LADBROKE GROVE

Project Flourish

Transport Assessment

Ballymore (London Arena) Limited and Sainsbury's Supermarkets Limited

October 2023

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Ballymore (London Arena) Limited and Sainsbury's Supermarkets Limited

PROJECT FLOURISH

Transport Assessment

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EXECUTIVE SUMMARY

Scheme Overview

WSP has been appointed by Ballymore (London Arena) Limited and Sainsbury's Supermarkets Limited (the Applicant) to prepare this Transport Assessment (TA) in support of a hybrid planning application at the site forming Sainsbury's and Former Utilities Land at Canal Way, Ladbroke Grove in the Royal Borough of Kensington and Chelsea (RBKC).

The application comprises the following:

- A new, 20-minute liveable neighbourhood designed with the Healthy Streets Approach and Vision Zero principles at its core
- Replacement Sainsbury's store (net sales area increased from 4,393 sqm to 5,509 sqm)
- 43% reduction in Sainsbury's car parking from 396 to 227 spaces
- Removal of the petrol filling station (PFS)
- Up to 2,519 new homes
- 'Car lite' residential car parking in accordance with the London Plan and reflective of the Proposed Development's future public transport accessibility level (PTAL)
- Approximately 345 residential car parking spaces (0.14 spaces per dwelling), with space to meet the passive 10% accessible car parking requirement, if required. New residents will not be eligible to apply for on-street parking permits for nearby controlled parking zones
- Maximum 14,500 sqm GIA flexible non-residential uses (retail, commercial, leisure, community)
- Substantially improved pedestrian and cycle infrastructure
- People walking, wheeling and cycling prioritised within the Proposed Development and upgrades to the Grand Union Canal (GUC) towpath fronting the site
- Safety enhancements to the access from Ladbroke Grove with new, signalised access junction including pedestrian crossings, implementing a long-standing aspiration of RBKC
- Provision of TfL cycle hire docking stations within the Proposed Development site, facilitating the scheme's extension to the north
- Safeguarded land for the provision of a pedestrian and cycle connection across the Great Western Main Line (GWML) (expected to be delivered as part of the Northern Pole Site permission once granted) and financial contributions towards this connection and the connection across the GUC (expected to be delivered as part of the neighbouring St William Development)
- Significant electric vehicle charging infrastructure across car parking for all uses
- Extensive cycle parking for all uses, in accordance with the London Plan
- Transformational upgrades to the bus facilities close to the replacement Sainsbury's store including interchange, bus standing and passenger waiting facilities
- Proportionate financial contributions towards improvements at Ladbroke Grove or Kensal Green Underground station.

Construction is expected to commence in 2026 with practical completion by 2036. The current Sainsbury's store will remain operational throughout the construction of the replacement store.

Vehicular Access and Traffic Impact

The layout of the Proposed Development and associated transport strategy have been developed with RBKC and Transport for London (TfL) over a number of years as part of an iterative masterplanning and pre-application process.

The Proposed Development, incorporating the removal of the PFS which is a significant trip generator, will generate just over one additional vehicle per minute during the AM peak hour. During the PM peak hour, there will be a reduction in vehicle trips.

A requirement set out in RBKC's Kensal Canalside Opportunity Area Supplementary Planning Document is for "clearly defined attractive and safe, pedestrian and cycle entrances" and "to deliver excellent walking and cycling facilities" from Ladbroke Grove. These requirements have resulted in the development of a proposed all movements signalised junction with dedicated cycle facilities for those cycling to and from the site, and for pedestrians and families accessing schools, community facilities and places of interest.

Design and modelling work has been completed for a number of potential options on behalf of RBKC, separate to this hybrid planning application, which has concluded that signalisation of the junctions of Ladbroke Grove with Canal Way and Kensal Road junction would best meet RBKC's objectives.

The modelling outputs presented in this TA indicate that the improvements to dedicated cycle and pedestrian facilities within the junction will result in an increase in journey times when compared to the existing mini-roundabout junction. This is viewed as an appropriate trade-off wholly consistent with RBKC, Mayoral and Government objectives to increase levels of active travel through delivering on the Healthy Streets Approach and reducing road danger.

Public Transport Impacts

In order to provide enhanced bus facilities and driver welfare facilities that are fit for purpose, the bus strategy is predicated on relocating bus stops and stands into the heart of the Proposed Development, adjacent to the replacement Sainsbury's store.

In terms of the bus capacity impacts of the additional bus trips generated by the Proposed Development, TfL confirmed during pre-application discussions that there would be sufficient capacity to accommodate additional trips. This is subject to further review and confirmation by TfL during the application's determination period.

Capacity analyses at Ladbroke Grove and Kensal Green stations have been completed to establish the impact of additional trips generated by the Proposed Development when it is fully built out and occupied in 2041. As is typical of stations across London, some elements of each station do not currently accord with TfL's 'S1371 – Station capacity planning' (2019) guidelines. Although the Proposed Development will increase passenger flows through each station, the incremental changes are no different to those requirements of the 2041 scenario without the Proposed Development. However, the Applicant is willing to discuss appropriate financial contributions towards station improvements as part of the S106 Agreement.

Residential Car Parking Provision

The starting point in the London Plan is that the Proposed Development, as an Inner London Opportunity Area, should be car free with the exception of disabled persons parking. Car parking should be aligned with future public transport accessibility and connectivity, and should take account of local circumstances and the quality of public transport provision.

Although bus services are to be extended into the Proposed Development, the future PTAL of the site will largely remain within the range of PTAL 0-5.

The location and constraints of the development site suggests that a car free requirement for Inner London Opportunity Areas is not appropriate and a minor departure to provide approximately 0.14 spaces per dwelling is justifiable with due consideration to future PTAL, public transport quality and local circumstances. In this context, the London Plan maximum standard for Inner London PTAL 3 is deemed most suitable, which is 0.25 spaces per dwelling.

The proposed level of residential car parking allows flexibility in achieving London Plan Policy T6.1 Part G by means of converting standard car parking to disabled persons parking as necessary up to the upper London Plan requirement of 0.10 disabled parking spaces per dwelling, and it supports the Mayor's target for 80% of journeys to be made by foot, cycle or public transport.

Active electric vehicle (EV) charging would be provided from the outset for 20% of resident spaces with passive provision to all other spaces.

Non-Residential Car Parking Provision

The flexible non-residential uses, which exclude the replacement Sainsbury's store, will have no car parking.

Car parking for the replacement Sainsbury's store will be significantly reduced from 396 to 227 spaces. Given that the replacement Sainsbury's store would be sited in a location with a future PTAL of 4, the maximum standard within the London Plan, Table 10.5, is 1 space per 75 sqm GIA, however the standard also states that viability for the replacement retail should be taken into account when determining replacement parking provision. Given the total proposed GIA of 22,955 sqm, the London Plan would permit up to 306 spaces and so the 227 spaces proposed is comfortably below this level. The GIA includes all covered and basement areas and subsequently the maximum standard overestimates a suitable parking demand. The provision of 227 spaces reflects a need to provide an element of restraint to current demand but maintains the minimum requirement to maintain the viability of re-providing an attractive store for the existing customer base.

12 spaces (5%) are to be provided with rapid EV charging from the outset, exceeding the requirement within London Plan Policy T6.3. 14 spaces (6%) are to be allocated for Blue Badge holders and nine parent & child spaces will be provided.

Summary and Conclusion

The Proposed Development has been subject to extensive pre-application scoping and discussions with RBKC and TfL over several years. The Applicant and relevant authorities agree that the Proposed Development must put people first and deliver strategic and local policy objectives such as:

- Supporting the Mayor's target for 80% of all trips to be made by foot, cycle or public transport through high-quality walking and cycling networks, and upgraded bus facilities.
- Facilitating shorter, regular trips on foot or by cycle through designing with the Healthy Streets Approach and Vision Zero principles at the core.
- Safeguarding the delivery of a new Elizabeth line station and new pedestrian and cycle connections over the GWML and GUC.
- Agreeing a package of appropriate, proportionate financial contributions towards station improvements, improvements to bus passenger facilities within the development and expansion of TfL's cycle hire scheme.
- Implementing a suite of management measures relating to construction logistics, travel planning, delivery and servicing, and parking management.
- Overall, it can be concluded that the Proposed Development is a sustainable scheme which supports a range of policy objectives. With the accompanying mitigation, the Proposed Development can be appropriately and safely accommodated within the local transport network.

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1 INTRODUCTION

1.1 OVERVIEW

1.1.1. Ballymore (London Arena) Limited and Sainsbury's Supermarkets Limited (hereafter referred to as 'the Applicant') has appointed WSP UK Ltd to provide transport planning advice for the Project Flourish – Ladbroke Grove development proposals (hereafter referred to as the 'Proposed Development').

1.1.2. The site address is Sainsbury's and Former Utilities Land, Canal Way, Ladbroke Grove, London, W10, hereafter referred to as the 'site', in the RBKC.

1.1.3. The vision for the site is to create a new Neighbourhood Centre, which will continue to play an important role in providing local retail services, whilst being recreated as a new place of high-quality urban living, delivering much needed homes in RBKC and for London. This TA has been prepared to accompany a hybrid planning application (part detailed, part outline) for the site.

1.1.4. The full description of development is provided in Section 5. In summary, the application includes demolition of all existing buildings and structures to facilitate a mixed-use development comprising residential, retail, commercial and community uses with associated infrastructure.

1.1.5. The outline element of the scheme will include residential floorspace and ancillary residential facilities (Class C3) and non-residential floorspace comprising flexible commercial, community and sui generis floorspace (Class E / Class F2 / Sui Generis), the provision of new pedestrian and vehicular access, open space, landscaping, car and cycle parking and other associated infrastructure works with all matters reserved for future consideration.

1.1.6. The detailed element of the scheme will comprise a large retail store and ancillary facilities (Class E(a)), small units at ground floor level for Commercial, Business and Service uses (Class E), Leisure floorspace (Class E(d)), residential facilities (Class C3), improvements to existing site access at Ladbroke Grove, provision of new pedestrian and vehicular access, internal roads and associated landscaping, car and cycle parking and associated infrastructure works including remediation.

1.1.7. The Proposed Development is summarised below.

- 2,519 residential units;
- 22,955 sqm GIA Sainsbury's store;
- Removal of the petrol filling station (PFS);
- Up to 14,500 sqm GIA flexible uses (retail, commercial, leisure and community);
- 227 Sainsbury's car parking spaces (reduced from 396), a reduction of 169 spaces;
- 'Car lite' residential (0.14 spaces per unit);
- London Plan compliant cycle parking;
- Access, servicing, landscaping and pedestrian and cycle improvements; and
- New improved bus facilities, bus stops and bus route extensions.

1.1.8. The site is within the wider Kensal Canalside Opportunity Area (KCOA) which envisages the delivery of a minimum of 3,500 new homes and 2,000 jobs. The KCOA designation has been identified and established through the statutory London Plan and Local Plan process. The KCOA is also subject to

a Supplementary Planning Document (SPD), which was adopted in 2021, and sets the broad framework for the area and the site and Proposed Development. The KCOA consists of three development opportunities as follows:

- Ballymore and Sainsbury's site – up to 2,519 homes and 22,955 sqm GIA of supermarket retail and up to 14,500 sqm GIA of flexible uses;
- St William Gasworks site (known as Plot 3) – circa 750 homes estimated; and
- London and Continental Railways North Pole site – undefined development.

1.1.9. The site is located between the GUC, the GWML, and the B450 Ladbroke Grove. The wider proposals are the subject of a comprehensive SPD prepared by RBKC, and adopted in 2021, including a high-level transport strategy and Development Infrastructure Funding Study (DIFS).

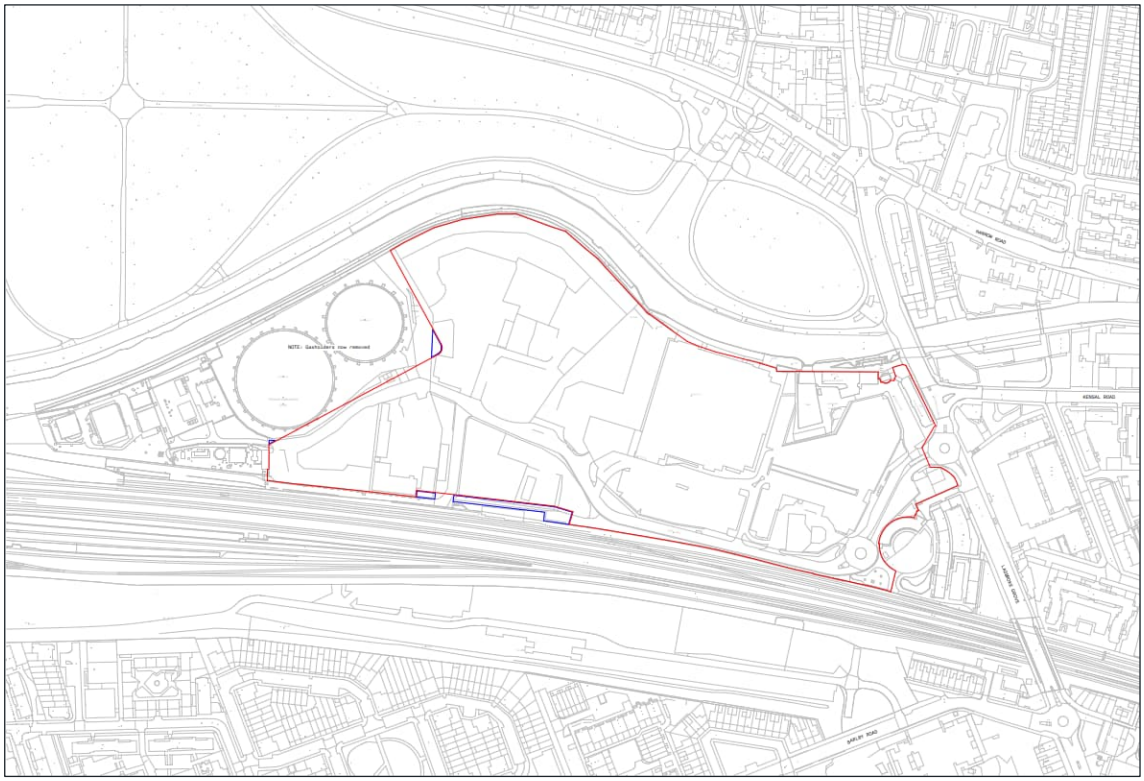
1.1.10. This TA has been prepared in accordance with National, Regional and Local policy and taking into account best practice guidance, particularly 'TfL Best Practice Guidance for Transport Assessments' published by TfL in 2019.

SITE LOCATION

1.1.11. The site is located in North Kensington, on the southside of the GUC, within the administrative boundary of the RBKC. To the east of the site is City of Westminster (CoW) and to the north is London Borough of Brent (LBB). The Boroughs are separated by Harrow Road and Ladbroke Grove. Further to the west is Old Oak Common a strategic London Plan Growth Area, which is a 15-minute cycle journey. Paddington Station is a 15-minute cycle journey to the east. Ladbroke Grove Station is a 12-minute walk to the south from the main site junction, and Kensal Green and Kensal Rise are a 12-minute walk.

1.1.12. The red line boundary and location of the site in a wider context is shown in **Figure 1-1** and **Appendix A**.

Figure 1-1 – Site Location and Application Boundary



1.1.13. The site is approximately 7.62 hectares and currently contains a Sainsbury's store, PFS and 396 car parking spaces, together with commercial uses and industrial land previously used as a Crossrail construction site.

1.1.14. Canalside House, the Boat House Activity Centre and 14 residential units are located at the north east corner of the site, fronting Ladbroke Grove, which are currently owned by RBKC.

1.1.15. In the south-east corner of the KCOA a memorial is dedicated to the 31 victims of the 1999 Ladbroke rail disaster.

1.1.16. Within the site, on Canal Way, next to the junction with Ladbroke Grove, is a TfL bus stand and bus passenger waiting facilities including two bi-directional stops for seven bus routes. The bus facilities are owned by the applicant and leased to TfL.

The wider KCOA

1.1.17. The wider KCOA is split in two by the GWML. The land to the south, known as the North Pole site, is owned by De. It is understood there are no formal plans for this site in the immediate future. If it is developed in the future, it is expected that a pedestrian and cycle bridge over the GWML would be required to be delivered as part of that application. Land has been safeguarded for this as part of the Proposed Development.

1.1.18. The old water tower also sits within the northeast corner of the KCOA but outside the Application site boundary and has been converted to residential use.

1.1.19. A Network Rail compound is located alongside the northern side of the railway sidings and is accessed by a vehicle access ramp via Canal Way that enables access to vehicles and staff for repairs and maintenance to be carried out trackside.

1.1.20. To the west of the site and the Application boundary is land occupied by the former Kensal Gasworks site, which is owned by St William Homes LLP (known as Plot 3 in the KCOA). This site will be subject to a separate planning application.

1.1.21. At the west end of the KCOA is located a National Grid substation and Cadent managed plant along with smaller industrial and logistics activities. These are located outside of the site and the Application boundary.

PLANNING HISTORY

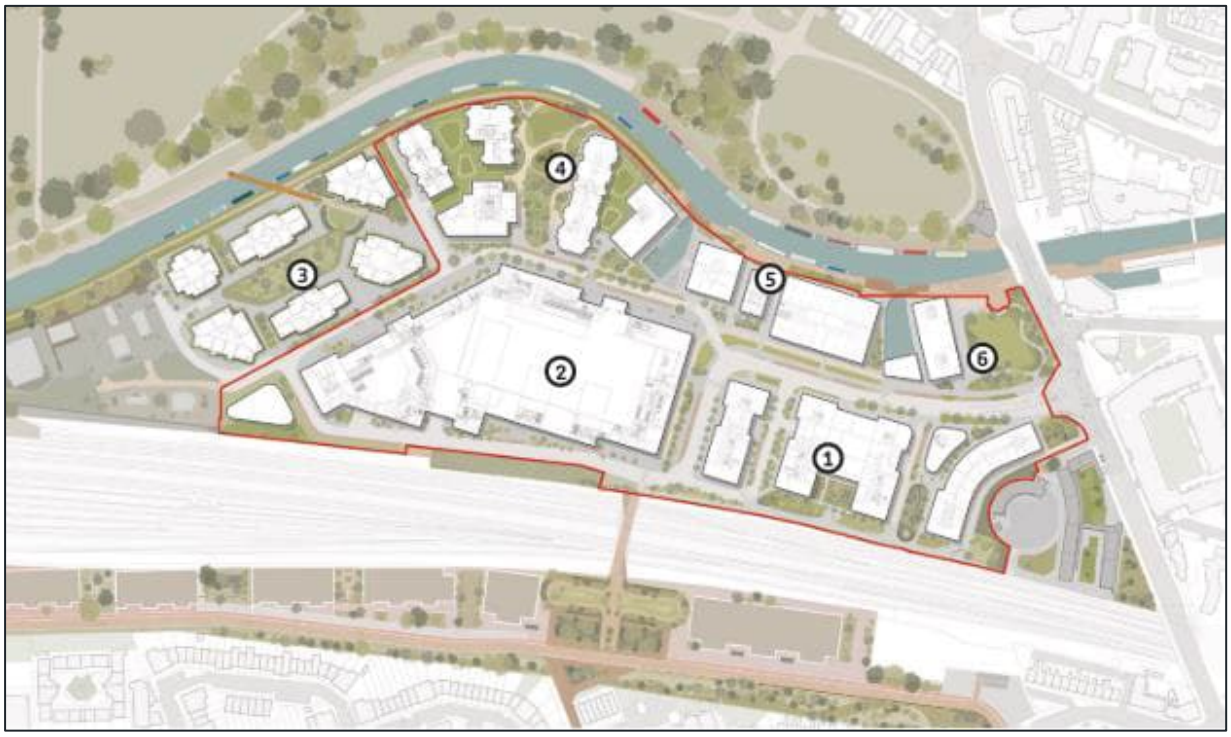
1.1.22. In 2006 an outline application for redevelopment of the site was submitted (Planning Ref. PP/06/01619) to provide 790 residential units (negotiated to 730 units), nine residential moorings and 14,859 sqm of non-residential floorspace alongside car parking, highways improvements, a new inner canal basin and reconfigured outer canal basin. The Applicant at that time was Peabody Trust and the scheme was eventually considered as withdrawn and undetermined.

1.1.23. A previous historic planning applications for the same parcel of land was submitted in 1997 and approved in 2022 but has now expired (ref: TP/97/02707). The application included provision of 15,989 sqm of Class B1 (Business) accommodation, and 308 residential units together with restaurant and café facilities and associated car parking together with highway improvements, reconfiguration of canal basin and provision of ecology garden.

PROPOSED DESCRIPTION OF DEVELOPMENT

1.1.24. The Proposed Development site is divided into five development Plots, which are shown in in **Figure 1-2**. Plot 3 does not form part of this planning application.

Figure 1-2 – Site Development Plots



1.1.25. This TA is supporting a hybrid planning application, with the description of development described as:

'A hybrid application for the demolition of all existing buildings and structures to facilitate a mixed use development comprising residential, retail, commercial and community uses with associated infrastructure.

The outline element of the scheme will include residential floorspace and ancillary residential facilities (Class C3) and non-residential floorspace comprising flexible commercial, community and sui generis floorspace (Class E / Class F2 / Sui Generis), the provision of new pedestrian and vehicular access, open space, landscaping, car and cycle parking and other associated infrastructure works with all matters reserved for future consideration.

The detailed element of the scheme will comprise a large retail store and ancillary facilities (Class E(a)), small units at ground floor level for Commercial, Business and Service uses (Class E), Leisure floorspace (Class E(d)), residential facilities (Class C3), improvements to existing site access at Ladbroke Grove, provision of new pedestrian and vehicular access, internal roads and associated landscaping, car and cycle parking and associated infrastructure works including remediation.

1.1.26. As the description suggests there is a wide mix of land uses proposed on the site, with a predominant residential element. The site will be enabled by relocation of the Sainsbury's store and removal of the existing PFS and surface level car park. This re-provided store combines to form a new Neighbourhood Centre

1.1.27. The proposed residential and non-residential land use schedules are proposed illustratively in **Table 1-1** and **Table 1-2**. The proposed residential units are shown by the number of bedrooms. The non-residential uses are shown illustratively as a level of flexibility will be required on the final use and floor areas.

Table 1-1 – Proposed Illustrative Residential Quantum

	Studio	1 Bed	2 Bed	3 Bed	4 Bed	Total
Residential Units	293	737	962	467	60	2,519

Table 1-2 – Proposed Illustrative Non-Residential Quantum (excluding Sainsbury's)

Planning Use	Indicative Area (sqm GIA)	Min Area (sqm GIA)	Max Area (sqm GIA)
Commercial spaces – retail			
Retail – Class E(a)	1,677.20	1,000	2,500
Food and Beverage (Restaurant / Café / Drinking Establishment) – Class E(b) / Sui Generis	2,947.30	1,500	3,500
Cycle hub – Class E	212.70	0	250
Commercial spaces – office			
Leisure (possibly including swimming pool) – Class E(d) / Class F2(d)	1,520	500	2,000
Commercial spaces – workspace			
Flexible workspace – Class E(g)	3,339.50	3,500	5,000
Re-provided Canalside House workspace – Class E(g)	741	700	800
Community spaces			
Community – Class F1/F2	1,145.10	500	1,500
Community leisure – Class E(d) / F1 / F2 (including indoor sports facility and re-provided Boat House facilities)	1,883	1,000	2,000
Creche – Class E(f)	225.40	0	350
Health – Class E(e)	0	0	300
Total	**13,691.20**	-	-
Maximum Cap for non-residential floorspace purposes			**14,500 sqm**

1.1.28. The existing Sainsbury's store will relocate further into the site, creating a new store comprising 5,509 sqm of net sales area, which is an increase from the existing 4,393 sqm. The total GIA is 22,955 sqm, of which the total NIA is 13,341 sqm. The replacement store will have a substantially reduced car parking provision of 227 spaces from the current 396 spaces, a reduction 169 spaces. **Table 1-3** shows the existing and proposed floor areas and other relevant items.

Table 1-3 – Existing and Proposed Sainsbury's Store

	Existing	Proposed
Store Footprint	2.6ha (incl. car park & service yard)	1.2 ha (store footprint at ground level only. Excl. residential, offices and retails)
Total Floor Area (GIA)	8,823sqm	Total GIA = 22,955sqm This comprises: Building footprint area: 13,341sqm Covered Service Yard: 1,620sqm Covered car park: 7,994sqm
Net Sales Area	4,393sqm	5,509sqm
Concessions (and Associated Areas)	Argos – 134sqm Vacant Concession – 265sqm Other Concessions – 75sqm	Argos – 153sqm Concession – 365sqm
Goods Online	5 Goods Online vans	15 Goods Online vans
Car Parking Spaces	396 car parking spaces	227 spaces **(including 14 accessible, 9 parent and toddler and 12 Fast Charge EV spaces)**
Service Yard Space	946sqm (external yard. Not Covered)	1,619sqm (area included as part of total GIA above)
Petrol Filling Station	8 pumps and kiosk	Removed

1.1.29. The Proposed Development will connect with the wider KCOA and there has been significant consultation with adjacent landowners in order to ensure that the proposals will deliver a well-designed environment with a high quality of public realm that will facilitate and encourage walking, cycling and public transport use along existing and new desire lines through the site. Furthermore, although the bridge does not form part of this application, land has been safeguarded to accommodate a pedestrian and cycle bridge over the GWML in future, the landing of the bridge is provided for along the southern perimeter of the site, east of the retained Network Rail compound.

1.1.30. The Proposed Development seeks to provide a sustainable development which promotes active travel modes and is considered car-lite, in accordance with local and strategic policy. The highways strategy, whilst continuing to provide access to the Sainsbury's store, includes an improved network for all modes of transport, and due to the reduction in Sainsbury's store car parking and removal of the PFS a reduction in retail traffic. Importantly the proposals incorporate junction improvement works, requested by RBKC, and an aspiration to provide a new all movements signalised junction to replace the mini-roundabout. This is considered to be much safer and improved for pedestrians and cyclists when compared with the existing position. The existing bus stops and stands are proposed to be upgraded and relocated to a much more accessible and higher quality location, away from the existing junction. The Proposed Development seeks to deliver RBKC's aspirations for the KCOA and to meet wider London needs in the following ways:

- Provide a high-quality home for over 3,500 households (of which up to 2,519 will form part of the Proposed Development);
- Optimise the site for housing including high quality of affordable homes;
- Improve access to and embrace the biodiversity and benefits of the canal;
- Bring new social and community facilities;
- Deliver environmentally sustainable approaches to development;
- Build on its industrial heritage, linking into the local creative economies;
- Minimise the need for private vehicle use;
- Bring new job opportunities;
- Ensure that high-density development delivers high-quality architecture and public open and green spaces; and
- Respond to the historic setting of the Kensal Green Cemetery and dockside development.

1.1.31. The Proposed Development is designed to contribute towards local and strategic policy objectives as documented in Section 2 of this report. The scheme will provide improved public realm and pedestrian permeability through a number of improvements, including a direct connection from the site via the existing GUC towpath towards the Old Oak Common station. The site will also include a safeguarding for delivery of a new pedestrian and cycle bridge over the GWML, subject to third party land and consents.

PRE-APPLICATION CONSULTATION

1.1.32. Formal pre-application consultation has been ongoing for a number of years. Advice was sought from TfL and RBKC Highways at two meetings on 4th March 2021 and 8th September 2021. TfL issued formal feedback on 22nd March 2021 and 1st October 2021.

1.1.33. Since 2021 the design of the scheme has evolved to respond to advice through various pre application meetings with RBKC. Further meetings have been held with RBKC throughout 2023. With the responses provided by the planning consultant and included in the Planning Statement.

1.1.34. Since 2021 a number of pre application meetings have also been held with TfL. A further TfL pre-application meeting was held with TfL and RBKC on the 22nd May 2023, a pre application letter was provided on 31st July 2023.

1.1.35. The pre-app comments received are included at **Appendix B**.

1.1.36. A summary of TfL comments is provided below:

- Car parking – TfL believe the level of parking for residential and employment is too high.
- Cycle parking – TfL are supportive of the proposed approach to short-stay cycle parking for the commercial floorspace coming forward in outline. The layouts and numbers should be refined at the detailed stage and secured by planning conditions;
- Cycle routes – TfL has identified a number of specific off-site measures and has requested a continuation and improvement of existing routes;
- Cycle hire – TfL has requested that the sites to be identified and land to be safeguarded. Where off-site – applicant will need to fund extension of existing cycle hire to the site;
- ATZ assessment – TfL requests that an ATZ should be undertaken for day and night-time conditions. Places of worship should be added to the assessment.
- Trip Generation – TfL agree and support the proposed approach to trip generation (as per March 2021 letter). The level of wider cycle growth and distribution should be agreed;
- Highway modelling – TfL highlights that the MAP4 audit of the main junction design is not yet signed off;
- Bus capacity – TfL previously advised that there is likely to be sufficient capacity for addition development demand. TfL will review final TA and update advise accordingly;
- Temporary bus infrastructure / routing during construction – TfL requires further information on bus arrangements during construction; and
- General Construction Information – TfL request further information.

1.1.37. These comments have been addressed as considered appropriate for this stage of the planning application in the detailed assessment within this TA, and through technical notes and drawings. Some matters are to be addressed post submission of the application, including final sign off the highway modelling and the construction phasing and routings, with the latter provided within the outline Construction Logistics Plan (CLP).

1.1.38. The pre-application meetings have been used to update the stakeholders on the design changes which have taken place since the consultations started in 2021 and 2022. Further changes have been made following advice received in 2023.

1.1.39. Public consultation events were held with the local community during 2021. Further public consultation events have also been held by the Applicant through May and June 2023, in order to reflect the revised proposals.

1.1.40. The public consultation feedback and responses are published in the Statement of Community Involvement, submitted under separate cover in the planning application documents.

2 POLICY

2.1 INTRODUCTION

2.1.1. The Proposed Development has been developed with full consideration of the national, regional and local planning policy framework and legislative guidance. This report will demonstrate how the development proposals comply with the following:

- National Planning Policy Framework (MHCLG, 2023);
- National Planning Practice Guidance (MHCLG, 2021);
- The London Plan (GLA, 2021);
- The Mayor's Transport Strategy (GLA, 2018);
- Royal Borough of Kensington and Chelsea Local Plan (RBKC, 2019);
- Royal Borough of Kensington and Chelsea Local Plan Review (RBKC, 2023);
- Transport and Streets Supplementary Planning Document (RBKC, 2016); and
- Kensal Canalside Opportunity Area Supplementary Planning Document (RBKC, 2021).

2.1.2. A more detailed policy summary and policy balance is provided within the accompanying Planning Statement.

2.2 NATIONAL PLANNING POLICY FRAMEWORK

2.2.1. The National Planning Policy Framework, (NPPF) was first published in 2012, and last revised in 2023 and sets out the Government's planning policies for England and how these should be applied. The NPPF supports the promotion of sustainable transport and the Proposed Development seeks to adhere to a number of core policies.

2.2.2. NPPF Chapter 9 - Promoting Sustainable Transport, outlines the requirements of development applications, it aims to ensure that:

- appropriate opportunities to promote sustainable transport modes can be, or have been, taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users;
- the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

2.2.3. The NPPF also provides details on what developments should do to minimise the impact on the road network:

- give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

- create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible, and convenient locations.

2.2.4. Travel Plans (TPs) should be provided for all developments which generate significant amounts of movement.

2.3 NATIONAL PLANNING PRACTICE GUIDANCE

2.3.1. The National Planning Practice Guidance (NPPG) relates to Travel Plans and TAs and is a guidance in support of the NPPF. The NPPG details the overarching principles on TA's and Travel Plans.

2.3.2. Paragraph 02 (Reference ID: 42-002-20140306) of the NPPG notes that Travel Plans and TAs are ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.

2.3.3. Paragraph 05 (Reference ID: 42-005-20140306) notes that Travel Plan and TAs can positively contribute to:

- Encouraging sustainable travel;
- Lessening traffic generation and its detrimental impacts;
- Reducing carbon emissions and climate impacts;
- Creating accessible, connected, inclusive communities;
- Improving health outcomes and quality of life;
- Improving road safety; and
- Reducing the need for new development to increase existing road capacity or provide new roads.

2.3.4. Paragraph 06 (Reference ID: 42-006-20140306) details the key principles to be followed when preparing Travel Plans and TAs:

- TA/TP need to be proportionate to the size and scope of the Proposed Development to which they relate and build on existing information wherever possible;
- TA/TP need to be established at the earliest practicable possible stage of a development proposal;
- TA's/TP's need to be tailored to particular local circumstances (other locally determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally); and
- TA/TP need to be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, TAs and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).

2.4 THE LONDON PLAN

2.4.1. The London Plan (2021) sets out policies to ensure that London's transport is easy, safe and convenient for everyone and encourages cycling, walking, public transport and the use of electric vehicles. The Mayor's key target, as set out in Policy T1 is that 80% of all trips in London are to be made by foot, cycle or public transport by 2041.

2.4.2. The London Plan recognises that London's challenges of guaranteeing its status as an efficient, well-functioning globally competitive city are intertwined with the obstacles and opportunities that transport brings. It states that the integration of land use and transport is essential in realising and maximising growth and ensuring that different parts of the city are connected in a sustainable and efficient way.

2.4.3. In order to achieve this, the London Plan acknowledges that a strategic shift is needed to reduce Londoners' dependency on the car, creating a healthy, pleasant and sustainable street environment in which people can walk, cycle and use public transport.

2.4.4. Policy SD1 Opportunity Areas sets the principles by which the Mayor will support and assist LPA's with promoting strategic opportunity areas. Opportunity Areas (OA's) are identified as significant locations with development capacity to accommodate new housing, commercial development and infrastructure (of all types), linked to existing or potential improvements in public transport connectivity and capacity. Kensal Canalside is identified in the London Plan as an OA to deliver 3,500 new homes and 2,000 jobs.

2.4.5. Policy T2 'Healthy Streets' outlines that development proposals should:

- Demonstrate how they will deliver improvements that support the ten healthy streets Indicators in line with TfL guidance;
- Reduce the dominance of vehicles on London's streets whether stationary or moving; and
- Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.

Source: Lucy Saunders

2.4.6. **Policy T4 'Assessing and Mitigating Transport Impacts'** states that development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity. It is acknowledged that TAs should be submitted with development proposals where appropriate and 'focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development'.

2.4.7. The London Plan focuses heavily on improving infrastructure and facilities for cycling and subsequently increasing its mode share across the city. **Policy T5 'Cycling'** recognises that access to secure cycle parking is vital to achieve these goals and as such, all new development in London must provide convenient and accessible cycle parking in line with minimum standards. Regarding short-stay cycle parking, this must be convenient and readily accessible.

2.4.8. It is acknowledged that the dominance of vehicles on streets is a significant barrier to walking and cycling and reduces the appeal of streets as public places. To manage London's road network, align with the Healthy Streets Approach and ensure that people and businesses can move about the city as the population grows, new car parking provision must be carefully controlled.

2.4.1. **Policy T5 'Cycle Parking'** sets out the minimum provision required to support new developments and states that the cycle parking should be designed in accordance with London Cycling Design Standards (LCDS) published by TfL.

2.4.2. **Policy T6 'Car Parking'** states that parking should be restricted in line with existing and future public transport accessibility and connectivity. Car-free development should be targeted in places that are well-connected. The Policy T6 car parking standards relevant to the site are outlined in

2.4.3. **Table** 2-1**.**

Table 2-1 – London Plan Maximum Car Parking Standards

Land Use / Location		No. beds	Maximum Parking Provision
Residential	Central Activities Zone Inner London Opportunity Areas Metropolitan and Major Town Centres All areas of PTAL 5 – 6 Inner London PTAL 4	All	Car-Free
	Inner London PTAL 3	All	Up to 0.25 spaces per dwelling.
Residential	Inner London PTAL 2 Outer London Opportunity Areas	All	Up to 0.5 spaces per dwelling
Residential	Inner London PTAL 0-1	All	Up to 0.75 spaces per dwelling
Residential	Outer London PTAL 4	1-2	Up to 0.5 – 0.75 spaces per dwelling
Residential	Outer London PTAL 4	3+	Up to 0.5 – 0.75 spaces per dwelling
Residential	Outer London PTAL 2-3	1-2	Up to 0.75 space per dwelling
Residential	Outer London PTAL 2-3	3+	Up to 1 space per dwelling
Residential	Outer London PTAL 0-1	1-2	Up to 1.5 space per dwelling
Residential	Outer London PTAL 0-1	3+	Up to 1.5 spaces per dwelling
Office	Central Activities Zone	N/A	London Car free
Retail	Inner London Outer London Opportunity Areas Outer London retail below 500 sqm.	N/A	Up to 1 space per 75 sq.m. gross internal area (GIA)
Retail	Rest of outer London	N/A	Up to 1 space per 50 sq.m. (GIA)

2.4.4. In addition, appropriate provision should also be made for Blue Badge holders which includes disabled sized spaces for 3% of the total number of dwellings should be provided from the outset.

2.4.5. There is a requirement to provide 20% of residential parking spaces with active electric vehicle charging points, with the remaining 80% being passive. London Plan electric vehicle charging policy is set out in **Table 2-2**.

Table 2-2 – London Plan EV Charging Standards

Land-Use Class		London Plan EV Charging Standards	
		Active	Passive
C3	Dwellings	20%.	All other spaces.
E	All other uses	Where car parking is provided at retail development, provision for rapid electric vehicle charging should be made.	None.

2.4.6. **Table 2-3** shows the London Plan minimum cycle parking standards.

Table 2-3 – London Plan Minimum Cycle Parking Standards

Land-Use Class		London Plan Minimum Cycle Parking Standards	
		Long-Stay	Short-Stay
C3	Dwellings	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	1 space per 40 units
A1	Food Retail	1 space per 175 sqm (GEA)	First 750 sqm: 1 space per 20 sqm; Thereafter: 1 space per 150 sqm (GEA)
	Non-Food Retail	First 1,000 sqm: 1 space per 250 sqm Thereafter: 1 space per 1,000 sqm (GEA)	First 1,000 sqm: 1 space per 60 sqm; thereafter: 1 space per 500 sqm (GEA)
A2-A5	Cafes & Restaurants, Drinking Establishments, take-away	1 space per 175 sqm (GEA)	1 space per 20 sqm (GEA)
B1	Business offices	1 space per 75 sqm (GEA)	First 5,000sqm: 1 space per 500 sqm Thereafter: 1 space per 5,000 sqm (GEA)
D1	Nurseries	1 space per 8 FTE staff and 1 space per 8 students	
	Other	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
D2	Sports (e.g., sports hall, swimming, gymnasium, etc)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)

2.5 MAYOR'S TRANSPORT STRATEGY

2.5.1. The Mayor's Transport Strategy was produced in 2018 and incorporates the Healthy Streets and Vision Zero approaches aimed to achieve:

- Active, inclusive and safe travel;
- A more efficient use of the street network; and
- Improvements to air quality and the environment.

2.5.2. Good Growth is a key concept of the Mayor's Transport Strategy and involves ensuring that people have travel options other than driving. Indeed, Policy 21 states that:

"The Mayor, through TfL and the boroughs, and working with stakeholders, will ensure that new homes and jobs in London are delivered in line with the transport principles of Good Growth for current and future Londoners by using transport to:

- Create high density, mixed-use places; and
- Unlock growth potential in underdeveloped parts of the city."

