



B&Q site, Cricklewood Lane, Cricklewood

Proposed residential led development

TRANSPORT ASSESSMENT

Prepared by: Entran Ltd

On behalf of: Montreaux Cricklewood Developments Ltd

DATE: March 2021



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CONTENTS

EXECUTIVE SUMMARY	4
1. INTRODUCTION	5
2. SITE LOCATION AND DESCRIPTION	6
3. LOCAL TRANSPORT NETWORK	7
4. PROPOSED DEVELOPMENT	14
5. PARKING	18
6. TRANSPORT IMPLEMENTATION STRATEGY	24
7. FRAMEWORK TRAVEL PLAN	25
8. DELIVERY AND SERVICING PLAN	28
9. CONSTRUCTION LOGISTICS PLAN	30
10. HEALTHY STREETS ASSESSMENT	32
11. TRIP GENERATION	35
12. TRANSPORT EFFECTS	41
13. TRANSPORT IMPROVEMENTS	43
14. SUMMARY AND CONCLUSIONS	44

FIGURES

2.1	Site location plan
3.1	PTAL contour plan (2011 base)
3.2	Pedestrian isochrones
3.3	Local cycle network
3.4	Cycle isochrones
3.5	Proposed Brent Cross West rail station
3.6	Waiting restrictions
3.7	Traffic survey locations
3.8	Multi modal travel times (TfL 2021 forecast)
4.1	Extract from Illustrative Masterplan
4.2	Movement Strategy principles
4.3	Service routes
5.1	Percentage of Blue Badge holders
5.2	Blue Badge holders as a proportion of the population
5.3	Existing Car Club vehicle locations
8.1	Service route
9.1	Average monthly construction vehicle trips
10.1	Cricklewood Lane – Healthy Streets assessment
10.2	Depot Approach – Healthy Streets assessment
10.2	Internal routes – Healthy Streets assessment
11.1	Proposed Development, forecast mode share



TABLES

- 3.1 Bus route summary
- 3.2 Summary of existing services from Cricklewood rail station
- 3.3 Existing baseline traffic flows
- 4.1 Schedule of accommodation
- 5.1 Extract from London Plan cycle parking standards
- 11.1 Retail Parks trip rates per 100m²
- 11.2 Retail Parks multi-modal trips for 7990m²
- 11.3 Retail Parks trip rates per parking space
- 11.4 Retail Parks multi-modal trips for 470 spaces
- 11.5 Retail Parks multi-modal trips for 470 spaces (adjusted)
- 11.6 Private flats trip rates per dwelling
- 11.7 Private flats multi-modal trips for 1100 dwellings
- 11.8 Non-residential units options analysis
- 11.9 A3 restaurant trip rates per 100m²
- 11.10 A3 restaurant multi-modal trips for 434m²
- 11.11 B1 employment restaurant trip rates per 100m²
- 11.12 B1 employment multi-modal trips for 332m²
- 11.13 D2 leisure trip rates per 100m²
- 11.14 D2 leisure multi-modal trips for 434m²
- 11.15 Commercial and community multi-modal trips
- 11.16 Total development multi-modal trips
- 12.1 Net change in multi-modal trips

APPENDICES

- A Bus routes
- B Traffic survey data
- C Architects' Parameter Plans
- D Site access visibility splays
- E Artist's impressions of public realm provision
- F Pedestrian desire lines
- G Refuse collection strategy and swept path analyses
- H Framework Travel Plan
- I Healthy Streets Assessment
- J ATZ assessment
- K TRICS data
- L Census journey to work review
- M Link flow diagrams



EXECUTIVE SUMMARY

This Transport Assessment (TA) has been prepared by Entran Ltd in support of an outline planning application for a residential led, mixed-use development of up to 1100 new homes and 1200m² of complimentary commercial and community uses on land at Cricklewood Lane, Cricklewood.

This TA has been prepared alongside a Transport Implementation Strategy which provides the opportunity to reduce dependence on travel by private car and seeks to influence travel to and from the Proposed Development rather than merely assessing its impact.

The Site is currently in use as a mixed retail park.

The development comprises the construction of up to 1100 residential dwellings and 1200m² of flexible Use Class E non-residential use at ground floor. The Proposed Development includes new public realm including pedestrian and cycle routes as well as a new public square and landscape enhancements. The proposed development will provide car parking spaces for 10% of the residential dwellings, of which 3% will be for disabled drivers from the outset. Operational car parking will be provided for the non-residential units. Electric Vehicle Charging Points will be installed in accordance with TfL and LBB requirements. Secure cycle parking will be provided in accordance with London Plan standards.

The Proposed Development will remove an existing vehicle access from Cricklewood Lane to the benefit of pedestrians and cyclists, and highway safety in general. The Proposed Development will take vehicle access from Depot Approach, a private access road.

All roads surrounding the site are subject to existing waiting restrictions, including a number of controlled parking zones. There is therefore no opportunity for the proposed development to displace any parking onto the public highway or surrounding streets.

Bus stops within easy walking distance of the site are served by high frequency bus services operating throughout the day and night.

The closest station is Cricklewood Station, less than two minutes' walk from the Site.

An audit of existing pedestrian and cycle facilities within the Active Travel Zone found no significant barriers that would deter or prevent walking and cycling as a primary mode of transport.

The evidence shows that the site is highly accessible by foot, by bike, by bus or using rail services. The introduction a new, direct route through the Site for pedestrians and cyclists will increase the site's PTAL rating (as well as that of land to the north-west) and further and reduce travel times to key employment, retail, health and leisure facilities. The site is clearly well placed to promote travel by sustainable modes of transport and reduce reliance on the private car. The residents of the proposed development will have a genuine and viable choice of modes of travel.

The residents of the new development will benefit from a Car Club so that those households who do not own a vehicle will still have access to one as and when they may need one for essential journeys.

An assessment of travel by different modes shows that the proposed development will result in a material reduction in peak hour and daily vehicle trips. The net result will be an improvement in local highway conditions.

The multi-modal assessment forecasts that 36% of daily trips would be on foot, followed by 17% by bus and 15% by rail. Journeys by car would only represent 14% of person trips. The Framework Travel Plan would provide an opportunity to increase the number of cyclists, bus passengers and car-sharers and decrease the levels of single car occupancy further still.

The development will be supported by a three-part Transport Implementation Strategy comprising the Framework Travel Plan (FTP), Construction Logistics Plan (CLP) and Delivery & Servicing Plan (DSP). Final versions will be prepared (prior to commencement and occupation respectively) in partnership with LBB and TfL.

The provision of new homes and employment at Cricklewood Lane offers an opportunity to enhance this area with no material effect on transport and should be supported by the local highway authorities.



1. INTRODUCTION

- 1.1. This Transport Assessment (TA) has been prepared by Entran Ltd in support of an outline planning application for residential led, mixed-use development of up to 1100 new homes and 1200m² of complimentary commercial and community uses on land at Cricklewood Lane, Cricklewood. Full details of the proposed development are contained in section 4 of this report.
- 1.2. The Site falls within the jurisdiction of the London Borough of Barnet (LBB) who are the local planning authority and the local highway authority.
- 1.3. Pre-application discussions have been held with LBB officers and Councillors. This TA has been developed to take account of the comments received, as well as current local and national guidance.
- 1.4. In preparing this report, we have made reference to the Transport for London (TfL) Borough Planning Team transport assessment best practice guidance (TABPG).
- 1.5. Guidance published by the DfT and the DCLG in 2007 provided advice on the content and preparation of Transport Assessments and Transport Statements. It also assisted stakeholders to determine whether an assessment may be required and, if so, what the level and scope of the assessment should be.
- 1.6. The original national guidance on the assessment of traffic implications associated with development proposals was contained in the “Guidelines for Traffic Impact Assessment” published by the Institute of Highways and Transportation (IHT) in 1994. Since the IHT guidelines were produced, there has been a significant change in Government policy and general guidance regarding improved sustainability in transport. The fundamental difference between TAs and the old TIAs is that TAs seek to influence modes of travel and assess person-trips rather than vehicle trips, whereas TIAs were based on the principles of “predict and provide” for the private car.
- 1.7. The 2007 document brought the guidance on transport assessment up to date with these changes in Government policy, and expanded it to address the assessment of the potential implications of development proposals on the entire transport system. The TABPG guidance builds on that produced by the DfT and relates specifically to London planning and transport policy objectives.
- 1.8. In 2014 DCLG published a suite of Planning Practice Guidance including advice entitled “Travel plans, transport assessments and statements in decision taking”. The 2014 TfL guidance sits alongside the current government guidance on the transport related effects of development.
- 1.9. In 2017 TfL published the Mayor’s Healthy Streets Approach, prioritising walking, cycling and public transport to create a healthy city.
- 1.10. The combined TfL guidance reflects central government guidance on transport assessments but is specific to the transport needs of London.

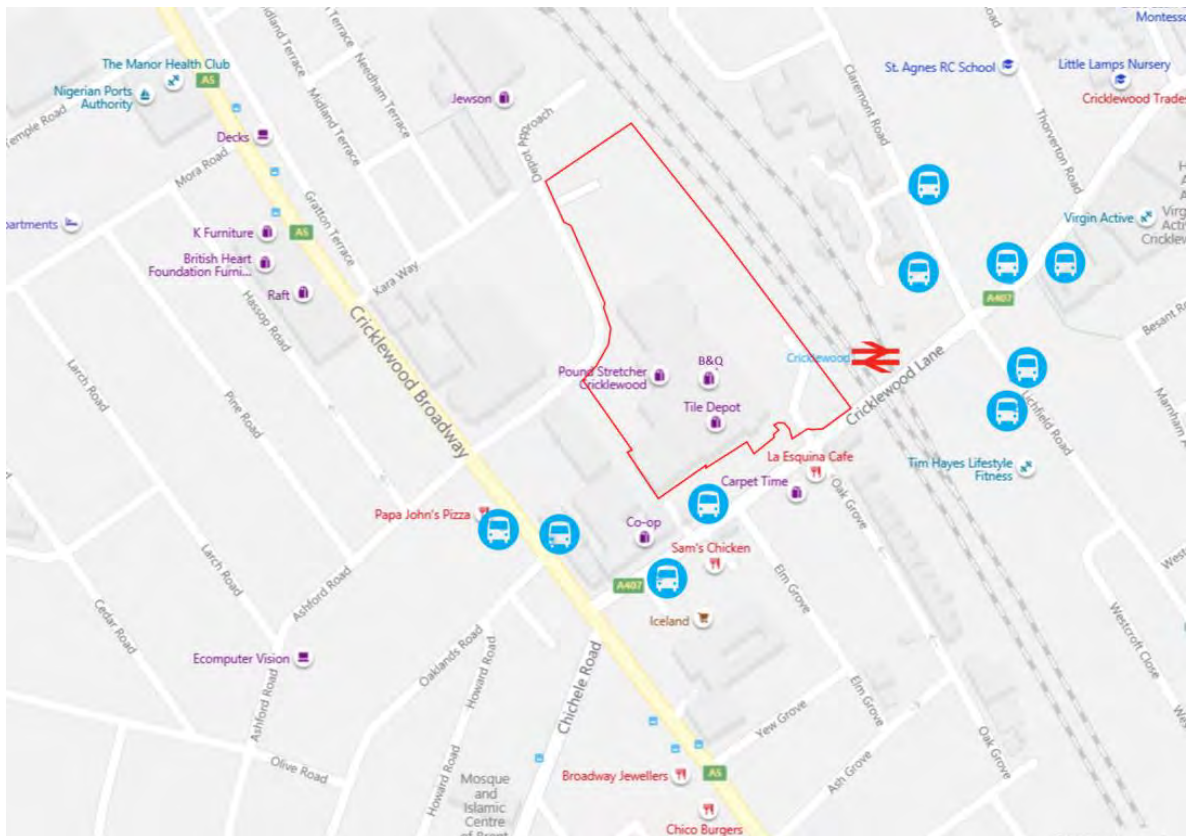
Report layout

- 1.11. Section 2 of this report provides a description of the site and its location. Section 3 then describes the local transport network including the road network, bus provision, pedestrian and cycle facilities and rail station locations.
- 1.12. Section 4 describes the development proposals, including means of access and proposed public realm improvements. Section 5 describes an analysis of car and cycle parking demand. Section 6 summarises the three-part Transport Implementation Strategy which will provide a package of measures to management and regulate the movement strategy during the construction and operational phases. Section 7 summarises the Framework Travel Plan while sections 8 and 9 outline the Delivery and Servicing Plan and Construction Management Plan. Section 10 comprises a Healthy Streets Assessment of the existing and proposed streets surrounding the Site. Section 11 includes an analysis of travel by different modes to the Proposed Development and Section 12 assesses the net effect of the development proposals on the transport network. Section 13 summarises the proposed transport improvements to be delivered by the Proposed Development and Section 14 provides a summary of this Transport Assessment and draws conclusions from its findings.

2. SITE LOCATION AND DESCRIPTION

- 2.1. The Site is located to the west of Cricklewood Station in the heart of Cricklewood. The Site fronts onto Cricklewood Green which abuts Cricklewood Lane on the Site's south-eastern boundary. The Site's north-eastern boundary is formed by the rail line leading from Cricklewood Station towards Brent Cross. The north-western boundary adjoins a surface level private car park (Beacon Bingo) and the south-eastern boundary adjoins private road, Depot Approach and an adjacent commercial site which benefits from an extant planning permission for residential development. The site location is shown below in Figure 2.1.

