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<b>TECHNICAL NOTE</b>	Project IKEA Tottenham	Date 3/10/2018
Subject Review of London Borough of Enfield / Arup 'Meridian Water Masterplan Arup IKEA and Tesco Access Study' (July 2018)		By S Evans/ P Smith

## INTRODUCTION

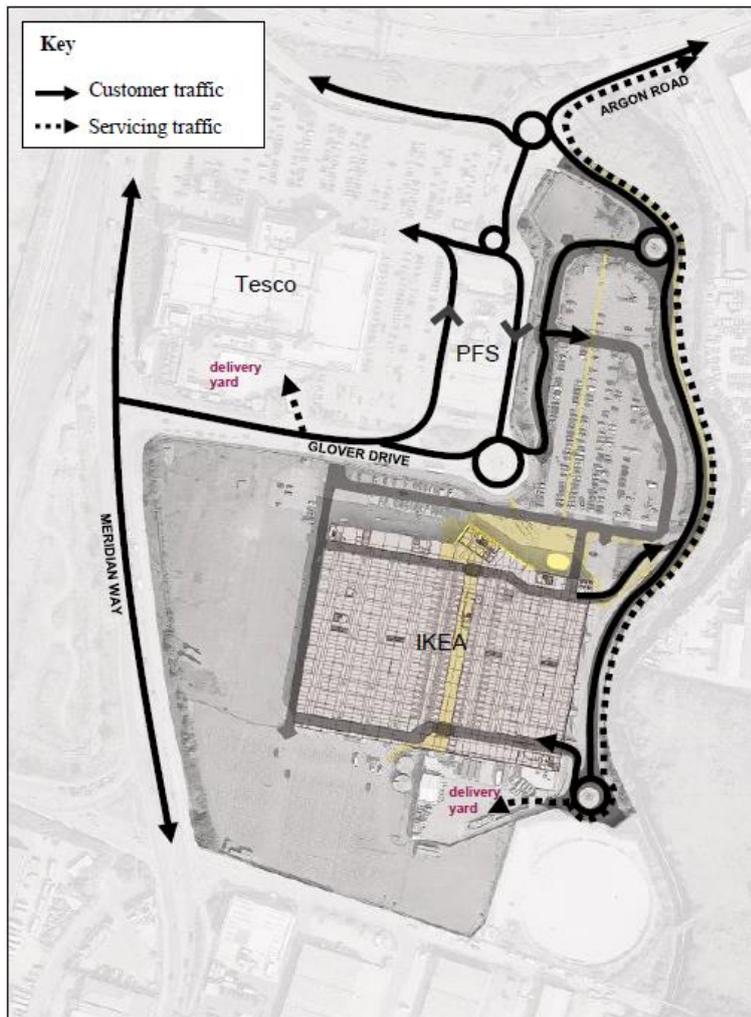
1. Pell Frischmann is commissioned by IKEA Properties Investments Ltd (IKEA) to provide transport planning and highways consultancy advice in connection with the existing IKEA Tottenham store situated on Glover Drive, Enfield, London, N18 3HF (the 'store'), within the London Borough of Enfield (the 'borough').
2. On behalf of IKEA, Pell Frischmann has undertaken a review of the 'Meridian Water Masterplan IKEA and Tesco Access Study' report prepared by Arup on behalf of the London Borough of Enfield (LBE) (Final Draft, dated 26 July 2018). The purpose of the Arup report is to set out the proposed junction designs and "some initial junction modelling work" related to proposals for The Causeway east-west route through the Meridian Water Masterplan site. The Causeway is a proposed new road between Glover Drive and Harbet Road.
3. Based on the information received to date whilst IKEA is keen to work with LB Enfield and their consultants to resolve the concerns we set out in this note we currently cannot support the HIF bid or support any forthcoming planning application in relation to the Causeway as it has not been demonstrated satisfactorily that there will not be a significant impact on the operation of the IKEA store.