2.5.3. There are seven key transport principles of Good Growth. How the Proposed Development achieves each of these is outlined as follows:

- **Excellent access to public transport:** The site is located in close proximity to several public transport links including those serving Ladbroke Grove station, Kensal Rise station, Kensal Green station and the Old Oak Common station which is under construction. There are also several bus routes operating on the site and it is proposed to extend some of the bus routes within the site to access the new developments and the relocated Sainsbury's. The site will benefit from PTAL improvement achieved through bus route extension within the site.
- **High density, mixed-use developments;** The development will provide up to 2,519 residential units, a mix of several retail spaces and will create a vibrant place for new residents and visitors of the surrounding community.
- **People choose to walk and cycle:** The Proposed Development will provide cycle parking in accordance with the London Plan standards. TfL cycle hire facilities will be provided on site where feasible, and both TfL and Sustrans cycle routes are in close proximity to the site.
- **Car free and car lite places:** The Proposed Development will reduce parking for the Sainsbury's store, and parking provision for the proposed residential development will be car-lite, providing 0.14 spaces per unit, which will include the provision of accessible Blue Badge spaces.
- **Inclusive accessible design:** The development will be accessible for disabled users and will seek to enhance pedestrian and cyclist permeability.
- **Carbon free travel:** Active travel modes will be promoted through the provision of shared spaces within the developments landscape designs. A Travel Plan will be provided for the development to further promote sustainable modes.
- **Efficient freight:** Servicing and delivery infrastructure will be provided via an internal site arrangement, as well as a Plot-by-Plot parcel concierge.

2.6 RBKC LOCAL PLAN

2.6.1. The RBKC Local Plan was adopted in September 2019. The Local Plan sets out the vision, objectives and detailed spatial strategy for future development in RBKC up to 2028 along with specific strategic policies and targets, development management policies and site allocations.

2.6.2. The Local Plan, through Policy CA1, highlights the KCOA has been identified to deliver a minimum of 3,500 new residential units, 10,000 sqm of new offices and 2,000 sqm of non-residential floorspace, including social and community and local shopping facilities in addition to the new Sainsbury's store.

2.6.3. This document references that S106 Agreements should be made to fund the following:

- Construction and maintenance of a new bridge across the railway and also a new bridge over the GUC;
- Improved transport infrastructure including better bus links and new road and improvements to the junctions with Ladbroke Grove;
- Public realm and public spaces and improvements to little Wormwood Scrubs and Kensal Green Cemetery (subject to access through the cemetery and a linking bridge over the GUC); and
- Landscaping, biodiversity and amenity improvements to the GUC.

2.6.4. Policy CO 3 sets out the strategic objective for Better Travel Choices, that walking, cycling and public transport are safe, easy and attractive, and preferred by our residents to private car ownership and use.

2.6.5. Cycle parking is set out in the Transport and Street SPD, which states that it will be in accordance with the London Plan.

2.7 RBKC LOCAL PLAN REVIEW

2.7.1. The emerging new RBKC Local Plan Review has been through a number of stages of consultation, and whilst not yet adopted weight should be applied to the policies:

2.7.2. The submission version was published and sent to secretary of state on 8th February 2023. The examination in public (EiP). The key policies are summarised in **Table 2-4**.

Table 2-4 – RBKC Local Plan Policies (Publication Version, October 2022)

Policy Requirements	
Policy CA1 – Kensal Canalside	Comprehensive development of the site in accordance with an urban design framework that will be set out in the Kensal Canalside Opportunity Area SPD. A high-density development with a high environmental standards and lows levels of car dependency and ownership. Attractive, usable and flexible public realm providing an appropriate setting for a mixed-use Canalside development which features leisure, education and business uses as well as housing. The site designation has been established through the GLA OAPF designations and the previous Local Plan policy.
Policy T1 – Street Network	Guidance for new streets is provided as follows; • In areas of large scale redevelopment, the Council will require new street networks to be inspired by the Borough's historic street patterns to ensure optimal connectivity and accessibility. • New street networks must be established with a clear function, hierarchy and choice of routes, designed to optimise connectivity, accessibility and legibility, and to reflect the historic and finely grained block structure of the Borough. • New streets to be designed to give priority to pedestrian and cyclist movement, be attractive, safe, provide planting, minimise opportunities for crime, and be inclusive to all, in line with the Healthy Streets Approach. • New streets to be built to adoptable standards. • Development that provides new links and removes barriers that disconnect access for pedestrians, cyclists and people with limited mobility is encouraged. The development of new gated communities and development that restricts access for pedestrians, cyclists and people with limited mobility to existing streets will be resisted. Guidance for existing Streets is set out as below: • Development that changes the existing street network including the addition or modification of accesses, street layouts and road crossings must serve to (i) improve street safety in line with the Vision Zero approach, (ii) provide for ease of movement for all pedestrian groups (iii) contribute positively to the Healthy Streets score.
Policy T2 – Three Dimensional Street Form	Saved from adopted Local Plan.
Policy T5 – Land use and Transport	The council will ensure that there are better alternatives to car use by making it easier and more attractive to walk, cycle and use public transport and by managing traffic congestion and the supply of car parking. The council require: • Require development to be located in suitable areas where the transport requirements can be met in a sustainable manner, and which actively encourages travel by sustainable modes; High trip generating development to be located in areas of the Borough where public transport accessibility has a PTAL score of 4 or above and where there is sufficient public transport capacity, or that will achieve PTAL 4 and provide sufficient capacity as a result of committed improvements to public transport;

Policy Requirements	
	• Large scale developments are required to submit Transport Assessments and Travel Plans; Resist the loss of buildings and land used for public transport, active travel or related support functions (unless satisfactory alternative facilities are provided.
Policy T3 Living streets and outdoor life	The policy requires implementation of vibrant outdoor spaces. The policy states: • Require opportunities to be taken within the street environment to create places that support outdoor life, inclusive to all, adding to their attractiveness and vitality. • Support proposals for outdoor hospitality uses that contribute positively to the streetscape by improving the visual and functional qualities of our streets maintain the safe, secure passage of pedestrians including those with mobility needs and • are proportionate in scale to their context.
Policy T4 – Streetscape	The council will require a well-connected, inclusive, and legible network of streets to be maintained and enhanced. Require improvements to the visual, functional and inclusive quality of our streets, ensuring they are designed and maintained to a very high standard, that street clutter is removed and that street furniture, advertisements and signs are carefully controlled to avoid clutter to support the Council's aim of driving up the quality of the Borough's streetscape: • Remove redundant street furniture. • Retain, and seek the maintenance and repair of, historic street furniture such as post boxes and red Gilbert Scott telephone boxes, where this does not adversely impact on the safe functioning of the street. • Where there is an exceptional need for new street furniture, it must be of high-quality design and construction, and placed with great care, so as to relate well to the character and function of the street. • Resist adverts, including on street furniture, that by reason of size, siting, design, materials or method of illumination harm amenity or public or road safety. • Resist freestanding structures such as telephone kiosks where the function for the display of adverts dominates the primary purpose for the structure, whether sited on streets, forecourts or roadsides. • Resist pavement crossovers and forecourt parking. • Resist the construction of high garden walls and fences along street boundaries.
Policy T6 – Active Travel	Active Travel is at the core of new policy in the Local Plan. The councils requires that: • All new development to maximise trips made by sustainable transport modes by making it easier and more attractive to walk and cycle within the Borough. • Improvements to the walking and cycling environment are required, including pedestrian and cycle links through new developments and through improving walking and cycling routes to transport infrastructure, social infrastructure, green spaces and town centre uses. Necessary off-site improvements shall be secured by planning obligation. • New development must incorporate measures to improve road safety, and in particular the safety of walking and cycling and resist development that compromises road safety. • New development adjacent to the River Thames or GUC will be required to deliver improved access and connections to the water for walking, cycling and recreation alongside it.
Policy T7 – Public Transport	This policy requires the following: • Development to promote sustainable travel through the delivery of enhancements to existing public transport infrastructure. • New developments must provide or contribute toward improvements to public transport services, access to them and interchange between them, giving priority to areas that currently have lower levels of accessibility.

Policy Requirements	
	• Support improvements to West London Line services and enhancements to facilities that improve access to the services. Step-free access • The Council will work with partners to ensure that step-free access is delivered at all underground and rail stations, requiring new developments to contribute toward step-free access and ensure it is delivered at Underground and rail stations in the Borough where there is a redevelopment opportunity, giving priority to those which deliver the greatest overall benefits.
Policy – T8 – Car Parking	Seek to minimise reliance on private car use arising from new development and promote sustainable travel patterns by managing congestion and the supply of car parking. • Require it to be demonstrated that development will not result in any material increase in traffic congestion or on street parking pressure. • All new additional residential development must be permit free. Car parking provided in new residential development must be at or below the adopted car parking standards. • Parking in non-residential development must be for essential need only. • All parking spaces within new development to be equipped with electric vehicle charging points. • Where a development creates new on-street parking, this must be managed so that parking demand is controlled and the need for off-street parking is minimised. • Resist new public car parks and the loss of off-street coach parking.
Policy –T9 – Servicing	Servicing facilities and coach parking must be well designed built to accommodate the demands of new development and minimise the number of servicing trips required. Facilities should also be sensitively integrated into the development and the surrounding townscape. In particular, servicing activities and coach pick-up and drop-off should not give rise to traffic congestion, conflict with pedestrians or be detrimental to residential amenity. Developments must provide sufficient on-site servicing space where feasible, delivery consolidation floorspace, and coach parking to accommodate the number and type of vehicles likely to be generated and to ensure that this can take place without manoeuvring on the highway. Require a Servicing Management Plan for all sites with on-site servicing space that will control the hours of servicing, including details on how vehicles will be managed, and controls on the types and sizes of vehicles to ensure they are appropriate to the local area and are environmentally acceptable. All new developments with on-site servicing facilities must provide sufficient electric vehicle charging points for the size and number of vehicles likely to be generated. New hotel developments including significant extensions to existing hotels must provide coach drop-off and pick-up facilities and a Coach Management Plan. Where developments cannot provide onsite servicing space or coach parking, applicants must demonstrate that proposal can function satisfactorily without giving rise to adverse effects on traffic congestion, pedestrian safety, residential amenity or impact on bus routes. A Servicing Management Plan and/or Coach Management Plan will be required in these instances. Proposals for restaurants or take-aways, requiring planning permission, must be supported by a Delivery Management Plan to explain how any food delivery service would operate and to demonstrate that there would be no resultant impact upon the function of the highway. • Proposals for larger developments, must be supported by a Delivery Management Plan to explain how deliveries would be consolidated (through use of a concierge or mail office) to limit van traffic generation.

2.8 RBKC TRANSPORT AND STREET SPD

2.8.1. The Transport and Streets SPD was adopted in April 2016. The SPD sets out the Council's parking standards. Car parking standards are summarised within **Table 2-5.**

Table 2-5 – RBKC Car Parking Standards

Land Use	Standard
C3 – Flats of 2 bedrooms or less	0.5 per dwelling
Housing or flats of 3 beds or above	0.5 per dwelling
C1 – Hotels	1 Space per 40 bedrooms
A-B class	1 space per 1,500 sqm
Sheltered Housing	0.3 per dwelling
B1	Refer to London Plan
B2-B8	Refer to London Plan
D1	Refer to London Plan
D2	Refer to London Plan

2.8.2. CTMPs (Construction Traffic Management Plans) are required with planning applications for basements and with major applications for development works. RBKC provides a CTMP pro-forma template. Draft CTMPs submitted with planning applications must provide sufficient detail to demonstrate that the construction traffic and activity associated with the Proposed Development works would not cause unacceptable harm to pedestrian, cycle, vehicular and road safety, adversely affect bus or other transport operations (e.g. TfL cycle hire), significantly increase traffic congestion, nor place unreasonable inconvenience on the day to day life of those living, working and visiting nearby.

2.9 RBKC KENSAL CANALSIDE OPPORTUNITY AREA SPD

2.9.1. The Kensal Canalside Opportunity Area SPD was adopted in July 2021.The document provides guidance on the application of the Development Plan policies for the redevelopment.

2.9.2. Kensal Canalside is one of 48 Opportunity Areas within the London Plan, 2021 and the Mayor of London has designated these due to their significant capacity for development. The adopted SPD states that the Applicant will be required to demonstrate that the Proposed Development does not compromise the delivery of the development and infrastructure components that the site allocation and SPD identify for the Kensal Canalside Opportunity Area.

2.9.3. The SPD states that any future development of the Kensal Canalside will be assessed against the following principles:

- **Connected:** A well connected place for all users- pedestrians, cyclists, public transport and cars;
- **Active:** A neighbourhood formed of a series of safe, inviting and attractive streets and spaces offering opportunities for all to meet, play and spend time;
- **Liveable**: A high-quality neighbourhood where people have equal access to homes, workspace and local amenities;
- **High quality**: A high quality place with new architectural character that reads as a natural extension of the borough;

- **Sustainable**: A resilient and sustainable development that strives to achieve carbon neutral targets throughout its lifecycle; and
- **Healthy**: A neighbourhood that enriches the local area, promotes healthy living, healthy streets and physical and mental wellbeing.

2.9.4. The SPD includes a number of key policies which are summarised as follows:

- **CO1 –** Connections that follow the principles of Healthy Streets, inclusively designed and accessible to all;
- **CO2 –** A new well-connected neighbourhood that integrates into the existing local communities and open spaces;
- **CO3 –** New pedestrian and cycle links, with segregated cycle lanes as appropriate, that promote active travel, linking to transport hubs and the wider cycling and walking network;
- **CO4 –** Cycle docking stations as agreed with TFL at appropriate locations within the site;
- **CO5 –** A new north-south pedestrian and cycling bridge across the Great Western Railway
- **CO6 –** New connections and improved access to the towpath with a pedestrian bridge over the GUC;
- **CO7 –** A design that safeguards a new Elizabeth Line station;
- **CO8 –** Improved access to public transport including an enhanced and expanded bus network;
- **CO9 –** A safe and improved junction on Ladbroke Grove and a new junction at Barlby Road; and
- **SS2 –** A residential development which seeks to minimise car usage and prioritises sustainable forms of transport.

2.9.5. A summary of the transport policy compliance is provided in **Table 2-6**.

Table 2-6 – Summary of Transport Policies

Summary of Transport Policy Compliance	
NPPF	The Proposed Development complies with the NPPF policies through the following: • The development seeks to promote active and sustainable travel by providing fit for purpose pedestrian and cyclist spaces within the site and linking to wider networks, and the development will improve the adjacent Canal side tow path route. • The development will provide reduced car parking spaces for the Sainsbury's store and residential car parking as well as Blue Badge spaces will be provided in accordance with the London Plan and local RBKC policies. • The main access via Canal Way junction will be improved for better access for pedestrians and cyclists as well as to relieve potential traffic congestion as a result of the Proposed Development.

Summary of Transport Policy Compliance	
London Plan / Mayor's Transport Strategy	The Proposed Development complies with the London Plan policies through the following: • Active, inclusive and safe travel. • A more efficient use of the street network. • Improvements to air quality and the environment. • Create high density, mixed-use places. • Unlock growth potential in underdeveloped parts of the city. • Optimisation of housing within a London Plan growth area. • Car lite parking strategy due to the PTAL ranging between 0 and 5. • Provision of 3% (and up to 10% disabled parking). • Improvements to public transport to support development. • Protection and upgrade of land with transport functions. • Provision of a travel plan. • Provision of a delivery and servicing plan. • Provision of a construction management plan.
RBKC Local Plan (Reg 19)	The Proposed Development complies with the London Plan policies through the following: • Local Policies are accorded to as set out in the London Plan, where Healthy Streets is central to the overarching transport strategy. • Provides new development in PTAL of 4 or above. • Active travel is at the centre of the proposals. • Vibrant and accessible open spaces and opportunity for outdoor activities is promoted in the masterplan design. • The site protects, refurbishes and reprovides land with transport functions including bus facilities and new cycle facilities. • Servicing is provided on street in dedicated servicing bays with adequate turning and loading areas. • Streets are designed in accordance with the Streetscape Guidance.

3 TRANSPORT PLANNING FOR PEOPLE

3.1 INTRODUCTION

3.1.1. This chapter identifies who the Proposed Development will be for and their likely travel trends. This includes the most likely travel patterns and characteristics for each of the different users of the Proposed Development; with a focus on sustainable modes of travel (walk, cycle and public transport), owing to the 'car light' nature of the proposals.

3.2 WHO IS THE DEVELOPMENT FOR?

3.2.1. The Proposed Development will be for the following users:

- Residents living in the developments and locals visiting the supporting retail and community uses;
- Employees and staff working within the new buildings; and
- People travelling through and past the development.

3.3 TRAVEL IN LONDON AND KENSINGTON

3.3.1. The following section reports the travel trends in London and sets the Borough specific context in relation to when future site users will travel. The London Travel Demand Survey (LTDS) Reports summarise trends and developments relating to travel in London. This document reports on the overall trend in travel demand and travel by mode.

3.4 MODE OF TRAVEL

3.4.1. Mode shares reflect the choices that people make for travel in London, given the connectivity provided by the transport networks. The Mayor's aim for 2041 is for 80 per cent of trips in London to be made by active, efficient and sustainable modes (walking, cycling and public transport).

3.4.2. Since 2001 cycling and public transport modes have registered a strong growth in mode share which, coupled with the decrease in private car as a mode, is a positive trend supportive the ambitious policy objective of the Mayor's Transport Strategy.

3.4.3. Overall, the active, efficient and sustainable mode share, at the trip level, has increased form 52% in year 2000 to 62.7% in 2017.

3.4.4. Within RBKC, according to LTDS 11, the overall sustainable mode share is 79.2%, as follows:

- Walking – 43.5%
- Cycling – 3.2%
- Public Transport – 32.5%

3.4.5. Within the RBKC, the mode share for active and sustainable travel therefore only needs to increase by 0.8% in line with the London wide objectives for sustainable trips and by 15.8% to be in line with central London targets.

3.4.6. More recently the COVID-19 pandemic has led to a major shift in travel behaviours. The general pattern of change relates to more flexible working patterns, greater working from home, and commuter travel during a more extended AM and PM peak. As a result, ticketing and pricing structure are changing, as are timetables, in order to meet these changing travel patterns. Some employers are requesting that their staff return to work on the majority of days, with people working on average two to three days a week in the office. Some companies on the other hand are giving their staff full flexibility.

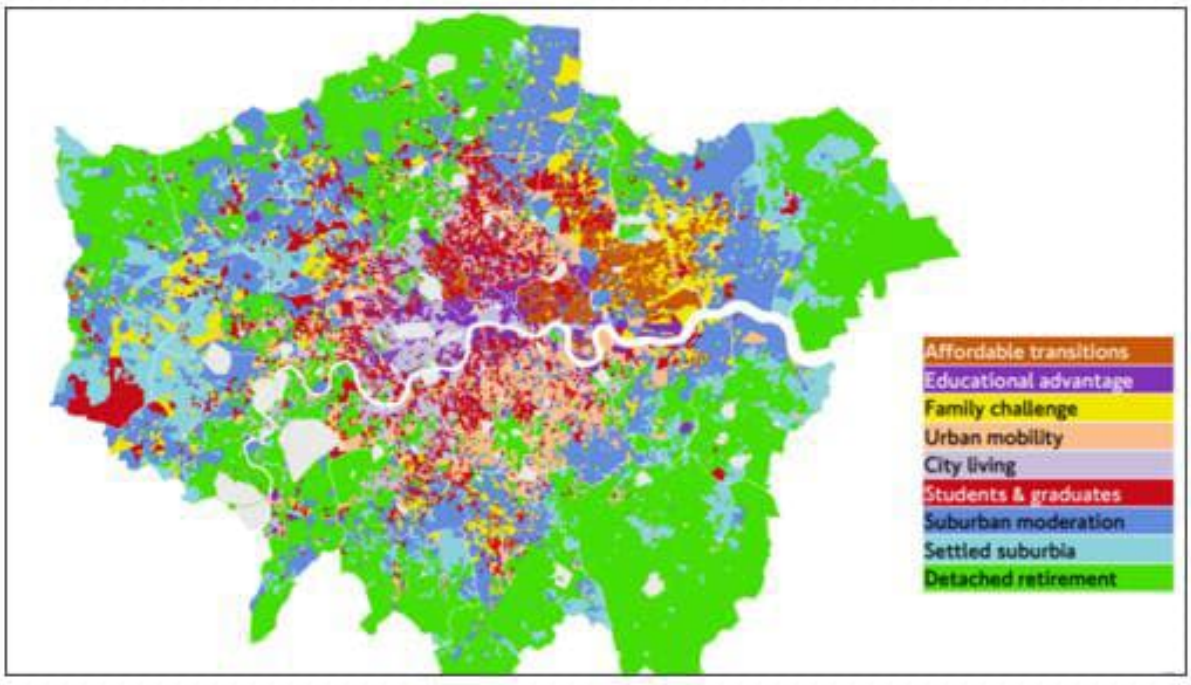
3.4.7. These changes in behaviour have resulted in new flexible working patterns, and changes in demand. For the Proposed Development this will mean a lower peak hour demand and internalised trips and a requirement for more co-working spaces within buildings, either for residents, or for private commercial operators.

3.5 TRANSPORT CLASSIFICATION OF LONDONERS (TCOL)

3.5.1. As part of the ongoing commitment to monitor the London's travel trends TfL published the Transport Classification of Londoners, (TcoL) report in 2017.

3.5.2. TcoL is a study presenting a multi-modal segmentation of Londoners on the basis of the travel choices and the motivations of those travel choices. These segments were aggregated into nine key groups, the distribution of these across London and is shown in **Figure 3-1**.

Figure 3-1 – TfL Classifications of Londoners



3.5.4. **Table 3-1** shows the Transport of Londoner's profiles.

Table 3-1 – Transport Classification of Londoners Profiles

Segments	Family Type	Mode of Travel	Level of Change
Affordable Transitions	New jobs & families	Low car, high bus, walk, cycle	Highest level of change
City Living	High incomes	High PT esp. Tube/active travel	Average level of change
Detached Retirement	Empty Nest'/retired	Very high car	Very low levels of change
Educational Advantage	Well educated	High income High PT/ low car	Higher level of change
Students & Graduates	Low car	High bus/walk	Average level of change
Family Challenge	Low income families	High bus, average others	Higher level of change
Settled Suburbia	Lower income families	High car	Below average level of change
Suburban Moderation	Families with children	High car, some bus	Average level of change
Urban Mobility	Young workers, good salary	Low car, high cycle/PT	Above average change

3.5.5. **Table 3-2** shows the Transport Classification of Londoner's profile for RBKC.

Table 3-2 –Transport Classification of Londoners Profile for RBKC

Borough	RBKC
Affordable transitions	0%
City living	51%
Detached retirement	3%
Educational advantage	24%
Family challenge	0%
Settled suburbia	0%
Students & graduates	12%
Suburban moderation	0%

Urban mobility	10%
Total	100%

3.5.6. The RBKC profile shows the largest share of residents fall within the City Living segment (51%) followed by Educational Advantage (24%). These categories, as presented within this section, have an average and higher level of change respectively towards modal shift.

3.5.7. The 'City Living' segment have very high levels of London Underground use while also above average use of bus, rail, walking and cycling.

3.5.8. The 'City Living' current mode share attitudes compared to London are:

- Car driver – below average;
- Bus – above average;
- Rail – above average;
- Tube – well above average;
- Walk – well above average; and
- Cycle – above average.

3.5.9. People in this segment have the following motivations leading to travel behaviour change:

- Lifestyle changes;
- Health & fitness;
- Changes to roads and driving;
- Changes to public transport; and
- Money.

3.5.10. Those in the 'Educational Advantage' segment, which is also identified in the nearby areas of the Proposed Development site, rely on public transport and walking, with very low car use. They have a high propensity for change.

3.5.11. The 'Educational Advantage' current mode share attitudes compared to London are:

- Car driver – well below average;
- Bus – well above average;
- Rail – average;
- Tube – well above average;
- Walk – well above average; and
- Cycle – above average.

3.5.12. People in this segment are mainly living in central London and tend to be highly educated with above average incomes. They have a low incidence of having children living in the household. The motivations leading to travel behaviour change are identified as:

- Health & fitness;
- Lifestyle changes;
- Money;
- Changes to public transport; and

- Changes to roads and driving.

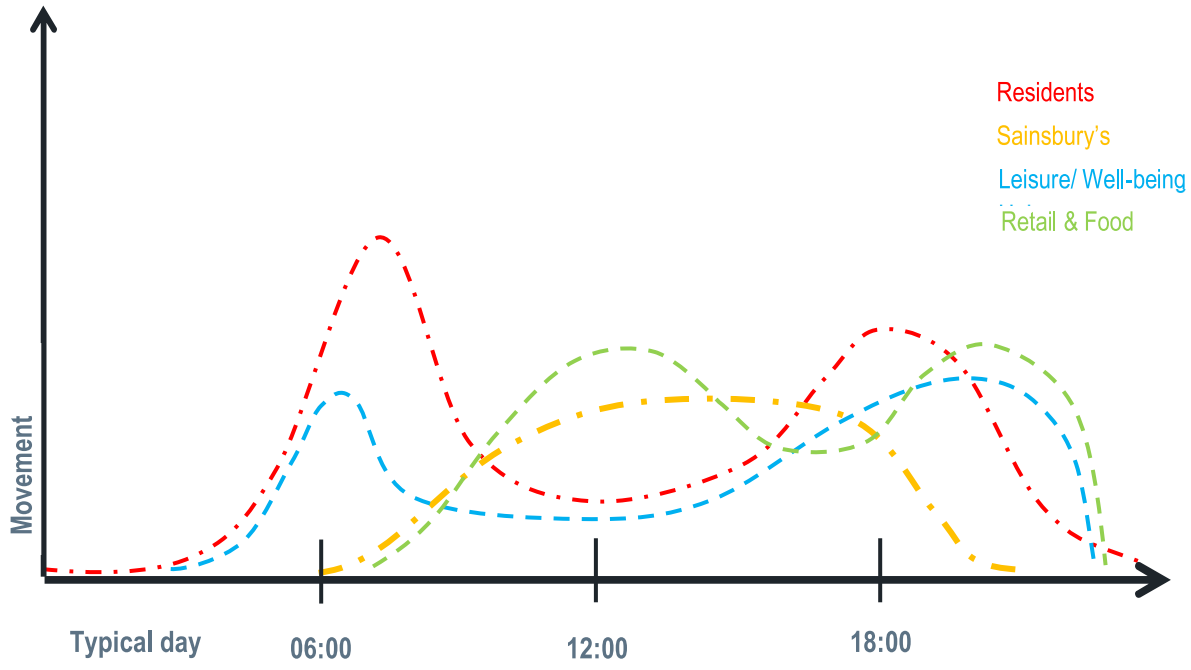
3.6 PROPOSED DEVELOPMENT OCCUPIERS

RESIDENTS

3.6.1. The Proposed Development seeks to provide up to 2,519 residential dwellings, with a new Sainsbury's store and flexible non-residential uses. The residential element of the scheme is to be car-lite including provision for active and passive blue badge parking. As such, the vast majority of the future resident's trips will either be on foot, (including towards London Underground/Overground and rail), by bus or by bicycle. During a typical weekday, these trips will be outbound in the morning and inbound trips in the evening for residents and retail and leisure trips activity through the day.

3.6.2. An indicative profile of movement is demonstrated in **Figure 3-2**.

Figure 3-2 – Indicative Movement Profile



3.6.3. There are numerous amenities within a short distance from the site, these are considered in more detail in the Active Travel Zone Assessment, which includes a number of maps. The amenities surrounding and within the Proposed Development are:

- Retail:
  - Sainsbury's store
  - Ladbroke Grove / Portobello Road
  - Kensal Rise High Street
- Leisure:
  - Little Wormwood Scrubs

- Moberly Leisure Centre

- Education:
  - Ark Brunel Primary Academy School
  - Barlby Primary School
  - St Marys Catholic Primary School
- Healthcare:
  - GP's
  - Dentists
- Religious centres
- Transport:
  - Ladbroke Grove station
  - Kensal Green station
  - Kensal Rise station
  - Old Oak Common station
  - Various bus stops

3.6.4. As such, it is targeted that a high proportion of journeys are taken by sustainable and active travel modes.

RETAIL/ LEISURE/ FLEXIBLE WORKSPACE

3.6.5. As outlined in the description of development and accommodation schedule the proposals seek to provide an element of non-residential retail, leisure and flexible workspace uses. For this assessment the existing Sainsbury's store will be the main trip generator. The improved public realm and mix of other retail and flexible commercial and leisure uses will provide opportunities for linked trips to/ from all non-residential uses including Sainsbury's and the residential units which will result in more localised movements within the site. The surrounding communities will be able to also access the retail/ leisure and flexible workspace by means of sustainable travel.

VISITORS

3.6.6. Visitors to the development will comprise predominantly customers to the Sainsbury's store, visitors to the residential elements of the scheme, and visitors to the non-residential uses. The restrictive provision of car parking on site will ensure that trips are focused toward sustainable transport.

3.6.7. As above, it is anticipated that visitors associated with the non-residential uses, excluding the Sainsbury's store, would be made up of the local population who would naturally be travelling by sustainable modes. Taxis trips, including Uber will be likely, but any sustained demand will likely be during the evening and at weekends, outside the peak hours.

4 SITE AND SURROUNDINGS

4.1 INTRODUCTION

4.1.1. This section summarises the existing transport provision in the vicinity of the site including a review of the Public Transport Accessibility Level (PTAL) and accessibility of the site by all modes of transport.

4.1.2. The existing site provides a Sainsbury's store and surface car park, together with a petrol filling station. Other commercial uses and industrial uses are also present, together with Network Rail access to tracks. A fuller description has been provided in chapter 1.

4.2 ACTIVE TRAVEL MODES

WALKING

4.2.1. The site is accessed by pedestrians via the GUC and Ladbroke Grove. Most amenities listed in chapter 3 are located within a 15-20-minute walking distance of the site, as demonstrated in **Figure 4-1** and in the ATZ assessment.

Figure 4-1 – Walking Isochrone

4.2.2. This 15-20 minute catchment plays well to 'the *'15 minute city'* 'and *'20 minute neighbourhood'*. which supports the earlier principles in this TA around home working, co-working and more flexible lifestyles. As such the pedestrian and cycling environment is key to attracting shorter local journeys.

4.2.3. In addition, the site is within a short 15 minute cycle journey of Paddington, Old Oak Common and Portobello Road Market.

4.2.4. In line with best practice the most prominent walking routes to key amenities have been assessed in the ATZ assessment, the results of which are presented in chapter 6.

CYCLING

4.2.5. The site is well served by cycle routes connecting to a number of destinations.

4.2.6. The cycling isochrone shown in **Figure 4-2** demonstrates the extent of the potential cycle zone within 30 minutes and below of the Proposed Development.

Figure 4-2 – Cycle Isochrone

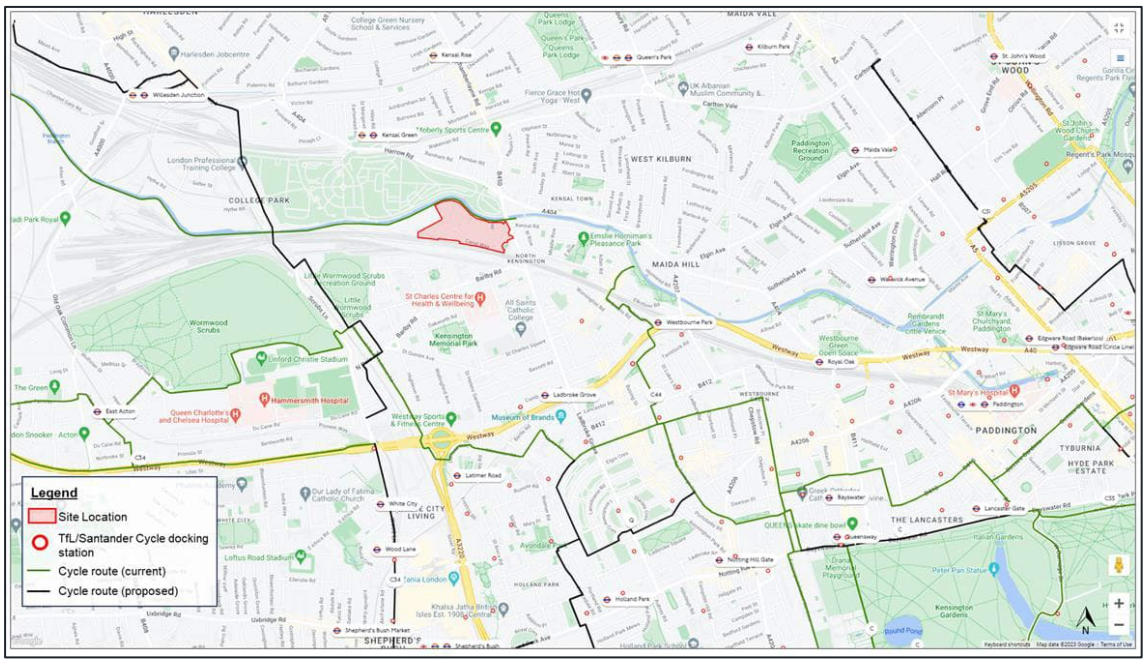
4.2.7. Directly north of the site is the canal route, which forms part of the 'Cycleway' ('Quietway') cycle network that provides signposted routes on quieter back streets for cyclists travelling at a more relaxed pace. This Quietway route provides an east to west priority cycle route from the site towards Old Oak Common Lane. The GUC is managed by the Canal and Rivers Trust (CRT), who actively encourage use of the canal for leisure activities. For cycling, the GUC does offer a connection, but cyclists are required to respect other users.

4.2.8. Improvements have been undertaken on the towpath between Hayes and Stockley Park and further upgrades are expected over time as new developments come forward, and as a result of local authority funded works.

4.2.9. On the B450 Ladbroke Grove an advisory cycle lane is provided along both sides of the road between Ladbroke Grove station to the south and the junction with Harrow Road to the north.

4.2.10. Existing TfL cycle hire stations are located within a short walking distance of around 15 minutes from the site on St Mark's Road and Bevington Road as shown along with TfL identified Cycleways in **Figure 4-3.**

Figure 4-3 – Existing Cycleways



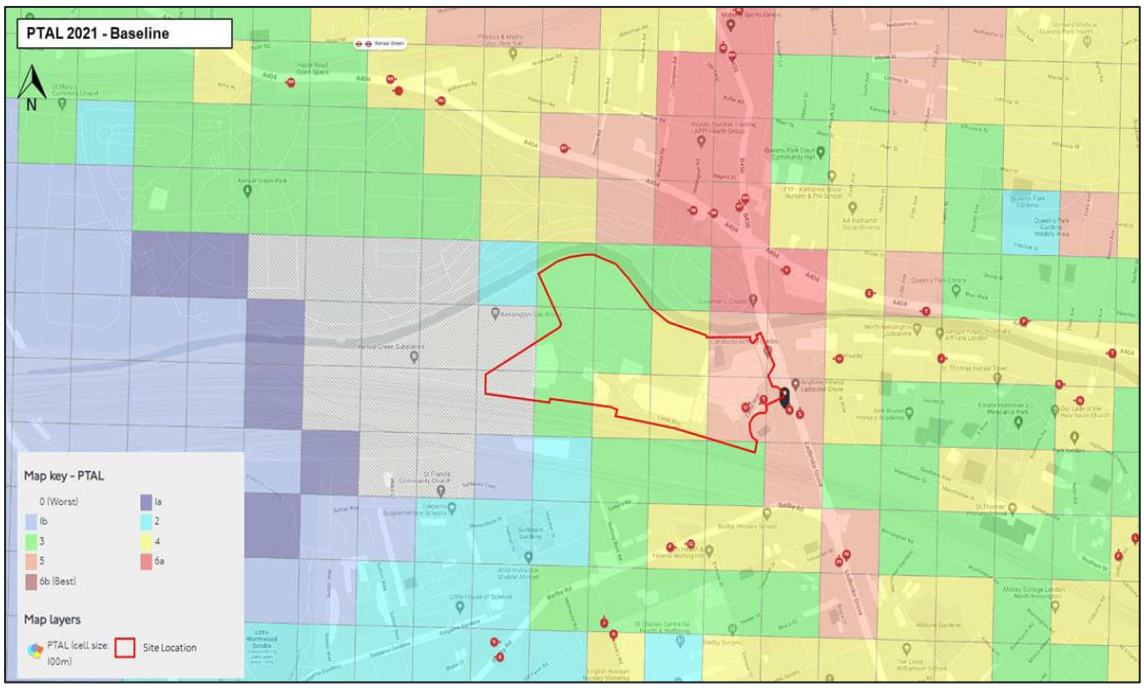
4.3 PUBLIC TRANSPORT

ACCESSIBILITY

4.3.1. The Public Transport Accessibility Level (PTAL) is a TfL methodology which measures how accessible a location within London is to local public transport services. PTALs are scored from '1' or 'very poor' to '6' or 'excellent'. It should be noted that whilst this is a useful measure of accessibility, at this site the PTAL changes very quickly across only a short distance, and as a result this should be considered against actual walk, cycle and bus journey times, which are relatively short; between 10-15 minutes on average to most transport connections and amenities.

4.3.2. The PTAL of the site currently varies from between two in the far western end of the site to five at the main site access on Canal Way, and along Ladbroke Grove. Further west into the site, the absence of walking routes and public transport services, causes the PTAL to decrease, highlighting a lack of public transport accessibility currently within the majority of the site. The existing PTAL is shown in **Figure 4-4**.

Figure 4-4 – Existing PTAL (2021)



BUSES

4.3.3. The site is currently served by seven bus services which access the site via Canal Way, providing access to the Sainsbury's store. The bus routes available serve multiple destinations including nearby London Underground and London Overground stations.

4.3.4. The bus routes and frequency of services are shown in **Table 4-1**.

4.3.5. The bus routes 295 and 452 (temporarily) are terminating routes within the site. The remaining routes (23, 52, 70, 228 and 18 are through routes). The status of Route 452 may change as it is currently terminating on site as a temporary measure. Weekday frequencies for the bus services in the area surrounding the Proposed Development can be found in **Table 4-1.**

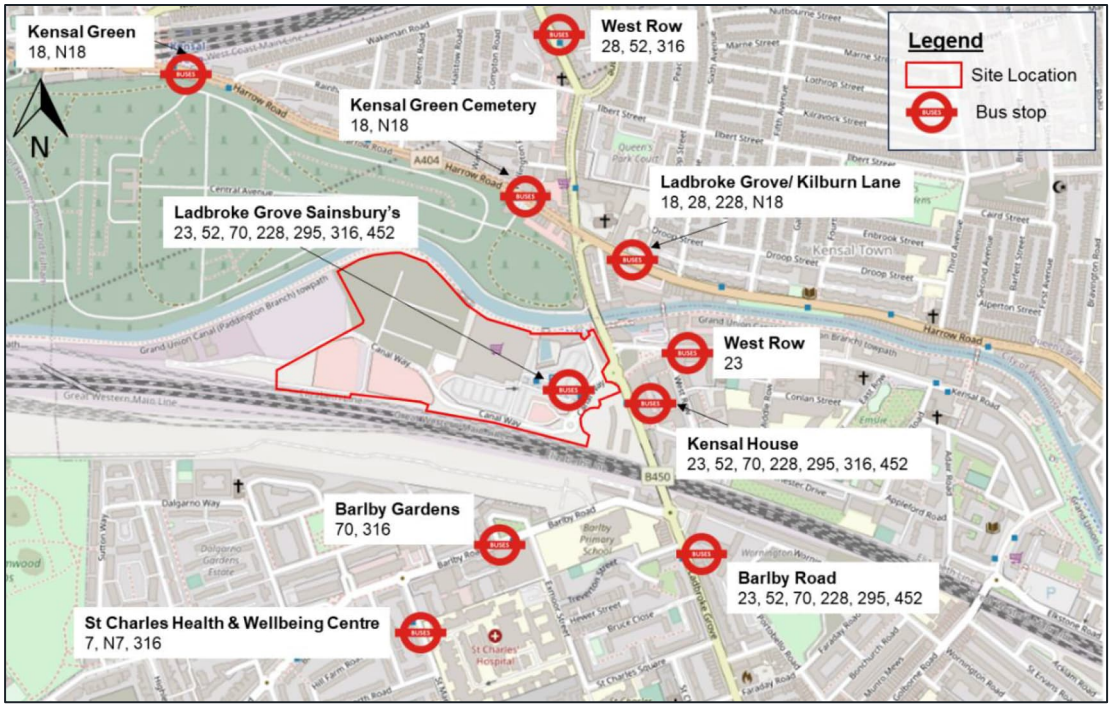
Table 4-1 – Existing Local Bus Services

Bus Route	Service Destinations	AM Peak (Frequency)	PM Peak (Frequency)
23	Westbourne Park – Ladbroke Grove – Westbourne Grove – Padding–on – Marble Arch – Kensing–on – Hammersmith	7	8
52 (24hr)	Willesden – Kensal Rise – Ladbroke Grove – Notting Hill Gate – Kensing–on – Knightsbridge – Victoria	7	7
70	Chiswick Business Park – Acton – East Acton – North Kensing–on – Ladbroke Grove – Westbourne Park – Kensing–on – South Kensington	6	6
228	Park Ro–al – Willesden Junction – East Acton – Uxbridge Road – White City – Holland Park – Ladbroke Grove – Harrow R–ad – Maida Hill Chippenham Gardens	3	3

295	Ladbroke Grove – Shepherd's Bush – Hammersmith – Fulham – Clapham Junction	7	7
316	Cricklewood – Kilburn – Queen's Park – Ladbroke Grove – North Kensington – Latimer Road Station – Shepherd's Bush – White City	6	6
452	Kensal Rise – Ladbroke Grove – Notting Hill Gate – Kensington – Knightsbridge – Chelsea Bridge – Queenstown Road – Wandsworth Road – Vauxhall	7	6
18	Sudbury – Wembley – Kensal Green – Baker Street Station – Euston	14	13

4.3.6. **Figure 4-5** shows the existing bus stop locations and bus routes within the vicinity of the site.