Figure 2.1 – Location Plan



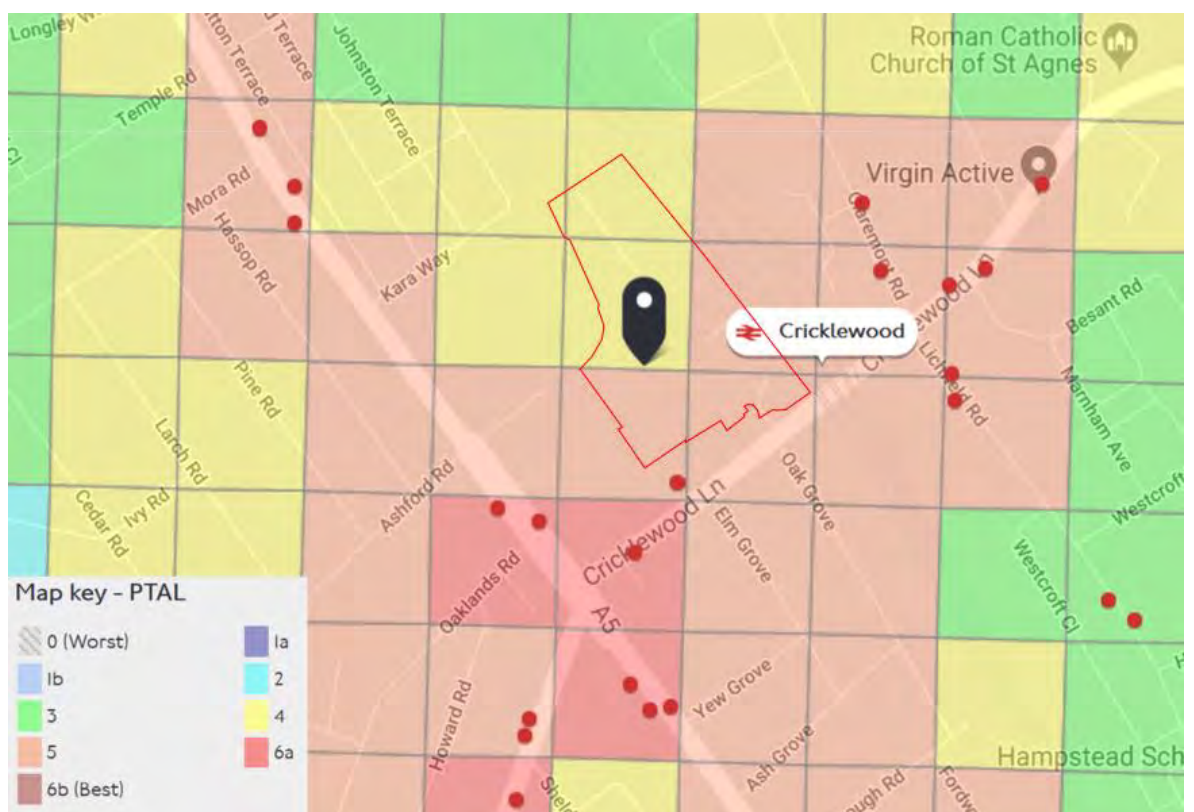
- 2.2. The Site is currently occupied by a retail warehouse (use class A1) owned and operated by B&Q. Two additional smaller retail warehouse units (Poundstretcher and Tile Depot) adjoin B&Q. The combined gross floor area (GFA) of the existing retail units is 7,990m². The existing Site use incorporates a car park with 470 car parking spaces. The Site has three vehicular accesses, one of which joins Cricklewood Lane (A407) whereas the other two join Depot Approach. The Cricklewood Lane access is a priority junction with a narrow ghost right-turn lane for drivers turning right into the Site, and a restricted-movements layout preventing right turns out of the Site. The two accesses onto Depot Approach comprise the service access and a second access into the car park. The service access takes the form of a wide bellmouth (to allow for large service vehicles) with gates at the back edge of the pedestrian footway. The service yard serves all three retail units situated within the Site. The car park entrance on Depot Approach is another wide bellmouth with entry and exit lanes divided by a central splitter island. The entry and exits are gated, and signage indicates that the private car park is for customer use with a maximum stay of three hours.
- 2.3. Site investigation indicates that 'We buy any car, Cricklewood' also trades from the Site and photographic evidence (Aug '14 - Jan '20) shows the small temporary office has been located within the car park for at least five years. In addition, 'The Lunch Box' is a mobile catering van which is also located within the car park.

3. LOCAL TRANSPORT NETWORK

General

- 3.1. The site is located in an area with a 2011 PTAL rating of 4/5. The PTAL rating for the site takes into account the time taken to access the public transport networks and includes:
- The walk time to various public transport services
 - The average waiting time for each service
 - The reliability of each service
- 3.2. The methodology is based on a walk speed of 4.8km/hr (80m/min) and considers rail stations within a 12 minute walk (960m) of a site and bus stops within an 8 minute walk (640m). PTAL is categorised into six levels from 1 to 6 where 1 represents a low level of accessibility and 6 a high level. A 2011 baseline PTAL contour plan is included below as Figure 3.1.

Figure 3.1 – PTAL contour plan (2011 base)



- 3.3. Figure 3.1 illustrates that the section of the Site that fronts onto Cricklewood Lane has a PTAL rating of 5 whereas the 'rear' portion of the Site has a PTAL rating of 4. It is important to recognise that this information is taken from the TfL WebCAT site which shows PTAL ratings in 100m squares. Needless to say, the accessibility of the Site does not adhere to the rectilinear form of these indicative squares, but it is reasonable to conclude that the PTAL score is 5 at the front of the Site and 4 at the rear. The lower PTAL rating at the north-western end of the Site is influenced by the walking distance to Cricklewood Station via Depot Approach. This walking distance would reduce if public access was formally allowed through the Site.
- 3.4. Transport for London describe PTAL 4/5 as a 'Good' level of accessibility, indicating that residents, staff, or visitors in this location would not be solely reliant on travel by private car. This is a suitable location to promote travel by sustainable modes.

- 3.5. Cricklewood Lane (A407) is a local distributor road joining the Cricklewood Broadway (A5) to the south west and Hendon Way (A41) to the north east.
- 3.6. Depot Approach is a private cul-de-sac serving a range of commercial premises including the Site, Beacon Bingo (premises and two car parks), Jewson building supplies, hand car wash, tyre supply and fitting business and a vacant development plot. Each of these businesses attract vehicular traffic in the form of customer cars and large service vehicles.
- 3.7. Depot approach takes access from Cricklewood Broadway (A5) by means of a four-arm signal-controlled junction with yellow hatched box-junction markings.
- 3.8. All service vehicles visiting the Site currently use Depot Approach. Customers arriving at the Site from the north-west generally use Depot Approach. Those arriving and departing to and from the north-east generally use the Cricklewood Lane access. Those arriving from the south have a choice of either access, but the right-turn ban out of the Cricklewood Lane exit means that all those leaving the Site to the south would use Depot Approach.

- 3.9. *NOTE: At the time of preparing this assessment, TfL is working with London Boroughs to create more space for people to safely walk or cycle as London emerges from the coronavirus lockdown. Temporary cycle lanes and wider pavements are among the changes that have been made as part of the 'Streetspace for London' initiative. It is possible that some of the temporary facilities will become permanent, but at the time of writing there is still considerable uncertainty as to the duration of any travel restrictions and the longevity of the Streetspace facilities. For this reason, the baseline conditions reflect the assessment work carried out before the coronavirus pandemic, and any references to future transport improvements relate to committed infrastructure work, outside of the Streetspace initiative.*



Pedestrians

- 3.10. Acceptable journey distances on foot vary depending on the purpose of the journey, the environment in which the journey is taking place and of course the individual walking. Prior to being superseded by the National Planning Policy Framework (NPPF), PPG13 suggested that walking offers the greatest potential to replace short car trips for journeys less than 2km. The IHT guide 'Providing for Journeys on Foot' suggests that for commuting a desirable walking distance would be 500m, an acceptable walking distance would be 1km and the preferred maximum walking distance would be 2km, in line with the PPG13 advice. The 2011 Census data for Greater London shows that 32% of journeys to work on foot are over 2km in length. A walking distance of 2 kilometres, and more in some cases, is likely to be realistic for residents or visitors travelling to and from the Site.
- 3.11. Figure 3.2 shows walking radii from the Site, and given that most local services, shops and transport hubs can be found within a 400m radius (5 minute walk), this Site is very well placed to promote travel on foot.

Figure 3.2 – Pedestrian isochrones.



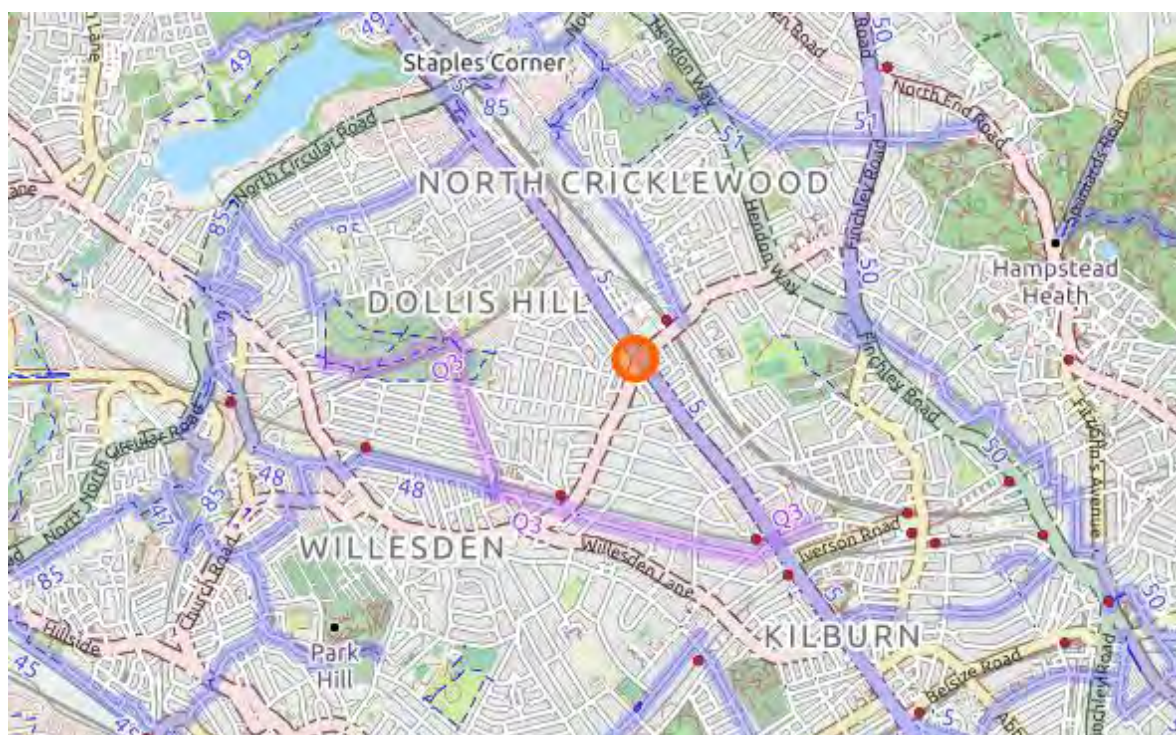
- 3.12. This site benefits from good existing pedestrian facilities. To the east of the Site, Depot Approach joins the Cricklewood Broadway where many shops and services are located. This stretch of Cricklewood Broadway is a heavily trafficked road but with wide footways, street lighting and regular controlled pedestrian crossings along its length, it is suitable for travel on foot.
- 3.13. The junction between Depot Approach and Cricklewood Broadway is signal controlled with pedestrian stages on all four arms. The same applies to the junction between Cricklewood Lane and Cricklewood Broadway, providing safe pedestrian routes to all local shops and services.
- 3.14. Cricklewood Lane on the south-eastern boundary of the Site is another well-lit street with wide footways, joining Cricklewood Broadway to the south-west and passing under the railway bridge and continuing towards Childs Hill to the north-east. There is currently a very wide footway below Cricklewood Green flanking the Northern side of the road, and a 3m footway on its southern side. Cricklewood Lane benefits from three uncontrolled pedestrian crossing islands within the vicinity of the Site and controlled crossings at the junctions with Cricklewood Broadway and Claremont Road.
- 3.15. An audit of pedestrian facilities within the identified Active Travel Zone shows that on the primary pedestrian desire lines are wide and well lit.
- 3.16. The ATZ assessment described later in **Section 10**, identified that there is a degree of street furniture 'clutter' on some principal routes, but not to the degree that it results in any unacceptable footway widths.
- 3.17. All footways in the vicinity of the Site are well lit. All pedestrian crossing points across side roads and across primary links, benefit from flush dropped kerbs (max upstand 6mm) and tactile paving.

- 3.18. There are two existing uncontrolled pedestrian crossing points over Cricklewood Lane within the extent of the Site frontage (either side of the existing site access). These have dropped kerbs, tactile paving, central refuges with reflective bollard, and dedicated lighting. The ATZ assessment identified that these refuges are less than 2m wide so whereas they provide a safe refuse for pedestrians they do not cater well for wheelchair users or pedestrians with pushchairs or trolleys.
- 3.19. The Rail line causes a degree of severance for pedestrians wishing to walk north-eastwards from the Site but the route beneath the rail line is lit and the artwork introduced in 2015 makes this a relatively pleasant underpass.
- 3.20. The site is well placed to promote journeys on foot with very few barriers to deter walking as a primary mode of travel.

Cycle

- 3.21. Specific cycle infrastructure is limited in Cricklewood, but many local roads are suitable for travel by bike. Figure 3.3 indicates the local roads that have been considered suitable for cycling, with the short stretch of Quietway 3 (running between Regent’s Park and Gladstone Park) also shown. There are also a number of leisure routes in nearby Hampstead Heath.

Figure 3.3 – Local Cycle Infrastructure.



- 3.22. Despite the limited segregated infrastructure, it is very possible to reach a large area within a 20-minute cycle from the Site, as shown in Figure 3.4.

Figure 3.4 – Cycling isochrones.



- 3.23. The site is well placed to promote travel by bike. The 20 minute isochrone illustrated in Figure 3.4 constitutes the Active Travel Zone (ATZ) for cyclists.

Bus

- 3.24. The Site is well placed for travel by bus with two stops serving 8 bus routes within a maximum 300m walk from any part of the Site. Table 3.1 summarises the routes available from Cricklewood Lane, Stop BP to the west of the Site and Cricklewood Broadway, Stop CW south of Site.
- 3.25. Full bus timetables can be found at www.londonbusroutes.net or www.tfl.gov.uk/bus/timetable and are summarised below:

**Table 3.1 –Bus route summary**

No	Details	Duration	Frequency
16	Cricklewood – Kilburn - Victoria	0515-2350	7-8 minutes
32	Edgware - Burnt Oak - Cricklewood - Kilburn	0505-0018	7-8 minutes
226	Ealing - Cricklewood - Pennine Drive - Golders Green	0501-0106	12 minutes
245	Alperton - Cricklewood - Golders Green	0540-0400	12 minutes
260	Golders Green - Cricklewood - White City	0514-0018	12 minutes
316	Cricklewood - Queen's Park - White City	0517-0003	12 minutes
332	Neasden Tesco - Cricklewood - Kilburn - Paddington	0538-0009	10 minutes
632	Kilburn Park - Cricklewood -Grahame Park	0750-0754-0758	3 times per day

- 3.26. Table 3.1 shows that the site benefits from excellent bus provision. The services which stop within easy walking distance of the redevelopment site provide access to a very wide area at a high frequency. Importantly, the frequency is such that those using the bus do not have to schedule their travel according to a timetable but can simply walk to the bus stop and catch the next bus to their destination, usually with a maximum wait of no more than 5 or 6 minutes. This facility makes using the bus for travel to work convenient and attractive.
- 3.27. A detailed map of buses from Cricklewood is included as **Appendix A**. It shows the wide network of routes to locations including Edgware, Finchley, West Hampstead, Kilburn, Willesden, Sudbury and Neasden.

