not provide a land requirement breakdown by uses. This contrasts with paragraph 82 of the NPPF which states that planning policies should recognise and address the **specific locational requirements of different sectors**. Para 82 goes on to specify that "this includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for **storage and distribution operations** at a variety of scales and in suitably accessible locations."

Table 4.1 Employment Land Requirements as per Policy SP 5 of Local Plan

	Baseline (ha)	Higher Growth Scenario (ha)
Braintree	20.9	43.3
Colchester	22	30
Total	**42.9**	**73.3**

Source: North Essex Authorities (2021), North Essex Authorities' Shared Strategic Section 1 Plan

It is unclear over what period land requirements are expressed for

4.2.3 First of all it is unclear over which period these requirements are expressed for. The supporting text to Policy SP 5 should provide some clarifications in this regard. However, the text is unclear and inconsistent. It first refers to employment forecasts developed using the East of England Forecasting Model (EEFM) and Experian (2016), covering the period **2013 and 2037** as being set out in Policy SP 5'. Given the models used for forecasting and the reference year (2016), these appear to be based on the 2017 *Employment Land and Floorspace - Aligned with the November 2016 OAN*[7] (ELF) which uses EEFM and Experian over the period between 2014 and 2036.

4.2.4 The supporting text also mentions that Employment Land Needs Assessments (ELNAs) have been

[7] Peter Bret Associate (2017) , Employment Land and Floorspace - Aligned with the November 2016 OAN

carried out by each authority and it seems to imply that these are the basis for Policy SP 5 land requirements "for the period **2016-2033**". This appears to contrast with what is stated above.

4.2.5 The ELNAs for the two authorities were produced in 2015 by Aecom for Braintree and nlp for Colchester. The Braintree's ELNA covers the period between 2015-2033. The Colchester's ELNA covers the period between 2014 and 2032.

4.2.6 We therefore cannot say for certain over what period these the requirements in **Table 4.1** are expressed for, although, as we discuss below, we believe they are expressed for an 18 year period.

It is unclear which evidence base documents informs land requirements

4.2.7 We cannot fully reconcile the land requirements figures in **Table 4.1** with estimates from the evidence base documents.

4.2.8 We first consider the ELF, as the supporting text to Policy SP 5 first referred to the joint EEFM and Experian models which we know are found in the ELF.

4.2.9 The ELF provides a lower estimate based on the EEFM and an upper estimate based on Experian. The estimates from the ELF are provided as floorspace and are not translated into land requirements. Even if we attempt to translate the floorspace figures in land requirements using standard plot ratio assumptions, we cannot reconcile the ELF's numbers with those presented in **Table 4.1**. For example, if we take the case of Braintree, the (lower) estimates based on the EEFM forecast an overall **decline** in floorspace required for the combined Office, Industrial and Warehouse, which clearly does not match the baseline scenario of **Table 4.1**. Similarly, if we look at the Experian forecasts, the change to 2036 is for an additional 34,090 sqm. Even if we assume a plot ratio of 40%[8], this floorspace translates into only 8.5 ha which is lower than the requirements set out in either scenarios of **Table 4.1**.

4.2.10 We then consider the ELNAs.

4.2.11 The *Main Modifications for Consultation* document for Braintree District Local Plan's Section 2 and published in December 2021 (para 6.12 p.33) refers to the ELNA prepared by Aecom as the document used to recommend land requirements. Incidentally, we note an inconsistency: here (para 6.12) reference is made to Policy SP4 of section 1 as the policy mandating land requirements, while further down in the document (e.g. in Policy LPP 2 p.36) reference is made to Policy SP 5 when discussing land requirements.

4.2.12 Braintree's ELNA is based on the EEFM labour demand projection adjusted for local factors. It concludes that the district has an additional requirement of between 53,400 sqm and 66,800 sqm of office space up to 2033, while the requirement for industrial land (manufacturing and warehousing) is between 7.5 ha and 11 ha based on a plot ratio of 40% for manufacturing and 50% for warehousing. Again, these numbers are not consistent with **Table 4.1**. If we tried to translate the office requirement in land at a 60% ratio[9] it would translate in a requirement of between 8.9 ha and 11.1 ha, which added to the industrial estimates produce bookend estimates between 16.4 had and 22.13 ha. These again are not consistent with **Table 4.1**.