Figure 4-5 – Bus Stop Locations and Bus Routes



LONDON UNDERGROUND, OVERGROUND, AND RAIL

4.3.7. The site is surrounded by a number of stations offering access to London Underground, London Overground, and mainline rail services, which are listed in **Table 4-2**.

4.3.8. It is considered that travel by London Underground and London Overground represents an attractive mode of travel and wide range of options from different stations to residents and visitors of the site given the accessibility and frequency of services to central London destinations.

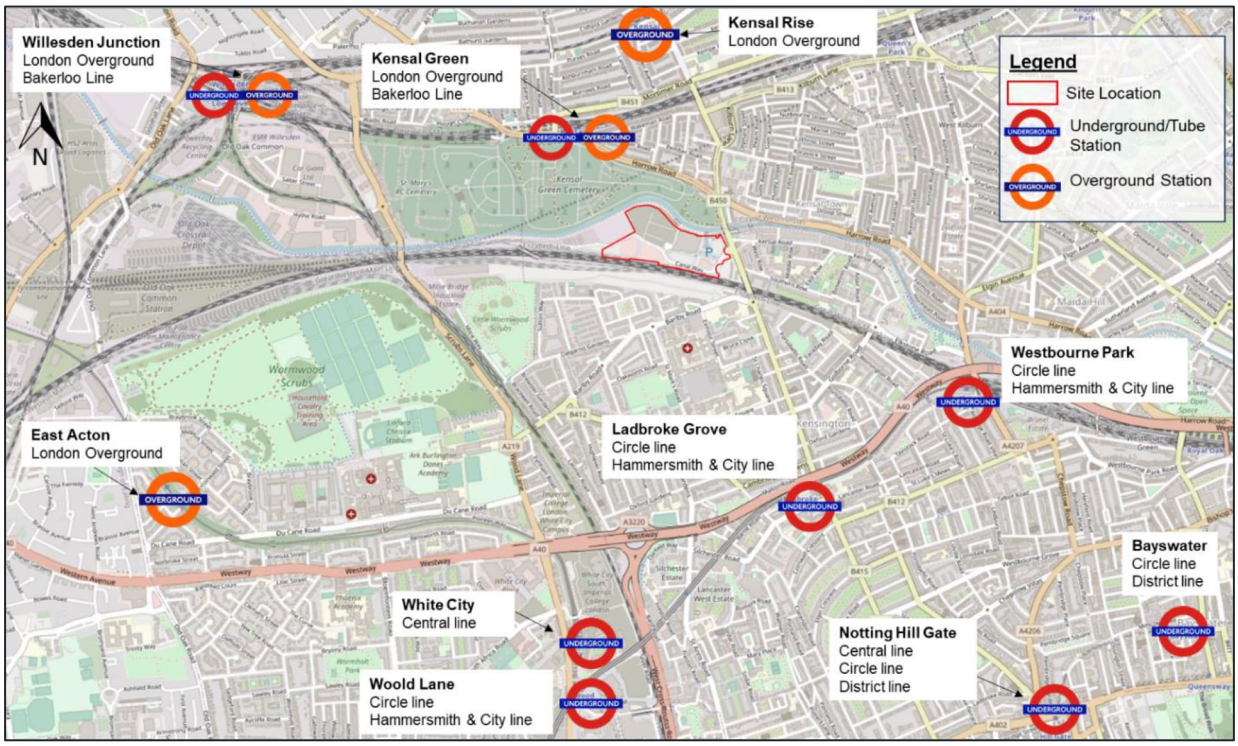
4.3.9. The closest London Underground stations are Kensal Green and Ladbroke Grove which are within a 15-minute walk from the site. These stations can also be accessed via the bus services located on Canal Way within 5-10 mins from the development.

Table 4-2 – Summary of Existing Rail / Underground Station Services

Station	Service	Approximate Weekday Frequency	
		AM Peak	PM Peak
Kensal Green	Bakerloo Line	20	20
	Overground	8	8
Kensal Rise	Overground	8	8
Ladbroke Grove	Circle and Hammersmith & City Lines	25	25
Westbourne Park		25	25
Notting Hill Gate	Central	25	25
	Circle	25	25
	District	25	25
Total Services		**161**	**161**

4.3.10. **Figure 4-6** shows the location of all stations in proximity to the site.

Figure 4-6 – Rail Stations and Services



FUTURE RAILWAY AND LONDON UNDERGOUND SERVICES

4.3.11. The new Old Oak Common (OOC) station is located west of the site approximately 3km and circa 40mins walking time. The station will open between 2029 and 2036 with HS2 serving the site from 2036 and will provide residents and visitors with access to High Speed and Elizabeth Line services.

4.3.12. Access to the OOC station is along the GUC and from Barlby Road and Scrubs Lane, therefore encouraging residents and visitors to walk or cycle to the station via the Canal route towpath.

4.3.13. There has been a long term aspiration of the Royal Borough to include an Elizabeth Line station on the site. Since the site was first designated a large body of work was undertaken to consider the viability of a new Elizabeth Line station from an operational and cost perspective. Up until this time, the case for the new station has not been made successfully. Now that the Elizabeth Line is open, there are currently no commitments to changing the stopping patters of adding new stations. The viability of doing so has become much more challenging due to entering a new economic cycle where other priorities for public funding exist. No further feasibility work in planned by RBKC / TfL and this is recognised in the Local Plan Review.

4.3.14. High Speed 2 services from OOC will connect to Elizabeth Line/ London Overground services via a new interchange, providing an attractive location for employment and wider UK travel to the west of the Proposed Development.

4.4 EXISTING HIGHWAY NETWORK

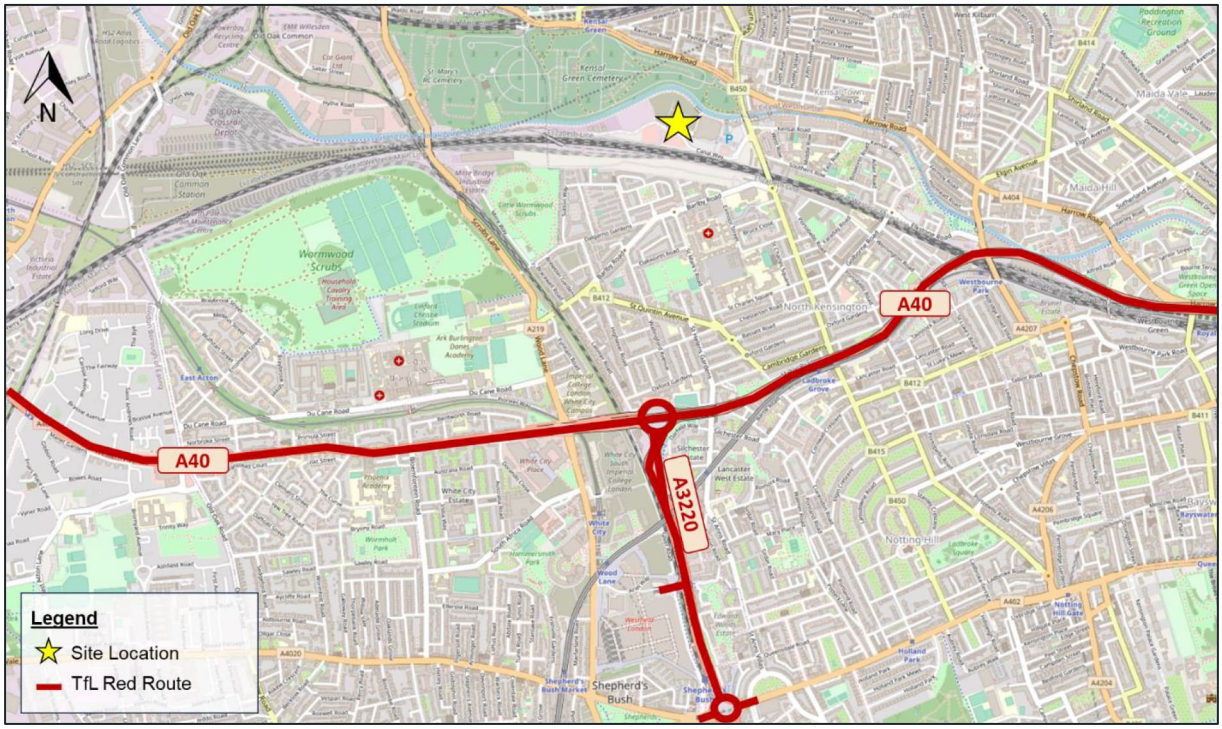
4.4.1. The site is accessed via Canal Way which forms a mini-roundabout junction with Ladbroke Grove. Ladbroke Grove is a major distributor road with on-street parking and bus stops on both sides of the road. There are advisory cycle lanes along both sides of Ladbroke Grove within the vicinity of the site.

4.4.2. The A404 Harrow Road north of the site, is an arterial connector which provides the main east-west route in proximity to the site. It provides strategic access to the A406 to the northwest and the A40 Westway to the southeast. The A404 Harrow Road is a two-way single carriageway with a 30mph speed limit, with one lane per direction and a bus only route on the eastbound lane.

4.4.3. The A40 which is south of the site boundary is part of the TLRN and is a ‘Red Route’ with parking and loading activity prohibited. The A40 has a 40mph speed limit with three lanes in each direction.

4.4.4. **Figure 4-7** shows the location of the Red Route in proximity to the site.

Figure 4-7 – TfL Red Routes



EXISTING TRAFFIC FLOWS

4.4.5. A set of manual classified turning count surveys were commissioned by RBKC and their consultants (Project Centre) and agreed with TfL in July 2019 at six key locations, as follows:

- A404 Harrow Road / B450 Ladbroke Grove;
- Kensal Road / B450 Ladbroke Grove;
- Canal Way / B450 Ladbroke Grove mini-roundabout;
- Barlby Road / B450 Ladbroke Grove mini-roundabout; and
- Canal Way / Petrol Filling Station Entrance and Exit.

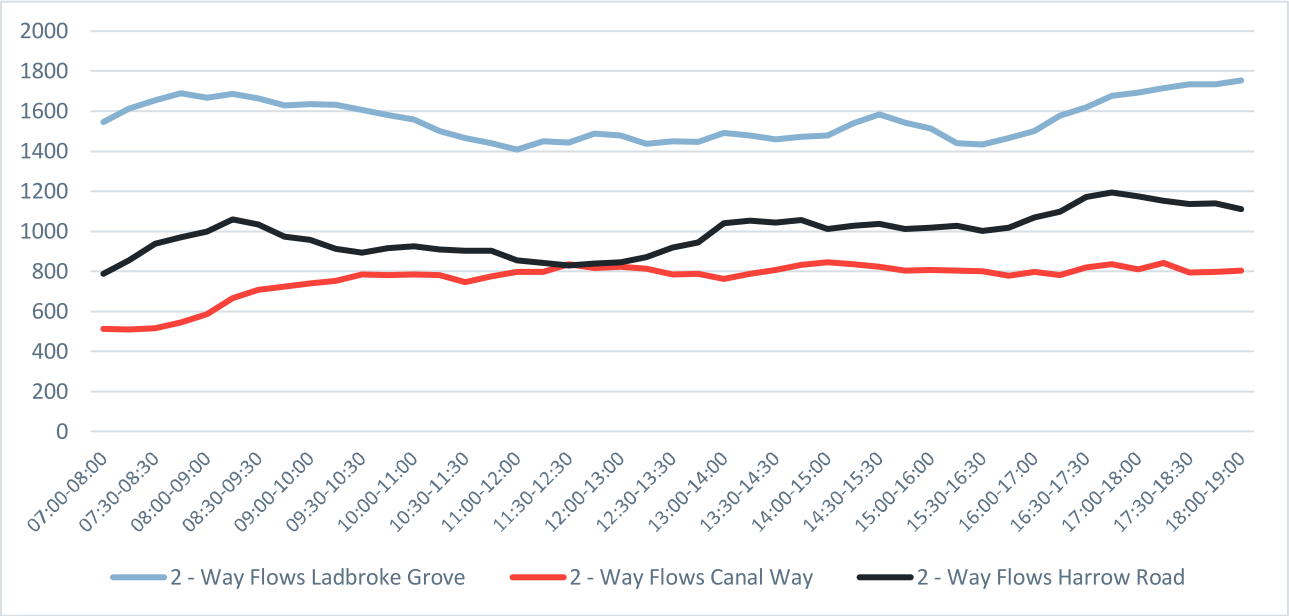
4.4.6. The manual classified turning count surveys listed above were supported by the following surveys:

- Queue length surveys;
- Pedestrian and cyclist count surveys
- Origin-Destination surveys; and
- Journey time surveys.

4.4.7. A plan of the survey locations and methodology is provided in the Project Centre Survey Specification Report provided in **Appendix C**.

4.4.8. **Figure 4-8** shows the results of the traffic surveys undertaken on Wednesday 03 July 2019 to identify the network peak hours and compare the volume of traffic on each key road on the local highway network.

Figure 4-8 – Wednesday 03 July 2019 Traffic Survey Results



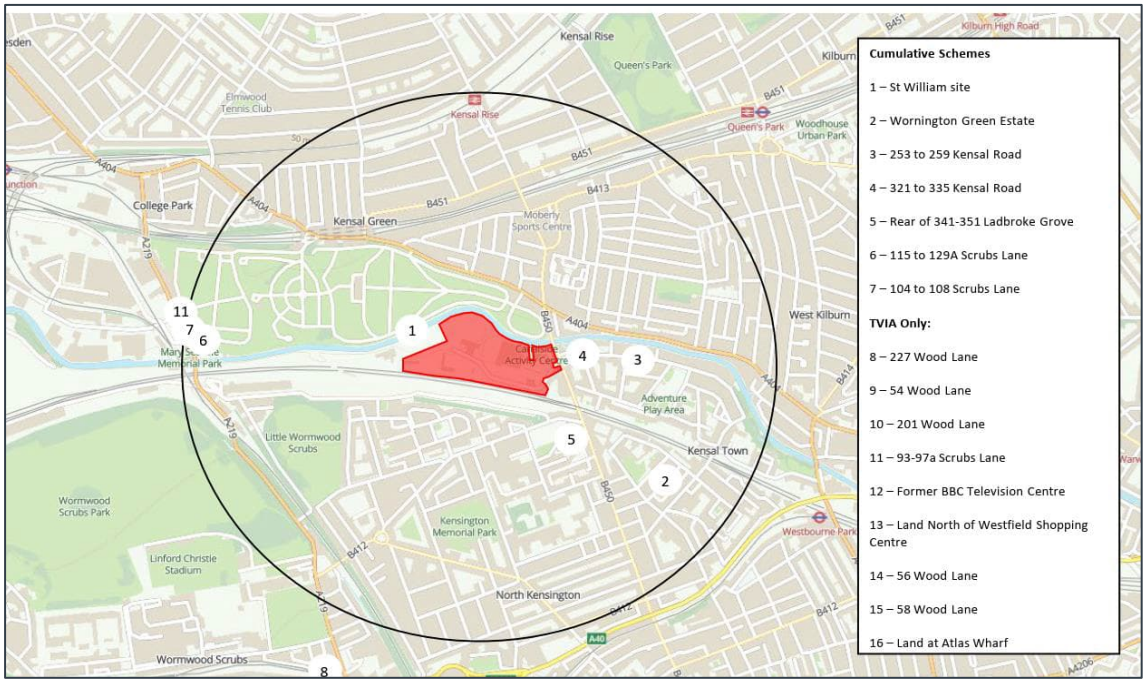
4.4.9. **Figure 4-8** shows that Ladbroke Grove has the highest volume of traffic compared to Harrow Road and Canal Way. The AM peak hour is observed between 0800 and 0900 hours and the PM peak hour is between 1700 and 1800 hours.

4.4.10. In addition, traffic surveys at the Sainsbury's store car park were undertaken in April 2018 over a period of one week at the entrance and exit to the car park.

COMMITTED DEVELOPMENTS

4.4.11. A number of committed developments have been identified through consultation with the local planning authority. These are illustrated in **Figure 4-9**.

Figure 4-9 – Committed Developments



4.5 STRATEGIC DEVELOPMENTS

OLD OAK COMMON AND ROYAL PARK

4.5.1. The Old Oak and Park Royal Opportunity Area is one of the largest UK development areas with capacity to deliver 56,000 jobs and 25,500 homes. The High Speed 2 transport hub is located just 2.3km from the site with access to the Elizabeth Line, and wider connectivity with the north and west of England.

4.5.2. The station will act as a catalyst for economic regeneration given the expected 250,000 passengers that will use the service every day. Moreover, it will increase the appeal of the site for future residents given the immediate access available to multiple parts of the UK and central London.

COMMITTED AND FORECAST INFRASTRUCTURE

Cycleways (Quietways and Cycle Superhighways)

4.5.3. Cycleways are routes that link communities and destinations across London in one cycle network. The nearest cycleways to the site is Quietway 16 which follows an east-west alignment north of the site along the canal towpath. Recent improvements to this route have been funded by TfL between Hayes and Stockley Park to supplement previous route improvements between Ladbroke Grove and Old Oak Lane.

4.5.4. Discussions with TfL and RBKC during pre-application stage identified the following cycling improvements which have been considered and are being delivered through the application or may be sought by RBKC and TfL:

- Wider canal towpath improvements;
- Connections to cycleway C44;

- Connections to cycleway C27;
- Cycleway route 8 feasibility design linking to cycleway C27;
- Modest wider cycle improvements along Ladbroke Grove.

5 DEVELOPMENT PROPOSALS

5.1 INTRODUCTION

5.1.1. The key aspects of the Proposed Development are as follows:

- 2,519 residential units;
- 22,955 sqm GIA Sainsbury's store;
- Up to 14,500 sqm GIA flexible non-residential commercial and leisure uses;
- 227 retail parking spaces (reduced from 396), a reduction of 169 spaces;
- 'Car lite' residential parking (0.14 spaces per residential unit);
- London Plan compliant cycle parking;
- Access, servicing, landscaping and pedestrian and cycle improvements; and
- New improved bus facilities, bus stops and bus route extensions.

5.1.2. The Proposed Development brings forward regeneration of a previously developed site, by converting excess and inefficient surface level car parking and industrial land into much needed housing, including affordable housing for RBKC and for London. The site is within the KCOA which has been allocated to deliver a minimum of 3,500 new homes and 2,000 new jobs, the majority of which are delivered by the Proposed Development.

DESCRIPTION OF DEVELOPMENT

5.1.3. The Proposed Development is seeking permission for 2,519 residential dwellings, up to 14,500 sqm GIA of flexible non-residential uses (retail, commercial, leisure and community uses), and a re-provided Sainsbury's store of 22,955 sqm GIA. The development is enabled by relocation of the Sainsbury's store, reduction in parking, and removal of the PFS. The proposed description of development is as follows:

"A hybrid application for the demolition of all existing buildings and structures to facilitate a mixed use development comprising residential, retail, commercial and community uses with associated infrastructure.

The outline element of the scheme will include residential floorspace and ancillary residential facilities (Class C3) and non-residential floorspace comprising flexible commercial, community and sui generis floorspace (Class E / Class F2 / Sui Generis), the provision of new pedestrian and vehicular access, open space, landscaping, car and cycle parking and other associated infrastructure works with all matters reserved for future consideration.

The detailed element of the scheme will comprise a large retail store and ancillary facilities (Class E(a)), small units at ground floor level for Commercial, Business and Service uses Leisure floorspace (Class E(d)), residential facilities (Class C3), improvements to existing site access at Ladbroke Grove, provision of new pedestrian and vehicular access, internal roads and associated landscaping, car and cycle parking and associated infrastructure works including remediation".

5.1.4. The Proposed Development also seeks to meet TfL and the Mayors' wider ambition to encourage more people to walk, cycle and use public transport, as presented in chapter 2 of this report. Sustainable transport is a key contributor in resolving the challenges of climate change, poor air quality and inactivity, and has been embedded into the layout of the Proposed Development.

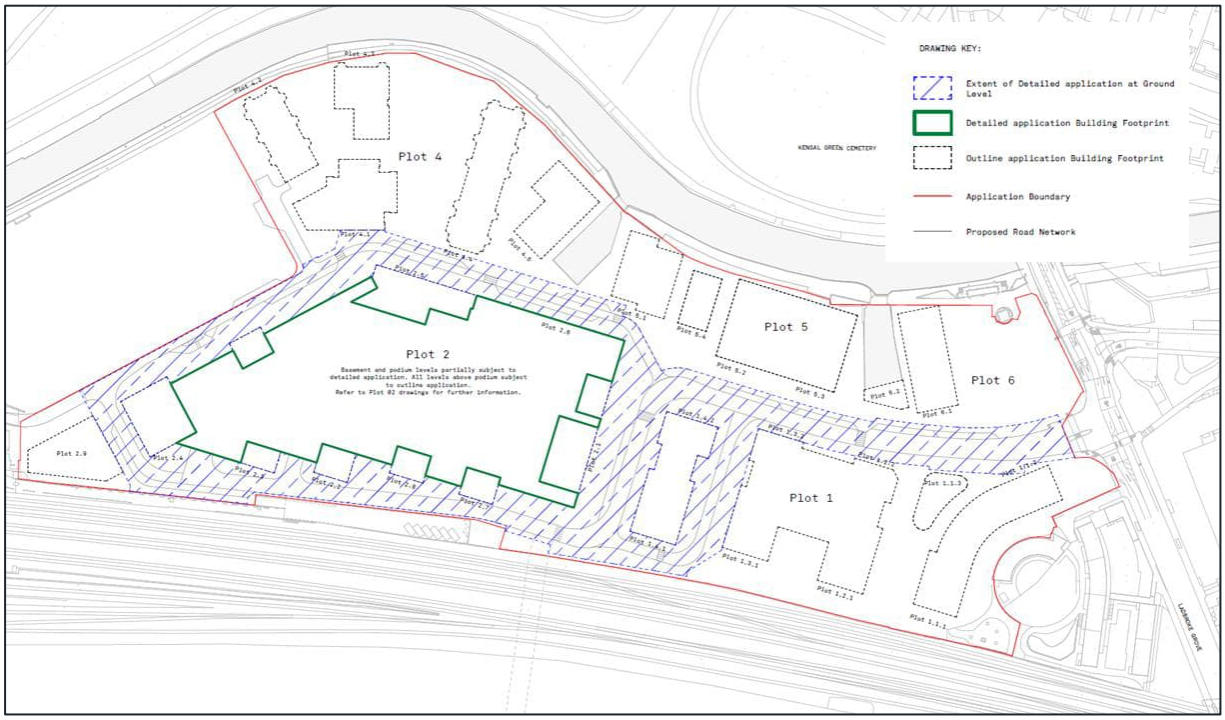
Therefore, a 'car-lite' approach is proposed for the residential development, which will include 3% active provision for disabled parking, with 20% of resident car parking spaces having access to electric vehicle charging points from the outset, the active provision. The proposals include long-stay and short-stay cycle parking for the residential, non-residential uses, and the Sainsbury's store, in addition to TfL cycle hire provision. As the proposals are largely submitted in outline, there is flexibility to provide spaces for other mobility users such as e-scooters should this become required. New modes and Mobility as a Service (MaaS) are changing the way we travel, and the Travel Plan, Parking Management Plan and Delivery and Servicing Plan can evolve to cater for new modes of travel. There is sufficient flexibility in the proposed design to accommodate these changes into the layout.

5.2 DEVELOPMENT PROPOSALS

5.2.1. As highlighted in the development description the application comprises of a hybrid planning application. The Proposed Development will take the form of five Plots; Plots 1, 2, 4, 5 and 6. Plot 3 is also within the Opportunity Area but is part of a separate planning application by a different applicant.

5.2.2. The detailed elements of the proposal as set out in the description relate to the new Sainsbury's store and other ancillary uses in Plot 2. The site layout including areas of detail and outline for the purposes of the hybrid application are shown in **Figure 5-1**.

Figure 5-1 – Illustrative Plan



5.2.3. The residential elements of the application are proposed in outline and illustrative only at this stage, the number of units by plot is set out in **Table 5-1**, with the plots locations shown in **Figure 5-1**. There will be a maximum of 2,519 residential units across the five plots. There is a mix of studio, 1, 2, 3 and 4 bed units, and town houses, with the current indicative mix shown in **Table 5-1**.

Table 5-1 – Proposed Overall Residential Development Schedule by Plot

Plot	Residential Units
1	748
2	947
4	501
5	235
6	88
Total	2,519

5.2.4. **Table 5-2** shows the proposals for the Sainsbury's store which includes a total GIA at 22,955 sqm including ancillary and the net sales area at 5,509 sqm.

Table 5-2 – Proposed Sainsbury's Store Details

	Replacement Sainsbury's Store Details
Store Footprint	1.2 ha (store footprint at ground level only. Excl. residential, offices and retails)
Total Floor Area (GIA)	Total GIA = 22,955sqm This comprises: Building footprint area: 13,341sqm Covered Service Yard: 1,620sqm Covered car park: 7,994sqm
Net sales area	5,509sqm
Concessions (And Associated Areas)	Argos – 153sqm Concession – 365sqm
Goods Online	15 Goods Online vans
Car Parking Spaces	227 spaces **(including 14 accessible, 9 parent and toddler and 12 EV spaces)**

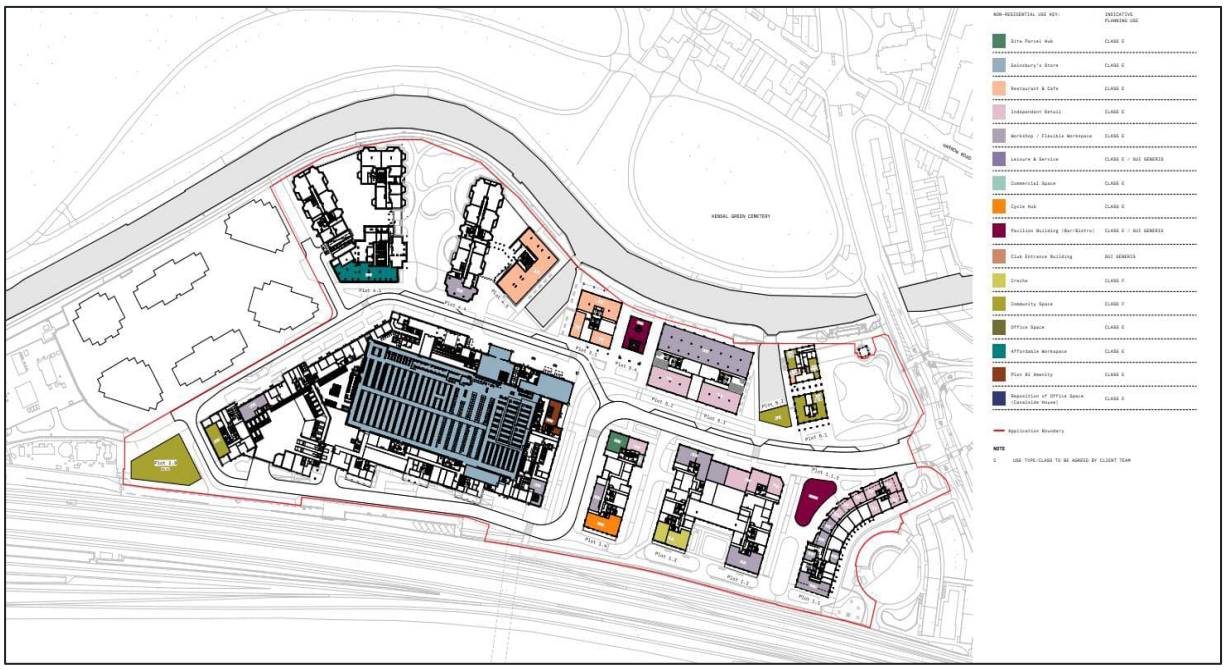
5.2.5. The non-residential elements, excluding the Sainsbury's store, are shown in **Table 5-3**, the final form of which has not been fixed but will comprise of a mixture of flexible uses up to a maximum of 14,500 sqm.

Table 5-3 – Proposed Non Residential Uses

Planning Use	Indicative Area (sqm GIA)	Min Area (sqm GIA)	Max Area (sqm GIA)
Commercial spaces – retail			
Retail – Class E(a)	1,677.20	1,000	2,500
Food and Beverage (Restaurant / Café / Drinking Establishment) – Class E(b) / Sui Generis	2,947.30	1,500	3,500
Cycle hub – Class E	212.70	0	250
Commercial spaces – leisure			
Leisure (possibly including swimming pool) – Class E(d) / Class F2(d)	1,520	500	2,000
Commercial spaces – workspace			
Flexible workspace – Class E(g)	3,339.50	3,500	5,000
Reprovided Canalside House workspace – Class E(g)	741	700	800
Community Spaces			
Community – Class F1/F2	1,145.10	500	1,500
Community leisure – Class E(d) / F1 / F2 (including indoor sports facility and reprovided Boat House facilities)	1,883	1,000	2,000
Creche – Class E(f)	225.40	0	350
Health – Class E(e)	0	0	300
Total	**13,691.20**	-	-
Class F (F1/F2) total floorspace			**Maximum 14,500 sqm**

5.2.6. An Illustrative Scheme layout has been prepared for the non-residential uses. The non-residential use strategy is illustrative with all details sought through the Reserved Matters applications and it accounts for the maximum areas in **Table 5-3**. **Figure 5-2** shows the Illustrative Scheme layout for the non-residential, with a plan also provided as **Appendix D**.

Figure 5-2 – Illustrative Scheme Layout for Non-Residential Uses



5.2.7. The Design Access Statement (DAS) submitted under separate cover within the application documents provides further detail on the proposed residential and non-residential layouts, and access strategy for each plot.

5.3 PROPOSED MOVEMENT STRATEGY

5.3.1. A multi-modal movement strategy has been developed with RBKC and TfL as part of an iterative pre-application process over a number of years.

5.3.2. The overarching priority for the new residential development, notwithstanding the need to accommodate the access to the re-provided Sainsbury's store, is to provide Healthy Streets objectives which promote active travel modes, and reduce the need for car ownership and use. The movement strategy has been developed in accordance with the direction of travel within the NPPF, London Plan, Mayor's Transport Strategy and RBKC transport planning policies.

5.3.3. A key objective of the development proposals is the important role played by Sainsbury's as an established destination, providing amenities for the surrounding community. The current store has relatively high patronage and 396 car parking spaces. Even though the store is re-provided on site, the overall parking level reduces significantly to 227, a reduction of 169 spaces, which will be provided within an underground basement. Based on the proposed trip generation and mode share assessment, the predominant first mode movement pattern for the proposed development is on foot, followed by bus and then car driver third.

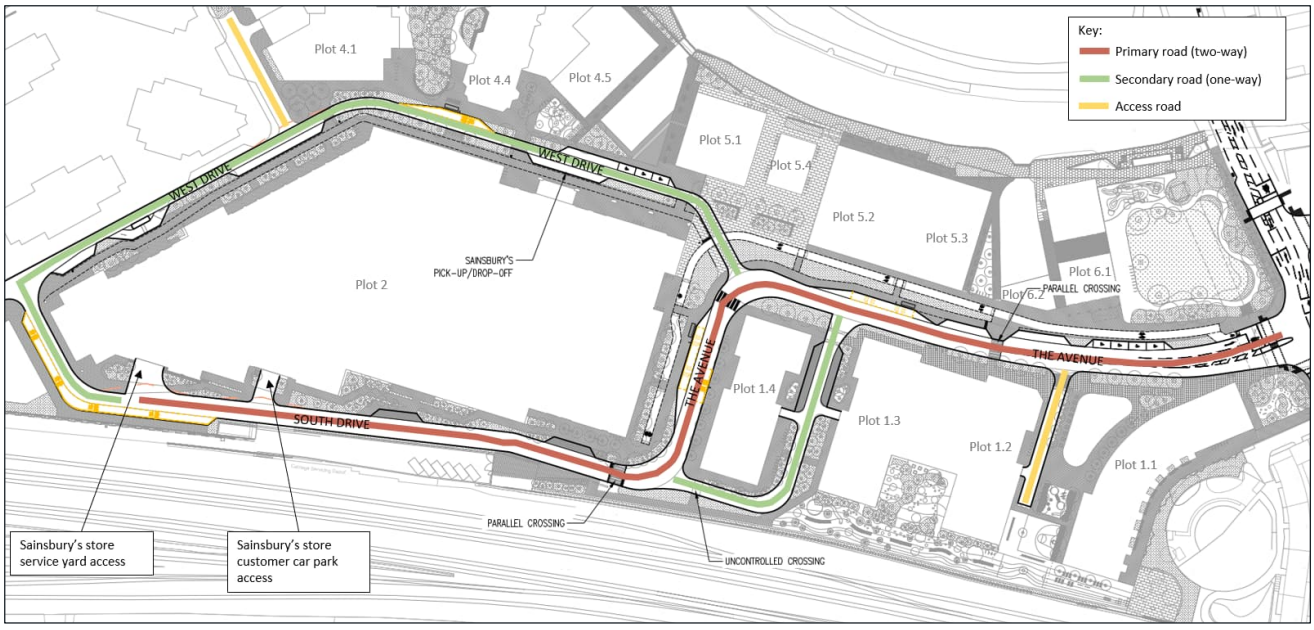
5.3.4. A new all movements signalised junction will significantly improve the safety and convenience for pedestrians, cyclists and other vulnerable road users and will incorporate dedicated cycle facilities which is not currently provided by the mini-roundabout layout. The new crossings will also enable safe movements across the main junction entrance and to the eastern side of Ladbroke Grove and Kensal Road, providing access to schools and places of interest. The site entrance is also opened up due to relocation of existing gas governors and the demolition of Canalside House.

5.3.5. A number of networks for each mode of transport will be provided across the site particularly for active travel modes. Each element of the transport strategy with associated drawings is provided below.

PROPOSED STREET LAYOUT

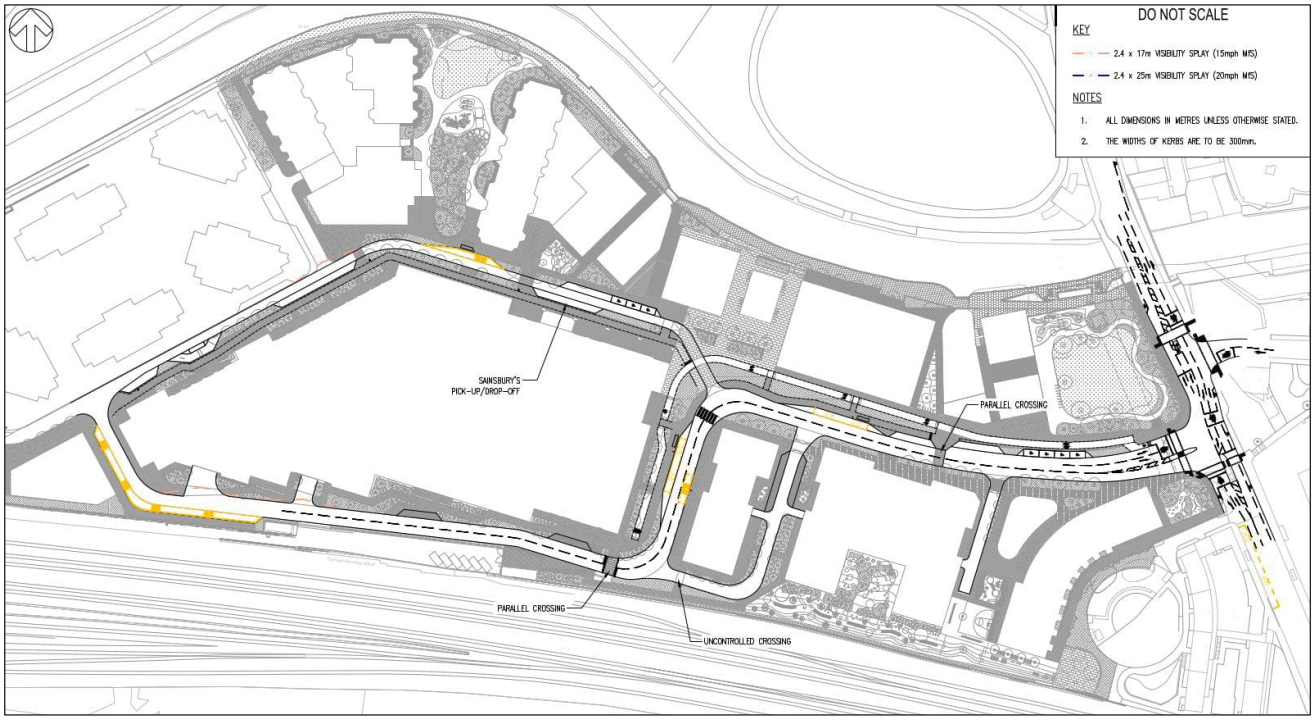
5.3.6. The proposed street layout includes a primary two-way road with a carriageway width of approximately 7.3m which would run between the junction with Ladbroke Grove and the Sainsbury's store customer car park access. The street name for the primary two-way road is The Avenue, between the junction with Ladbroke Grove up to the southeast corner of Plot 2. The street name for the two-way road is South Drive along the south edge of Plot 2. The proposed street layout also includes secondary one-way roads, one around the west and north edge of Plot 2 with a 3.7m wide carriageway, named West Drive, which would be one-way only in a clockwise direction. The second one-way street is between Plot 1.3 and Plot 1.4, with a 5m wide carriageway, and would be one-way only southbound. The proposed street layout also shows two access roads, one between Plot 1.1 and Plot 1.2, with a carriageway width of 5m, and a second access road between Plot 3 and Plot 4.1, with a carriageway width of 5.5m. **Figure 5-3** shows the general street layout as described.

Figure 5-3 - Proposed Street Layout



5.3.7. The site will be accessed via a proposed four-arm signal junction between Ladbroke Grove, The Avenue (formerly Canal Way) and Kensal Road. **Figure 5-4** shows the general arrangement plan for the proposed street layout.