Rail

- 3.28. The Site's proximity to Cricklewood Railway Station in fare zone 3 means that it is extremely well placed for travel by rail. A short walk (less than two minutes) along the wide footway in front of Cricklewood Green and under the railway bridge provides a safe and attractive route to the station. Cricklewood Station is served by a 24 hour Thameslink service to London, Wimbledon, Sutton, Luton, and St Albans. The station has a small amount of CCTV monitored Cycle Storage and is served by a number of bus routes. Table 3.2 summarises the services from Cricklewood station.

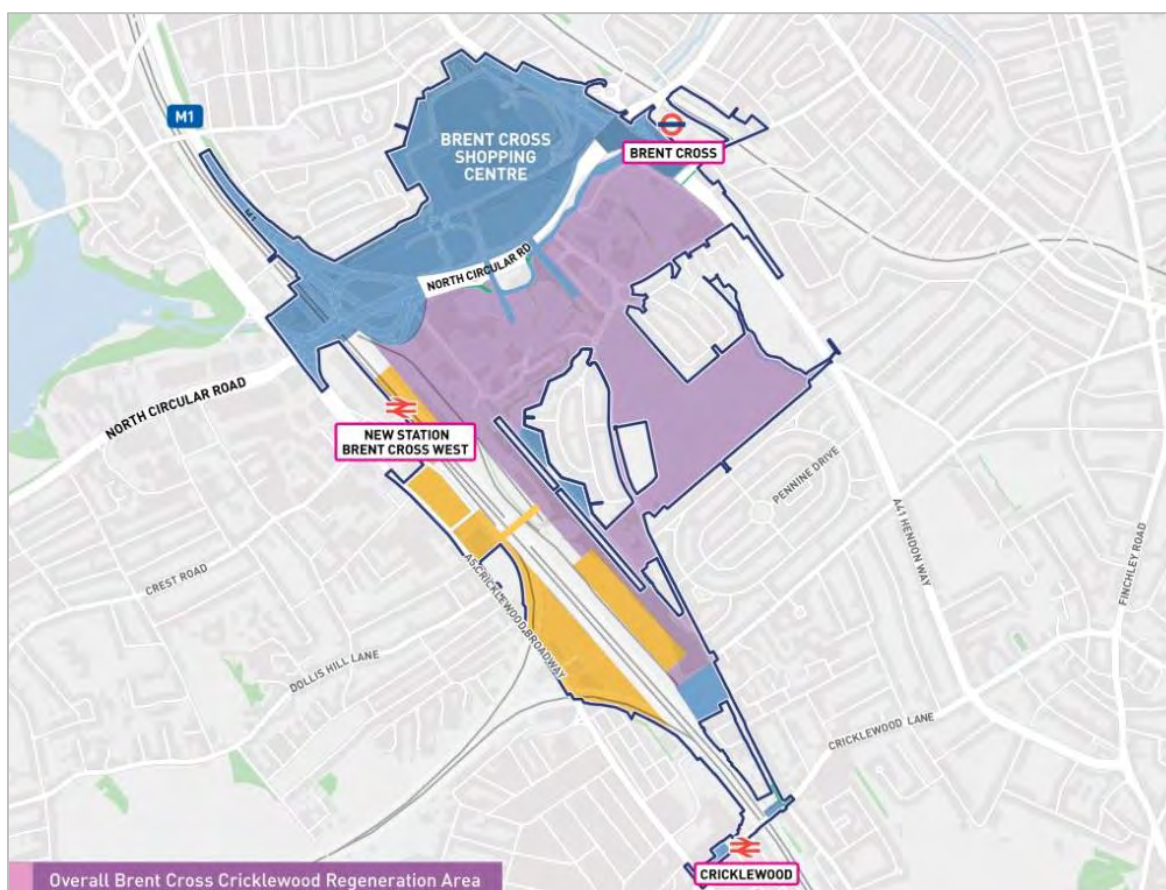
Table 3.2 – Summary of existing services from Cricklewood station.

Route	Duration	Frequency	Capacity
Sutton (Surrey)	0456-2330	15 mins	8 carriages
Sutton via Wimbledon	0316-2330	30 mins	8 carriages
London Blackfriars (on Sutton route)	24 hours	15 mins	8 carriages
St Albans	24 hours	15 mins	8 carriages

- 3.29. This shows that at present the trains stopping at Cricklewood Station provide an average of 8 trains per hour, with 4 northbound and another 4 southbound, equating to 32 carriages in either direction, or 144 trains per day (tpd).

- 3.30. Cricklewood Station originally comprised a series of red-brick Victorian buildings with associated forecourt and grounds; however the wider grounds are now used for a separate commercial business (Station House Reclamation) and the ticket hall comprises the westernmost portion of the former station house. The ticket hall has a single counter for ticket purchases but also has a ticket machine. The automatic barriers are compatible with Oyster and contactless payment.
- 3.31. Access to the ticket hall is gained on foot by means of a wide walkway from Cricklewood Lane. This approach was upgraded in 2015 to include extensive planting and distinctive artwork. The subway beneath the rail lines was upgraded in 2014.
- 3.32. The station has cycle parking (Sheffield loop stands) adjacent to the ticket office and further cycle parking installed in 2019 adjacent to the rail bridge.
- 3.33. In May 2020 LBB granted final approval for the new Brent Cross West station, to the north of Cricklewood. Although outline permission had already been granted as part of the Brent Cross regeneration scheme, the LBB planning committee granted planning permission for the new station in May 2020.
- 3.34. The new £40 million station will be located approximately half way between Hendon and Cricklewood stations as shown in Figure 3.5 below.

Figure 3.5 – Proposed Brent Cross West rail station

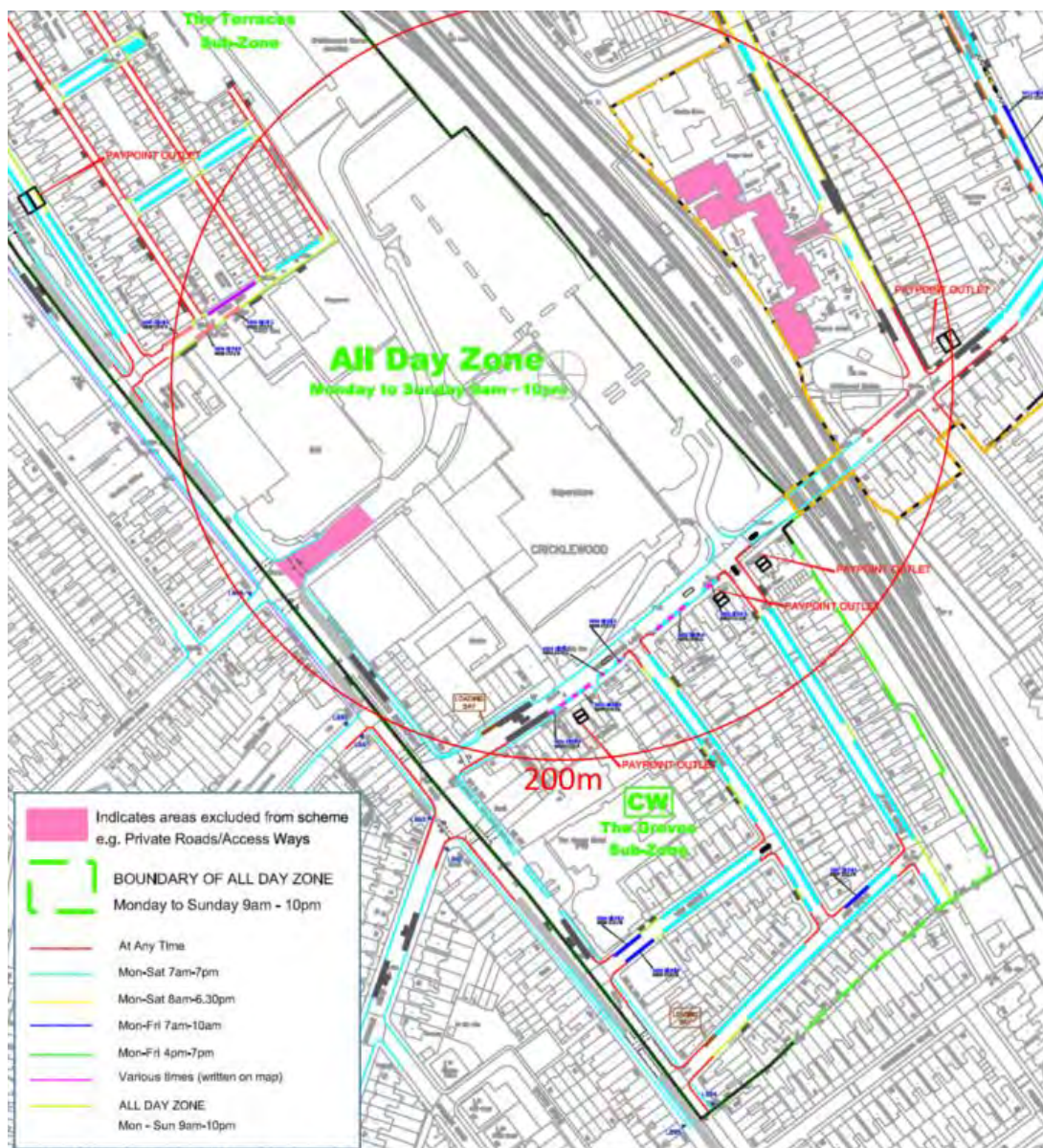


- 3.35. The new station will have four platforms, two of which will be used by slow stopping services. The forecast capacity is a peak of eight trains per hour and an off-peak service of four trains per hour.

Parking controls

- 3.36. All roads within 200m of the Site are either private, and therefore subject to private enforcement, or public highway and subject to waiting restrictions or Controlled Parking Zones (CPZ). The Site falls within the All Day Zone which operates seven days a week from 9am to 10pm. To the north of the Site is The Terraces sub-zone, to the south is The Groves sub-zone and to the north-east of the Site (beyond the rail bridge) is the C1 One-Hour Zone.
- 3.37. Generally, in the vicinity of the Site, Cricklewood Lane and Cricklewood Broadway have single yellow lines on both sides restricting parking Mon-Sat 7am to 7pm. All junctions are protected by double yellow lines denoting no waiting at any time.
- 3.38. On the south-eastern side of Cricklewood Lane a series of parking bays provide a mix of daytime (9am-5.30pm) short-stay (90 min) pay and display parking bays, and evening (5.30pm-10pm) resident permit holders only bays. The bays are for resident permit holders only on Sundays.
- 3.39. The existing waiting restrictions are illustrated on Figure 3.6 below.

Figure 3.6 – Waiting restrictions



Baseline traffic flows

- 3.40. A detailed traffic survey was carried out from 20th to 26th June 2019. The survey locations are shown in Figure 3.7 below. The traffic survey included peak hour manual turning counts on June 26th at:
- North car park access (1);
 - South car park access (2);
 - Cricklewood Broadway (A5) j/w Depot Approach (3); and
 - Cricklewood Broadway (A5) j/w Cricklewood Lane and Chichele Road (A407) (4)
- 3.41. The traffic survey also included seven-day automatic traffic counts (ATC) in seven locations.
- North car park access (a);
 - South car park access (b);
 - Cricklewood Lane (A407) (c);
 - Cricklewood Broadway (A5) (SE) (d);
 - Chichele Road (A407) (e);
 - Cricklewood Broadway (A5) (NW) (f); and
 - Depot Approach (g).
- 3.42. The survey locations are shown in Figure 3.7 below.

Figure 3.7 – Traffic survey locations



- 3.43. The roads listed in above and illustrated in Figure 3.7 represent the traffic impact study area. The study area for pedestrians, cyclists and public transport passengers included an extended study area to include the Active Travel Zone defined by 15 minute walking and cycling distances.



- 3.44. Section 12 of the TA demonstrates the proposed development results in a net reduction in traffic. For this reason, the study area includes the existing and proposed site accesses, the road links between those junctions, and all road links leading from those junctions. Accordingly, the Claremont Road junction has not been assessed for operational capacity as the reduction in traffic is beneficial to the junction.
- 3.45. The observed 2019 traffic flows are shown in Table 3.3 below. A growth rate has been applied to derive 2020 'current' traffic flows. The growth rate from 2019 to 2020 is based on the Low National Road Traffic Forecast (NRTF) rate. It should be noted that a permanent traffic monitoring station is located on Cricklewood Broadway which provides daily traffic flow data from 2000-2019. That data demonstrates that observed growth from 2014 to 2019 is below Low NRTF, so the use of Low NRTF is considered robust. Full traffic survey data is provided as **Appendix B**.

Table 3.3 – Existing baseline traffic flows.

Road link	2019 observed two-way traffic (AADF)	2020 baseline two-way traffic (AADF)
North car park access	2075	2075
South car park access	2516	2516
Cricklewood Lane (A407)	14167	14280
Cricklewood Broadway (A5) (SE)	21723	21897
Chichele Road (A407)	11313	11404
Cricklewood Broadway (A5) (NW)	24572	24768
Depot Approach	1747	1761

- 3.46. The traffic survey also specifically identified any traffic using the Site car park as a short-cut to avoid the Cricklewood Lane traffic signals. The survey identified 40 drivers cutting through the car park from Depot Approach to Cricklewood lane during the morning peak hour (0800-0900) and 41 during the evening peak (1700-1800). In the reverse direction, the survey only identified 2 or 3 vehicles during the peak hours. This traffic should not be using the car park as a 'rat-run' and would be redirected onto the public highway as a result of the Proposed Development.
- 3.47. The Site currently generates 4591 vehicle trips per day via the two Site accesses.

Multi-modal travel times

- 3.48. TfL records multi-modal journey times across the capital and provides forecast for future journey times taking account of committed transport improvements. The 2021 journey times for the Site are shown in Figure 3.8 below.

Figure 3.8 – Multi-modal travel times (TfL 2021 forecast)



- 3.49. Figure 3.8 shows a large catchment within 15-30 minutes travel time from the Site and a very extensive catchment within 45 minutes of the Site extending from Edgware in the north to Westminister in the south.

Accessibility audit summary

- 3.50. It is clear that the site is highly accessible by foot, by bike, by bus or using rail services. The introduction of Bret Cross West station and other committed transport improvements will increase the site's accessibility further and reduce travel times to key employment, retail, health and leisure facilities. The site is clearly well placed to promote travel by sustainable modes of transport and reduce reliance on the private car.

Accident review

- 3.51. An assessment has been carried out to review all Personal Injury Accident data within the defined study area surrounding the Site. The study area has been broken down into 5 sections, 3 junctions these are Depot Approach/ A5 junction, the Cricklewood Ln./ A5 junction and the Cricklewood Ln./ B&Q access junction, the remaining two will consist of the A5 and Cricklewood Ln. this breakdown is



demonstrated on the figure below, using the same location references as figure 3.7 above.

Figure 3.9 – Plan of Personal Injury Accidents (PIA)



3.52. The map breaks down incidents by severity with orange indicating slight injury, red indicating serious injury and black indicating a fatality. Table 3.4 provides a summary of accident severity by location.