[8] In reality, given the floorspace figure includes office, we would expect a higher plot ratio, which would translate into an even lower land requirement.
[9] In practice the site coverage for office could be even higher, which would translate into an even lower land requirement.

4.2.13 Colchester's ELNA relies on three different methods: labour demand forecasts produced by EEFM, past trends on completion, and local labour supply based on subnational population projections. These methods produce four scenarios: one per method, plus a variation on the completion method where changes considered as 'one-off' are removed from the historic take-up series. The estimates derived from these models are then adjusted to include a safety margin worth two years of average net take-up and an allowance for losses. Floorspace requirements are then translated into land requirements using a 40% plot ratio for industrial and a ratio ranging between 40% and 2.0 for office depending on location. The resulting land requirements for the combined office and industrial uses range from -21 ha to 55.8 ha as summarised below.

Table 4.2 Colchester's Land Requirements by Scenario

	1. Baseline Job Growth (EEFM)	2. Past Completion Rates	3. Higher Past Completion Rates	4. Labour Supply (2012 Based SNPP)
Offices (B1a/B1b)	18.5	12.8	12.8	15.4
Industrial (B1c/B2/B8)	11.3	-33.8	43.0	6.6
All B Uses	**29.8**	**-21.0**	**55.8**	**22.0**

Source: NLP (2015) ELNA

4.2.14 The study concludes that the Council should plan to accommodate at least the labour supply scenario (no. 4) of 22 ha but should also consider planning to accommodate the higher requirement arising from the EEFM scenario (no.1) of 29.8 ha.

4.2.15 In the case of Colchester we can therefore see an alignment between the local plan and the ELNA estimates, with a slight adjustment to the *higher growth scenario* rounded to 30 ha (from 29.8 ha) in **Table 4.1**. Based on the above, the land requirements for I&L are therefore between 6.6 ha and 11.3 ha.

Labour forecasting models typically underestimate future land needs

4.2.16 As discussed, the methods to estimate future land needs for the PMA are primarily based on labour demand forecasting models.

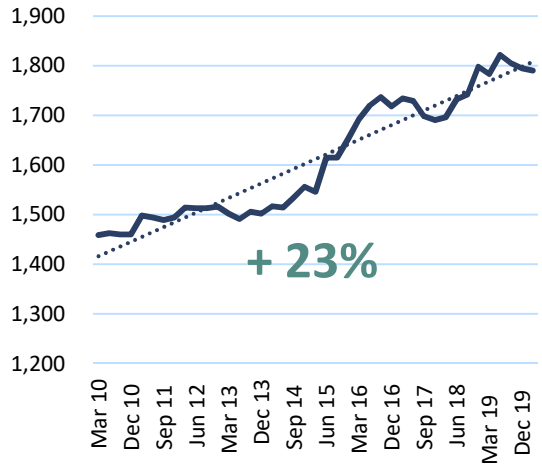
4.2.17 We do not agree with the use of labour demand forecasting models for I&L land needs as they tend to underestimate future I&L demand. Employment forecasts often reflect the continued restructuring of the economy away from industry towards services, projecting job declines in industrial sectors. Almost inevitably, demand projections based on this method lead to underestimations, as job declines are often assumed to translate into low or negative demand for industrial floorspace. For example, the EFFM 2019 model at the national level projects an increase in I&L jobs of 7% in the UK over the next 20 years. This subdued growth forecast strongly contrasts with the growth in logistics jobs over the last 10 years which was of +23%.