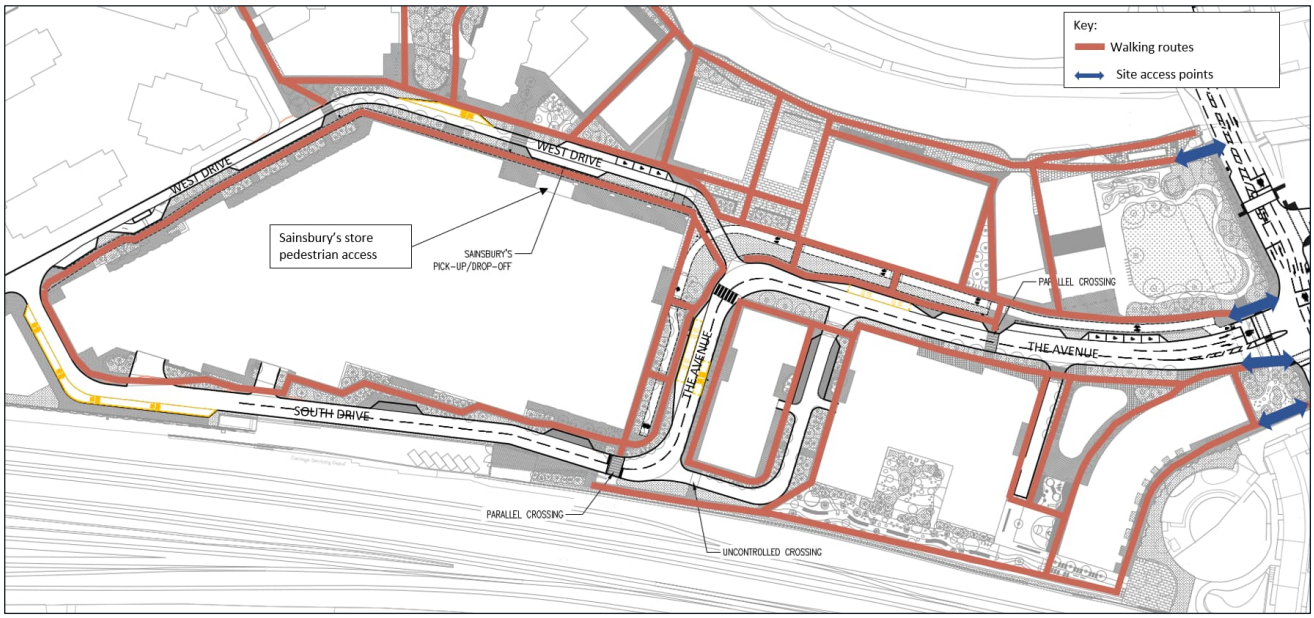
Figure 5-4 – General Arrangement Plan for Street Layout



WALKING

5.3.8. The main proposed pedestrian access into the site is via the new signal junction on Ladbroke Grove. Additional access points for pedestrians into the site are provided along the GUC and immediately south of the new signal junction. These provide access points to the site for pedestrians which avoids the main junction and may provide a more suitable desire line. The proposed movement strategy for pedestrians is shown in **Figure 5-5**.

Figure 5-5 – Proposed Walking Routes



5.3.9. The Proposed Development includes footways and footpaths across the site to encourage walking and provide a permeable site. A wide range of visually interesting and high-quality materials will be used, and all routes will be Disability Discrimination Act / Equality Act compliant, to ensure they are suitable for all.

5.3.10. A series of formal and informal crossing points are provided on pedestrian desire lines where feasible. The crossings are generously sized and will be provided either by a zebra crossing or parallel crossings for both pedestrians and cyclists.

5.3.11. The Applicant is working together with RBKC and other third parties, including the owners of the St William Development site and the North Pole site, to seek to deliver the canal and rail bridges, as outlined in the KCOA. A bridge over the canal will be safeguarded by the landowners developing Plot 3 the gasworks site to the west of the Proposed Development site. Land has been safeguarded for the pedestrian and cycle bridge over the GWML, which would land near the southeast corner of Plot 2 connecting the site to the North Pole site. The bridge, if delivered, would provide a direct connection to the communities living along Barlby Road, providing a new connection to the site from the south and west. The bridge landing point is safeguarded in the design but does not form part of this planning application due to the third-party land interests.

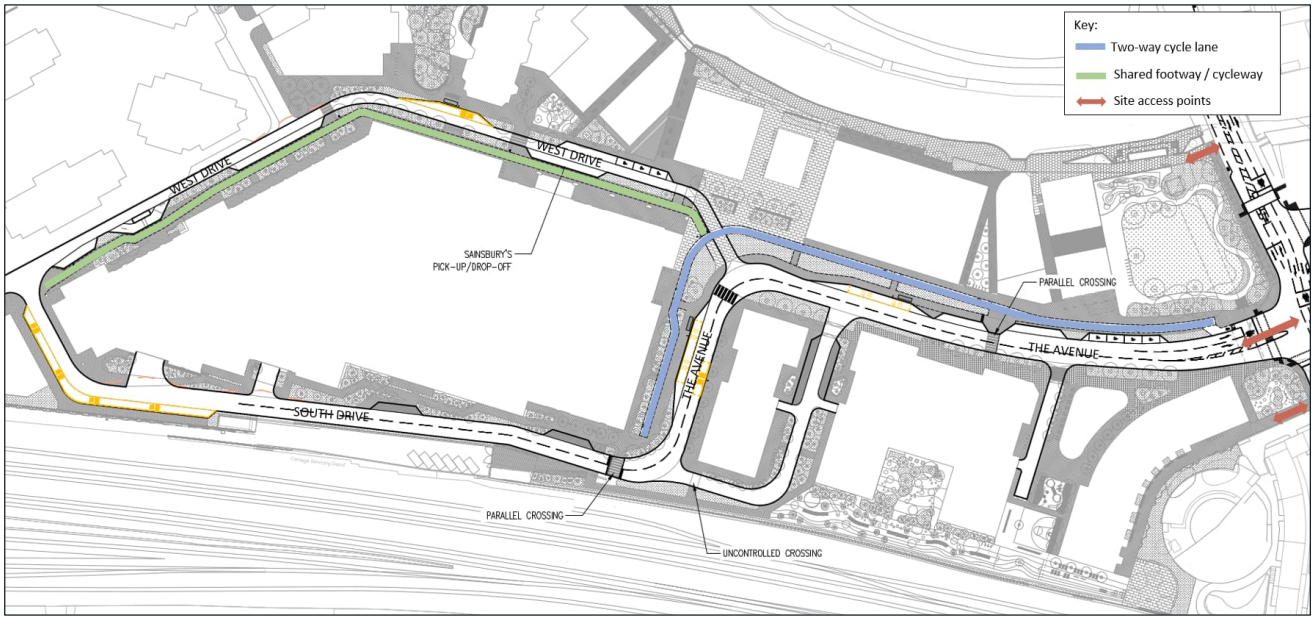
CYCLING

5.3.12. The main cycle access into the site is via the new signal junction on Ladbroke Grove. The new signal junction between Ladbroke Grove, The Avenue (formerly Canal Way) and Kensal Road will be made safer for cyclists by introducing Advanced Stop Lines (ASL) and cycle feeder lanes. The new access will allow for cyclists to enter the site in a safer environment when compared to the existing mini-roundabout.

5.3.13. Additional informal site access points are available for cyclists, via the towpath along the south edge of the GUC, and via a proposed access immediately south of the new signal on Ladbroke Grove, both of which may provide a more direct access for cyclists which would avoid the new signal junction.

5.3.14. The proposals include a 3m wide two-way cycle lane along the north and west edge of The Avenue which would run between the signal junction on Ladbroke Grove and the southeast corner of Plot 2, the approximate location of the area safeguarded for the GWML pedestrian and cycle bridge. In addition, the proposals include a shared footway / cycleway along the south edge of West Drive which is likely to be used by westbound cyclists only, with eastbound cyclists using the one-way carriageway. The proposed cycle routes and access points available for cyclists are in **Figure 5-6**.

Figure 5-6 – Proposed Cycle Routes and Site Access Points



5.3.15. With regard to existing cycle routes off-site, cycling on Ladbroke Grove is via advisory cycle lanes which would benefit from a review of opportunities for improvement as identified in the DIFS. Currently there are a number of challenges to delivering LTN 1/20 compliant cycle routes on Ladbroke Grove due to a combination of existing constraints in the form of permit parking, bus stops and bridge restriction. Further discussions with RBKC and TfL will be undertaken post submission of the application as the detailed highway design is progressed.

5.3.16. The GUC towpath route is as previously described a designated cycleway, and the route is advantageous for achieving general connectivity to the wider area. There is an existing bridge on the GUC towpath which traverses a wharf access point along the north edge of the site, which may not be suitable for some cyclists, however as part of the Proposed Development layout, cyclists would be able to enter the site and cycle around the proposed wharf remaining on a relatively level route.

5.3.17. Any future bridges over the canal and/or GWML, which are not part of the Proposed Development, however land has been safeguarded for a pedestrian and cycle bridge over the GWML, would allow for improved access to the site for cyclists. If the bridges are not delivered other options for cyclists are included as set out above.

5.3.18. The Proposed Development layout indicatively shows the provision of fifteen docking points for TfL cycle hire along the south edge of The Avenue, north of Plot 1.1. It is acknowledged additional docking points for TfL cycle hire may need to be safeguarded on-site where feasible, alternatively contributions would be made through the Section 106 Agreement to fund TfL cycle hire docking stations off-site, to help fund the extension of the scheme. The provision of TfL cycle hire stations will be in accordance with TfL's cycle hire developer guidance and will include considerations such as the minimum number of docking points per docking station and access for redistribution vehicles to stop within 15m of docking stations. The Applicant will discuss suitable provision with TfL and RBKC, and the requirement and phasing of TfL cycle hire stations will be stipulated within the Section 106 Agreement.

PUBLIC TRANSPORT

5.3.19. The public transport strategy is summarised as follows:

- Accordance with Healthy Streets objectives (see **Table 10-1**);
- Accordance with Liveable Neighbourhoods within a new Neighbourhood Centre;
- An increase in PTAL for the west edge site;
- Car lite with approximately 345 residential car parking spaces;
- Significant reduction in Sainsbury's retail parking, reduced by 169 spaces
- Removal of petrol filling station;
- 20% active and 80% passive electric and rapid electric vehicle charging points;
- Car free for proposed non-residential uses (retail and community and leisure uses);
- New cycle connections throughout the site;
- New pedestrian connections throughout the site;
- New pedestrian crossings and cycle infrastructure at the main site access junction (as per RBKC preferred junction arrangement);
- Passive provision for a new pedestrian and cycle bride over the GWML and contributions towards delivery;
- Passive provision and contributions towards cycle hire and TfL cycle hire docking stations;
- Legible London signs on the site;
- Contributions towards improvements at Ladbroke Grove or Kensal Green stations.
- New bus stops, with an increase in stop provision from 2 stops to 4 (for both northbound and southbound services);
- New bus standing and bus driver facilities;
- Extended bus routes serving the entire site (to achieve increases in PTAL); and
- Off site improvement to pedestrian and cycle links.

BUS STRATEGY

5.3.20. A number of improvements to bus stops and bus routes are proposed in order to enhance the PTAL for some areas of the site and provide better accessibility for new residents and visitors, including an improved experience for Sainsbury's customers and interchanging bus passengers.

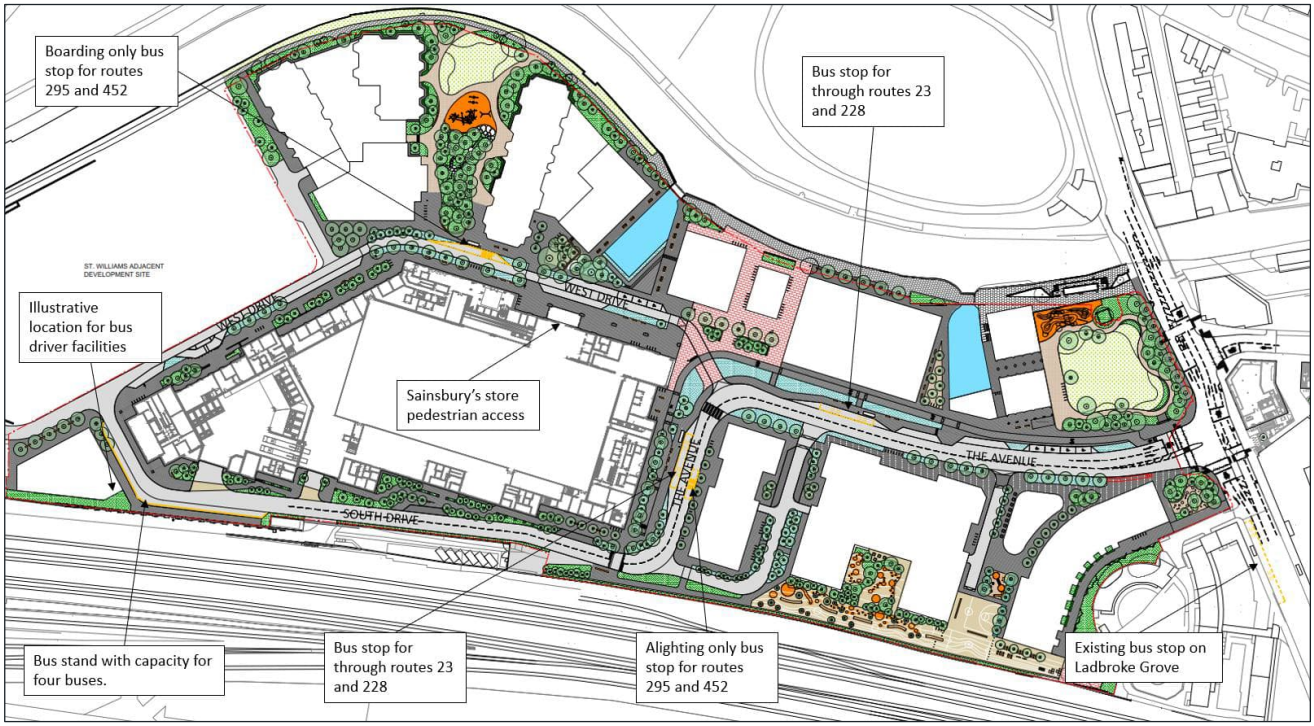
5.3.21. Following pre application discussions with TfL, the site layout will accommodate new bus stops, new bus stands, new bus facilities, and new passenger waiting facilities. The new routes for buses through the site will provide better circulation by spreading the stops and stands over a wider area and away from the constraints of the existing mini-roundabout junction on Ladbroke Grove. Detailed discussions have taken place with TfL to evolve the bus strategy to a more agreeable position.

5.3.22. In general, to allow for better bus accessibility across the site, and to maintain an acceptable level of service for the Sainsbury's store, bus services will be re-routed further into the site. Overall, the quality of experience and new facilities provides significantly improved experience for bus passengers compared with the existing layout.

5.3.23. It should be noted the applicant is also proposing to contribute towards the cost of bus route extensions and capacity enhancements where required, subject to further discussions with TfL. The new residents and users of the site will also provide additional revenue to TfL for use of bus services.

5.3.24. TfL have identified that the following bus routes should serve the site, these include bus routes 295, 23, 228 and 452. Bus routes 52, 70 and 316 will remain on Ladbroke Grove, as requested by TfL during initial pre-application discussions. Bus routes 295 and 452 are terminating routes and will require use of a bus standing facility and driver welfare facilities. The bus strategy layout is shown in **Figure 5-7.**

Figure 5-7 – Proposed Bus Strategy Layout

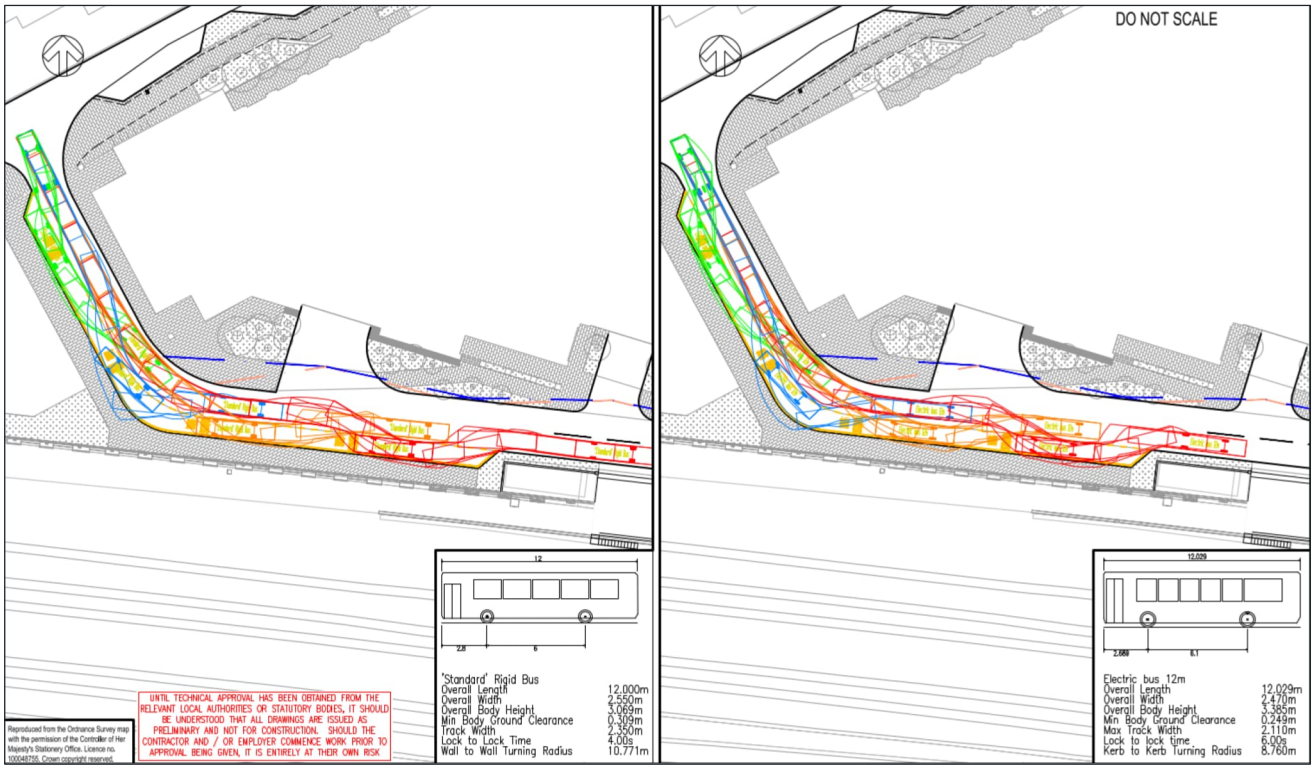


5.3.25. Bus routes 23, 228, 295 and 452 will enter and exit the site through the proposed signal junction on Ladbroke Grove however will have different routes once on-site depending on the service. The northbound and southbound through routes, 23 and 228 will travel westbound on The Avenue to enter the site, with buses turning left onto the one-way southbound only road between Plot 1.3 and Plot 1.4. The buses for routes 23 and 228 will then turn right, back onto The Avenue to access the bus stop on the east edge of the Sainsbury's store, or the bus stop south of Plot 5, depending on the service, with one stop for northbound destinations and a second bus stop for southbound destinations.

5.3.26. The buses of the terminating routes, routes 295 and 452, will travel westbound on The Avenue to enter the site, however will remain on The Avenue to access the alighting only bus top on the west edge of Plot 1.4. The buses for routes 295 and 452 would then continue onto South Drive to access the bus stand or to continue around to the boarding only bus stop on West Drive, south of Plot 4.

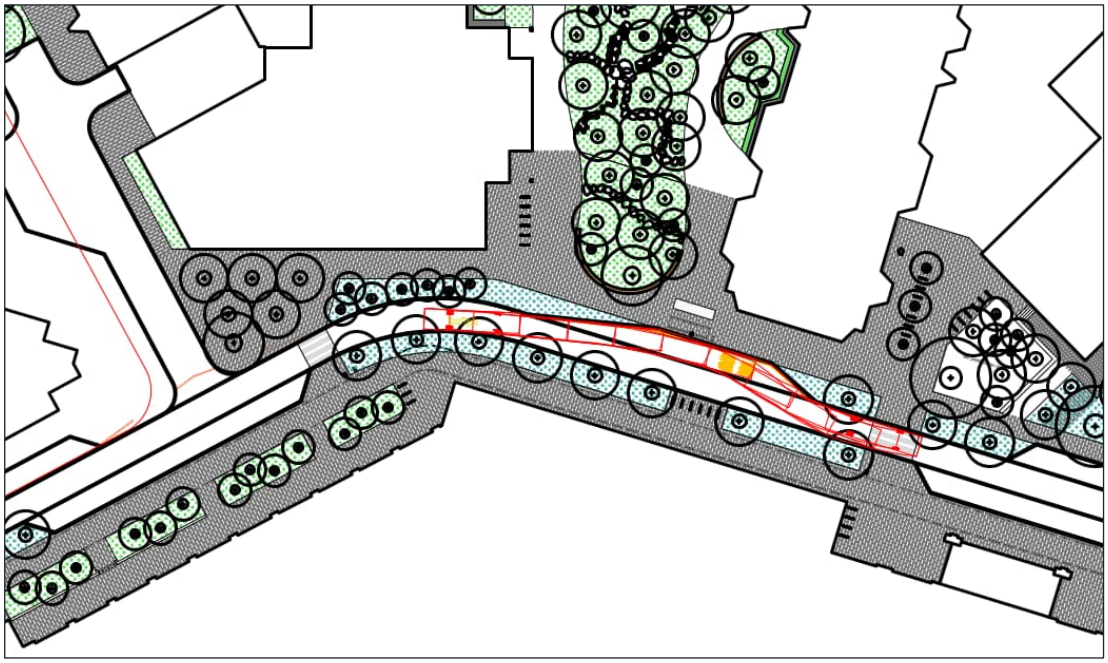
5.3.27. The proposed bus stops and bus stands have been tracked using both standard buses and electric buses. **Figure 5-8** shows the swept path assessment for the proposed bus stand on South Drive, south of Plot 2.

Figure 5-8 – Proposed Bus Stand Vehicle Tracking



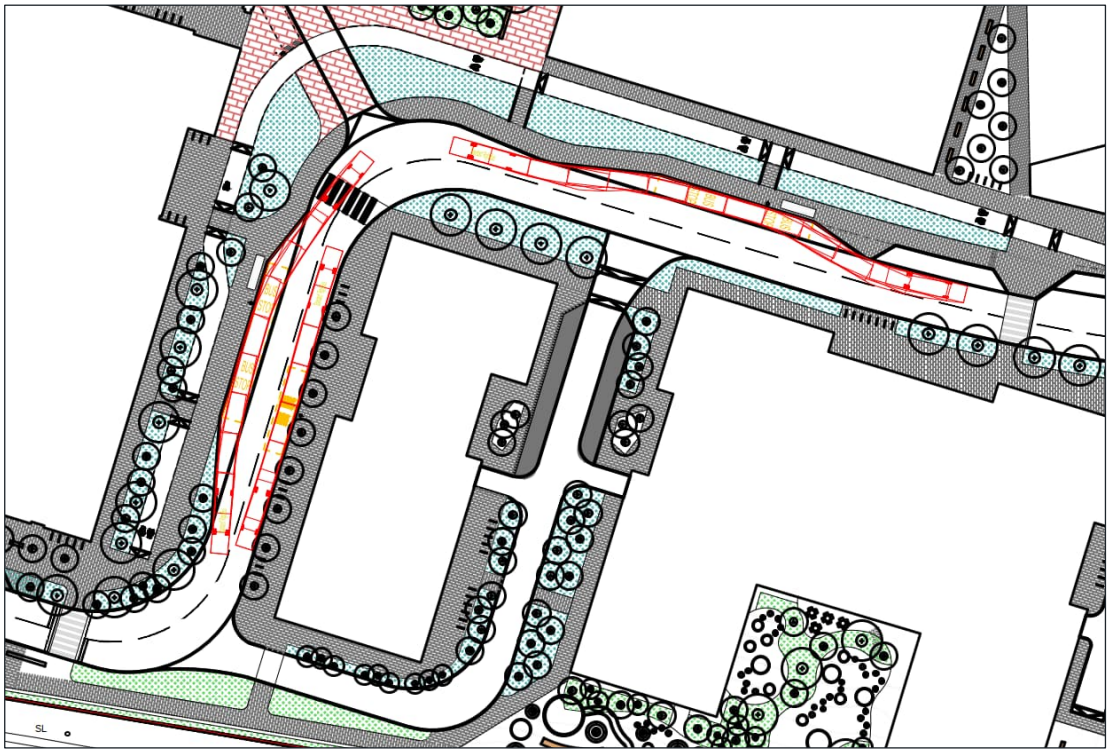
5.3.28. Bus routes 295 and 452 will terminate on the site and will use the new boarding only bus stop on West Drive, south of Plot 4.1. The swept path assessment for the new boarding only stop on West Drive is shown in **Figure 5-9**.

Figure 5-9 – Proposed Boarding only Bus Stops for Terminating Services



5.3.29. **Figure 5-10** shows the swept path assessment for the two through routes accessing bus stops on The Avenue, one to the east of Plot 2 and one to the south of Plot 5. The plan also shows the swept path assessment for the alighting only bus stop on The Avenue, to the west of Plot 1.4, which would be within the carriageway.

Figure 5-10 – Proposed Bus Stops For Through Services and Alighting only



5.3.30. The bus tracking plans shown in the figures above are also provided as **Appendix E**.

5.3.31. As noted, three bus services are proposed to remain on Ladbroke Grove and will not enter the site (bus routes 52, 70 and 316) due to potential impacts on the current level of service and passengers. There may be scope to bring these routes onto the site, along with the other routes, if TfL was agreeable to this in the future.

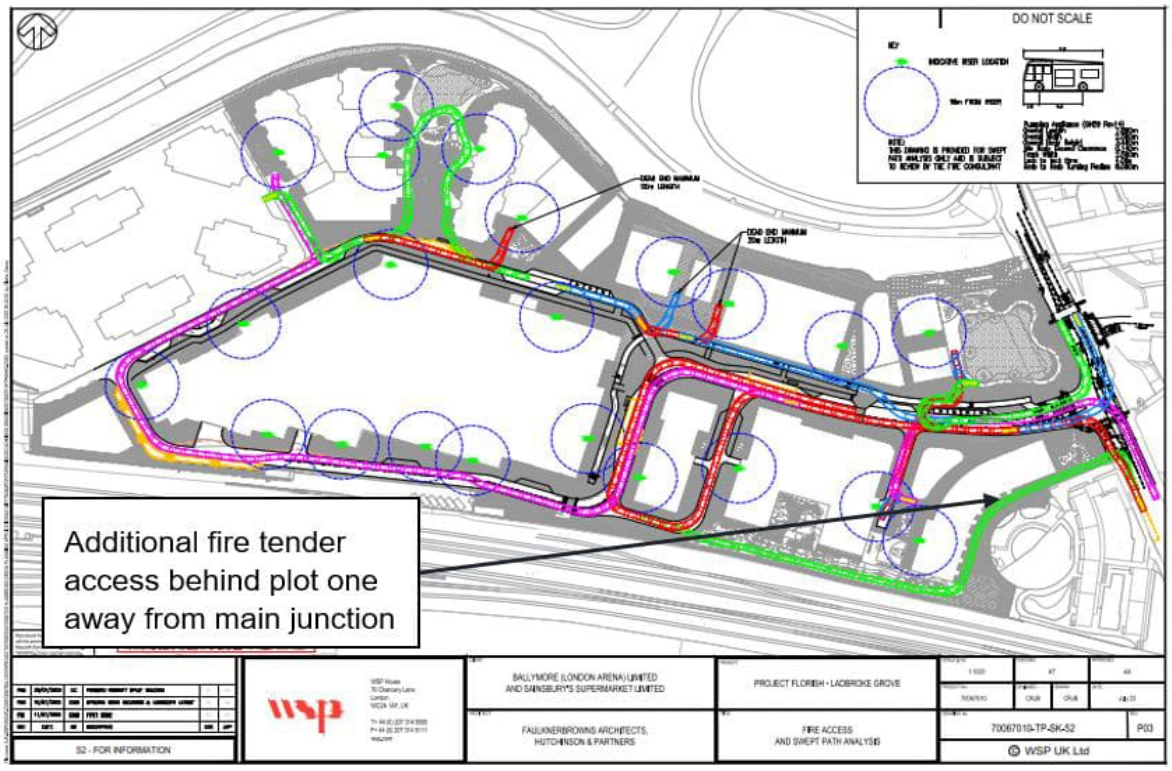
5.3.32. The proposed site layout allows the bus network and bus facilities to be significantly improved from the existing poor-quality location which is clogged up around the main site access junction, mixed with Sainsbury's store traffic and queuing at the mini-roundabout, and offering a very poor quality of public amenity for passengers.

5.4 FIRE TENDER ACCESS

5.4.1. The Proposed Development layout has been designed to ensure that appropriate fire tender access can be provided for each of the buildings. It is understood that fire fighting shafts will be provided in each proposed building on-site, therefore only access for a fire tender pump type vehicle to each building is required. It should be noted this guidance is caveated to check with the local fire service with regard to the type of vehicles in the fleet.

5.4.2. **Figure 5-11** illustrates the fire tender access strategy, showing the fire tender pump stopping within 18m of the main riser inlet for each building. The swept path assessment for the fire tender pump is also provided as **Appendix F**.

Figure 5-11 - Fire Tender Access



5.4.3. It is understood comments have been received regarding the site having a single access point for fire tenders.

5.4.4. As part of the Proposed Development, provision has been made for a second site access for fire tender and emergency vehicle access only, at a point immediately south of the proposed new signal junction between Ladbroke Grove, Canal Way and Kensal Road, which would route along the southeast edge of Plot 1.1. The route would be a minimum of 3.7m in width, in accordance with Building Regulations Approved Part B, and would be available for use by fire tenders if needed. It is suggested the proposals are reviewed by RBKC and the London Fire Brigade during the planning determination period and developed further, if required. The proposal is similar to the arrangement proposed by Alan Baxter Ltd in the Kensal Canalside Bridge Location and Ramp Approach Options Study (including April 2019 Addendum), where a secondary emergency access was proposed, north of the junction with Canal Way, opposite Kensal Road, presented as Appendix E in the Alan Baxter report.

5.4.5. With regard to additional access options, as part of the wider KCOA studies, Alan Baxter Ltd was appointed by RBKC to undertake a study of site access options regarding the bridging options for the site over the GWML bridge. The options were presented in the Kensal Canalside Bridge Location and Ramp Approach Options Study (including April 2019 Addendum).

5.4.6. The report and later addendum provided an assessment of the following options:

- Option A – New bridge for all vehicles, pedestrian and cyclists.
- Option B – New bridge for bus access and secondary emergency vehicle access, pedestrians and cyclists only, with approach ramps aligned through the centre of the North Depot site.
- Option B1 - New bridge for bus access and secondary emergency vehicle access, pedestrians and cyclists only, with approach ramps aligned along the south edge of the North Depot site.
- Option C – New bridge for pedestrians and cyclists only.

5.4.7. The Alan Baxter Ltd report reached the following key conclusions:

- The North Pole Depot site is a narrow site and the potential further safeguarding of land by Department for Transport would significantly reduce the developable land area. The road bridge options reviewed place a further constraint on the ability to develop the site due to the technical challenges and cost of providing the associated ramp structures. A pedestrian and cycle bridge significantly reduces these costs and allows for simpler phasing of development.
- The form of the site layout, in particular the location of a new supermarket, has a substantial impact on the feasible range within which any new bridge can be located. It also impacts on the ability of the bridge to relate well to any new Crossrail station. The need to maintain a reasonable gradient on the bridge approach structure within the North Pole Depot site imposes a further significant constraint. As a result of the highway infrastructure requirements of the PBA preferred option an acceptable gradient cannot be achieved. Option B that provides more modest highway infrastructure and Option C, that provides a pedestrian and cycle bridge over the GWML, do achieve acceptable gradients and can be delivered.
- Options B and C generate a greater area for development due to the reduced scale of the highways. As the highway for option C remains largely at grade, and only a pedestrian / cycle bridge would be required, the infrastructure costs for this option would be significantly less than the other options considered.

- If Department for Transport were to safeguard the additional land, the developable area on the North Pole Depot site would be significantly reduced. In this scenario it is questionable whether it would be viable to develop the North Pole Depot site with a full highway access given the additional costs and land take that this entails.

5.4.8. With regard to the Option B1 assessment, which was provided as an addendum to the report, Alan Baxter Ltd concluded that whilst Option B1 would provide for a slightly reduced overall area of developable land than that provided by the previous Option B, it would generate a larger developable area in the eastern part of the site than for the previous options considered and without any significant change in site levels. The necessary highways layout and ramped approach to the bridge would result in a reduced developable area to the west of the new bridge but with some potential to develop the area beneath the ramped viaduct.

5.4.9. The Alan Baxter Ltd report identifies developable land available on the North Pole Depot site for each bridge and ramp option. The results show all bridge and ramp options assessed would require approximately half of the site area to be used, leaving only half of the site available as developable land. The Alan Baxter report notes that providing a pedestrian and cycle-only bridge would make better use of the narrow North Pole Depot site.

5.4.10. With regard to cost of the bridge option, the Alan Baxter report noted the pedestrian and cycle-only bridge only option would reduce costs significantly and provide a more straightforward phasing strategy for construction.

5.4.11. It should be noted, the Applicant has surveyed the railway infrastructure to ascertain the best location for the proposed pedestrian and cycle bridge. The location identified is the only place where a prefabricated pedestrian bridge structure would clear the existing rail electrification structure. It is understood a road bridge would not clear the existing electric cables due to the bridge gradients required, therefore any works to accommodate a road bridge would require the electrification infrastructure to be adapted or the road bridge set at a higher level, requiring additional ramping.

5.4.12. Another key consideration is the availability of the North Pole Depot site, upon which any bridge would be required to land. There are currently no proposals to develop the site and the future use of the site is unconfirmed at the time of the Project Flourish – Ladbroke Grove planning submission.

5.4.13. With regard to the route for the fire tender, the nearest fire station is North Kensington Fire Station, located at the junction with Ladbroke Grove and Faraday Road. The most direct route between the site and North Kensington Fire Station is via Ladbroke Grove, a distance of approximately 550m. An alternative route is available via Golborne Road and Kensal Road, a distance of approximately 1.5km.

5.4.14. Willesden Fire Station is approximately 3.1km from the site and would be accessed via Harrow Road to the north. The next nearest fire station is Paddington Fire Station, approximately 3.6km from the site which would be accessed via Harrow Road or Kensal Road to the east. Park Royal Fire Station is approximately 4.4km from the site, via Harrow Road, to the west of the site.

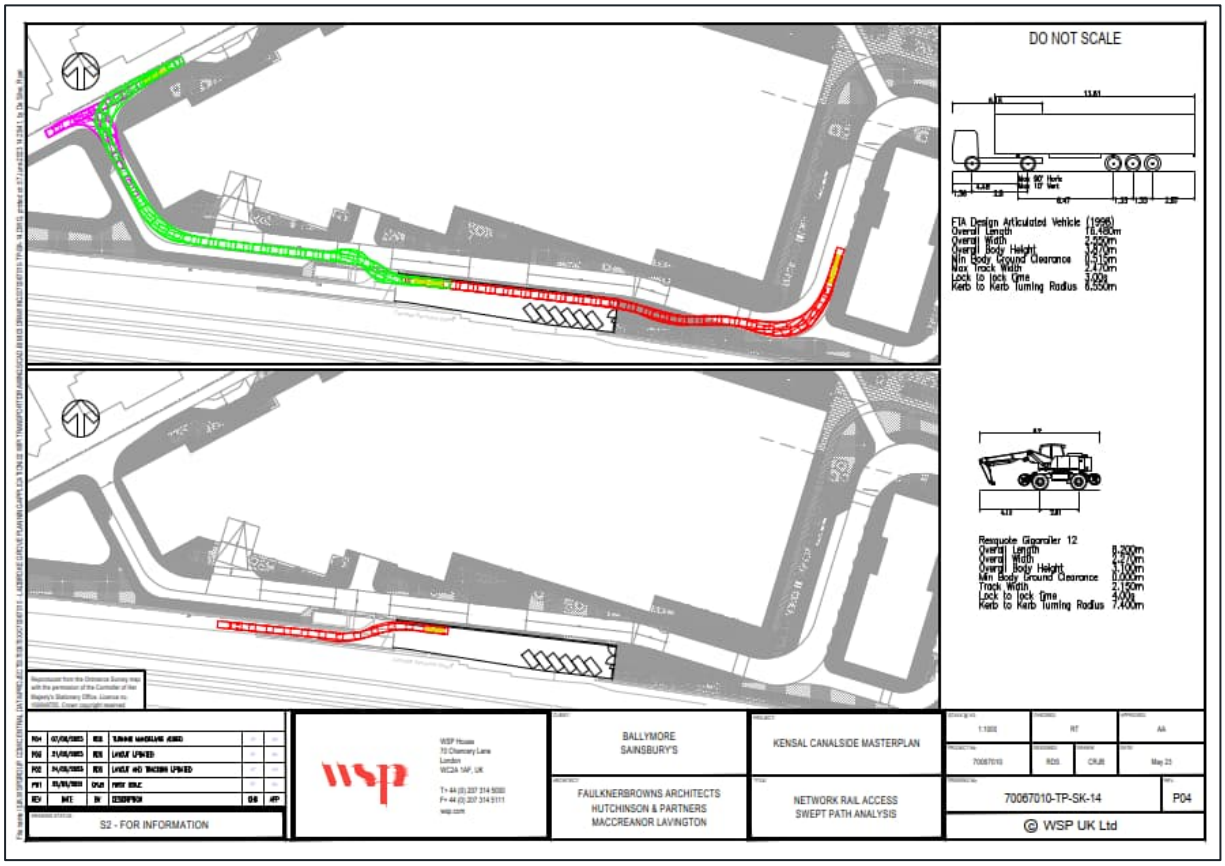
5.5 SPECIALIST AND THIRD-PARTY ACCESS

NETWORK RAIL

5.5.1. There is an existing Network Rail compound next to the site, which is re-provided with a new access adjacent to the GWML. The compound, whilst not forming part of the planning application, is

provided access via the proposed road alignment within the application. The design has been prepared in consultation with Network Rail and will enable them to access the track with large articulated vehicles which bring road to rail vehicle (RRV) vehicles to their site access for essential maintenance purposes. The general usage of this facility will be very low, and subject to specific events. The proposed road layout has been designed to enable the vehicle to enter and exit the site in forward gear, and the road widths enable the larger vehicles to follow the road around the rear of the Sainsbury's store. The routing and swept path of the vehicle is shown in **Figure 5-12**.

Figure 5-12 – Network Rail Compound Access



CADENT

5.5.2. Following consultation with Cadent, the roadway has been designed to provide access to their compound beyond the western edge of the site boundary. This will enable large rigid articulated vehicles to access their compound from time to time for essential maintenance purposes. The vehicles would utilise the same routing as shown in **Figure 5-12**.

5.6 PARKING ARRANGEMENTS

CYCLE PARKING

5.6.1. The proposed cycle parking will be provided in accordance with the minimum parking standards set out in the London Plan, and cycle parking layouts and access to cycle parking will follow the TfL London Cycling Design Standards (LCDS).

Residential and Non-Residential Long-stay Cycle Parking

5.6.2. Long-stay cycle parking refers to cycle parking for residents and employees of the Proposed Development. The hybrid planning application is largely in outline, therefore there is not a need to provide detailed layouts for the cycle parking stores within the outline element of the application. This will be addressed during the detailed Reserved Matters applications.

5.6.3. At outline planning stage there is a commitment to provide the total amount of long-stay cycle parking within the development in accordance with the London Plan standards (as reflected in the RBKC Local Plan and Transport SPD).

5.6.4. The indicative residential long-stay cycle parking provision is based upon a total of 2,519 units. The non-residential long-stay cycle parking is based on the GIA floor areas as applied to the Illustrative Scheme, labelled as the Indicative Area in **Table 1-2**, excluding the proposed Cycle Hub with a floor area of 212 sqm GIA.

5.6.5. With regard to the proposed retail floor area shown in the Illustrative Scheme, approximately 1,677 sqm GIA, the London Plan has cycle parking standards for both food retail and non-food retail. As the retail split is unknown at this stage, it has been assumed 50% of the retail floor area would be food retail and 50% would be non-food retail.