Table 3.4 – Accident severity breakdown

	Slight	Serious	Fatal	Total
Depot Approach/ Cricklewood Junction	2	0	0	2
A5	4	0	0	4
Cricklewood Ln/ B&Q access junction	8	1	0	9
Cricklewood Ln	12	2	0	14
A5/Cricklewood Ln Junction	2	1	0	3
	28	4	0	32

3.53. As shown by the table above, approximately 90% of all incident in the past 3 years have resulted in slight injuries.

3.54. The tables below provide a further assessment of PIAs by mode of travel at each junction and road link within the study area.

**Table 3.5 - Depot Approach/ A5 Junction types of accidents**

	Number of accidents	Percentage
Single Vehicle	0	0%
Vehicle - Vehicle	2	100%
Vehicle - Cyclist	0	0%
Vehicle - Pedestrian	0	0%
Cyclist - Pedestrian	0	0%

Table 3.6 – A5 types of accidents

	Number of accidents	Percentage
Single Vehicle	1	25%
Vehicle - Vehicle	1	25%
Vehicle - Cyclist	1	25%
Vehicle - Pedestrian	1	25%
Cyclist - Pedestrian	0	0%

Table 3.7 - A5/Cricklewood Ln Junction types of accidents

	Number of accidents	Percentage
Single Vehicle	2	22%
Vehicle - Vehicle	3	33%
Vehicle - Cyclist	0	0%
Vehicle - Pedestrian	4	44%
Cyclist - Pedestrian	0	0%

Table 3.8 – Cricklewood Ln. types of accidents

	Number of accidents	Percentage
Single Vehicle	2	14%
Vehicle - Vehicle	7	50%
Vehicle - Cyclist	0	0%
Vehicle - Pedestrian	5	36%
Cyclist - Pedestrian	0	0%

Table 3.9 - Cricklewood Ln/B&Q access junction accidents breakdown

	Number of accidents	Percentage
Single Vehicle	0	0%
Vehicle - Vehicle	2	67%
Vehicle - Cyclist	0	0%
Vehicle - Pedestrian	1	33%
Cyclist - Pedestrian	0	0%

**Table 3.10 – All locations types of accidents**

	Number of accidents	Percentage
Single Vehicle	5	16%
Vehicle - Vehicle	15	47%
Vehicle - Cyclist	1	3%
Vehicle - Pedestrian	11	34%
Cyclist - Pedestrian	0	0%

- 3.55. This assessment demonstrates that the majority of PIAs within the study area either involve a single vehicle or a collision between two vehicles. Within section 12 of the TA, it is shown how the proposed development will result in a net reduction in traffic on the local highway network and close up an existing junction onto Cricklewood Lane. This will have a positive effect on the safety of the network.
- 3.56. The assessment also demonstrates that 36% of PIAs occur between a vehicle and a pedestrian; approximately 50% of these incidents occur along Cricklewood Lane. which will see a reduction in traffic and improvements in pedestrian crossing facilities as a result of the development.
- 3.57. The assessment has also identified a small number of incidents at the existing Site access from Cricklewood Lane; these will no longer occur as the redevelopment of the Site will remove this access.



4. PROPOSED DEVELOPMENT

Proposed Development

- 4.1. The proposed description of development is:
“Outline planning application (including means of access with all other matters reserved) for the demolition of existing buildings and comprehensive redevelopment of the site for a mix of uses including residential C3 and flexible commercial and community floorspace in use classes A3/B1/D1 and D2; car and cycle parking; landscaping; and associated works.”
- 4.2. This comprises the Proposed Development.
- 4.3. The planning application is supported by a set of Parameter Plans, submitted as documents for approval. These plans set the maximum parameters for any future reserved matters applications. The Parameters Plans indicate a development of up to 1100 new homes of which 35% will be affordable housing (subject to final agreement with LBB) and 1200m² of commercial and community uses.
- 4.4. The application is also supported by an Illustrative Masterplan which seeks to establish a vision and framework for development across the site. The Illustrative Masterplan is not for approval and is for information only.
- 4.5. A full set of EPR Architects Parameter Plans are included as **Appendix C**.
- 4.6. The schedule of accommodation (also included at Appendix C) is summarised below.

Table 4.1 – Schedule of accommodation

Phase	Dev Parcel	Flexible commercial (m ²)	Studio	1 bed	2 bed	3 bed	Total
1	A	480	68	128	152	29	377
	B	650	0	51	84	35	170
2	C	0	40	131	140	18	329
3	D	70	40	103	58	23	224
TOTAL		1200	148	413	434	105	1100

Means of access

- 4.7. The Proposed Development will deliver significant improvements to the public realm, including the creation of a new public square and a high quality pedestrian and cycle route through the site, linking Depot Approach and Cricklewood Lane. This new public realm will create new cycle and pedestrian accesses into the site but also create new direct, attractive routes between the centre of Cricklewood and future development land to the north-west of the Site.
- 4.8. Cricklewood Green does not form part of the planning application but the movement strategy includes new landscaped routes through Cricklewood green which are expected to be secured by means of a legal agreement pursuant to Section 106 of the Town and Country Planning Act 1990.
- 4.9. The closure of the existing vehicle access onto Cricklewood Lane will improve the pedestrian realm along Cricklewood Lane and, by virtue of removing vehicle turning movements, improve highway safety in this location.
- 4.10. The Proposed Development will take vehicle access from Depot Approach, a private access road over which the Site has a right of access. Vehicle visibility splays for the proposed site accesses are included as **Appendix D**. These accesses have been designed with both pedestrian and cyclists in mind. The access dimensions have been designed to operational minimal width, for the benefit of pedestrians. The access widths and radii will ensure slow vehicle speeds and reduce pedestrian crossing distance to a minimum in line with best practice.

- 4.11. The Illustrative Masterplan includes an internal road network that retains a traffic-free public realm through the heart of the Proposed Development but delivers vehicle access routes for car parking and servicing around the perimeter of the Site. An extract from the Illustrative Masterplan is included for information as Figure 4.1 below.

Figure 4.1 – Extract from the Illustrative Masterplan



- 4.12. The Illustrative Masterplan shows the four Blocks A-D, the new public square in front of Block A, and the strong traffic-free pedestrian and cycle routes running through the heart of the Proposed Development.
- 4.13. Artist's impressions of the extensive new public realm, and the proposed improvements to existing public realm, are included as **Appendix E**.

Movement Strategy

- 4.14. The general principles of the Movement Strategy are shown in Figure 4.1 below. This shows the vehicle and service routes around the perimeter of the Site and the pedestrian and cycle route through the centre. Access for emergency vehicles will also be provided through the centre of the Proposed Development.

Figure 4.2 – Movement Strategy principles.



- 4.15. The movement strategy shows a clear segregation of vehicle and pedestrian/cycle routes
- 4.16. Primary and secondary pedestrian desire lines are illustrated in **Appendix F**, including all controlled and uncontrolled crossing points on the desire line routes.
- 4.17. The movement strategy indicates an area of land (hatched red) which will be safeguarded so as not to preclude any future aspirations for a secondary access into Cricklewood Station.



Service Routes

- 4.18. A swept path analysis has been carried out, using the Illustrative Masterplan, to determine a service route that would allow all refuse and recycling bins to be collected with a maximum carry distance of 10m. Based on the Illustrative Masterplan most bin stores would be located within 10m of the service route, but those that are not would have a corresponding bin presentation area adjacent to the service route, shown as P1 to P4 in Figure 4.3 below. This would require a managed waste strategy to enable bins to be taken from the necessary bin stores to the presentation areas on collection days. It is important to stress that Layout is a reserved matter so full details will be provided as part of any reserved matters application. The illustrative waste collection strategy is described in the draft Delivery and Servicing Plan later in this TA, and illustrated in Figure 4.3 below and **Appendix G**.

Figure 4.3 – Service Routes





5. PARKING

- 5.1. This is an Outline planning application so whereas means of access will be determined, the layout is a reserved matter. For this reason, the total number of car and cycle parking spaces are not defined as part of the planning application. However, the following information is based on the maximum parameters.

Cycle parking provision

- 5.2. The Intend to Publish London Plan 2019 (ITP London Plan) sets out minimum cycle parking standards for new development in its Table 6.3. Those parts of table 6.3 that relate to the B&Q Cricklewood proposals are summarised in Table 5.1 below.

Table 5.1 – Extract from ITP London Plan cycle parking standards

Land use		Long-stay	Short stay
A3	Cafés and restaurants	1 per 175m ²	1 per 20m ²
B1	Employment	1 per 75m ²	1 per 500m ²
C3- C4	Dwellings (all)	1 space per studio or 1 person 1-bedroom dwelling 1.5 spaces per 2-person 1- bedroom dwelling 2 spaces per all other dwellings	5 to 40 dwellings: 2 spaces Thereafter: 1 space per 40 dwellings
D1	Community	1 per 8 FTE staff	1 per 100m ²
D2	Health/leisure	1 per 8FTE staff	1 per 100m ²

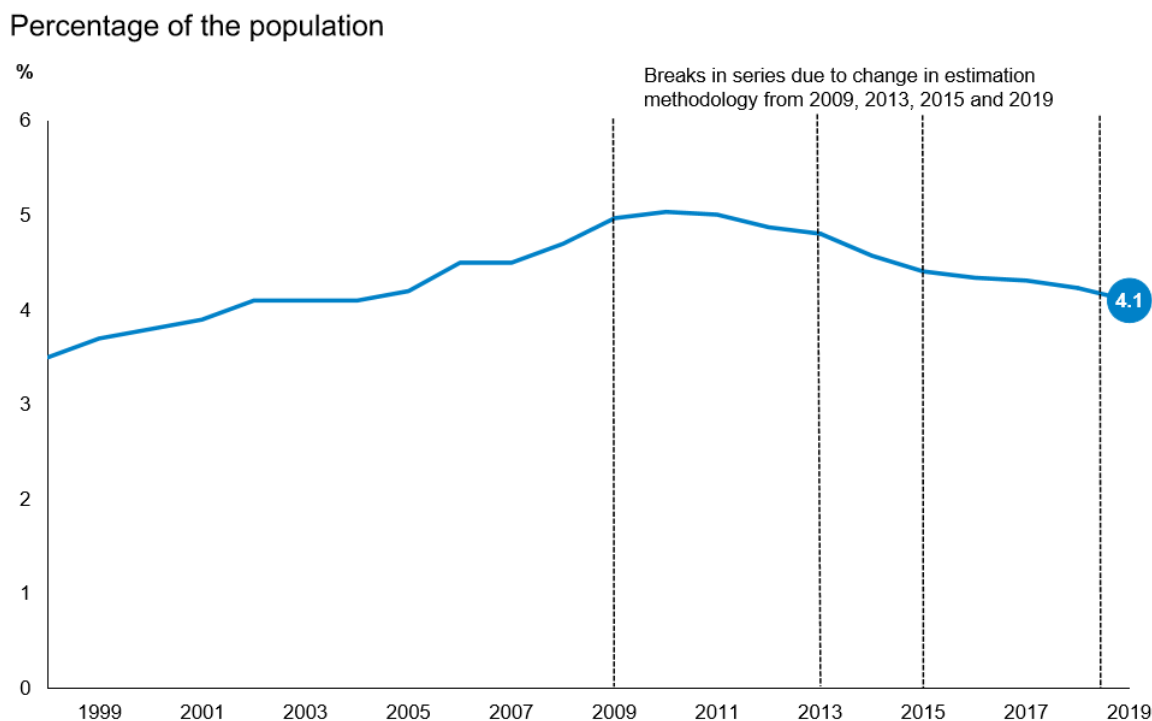
- 5.3. The proposed development comprises up to 1100 dwellings (148 x studio; 413x1B; 539x2+B). The minimum cycle parking requirement therefore comprises 1,846 long-stay spaces and 28 short stay spaces. The long-stay spaces will be provided in secure cycle stores at ground floor level and the short stay spaces will be provided in the form of 14 Sheffield loop stands, located close to pedestrian entrances and incorporated into the landscape scheme.
- 5.4. The long-stay residential cycle parking spaces will be segregated into smaller stores, located close to the residential cores. In order to maximise efficient land-use the majority of secure residential cycle spaces will be provided as Josta (or similar) two-tier cycle racks. In accordance with the London Cycle Design Standards at least 5% will be suitable for non-standard bikes such as three-wheelers, recumbent bikes or adapted cycles, and will incorporate a range of secure cycle parking including racks, Sheffield stands and lockers for folding bikes.
- 5.5. The Proposed Development includes up to 1200m² of flexible commercial and community use. It is highly unlikely that the whole of the non-residential floorspace would be brought into a single use. In terms of cycle parking the uses that would generate the highest parking demand would be A3 café and B1 employment; however, one would generate a higher requirement for long-stay parking and the other would generate a higher requirements for short-stay parking. Therefore, for the purpose of this assessment the cycle parking demand has been calculated on the basis of 600m² of A3 use and 600m² of B1 use. Based on this equal split of the uses with the highest parking demand, A3 use would require 4 long stay spaces and 30 short-stay spaces; the B1 use would require 8 long-stay and 2 short-stay. The non-residential uses would therefore require 12 long-stay spaces (to be provided within the commercial footprint) and 32 short-stay spaces, to be provided in the form of 16 Sheffield loop stands located close to pedestrian entrances and incorporated into the landscape scheme.



Car parking provision

- 5.6. The Illustrative Masterplan has been tested to demonstrate that it can accommodate 110 car parking spaces, all of which have been designed with dimensions suitable to be used by Blue Badge holders.
- 5.7. The ITP London Plan (2019) states:
*“Disabled persons parking should be provided for new residential developments. Residential development proposals delivering ten or more units must, as a minimum:
Ensure that for three per cent of dwellings, at least one designated disabled persons parking bay per dwelling is available from the outset.
Demonstrate as part of the Parking Design and Management Plan, how an additional seven percent could be provided with one designated disabled persons parking space per dwelling in future upon request as soon as existing provision is insufficient.”*
- 5.8. The Illustrative Masterplan therefore shows that 10% accessible spaces could be provided for the residential accommodation, but that a minimum of 3% would be provided from the outset in accordance with the London Plan. The non-residential uses would have operational and Blue Badge spaces only (nominally set at 8 operational and 4 Blue Badge spaces but to be determined as part of the Layout reserved matters).
- 5.9. The Department for Transport report “Blue Badge Scheme Statistics, England: 2019” states that there was a 2.5% reduction in Blue Badges held in England in March 2019 compared to the previous year; and that in London the reduction was 3.7% (227,000 fewer than 2018).