4.2.18 Lower projected job growth compared to historic levels does not reflect reality given the I&L sector had its strongest year in 2020 and data on the first half of 2021 indicates that the market is continuing to grow on the strong trajectory set by the previous year. Savills July 2021 Big Shed Briefing[10] reports that

[10] The Big Shed Briefing focuses on large units typically of 100,000 sqft plus

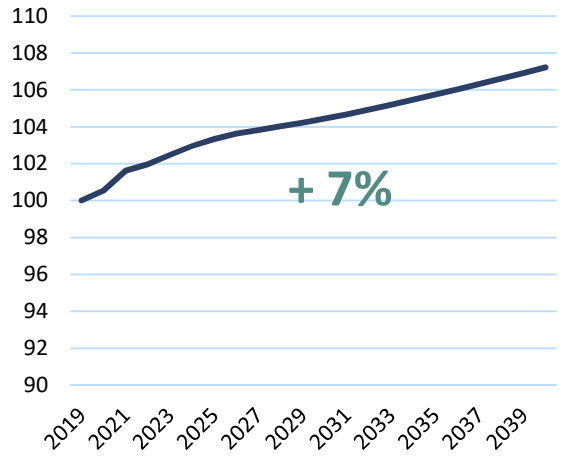
halfway into 2021 24 million sqft of warehouse space has been transacted, setting a new H1[11] take-up record and being 82% above the long-term H1 average. This data alone demonstrates labour demand models are not reflective of actual market trends.

Figure 4.1 UK historic growth in historic logistics jobs



Source: ONS JOBS02, Savills

Figure 4.2 EFFM projected growth in logistics jobs



Source: EEFM 2019, Savills

There does not appear to be any consideration of suppressed demand

4.2.19 When supply, as signalled by floorspace availability, is low, demand is 'suppressed' as prospective tenants can't find space in a market. 8% is typically referred to as the equilibrium level at a national level when supply and demand are broadly in balance (as sourced in publications such as the GLA's Land for Industry and Transport SPG (2012). Below this level, available supply becomes tight and rents increase as occupiers compete for limited available stock.

4.2.20 As we discuss in **Section 3**, specifically **Figure 3.2,** the PMA has experienced availability below this equilibrium level since 2016. Labour demand methods take no account for supply shortages, nor market factors which are a key determinant in development coming forward or not. In effect labour demand models take no account of demand that has been lost from the PMA due to historic supply constraints.

Doesn't account for growth in E-Commerce or future growth UK freight

4.2.21 The exponential growth in online retail is probably the most quantifiable of the major changes driving growth in the I&L sector. As we showed in **Figure 2.1,** the share of internet sales has consistently increased over the last 15 years: in 2006 online shopping was at 3%, while today this share has grown to 26% and is expected to increase even further. The growth in online shopping has significant implications on future I&L demand given that e-commerce requires around 3 times the logistics space of traditional bricks-and-mortar retailers[12]. Freight volumes are another key growth driver of I&L floorspace need. As we showed in **Figure 2.2**, significant growth is forecast across all freight modes, which will increase demand for I&L space in the future.

[11] H1: first half of the year
[12] Prologis (2016), Global E-Commerce Impact on Logistics Real Estate. Online Article: https://www.prologis.com/about/logistics-industry-research/global-e-commerce-impact-logistics-real-estate

4.2.22 Given the methodological shortcomings discussed above and the difficulty in reconciling the Local Plan land requirements with evidence base documents, we run our own methodology for estimating future demand.

4.3 Savills Estimate of Future I&L Demand

4.3.1 Below we present a step-by-step walk-through of Savills' I&L demand methodology. Our methodology is NPPG-compliant as it considers market signals and builds on historic take-up trends by considering future forecasts of market growth drivers such as increases in online shopping.

Establishing plan period

4.3.2 We assume an 18 year period which is consistent with Braintree's ELNA (between 2015 and 2033) and Colchester's ELNA (between 2014 and 2032).

Estimation of historic demand

4.3.3 This is based on the average annualised net absorption for the PMA (from **Section 3**) at 142,500 sqft per annum between 2011 and 2021. Savills considers the leading demand measure of floorspace to be 'net absorption', which indicates the quantum of net floorspace occupied over a period of time (i.e. move-ins minus move-outs) based on leasing deals.