## REVIEW OF ACCESS STUDY

4. The Arup report notes that, *"It is recognised that both Ikea and Tesco have successful businesses operating within the area identified for the Meridian Water regeneration. As the Meridian Water development progresses, LBE and their consultant team are very aware that maintaining this successful operation as the masterplan progresses will be very important."*
5. It continues and states that, *"The opening of The Causeway will result in some changes to the existing access strategy for Ikea and Tesco. A number of access options have been considered, supported by preliminary design and junction capacity modelling work, that endeavour to balance the delivery of the objectives of Meridian Water with the customer and business access requirements for Tesco and Ikea."*
6. The Arup report considers the potential traffic impacts of the proposed Causeway, which at its western end would meet Glover Drive to the immediate north of the existing IKEA store. From this point, The Causeway continues eastwards through the existing IKEA surface car park (which is situated to the north-east of the IKEA store building), across Pymmes Brook to the east of the car park, and towards the River Lea.

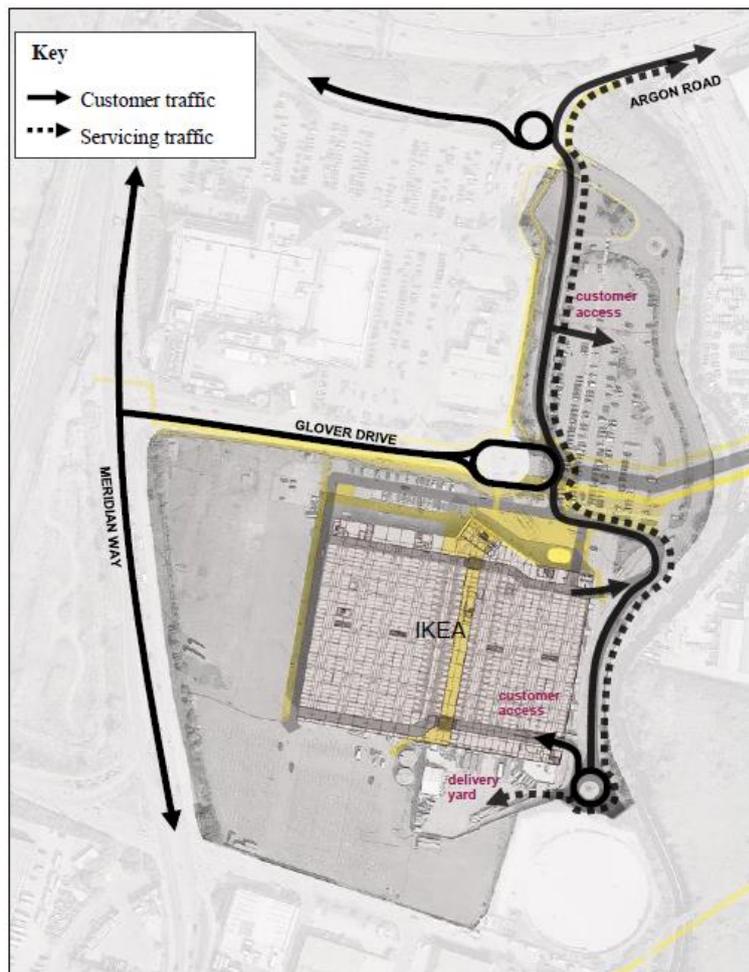
At present, and as illustrated in Figure 3 contained within the Arup report (reproduced in Figure 1 below), IKEA benefits from a single undivided site bounded by Glover Drive and the Tesco site to the north, Pymmes Brook to the east, Leaside Road to the south and the A1055 Angel Edmonton Road to the east. The IKEA site features three car parking areas; an undercroft car park beneath the store building, which is situated towards the centre and south of the site; a surface car parking area at the front of the store immediately adjacent to Glover Drive to the north-west; and a significantly larger surface car park to the north-east.