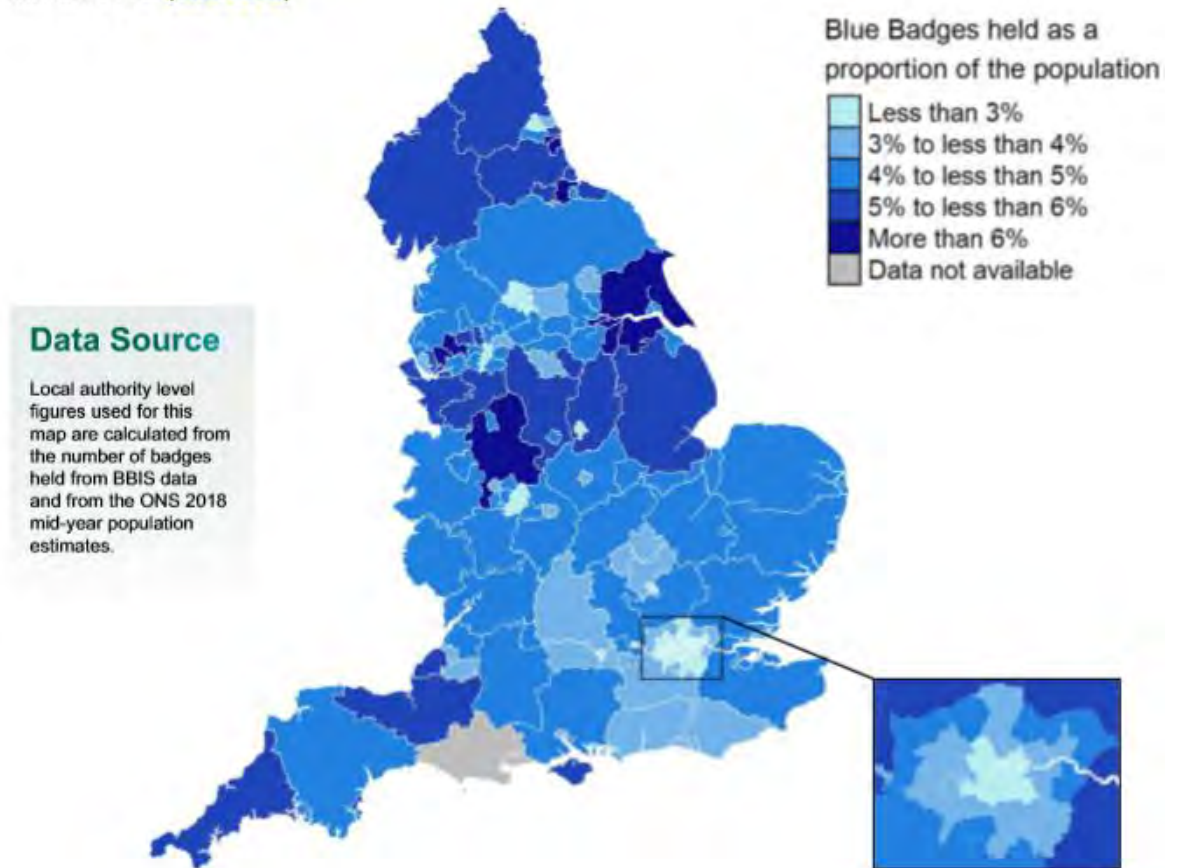
Figure 5.1 – Percentage of population that hold a Blue Badge: England annually since 1998.



- 5.10. The 2014 Accessible London SPG quotes the 2011 London Plan which was written when Blue Badge ownership was at its peak in England. Indeed, it draws its requirement for disabled persons parking provision from the WHDG 2006 which was written at a time when Blue Badge ownership was on the rise and had been for the previous decade. That is no longer the case.
- 5.11. The figures for England as a whole are not representative of the figures for London. Figure 5.2 below shows Blue Badge holders as a proportion of the population.

Figure 5.2 – Blue Badges held as a proportion of the population: England, Local Authorities, 2019.

March 2019 ([DIS0108](#))



- 5.12. This figure demonstrates that Blue Badge holders as a proportion of the population are at their lowest in London. This is directly related to the density in population and the accessibility by public transport and other modes. Figure 5.2 above illustrates that in 2019 the percentage of the population in London that held Blue Badges was less than 3% in Inner London and 3-4% in Outer London. Figure 5.1 would suggest that this proportion is likely to fall but ignoring this fact this statistic would provide evidence for the GLA move towards a requirement for 3% disabled persons parking in the 2019 ITP London Plan.
- 5.13. In fact, the number of Blue Badges held in London in March 2019 represented 2.5% of the resident population.
- 5.14. Given the above, it is unlikely that Blue Badge parking at B&Q Cricklewood will exceed 3% in the foreseeable future. However, irrespective of the evidence base, the Proposed Development can accommodate 33 accessible spaces from the outset (3%) and make provision for a further 77 spaces (7%).
- 5.15. A minimum of 22 on-site residential parking spaces (20%) will have active Electric Vehicle Charging Points from the outset and all the remaining 88 spaces (80%) will have passive EVCP provision in accordance with TfL and LBB requirements. The quantum of EVCP for the non-residential uses will be determined as part of any reserved matters applications.
- 5.16. The ITP London Plan differs slightly from the LBB draft Local Plan 2020 in terms of residential car parking standards whereas commercial and cycle parking standards follow those in the ITP London



Plan. The LBB residential parking standards are shown in table 5.2 below:

Table 5.2 – LBB 2020 draft local plan residential parking standards

PTAL	Maximum spaces per unit	
	LBB Proposed Parking Standards for 1/2 bed units	LBB Proposed Parking Standards for 3+ bed unit
0	up to 1.25	up to 1.5
1	up to 1.25	up to 1.5
2	up to 1	up to 1.25
3	up to 0.75	up to 1
4	up to 0.5	up to 0.75
5	Car free - 0.5†	Car free - 0.5†
6	Car free	Car free

- 5.17. As explained earlier in the TA, as a result of the new public realm and routes through the Site, the development will result in an improvement in PTAL rating to the rear of the Site. The Site currently has a 4/5 PTAL rating, with the proposed improvements this is expected to improve to 5 across the whole Site. With the PTAL improvement the parking strategy is appropriate for this location and in accordance with the LBB and ITP London Plan standards. According to the standards, the development should aim towards the lower limit of car-free rather than the upper limit of 0.5 spaces per unit. The proposed development seeks to provide 10% of the number of flats with parking spaces, equivalent to 0.1 space per unit.

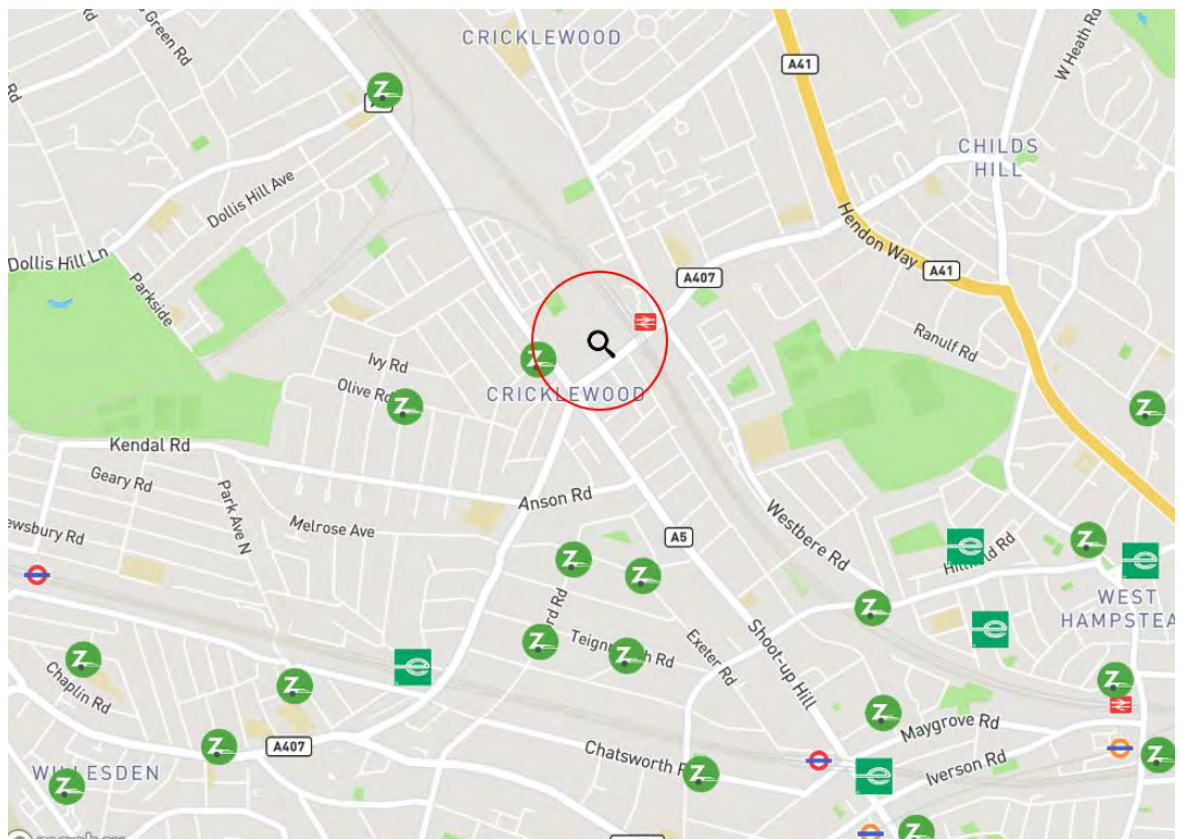
Parking need and harm

- 5.18. If a development in an inaccessible location provides less parking than it *needs* then the residents' ability to travel would be limited, potentially resulting in social exclusion. That is not the case here. The accessibility audit described in Section 3 demonstrates that residents in the Proposed Development would have a genuine choice of modes of travel. These residents would not be reliant on a private car to travel to work, education, shopping or other journeys. This is supported by the Site's existing PTAL rating of 4/5, rising to 5 across the Site. The development will also provide a comprehensive Travel Plan for residents and employees which will further encourage sustainable travel choices. The issue of parking 'need' is fully addressed by the Proposed Development.
- 5.19. In most cases, if a development provides insufficient parking then vehicles may be displaced onto the surrounding highway network resulting in *harm* to the free flow of traffic or the amenity of local residents. In this instance, however, all roads within a 200m walking distance of the Site are subject to existing waiting restrictions and parking controls. In discussion with LBB it was agreed that the Lambeth parking stress methodology should be used to determine appropriate walking distances to parking areas. That methodology, commonly used by most London Boroughs, suggests a 200m walking catchment for residential development. The Applicant expects to enter into a S106 Agreement preventing future residents of the Proposed Development from being eligible for on-street parking permits. The development would therefore not displace any parking onto the public highway. Depot approach is a private road, on which the developer/ owner will be able to implement private parking enforcement measures. This addresses the issue of harm.
- 5.20. Residents moving into the proposed development will be made aware of the level of parking provision for the scheme as well as the Travel Plan initiatives and Car Club availability. They will not be able to park on-street and will be aware of this restriction a when they make their decision to move to this location.

Car Clubs

- 5.21. There are two Car Club operators close to the site, Zipcar and Enterprise. There are many existing Car Club vehicles in this area (predominantly to the south of the Site); only one is shown to be within 200m walking distance of the Site but a further four would be within a 10 minute walk. The Proposed Development provides the opportunity for a new Car Club space to be provided on-site, or on the highway by means of a financial contribution. If a space were to be provided on-site it would be in a location accessible to the wider public so that the new Car Club vehicle would be available to the new residents as well as the wider local community. The existing vehicle locations are shown in Figure 5.3 below.

Figure 5.3 – Existing Car Club vehicle locations



- 5.22. CoMoUK is an independent body which promotes shared mobility including car clubs, 2+ sharing, bike sharing and taxi sharing. Part of CoMoUK's work is research, best practice and technical advice. They state that on average one Car Club vehicle removes 20 cars from the streets.
- 5.23. The provision of a new Car Club space would ensure that this would be a suitable place to live without a car, taking advantage of the highly accessible location, but with access to a vehicle for essential journeys where walking, cycling or public transport are not suitable.



Parking conclusions

- 5.24. Secure cycle parking will be provided in accordance with the London Plan and London Cycle Design Standards.
- 5.25. The proposed development can provide 110 car parking spaces on-site, all of which would be suitable for disabled drivers. 33 would be allocated to Blue Badge Holders from the outset and a further 77 could be made available for Blue Badge holders if required.
- 5.26. Electric Vehicle Charging Points will be introduced in accordance with TfL and LBB requirements.
- 5.27. Car and Cycle parking provision will be controlled and regulated by means of a Parking Design and Management Plan, to be secured by condition and agreed prior to first occupation.



6. TRANSPORT IMPLEMENTATION STRATEGY

- 6.1. As stated in the introduction, this TA has been developed to seek to influence modes of travel to the proposed redevelopment rather than merely predicting travel patterns and providing mitigation.
- 6.2. The development will be supported by a three-part Transport Implementation Strategy (TIS) comprising:
- Framework Travel Plan (FTP);
 - Delivery and Servicing Plan (DSP);
 - Construction Logistics Plan (CLP).
- 6.3. Due to the outline nature of this planning application, a Framework Travel Plan has been prepared to cover the residential, commercial and community uses and is included as **Appendix H**. The FTP is summarised in Section 7 of this report. Outline DSP and CLPs are included as Sections 8 and 9. Final versions of all TIS documents will be secured by planning condition to be submitted and approved prior to commencement or occupation as appropriate. These are described in outline below.