Estimation of suppressed demand

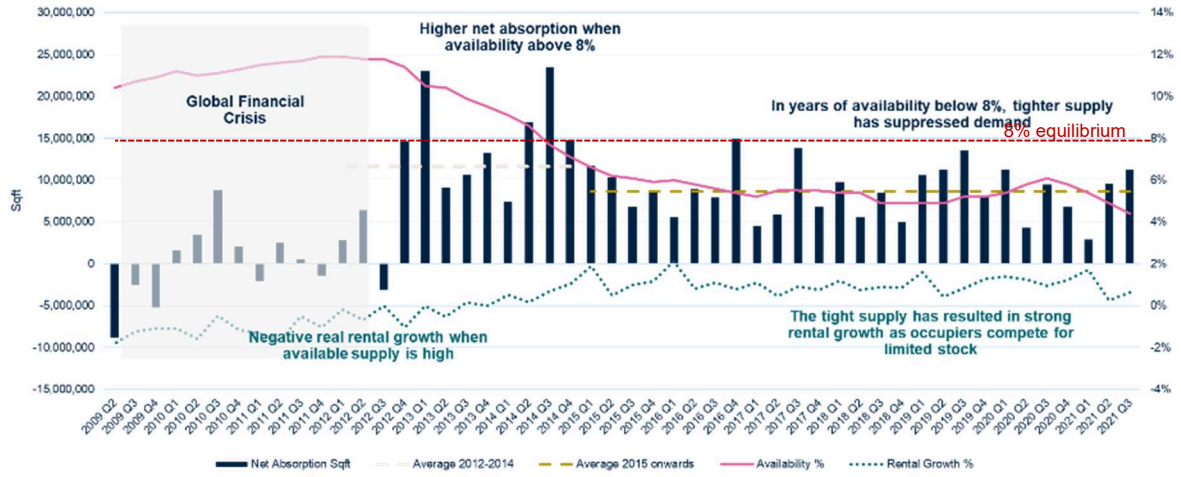
4.3.4 The rationale for accounting for suppressed demand is that when sufficient supply isn't available, demand cannot be accommodated. This is the top-up figure to be added to the historic demand trend to account for years when the market was supply constrained.

4.3.5 If one observes real rental growth (i.e. rental growth adjusted for inflation) over the past decade at the national level and observes its relationship to availability, it becomes clear that I&L rents begin to grow strongly when availability is below 8%. This relationship is clearly illustrated in **Figure 4.3** below. When availability was above 8% between 2009 and 2014 real rental growth (net of inflation) was either negative or only slightly positive. This enabled demand to be accommodated as sufficient supply was available.

4.3.6 However since 2015, as availability dipped below 8% and has stayed below this level ever since at the national level, real rents have grown strongly year on year. During this period net absorption has been lower than the 2009-2014 period despite the I&L sector going from strength to strength. This clearly shows the suppressing nature tight availability (below 8%) has had on I&L demand nationally.

4.3.7 We discussed a similar phenomenon occurring in the PMA (**paragraph 3.2.8** and **Table 3.1**) with rental growth being significantly higher when availability dipped below 8%.

Figure 4.3 Historic Net Absorption (Sqft.), Availability (%) and Real Rental Growth (%) in England



Source: CoStar, OBR, Savills

4.3.8 We have developed our own methodology to account for suppressed demand. This measure is calculated as follows:

1) For years where availability has been below the 8% equilibrium threshold, we calculate the quantum of floorspace necessary to achieve 8% availability (Column "Av. To EQ (sqft)" in **Table 4.3**, calculation **F**);
2) We then take the average of the ratio between net absorption and available floorspace for every year over the past decade (Calculation **E** averages 23% based on Column "Net Absorption / Availability");
3) We apply this average to the estimated floorspace required to reach 8% availability in each year where the market is below the 8% availability threshold to estimate each period's suppressed demand (Calculation **F*E** in Column "Suppressed Net Absorption (sqft)");
4) We calculate average suppressed net absorption over the past decade. This give the annualised suppressed demand figure to be used as a top-up to the historic trend.

