

**Project number:** 23108  
**Prepared by:** MD  
**Subject:** Highway Safety Impact Assessment

**Date:** 20<sup>th</sup> December 2023

**File name:** 23108TN1a

## **1 Introduction**

### **1.1 Background**

- 1.1.1 Lime Transport has been commissioned by Mr and Mrs N Christofi to produce a Highway Safety Impact Assessment in support of a residential development of two dwellings at 31 Beech Hill Avenue, Barnet in the London Borough of Enfield.
- 1.1.2 The proposed development site is situated on land to the west of Beech Hill Avenue and is presently occupied by a 5-bedroom dwelling. It is in the London Borough of Enfield, approximately 1.7km north of New Barnet.

### **1.2 Planning history**

- 1.2.1 In March 2022 planning permission (application ref. 21/00552/FUL) was granted for the redevelopment of site with the demolition of the existing house and construction of two detached 2-storey dwelling houses with rear balconies, accommodation in roof space together with associated parking.
- 1.2.2 A resubmission for changes to the proposals was submitted in November 2023 (application ref. 23/03824/FUL) for the redevelopment of the site by the erection of two detached 2-storey dwelling houses with rear balconies, accommodation in roof space, additional side extension to accommodate a garage and gym for Plot 2, together with associated parking and crossover. It was determined that the application did not meet planning requirements. The London Borough of Enfield requested a Highway Safety Impact Assessment was produced.
- 1.2.3 This Technical Note is for a resubmission for changes to the proposals for Plot 2 only. Plot 1 will remain as approved under application ref. 21/00552/FUL.

## **2 Description of development**

### **2.1 Development proposals**

- 2.1.1 The existing, consented and proposed situation is set out overleaf:

Table 2.1 Existing, consented and proposed scenarios

Scenario	Description
Existing	Presently occupied by a 5-bedroom dwelling.
Consented (planning application ref: 21/00552/FUL dated 17/3/2022)	The scheme has planning consent for two 2-storey detached family houses, comprised of two plots (Plot 1 to the north and Plot 2 to the south). Plot 1 will accommodate a 6-bedroom dwelling house (516m <sup>2</sup> ) and Plot 2 a 4-bedroom dwelling house (416m <sup>2</sup> ).
Proposed changes to the consented scheme	Proposal to construct two detached houses on two separate plots is unchanged. The proposed change includes the addition of a side extension to the south of Plot 2 to accommodate a garage and gym.