7. FRAMEWORK TRAVEL PLAN

- 7.1. The development will be supported by a Framework Travel Plan (FTP) for residents, employees and visitors. The full FTP, included as **Appendix H**, will be secured by condition and agreed as part of any reserved matters or detailed planning permission.
- 7.2. The FTP provides a framework against which individual travel plans will be prepared for the residential, commercial and community elements of the scheme. The form of the commercial TP(s) will depend on the number of occupiers. The employment use may be occupied by a single employer or a number of smaller businesses, therefore the need for commercial TPs must be flexible enough to accommodate different future circumstances. The provision of a FTP at the outline planning stage therefore secures the necessary obligations and procedures whilst allowing the individual TPs to be tailored to the needs of the development as it progresses.
- 7.3. The FTP includes an audit of sustainable travel options available to this Site as described earlier in this TA. It also includes details of mode-share targets, informed by the predicted mode-share set out in the TA, following the implementation of the proposed development.
- 7.4. The FTP sets out clear objectives and targets and then lists a range of proposed measures. The measures are described as follows:
- **Hard measures** – these are infrastructure provision or improvements;
 - **Soft measures** – these are management measure, incentives, marketing initiatives etc.;
 - **Secured measures** – these are either existing measures or those to be delivered by the development;
 - **Potential measures** – these are an ‘arsenal’ of measures available to the TP Co-ordinator if required, to be chosen according to survey feedback so that resources can be targeted towards those measures found to be most effective.
- 7.5. The FTP includes an action plan with a clear schedule of surveys, monitoring and reviews. It also explains how the FTP can be secured and enforced.
- 7.6. The TP will play a valuable role in supporting the development’s sustainability concepts and extend them to the way in which people travel to, from and within Cricklewood.
- 7.7. The proposed development will provide appropriate infrastructure to encourage sustainable travel and will also provide information and incentives where practicable.
- 7.8. Unlike employment, retail or educational sites it is not possible to dictate to residents how they should travel. For this reason, residential travel plans are based on the provision of infrastructure, information and incentives rather than the imposition of management procedures. In the case of this proposed residential development the introduction of appropriate infrastructure and the communication of relevant information are included within the Framework Travel Plan.
- 7.9. TfL’s ‘Guidance for Residential Travel Planning in London’ sets thresholds above which travel plans are required for new developments. It suggests that a full Residential Travel Plan should be provided for developments of 80 dwellings or more.
- 7.10. The effects of travel choices on our environment, our health and our quality of life are well documented. Sources describe how increases in road traffic have produced unsustainable levels of congestion and pollution. The effects can be felt at a local level through poor air quality, noise and busier roads and at a global level through suggested linkages to climate change. Journeys by road are becoming slower and more unreliable causing problems for business and stress to drivers.
- 7.11. Travel planning must be realistic and should not expect to remove car usage altogether. Instead, an effective travel initiative will maximise the use of sustainable travel to achieve more sensible and appropriate use of the private car. If every car commuter used an alternative to the car on just one day a week, car usage levels for commuting would be reduced by as much as 20% immediately, with commuter parking requirements also reduced by up to 20%. In an accessible location such as Cricklewood, however, low-car or car-free housing is a realistic prospect.



- 7.12. A key element of the proposed development is the introduction of appropriate infrastructure to encourage sustainable travel.
- 7.13. The Site is already highly accessible on foot, by bike and by bus and rail. The transport infrastructure surrounding the Site lends itself to encouraging these modes of travel. The development has therefore been designed to incorporate direct segregated pedestrian access into the site, and to provide secure cycle parking spaces for each dwelling.
- 7.14. In addition, significant improvements will be made to the pedestrian realm on Cricklewood Lane and new public realm will be created within the Proposed Development itself. This will enhance the pedestrian environment around the site.
- 7.15. Zipcar and Enterprise Car Club already operate a number of car club vehicles in the area. The Proposed Development provides an opportunity to provide a new Car Club space for the benefit of the new residents and the wider community.
- 7.16. As part of the Welcome Pack, Car Club membership would be offered to all new residents as follows:
- Free 2 year Car Club memberships providing access to vehicles in Cricklewood, the rest of London and the UK ;
 - Bespoke marketing material and membership certificates;
 - Briefing of sales staff at the development on the car club and attendance at promotional events;
 - 24/7 customer service team;
 - 24/7 booking system including mobile booking site (IOS and Android) and iPhone app;
 - Vehicle insurance;
 - Vehicle maintenance and valeting;
 - Creation of reports and statistics for the developer and Council;
 - Personal Account Manager;
- 7.17. This would be fully funded by the developer at no expense to the new occupiers. The provision of the Car Club membership can be secured by appropriate planning condition.
- 7.18. In accessible areas Car Clubs allow residents who only require occasional use of a vehicle to make the choice not to own a vehicle themselves. Equally, many two-car households only use 1.1 cars on a regular basis so the provision of a Car Club allows them to own a single vehicle and use the Car Club as often as they like on a pay-as-you-go basis. The charitable organisation CoMoUK states that one Car Club space can remove 20 vehicles from the road.

Residents' Welcome Pack

- 7.19. It will be the responsibility of the developer to ensure that residents are provided with an information pack containing details of the Car Club, public transport timetables and maps, as well cycling and pedestrian infrastructure when they move into the flats.
- 7.20. The site's communal areas will be maintained by a management company. The management company will be obliged to provide an update to the 'Residents Welcome Pack' once every twelve months in order that any new residents are made aware of their local transport options.
- 7.21. The information pack will include information and incentives for all purchasers/tenants. The information will enable the new residents to make informed decisions about their modes of travel. The incentives will be provided by the developer in the first instance and will be dependent on negotiating suitable packages with local shops and services.
- 7.22. The likely content of the Residents' Welcome Pack will be:



- Car Club membership and information;
- Cycle route information;
- Sustrans leaflets on the beneficial effects of walking and cycling ;
- Free reflective clothing i.e. cycle bib, arm bands etc.;
- Free bicycle locks/helmets;
- Developer to negotiate local cycle shop discount ;
- Details of local cycle groups (e.g. Barnet Wheelers);
- Details of BikeBUDi travel system ;
- Cycle hire;
- Bus route/timetable information;
- Rail timetable and route information;
- Details of car-sharing website (e.g. www.Liftshare.com);
- Details of CarBUDi travel system;
- Notice/message board in foyer of flats to allow people to car share/walk/cycle together (perhaps at night for safety);
- Developer to negotiate preferential rates at local car-hire company;
- Taxi company information – possible discount vouchers for a taxi company;
- Details of TaxiBUDi travel system;
- Supermarket home delivery details.

7.23. This list is not exhaustive or a prescriptive list of what will be in the travel pack but provides details of the likely content of the pack. Details of the final pack will be agreed in partnership with the Council.

Framework

7.24. Due to the flexible nature of the commercial and community uses, a Framework Travel Plan has been prepared in order that it can set out the structure, obligations, targets and initiatives for future individual Travel Plans to be prepared by the occupiers of the non-residential units. The FTP covers the residential and non-residential uses.

8. DELIVERY AND SERVICING PLAN

- 8.1. This Delivery and Servicing Plan (DSP) highlights the implications of the proposed redevelopment with regard to existing and also proposed servicing constraints. The DSP refers to the *'London Freight Plan (LFP)* and takes into consideration the adopted methods of good design practice. The DSP has been prepared in accordance with the Freight Transport Association document *'Designing for Deliveries'* and TfL's guidance document *"Delivery and Servicing Plans: Making freight work for you"*.
- 8.2. The LFP recognises that a DSP will aim to provide consideration of consolidation and collaborative delivery arrangements to help reduce the impact of commercial goods and servicing vehicle activity in and out of premises/developments.
- 8.3. A final version of this DSP will be prepared in partnership with LBB prior to the proposed development being occupied; however, the structure, obligations and principles are included here for agreement prior to determination of the outline planning application.
- 8.4. The servicing route is shown highlighted in pink on the Illustrative Masterplan in Figure 6.1 below. This route would allow refuse collection vehicles (RCVs) to collect bins with a maximum carry distance of 10m from each bin store or presentation area. The vehicle swept path is included in **Appendix G**. The same service route would be used for daily residential deliveries.

Figure 8.1 – Service route.



- 8.5. Vehicles will stop in appropriate on-street positions along the service route.



Refuse collection.

- 8.6. LBB currently operates residential kerbside collection in Cricklewood. The Proposed Development includes a permeable servicing layout to allow refuse vehicles to stop within 10m of every refuse store or presentation area. Swept path analyses are included in **Appendix G** to demonstrate the refuse servicing routes. Refuse stores are provided at ground floor level with doors directly onto the building frontages. Residents will be able to bring refuse down to ground level where they will have easy access into the refuse stores. The refuse stores will have doors opening onto hard paved areas linking directly to the service route. Refuse and recycling bins can be collected directly from the stores and wheeled to the vehicles.
- 8.7. Based on the Illustrative Masterplan, most bin stores would be located within 10m of the service route, but those that are not would have a corresponding bin presentation area adjacent to the service route, as demonstrated in figure 4.3 (presentation areas P1 to P4). This would require a managed waste strategy to enable bins to be taken from the necessary bin stores to the presentation areas on collection days. Commercial refuse collection will be by private contract, but the same access arrangements will apply as for the residential refuse collection.

Consolidation

- 8.8. Residents will be advised of the importance of consolidating deliveries where possible. New residents will be provided with information explaining how they can consolidate deliveries such as supermarket deliveries with their neighbours and how this can deliver cost savings. This accords with TfL advice.

Hours of delivery

- 8.9. There are no restrictions on the hours of delivery to other residential or business premises served by Depot Approach. There are loading restrictions on all roads surrounding the site so all delivery and servicing must take place in designated locations. There is therefore no need to restrict delivery hours.

Route management

- 8.10. There are no local height or weight restrictions that would result in HGV diversion routes to or from the site.
- 8.11. As a principle, all drivers will be advised to use the highest category of road available to them and to avoid residential roads where practicable.

First time delivery

- 8.12. Provisions will be made for first time deliveries. The inclusion of a post room within each Block will ensure that there is a safe and secure location to drop parcels off if residents are unavailable to take receipt of goods at time of delivery. This will reduce the need for return visits.

Promotion of LGV rather than HGV

- 8.13. Residents will be advised of the benefits of promoting delivery by Light Goods Vehicles. New residents will be provided with a leaflet explaining what information should be provided to delivery companies to maximise the use of small vehicles for deliveries or to advise of appropriate servicing arrangements for larger vehicles. This accords with TfL advice.

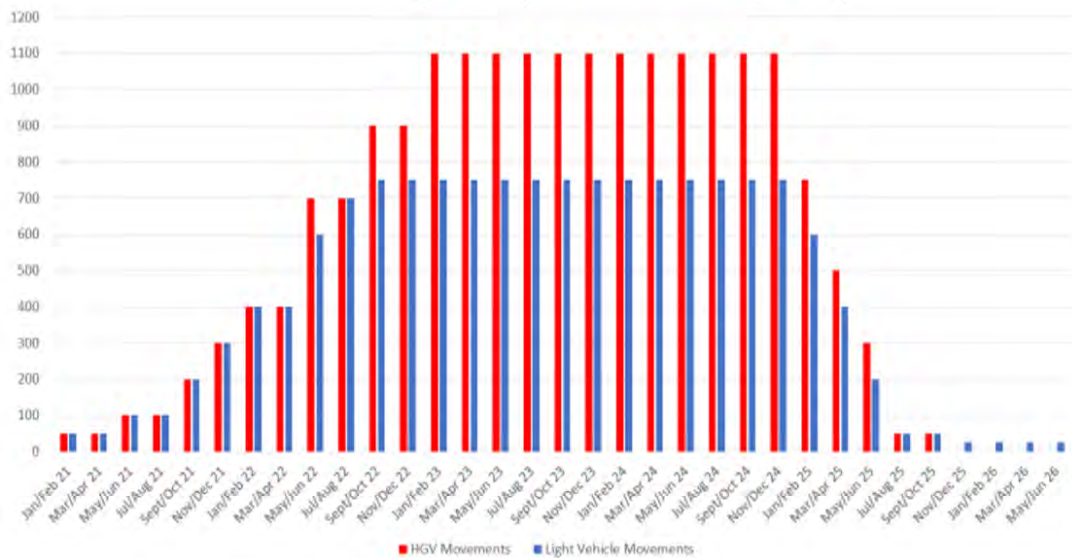


9. CONSTRUCTION LOGISTICS PLAN

- 9.1. Prior to commencement on site, a final Construction Logistics Plan (CLP) will be drawn up in partnership with LBB and submitted for approval. A separate Construction Management Plan will be prepared to address the management of the Site during construction, but the CLP is included here as part of the TIS as it is the management document to control and regulate construction vehicle movements. The CLP will comply with the TfL guidance document '*Construction Logistics Plans: Making freight work for you*'. TfL considers that Construction Logistics Plans are a key project in the London Freight Plan, alongside DSPs and FORS membership.
- 9.2. The Cricklewood CLP will:
- Help the construction process comply with NPPF and the Traffic Management Act;
 - Demonstrate that construction materials can be delivered, and waste removed in a safe, efficient and environmentally friendly way;
 - Examine the feasibility and viability of using the Blue-Ribbon Network for the movement of demolition and construction materials and promote the use of water transport where found to be feasible and viable;
 - Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
 - Help cut congestion on London's roads and ease pressure on the environment;
 - Improve reliability of deliveries to the site;
 - Reduce fuel costs.
- 9.3. The CLP must include:
- On-site management and design;
 - Off-site management;
 - Vehicle numbers;
 - Vehicle types;
 - Hours of delivery;
 - Route management;
 - Procurement strategy
 - Operational efficiency;
 - Waste management;
 - Road trip reduction; and
 - Targets and monitoring.
- 9.4. During the Demolition and Construction phase the estimated average monthly vehicle trips will be as shown in Figure 9.1 below.



Figure 9.1 – Estimated average monthly vehicle trips (demolition and construction)



- 9.5. This indicates that the peak construction period will be during 2024. At peak construction, the average daily vehicle movements will comprise 40 HGV trips (i.e. 20 HGVs arriving and then departing) and 30 LGV trips (15 cars and vans arriving and then departing). All vehicles will arrive via Cricklewood Broadway and Depot Approach and depart via Cricklewood Lane and Cricklewood Broadway. The result would therefore comprise 35 vehicles leaving via Cricklewood Lane and turning right at the Cricklewood Broadway signal junction; and 70 construction vehicle trips (arrivals and departures) via Cricklewood Broadway. These figures represent 0.2% increase in vehicle trips on either road.
- 9.6. The 35 arrivals via Depot Approach would represent a 1.9% increase in traffic on that road.
- 9.7. The final CLP will be a stand-alone document but sit alongside the FTP and DSP in a three-part *Transport Implementation Strategy*.