Table 4.3 shows the relevant calculations.

Table 4.3 Suppressed Demand Calculations within the PMA

	A	B	C=(A*B)	D	D/C	F=(8%-B)*A	F*E
Years	Inventory (sqft)	Availability (%)	Availability (sqft)	Net Absorption (sqft)	Net Absorption / Availability	Av. To EQ (sqft)	Suppressed Net Absorption (sqft)
2021 (YTD)	11,562,538	4.7%	543,439	91,599	16.9%	381,564	87,808
2020	11,423,639	6.8%	776,807	75,504	9.7%	137,084	31,547
2019	10,965,094	3.5%	383,778	196,159	51.1%	493,429	113,551
2018	10,823,445	2.5%	270,586	179,628	66.4%	595,289	136,992
2017	10,823,445	5.1%	551,996	187,192	33.9%	313,880	72,232
2016	10,830,049	6.7%	725,613	- 42,001	-5.8%	140,791	-
2015	10,806,013	8.4%	907,705	436,813	48.1%	- 43,224	-
2014	10,806,013	11.6%	1,253,498	133,106	10.6%	- 389,016	-
2013	10,806,013	13.6%	1,469,618	333,332	22.7%	- 605,137	-
2012	10,744,223	14.7%	1,579,401	- 53,008	-3.4%	- 719,863	-
2011	10,744,223	17.2%	1,848,006	17,722	1.0%	- 988,469	-
					E=Average		Suppressed Demand=Average

Source: Savills (2021)

4.3.9 The estimated suppressed demand figure for the PMA is 40,500 sqft per annum.

Projecting forward the combined historic and suppressed demand

4.3.10 This step requires adding the combined annualised historic (142,500 sqft per annum as per **Figure 3.3**) and suppressed demand (40,500 sqft per annum as per **Table 4.3**) figures totalling 183,000 sqft per annum, and multiplying this by the number of years in the plan period (183,000 sqft x 18 years), which gives **3.3 million sqft.**

Adjusting for current and future increases in online retail

4.3.11 Our analysis of leasing activity since 2011 from **Figure 3.5** in the previous section indicated that 23% of I&L demand in the PMA is linked to e-commerce[13]. 23% of projected demand corresponds to 755,000 sqft (23% * 3.3 million sqft) over the plan period. Forecasts of online sales annual increases are projected to be 93% above the historic trend[14]. Applying this 93% uplift to the historic and suppressed demand from e-commerce sectors yields a future demand of 1.5 million sqft over the plan period. This equates to an uplift of 702,900 sqft (**Table 4.4**).

Table 4.4 Adjusting for Current and Future Increases in Online Retail within the PMA

Demand	Annual (sq. ft)	Over Plan Period (sq. ft)
E-commerce related (23% of historic + suppressed)	**41,900**	**755,000**
E-commerce related after 93% uplift	**81,000**	**1,457,900**
E-commerce demand uplift	**+39,000**	**+702,900**

Source: Savills (2021)

4.3.12 Adding the uplift to the combined historic and suppressed demand estimates yields a total demand of **4**

[13] CoStar (2021): Leasing activity in the sectors 'Transportation and Warehousing'; 'Retailer'; and 'Wholesaler'
[14] Forrester Research – Online Retail in UK, 2002-2025: We look at the uplift in online retail spending between 2021 and 2025 versus the average for 2011-19

million sqft over the plan period, as summarised in **Table 4.5.**

Table 4.5 Summary of Future Demand (over Plan Period) within the PMA

Adjustment Type	Adjustment (sqft) (over plan period)	Total (over plan period)
Historic Demand (Net Absorption) Over 18 years		2,565,700
Suppressed Demand Over 18 years	+ 729,000	3,294,700
Ecommerce Uplift	+ 702,900	3,997,600

Source: CoStar, Savills

Plot Ratios

4.3.13 The above floorspace figures are translated into land requirements using a plot ratio of 40%. This is broadly consistent with the plot ratios used in the ELNAs, although we acknowledge that Braintree's ELNA assumes a plot ratio of 50% for warehousing. Based on our professional experience and examples of recent developments from across the country, we consider this plot ratio to be too high and not reflective of modern logistic occupier requirements which typically command a ratio in the region of 30-40%. A 40% ratio is therefore considered appropriate and conservative.