2.1.2 Plot 1 will remain as approved under the consented application ref. 21/00552/FUL.

2.1.3 The development proposals are shown in **Figure 2.1** below.

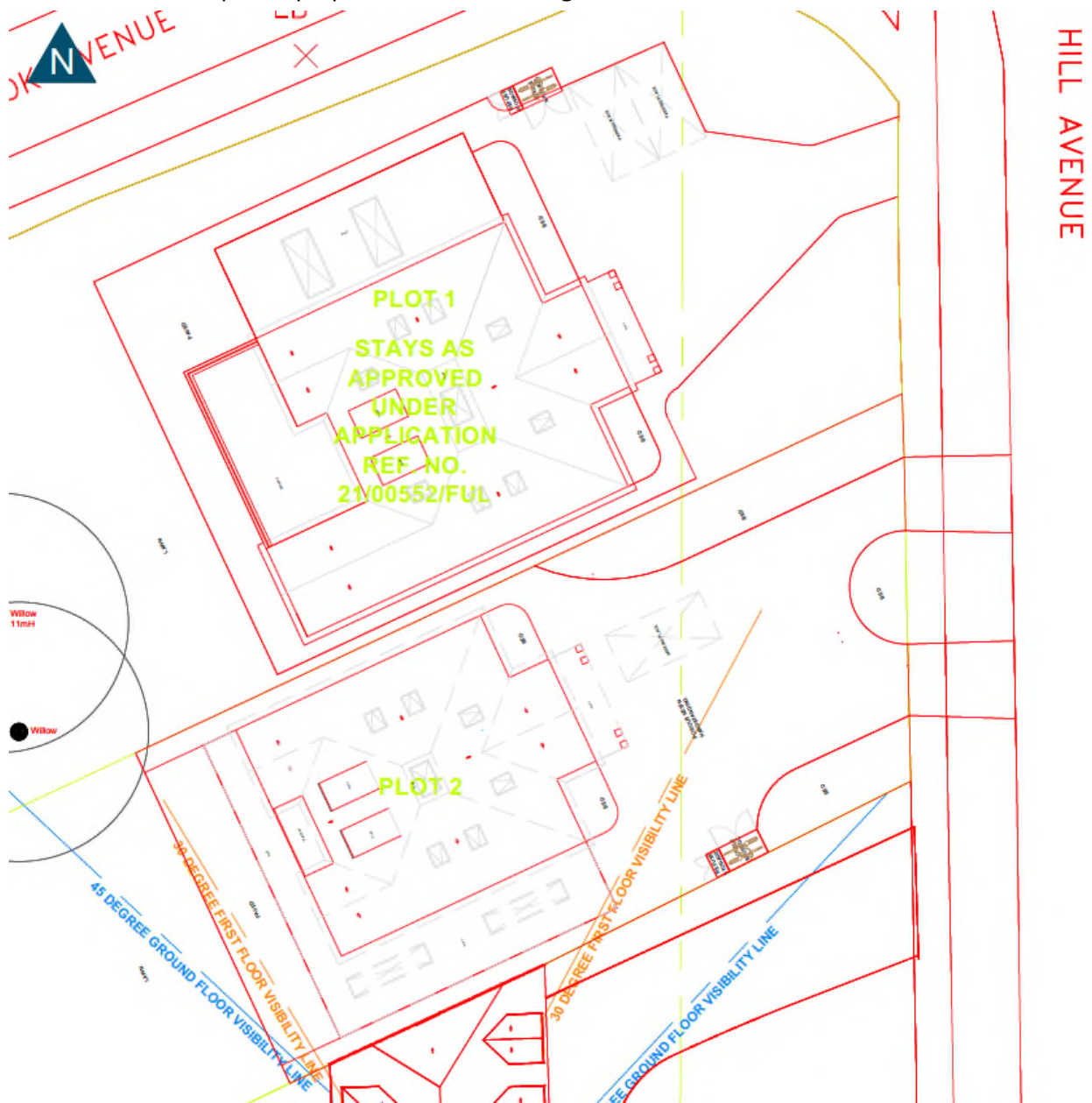


Figure 2.1 Development proposals

## 2.2 Car parking

### ***Existing situation***

- 2.2.1 The site can currently accommodate five cars on the existing driveway, and a garage is also provided which can accommodate an additional vehicle.

### ***Consented provision***

- 2.2.2 The development has consent for two on-site parking spaces for each plot, at the front of each dwelling.

### ***Relevant parking policy***

- 2.2.3 It is proposed to provide car parking in line with the maximum standards set out within the London Plan 2021. The London Plan 2021 uses PTAL as an indication of the level of car parking provision a development should provide.
- 2.2.4 The site is situated in Outer London in a PTAL 0 area (poor), which results in a maximum parking requirement of 1.5 spaces per dwelling as per the London Plan.
- 2.2.5 The London Plan also states that for dwellings with 3+ bedrooms in Outer London PTAL 0-1, 'boroughs should consider standards that allow for higher levels of provision where there is clear evidence that this would support additional family housing'. The proposals will provide an additional family home within the London Borough of Enfield.

### ***Proposed provision***

- 2.2.6 The proposed car parking provision is set out below:
- Plot 1 - will remain unchanged in accordance with the consented scheme as approved under application ref. 21/00552/FUL, which has consent for two car parking spaces on the driveway at the front of the dwelling.
  - Plot 2 - the number of car parking spaces will remain the same as the consented application. It is proposed to provide one parking space on the driveway at the front of the dwelling and one space in a garage at the southern side of the dwelling in the proposed garage.
- 2.2.7 EV charging infrastructure will be provided for each plot.

### ***Parking justification***

- 2.2.8 Car ownership data from the 2021 Census has been used to establish the local car ownership rate for existing residents. Car ownership for houses in the Lower Super Output Area (LSOA 011D) is 1.66 cars/vans per dwelling. Based on this, it is likely that residents could own up to two cars.
- 2.2.9 It is considered that based on the site's low PTAL and the car ownership levels two spaces per dwelling is appropriate parking provision for the proposed development to ensure that parking demand can be accommodated on-site.

## 2.3 Cycle parking

### *Existing situation*

- 2.3.1 There is no existing formal cycle storage, however, it is anticipated that cycles are stored either in the garage or rear garden.

### *Consented provision*

- 2.3.2 The site has consent for sheltered, secured and easily accessible cycle storage for two cycles within the curtilage of each dwelling, as approved under application ref. 21/00552/FUL.

### *Proposed provision*

- 2.3.3 In accordance with the London Plan 2021, it is proposed that sheltered, secured and easily accessible cycle storage for two cycles for each dwelling will be provided, and this will be located within the curtilage of each dwelling on the driveway at the front of each property. The proposed location of the cycle storage is shown in **Figure 2.2** below.