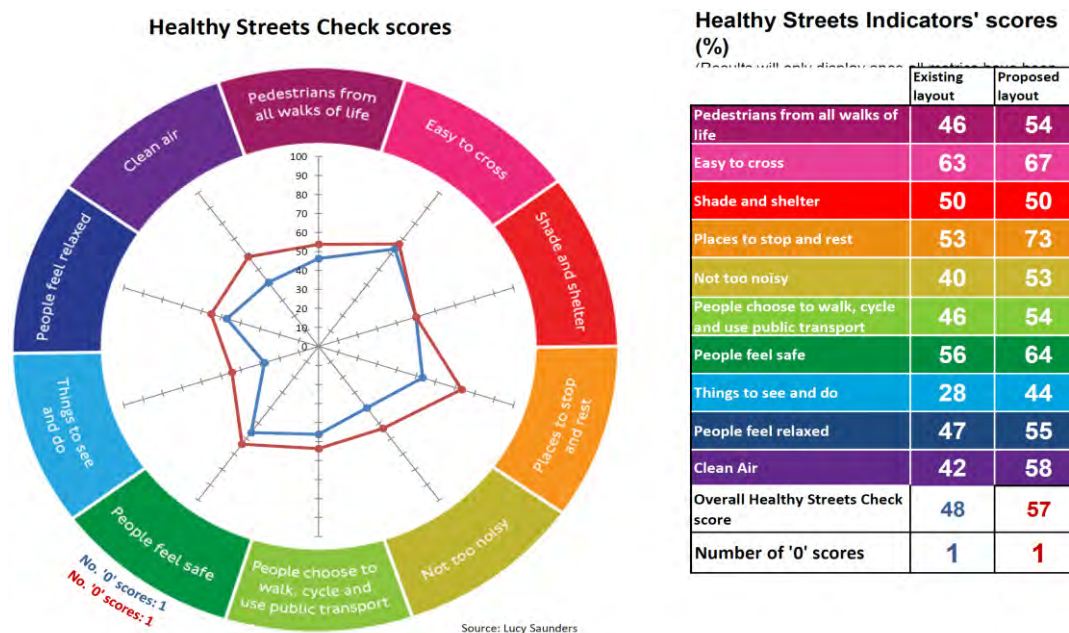


10. HEALTHY STREETS ASSESSMENT AND ACTIVE TRAVEL ZONE ASSESSMENT

Healthy Streets

- 10.1. A Healthy Streets Assessment has been carried out for the Proposed Development.
- 10.2. As part of the Proposed Development, significant improvements are proposed to the local network within and immediately surrounding the Site. The improvements include:
- New pedestrian and cycle routes through the Proposed Development, providing shorter and more direct routes between Cricklewood Lane to Depot Approach;
 - New public square and extensive public realm to enhance the environment for pedestrians and cyclists. Enhancing the environment and public realm e.g. trees and landscaping along the new routes to support making the area greener, healthier and more attractive place
 - Improvements to Cricklewood Green (to be secured by agreement);
 - Use of landscaping to reduce vehicle speed and dominance and increase pedestrian priority; and
 - Removal of the existing vehicle access from Cricklewood Lane to reduce severance and increase space for pedestrians and cyclists.
- 10.3. These improvements are considered to create a sustainable development that reflects TfL's Healthy Streets agenda. The healthy streets audit has been undertaken for Cricklewood Lane in the vicinity of the Site and also for the routes through the Proposed Development.
- 10.4. The 'Healthy Streets Check for Designers' has been used to undertake the audit. It is noted that the Healthy Streets Check score does not show whether a street is healthy or not, but indicates the strengths and weaknesses of a street, and it is not possible to achieve an overall score of 100%, as to score well against some metrics, compromises are needed in other metrics. The Healthy Streets Audit is available in **Appendix I** for reference.
- 10.5. Figure 10.1 shows that the proposed arrangement of Cricklewood Lane is an improvement compared to the existing environment with the enhanced public realm, landscaping and activated frontage improving the 'quality of place to stay' clear air and levels.

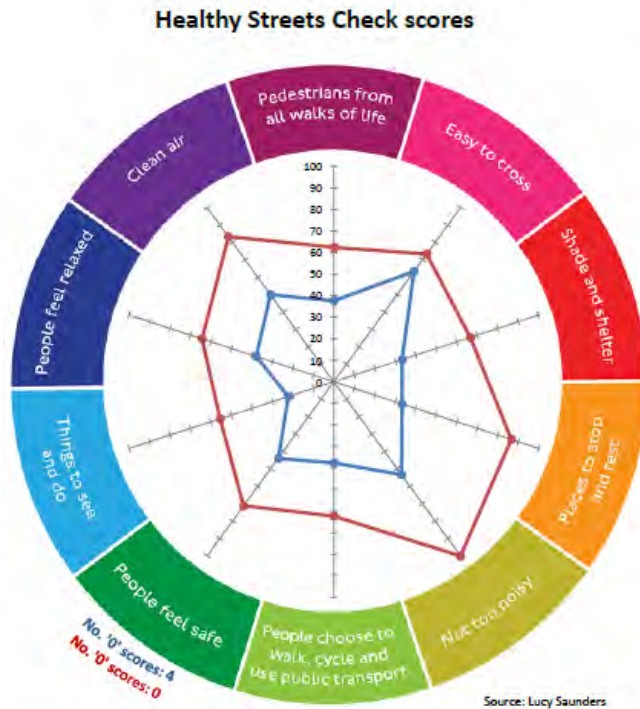
Figure 10.1 – Cricklewood Lane – Healthy Streets





- 10.6. Depot Approach as shown in Figure 10.2 would also be improved by virtue of improved supervision, reduced vehicle speeds and enhanced pedestrian environment.

Figure 10.2 – Depot Approach – Healthy Streets

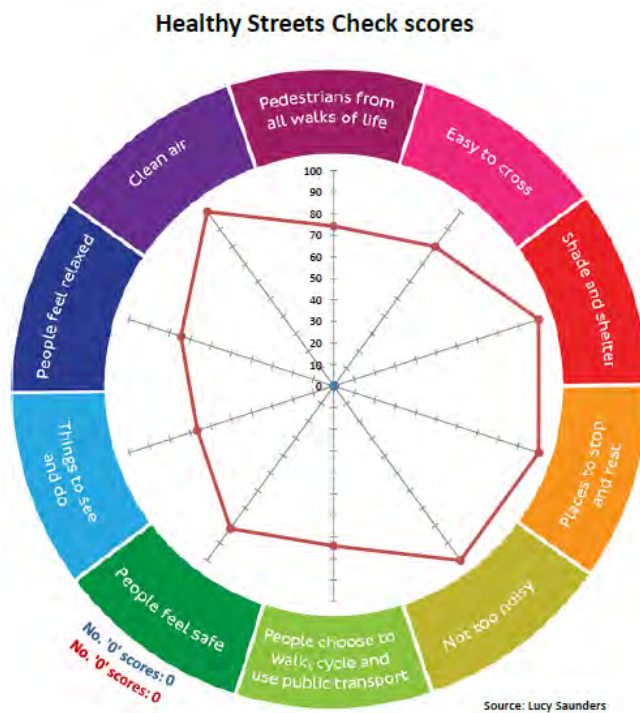


Healthy Streets Indicators' scores (%)

	Existing layout	Proposed layout
Pedestrians from all walks of life	38	62
Easy to cross	63	73
Shade and shelter	33	67
Places to stop and rest	33	87
Not too noisy	53	100
People choose to walk, cycle and use public transport	38	62
People feel safe	44	71
Things to see and do	22	56
People feel relaxed	38	64
Clean Air	50	83
Overall Healthy Streets Check score	40	67
Number of '0' scores	4	0

- 10.7. The new route through the Proposed Development as show in Figure 10.3 demonstrates that the proposed layout reflects the Healthy Streets aspirations, with high scores in all categories.

Figure 10.3 – Internal Routes – Healthy Streets



Healthy Streets Indicators' scores (%)

	Existing layout	Proposed layout
Pedestrians from all walks of life	#####	74
Easy to cross	#####	80
Shade and shelter	#####	100
Places to stop and rest	#####	100
Not too noisy	#####	100
People choose to walk, cycle and use public transport	#####	74
People feel safe	#####	82
Things to see and do	#####	67
People feel relaxed	#####	75
Clean Air	#####	100
Overall Healthy Streets Check score	0	78
Number of '0' scores	0	0



Active Travel Zone (ATZ) Assessment

- 10.8. A full ATZ assessment has been carried out in accordance with TfL guidance. The full report is included as **Appendix J**.
- 10.9. The ATZ assessment examines a study area equivalent to a 20-minute cycle ride from the Site. Within the study area, the assessment reviews the location of significant local facilities and the routes to them from the Site.
- 10.10. In addition to the standard ATZ assessment, a detailed pedestrian gravity model has been undertaken in order to weight the predicted pedestrian movements to each of the study routes. For the purpose of this assessment, pedestrian trips include those walking to bust stops or stations as part of a longer journey.



11. TRIP GENERATION

- 11.1. The DfT and TfL guidance on Transport Assessment advise that baseline traffic data should be derived as follows:

“Baseline transport data

- *The quantification of person trips generated from the existing site and their modal distribution, or, where the site is vacant or partially vacant, the person trips which might realistically be generated by any extant planning permission or permitted uses;”*

- 11.2. The transport effects of the proposed development are therefore determined by comparing the journeys that might realistically be generated by the existing site, and those predicted for the proposed use.

Existing use

- 11.3. As stated in Section 2, the Site is currently occupied by a retail warehouse (use class A1) owned and operated by B&Q. Two additional smaller retail warehouse units (Poundstretcher and Tile Depot) adjoin B&Q. The combined gross floor area (GFA) of the existing retail units is 7,990m². The existing Site use incorporates a car park with 470 car parking spaces.
- 11.4. The traffic survey in June 2019 recorded two-way flows and peak hour turning movements at the two Site accesses. The Site currently generates **4591 vehicle trips** per weekday via the two Site accesses. The existing retail use has a Site peak on Saturdays. For a robust assessment, the weekday peaks have been taken as a baseline as this will result in the greatest net increase in traffic when compared to the proposed uses.
- 11.5. The survey did not capture multi-modal trips so the TRICS® database has been used to calculate multi-modal trips for the existing uses. The TRICS® selection criteria was based on the sub-category RETAIL PARKS – EXCLUDING FOOD. There are insufficient surveys sites of a similar nature in London so the selection was widened out to England. The standard methodology was applied to derive trip rates per 100m². Full TRICS details are included as **Appendix K**.
- 11.6. Table 11.1 below shows the multi-modal trip rates for retail parks.

Table 11.1 – TRICS trip rates per 100m² – Retail Parks weekday

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0.185	0.357	1.209	0.069	0	0	1.82
PM	0.265	0.46	0.346	0.127	0	0	1.198
Daily	8.691	14.596	6.839	0.336	0.047	0	30.509

- 11.7. When the above trip rates are applied to the existing 7990m² of retail floorspace, the resultant multi-modal trips are as shown below.

Table 11.2 – Retail Parks weekday, multi-modal trips (7990m²)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	15	29	97	6	0	0	145
PM	21	37	28	10	0	0	96
Daily	694	1166	546	27	4	0	2438

- 11.8. The daily vehicle trips in Table 11.2 are significantly lower than those observed on-site. For this reason, a further assessment was undertaken to derive trips per parking space. The resultant trip rates and trips are as shown in Tables 11.3 and 11.4 below.

**Table 11.3 – TRICS trip rates per parking space – Retail Parks weekday**

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0.043	0.084	0.284	0.016	0.000	0.000	0.43
PM	0.062	0.108	0.081	0.030	0.000	0.000	0.28
Daily	2.041	3.427	1.606	0.079	0.011	0.000	7.16

- 11.9. When the above trip rates are applied to the existing 470 car parking spaces, the resultant multi-modal trips are as shown below.

Table 11.4 – Retail Parks weekday, multi-modal trips (470 spaces)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	20	39	133	8	0	0	201
PM	29	51	38	14	0	0	132
Daily	959	1611	755	37	5	0	3367

- 11.10. This adjusted methodology provides a figure for two-way daily vehicle trips which is far closer to the observed survey data. These figures are therefore considered to be more robust. However, as the observed vehicle trips are available, the above table can be adjusted further to represent observed conditions.

Table 11.5 – Retail Parks weekday, multi-modal trips (470 spaces) (adjusted)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	232	39	133	8	0	0	412
PM	278	51	38	14	0	0	381
Daily	4591	1611	755	37	5	0	6999

- 11.11. Table 11.5 therefore shows the observed vehicle trips associated with the current site and a multi-modal assessment for other modes based on TRICS data.

Proposed residential use

- 11.12. The TRICS database was interrogated for the proposed uses. In each case site selection was restricted to London surveys for sites with similar PTAL ratings. The residential selection was based on FLATS PRIVATELY OWNED. The TRICS database does include rented flats which generally show lower overall trip rates, but a single selection of flats in private ownership was taken for a robust assessment.

- 11.13. The trip rates and trips for the proposed new homes are shown below.

Table 11.6 – TRICS trip rates per dwelling – Private Flats weekday

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0.107	0.142	0.175	0.004	0.105	0.112	0.645
PM	0.077	0.107	0.159	0.002	0.087	0.09	0.522
Daily	0.816	1.021	1.86	0.052	0.891	0.819	5.459

- 11.14. When the above trip rates are applied to the proposed 1100 new flats, the resultant multimodal trips are as shown below.

**Table 11.7 – Flats weekday, multi-modal trips (1100 flats)**

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	118	156	193	4	116	123	710
PM	85	118	175	2	96	99	574
Daily	898	1123	2046	57	980	901	6005

- 11.15. The vehicle trips may be higher than would be generated by 110 car parking spaces, but these figures therefore represent a robust assessment.

Proposed flexible commercial and community uses

- 11.16. The outline application for the Proposed Development seeks a flexible permission for up to 1200m² of A3/B1/D1/D2 use as described earlier.
- 11.17. For the purpose of a robust assessment a reasonable worst case has been calculated for the proposed non-residential uses. In order to derive a reasonable worst case, the total daily travel demand was calculated for each of the non-residential use classes.
- 11.18. The non-residential uses will be located in Blocks A, B and D. The likely distribution will include 'D' class uses in Blocks B and D, and space suitable for all non-residential uses in Blocks A and B. Due to the location and distribution of the non-residential uses (as indicated on the Illustrative Masterplan) it would be impractical and unviable for 100% of the non-residential floorspace to be in A3 or D2 use. It is highly unlikely that the floorspace would be 100% B1 or D1 but these options have been considered for a robust assessment. Based on the Illustrative Masterplan, eight options were considered as shown below.

Table 11.8 – Non-residential units option analysis

Option	Gross floor area	Use class
A	1200	B1
B	1200	D1
C	434	A3
	766	B1
D	434	A3
	766	D1
E	434	D2
	766	B1
F	434	D2
	766	D1
G	434	A3
	434	D2
	332	B1
H	434	A3
	434	D2
	332	D1

- 11.19. Of these eight possible options for the non-residential uses, Option G would generate the highest total daily travel demand by all modes. This is therefore considered to be the reasonable worst case. The transport effects of the Proposed Development have therefore been assessed by combining travel demand associated with the proposed residential use and the reasonable worst case (Option G) non-residential unit mix.



- 11.20. The peak hour and daily trip rates and trips for the Option G uses are set out below.

Table 11.9 – TRICS trip rates per 100m² – A3 restaurant weekday

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0	0	1.546	1.031	1.031	0.515	4.123
PM	2.616	2.617	4.36	0	2.907	0.582	13.082
Daily	22.895	19.705	53.763	1.613	20.307	7.002	125.285

- 11.21. When the above trip rates are applied to the 434m² floor area, the resultant multi-modal trips are as shown below.

Table 11.10 – A3 restaurant weekday, multi-modal trips (434m²)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0	0	7	4	4	2	18
PM	11	11	19	0	13	3	57
Daily	99	86	233	7	88	30	544

- 11.22. The A3 uses will only have operational parking so the peak hour vehicle trips are reasonable but the daily vehicle trips are higher than might be expected.