**Figure 1: Existing Highway Access Routes**



7. As illustrated in Figure 9 of the Arup report (reproduced in Figure 2 below), the Meridian Water highway proposals will include severing the existing surface car park to the north-east of the IKEA site from the IKEA store building and other car parking areas, by The Causeway which will run east-west as a continuation to Glover Drive.
8. The proposals also include, as shown as in the preferred option, a new elongated roundabout immediately in front of the IKEA store building; and a realigned north-south road running between the Tesco site and IKEA surface car park. These proposals will have a significant impact on the operation of the IKEA store including access/egress for vehicles, pedestrian movements between the store and surface car park; and access/egress for delivery and servicing vehicles.

**Figure 2: Elongated Roundabout Options**



9. As set out in Figure 12 of the Arup report, it is indicated that The Causeway will be a route for buses, pedestrians and cyclists, with limited access for general traffic. It is noted however that the LB Enfield AAP states “The Causeway should be accessible by vehicular traffic between Glover drive in the west and Harbet Road in the east”. Clarification is sought as to the definitive position on this.
10. The LB Enfield Meridian Water Area Action Plan (AAP) indicates that the high density of development proposed at Meridian Water is predicated on the masterplan achieving a significant increase in the Public Transport Accessibility Level (PTAL) rating, from its current levels of 0 (‘Worst’) - 1b across the majority of the site, and 2 (at the western end of the site nearest the existing railway station), to between 4 and 6 (‘Best’).
11. In order to achieve such a significant improvement in PTAL similar to levels achieved in central London it is assumed that the extent and frequency of bus services in the area will need to significantly increase. This suggests that level of bus service frequency along The Causeway will also be very high, however there is some discrepancy with the proposed mode share for buses in the Meridian Water Strategic Highway Modelling report which shows at Table 45 Bus mode share reducing from the 2011 Census mode share (26%) to 24% in the 2031 forecast year.
12. If the level of bus services proposed to serve The Causeway are at a level that will be required to generate a transformational increase in the PTAL of the Meridian Water masterplan area as stated in the AAP, this has the potential to create significant issues for the safe operation of the IKEA site and car park and will impact on the operation of the proposed roundabout on Glover Drive.

13. The Arup report contains various drawings showing proposed changes to Glover Drive and Argon Road roundabouts; to accommodate The Causeway, Glover Drive would include an additional eastern arm severing the IKEA surface car park from the rest of the IKEA site. However, whilst the report states that, "Designated crossing locations will be designed into the scheme", no detail with regards to crossing points over The Causeway are provided at this stage.
14. IKEA and Pell Frischmann have first-hand experience of the issues that can be caused by public highway creating separation between the car park and store. At the IKEA Reading store issues occur with customer trolleys interacting with the tactile paving causing purchases to fall into the carriageway from the trolleys. The necessity for tactile paving is a legal requirement on adopted highway and the rules are inflexible with regard to their extent and layout. There are also issues with customers not appreciating that they do not have priority over vehicular traffic at the crossing point which can create a safety issue. As the crossing would be in public highway IKEA has no control over the nature or treatment of pedestrian crossing facilities or the ability to give priority to customer pedestrian traffic over vehicular traffic.
15. It is also noted that a two-way cycleway is proposed along The Causeway and Glover Drive adjacent to the carriageway; with the AAP stating that "The profile of Glover Drive will be reconfigured to accommodate cycle lanes in each direction, generous pavements and landscaping". It is essential that these proposals do not conflict with the existing operations of the IKEA store. We also seek clarification as to how the proposed cycle lanes would interact with the linkage between the store and the now separate northern IKEA car park.
16. With regard to the latest traffic surveys, which the Arup report states were carried out in June 2018, it is unclear on which weekend the traffic surveys were carried out, i.e. the precise weekend. IKEA customer footfall and trade varies significantly throughout the year, depending on a number of factors including whether it is term-time or school holidays, a bank holiday weekend, in the run-up to Christmas, Easter and other major events, etc. It is noted that the football World Cup also took place during June 2018, which it is considered could have significantly impacted on the number of visitors at IKEA at various weekends, and the weekend of the survey may have been affected.
17. We therefore request further information as to the details of the June 2018 counts, and we may further request that a sensitivity test exercise be undertaken if the survey weekend is shown to have been on a weekend with below peak trading in terms of numbers of visitors and traffic generation.
18. The Arup report states that in the Saturday peak, if traffic flows continue to use their existing routes, the maximum RFC is 0.94 which occurs at the Tesco access arm and is worse than the existing situation.
19. In relation to junction capacity, it is described that traffic has been manually reassigned through the network to achieve the junction performance as set out in the report. If existing junctions are already operating close to capacity and operate over capacity in the future, yet junctions further from the IKEA store already operate over capacity, it is unclear what happens to these junctions further away in the future if other traffic redistribution occurs as a result of the proposed network changes.
20. It is noted that within this latest modelling report only four local junctions have been tested; two on Meridian Way and two internal site junctions, as part of a limited network. There has been no allowance made in the recent modelling for any potential reassignment of journeys either to or from the wider highway network as a result of the proposed changes. It is possible that with either simplified network, with less junctions Glover Drive might actually become more attractive to through-traffic following its proposed realignment.