5.6.6. The number of long-stay spaces by plot are shown in **Table 5-4**.

Table 5-4 – Proposed Long-stay Cycle Parking by Plot

	Proposed Maximum Development		Long-stay cycle spaces	
Plot	Residential Units	Commercial GIA (sqm)	Residential	Commercial
Plot 1 Total	748	4,000	1,322	35
Plot 2 Total	947	4,307	1,562	20
Plot 4 Total	501	1,197	908	11
Plot 5 Total	235	2,964	428	24
Plot 6 Total	88	1,010	158	17
Total	**2,519**	**13,472**	**4,378**	**107**

5.6.7. It is assumed the long-stay cycle parking will largely be provided in the form of two-tier cycle stands, however there will be provision for a minimum of 5% of the total number of spaces in each cycle store to be capable of accommodating larger, non-standard cycles.

Residential and Non-Residential Short-stay cycle parking

5.6.8. Short-stay cycle parking refers to cycle parking for visitors to the Proposed Development.

5.6.9. The indicative residential short-stay cycle parking provision is based upon a total of 2,519 units. The non-residential short-stay cycle parking is based on the GIA floor areas as applied to the Illustrative Scheme, labelled as the Indicative Area in **Table 1-2**, excluding the proposed Cycle Hub with a floor area of 212 sqm GIA.

5.6.10. With regard to the proposed retail floor area shown in the Illustrative Scheme, approximately 1,677 sqm GIA, the London Plan has cycle parking standards for both food retail and non-food retail. As the retail split is unknown at this stage, it has been assumed 50% of the retail floor area would be food retail and 50% would be non-food retail.

5.6.11. The short-stay cycle parking by plot is shown in **Table 5-5**.

Table 5-5 – Proposed Short-stay Cycle Parking by Plot

	Proposed Maximum Development		Short-stay cycle spaces	
Plot	Residential Units	Commercial GIA (sqm)	Residential	Commercial
Plot 1 Total	748	4,000	19	96
Plot 2 Total	947	4,307	24	37
Plot 4 Total	501	1,197	13	34
Plot 5 Total	235	2,964	6	94
Plot 6 Total	88	1,010	2	12
Total	**2,519**	**13,472**	**64**	**273**

5.6.12. The short-stay cycle parking will be provided in the form of Sheffield stands within the public realm, where possible within 20m of the destination.

5.6.13. The Proposed Development includes a Cycle Hub with a floor area of approximately 212 sqm GIA. The layout of the cycle hub, and therefore the capacity is unknown at this stage, however a floor area of 212 sqm is shown. The cycle hub would be provided in Plot 1, shown at the south end of Plot 1.4, and would be available to all visitors of the site.

Sainsbury's Cycle Parking

5.6.14. The proposed long-stay and short-stay cycle spaces for the Sainsbury's store are based upon the proposed net sales area of 5,509 sqm. **Table 5-6** shows the long-stay and short-stay cycle spaces required in accordance with the London Plan cycle parking standards.

Table 5-6 – Proposed Sainsbury's Cycle Parking

Use	Long-stay cycle spaces	Short-stay cycle spaces
Sainsbury's store	32 spaces	70 spaces

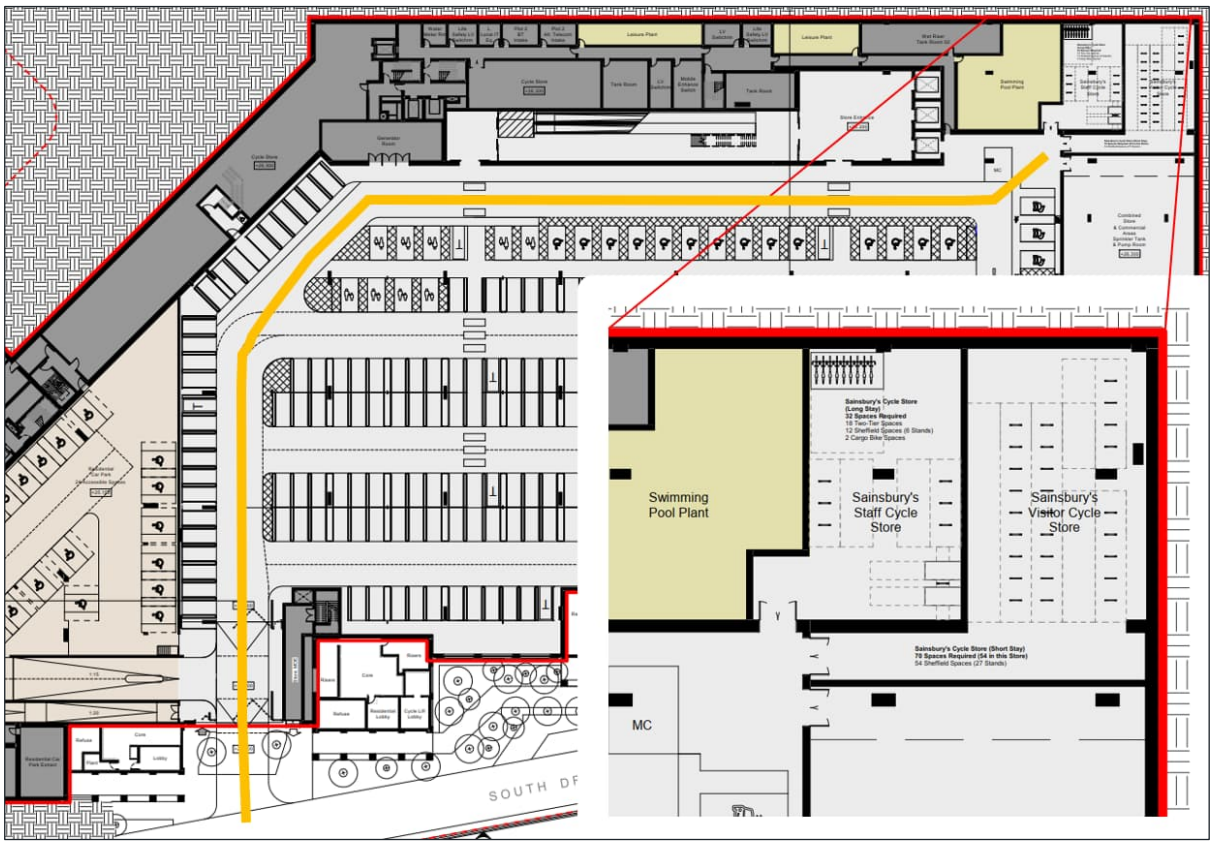
5.6.15. The Sainsbury's long-stay cycle parking spaces will be provided at basement level, accessed via the Sainsbury's customer car park, via South Drive. The long-stay cycle parking will provide 32 spaces using the following type of cycle parking:

- Two-tiered – 18 spaces
- Standard Sheffield stands – 12 spaces
- Large Sheffield stands – 2 spaces

5.6.16. The Sainsbury's short-stay cycle parking spaces will also be provided at basement level, accessed via the Sainsbury's customer car park, via South Drive. The basement short-stay cycle parking area will provide 54 spaces using Sheffield stands, and 16 short-stay cycle spaces will be provided at ground floor level, next to the store entrance on West Drive, also using Sheffield stands.

5.6.1. **Figure 5-13** shows the proposed long-stay and short-stay cycle parking for Sainsbury's at basement level.

Figure 5-13 – Sainsbury's Long-stay and Short-stay Cycle Parking Store



CAR PARKING

5.6.2. The proposed parking strategy is for a 'car lite' residential development, accompanied by a substantial reduction in Sainsbury's car parking, and a car free approach to all non-residential uses. This is considered a sustainable approach to car parking given the scale and location of the proposed development.

Residential Car Parking

5.6.3. The proposed residential development will have an overall parking provision of approximately 345 spaces for the 2,519 units, which is a parking ratio of 0.14 car parking spaces per unit, assuming the maximum number of units.

5.6.4. The proposals include two basement car parks on-site for residents, one in Plot 1 providing approximately180 spaces, and the second in Plot 4 providing approximately 134 spaces. Plot 2 will also have residential car parking at basement level which would be accessed via the Sainsbury's store customer car park, however the residential car parking would be contained in a separate parking area, providing approximately 24 spaces.

5.6.5. The remaining car parking would be provided on-street in parallel parking bays along the south edge of Plot 5 and Plot 6, along parts of the north edge of West Drive and The Avenue.

5.6.6. The proposed residential parking numbers are set out in **Table 5-7**.

Table 5-7 – Proposed Residential Car Parking Provision

Plot	Proposed units	Standard parking spaces	Accessible parking spaces (% of units)	Total car parking spaces
1	748	157	23 (3.1%)	180
2	947	-	24 (2.5%)	24
4	501	119	15 (3.0%)	134
5	235	-	3 (1.3%)	3
6	88	-	4 (4.5%)	4
Total	**2,519**	**276**	**69**	**345**

5.6.7. With regard to accessible parking, the London Plan states that for 3% of units, at least one designated disabled persons parking bay is available from the outset, the active provision. In addition, the Parking Design and Management Plan should demonstrate how an additional 7% of units could be provided with one designated disabled persons parking space per unit in the future if there is demand, the passive provision.

5.6.8. **Table 5.7** shows Plot 1 and Plot 4 include 3% active accessible car parking provision in accordance with the London Plan. Plot 2 and Plot 5 are low on active accessible car parking provision, by approximately five and four spaces respectively. As part of the CCPMP, it is proposed to provide additional active parking within the Plot 1 and/or Plot 4 basement car parks if needed.

5.6.9. With regard to the passive demand, the proposals would be to provide any additional demand in the basement car parks. The maximum number of units would be 2,519 across the site, 7% of which would be 176 additional spaces required, which could be provided within the two basements, with approximately 267 spaces available.

5.6.10. Electric vehicle charging points will be provided for 20% of all residential car parking from the outset, the active provision, with passive provision for all remaining spaces.

5.6.11. **Figure 5-14** shows the basement car park access points and the on-street parking.

Figure 5-14 – Basement Car Park Access Points and On-street Parking

Residential parking justification

5.6.12. Car parking standards are set out in the RBKC Local Plan and Transport and Streets SPD and the London Plan, as summarised in Section 2 of this TA. The RBKC Local Plan (consultation draft 2022) generally reflects the parking policies and standards within the London Plan. The Kensal Canalside SPD (2021) does not include any car parking standards. London Plan Policy T6 provides the relevant guidance on car parking. For Opportunity Areas there is also guidance in Policy SD1. Policy T6 states:

- A: Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity; and
- B Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite'). Car-free development has no general parking but should still provide disabled persons parking in line with Part E of this policy.

5.6.13. Para 10.6.4: *When calculating general parking provision within the relevant standards, the starting point for discussions should be the highest existing or planned PTAL at the site, although consideration should be given to local circumstances and the quality of public transport provision, as well as conditions for walking and cycling*. London Plan Table 10.3 relates to residential car parking standards and provides guidance as set out in Section 2, Table 2-1**,** and is summarised below in **Table 5-8**.

Table 5-8 – London Plan Residential Parking Standards

Character Area	PTAL	Parking Standard
Central Activities Zone, Inner London Opportunity Areas, Major Town Centres	5-6	Car free
Inner London	4	Car free
Inner London	3	0.25 spaces per dwelling
Inner London, Outer London Opportunity Areas	2	Up to 0.5 spaces per unit
Inner London	0-1	Up to 0.75 spaces per dwelling

5.6.14. London Plan *Table 10.5* relates to retail car parking standards which are shown in **Table 5-9**.

Table 5-9 – London Plan Retail Parking Standards

Character Area	PTAL	Parking Standard
Central Activities Zone, Inner London Opportunity Areas, Major Town Centres	5-6	Car free
Inner London, Outer London Opportunity Areas, and outer London Retail below 500 sqm	All	Up to 1 space per 50 sq.m. (GIA); and
Rest of outer London	All	Up to 1 space per 75 sq.m. (GIA).

5.6.15. The Proposed Development includes up to 2,519 residential units of a varied housing mix and tenure. The London Plan Policy T6 (T6.1) states that the level of parking should take into account levels of existing and future public transport accessibility and connectivity, and car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite').

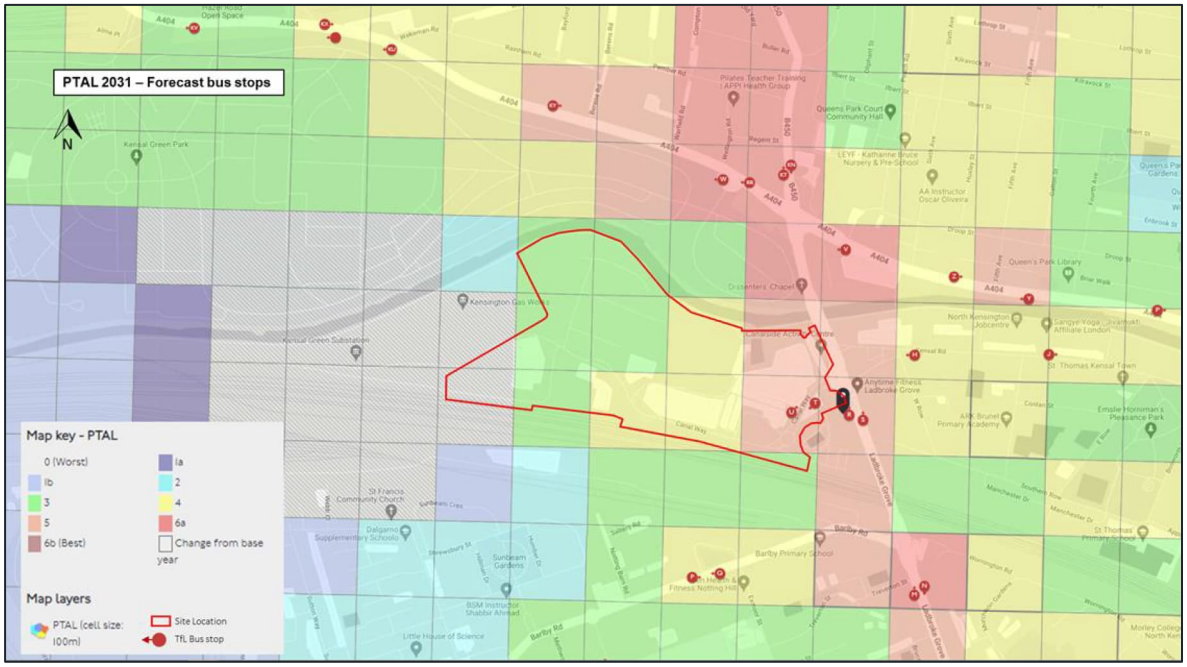
5.6.16. The London Plan also notes that all residential car parking spaces must provide for electric or Ultra-Low Emission Vehicles. At least 20% of spaces should have active charging facilities, with passive provision for all remaining spaces. The Proposed Development will enable EV parking to be proposed in accordance with London Plan EV charging policy.

5.6.17. The London Plan states in para 10.6.4 that consideration should be given to local circumstances and the quality of public transport. The site is within an Opportunity Area and on the very edge of Inner London. Whilst the quality of public transport services is good, the entire site does not benefit from the same PTAL or same access to London Underground services as other Inner London Opportunity Areas.

5.6.18. The London Plan also states that for Inner London sites with a PTAL of 2 or 3, and Outer London Opportunity Areas, that the maximum recommended level of parking ranges from between 0.25 spaces per unit and 0.5 spaces per unit.

5.6.19. The future site PTAL with extended bus services is shown in **Figure 5-15**, and illustrates that the PTAL of the site remains between 0 and 5, with the majority of the site having a PTAL of 3 or lower. On this basis, the proposed level of residential parking is considered appropriate based on a combination of the PTAL level ranging from between 0-5, reflecting an average 'medium' level of accessibility. It should be noted that the site is on the very edge of inner London and as such shares these characteristics due to the nature of uses at the western end of the site.

Figure 5-15 – Future PTAL



5.6.20. In conclusion, the site is fairly unique for an inner London Opportunity Area designation due to its location and constraints. On this basis the parking ratio for the residential element proposes 0.14 spaces per unit, with 3% blue badge amounting to 76 spaces. Due to local circumstances and the quality of the transport network within a walkable distance, the level of residential parking proposed is considered appropriate.

Sainsbury's store car parking

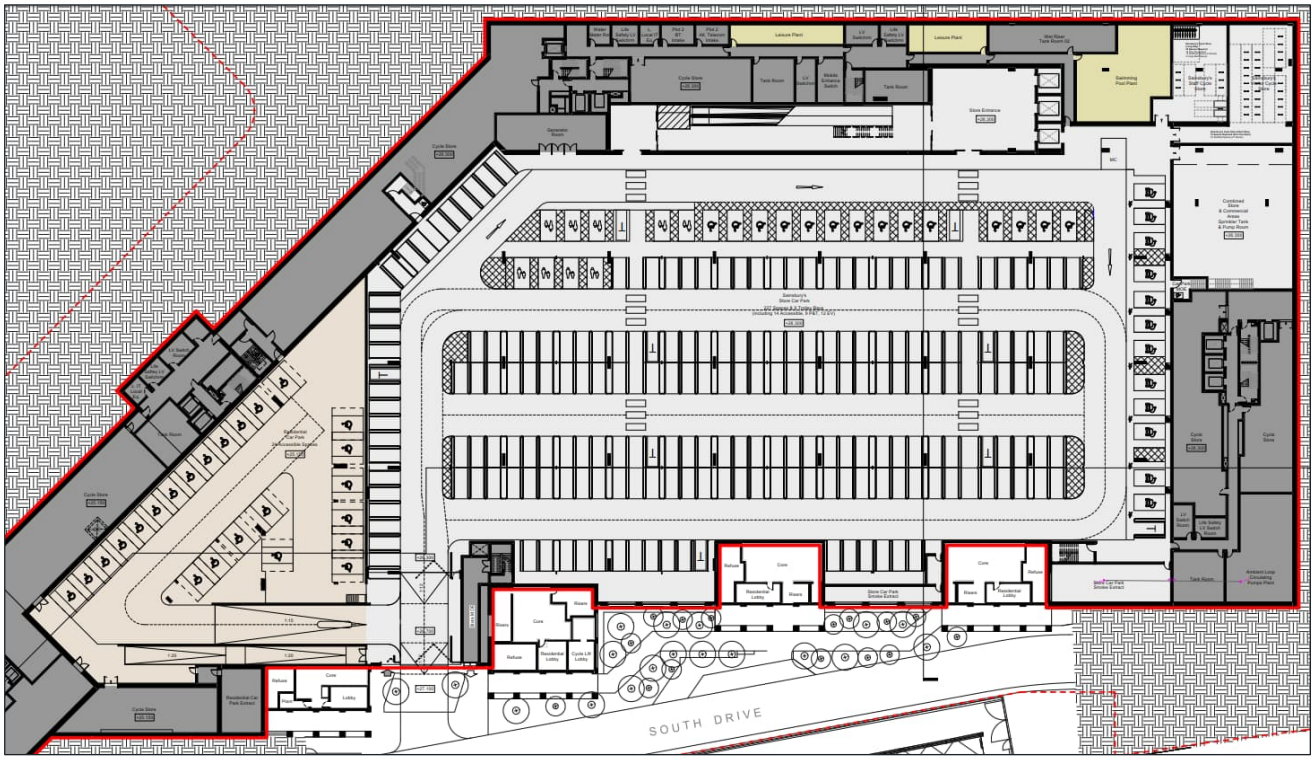
5.6.21. The proposed retail parking will be substantially reduced from 396 to 227 spaces, a reduction of 169 spaces. The petrol filling station (PFS) which currently attracts a large number of car trips to the site will also be removed. The car park access is also moved further away from the main site access and bus services, thereby achieving a better outcome for bus access and bus passengers.

5.6.22. Active Electric Vehicle (EV) fast charging facilities will be provided for 12 spaces with the potential to provide a further 12 fast charging units to ensure demand for charging is met. Passive provision for standard charging will be included to reflect the London Plan Standards.

5.6.23. 14 accessible spaces are provided as part of the total parking allocation, provided in close proximity to the elevators. Nine parent and child bays are proposed to be provided as part of the total parking arrangement.

5.6.24. The new Sainsbury's store has an increased Net Sales Area of +25% and a reduced car park. This will result in a more sustainable balance between the level of car parking and the amount of retail floor area within the reprovided store. The Sainsbury's store car parking layout is illustrated in **Figure 5-16**.

Figure 5-16 – Sainsbury's Car Park Layout



Sainsbury's store parking justification

5.6.25. The proposed Sainsbury's store includes a net sales retail area of 5,509 sqm which represents a +25% increase on the existing net sales areas of 4,393 sqm. A significant reduction in retail car parking from 396 to 227 spaces is proposed. The store will now sit at the heart of the development and include residential units above the store itself.

5.6.26. London Plan policy with regards to retail parking is set out in Policy T6.3 and Table 10.5. Table 10.5 states that Inner London areas should apply the maximum provision is up to 1 space per 75 sqm Gross internal area (GIA). This however is further qualified, in that re-provision of retail space as part of wider development can be increased if it affects viability. In addition, the site sits approximately 100m away from the Borough boundary with LB Brent where the London Plan recommends a parking standard some 50% higher.

5.6.27. During the pre-application process TfL have highlighted the importance that replacement parking provision does not simply cater for current demand and that the applicant should work toward a lower car driver / passenger mode share.

5.6.28. As a result of the pandemic, general travel patterns have shifted significantly. Food shopping patterns have adjusted to reflect wider changes in working and travel patterns. The TA has been based on traffic data surveyed in 2018 to ensure the traffic capacity assessment at peak hours was based on robust and worst-case traffic flow. Parking surveys carried out in 2018 indicated that maximum demand was around 320 spaces on weekday periods and 286 spaces on a Saturday.

5.6.29. Whilst the long-term effects of the pandemic in terms of travel behaviour are yet to be fully known, it is evident that peak parking demand has reduced and in particular weekday evening peak periods. It is assumed that this is related to general reductions in commuter journeys during the historically established peak periods which would have formed part of a linked trip to a supermarket.

5.6.30. Given the recent changes in travel patterns, a number of independent surveys have been undertaken to understand current car park occupancy post pandemic and the results are set out in **Table 5-10**.

Table 5-10 – Sainsbury's Car Park Occupancy Survey Results

Survey Day	Survey Date	Car Park Occupancy
Friday	20 April 2018 (pre-pandemic)	320
Saturday	21 April 2018 (pre-pandemic)	286
Friday	15 October 2021	230
Saturday	16 October 2021	191
Friday	5 November 2021	238
Friday	4 November 2022	248
Friday	31 March 2023	234

5.6.31. It is evident that on all but one survey day, parking demand exceeded the proposed car park provision of 227 spaces.

5.6.32. The proposed parking provision clearly includes an element of constraint to current parking demand. The increase in customers on the doorstep and the upscaling of the online shopping service will have an immediate effect of reducing mode share to car.

5.6.33. The information above would suggest that parking provision is not the key driver for mode share, hence why the current surface level car park operates with significant capacity at the busiest times. It can be assumed that parking demand has been influenced by general travel trends and wider transport policy.

5.6.34. In this case, where the redevelopment scheme is dependent on the reprovision of a highly successful store, the economic comparison between the future and current operation is a critical

factor. A key component of the higher value sales transactions at this store remains the carborne shop, and whilst the mode share to car is reducing, this type of shop will need to be accommodated in the short to medium term. The provision based on the above justification is consistent with the Part G of London Plan Parking Policy T6.3.

Non-Residential Uses

5.6.35. The other non-residential uses will be car free in accordance with the London Plan standards and Local Plan policy.

Car Clubs

5.6.36. The proposals do not currently show any car club spaces, however provision could be made for one or two spaces south of Plot 6.1, where four accessible car parking spaces are currently shown. Plot 6 will include 88 residential uses, therefore there may be the opportunity to use one or two of these spaces for car club parking.

5.6.37. It is understood Zip car has a very strong network in the area. It is suggested the provision and location of car club spaces is further explored for the Reserved Matters Applications, where discussion with car club operators can be undertaken.

Parking Summary

5.6.38. The proposed approach to parking is considered acceptable in general conformity with the London Plan due to a number of factors:

- Car lite approach to residential car parking including disabled spaces at 3% with capacity to increase to 10% should demand increase;
- A reduction in Sainsbury's car parking from 396 to 227, a reduction of 169 spaces;
- Site accessibility and PTAL;
- Provision of public transport services; and
- Viability of the Sainsbury's store.

5.6.39. Primarily, the range in PTAL and the proximity to surrounding transport services has dictated the proposed levels of residential car parking which remain very low, and have been consistently reduced over a number of years of consultation.

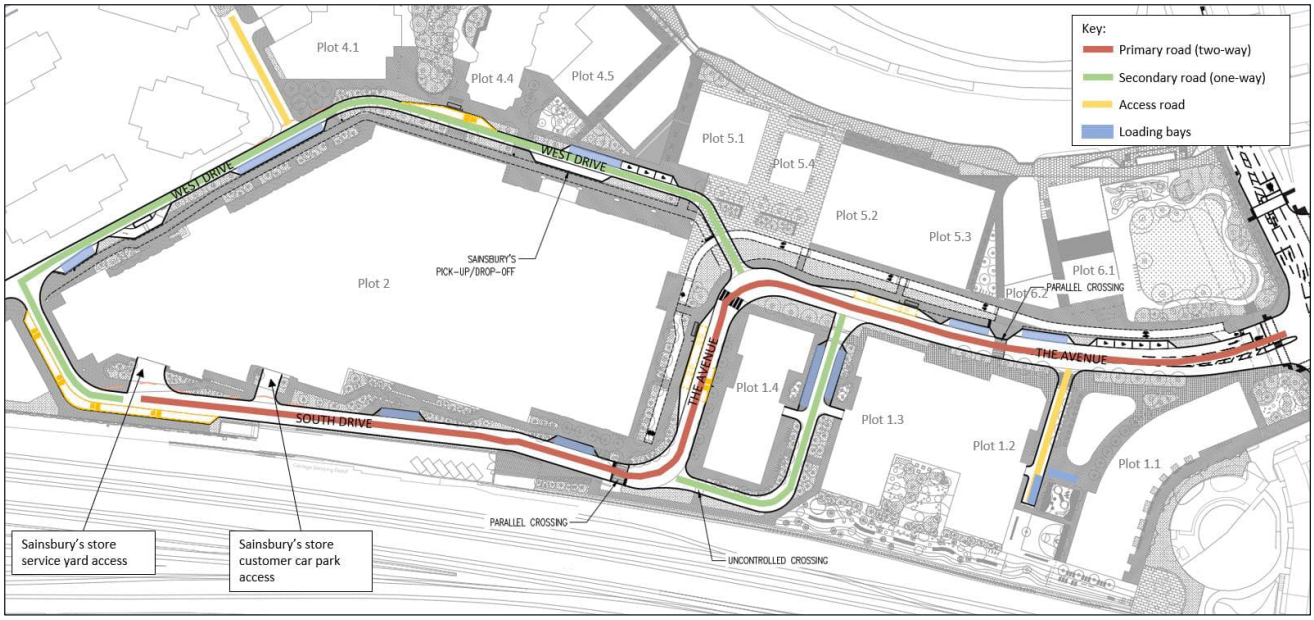
5.6.40. In addition, the level of Sainsbury's customer car parking has been reduced considerably despite the +25% increase in the net sales area. The site only becomes deliverable for housing and affordable housing by virtue of the relocation of the Sainsbury's store and car park. The requirement to optimise the site for housing requires the proposed Sainsbury's store relocation to be viable.

5.6.41. ANPR cameras will be used to manage the Sainsbury's car park to ensure that parking durations are limited to three hours for customers. Sainsbury's have proposed, as part of the accompanying Travel Plan for the store, that the Travel Plan Coordinator (TPC) will liaise with the store manager to conduct quarterly car park usage surveys to provide a snapshot on utilisation. The results of the survey will be used to understand if any additional bays can be converted for sustainable transport use, such as additional cycle spaces or EV charging. A robust enforcement plan will be implemented by Sainsburys to manage parking use and demand, as outlined in the Sainsburys CPMP.

5.7 DELIVERY AND SERVICING STRATEGY

5.7.1. Delivery and servicing vehicles will access the site via the proposed signal junction between Ladbroke Grove and The Avenue (formerly Canal Way). The proposals include a new road layout for the site, as shown in **Figure 5-17**.

Figure 5-17 – Vehicle Access and Servicing Locations



5.7.2. The primary road through the site is a two-way road with a carriageway width of approximately 7.3m. The two-way road will extend between the new signal junction with Ladbroke Grove, replacing the alignment of Canal Way, up to the service yard access for the Sainsbury's store. The street will be named The Avenue between the junction with Ladbroke Grove up to the south edge of the Plot 2 building, from which point the street will be named South Drive.

5.7.3. There is a secondary routes on-site which begins to the west of the service yard access for the Sainsbury's store and loops around the Plot 2 building, up to a priority junction with The Avenue. The route is one-way in a clock-wise direction, with a carriageway width of approximately 3.7m.

5.7.4. There is also a secondary which runs between Plot 1.3 and Plot 1.4. The route would be one-way southbound only, with vehicles turning left from The Avenue and driving southbound, up to a priority junction with The Avenue. The carriageway is approximately 5m in width.

5.7.5. There is an access road between Plot 1.1 and Plot 1.2 which will be two-way with a carriageway width of approximately 5m. The access road has a turning head at the south end.

5.7.6. There is a second access road between Plot 3 and Plot 4.1 which will be two-way with a carriageway width of approximately 5.5m. The access road has a turning head at the north end.

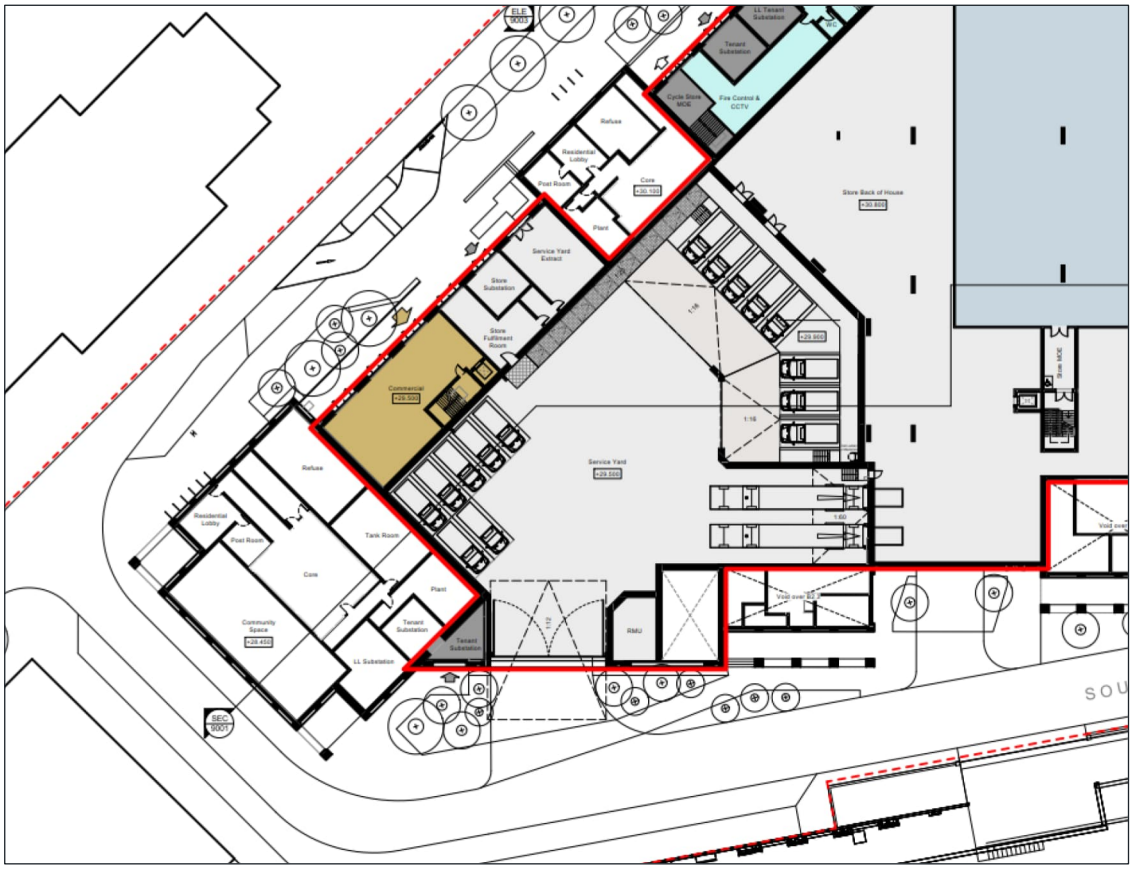
5.7.7. The proposed roads will provide on-street loading bays which will sit off the carriageway and will be dedicated for delivery and servicing activity.

5.7.8. The proposed Sainsbury's store includes a dedicated service yard accessed via South Drive, on the south west edge of Plot 2. The service yard access is separate from the Sainsbury's customer car park access.

5.7.9. The Sainsbury's service yard provides loading and parking areas for all store deliveries and waste collection, and 15 goods on-line vehicles which significantly increase the capacity for on-line deliveries. A separate Delivery and Servicing Plan has been prepared for the Sainsbury's store.

5.7.10. The proposed layout of the Sainsbury's servicing yard is shown in **Figure 5-18**.

Figure 5-18 – Proposed Sainsbury's Servicing Yard

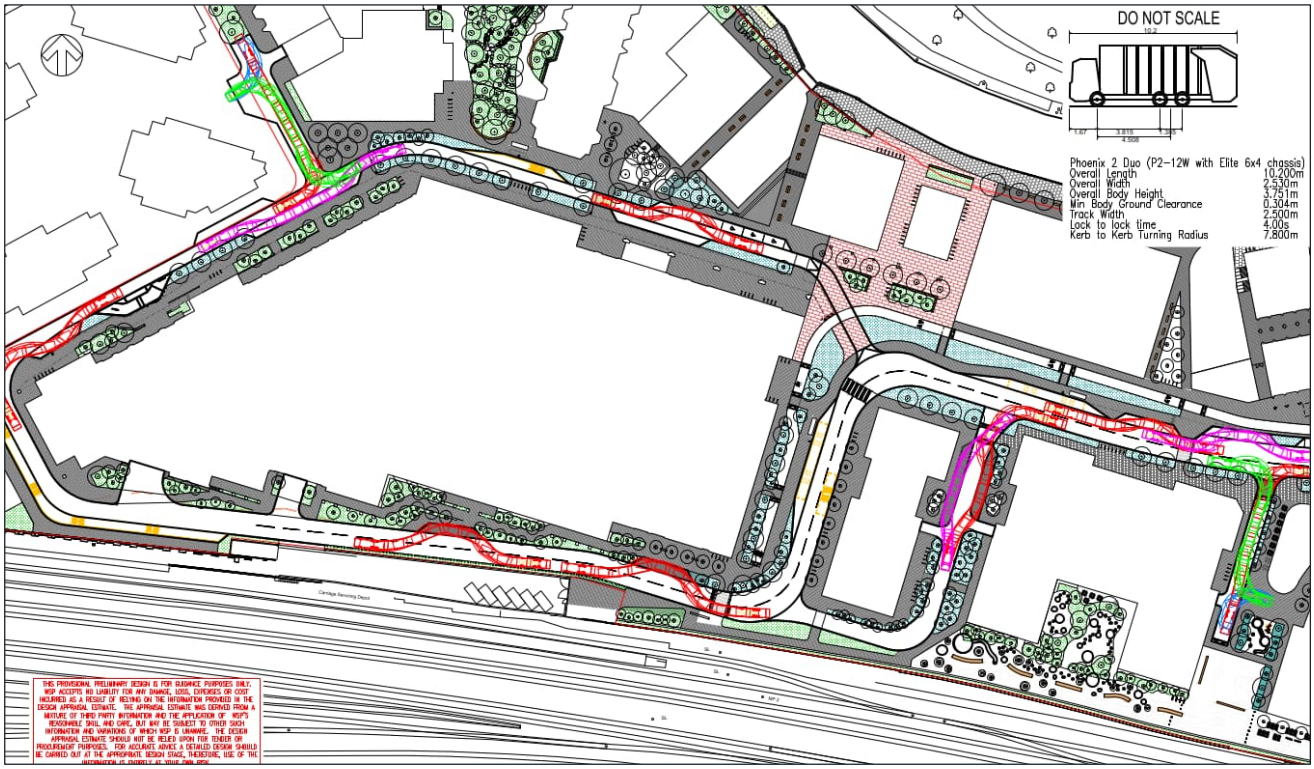


WASTE COLLECTION STRATEGY

5.7.11. Waste collections for the residential units will be undertaken by RBKC. Waste collection for the non-residential uses is likely to be undertaken by a private waste collection contractor. Waste collection would all be undertaken on street via the dedicated off-street loading bays.

5.7.12. **Figure 5-19** shows the swept path assessment for a 10.2m long waste collection vehicle accessing the proposed off-street loading bays.

Figure 5-19 – Waste Collection Strategy



5.7.13. An outline Waste Management Strategy, for the residential and non-residential uses only, has been prepared and will be submitted as part of the hybrid planning application.

6 ACTIVE TRAVEL ZONE

6.1.1. The Active Travel Zone (ATZ) assessment is a qualitative analysis of the cycle and walking network surrounding the Proposed Development, the methodology has been developed by TfL to support the Healthy Streets Approach and Vision Zero. The assessment is carried out to assist the understanding of the Proposed Development potential to contribute in promoting sustainable travel.

6.1.2. The ATZ Assessment comprises a number of site visits during which Point of View (PoV) records of the key routes were taken at Circa 150m intervals. The photographic survey of the routes is then benchmarked against Healthy Streets indicators 3-10.

- Easy to Cross;
- People Feel Safe;
- Things to see and do;
- Places to stop and rest;
- People feel relaxed;
- Not too noisy;
- Clean Air; and
- Shade and Shelter.

6.1.3. A detailed ATZ Assessment has been prepared in line with TfL's Healthy Streets guidance and can be found in **Appendix G**. The three key maps as requested by TfL are provided in **Figure 6-1** to **Figure 6-3**.

- Active Travel Zones; and
- Neighbourhood and Most Important Journey; and
- Neighbourhood Map – ATZ Routes.