*Figure 2.2 Proposed cycle storage location*

## 2.4 Site access arrangements

### *Existing situation*

- 2.4.1 The site currently has an existing vehicle crossover, approximately 4.5m in length (measured from the back of the footway), providing pedestrian, cyclist and vehicular access.

2.4.2 Pedestrian access is provided via a separate access, with steps fronting the property.

***Consented provision***

2.4.3 The site has consent for the construction of a new vehicle crossover for Plot 2, with Plot 1 utilising the existing crossover, as approved under application ref. 21/00552/FUL.

***Proposed provision***

2.4.4 The existing crossover will be utilised to provide vehicular, pedestrian and cycle access to Plot 1.

2.4.5 It is proposed that two new crossovers will be provided for Plot 2 to allow vehicles to enter at one crossover and exit via the other crossover. This compares to the consented scheme for Plot 2 with only one vehicle crossover.

2.4.6 The new crossovers will be designed in accordance with Enfield's Vehicle Crossover Guidance Note. The width of the proposed crossover will be approximately 3.4m (northerly crossover) and 3.3m (southerly crossover) along the property boundary widening to 3.6m at the kerbside, with crossovers, a minimum of approximately 5m apart from each other and the crossovers for the adjoining properties.

## **2.5 Vehicle swept path analysis**

2.5.1 Vehicle swept analysis of a 4.7m long estate car entering and egressing Plot 2 via the proposed crossovers, and into the proposed car parking space and garage is shown in **Appendix A**.

## **2.6 Refuse storage**

***Existing situation***

2.6.1 There is no existing formal refuse storage, however, it is anticipated that refuse is stored either in the garage or in the general storage and utility area within the existing dwelling.

***Consented provision***

2.6.2 The consented site does not provide refuse storage details.

***Proposed provision***

2.6.3 Refuse storage will be provided in accordance with Enfield's Waste and Recycling Storage Planning Guidance. A bin store is provided within the curtilage of each dwelling that can accommodate a refuse and recycling bin. The bin store is located on the driveway of each property.

### 3 Deliveries and servicing

#### 3.1 Refuse arrangements

- 3.1.1 The proposed refuse collection arrangements will remain the same as the existing and consented situation, with refuse collected on-street along Beech Hill Avenue as part of the existing refuse collection. Residents will be required to carry their bins approximately 15m to the kerbside on the refuse collection day.

#### 3.2 Servicing and deliveries trip generation

- 3.2.1 The delivery and servicing vehicle trips for the proposed development will remain the same as the consented situation.
- 3.2.2 There are a limited number of sites available within the TRICS database which detail the likely servicing associated with residential use. Given the increase in home deliveries in recent times, there is also a lack of up-to-date data. Therefore, the likely number of deliveries has been based on an independent survey carried out at the Cherry Orchard Road residential development in Croydon (planning ref. 19/05893/DISC) comprising 300 dwellings on 2<sup>nd</sup> July 2020 between 7am and 20pm.
- 3.2.3 The surveys were undertaken during a period when restrictions in relation to COVID-19 were still in place and when the number of deliveries was likely to be higher than usual. This corresponded with an increased proportion of people working from home or being furloughed, and when the shops and restaurants were not fully open, therefore, resulting in a higher number of food and other deliveries.
- 3.2.4 The likely number of delivery and servicing trips generated by the proposed development of two houses is shown in **Table 3.1** overleaf.

Table 3.1 Total trip generation: Delivery and servicing vehicle trips

Time period	Total trip rate	Total no. of trips per day	Total no. of trips week
<b>LGVS</b>			
8am-9am	0	0.0	0
5pm-6pm	0.003	0.0	0
7am-10pm	0.0737	0.1	1
<b>OGVs</b>			
8am-9am	0	0.0	0
5pm-6pm	0.003	0.0	0
7am-10pm	0.017	0.0	0
<b>Motorbikes</b>			
8am-9am	0	0.0	0
5pm-6pm	0	0.0	0
7am-10pm	0.007	0.0	0
<b>Cars</b>			
8am-9am	0	0.0	0
5pm-6pm	0	0.0	0
7am-10pm	0.01	0.0	0
<b>Total</b>			
8am-9am	0	0.0	0
5pm-6pm	0.006	0.0	0
7am-10pm	0.1077	0.2	1