4.3.14 Applying a 40% plot ratio to the estimated PMA floorspace demand of 4 million sqft translates into a future land requirement of **92.8 ha**.

4.4 Conclusions

4.4.1 Section 1 of Braintree and Colchester Local Plan reported a combined land requirement of between 42.9 ha and 73.3 ha for office and I&L. Our assessment of demand is interested in the I&L market only, however in our review we were able to discern the I&L component of demand only for Colchester, not Braintree. This brings the land requirements to a maximum of between 27.5 ha and 54.6 ha (including office demand for Braintree).

Table 4.6 Employment Land Requirements for the PMA

	Baseline (ha)	Higher Growth Scenario (ha)
Braintree (office and I&L)	20.9	43.3
Colchester (I&L)	6.6	11.3
Total	**27.5**	**54.6**

Source: North Essex Authorities (2021), North Essex Authorities' Shared Strategic Section 1 Plan, nlp (2015) Colchester ELNA

4.4.2 In sections **4.2.16** to **4.2.18** we discussed the shortcomings of relying on labour demand models (as those employed by the ELNAs) which tend to underestimate I&L demand. This was confirmed by the results produced by the Savills demand methodology, which estimated an I&L land requirement of 92.8 ha across the PMA.

4.4.3 This is between 38.2 ha and 65.3 ha above the estimates of the ELNAs/Local Plan (higher growth scenario and baseline scenario respectively). We also note that the underestimation of future I&L land needs is even greater given that Braintree's land requirements in **Table 4.1** include office uses.

5 Conclusions & Recommendation

5.1.1 In this report we demonstrated that there is unmet need for the I&L sector in Braintree and Colchester (the PMA) and that the evidence base used to inform the emerging Local Plan has underestimated this need.