Figure 6-1 – Active Travel Zone

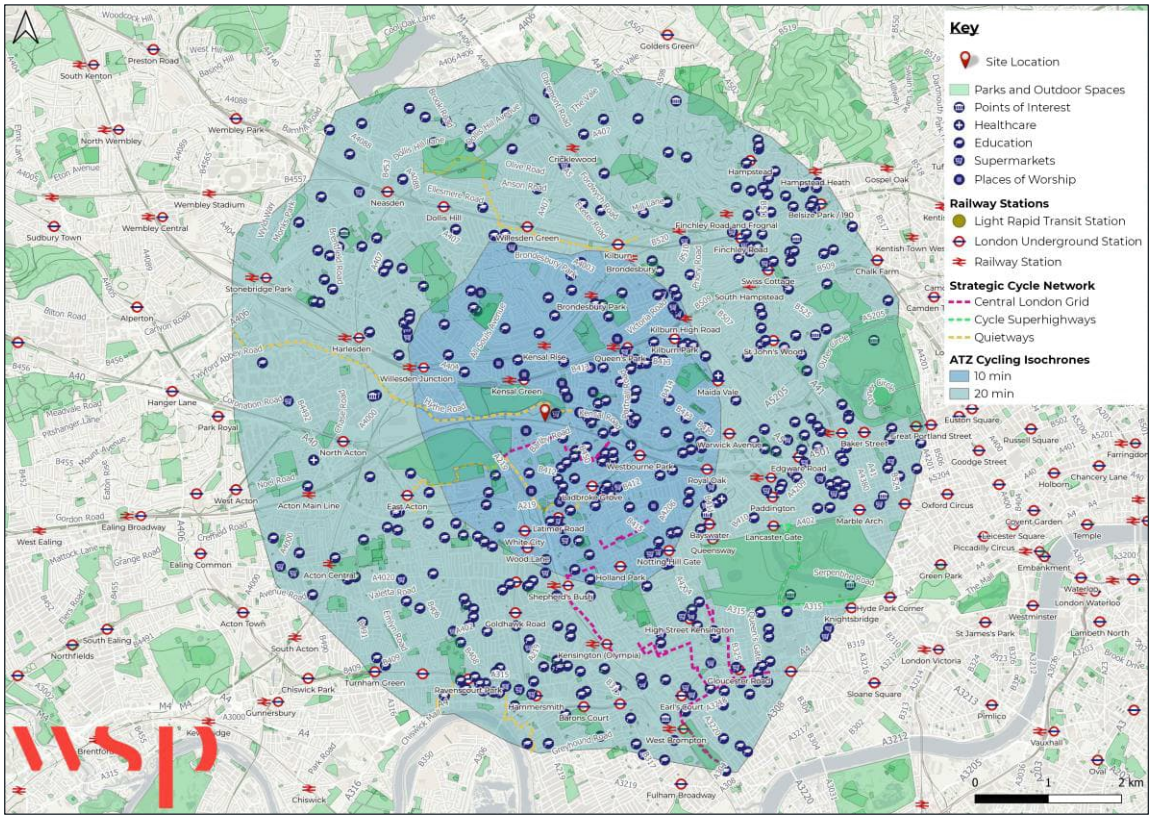


Figure 6-2 – Neighbourhood and Most Important Journeys

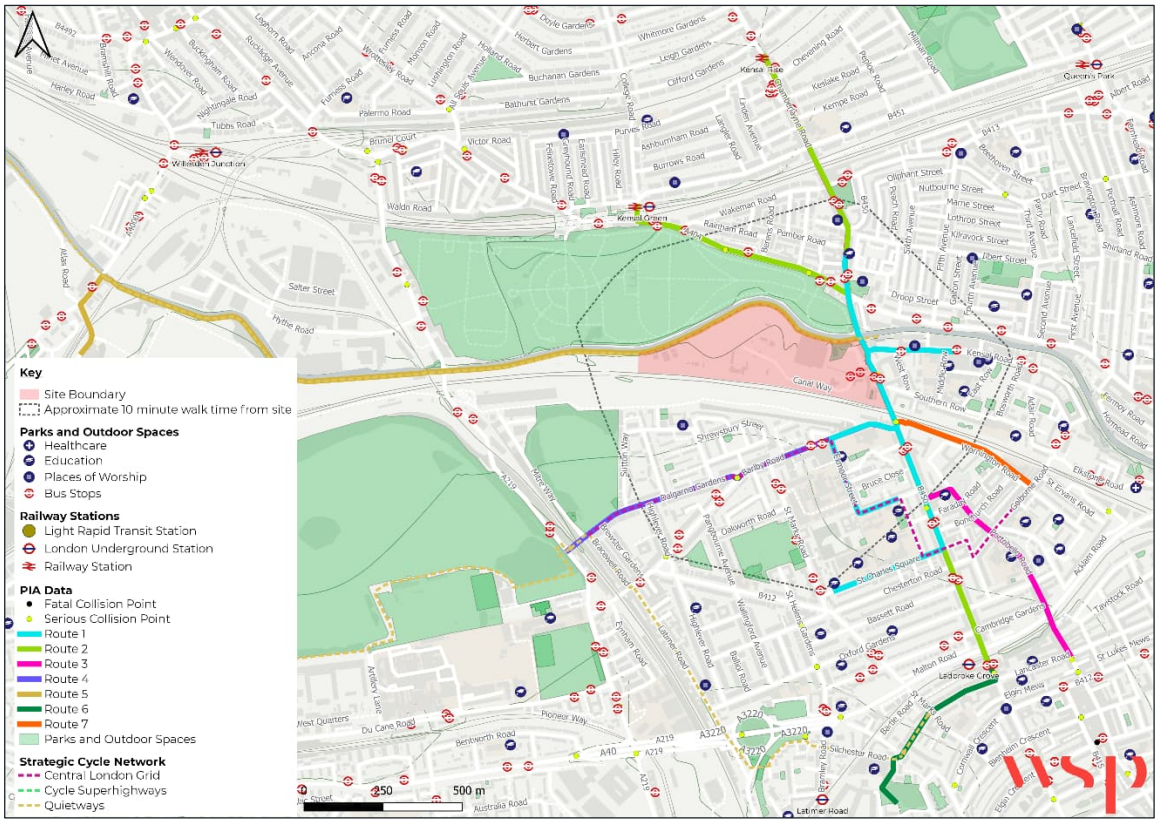
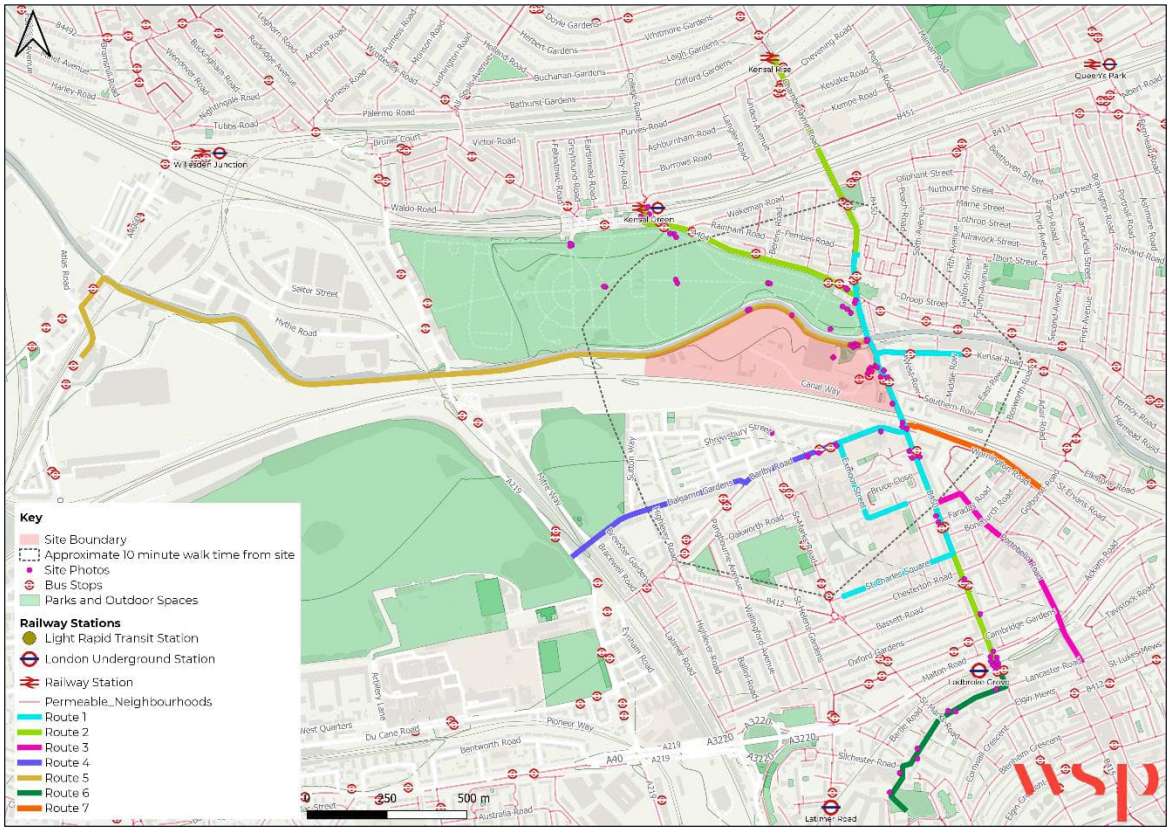


Figure 6-3 – Neighbourhood Map - ATZ Routes



6.1.4. The key routes which have been assessed are listed below. These routes as shown on the ATZ map were agreed through pre application discussions with TfL and RBKC.

- Route 1: Routes to nearest primary and secondary schools (Bales College, Barlby Primary school, The Lloyd Williamson school and St Charles Primary School)
- Route 2: Routes to nearest LUL and rail stations (Ladbroke Grove, Kensal Green, Kensal Rise)
- Route 3: Route to nearest town centre/high street (Kensal Rise and Portobello Road)
- Route 4: Route to nearest green space Little Wormwood Scrubs and Quietway 2
- Route 5: Route to future destinations (Old Oak Common)
- Route 6: Route to Kensington Leisure Centre / Kensington Academy
- Route 7: Routes to places of worship have also been considered following TfL pre app advice.

6.1.5. A nighttime ATZ has also been carried at the request of TfL out and is included within the detailed ATZ assessment.

6.1.6. The ATZ assessment identifies where there are deficiencies in the existing network and how these can be addressed. This is not a commitment to address them but to assist the Council and TfL in supporting wider improvements to the network. Where the improvements are directly related and appropriate there may be scope to offer some off-site improvements.

7 LONDON WIDE NETWORK

7.1 INTRODUCTION

7.1.1. This chapter sets out the approach to estimate the network peak hour trips associated with the proposed development, including the impact on the local highway and public transport network.

7.1.2. This approach has been presented through pre-application discussions with RBKC and TfL.

7.2 EXISTING TRIP GENERATION

7.2.1. The existing uses on the site which generate trips include:

- Sainsbury's store;
- Petrol Filling Station; and
- Industrial uses at west end of site.

7.2.2. The trip generation for the existing site is based upon the following surveys:

- Manual classified vehicle turning count surveys along various points of Canal Way on Wednesday 03 July 2019 within the area defined by RBKC and TfL;
- Automated traffic count surveys at the Sainsbury's car park entrance and exits between and including 18 April 2018 and 24 April 2018; and
- Surveys at the Sainsbury's store entrance to count pedestrians, cyclist and bus passengers on Friday 20 April 2018.

7.2.3. The full survey outputs are available in **Appendix H**.

7.2.4. **Table 7-1** shows the existing vehicle trips to and from the site. The following should be noted:

- The 'Sainsbury's store' trips are based on the April 2018 car park entry and exit surveys and are the average weekday trips;
- The 'Petrol Filing Station' trips are from the July 2019 surveys which counted vehicle entries and exits into the Petrol Filling Station;
- The Petrol Filling Station vehicle exit counts have been used to inform the estimated number of entries; and
- The 'Canal Way' trips are based on the July 2019 surveys. The traffic counts for Canal Way were surveyed at the junction with Ladbroke Grove, therefore include all vehicle trips along Canal Way, including buses, the Sainsbury's store and Petrol Filling Station, and any vehicle trips associated with the existing commercial uses at the west end of the site.

Table 7-1 – Existing Vehicles Trips from both April 2018 and July 2019 Surveys

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Sainsbury's store	145	111	256	236	272	508
Petrol Filling Station	83	83	166	92	92	184

Canal Way	327	252	579	380	414	794

7.2.5. **Table 7-2** shows the existing pedestrian, cyclist and bus passenger trips to the Sainsbury's store based on the April 2018 surveys.

Table 7-2 – Sainsbury's Multi-modal Surveys (Friday 20 April 2018)

Use	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Pedestrian	111	94	205	209	130	339
Cyclist	2	2	4	6	7	13
Bus passenger	66	77	143	86	96	182
Total	**179**	**173**	**352**	**301**	**233**	**534**

7.2.6. In addition, the Sainsbury's store generates existing servicing vehicle trips based on deliveries to the store and the goods online (GOL) home delivery service which currently operates, using five vans. **Table 7-3** shows the estimated number of peak hour and daily servicing trips generated by the existing Sainsbury's store.

Table 7-3 – Existing Sainsbury's Service Vehicle Trips

Use	AM peak hour			PM peak hour			Daily		
	Arr	Dept	Total	Arr	Dept	Total	Arr	Dept	Total
Store deliveries	2	2	4	2	2	4	15	15	30
GOL deliveries	1	1	2	1	1	2	15	15	30
Total	3	3	6	3	3	6	30	30	60

7.3 FORECAST TRIP GENERATION

7.3.1. The development proposals include up to 2,519 residential dwellings as presented in the Illustrative Scheme, a new Sainsbury's store with an increased net sales area, and up to 14,500 sqm of flexible retail, workspace, leisure and community uses, referred to as the 'non-residential' uses in this report. The forecast trip generation has considered the illustrative land uses proposed to assess the impacts. This section will present the forecast trip generation by mode for each of the uses.

RESIDENTIAL

7.3.2. The trip generation presented in the TA applies 2,519 residential units for the residential development, comprising three tenure types (Private Residential, Affordable Housing, and Intermediate), with unit sizes ranging from studio flats to four-bedroom flats.

7.3.3. With regard to residential car parking, **Table 7-4** presents the proposed number of car parking spaces, approximately 345 in total. This shows a parking provision of approximately 0.14 spaces per residential unit.

Table 7-4 – Proposed Residential Car Parking

Plot	Proposed Units	Basement Level Spaces	On-street parking	Total Car Parking Spaces
Plot 01	748	180	-	**180**
Plot 02	947	24	-	**24**
Plot 04	501	134	-	**134**
Plot 05	235	-	3	**3**
Plot 06	88		4	**4**
Total	**2,519**	**339**	**7**	**345**

7.3.4. The TRICS database has been used to identify comparable residential developments. The sites were agreed with TfL and RBKC as part of the pre application process. The site selection was based on the following criteria:

- Land use – Residential Affordable and Private flats;
- Location – Greater London;
- Units – 106 to 455;
- PTAL average 1-6; and
- Location – Town Centre, Edge of Town centre, Suburban area.

7.3.5. The selected sites, which were also presented in the Transport Assessment Scoping Note, are summarised in **Table 7-5.** The TRICS outputs are provided as **Appendix I**.

Table 7-5 – Selected Residential sites from TRICS

Reference	Description	Location	Units	PTAL	Area
EG-03-M-05	Blocks of flats & houses	Suburban Area	106	3	Acton
GR-03-M-01	Blocks of flats	Town centre	226	5	Greenwich
GR-03-M-02	Blocks of flats	Suburban Area	455	1b	Greenwich
SK-03-M-02	Blocks of flats	Edge of Town centre	122	6a	Peckham
HG-03-C-01	Blocks of flats	Neighbourhood centre	255	5	Tottenham Hale
IS-03-C-07	Blocks of flats	Edge of Town Centre	185	5	Islington

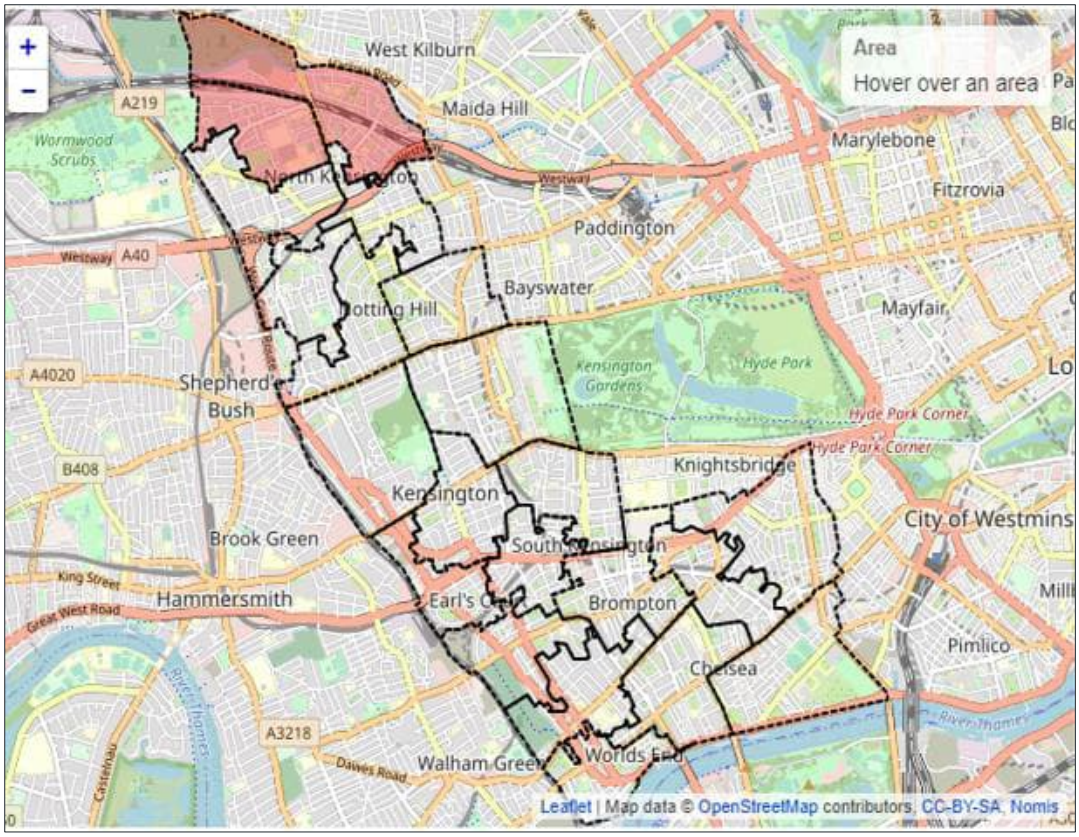
7.3.6. The total person residential trip rates per unit are shown in **Table 7-6**, with the estimated total person trips based upon the proposed 2,519 residential units.

Table 7-6 – Total Person Residential Trip Rates

Use	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Total person trip rate (per units)	0.059	0.409	0.467	0.221	0.115	0.335
Total person trips	147	1,029	1,176	555	288	844

7.3.7. To forecast the mode share for the total people trips, Census data for method of travel to work has been used. The 2011 Census dataset for method of travel to work have been extracted for RBKC as a whole and the output areas surrounding the site, to provide a representative local mode share benchmark. The selected MSOAs areas are shown in **Figure 7-1.**

Figure 7-1 – Output Area Selection for Census Data for Method of Travel to Work



7.3.8. The mode share for RBKC and the output areas from the Middle Layer Super Output Area (MSOA) encompassing the site are shown in **Table 7-7**.

7.3.9. It should be noted the mode shares have been adjusted by excluding the Census for "other method of travel to work" and "not in employment".

Table 7-7 – Mode Share from 2011 Census Data

Mode	RBKC Mode Share	MSOA Mode Share
Work mainly from home	12%	0%
Underground, metro, light rail or tram	32%	25%
Train	14%	10%
Bus, minibus or coach	14%	18%
Taxi	0%	0%
Motorcycle, scooter or moped	2%	2%
Driving a car or van	11%	20%
Passenger in a car or van	1%	1%
Bicycle	5%	7%
On Foot	9%	16%
Total	**100%**	**100%**

7.3.10. The MSOA mode share is regarded as a more suitable mode share to be applied to the residential development. The mode share presented in **Table 7-8** shows an adjusted MSOA mode share to better reflect the type of residential development (flatted, mixed-use, dense, car-lite) and accessibility to the site.

Table 7-8 – Forecast Residential Trips by Main Mode

Mode (Main Mode)	Mode Share	AM peak hour			PM peak hour		
		Arr	Dept	Total	Arr	Dept	Total
Work mainly from home	5.5%	8	57	65	31	16	46
London Underground	24%	35	247	282	133	69	203
Train	9%	13	93	106	50	26	76
Bus, minibus or coach	18%	27	185	212	100	52	152
Taxi	1%	1	10	12	6	3	8
Motorcycle, scooter or moped	0.5%	1	5	6	3	1	4
Driving a car or van	14%	21	144	165	78	40	118
Passenger in a car	1%	1	10	12	6	3	8
Bicycle	11%	16	113	129	61	32	93
On Foot	16%	24	165	188	89	46	135
Total	**100%**	**147**	**1,029**	**1,176**	**555**	**288**	**844**

7.3.11. As there are no London Underground, London Overground or mainline rail stations within an the recognised PTAL 960m (12 minutes' walk) of the site, it has been assumed that some new residents will decide to access nearby stations via bus, therefore the first / final mode to and from the site will be via bus.

7.3.12. For the purpose of understanding what impact this would have on the bus services, it has been assumed that 50% of all London Underground, London Overground and mainline rail users will travel to these stations via bus, with the remaining 50% walking. **Table 7-9** shows proposed first / final mode share, including these adjustments. The red highlighted text indicates the split of bus / London Underground / rail / on foot as part of the analysis. This approach was agreed with TfL as part of the pre-application process.

Table 7-9 – Forecast Residential First / Final Mode Share

Mode (First / Final Mode)	Mode Share
Work mainly from home	5.5%
Bus, minibus or coach	18%
LUL via Bus	11%
Train via Bus	5%
Taxi	1%
Motorcycle, scooter or moped	0.5%
Driving a car or van	14%
Passenger in a car or van	1%
Bicycle	11%
On Foot	16%
LUL on Foot	12%
Train on Foot	5%
Total	**100%**

7.3.13. The results show that the bus model share will increase from a base of 18% with an additional 16% and similarly walking mode share will increase from a base of 16% with an additional 17% to reflect the reallocation of travellers trying to access the London Underground, London Overground and mainline rail stations. Based on the first / final mode share, the resultant residential trips forecasted by mode, are shown in **Table 7-10**.

Table 7-10 – Forecast Residential Trips by First / Final Mode

Mode (First / Final Mode)	Mode Share	AM peak hour			PM peak hour		
		Arr	Dept	Total	Arr	Dept	Total
Work mainly from home	5.5%	8	57	65	31	16	46
Bus, minibus or coach	34%	50	350	400	189	98	287
Taxi	1%	1	10	12	6	3	8
Motorcycle, scooter or moped	0.5%	1	5	6	3	1	4
Driving a car or van	14%	21	144	165	78	40	118
Passenger in a car	1%	1	10	12	6	3	8
Bicycle	11%	16	113	129	61	32	93
On Foot	33%	49	340	388	183	95	278
Total	**100%**	**147**	**1,029**	**1,176**	**555**	**288**	**844**

7.3.14. It should be noted the 14% car driver mode share results in approximately 144 resident cars departing the site in the AM peak hour. This would be considered a high number of departures when compared to the total residential car parking provision on-site of 345 spaces. This would suggest 42% of the 345 car parking spaces would depart the site in the AM peak hour, which is likely to be an over-estimate. It is suggested this demonstrates the forecast residential car trips are robust and offer a worst case assessment.

7.3.15. The residential units will also generate delivery and servicing vehicle trips. **Table 7-11** presents the forecast residential delivery and servicing trips.

Table 7-11 – Forecast Residential Delivery and Servicing Vehicle Trips

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Service vehicle trip rate (per unit)	0.009	0.008	0.017	0.008	0.007	0.015
Service vehicle trips	23	20	43	20	18	38

SAINSBURY'S

7.3.16. The development proposals will increase the net sales area of the Sainsbury's store from 4,393 sqm to 5,509 sqm, an increase of +25%, however the increase in store size is primarily to provide a better internal layout and to accommodate pickers for the enlarged goods online (GOL) facility. Therefore, Sainsbury's is forecasting an increase in customer trips of approximately +10%, all of which are assumed to be generated by the associated new residential developments on-site. The development proposals for Sainsbury's will also include a reduction in customer car parking from 396 spaces to 227 spaces, a reduction of 169 spaces.

7.3.17. To forecast customer trips, the April 2018 survey results will be used, as agreed with TfL and RBKC during pre-application discussions. The reduction in car parking will constrain peak hour trips and it is likely customer car trips will reduce. However, to provide a robust assessment, the April 2018 observed car trips have been applied to provide the forecast trips. With regard to non-car trips to the Sainsbury's store by walking and cycling, these will be increased by +10% to reflect the proposed increase in the sales area. It is anticipated the majority of the additional trips will be generated by new residents on-site, therefore would be regarded as internal trips, which will be set out later in the TA.

7.3.18. **Table 7-12** shows the April 2018 observed customer trips, with the pedestrian and cycling trips increased by 10% to reflect the new customer trips from new residents within the site. It should be noted bus passenger and car trips have not been increased.

Table 7-12 – Sainsbury's Store Trips Increased by +10% (Excluding Car and Bus Passenger Trips)

Use	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Pedestrian	122	103	226	230	143	373
Cyclist	2	2	4	7	8	15
Bus passenger	66	77	143	86	96	182
Cars	145	111	256	236	272	508

7.3.19. **Table 7-13** presents the net increase in Sainsbury's customer trips.

Table 7-13 – Additional Sainsbury's Trips

Use	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Pedestrian	11	9	21	21	13	34
Cyclist	0	0	0	1	1	1
Bus passenger	0	0	0	0	0	0
Cars	0	0	0	0	0	0

7.3.20. With regard to delivery and servicing vehicle trips generated by the proposed Sainsbury's store, these will increase with the provision of additional goods online (GOL) vans operating on the site which will make deliveries to customer's homes. **Table 7-14** shows the forecast delivery vehicle trips for the proposed Sainsbury's store.

Table 7-14 – Forecast Sainsbury's Delivery and Servicing Vehicle Trips

Item	AM peak hour			PM peak hour			Daily		
	Arr	Dept	Total	Arr	Dept	Total	Arr	Dept	Total
Store deliveries	2	2	4	2	2	4	15	15	30

Item	AM peak hour			PM peak hour			Daily		
	Arr	Dept	Total	Arr	Dept	Total	Arr	Dept	Total
GOL deliveries	5	5	10	5	5	10	45	45	90
Total	7	7	14	7	7	14	60	60	120

NON-RESIDENTIAL

7.3.21. The assessment includes an assumption that all non-residential trips will be made by active travel and public transport, due to the constrained approach to parking on-site, the availability of public transport, and the inherent nature of the ancillary uses which will have a local catchment.

7.3.22. **Table 7-15** shows the proposed non-residential uses and approximate floor areas for each.

Table 7-15 – Proposed Non-Residential Uses and Floor Areas

Use	Floor Area (sqm)
Food & Drink	2,947.30
Retail	1,677.20
Workspace	3,339.50
Community	3,028.10
Leisure	1,520
Canalside house (re-provided)	741
Cycle hub	212.70
Creche	225.40
Total	**13,691.20**

7.3.23. With regard to trip generation, only the significant non-residential uses have been assessed, as listed below, with the remainder considered as ancillary to the main development or these trips are likely to be internal to the development site.

- Food & Drink
- Retail
- Community
- Workspace

7.3.24. A factor of 90% of trips generated by the uses listed above (excluding Workspace) is considered to be 'internal' to the site or 'linked' to other land uses, with only 10% of trips originating from outside the scheme, with the exception of trips associated with the proposed Workspace use.

Food & Drink

7.3.25. Travel to and from Food & Drink uses are expected to primarily originate within the site or to be part of linked trips to the food-store, or passing leisure trips.

7.3.26. Trip generation associated with the Food & Drink uses have been forecast using surveys from the TRICS database selected:

- Land use – Hotel, Food and Drink – Pub / Restaurant;
- Weekday surveys – All;
- Location – Greater London; and
- PTAL 5+.

7.3.27. The selected TRICS site, reference BT-06-B-01, is a coffee shop and restaurant in Wembley, Brent, with a floor area of 150 sqm. These sites were selected due to the lack of comparable large mixed used schemes, however can be applied on a unit by unit basis to the proposed scheme because the trip profile in considered comparable **Table 7-16** shows the total person trip rates, applied to an overall Food & Drink floor area of 2,947 sqm.

Table 7-16 – Forecast Food & Drink Trips

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Total person trip rate (per 100 sqm)	-	-	-	6.000	3.333	9.333
Total person trips	-	-	-	177	98	275
External trips (10%)	-	-	-	18	10	28

Retail

7.3.28. The retail strategy will complement the proposed Sainsbury's store on site and will be provided in the form of separate small-medium size units accessed directly from the public realm.

7.3.29. The nature and size of the retail uses provided within the wider site is unlikely to attract trips from long distances and therefore people travelling to retail destinations within the site will most likely originate from a local catchment.

7.3.30. As set out in the Transport Assessment Scoping Note, the method applies a trip rate equal to 30% of the Food & Drink trip rate, as shown in **Table 7-17**. The trip rates have been applied to a Retail floor area of 1,677 sqm.

Table 7-17 – Forecast Retail Trips

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Total person trip rate (per 100 sqm)	-	-	-	1.800	1.000	2.800
Total person trips	-	-	-	30	17	47
External trips (10%)	0	0	0	3	2	5

Community

7.3.31. The proposed Community use will have a local catchment. Trip generation associated with the Community uses have been forecast using surveys from the TRICS database on the following basis:

- Land use – Leisure;
- Weekday surveys – All;
- Location – Greater London;
- PTAL 5+

7.3.32. The selected TRICS site, reference HK-07-C-03, is a leisure centre in Shoreditch, Hackney in London with a floor area of 11,618 sqm. **Table 7-18** shows the total person trip rates, applied to an overall community use are of 3,028 sqm.

Table 7-18 – Forecast Community Trips

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Total person trip rate (per 100 sqm)	1.214	0.792	2.006	1.721	1.954	3.675
Total person trips	37	24	61	52	59	111
External trips (10%)	4	2	6	5	6	11

Combined External Trips for Food & Drink, Retail, and Community Use

7.3.33. The trips generated by the Food & Drink uses, Retail uses, and the Community uses will be from a local catchment. In addition to constrained parking on-site, it is assumed all trips would be made by either walking, cycling or bus.

7.3.34. **Table 7-19** shows the applied mode share, with trips by mode during the peak hours.

Table 7-19 – Forecast External Food & Drink, Retail, and Community Use Trips by Main Mode

Mode (Main Mode)	Mode Share	AM peak hour			PM peak hour		
		Arr	Dept	Total	Arr	Dept	Total
London Underground	0%	0	0	0	0	0	0
Train	0%	0	0	0	0	0	0
Bus, minibus or coach	20%	1	0	1	5	3	9
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	0%	0	0	0	0	0	0
Driving a car or van	0%	0	0	0	0	0	0
Passenger in a car	0%	0	0	0	0	0	0
Bicycle	20%	1	0	1	5	3	9
On Foot	60%	2	1	4	16	10	26
Total	**100%**	**4**	**2**	**6**	**26**	**17**	**43**

Workspace

7.3.35. A first principles approach has been applied to determine the likely number of people travelling to/from the proposed workspace use. This approach consists of estimating the maximum occupancy of the use and determining the travel patterns based on use specific trends and factors.

7.3.36. The number of full-time employees (FTE) has been calculated as one FTE per 11.3sqm of NIA floorspace, as detailed in the London Office Policy Review (2017), and supported by the British Council of Offices (BCO), which identified a 'sweet spot' of 10-12 sqm per person in research published in September 2022.

7.3.37. An office utilisation of 70% of the workforce has been applied, which is supported by a BCO position paper dated 2022 which identified utilisation off office space between 60-80% on any given weekday. It is estimated 55% of the daily office population would travel to work during the peak periods. The trip generation also includes an allowance for an additional 5% of trips travelling in the opposite direction to the main peak flow to account for staff leaving for meetings in the AM peak and visitors arriving during the PM peak. **Table 7-20** shows the forecast workspace trips.

Table 7-20 – Forecast Workspace Trips

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Total person trips	114	10	124	10	114	124

7.3.38. Travel to work mode share for workplace population has been used to estimate likely mode share for the proposed workspace use, as presented in **Table 7-21.** This has been adjusted to reflect the car-free nature of the non-residential uses.

Table 7-21 – Office Mode Share: Census Data for RBKC

Mode	Mode Share	Adjusted Mode Share
Underground, metro, light rail or tram	26%	30%
Train	10%	14%
Bus, minibus or coach	18%	22%
Taxi	0%	0%
Motorcycle, scooter or moped	2%	2%
Driving a car or van	20%	0%
Passenger in a car or van	1%	1%
Bicycle	7%	11%
On Foot	16%	20%
Total	**100%**	**100%**

7.3.39. The resultant forecast tris associated with the workspace use of the development is provided within **Table 7-22**.

Table 7-22 – Forecast Workspace Trips

Mode (Main Mode)	Mode Share	AM peak hour			PM peak hour		
		Arr	Dept	Total	Arr	Dept	Total
London Underground	30%	34	3	37	3	34	37
Train	14%	16	1	17	1	16	17
Bus, minibus or coach	22%	25	2	27	2	25	27
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	2%	2	0	2	0	2	2
Driving a car or van	0%	0	0	0	0	0	0
Passenger in a car	1%	1	0	1	0	1	1
Bicycle	11%	13	1	14	1	13	14
On Foot	20%	23	2	25	2	23	25
Total	**100%**	**114**	**10**	**124**	**10**	**114**	**124**

7.3.40. The non-residential uses will generate servicing vehicle trips, the totals have been derived from a mixture of TRICS sites and experience of preparing assessments for non-residential developments

based on industry recognised servicing trip rates and standards (from TRICS). **Table 7-23** shows the daily servicing trip rate used for each of the non-residential uses.

Table 7-23 – Non-Residential Servicing Trip Rates (per 100 sqm)

Use	Floor Area (sqm)	Servicing Vehicle Trip Rate (Daily Arrivals)	Servicing Vehicle Trip Rate (Peak hour)
Food & Drink	2,947.30	1.35	0.135
Retail	1,677.20	0.6	0.06
Workspace	3,339.50	0.6	0.06
Community	3,028.10	0.2	0.02
Amenity	1,520	0.2	0.02
Commercial space	741	0.2	0.02
Cycle hub	212.70	0.2	0.02
Creche	225.40	0.2	0.02

7.3.41. **Table 7-24** shows the forecast delivery and servicing vehicle trips for the non-Residential uses.

Table 7-24 – Forecast servicing trips for Non-Residential

Use	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Food & Drink	4	4	8	4	4	8
Retail	1	1	2	1	1	2
Workspace	2	2	4	2	2	4
Community	1	1	1	1	1	1
Amenity	0	0	1	0	0	1
Commercial space	0	0	0	0	0	0
Cycle hub	0	0	0	0	0	0
Creche	0	0	0	0	0	0
Total	**8**	**8**	**16**	**8**	**8**	**16**

TOTAL TRIPS

7.3.42. **Table 7-25** shows the total trips for the proposed residential units, the Sainsbury's store and the non-residential uses, by main mode, including forecast delivery and servicing vehicle trips.

Table 7-25 – Total Forecast Trips – Main Mode

Mode (Main Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
London Underground	70	250	320	136	103	240
Train	29	94	123	51	42	93
Bus, minibus or coach	118	265	383	193	176	370
Taxi	1	10	12	6	3	8
Motorcycle, scooter or moped	3	5	8	3	4	7
Driving a car or van	203	290	494	349	345	694
Passenger in a car	1	10	12	6	3	8
Bicycle	32	117	149	74	55	129
On Foot	171	272	442	336	222	559
Total	629	1,314	1,943	1,155	954	2,109

7.3.43. **Table 7-26** shows the total trips for the proposed residential units, the Sainsbury's store and the non-residential uses, by first / final mode, including forecast delivery and servicing vehicle trips.

Table 7-26 – Total Forecast Trips – First / Final Mode

Mode (First / Final Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Bus, minibus or coach	167	432	599	285	248	532
Taxi	1	10	12	6	3	8
Motorcycle, scooter or moped	3	5	8	3	4	7
Driving a car or van	203	290	494	349	345	694
Passenger in a car	1	10	12	6	3	8
Bicycle	32	117	149	74	55	129
On Foot	221	449	669	433	296	730
Total	629	1,314	1,943	1,155	954	2,109

TOTAL EXISTING TRIPS

7.3.44. To estimate the net impact, **Table 7-27** shows the total existing trips generated by the existing Sainsbury's store and the Petrol Filling Station, by main mode.

Table 7-27 – Total Existing Trips – Main Mode

Mode (Main Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
London Underground	0	0	0	0	0	0
Train	0	0	0	0	0	0
Bus, minibus or coach	66	77	143	86	96	182
Taxi	0	0	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0	0	0
Driving a car or van	231	197	428	331	367	698
Passenger in a car	0	0	0	0	0	0
Bicycle	2	2	4	6	7	13
On Foot	111	94	205	209	130	339
Total	**410**	**370**	**780**	**632**	**600**	**1,232**

7.3.45. **Table 7-28** shows the total existing trips generated by the existing Sainsbury's store and the Petrol Filling Station, by first / final mode.

Table 7-28 – Total Existing Trips – First / Final Mode

Mode (First / Final Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Bus, minibus or coach	66	77	143	86	96	182
Taxi	0	0	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0	0	0
Driving a car or van	231	197	428	331	367	698
Passenger in a car	0	0	0	0	0	0
Bicycle	2	2	4	6	7	13
On Foot	111	94	205	209	130	339
Total	**410**	**370**	**780**	**632**	**600**	**1,232**

7.3.46. It should be noted there are existing commercial uses in operation at the west end of the site, i.e. businesses operating from a point west of the existing Sainsbury's store service yard access. It is understood these businesses generate approximately 550 two-way vehicle trips a day, between 7am and 7pm, and up to 40 two-way vehicle trips during each AM and PM peak hour. These

vehicle trips were not surveyed as part of the 2019 surveys, therefore are not included within the Total Existing Trips identified above.

TOTAL NET TRIPS

7.3.47. To understand the peak hour impacts of the development proposals, the net trips will be applied to the impact assessments. The net trips are split into main mode and secondary mode / linked mode. E.g. bus to rail or walk / cycle to rail. The net increase is the difference between the existing and the proposed. **Table 7-29** shows the net trips by main mode.

Table 7-29 – Total Net Trips – Main Mode

Mode (Main Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
London Underground	70	250	320	136	103	240
Train	29	94	123	51	42	93
Bus, minibus or coach	52	188	240	107	80	188
Taxi	1	10	12	6	3	8
Motorcycle, scooter or moped	3	5	8	3	4	7
Driving a car or van	-28	93	66	18	-22	-4
Passenger in a car	1	10	12	6	3	8
Bicycle	30	115	145	68	48	116
On Foot	60	178	237	127	92	220
Total	219	944	1,163	523	354	877

7.3.48. **Table 7-30** shows the net trips by first / final mode.

Table 7-30 – Total Net Trips – First / Final Mode

Mode (First / Final Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Bus, minibus or coach	101	355	456	199	152	350
Taxi	1	10	12	6	3	8
Motorcycle, scooter or moped	3	5	8	3	4	7
Driving a car or van	-28	93	66	18	-22	-4
Passenger in a car	1	10	12	6	3	8

Mode (First / Final Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Bicycle	30	115	145	68	48	116
On Foot	110	355	464	224	166	391
Total	219	944	1,163	523	354	877

7.4 TRAFFIC IMPACT ASSESSMENT

7.4.1. **Table 7-31** shows the net volume of vehicle trips is minimal and therefore not expected to have a significant impact on the local highway network.

Table 7-31 – Net Traffic Impact

Item	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Existing vehicle trips	231	197	428	331	367	698
Forecast vehicle trips	203	290	494	349	345	695
Net vehicle trips	-28	+93	+66	+18	-22	-4

7.4.2. To assess the impact on the local highway network, it has been agreed, in consultation with RBKC and TfL, to prepare a Vissim model. The Vissim model has been prepared to assess both the traffic impact on the proposed highway network resulting from the proposed development. The Vissim has also been used to assess the RBKC proposed new signalised junction at the site access, at the junction between Ladbroke Grove and Canal Way.