21. A further point to note is that all the tests have been undertaken with existing traffic flows, no tests have been undertaken of a future year scenario with the proposed Meridian Water Masterplan developed out. Even with a significant increase in PTAL, the level of development still has the potential to generate a large number of additional trips on the network via one mode or another.
22. Whilst it is appreciated that the designs for the Causeway are still at a preliminary stage, given that IKEA is being asked to agree to the AAP which sets out a framework for the Causeway, we are concerned that very little detail has been made available with regard to the design and interaction between the alignment and the IKEA store and existing operations.
23. Information required includes;
- Details for the latest surveys undertaken in June 2018, including exact dates and times and the survey results.
  - A sensitivity test be carried out if the survey results are shown to have been carried out on a weekend which is below typical trading for the IKEA store.
  - Clarification on how the manual traffic reassignment (of through-traffic) has been undertaken. We suggest the use of a microsimulation model may provide a better degree of confidence in the output.
  - AutoCAD drawings detailing the proposed design for both the reconfigured Glover Drive, new roundabout, the Causeway, including the proposed cycle lanes, pedestrian crossing points and reconfigured IKEA car park.
  - Details of the potential impact of the full Meridian Water masterplan, including proposed mode share / trip generation, and impact on Glover Drive.
24. Whilst IKEA is keen to work with LB Enfield and their consultants to resolve the concerns we have highlighted above if at all possible, our current position is that we cannot support the HIF bid or support any forthcoming planning application in relation to the Causeway as it has not been demonstrated satisfactorily that there will not be a significant impact on the operation of the IKEA store.

**Update to technical note 03/10/2018:**

25. The traffic surveys that were undertaken to inform the junction modelling in the Arup report were undertaken on Thursday 14th, Saturday 16th and Sunday 17th June 2018. The number of customers and visitors to IKEA on these dates are shown in Table 1 and are below the annual average and annual 85th percentile levels for this store, and therefore the baseline from which impacts have been assessed is not representative.

**Table 1: Number of customers and visitors to the IKEA store**

Scenario	Number of Customers			Number of Visitors		
	Thursday 14 <sup>th</sup> June 2018	Saturday 16 <sup>th</sup> June 2018	Sunday 17 <sup>th</sup> June 2018	Thursday 14 <sup>th</sup> June 2018	Saturday 16 <sup>th</sup> June 2018	Sunday 17 <sup>th</sup> June 2018
Meridian Water Assessment	2,455	4,223	3,026	5,378	9,852	7,355
Annual Average	2,932	5,192	3,739	6,831	12,550	9,223
Annual 85 <sup>th</sup> Percentile	3,384	6,129	4,550	7,881	15,050	11,388