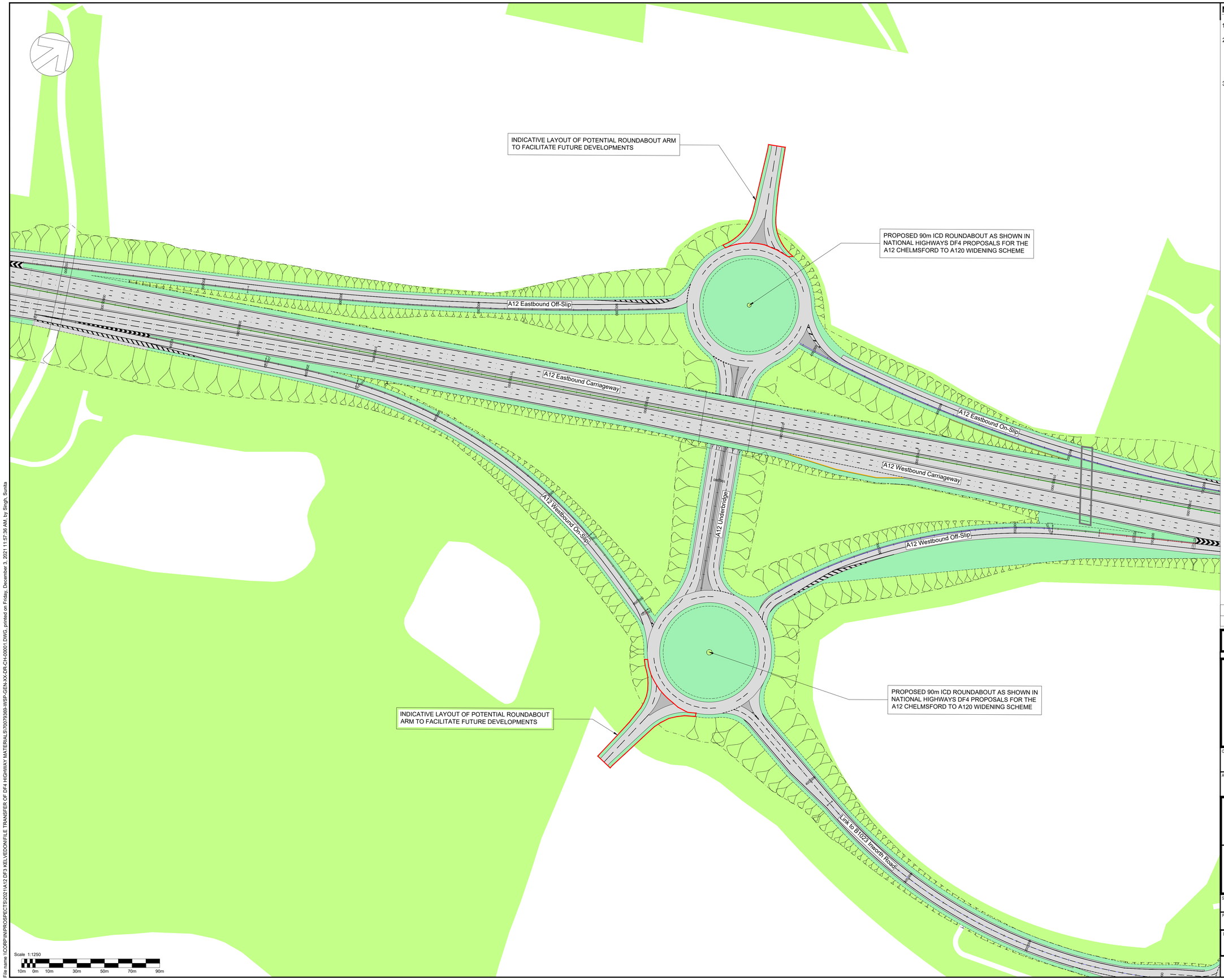
5.1.2 The I&L market has been expanding for a number of years and the pandemic accelerated existing growth trends, increasing demand for I&L floorspace. The Subject Site is well placed to tap into this growth, given its adjacency to the A12 that puts it in reach of a large base of potential customers and suppliers.

5.1.3 Our analysis of market data on leasing activity and new development indicates that the PMA has been supply constrained since 2016. Current I&L availability is only 4.7%, which is restricting market demand and is limiting market churn and economic growth.

5.1.4 We applied Savills demand methodology to address some of the shortcomings of the method used in the Councils' ELNAs. Our method is based on market net absorption, it adjusts for suppressed demand in years of undersupply, but it also takes account of the impact of future growth in internet shopping on demand for I&L space.

5.1.5 Based on the Savills demand methodology, we estimate a demand for I&L land of **92.8 ha** over the plan period**,** which is at least between 38.2 ha and 65.3 ha higher than the requirements identified in the Local Plans. We conclude that on the basis of strong, unmet I&L need across the PMA, the proposed I&L development on the Subject Site is needed and well positioned to cater for the booming I&L market.

APPENDIX F



NOTES:

1. THIS DRAWING MUST BE PRINTED IN COLOUR.
2. THE 2D LAYOUTS SHOWN FOR THE ADDITIONAL ROUNDABOUT ARMS IS PRELIMINARY AND ONLY FOR THE PURPOSES OF DEMONSTRATING THAT THE PROPOSED ROUNDABOUTS COULD COMFORTABLY ACCOMMODATE THE EXTRA ARMS.
3. THE PROPOSED DF4 JUNCTION 24 LAYOUT SHOWN ON THIS DRAWING IS TAKEN FROM GENERAL ARRANGEMENT DRAWING HE551497-JAC-HGN-SCHW-DR-C-0014

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TITLE: INDICATIVE ROUNDABOUT ARMS TO FACILITATE FUTURE DEVELOPMENTS ADJACENT TO PLANNED A12 JUNCTION 24

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