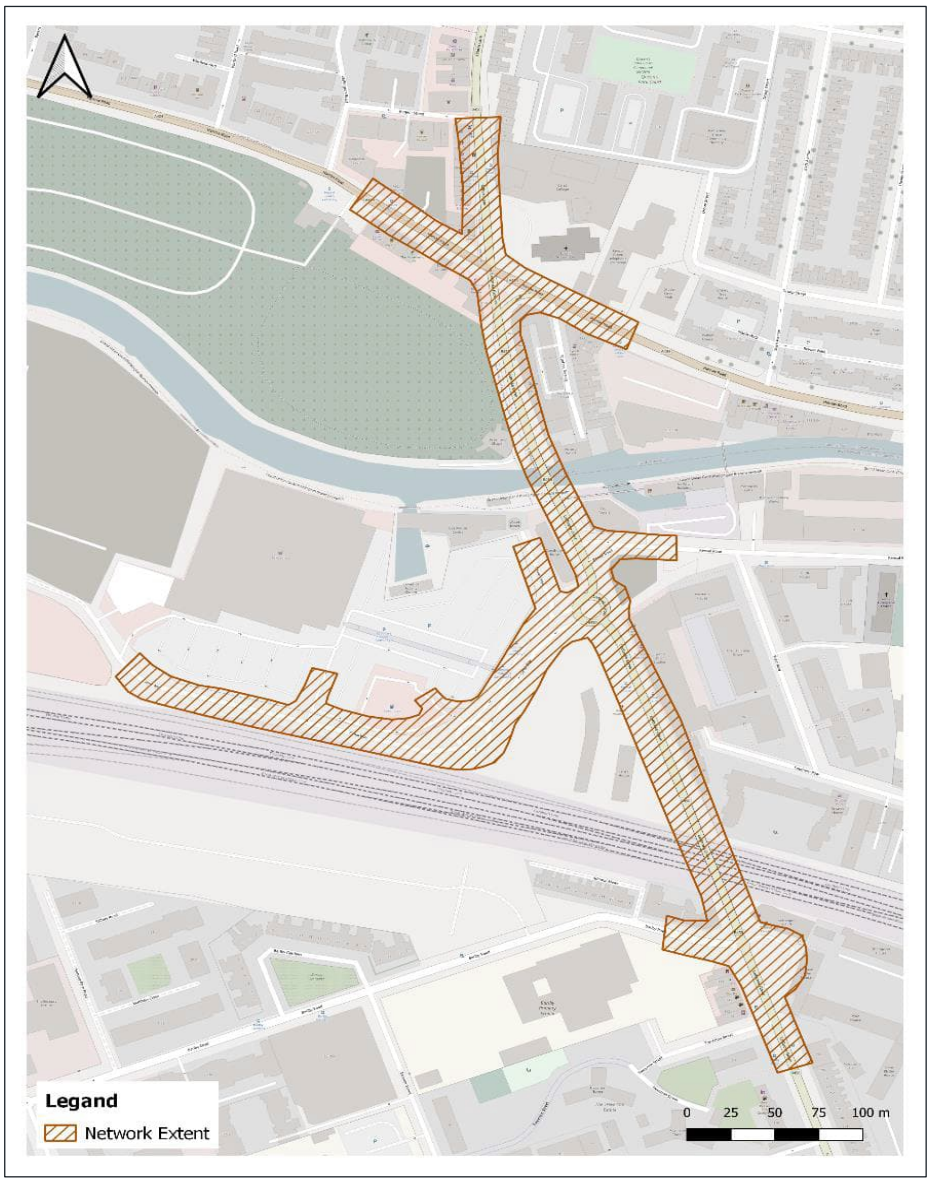
7.4.3. The junction between Ladbroke Grove and Canal Way is currently a three-arm mini-roundabout. As specified in the KCOA Supplementary Planning Document (2021), the proposals include improvements to the junction between Ladbroke Grove and Canal Way, which will incorporate the junction with Kensal Road, to form an all-movements four-arm signal-controlled junction. The key justification for providing the interventions in the SPD and these proposals is to ensure that the safety of pedestrians and cyclists is improved, particularly due to the increase in cycle trips from the proposed development. Currently the way the mini-roundabout is formed means that pedestrians and cyclists mix with general traffic. This arrangement is not in accordance with Healthy Streets of Liveable Neighbourhood guidance.

7.4.4. As part of wider KCOA studies undertaken by TfL and RBKC, reports have been prepared to assess the Ladbroke Grove and Canal Way junction options, in particular the Ladbroke Grove and Canal Way Junction Comparative Design Assessment (Project Centre, 2019) report. This report formed part of the RBKC evidence base for the SPD. This study, undertaken on behalf of RBKC, concluded the signalisation of the junction would offer the wider improvements for pedestrians, cyclists, and overall safety, in-line with national and regional policy objectives, an in particular London's Vision Zero which aims to eliminate all deaths and serious injuries by 2041.

7.4.5. TfL has audited the Vissim model and will ultimately be responsible for signing-off the model, which has been prepared in accordance with the TfL Vissim Model Audit Process (VMAP) approvals process. A number of technical meetings have been held with TfL to work through the detail of these assessments, and the interaction between strategic and local highway assessment.

7.4.6. The area of the Vissim model study area is shown in **Figure 7-2.** The modelled area includes Ladbroke Grove between and including the junctions with Harrow Road to the north and Barlby Road to the south. The model includes the proposed development site. The models have been used to assess the weekday AM and PM network peak hours on this network.

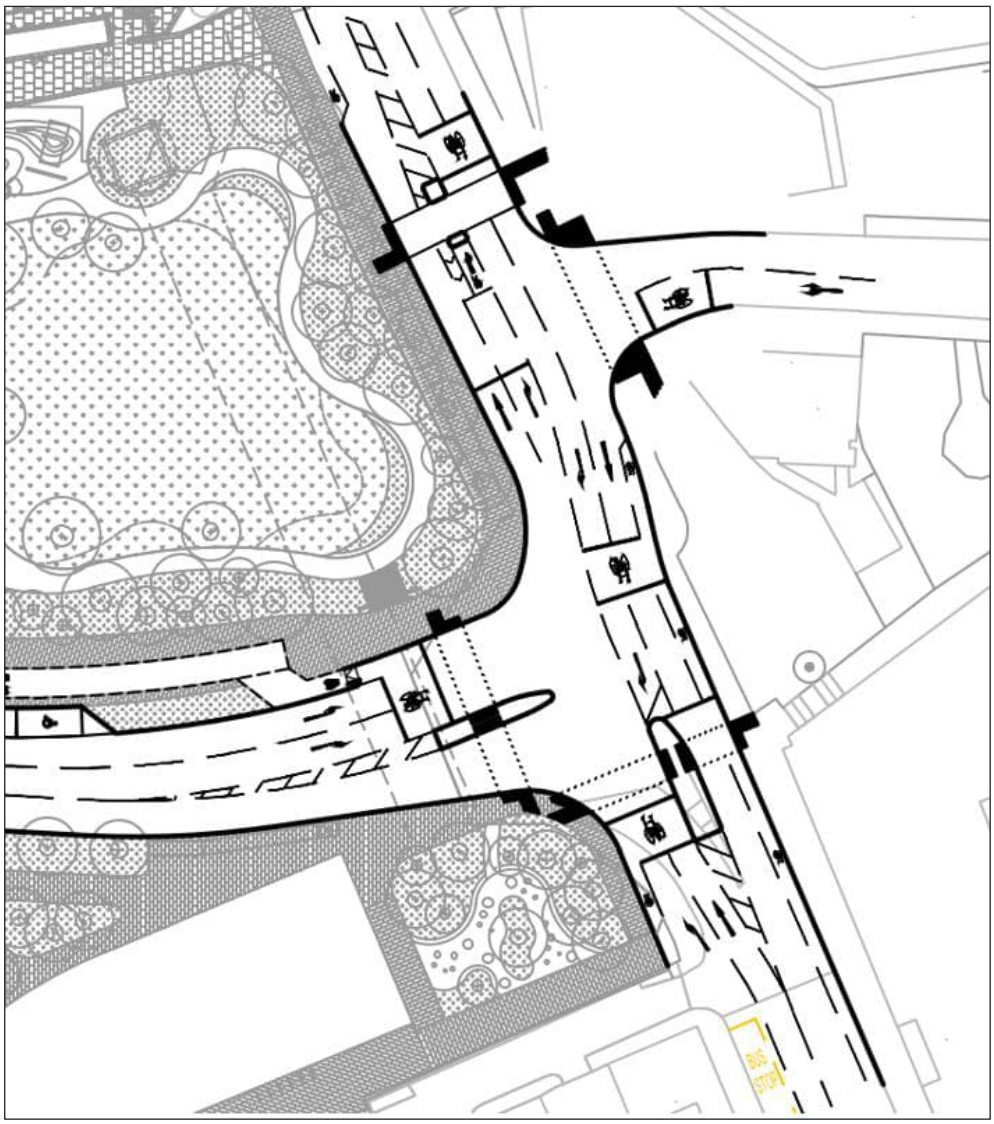
Figure 7-2 – Extent of Vissim Model



7.4.7. The Vissim model has assessed the impact of converting the existing mini-roundabout junction to a four-arm signal junction with the traffic flow changes as a result of the development.

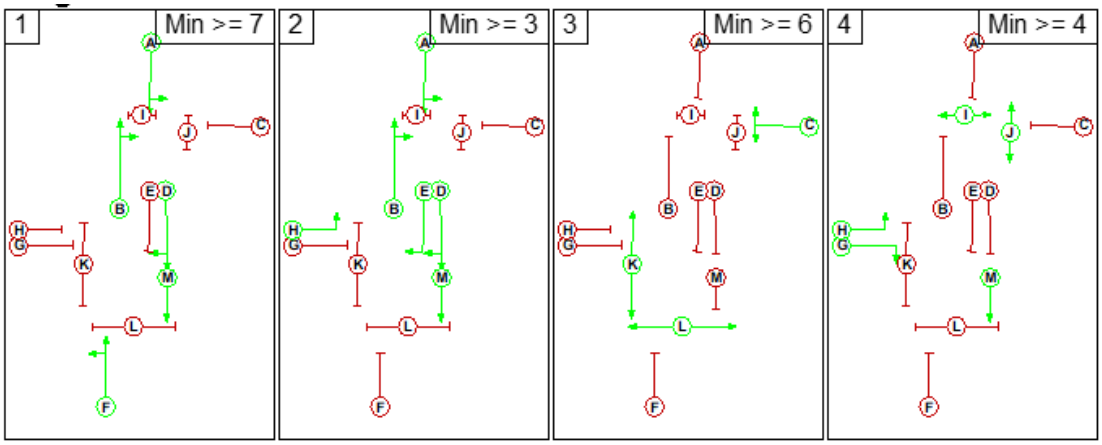
7.4.8. **Figure 7-3** shows the proposed layout for the four-arm signal junction between Ladbroke Grove, Canal Way and Kensal Road.

Figure 7-3 – Proposed Signal Junction Layout



7.4.9. **Figure 7-4** shows the proposed signal stages for the four-arm signal junction between Ladbroke Grove, Canal Way and Kensal Road.

Figure 7-4 – Proposed Signal Stage Sequence



7.4.10. The development proposals included in the 'with development' scenario for the Vissim mode include the following:

- Proposed Development – 2,538 units

  (a higher number was assessed in the models than in the illustrative scheme (2,519) due to the models being submitted in advance of the final unit numbers);
- St William residential – 750 units;
- New Sainsbury's store (removal of the PFS); and
- Non-residential uses (delivery and servicing trips only) – up to 14,500 sqm.

7.4.11. The forecast development vehicle trips used in the Vissim model are shown in **Table 7-32.**

Table 7-32 – Proposed Development Vehicle Trips

Use	Item	AM peak hour		PM peak hour	
		Arr	Dept	Arr	Dept
Residential	Proposed Development Residents car trips	21	145	78	41
	Proposed Development Resident service vehicle trips	22	19	20	18
	St Williams Resident cars trips	6	43	23	12
	St Williams Residential service vehicle trips	6	6	6	5
Sainsbury's	Customer Car trips	145	111	236	272
	Service Vehicle trips	6	6	6	6
Non-Residential	Customer Car trips	0	0	0	0
	Service Vehicle trips	8	8	8	8

7.4.12. The scenarios assessed in the Vissim model include:

- Future Baseline – Future year traffic growth with existing mini-roundabout junction, existing Sainsbury's petrol filling station trips removed, and no additional 'with development' trips;

- Future Do Nothing – as above but including the 'with development' trips; and
- Future Do Something – as above, including the proposed all-movement signal junction between Ladbroke Grove, Canal Way and Kensal Road.

7.4.13. The Vissim model includes bus trips to assess the impact on journey time. It should be noted some of the routes included in the future year Vissim model scenarios are unlikely to continue to serve the site in a 'with development' scenario, namely routes 52 and 316. In addition, route 452 currently terminates on-site, however could revert back to a 'through' route in the future, with an additional terminating route to be included, subject to a review from London Buses. The method to model the existing bus routes which serve the Canal Way bus stops has therefore provided a robust assessment for the proposed signal junction between Ladbroke Grove, Canal Way and Kensal Road, providing a reasonable worst case comparison of bus journey times.

7.4.14. Further details on the modelling methodology are provided in the Modelling Expectations Document (MED) provided as **Appendix J**. The Stage 5 Vissim modelling report is provided as **Appendix K**.

7.4.15. The fully journey times results are provided in the Stage 5 Vissim modelling report. The journey times have been collected between several start and end points in the model area to show the journey time of vehicles along specific routes to be compared between the scenarios. The journey time sections in the Stage 5 Vissim modelling report match those within the VMAP 3 validated base model.

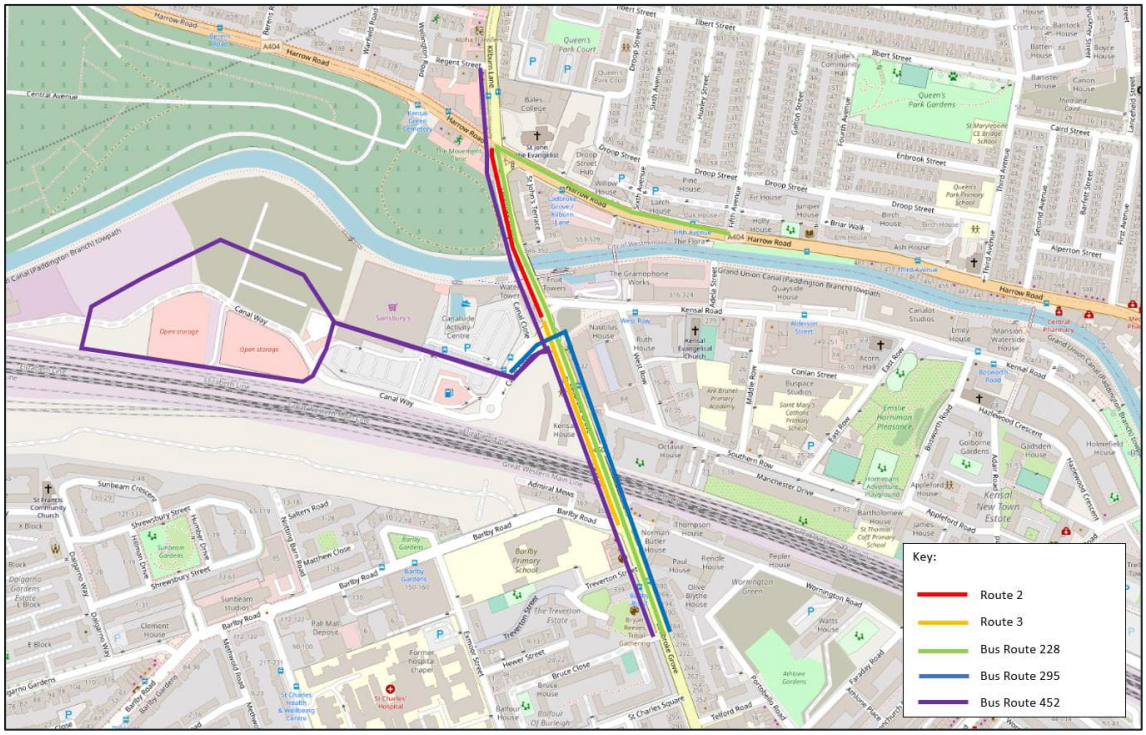
7.4.16. **Table 7-33** shows some of the key journey time routes modelled.

Table 7-33 – Key Journey Time Routes

Route	Start Point / End Point	Start Point / End Point
Route 2	Junction between Ladbroke Grove and Harrow Road	Junction between Ladbroke Grove and Kensal Road
Route 3	Junction between Ladbroke Grove and Kensal Road	Junction between Ladbroke Grove and Barlby Road
Bus Route 228	Junction between Ladbroke Grove and Bruce Close	Junction between Harrow Road and Fifth Avenue
Bus Route 295	Junction between Ladbroke Grove and Bruce Close	Canal Way (Existing bus stops)
Bus Route 452	Junction between Ladbroke Grove and Bruce Close	Junction between Kilburn Lane and Regent Street

7.4.17. **Figure 7-5** shows the journey time routes presented in **Table 7-33** on a plan.

Figure 7-5 – Vissim Model Journey Time Routes



7.4.18. **Table 7-34** shows the AM and PM peak hour results, comparing the journey time between the Future Baseline Do Nothing (DN) and Do Something (DS) scenarios. The routes are shown as Northbound (NB) and Southbound (SB).

Table 7-34 – Vissim Journey Time Results

Item	AM peak hour				PM peak hour			
	FB	DN	DS	Difference DN & DS +/- %	FB	DN	DS	Difference DN & DS +/- %
Route 2 SB (B1)	34	38	81	+113%	32	37	63	+70%
Route 2 NB (B2)	51	61	61	0%	51	54	53	-2%
Route 3 SB (C1)	50	62	94	+52%	53	57	82	+44%
Route 3 NB (C2)	49	58	190	+228%	54	71	150	+111%
Bus Route 228 NB	367	508	761	+50%	402	515	693	+35%
Bus Route 228 SB	385	515	827	+61%	402	466	661	+42%
Bus Route 295 NB	135	147	271	+84%	173	203	284	+40%
Bus Route 295 SB	188	168	264	+57%	208	149	261	+75%
Bus Route 452 NB	312	458	678	+48%	342	456	671	+47%
Bus Route 452 SB	344	481	748	+56%	337	427	663	+55%

7.4.19. In summary, the proposed conversion of the mini-roundabout junction to a signalised junction between Ladbroke Grove, Canal Way and Kensal Road, with dedicated pedestrian and cycle crossing stages, will increase journey times on the local highway network. However, these delays

need to be balanced with the positive pedestrian and cycle benefits arising from the proposed new junction, which would conform with TfL's Healthy Streets Approach and Vision Zero. Whilst the journey times are significant wider policy objectives and housing needs must be taken into account along with improved safety measures for vulnerable road users. The conversion to a signal controlled junction will also allow the potential for linking the signals with those at the junction between Harrow Road and Ladbroke Grove, to improve traffic flow on Ladbroke Grove.

7.4.20. The proposed junction improvement works will be discussed further with TfL and RBKC through further auditing of the Vissim modelling results, and if necessary to further develop the junction proposals as part of the next stage of design.

7.5 PEDESTRIAN IMPACT ASSESSMENT

7.5.1. This section presents the results from the Pedestrian Comfort Level (PCL) assessment.

7.5.2. The scope of the assessment includes the proposed footways throughout the site and the proposed pedestrian crossing points at the signal junction between Ladbroke Grove, Canal Way and Kensal Road. It should be noted proposed crossing points on the site have been excluded from the assessment.

7.5.3. The PCL assessment undertaken includes pedestrian demand from the:

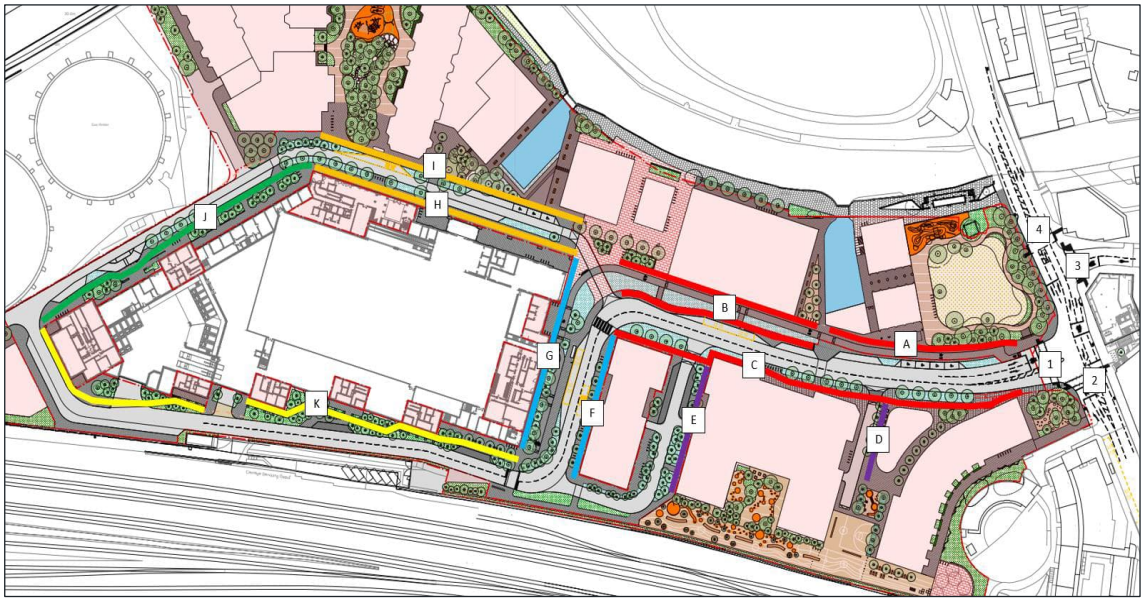
- Proposed Development residential – 2,519 units;
- St Williams residential – 750 units;
- New Sainsbury's store (including removal of the PFS); and
- Non-residential uses (Internal (90%) and External (10%) trips) – 13,691 sqm.

7.5.4. The assessment has been undertaken in line with the methodology outlined in TfL's 'Pedestrian Comfort Guidance for London: Guidance Document (1st Edition)'.

7.5.5. The PCL assessment has assessed pedestrian demand during either the AM or PM network peak hours, taking the busiest peak.

7.5.6. **Figure 7-6** shows the footway links included in the assessment, labelled A to K, with the four pedestrian crossing points labelled 1 to 4 at the proposed signal junction between Ladbroke Grove, Canal Way and Kensal Road.

Figure 7-6 – Footway and Crossing Locations



7.5.7. The pedestrian demand for the PCL footway assessments are based on the development forecast trips. The forecast development trips for the footway assessment are based on the following assumptions:

- Residents will access nearby stations via either bus or walking, with a total final mode share of 67% applied to bus and walking trips. The PCL assessment includes both bus passenger walking trips and walking trips.
- Sainsbury's customer pedestrian trips are based upon the April 2018 surveys, with trips factored up by +10% to account for the increased in the sales area. The PCL assessment includes both bus passengers and walking trips.
- The non-residential uses trips assume both internal (90%) and external (10%) trips, with a mode share of 60% pedestrians and 20% bus passengers.
- It has been assumed all pedestrians and bus passengers will use the main footways identified in **Figure 7-6**, however in reality the site access points along the canal tow path and south of the Ladbroke Grove and Canal Way junction will be well-used. This methodology ensures a robust assessment of the proposed footways.

7.5.8. The pedestrian demand for the PCL crossing assessment at the proposed signal junction are based upon pedestrian surveys undertaken at the existing Ladbroke Grove and Canal Way mini-roundabout junction, from July 2019, which included crossing demand. The 2019 survey counts are included as 'Baseline' with development trips from the proposed Residential and Non-Residential uses only, excluding the Sainsbury's trips, as these would be included in the 'Baseline' counts.

7.5.9. **Table 7-35** presents the forecast two-way pedestrian trips for the AM and PM peak hours, including the maximum demand which was used for the PCL assessment.

Table 7-35 – Forecast Two-way Pedestrian Trips per Hour

Location	AM peak	PM peak	Max.
Footways			
A	845	1074	1074
B	1557	1756	1756
C	845	1074	1074
D	143	174	174
E	143	174	174
F	1158	1107	1158
G	1158	1107	1158
H	1389	1549	1549
I	1389	1549	1549
J	394	355	394
K	1158	1107	1158
Crossings			
1	1054	913	1054
2	405	333	405
3	722	442	722
4	385	303	385

7.5.10. **Table 7-36** shows the minimum widths of the footway routes identified in **Figure 7-6**. It should be noted footway B is the cumulative width of two separate footways.

Table 7-36 – Footways PCL Assessment

Location	Location Type	Area Type	Total Width	Building Edge?	Kerb Edge?	Any unusable width?	Clear Footway Width
A	Full Footway Width	High Street	2.4m	Yes	No	No	2.2m
B	Full Footway Width	High Street	4.4m	Yes	Yes	No	4m
C	Full Footway Width	High Street	2.5m	Yes	No	No	2.3m
D	Full Footway Width	Residential	2.5m	No	Yes	No	2.3m
E	Full Footway Width	Residential	2m	Yes	Yes	No	1.6m

Location	Location Type	Area Type	Total Width	Building Edge?	Kerb Edge?	Any unusable width?	Clear Footway Width
F	Full Footway Width	High Street	3m	Yes	Yes	No	2.6m
G	Full Footway Width	High Street	3m	Yes	No	No	2.8m
H	Full Footway Width	High Street	4m	Yes	No	No	3.8m
I	Full Footway Width	High Street	2.5m	No	No	No	2.5m
J	Full Footway Width	High Street	3m	No	No	No	3m
K	Full Footway Width	High Street	2.5m	Yes	Yes	No	2.1m

7.5.11. **Table 7-37** shows the crossing widths and pedestrian green times, as required in the TfL PCL assessment methodology.

Table 7-37 – Crossings PCL Assessment

Location	Area Type	Width of Crossing	Width of Island	Time on Green Man	Time on Red Man	Time Blackout
1	High Street	2.8m	2.8m	6 secs	109 secs	5 secs
2	High Street	2.8m	2.8m	6 secs	109 secs	5 secs
3	High Street	4m	2.8m	6 secs	109 secs	5 secs
4	High Street	4m	2.8m	6 secs	109 secs	5 secs

7.5.12. **Table 7-38** shows the PCL footway results.

Table 7-38 – PCL Footway Results

Location	Average PCL	Peak Hour PCL	Average Max. PCL
A	A-	A-	A+
B	A-	A-	A+
C	A-	A-	A+
D	A+	A+	A+
E	A+	A+	A+
F	A-	A-	A+
G	A-	A-	A+

Location	Average PCL	Peak Hour PCL	Average Max. PCL
H	A-	A-	A+
I	B+	B+	A+
J	A+	A+	A+
K	A-	B+	A+

7.5.13. The footway results show a good score on all footways, achieving an A- on most footways, which is classified as comfortable for pedestrians. The lowest score is footway I, south of Plot 4, opposite the Sainsbury's store entrance. To ensure a robust assessment the pedestrian demand applied to footway I is the same as footway H, the footway along the front of the Sainsbury's store entrance on the north side of Plot 2, which achieved a score of B+. In reality, footway I would not experience as much pedestrian demand being on the opposite side of the road to the Sainsbury's store entrance, therefore the results are considered appropriate due to the range of route options and general width of footways.

7.5.14. **Table 7-39** shows the PCL crossing results.

Table 7-39 – PCL Crossing Results

Location	Crossing Arm		Space for People to Pass	
	Average PCL	Peak Hour PCL	Average PCL	Peak Hour PCL
1	E	E	E	E
2	C+	C-	C+	C-
3	B-	D	B-	D
4	B	C+	B	C+

7.5.15. The results show the pedestrian crossing on Canal Way would perform below the recommended standard PCL for pedestrians. It is acknowledged the demand assigned to the crossing is high, however the green time available for pedestrians to cross is low. It is recommended the proposed signal junction layout is refined further with RBKC and TfL to ensure an appropriate balance for sustainable travel modes.

7.5.16. The PCL assessment results are provided as **Appendix L**. It is proposed to review the pedestrian crossing facilities as part of the wider junction review to be undertaken with TfL and RBKC, with potential to make changes at more detailed design stages.

7.6 LONDON UNDERGROUND STATIONS IMPACT ASSESSMENT

7.6.1. The station impact assessment includes demand from the proposed residential development and flexible uses. Sainsbury's demand has been excluded due to the retail catchment of the existing and proposed store, with passengers being highly unlikely to visit the store by train. The assessment has compared the baseline for the 2019 NUMBAT data with the TfL 2041 Railplan demand plus the proposed development trips.

7.6.2. **Table 7-40** shows the net trips for the London Underground and train trips, which have been combined for the station capacity assessment.

Table 7-40 – Station Net Trips – Main Mode

Mode (Main Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
London Underground	70	250	320	136	103	240
Train	29	94	123	51	42	93
Total	**99**	**344**	**443**	**188**	**145**	**333**

7.6.3. The total station trips have been assigned to Ladbroke Grove station (Circle, Hammersmith & City Lines) and Kensal Green station (Bakerloo Line and London Overground Line). The trips have been assigned to each station, each of the three service lines, and the direction for travel, by applying the observed demand from the 2019 NUMBAT data.

7.6.4. The assessment includes the following areas of each station:

- Platform stair widths;
- Overbridges;
- Ticket gatelines; and
- Passenger trips in peak hours by station, line and directions of travel.

7.6.5. The assessment includes the following scenarios:

- 2019 Baseline;
- 2041 Future year demand from Railplan without development; and
- 2041 Future year with development.

7.6.6. The proposed development design year is assumed to be 2036, however the TfL models only include 2041 as a future year.

LADBROKE GROVE STATION

7.6.7. **Table 7-41** shows the assessment results for the platform stairs at Ladbroke Grove station.

Table 7-41 – Ladbroke Grove Station Platform Stair Widths

Scenario		Shared Stair	EB Platform Stair	WB Platform Stair
2019 Baseline	AM peak	2.40	2.40	2.40
	PM peak	2.40	2.40	2.40
2041 Baseline	AM peak	2.40	2.40	2.40
	PM peak	2.40	2.40	2.40
	AM peak	2.40	2.40	2.40

Scenario		Shared Stair	EB Platform Stair	WB Platform Stair
2041 With Developments	PM peak	2.40	2.40	2.40
Existing Stair Width		2.75	2.40	2.56
Existing Stair Sufficient		Yes	Yes	Yes

7.6.8. The results show the existing platform stair widths are sufficient to accommodate 2041 baseline demand and 2041 with development demand. **Table 7-42** shows the assessment for the Ladbroke Grove station overbridge.

Table 7-42 – Ladbroke Grove Station Overbridge Width

Scenario		Required Width	Existing Width	Existing width sufficient?
2019 Baseline	AM peak	2.20	1.73	Yes*
	PM peak	2.20	1.73	Yes*
2041 Baseline	AM peak	2.20	1.73	Yes*
	PM peak	2.20	1.73	Yes*
2041 With Developments	AM peak	2.20	1.73	Yes*
	PM peak	2.20	1.73	Yes*

7.6.9. The results show the existing overbridge width of 1.73m is below the TfL Station Planning Guidelines which recommends a width of 2.20m as a minimum width for passageways in stations. However, the existing width is sufficient to accommodate existing baseline and future year demand, and the additional demand with the proposed development passenger trips.

7.6.10. **Table 7-43** shows the Ladbroke Grove station ticket gateline assessment. The assessment includes accessible wide aisle gates (WAG) and standard automated ticket gates (ATG).

Table 7-43 – Ladbroke Grove Station Ticket Gateline Assessment

Scenario		In Gates Required		Out Gates Required		Total Gates Required		Existing Gates	
		ATG	WAG	ATG	WAG	ATG	WAG	ATG	WAG
2019 Baseline	AM peak	1	1	2	1	4	2	4	1
	PM peak	1	1	2	1	4	2	4	1

Scenario		In Gates Required		Out Gates Required		Total Gates Required		Existing Gates	
		ATG	WAG	ATG	WAG	ATG	WAG	ATG	WAG
2041 Baseline	AM peak	2	1	2	1	6	2	4	1
	PM peak	3	1	3	1	6	2	4	1
2041 With Development	AM peak	2	1	2	1	6	2	4	1
	PM peak	3	1	3	1	6	2	4	1

7.6.11. The results show six standard gates would be required in the 2041 future year baseline and the 2041 with development scenario. The standards require a minimum of two wide aisle gates, which is reflected in the results. Whilst this shows a deficiency, the deficiency is the same in the future year 2041 assessment and the 2041 with development assessment.

7.6.12. **Table 7-44** to **7-46** shows the number of boarding and alighting passengers by direction of travel at Ladbroke Grove station, totalled for both the Circle Line and Hammersmith & City Line due to the common stations served along both routes, for the baseline, future baseline and future baseline with development scenarios. The assignment of development trips is based on the existing split of passengers between stations (Ladbroke Grove and Kensal Green), service, and the direction of travel during the AM and PM peak hours.

Table 7-44 –Boarding and Alighting Passengers by Direction of Travel - 2019

Ladbroke Grove	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Eastbound	804	301	1,105	686	254	940
Westbound	273	637	909	266	619	885

Table 7-45 –Boarding and Alighting Passengers by Direction of Travel – 2041 Baseline

Ladbroke Grove	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Eastbound	1,245	261	1,505	1,168	240	1,408
Westbound	298	961	1,260	264	986	1,249

Table 7-46 –Boarding and Alighting Passengers by Direction of Travel – 2041 with Development

Ladbroke Grove	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Eastbound	1,370	295	1,665	1,214	292	1,506
Westbound	369	986	1,355	310	1,053	1,363

7.6.13. **Table 7-47** shows the assignment of station net trips to Ladbroke Grove station by direction of travel in the AM and PM peak hours.

Table 7-47 – Station Net Trips at Ladbroke Grove Station by Direction of Travel

Ladbroke Grove	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Eastbound	+125	+34	+159	+46	+52	+98
Westbound	+70	+25	+95	+47	+67	+113

7.6.14. **Table 7-47** shows at total of 254 passenger trips boarding and alighting at Ladbroke Grove in the AM peak hour and 212 in the PM peak hour.

KENSAL GREEN STATION

7.6.15. **Table 7-48** shows the assessment results for the platform stairs at Kensal Green station.

Table 7-48 – Kensal Green Station Platform Stair Widths

Scenario		Shared Stair	EB Platform Stair	WB Platform Stair
2019 Baseline	AM peak	2.40	2.40	2.40
	PM peak	2.40	2.40	2.40
2041 Baseline	AM peak	2.40	2.40	2.40
	PM peak	2.40	2.40	2.40
2041 With Developments	AM peak	2.40	2.40	2.40
	PM peak	2.40	2.40	2.40
Existing Stair Width		2.69	2.45	2.48

Scenario	Shared Stair	EB Platform Stair	WB Platform Stair
Existing Stair Sufficient	Yes	Yes	Yes

7.6.16. The results show the existing platform stair widths are sufficient to accommodate 2041 baseline demand and 2041 with development demand.

7.6.17. **Table 7-49** shows the assessment for the Kensal Green station overbridge.

Table 7-49 – Kensal Green Station Overbridge Width

Scenario		Required Width	Existing Width	Existing width sufficient?
2019 Baseline	AM peak	2.20	2.32	Yes
	PM peak	2.20	2.32	Yes
2041 Baseline	AM peak	2.20	2.32	Yes
	PM peak	2.20	2.32	Yes
2041 With Developments	AM peak	2.20	2.32	Yes
	PM peak	2.20	2.32	Yes

7.6.18. The results show the existing station overbridge width is sufficient to accommodate 2041 future year with development demand.

7.6.19. **Table 7-50** shows the Kensal Green station ticket gateline assessment.

Table 7-50 – Kensal Green Station Ticket Gateline Assessment

Scenario		In Gates Required		Out Gates Required		Total Gates Required		Existing Gates	
		ATG	WAG	ATG	WAG	ATG	WAG	ATG	WAG
2019 Baseline	AM peak	1	1	1	1	3	2	3	1
	PM peak	1	1	2	1	4	2	3	1
2041 Baseline	AM peak	2	1	2	1	5	2	3	1
	PM peak	1	1	4	1	6	2	3	1
2041 With Development	AM peak	2	1	2	1	5	2	3	1
	PM peak	1	1	4	1	6	2	3	1

7.6.20. The results show six standard gates would be required in the 2041 future year baseline and the 2041 with development scenario. The standards require a minimum of two wide aisle gates, which is reflected in the results.

7.6.21. **Table 7.51** to **7-53** shows the number of boarding and alighting passengers by direction of travel at Kensal Green station, for each service, for the baseline, future baseline and future baseline with

development scenarios. The assignment of development trips is based on the existing split of passengers between stations (Ladbroke Grove and Kensal Green), services, and the direction of travel during the AM and PM peak hours.

Table 7-51 –Boarding and Alighting Passengers by Direction of Travel - 2019

Kensal Green	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Bakerloo Southbound	659	31	690	192	45	237
Bakerloo Northbound	32	118	150	14	317	332
Overground Southbound	200	52	252	62	36	97
Overground Northbound	38	33	71	49	128	178

Table 7-52 –Boarding and Alighting Passengers by Direction of Travel – 2041 Baseline

Kensal Green	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Bakerloo Southbound	799	48	848	219	89	308
Bakerloo Northbound	62	118	180	25	480	505
Overground Southbound	301	84	385	102	88	190
Overground Northbound	81	47	129	89	236	325

Table 7-53 –Boarding and Alighting Passengers by Direction of Travel – 2041 with Development

Kensal Green	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Bakerloo Southbound	876	68	943	234	106	340
Bakerloo Northbound	92	127	219	53	520	573
Overground Southbound	323	91	414	108	95	203
Overground Northbound	101	53	154	92	240	332

7.6.22. **Table 7-54** shows the assignment of station net trips to Ladbroke Grove station by direction of travel in the AM and PM peak hours.

Table 7-54 – Station Net Trips at Kensal Green Station by Direction of Travel

Kensal Green	AM peak hour			PM peak hour		
	Boarders	Alighters	Total	Boarders	Alighters	Total
Bakerloo Southbound	+77	+19	+96	+15	+17	+32
Bakerloo Northbound	+30	+9	+39	+28	+41	+68
Overground Southbound	+23	+6	+29	+6	+7	+13
Overground Northbound	+19	+6	+25	+3	+4	+7

7.6.23. **Table 7-54** shows at total of 189 passenger trips boarding and alighting at Kensal Green station in the AM peak hour and 120 in the PM peak hour.

7.7 BUS NETWORK IMPACT ASSESSMENT

7.7.1. **Table 7-55** shows the net bus trips for the first / final mode. The forecast bus trips are generated by the residential units and the non-residential uses.

Table 7-55 – Net Bus Trips for First / Final Mode

Mode (First / Final Mode)	AM peak hour			PM peak hour		
	Arr	Dept	Total	Arr	Dept	Total
Bus, minibus or coach	101	355	456	199	152	350

7.7.2. The additional demand generated by the proposed development has been assigned to bus routes as follows to ensure a robust assessment:

- 47% AM peak departure trips assigned equally to the six southbound routes serving Ladbroke Grove station. Remaining AM peak departure trips assigned equally to all bus routes;
- AM peak arrival trips assigned equally to all bus routes;
- PM peak departure trips assigned equally to all bus routes; and
- 47% PM peak arrival trips assigned equally to the six northbound routes serving Ladbroke Grove station. Remaining PM peak arrivals trips assigned equally to all bus routes.

7.7.3. **Table 7-56** shows the additional boarders and alighters during the AM and PM peak hours and additional passengers per service, based on the bus frequencies provided by TfL.

7.7.4. It should be noted bus route 70 does not go northbound, instead it travels westbound along Barlby Road.

Table 7-56 – Local Bus Service Impact

Direction & Bus		Additional Passengers per Hour				Additional Passengers per Service			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Boarder	Alighter	Boarder	Alighter	Boarder	Alighter	Boarder	Alighter
Northbound	228	14	8	11	7	4.7	2.7	3.7	2.3
	23	14	7	11	7	2.8	1.4	2.2	1.4
	295	0	8	0	25	0.0	1.1	0.0	3.6
	316	15	8	12	8	2.1	1.1	1.7	1.1
	452	14	7	11	7	2.8	1.4	2.2	1.4
	52	15	8	12	8	2.5	1.3	2.0	1.3
	70	42	8	12	24	7.0	1.3	2.0	4.0
Southbound	228	43	8	12	25	14.3	2.7	4.0	8.3
	23	43	8	12	25	8.6	1.6	2.4	5.0
	295	42	0	12	0	6.0	0.0	1.7	0.0
	316	14	8	12	8	2.0	1.1	1.7	1.1
	452	42	8	12	24	8.4	1.6	2.4	4.8
	52	42	8	12	24	7.0	1.3	2.0	4.0
	70	15	7	11	7	2.5	1.2	1.8	1.2

7.7.5. The results show a high number of additional trips during the AM peak hour on the southbound 228 bus route which reflects the frequency of the service at three buses per hour. The total passenger demand by route and direction was shared with TfL during pre-application discussions and TfL at that time were satisfied that due to the number of services and the frequency of services that there is likely to be sufficient capacity on all routes to meet the development demand. On this basis the bus impact assessment is considered appropriate and robust.

7.7.6. A summary of all of the results in **Section 7** is provided in **Section 8**, including recommendations and options for mitigating the impacts.

8 IMPACTS AND MITIGATIONS

8.1 SUMMARY OF IMPACTS

8.1.1. Chapter 7 has highlighted in detail the impact of the Proposed Development on all modes of transport. The results show how demand from the development is distributed evenly across each mode, reflecting the wide range of transport services available to new residents and visitors to the site.