Table 11.11 – TRICS trip rates per 100m² – B1 office weekday

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0.244	0.025	0.612	0.122	0.612	1.615	3.23
PM	0.319	0.243	0.807	0.147	0.66	1.199	3.375
Daily	2.608	0.588	13.703	0.535	3.716	7.337	28.487

- 11.23. When the above trip rates are applied to the 332m² floor area, the resultant multi-modal trips are as shown below.

Table 11.12 – B1 office weekday, multi-modal trips (332m²)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	1	0	2	0	2	5	11
PM	1	1	3	0	2	4	11
Daily	9	2	45	2	12	24	95

- 11.24. The third non-residential use is D2 leisure. For the purpose of this assessment, and given the form and scale of the development, a Gym use has been selected.

Table 11.13 – TRICS trip rates per 100m² – D2 gym weekday

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	0.951	0.091	2.764	0.431	0.861	0.43	5.528
PM	1.109	0.091	5.458	0.318	2.061	1.427	10.464
Daily	19.95	2.996	66.432	4.759	24.758	14.112	133.007

- 11.25. When the above trip rates are applied to the 434m² floor area, the resultant multi-modal trips are as shown below.



Table 11.14 – D2 gym weekday, multi-modal trips (434m²)

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	4	0	12	2	4	2	24
PM	5	0	24	1	9	6	45
Daily	87	13	288	21	107	61	577

11.26. Again, as the D2 use will only have operational parking the peak hour vehicle trips are reasonable, but the daily trips are higher than might be expected.

11.27. The total non-residential multi-modal travel demand, based on the 'reasonable worst case' mix, is shown below.¹

Table 11.15 – Commercial and community weekday multi-modal trips

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	5	0	21	7	10	9	53
PM	17	13	45	2	24	13	113
Daily	97	100	567	29	270	151	1216

Combined development travel demand

11.28. The total forecast travel demand for the combined residential, commercial and community uses is therefore as shown below.

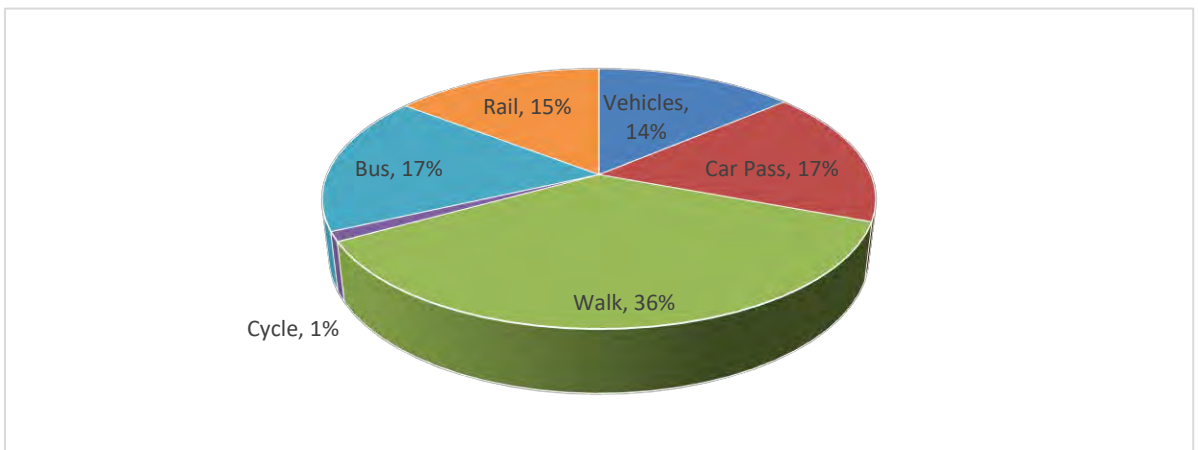
Table 11.16 – Total weekday development multi-modal trips

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	123	157	213	11	126	133	762
PM	102	130	220	4	119	112	688
Daily	995	1224	2613	87	1250	1052	7220

11.29. This clearly shows that the proposed development will have a highly sustainable travel profile making use of the very good accessibility of the site.

11.30. The mode share set out in Table 8.14 is illustrated in Figure 11.1 below:

Figure 11.1 – Predicted mode share



¹ Minor adjustment to daily vehicle trips to take account of operational parking as described



- 11.31. LBB previously queried the figure of 15% travel by rail given the Site's proximity to Cricklewood station. They suggested an assessment of Census data to establish journey to work mode share for Cricklewood. It is important to note that the above TRICS data includes all journeys for all purposes, not just journeys to work. Many local journeys such as shopping, primary school, health, leisure etc will be undertaken on foot or by bike and are clearly not included in the Census journey to work data. For this reason, the journey to work public transport percentages are clearly not representative of the mode share for all journeys. The TRICS data is more reliable for this purpose.
- 11.32. It should be noted that TfL's 'Travel in London – Report 12' includes a breakdown of trips per person per day, by purpose. In 2019, this breakdown was as follows:
- Usual workplace 18%
 - Other workplace 7%
 - Education 9%
 - Shopping 24%
 - Leisure 31%
 - Other 15%
- 11.33. This illustrates that journeys to work represent just 25% of all daily journeys. It is clearly inappropriate to apply the Census journey to work mode share figures to all daily journeys as that would misrepresent the likely mode share of 75% of all trips.
- 11.34. Notwithstanding the above, at LBB's request the journey to work data for this ward has been reviewed (See **Appendix L**). That data shows 41% travel by car and just 11% by rail. When those figures are adjusted to reflect the low level of car parking to be provided on-site, the resultant mode share gives 15% travel by rail, consistent with the above TRICS data assessment.



12. TRANSPORT EFFECTS

Multi-modal trips

- 12.1. As stated in Section 8, the transport effects of the proposed development are derived by comparing the current travel demand from the existing uses and the forecast travel demand for the proposed uses. The net change in multi-modal trips is derived by comparing Table 11.5 and Table 11.16. The result is shown below.

Table 12.1 – Net change in multi-modal trips

	Vehicles	Car Pass	Walk	Cycle	Bus	Rail	TOTAL
AM	-109	117	80	4	126	133	350
PM	-176	79	182	-10	119	112	307
Daily	-3596	-387	1858	50	1245	1052	222

- 12.2. As expected, the proposed development would result in a substantial reduction in peak hour and daily vehicle trips. Overall, the redevelopment of the Site would result in a small increase in multi-modal trips in the AM peak, PM peak and the day as a whole. Although this assessment shows a slight increase in overall trips, it should be noted that robust values have been used for the existing baseline and proposed development.
- 12.3. The development would result in a net increase in walking, cycling and public transport use. This is examined further below.

Vehicle trips

- 12.4. The development will result in a net reduction in vehicle trips with a resultant benefit in local highway conditions. However, the development will also remove an access from Cricklewood Lane. This will have a positive beneficial effect on the pedestrian and cycle environment, and reduce the existing rat-running through the Site, but will also result in a localised re-distribution of traffic associated with the Site.
- 12.5. For clarity, a series of link-flow diagrams are included as **Appendix M** to demonstrate existing and proposed turning movements at each junction in the study area. Traffic distribution is based on observed baseline proportions.

Pedestrian trips

- 12.6. Table 11.16 shows predicted peak hour pedestrian trips and table 12.1 shows the net increase compared to the current use of the Site. The pedestrian desire lines shown in **Appendix F**, indicate three primary routes, into and out of the site, namely Depot Approach, Cricklewood Lane towards the Station and Cricklewood Lane towards Cricklewood Broadway. This is expanded upon in the ATZ assessment at **Appendix J**. The ATZ assessment also includes a pedestrian gravity model which assigns pedestrian trips to individual walking routes based on the percentage of journeys by purpose, and the destinations that can be reached via each walking route. This includes those people walking to the station or bus stops.
- 12.7. The local network is considered to be able to accommodate this scale of net increase in pedestrian trips without capacity, comfort or amenity issues.
- 12.8. The Active Travel Zone assessment identified two potential areas for improvement. The route beneath the rail line already benefits from lighting and public art but there is potential for both to be enhanced. The uncontrolled pedestrian crossings on Cricklewood Lane have central refuges which are unsuitable for wheelchair users or pedestrians with pushchairs. There is insufficient road space to increase the width of the refuges so there is potential to replace one of the uncontrolled crossings with a controlled crossing, thereby removing the need for a refuge. In this location a Puffin crossing would be appropriate form of controlled crossing.



Cycle trips

- 12.9. Table 12.1 shows that the development is predicted to generate an additional 9 cycle trips in the AM peak and a minor reduction in the PM peak. It would be hoped that the Residents' Travel Plan would result in significantly more than 1% travel by bike. However, even if this were to increase significantly to the FTP target of 5%, the result would still only be less than one extra cyclist per minute for the whole scheme. That number would be distributed across the local highway network. This increase would be imperceptible to other highway users and would have no effect on capacity, comfort or cyclist amenity.

Bus trips

- 12.10. Table 12.1 shows 120 additional bus trips in the AM peak and 111 in the PM peak. The assessment of existing bus infrastructure shows that there are 8 bus services in each direction with buses running at a frequency between 8 and 12 minutes. The existing bus services provide 41 buses in each direction per hour (82 in total). The additional demand generated by the proposed development would equate to an average of one or two additional bus passengers per bus. The ATZ assessment now demonstrates a weighted distribution to each bus stop according to the frequency of buses serving that stop. This is a more accurate assessment. It should be noted, however, that as the average net increase is just 1 or 2 passengers on each bus, even if this figure were higher in the peak travel periods, or certain routes were more popular than others, the maximum net increase would not be expected to exceed 3 or 4 passengers on any individual bus. This increase would therefore be imperceptible to other bus passengers and would have no effect on capacity, comfort or passenger amenity. This information will inform any further discussions regarding CIL payments or S106 contributions

Rail trips

- 12.11. Table 12.1 shows 133 additional rail passengers in the AM peak and 112 in the PM peak. Trains currently stopping at Cricklewood station currently comprise 8 trains per hour (64 carriages), with half travelling south bound towards central London and the other half traveling north bound.
- 12.12. During the most affected peak period, if we were to assume two thirds travel southbound towards Central London, the predicted trip generation from the Site will result in an additional 2-3 passenger per carriage on the most affected trains. This increase would therefore be imperceptible to other rail passengers and would have no effect on capacity, comfort or passenger amenity. Again, this information will inform any further discussions regarding CIL payments or S106 contributions



13. TRANSPORT IMPROVEMENTS

- 13.1. The assessment of off-site transport effects demonstrates that the proposed development would have a beneficial effect on the local highway network by reducing peak hour and daily vehicle trips when compared to the current use of the site. The assessment of effects on public transport demonstrates that the net effect on individual services would be small.
- 13.2. The development will generate a significant number of pedestrian and cycle movements both internally and externally. The site will deliver very important infrastructure in the form of:
- New pedestrian/cycle route between Depot Approach and Cricklewood Lane;
 - Removal of an existing busy vehicle access from Cricklewood Lane;
 - Extensive new public realm designed on Healthy Streets principles, including a new public square, open space and play areas;
 - Extensive improvements to existing public realm, including Cricklewood Green enhancements to be secured by S106 agreement;
 - New Car Club space to provide for new residents and the wider local community;
 - Land safeguarded so as not to preclude future southern access into Cricklewood Station;
 - Contribution towards improvements to the pedestrian route beneath the rail bridge to be secured by S106 agreement;
 - Contribution to upgrade on uncontrolled crossing on Cricklewood Lane to a Puffin to be secured by S106 agreement.
- 13.3. In addition to the above the Proposed Development will include a three-part Transport Implementation Strategy to actively manage and influence the movement of goods and materials to and from the Proposed Development.



14. SUMMARY AND CONCLUSIONS

- 14.1. This Transport Assessment (TA) has been prepared by Entran Ltd in support of an outline planning application for a residential led, mixed-use development of new homes and complimentary commercial and community uses on land at Cricklewood Lane, Cricklewood.
- 14.2. This TA has been prepared alongside a Transport Implementation Strategy which provides the opportunity to reduce dependence on travel by private car and seeks to influence travel to and from the site rather than merely assessing its impact.
- 14.3. The development comprises the construction of up to 1100 residential dwellings and 1200m² of flexible A3/B1/D1/D2 non-residential use at ground floor. The Proposed Development includes new public realm including pedestrian and cycle routes as well as a new public square and landscape enhancements. The proposed development will provide car parking spaces for 10% of the residential dwellings, of which 3% will be for disabled drivers from the outset. Operational car parking will be provided for the non-residential units. Electric Vehicle Charging Points will be installed in accordance with TfL and LBB requirements. Secure cycle parking will be provided in accordance with ITP London Plan standards.
- 14.4. The Proposed Development will remove an existing vehicle access from Cricklewood Lane to the benefit of pedestrians and cyclists, and highway safety in general. The Proposed Development will take vehicle access from Depot Approach, a private access road.
- 14.5. All roads surrounding the site are subject to existing waiting restrictions, including a number of controlled parking zones. There is therefore no opportunity for the proposed development to displace any parking onto the public highway or surrounding streets.
- 14.6. Bus stops within easy walking distance of the site are served by high frequency bus services operating throughout the day and night. The closest station is Cricklewood Station, less than two minutes' walk from the Site.
- 14.7. An audit of existing pedestrian and cycle facilities within the Active Travel Zone found no significant barriers that would deter or prevent walking and cycling as a primary mode of transport.
- 14.8. The evidence shows that the site is highly accessible by foot, by bike, by bus or using rail services. The introduction a new, direct route through the Site for pedestrians and cyclists will increase the site's PTAL rating (as well as that of land to the north-west) and further and reduce travel times to key employment, retail, health and leisure facilities. The site is clearly well placed to promote travel by sustainable modes of transport and reduce reliance on the private car. The residents of the proposed development will have a genuine and viable choice of modes of travel.
- 14.9. The residents of the new development will benefit from a Car Club so that those households who do not own a vehicle will still have access to one as and when they may need one for essential journeys.
- 14.10. An assessment of travel by different modes shows that the proposed development will result in a material reduction in peak hour and daily vehicle trips. The net result will be an improvement in local highway conditions.
- 14.11. The multi-modal assessment forecasts that 36% of daily trips would be on foot, followed by 17% by bus and 15% by rail. Journeys by car would only represent 14% of person trips. The Framework Travel Plan would provide an opportunity to increase the number of cyclists, bus passengers and car-sharers and decrease the levels of single car occupancy further still.
- 14.12. The development will be supported by a three-part Transport Implementation Strategy comprising the Framework Travel Plan (FTP), Construction Logistics Plan (CLP) and Delivery & Servicing Plan (DSP). Final versions will be prepared (prior to commencement and occupation respectively) in partnership with LBB and TfL.
- 14.13. For the reasons set out in this Transport Statement there is no reason why the proposed development should be refused on grounds of highway capacity or safety, impact on the transport network or sustainability. The provision of new homes and public facilities in Cricklewood offers an opportunity to enhance this area with no adverse effects on transport and should be supported by the local highway authority.