- 3.2.5 Light goods vehicles (LGVs) are defined as cars and small vans under 3.5T and with 2-axles, and ordinary goods vehicles (OGVs) are defined as over 3.5T with 2-axles or more.
- 3.2.6 Based on the survey results, no trips are observed during the AM or PM peak periods, with the busiest hour of the day being between 10am and 11am. The majority of trips occurred between 10am and 2pm. Based on the above, it is likely that the development will generate approximately one vehicle trip per week.
- 3.2.7 It is anticipated that the maximum size of vehicle that would be reasonably expected to deliver to any residential development will be a 10m rigid vehicle. In practice, it is more likely that the maximum size of vehicle will be an 8m rigid vehicle, with transit sized vehicles being much more commonly used.
- 3.2.8 This trip generation for deliveries is the same as the consented scheme. It should also be noted that the existing use on site generates deliveries and the net increase will, therefore, be lower than the above.

## **4 Summary**

### **4.1 Introduction**

- 4.1.1 This Highway Safety Impact Assessment has been produced in support of the resubmission of changes to planning application 21/00552/FUL, for the residential development of two dwellings at 31 Beech Hill Avenue, Barnet in the London Borough of Enfield.
- 4.1.2 The proposals are in line with relevant policy including the London Plan 2021.

### **4.2 Development proposals**

- 4.2.1 The scheme has planning consent for two 2-storey detached family houses and comprises of two plots with one 6-bedroom house on Plot 1 and one 4-bedroom house on Plot 2. It is proposed that Plot 1 remains unchanged and Plot 2 includes an extension on the southern side for a gym and garage, with the removal of one of the two consented parking spaces (total parking for Plot 2 will be two spaces).
- 4.2.2 In accordance with the London Plan 2021, it is proposed that sheltered, secured and accessible cycle storage for two cycles for each dwelling will be provided, and this will be located in the curtilage at the front of each dwelling.

### **4.3 Site access**

- 4.3.1 The existing crossover will be utilised to provide vehicular, pedestrian and cycle access to Plot 1.
- 4.3.2 Two new crossovers will be provided for vehicular, pedestrian and cycle access to Plot 2. This will be designed in accordance with Enfield's Vehicle Crossover Guidance Note.

### **4.4 Refuse storage**

- 4.4.1 Refuse will be stored in a bin store within the curtilage of each dwelling and moved approximately 15m to the kerbside by residents on collection day, to be collected as part of the existing refuse collection along Beech Hill Avenue.

### **4.5 Deliveries and servicing**

- 4.5.1 it is likely that the development of two houses will generate approximately one vehicle trip per week as for the consented scheme.

### **4.6 Conclusions**

- 4.6.1 National Planning Policy Framework (NPPF) states in Paragraph 111 that:

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



4.6.2 It is considered that the proposed change to the consented development for two houses including changing a parking space on Plot 2 for a garage not have an unacceptable impact on highway safety, and the residual cumulative impacts can be accommodated on the road network and are not severe.

# Appendices



# Appendix A



  
**PL**  
**STAYS AS**  
**APPROVED**  
**UNDER**  
**APPLICATION**  
**REF. NO.**  
**1/00552/FUL**

**PLOT 2**

**PLOT 1**  
**STAYS AS**  
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**REF. NO.**  
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**PLOT 2**

**PLOT 1**  
**STAYS AS**  
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**PLOT 2**

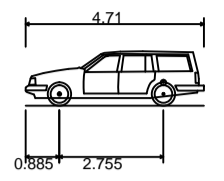
**PLOT 1**  
**STAYS AS**  
**APPROVED**  
**UNDER**  
**APPLICATION**  
**REF. NO.**  
**1/00552/FUL**

**PLOT 2**

**GENERAL NOTES**

- This drawing to be read in conjunction with all relevant civil engineering drawings.

**LEGEND**



Estate Car (2006)  
 Overall Length 4.710m  
 Overall Width 1.804m  
 Overall Body Height 1.442m  
 Min Body Ground Clearance 0.207m  
 Max Track Width 1.756m  
 Lock to Lock Time 4.01s  
 Kerb to Kerb Turning Radius 5.950m

**NOT FOR CONSTRUCTION**

Rev	Date	Description	Drawn	Check

5A Andrews Buildings  
 Penarth, CF64 2AA  
 Tel 029 2070 0924  
 mail@limetransport.com  
 www.limetransport.com

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 Scale 1:125@A1

Project **31 Beech Hill Avenue, Enfield** Drawn MD  
 Checked HLJ

Project No **23108**  
 Title **Swept path analysis**  
**Estate car** Client Project No

Drawing No **23108.OS.102.01**  
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