HIGHWAY IMPACTS

8.1.2. The Vissim model has assessed the new junction arrangement proposed by RBKC in consultation with TfL. The assessment shows significant delays to journey times on the Ladbroke Grove corridor including at the Kensal Road junction. The subsequent impact on bus journey times will require some mitigation through financial contributions to TfL in order to regulate the services on bus routes entering and extending into the site. We are awaiting a response from TfL on what level of service is expected based on the modelling predictions. This will be considered in more detail post submission of the application.

Summary of Journey Times and Queue Length Results

8.1.3. The Vissim modelling results show an increase in journey times through the proposed Ladbroke Road and Canal Way signal junction. In particular, the southbound route along Ladbroke Grove between the Harrow Road junction to the north and the Kensal Road junction to the south, would increase by approximately 113% when comparing the Do Something results with the Do Nothing results in the AM peak hour, and 70% in the PM peak hour. In addition, the northbound route along Ladbroke Grove between the junction with Barlby Road to the south and Kensal Road to the north would increase by 228% when comparing the Do Something results with the Do Nothing results in the AM peak hour, and 111% in the PM peak hour. On the basis that the traffic generation from the proposed development is marginal, the increase in journey times are primarily as a result of the conversion to a signalised junction.

8.1.4. The purpose of the junction arrangement is to provide dedicated controlled crossing facilities to safely accommodate new residents and visitors to the site, and to encourage walking and cycling. As previously set out the improved facilities should be considered as providing a positive outcome, and reflects the recommendations made by RBKC in their SPD evidence base report on the junction.

PUBLIC TRANSPORT IMPACTS

8.1.5. The low car dependence results in the majority of new trips from the development being taken on public transport, or through walking and cycling. As a result, a robust assessment of demand on public transport services has been undertaken. All of the assumptions for public transport use have been discussed and agreed with TfL as part of the pre application process.

8.1.6. Bus demand has been based upon an even distribution of trips on buses and London Underground / mainline rail services which has been agreed as reasonable. The total increase in bus and rail passengers have been shown to be satisfactorily accommodated on bus and rail services.

Summary of Bus Impacts

8.1.7. The bus service impact assessment shows minimal impact on the existing bus services, with the highest increase of passengers shown on the southbound 228 bus route. This is due to the methodology of assigning station trips to southbound bus routes in the AM peak hour, i.e. bus routes which access Ladbroke Grove station, of which there are six, bus routes 228, 23, 295, 452, 52 and 70. However, bus route 228 provides a lower service frequency of three per hour, therefore the impact per bus service is higher.

8.1.8. TfL will confirm the results of the public transport assessment when they have reviewed the TA. During pre-application discussions, TfL concluded that there is likely to be sufficient capacity available due to the number of bus services available. TfL will provide a further update once they have reviewed the TA findings.

8.1.9. The impact on bus journey time delay has been set out in the previous section and will require mitigation measures to maintain service frequency.

Station Capacity Analysis

8.1.10. A detailed station capacity analysis has been undertaken in the TA which has assessed both Ladbroke Grove and Kensal Green Station. The assessment included platform stair widths, gatelines, and station overbridges. The assessment has revealed that some issues exist at these stations when the future 2041 baseline demand is applied.

8.1.11. The results show the stair widths are satisfactory at both Ladbroke Grove and Kensal Green stations, when assessed using the 2041 future year demand.

8.1.12. The Kensal Green station overbridge width is acceptable. The Ladbroke Grove overbridge width is below the required standards, however the existing width is sufficient to accommodate existing baseline and future year demand, and the additional demand with the proposed development passenger trips.

8.1.13. The existing ticket gateline capacity at Ladbroke Grove is 4 x ATG and 1 x WAG. The assessment shows that this should be 6 x ATG and 2 x WAG. 2 x WAG is the minimum standard for TfL.

8.1.14. The existing ticket gateline at Kensal Green is 3 x ATG and 1 WAG. The assessment shows that this should be 6 x ATG and 2 x WAG. The assessment shows that the additional gates would be required in both the future baseline scenario and the future baseline with development scenario.

8.1.15. The main impacts are as a result of using the 2041 passenger demand from Railplan as provided by TfL. Therefore, It is important to note the assessment shows no significant change between the 2041 base and the 2041 with development scenario.

8.1.16. In summary, the assessment shows that the proposed development trips could be accommodated when considered against forecast 2041 background growth that would be on the network according to the TfL data.

PEDESTRIAN IMPACTS

8.1.17. An ATZ assessment has been undertaken for a number of routes as agreed with TfL. The ATZ assessment has revealed some deficiencies in the existing network.

8.1.18. Route 1 included the routes to nearest primary and secondary schools at Bales College, Barlby Primary school, The Lloyd Williamson school and St Charles Primary School. The ATZ assessment

showed footways should be cleaned and graffiti removed from bins to help people feel safe. Additional seating is proposed as part of our development along Ladbroke Grove.

8.1.19. Route 2 included routes to Ladbroke Grove station, Kensal Green station, and Kensal Rise station. The ATZ assessment showed several junctions along Chamberlayne Road can be improved by including tactile paving, footway widths could possibly be increased along Chamberlayne Road too, and a zebra crossing could be provided along Harrow Road.

8.1.20. Route 3 included routes to nearest town centre/high street at Kensal Rise and Portobello Road. The results showed informal crossings on Portobello Road could be improved with tactile paving to help pedestrians crossing. In addition, to help improve the streetscape, on-street car parking could be reduced on Portobello Road.

8.1.21. Route 4 included the route to the nearest green space at Little Wormwood Scrubs and Quietway 2. The results showed graffiti should be cleaned opposite Barlby Primary School and improvement could be made at informal crossings to provide tactile paving.

8.1.22. Route 5 included the route to future destinations at Old Oak Common. The ATZ assessment recommended the provision of streetlights and additional measures, such as overlooking of the route.

8.1.23. Route 6 included the route to Kensington Leisure Centre / Kensington Academy. The results showed a number of unused parking spaces, where it may be possible to assess the utilisation of the spaces and consider sections where parking could be replaced with cycle parking, landscaping, etc.

8.1.24. Route 7 included the route to Golborne Road via Wornington Green. The ATZ assessment recommended the provision of seating along Wornington Road where suitable.

Summary of PCL Assessment

8.1.25. A detailed PCL assessment was undertaken for the proposed footways on-site and the crossings at the proposed signal junction between Ladbroke Grove and Canal Way. The PCL assessment showed that the majority of footways are within acceptable PCL ratings.

8.1.26. The footway results show a good score on all footways, achieving an A- on most footways, which is classified as comfortable for pedestrians. The lowest score is footway I, south of Plot 4, opposite the Sainsbury's store entrance. To ensure a robust assessment the pedestrian demand applied to footway I is the same as footway H, the footway along the front of the Sainsbury's store entrance on the north side of Plot 2. In reality, footway I would not experience as much pedestrian demand being on the opposite side of the road to the Sainsbury's store entrance, therefore the results for I are not considered an issue.

8.1.27. The results show the pedestrian crossing on Canal Way would perform poorly with unacceptable comfort levels for pedestrians. It is acknowledged the demand assigned to the crossing is high and unlikely, however the green time for pedestrians and the crossing width are also relevant factors. It is proposed to review the pedestrian crossing facilities as part of the wider junction review to be undertaken with TfL and RBKC.

CYCLING IMPACTS

8.1.28. The assessment of highway impacts has included assumptions around an increase on cycling from the site resulting from new residents, cycle parking spaces, and mode split assumptions agreed with TfL.

8.1.29. Cycling infrastructure will need to meet TfL and RBKC guidance as part of the detailed design process.

8.1.30. The ATZ assessment has highlighted a number of areas that would benefit from further consideration. The Road Safety Audit will also provide direction as to the safety of the network proposal for cyclists.

8.1.31. The site layout includes dedicated cycle facilities, and a number of secondary streets which are less trafficked and suitable for cycling. The proposed 3m wide two-way segregated cycle lane on the northern section of The Avenue provides a dedicated cycle connection. A new cycle connection is also provided along the western edge of Sainsbury's. Both routes provide off-street cycle connection for new residents and users of the site. These proposals are considered to be in accordance with LTN 1/20.

8.1.32. Some further advanced cycle stages could be incorporated into the new junction design at the s278 stage of design. However, it should be noted that this could further impact bus journey times which are already impacted by the new junction.

8.1.33. Some modest improvements to cycle networks on Ladbroke Grove may be considered as beneficial though further discussions with RBKC and TfL, in accordance with the DIFS.

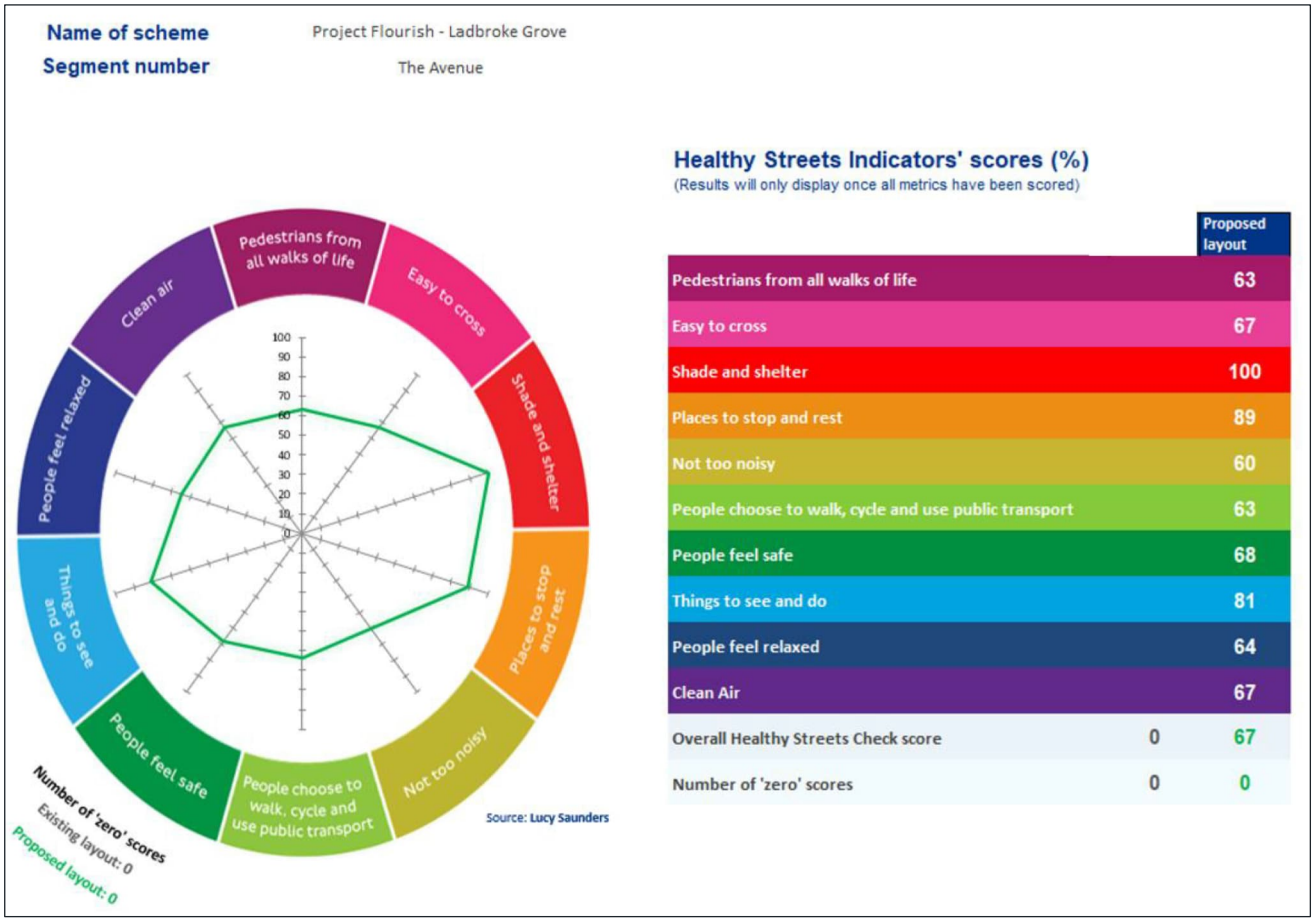
HEALTHY STREETS DESIGNERS CHECK

8.1.34. Due to the scale of the Proposed Development and the pedestrian / cycle improvements proposed, it has been considered necessary to undertake a Healthy Streets Designers Check.

8.1.35. The Healthy Streets Designers Check has been undertaken on the section of The Avenue between Ladbroke Grove and the junction with West Drive, the busiest pert of the road network on-site.

8.1.36. The Healthy Streets Designers Check has only assessed and scored the proposed layout, not the existing layout of Canal Way. This is due to the significant difference between the Proposed Development layout and the existing site layout, therefore a comparison would not be considered relevant. **Figure 8-1** shows the Healthy Streets Designers Check results.

Figure 8-1 – Healthy Streets Designers Check Summary Results



8.1.37. The objective of the Healthy Streets Designers Check is to get as high a score as possible, and for the score to be as evenly distributed across the ten Indicators with as few '0' scores as possible. **Figure 8-1** shows no '0' scores recorded with the lowest indicator scored at 60 for the 'Not too noisy' indicator.

8.1.38. It should be noted there is no threshold for an 'acceptable' Healthy Street Check score, with streets neither 'healthy' or 'unhealthy' and their score will reflect the volume and mix of traffic they are facilitating as well as design features.

8.1.39. The Healthy Streets Designer Check assessment results are provided as **Appendix M**.

MITIGATION

8.1.40. Based on the summary of the multi-modal impact assessment a number of potential mitigation measures are identified, which will be the subject of further discussions with RBKC and TfL. The majority of necessary improvements are included as embedded in the site layout and through the junction proposals. A summary of measures is provided below.

- New and re-provided bus infrastructure:
  - 4 bus stops
  - 4 bus stands

- Bus driver facilities
- New junction and dedicated cycle and pedestrian improvements;
- New streets and places;
- Circa 4,500 cycle parking spaces;
- TfL cycle hire docking stations;
- DIFS funding for transport:
  - Pedestrian and cycle bridge over the railway line;
  - Step free access contribution (Ladbroke Grove);
  - LU station gateline contributions (Ladbroke Grove); and
  - Off-site cycle improvements.

8.1.41. In summary, whilst impacts have been identified, these impacts can be mitigated through the Proposed Development and contributions. In addition, a number of management plans are prepared and summarised in the next section.

CONSTRUCTION IMPACTS AND MITIGATION

8.1.42. The construction impacts have not been assessed in detail at this stage. The outline Construction Logistics Plan (CLP) illustrates clearly how the construction strategy will be delivered, as shown in **Appendix N**. A summary of the content and overall strategy is summarised in Section 9 of this report. The CLP has been produced in accordance with TfL CLP Guidance.

8.1.43. The Environmental Statement includes an assessment of effects from construction in relation to noise and air quality. A summary of the total construction activity is shown in **Figure 8-2** and the total construction trips are shown in **Figure 8-3**.

8.1.44. The proposed construction routing via the strategic and local network is shown in **Figure 8-4**.

Figure 8-2 – Construction Vehicle Profile

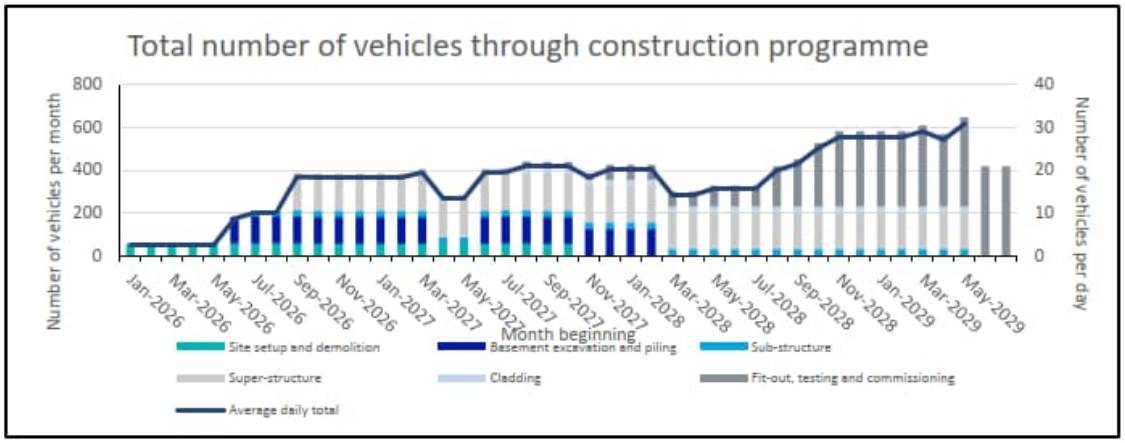


Figure 8-3 – Estimated Peak Construction Vehicles by Stage

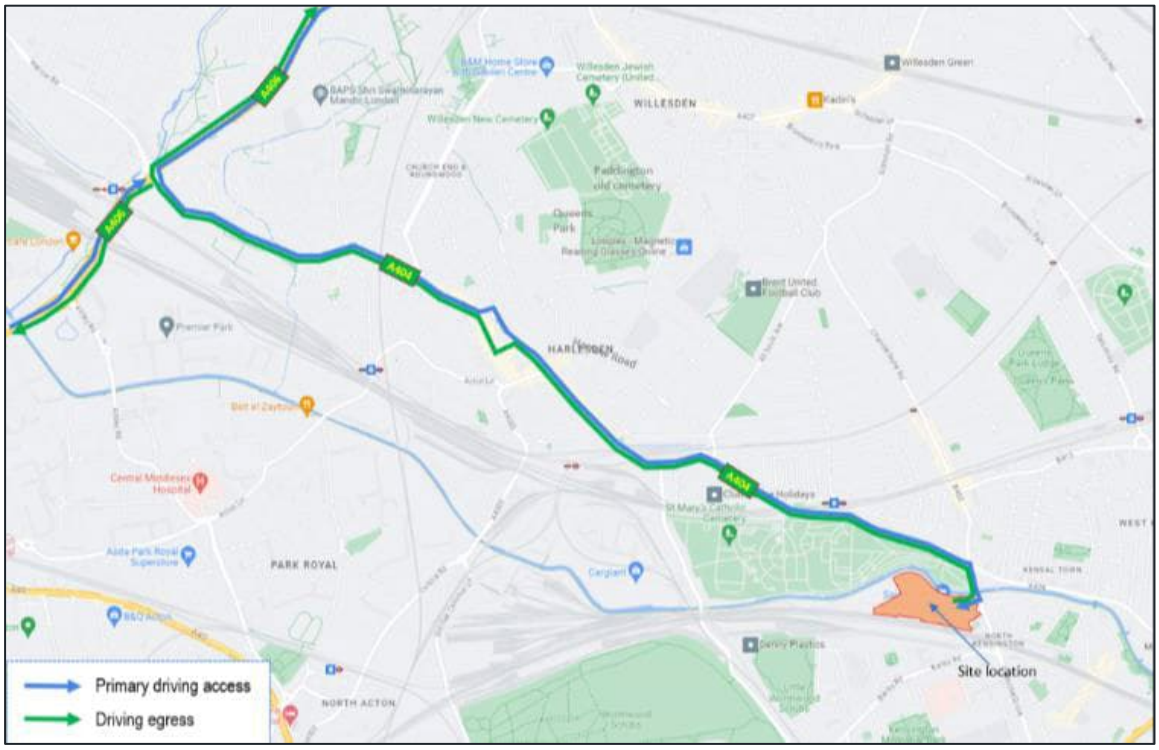
NO. OF VEHICLES IN PEAK PHASE (EX. OTHER PHASES)

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q1 2026 - Q3 2030	56	3
Basement excavation and piling	Q2 2026 - Q4 2034	125	6
Sub-structure	Q3 2026 - Q1 2035	30	1
Super-structure	Q3 2026 - Q3 2035	176	8
Cladding	Q1 2027 - Q1 2036	24	1
Fit-out, testing and commissioning	Q3 2027 - Q4 2036	419	20
Peak period of construction	Q2 2029 - Q3 2029	648	31

NO. OF VEHICLES IN PEAK PHASE (INC. POSSIBLE OVERLAP OF SUBSEQUENT PHASES

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q1 2026 - Q3 2030	648	31
Basement excavation and piling	Q2 2026 - Q4 2034	30,488	1,452
Sub-structure	Q3 2026 - Q1 2035	30,488	1,452
Super-structure	Q3 2026 - Q3 2035	30,488	1,452
Cladding	Q1 2027 - Q1 2036	30,488	1,452
Fit-out, testing and commissioning	Q3 2027 - Q4 2036	30,488	1,452

Figure 8-4 - Construction Routing



8.1.45. The routing shows that that vehicles will take a single route to site from the A406, via A404 Harrow Road and entering the Site from Ladbroke Grove. The new access and Harrow Road junction are capable of accommodating large construction vehicles due to the lane widths and corner radii on entry.

8.1.46. The current mini-roundabout junction between Ladbroke Grove and Canal Way is capable of accommodating construction vehicles from the outset of development works. The highways works to deliver the new junction will need to be phased into the delivery of the scheme.

9 MANAGEMENT PLANS

9.1 TRAVEL PLAN

9.1.1. A Framework Travel Plan (FTP) has been prepared and is provided as **Appendix O** of this report. A Sainsbury's Travel Plan has also been prepared separately for the Sainsbury's store and is provided as **Appendix P**.

9.1.2. The FTP includes a framework for reducing car travel and promoting active travel. Because the site has a low level of residential car parking (0.14 spaces per unit), the FTP will include measures to promote cycle and bus use, together with encouraging residents to use the wide range of London Underground and London Overground services. Walking will also be promoted, due to the variety of locations within easy reach to new residents of the development.

9.1.3. The FTP sets out the site wide management structure and outlines the sustainable travel principles and measures to be incorporated within the proposals. There is a focus on achieving a greater modal split for cycling and walking.

9.1.4. The implementation of pre-occupations measures included within the FTP will be the responsibility of the Travel Plan Co-ordinator (TPC). The TPC roles will be undertaken by the site management company or an appointed consultant. The success of the Travel Plan will be regularly monitored and reviewed to ensure that the Travel Plan continually develops during its lifetime.

9.1.5. The FTP has been prepared in accordance with TfL Travel Planning Guidance as well as 'Travel Planning for New Development in London: Incorporating Deliveries and Services' and DfT's Good Practice Guidelines: Delivering Travel Plans through the Planning Process'.

9.1.6. The Sainsbury's Travel Plan identifies numerous initiatives and measure to maximise travel by sustainable modes for both colleagues and customers. It is proposed to monitor car park use and re-purpose parking areas as customer travel habits change in line with London Plan policies. The priority will be to reduce the level car drivers to the store through a continuous plan to achieve a gradual shift towards non car modes. The Sainsbury's Travel Plan is produced with the same management regime as the FTP.

9.2 DELIVERY AND SERVICNG PLAN

9.2.1. An Outline Delivery and Servicing Plan (DSP) has been prepared and is contained in **Appendix Q** of this report. A Sainsbury's DSP has also been prepared separately and is provided as **Appendix R**.

9.2.2. The plan sets out a management strategy to encourage the efficient and sustainable movement of goods and deliveries and to reduce the transport impacts associated with servicing. The DSP has the following objectives:

- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during peak periods;
- Improve the reliability of deliveries to the site; and
- Reduce the impact of freight activity on local residents and the environment.

9.3 CAR AND CYCLE PARKING MANAGEMENT PLAN

9.3.1. An outline Car and Cycle Parking Management Plan (CCPMP) has been prepared and is contained in **Appendix S** of this report. A CCPMP plan has also been prepared separately for the Sainsbury's store and is provided as **Appendix T**.

9.3.2. The CCPMP sets out the proposed parking layouts and management of car parking spaces. The total car parking ratio for the residential development is 0.14 spaces per unit, including disabled parking at 3% with potential to reach 10%.

9.3.3. The detailed parking layouts will be submitted under the Reserved Matters applications.

9.3.4. The 'active' EV charging provision, at 20% of residential spaces, will be provided up front, again with potential to increase 'passive' provision in the future.

9.3.5. The Sainsbury's CPMP includes the parking layouts, based on the mix of parking provision within the basement parking. The total 227 parking spaces will include 12 EV fast charger spaces with provision for additional standard chargers in line with TfL requirements. The priority will be to reduce the level car drivers to the store through a continuous plan to achieve a gradual shift towards non car modes. The Sainsbury's Travel Plan is produced with the same management regime as the FTP.

9.3.6. Both reports provide details of the car parking access as well as how the parking is allocated and methods to ensure provision will be reserved for blue badge holders.

9.3.7. EV rapid charging is provided, however there will need to be a further review of this level of provision based on take up, and available power supply.

9.4 OPERATIONAL WASTE MANAGEMENT PLAN

9.4.1. An Outline Waste Management Plan for the residential and non-residential uses, excluding the Sainsbury's store, has been and is submitted separately as part of the hybrid planning application.

9.5 OUTLINE CONSTRUCTION LOGISTICS PLAN

9.5.1. An outline Construction Logistics Plan (CLP) has been prepared by the Applicant's own consultants. The report is included as **Appendix N**.

9.5.2. A full detailed CLP will be submitted at a later stage once the details of the construction activity are confirmed. Further construction phasing drawings will also be prepared and submitted to RBKC for approval in consultation with TfL.

9.5.3. Because the site involves the reprovision of existing and new bus facilities on site, it will be important to ensure that TfL is fully engaged in the construction management plans. The existing bus facilities on Canal Way will be relocated in a phased manner including the need to identify, test and agree temporary bus standing and bus stops. The bus facilities will be designed in accordance with TfL guidance. The proposals will need to ensure safe routes and facilities for bus passengers.

9.5.4. The site benefits from direct access to the canal and this has presented an opportunity to use the canal for movement and supply of construction waste materials. The waste materials strategy will utilise the Powerday site at Old Oak Common which has canal access for waste materials. Discussions have taken place between Powerday and the Applicant in order to validate the current proposals.

9.5.5. Activities will be monitored and managed throughout the construction period such that the CLP will reflect the most efficient and sustainable methods of demolition and construction.

9.5.6. Freight Operator Recognition Scheme (FORS) will be used to ensure safe vehicle movements to ensure accordance with the Mayor's Transport Strategy and TfL Guidance. The construction team will seek to achieve Gold membership standard.

9.5.7. Construction Logistics and Community Safety (CLOCS) will be fully accorded with to ensure safe movement of goods and vehicles across the site and in the surrounding network.

10 SUMMARY AND CONCLUSIONS

10.1.1. This TA has been prepared in support of a residential led mixed-use development on a brownfield site off Ladbroke Grove in the Royal Borough of Kensington and Chelsea. The Proposed Development forms part of the designated Kensal Canalside Opportunity Area (KCOA), as set in the London Plan 2021 and the RBKC Local Plan, and associated SPD (2021). These policy designations have established the broad principle of density and scale including a high-level transport capacity analysis.

10.1.2. The proposals are summarised as follows:

- Up to 2,519 residential units;
- 22,955 sqm GIA Sainsbury's store;
- Removal of the petrol filling station (PFS)
- Up to 14,500 sqm flexible uses (retail, commercial, leisure and community);
- 227 retail parking spaces (reduced from 395), a reduction of 169 spaces.
- 'Car lite' residential (0.14 spaces per unit including 3% disabled parking and potential for up to 10% disabled parking and electric vehicle parking);
- London Plan compliant cycle parking, comprising circa 4,500 spaces;
- Access, servicing, landscaping and pedestrian and cycle improvements; and
- New improved bus facilities, bus stops and bus route extensions.

10.1.3. The application has been submitted as a hybrid planning application, for the demolition of all existing buildings and structures to facilitate a mixed use development comprising residential, retail, commercial and community uses with associated infrastructure.

10.1.4. The outline element of the scheme will include residential floorspace and ancillary residential facilities (Class C3) and non-residential floorspace comprising flexible commercial, community and sui generis floorspace (Class E / Class F2 / Sui Generis), the provision of new pedestrian and vehicular access, open space, landscaping, car and cycle parking and other associated infrastructure works with all matters reserved for future consideration.

10.1.5. The detailed element of the scheme will comprise a large retail store and ancillary facilities (Class E(a)), small units at ground floor level for Commercial, Business and Service uses Leisure floorspace (Class E(d)), residential facilities (Class C3), improvements to existing site access at Ladbroke Grove, provision of new pedestrian and vehicular access, internal roads and associated landscaping, car and cycle parking and associated infrastructure works including remediation".

10.1.6. For car parking and cycle parking the minimum cycle parking numbers and maximum car parking numbers are fixed in the outline proposal. The detailed parking layouts for both cycles and cars will be provided at reserved matters approval stage, except in the case of Plot 2 ground and basement levels where they are now submitted in detail.

10.1.7. In depth discussions with TfL and RBKC have taken place over the past three years in order to agree and justify the site layout. The TA and transport strategy has also been the subject of a significant amount of pre-application discussions and engagement. Both local and strategic policy

and best practice has been carefully considered in preparation of the Proposed Development, including the Kensal Canalside SPD (2021).

10.1.8. The TA is considered to be in general conformity with national, regional and local policies, and reasoned justification has been provided where some aspects are not fully compliant. A long period of pre application discussions and review has taken place with RBKC and TfL about the overall movement strategy, illustrating clearly though ongoing design iterations and justification provided by the design team.

10.1.9. The proposed site layout has been prepared based upon the '20 Minute Neighbourhood' principle, whereby residents, employees and visitors can reach a wide variety of destinations within a 20-minute walk or cycle. Research from the UK government, RTPI and TfL shows the importance of the 20-minute Neighbourhood concept in achieving healthy lifestyles and reducing the need to travel by car. The new Neighbourhood Centre will provide a vibrant location for residents and visitors of the site, centred around the relocated Sainsbury's store.

10.1.10. The proposed development is 'car-lite' with a maximum total of 345 residential parking spaces provided for the maximum of 2,519 units (0.14 space per unit). Of these 76 spaces will be for disabled parking representing 3% of the total number of units. This can be increased to 10% of units if demand arises, with take up monitored to ensure sufficient disabled bays are provided. The London Plan advises that development within Opportunity Areas or within a PTAL of 5 and 6 should be car free, except for disabled parking. Given the site has a PTAL of between 0-5, the level of parking proposed is considered appropriate.

10.1.11. The Sainsbury's car park is located in the basement of Plot 2. The replacement of the store is required in order to release the wider brownfield site for redevelopment. A total of 227 parking spaces are proposed for the new store, which is a reduction of 169 spaces from the existing 396 spaces. Whilst the London Plan standards identify the requirement for a lower level of parking, the parking standards recognise the importance of viability when considering a mixed use scheme and the replacement parking for existing retail operation on the site. The 43% reduction in parking provision for the store, combined with an enlarged on-line shopping operation will significantly reduce the car mode share and avoid existing customers travelling further afield to supermarkets with higher levels of car parking. The development itself will generate significant new custom for the Sainsbury's store, of which virtually all with be internal trips made on foot or cycle, further reducing the car mode share.

10.1.12. During pre-application discussions with TfL it was requested that the level of parking for both residential elements of the development and the Sainsbury's store be reduced. The applicant has demonstrated through evidence surveys, together with the commitment to achieve a mode shift towards more active travel mode, that the level of parking is compliant with London Plan policy and will deliver a reduced modal split to car for shopping trips.

10.1.13. Approximately 4,500 cycle parking spaces are provided on site, both privately secure in basements and in the public realm for visitors. The wide variety of cycle connections including the canal towpath and potential new bridge connections will allow cyclists access to shopping and other leisure opportunities. The TfL cycle hire scheme could be brought into the site, subject to TfL agreement to extend the cycle hire scheme. This is shown illustratively and will be fixed through detailed design. Financial contributions will be made available to TfL to deliver the docking stations.

10.1.14. There is a strong aspiration to increase and enhance cycling across London in areas where people have a propensity to cycle to work. The site provides access via a range of routes to numerous employment opportunities, by virtue of its location on the edge of central London and a 15-minute cycle journey from the Central Activities Zone (CAZ). The site is close to Paddington, Kensington, White City and to the emerging Old Oak Common Opportunity Area. The canal provides a high-quality cycle connection to Paddington and Old Oak Common, both on and off the canal towpath.

10.1.15. Buses are central to the transport strategy within the TA, as they provide a high-quality connections to multiple destinations within a 20-minute bus journey from the main site access on Ladbroke Grove. The existing poor-quality facilities will be transformed, with TfL bus driver facilities also provided with a new facility which they do not currently have available to them on site. The facility will be to the south west of Plot 2, with the final design of the facility to be in accordance with TfL guidance.

10.1.16. There have been detailed discussions with TfL about the bus strategy and amendments to both terminating and through routes within the surrounding area. The bus strategy seeks to provide a range of options both on and off-site, including new high quality passenger facilities. Sainsbury's is one of the most important destinations for bus passengers as shown in the survey analysis. There is sufficient flexibility within the bus strategy to modify routes to reflect future travel patterns in consultation with TfL. Bus driver facilities will also be provided through consultation with TfL and in accordance with TfL guidance. The proposed layout includes a bus stand with capacity for four buses to access independently, with the principle of the new facility and number of stands agreed with TfL during pre-application discussions.

10.1.17. TfL has confirmed that there is likely to be sufficient capacity on existing bus routes to accommodate demand from the development. This will be confirmed by TfL once they have fully reviewed the application documents. On the basis of four bus routes being extended further into the site, there is expected to be a financial contribution made to TfL to regulate the services. Any additional journey times caused by the new junction may also be the subject of further contributions to TfL, once the proposed layout is concluded.

10.1.18. There has been a large amount of focus on the main access junction where the site joins Ladbroke Grove. The junction design was developed by RBKC and their consultant as part of an optioneering process. This was used to inform the SPD process, which recommended the proposed junction arrangement as its preferred option. RBKC commissioned surveys for the junction works in 2019 and these results were agreed as forming the baseline situation. This principle of the junction was adopted within the SPD (2021) and provides dedicated and controlled pedestrian and cycle facilities. The TA has adopted the proposed junction design and undertaken an assessment of the layout using Vissim. Therefore, the junction has been the subject of rigorous assessment with TfL and RBKC to understand the impacts. Further work will be undertaken post submission in order to agree the impact and final design of the junction layout.

10.1.19. The establishment of an all movements signalised junction with designated controlled pedestrian and cycle facilities is consistent of the requirements of transport policy and is supported by Healthy Streets policies in the London Plan and Local Plan, which seek to prioritise active travel modes. Where possible dedicated cycle facilities will be integrated into the final form of the junction layout in accordance with DfT's LTN 1/20. An off-street cycle lane is proposed alongside the main access route due to the volume of traffic forecast during peak times. The borough does not currently have any proposals to provide improved cycle facilities on Ladbroke Grove, due to existing constraints.

10.1.20. The overall approach to the TA is in accordance with National, Regional and Local guidance, in particular Healthy Streets policy objectives. This is due to the 'car lite' approach to residential parking, a 43% reduction in Sainsbury's car parking, and due to the provision of dedicated cycle facilities on site. A comprehensive bus strategy has been developed with TfL to achieve an acceptable bus network which serves the new Neighbourhood Centre. A combination of these measures contributes to promoting active travel modes over use of the car, reflecting the 20-minute Neighbourhood approach. Relocation of the existing Sainsbury's store and car park will enable much needed homes and affordable homes to be delivered in RBKC, supported by a wide range of sustainable travel choices.

SUMMARY OF HEALTHY STREETS BENEFITS

10.1.21. This TA and the supporting studies and reports has been prepared in accordance with the TfL Transport Assessment Best Practice Guidance. The Healthy Streets Approach has been applied to evaluate the benefits of the Proposed Development against the ten Healthy Streets indicators. These are summarised in **Table 10-1**.

Table 10-1– Summary of Healthy Streets Benefits

Summary of Benefits Against Healthy Streets Objectives	
Everyone feels welcome	• A new Neighbourhood Centre is created. • New parks and green spaces are created. • New local services and entertainment is created. • The beginning of the Notting Hill Carnival is enhanced. • Accessible disabled parking and fully accessible streets and connections are provided throughout the site. • Dropped kerbs and tactile paving will be provided throughout the site. • Affordable housing and community facilities will be provided on site.
Easy to cross	• New pedestrian crossings are provided on each arm of the new Canal Way / Ladbroke Grove junction. • New crossing points provided at regular intervals throughout the scheme. • Some roads are one way and therefore easier for people to cross. • Speed limits will be imposed and will remain low to improve safety.
Shade and shelter	• There are a large number and wide variety of trees, some of which will be mature. • There are also spaces and places which are covered or out of the direct sunshine.
Places to stop and rest	• There are a large number and wide variety of trees, some of which will be mature. • There are also spaces and places which are covered or out of the direct sunshine. • Seating will be provided throughout the landscape and along the Canal.

Summary of Benefits Against Healthy Streets Objectives	
Not too noisy	• The existing railway line does emit some noise to the site, and this will not change. • The Sainsbury's store entrance and servicing yard together with the bus layover are located towards the rear of the store close to the railway line. • The removal of various industrial uses over time and as a result of the proposed regeneration will reduce industrial related noises.
People choose to walk and cycle	• The scheme is 'car lite' including only 0.14 spaces per unit, including 3% active provision for Blue Badge parking. • No additional parking is provided for the non-residential uses. • A reduction in Sainsbury's traffic results in a higher mode share for active travel due to new residents of the development using the store. • 4,500 new cycle parking spaces are provided for residents, employees and visitors. • Passive provision for TfL cycle hire will be provided on-site where feasible. • Passive provision for new pedestrian and cycle bridges are included on the site.
People feel safe	• The site opens up an underutilised and derelict industrial site and large surface car park which is highly likely to encourage anti-social behaviour. • The site layout brings high quality public spaces, fuller surveillance, greater activity and associated security through estate management. • The Canal in its current form is also vulnerable to anti-social behaviour but is opened up to the public with new open space, bars and restaurants bringing new activity to a currently remote section of canal.
Things to see and do	• The proposals include a non-residential strategy which illustrates how the site will be activated as a Neighbourhood Centre. • The new uses will encourage people to come in and see the gardens, architecture, walk the canal, and visit bars and restaurants. • The site also provides a connection to Old Oak Common along the canal towpath and people are likely to traverse the site in between Paddington and Old Oak Common and beyond. • The setting of the rail disaster memorial is also enhanced and will be a place for people to visit.
People feel relaxed	• The numerous parks and open spaces within the site and along the canal and railway offer quiet spaces for people to sit and enjoy away from the main trafficked routes. Seating and places to sit and rest are provided throughout the site. The green trees and natural vegetation will enhance this feeling of relaxation.
Clean air	• This is enhanced by ensuring that the majority of the site is relatively low trafficked other than the primary route through the site, The Avenue, and the Sainsbury's car park access, which in itself has a smaller car park and is reprovided in a basement, which improves the air quality impact when compared to the current larger surface level car park.

Summary of Benefits Against Healthy Streets Objectives	
	• General increases in traffic are negligible with the reduction in car parking and the removal of the petrol filling station.. • 20% active and 80% passive electric vehicle charging is provided for the proposed residential car parking, including rapid charging.

LIST OF APPENDICES

Appendix	Description
A	Site Location and Red Line Plan
B	Pre Application Feedback
C	Project Centre Traffic Survey Specification
D	Non-Residential Use Plan
E	Bus Swept Path Assessments
F	Fire Tender Swept Path Assessment
G	Active Travel Zone Assessment
H	Traffic Survey Data (2018 and 2019)
I	Residential TRICS sites
J	Modelling Expectations Document
K	VMAP Stage 5 Report
L	PCL Assessment Results
M	Healthy Streets Designers Check
N	Outline Construction Logistics Plan
O	Framework Travel Plan
P	Sainsbury's Travel Plan
Q	Outline Delivery & Servicing Plan
R	Sainsbury's Delivery and Servicing Plan
S	Car and Cycle Parking Management Plan
T	Sainsbury's Car and Cycle Parking Management Plan