14 BLACKBURN ROAD, CAMDEN

TRANSPORT STATEMENT

PROJECT NO. 22/227 DOC NO. D001

DATE: MARCH 2023

VERSION: 4.0

CLIENT: HAMPSTEAD ASSET MANAGEMENT LTD (HAML) AND BUILDER DEPOT LIMITED (BDL)

Velocity Transport Planning Ltd

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1 INTRODUCTION

1.1 GENERAL

1.1.1 This Transport Statement ('**TS'**), prepared by Velocity Transport Planning ('**VTP'**), is submitted on behalf of Hampstead Asset Management Ltd ('**HAML'**) and Builder Depot Limited (BDL) (together '**the Applicant'**) to accompany an application for full planning permission for the development at 14 Blackburn Road, London, NW6 1RZ (the '**Site'**).

1.1.2 The Site is occupied by various warehouses (between one and two storeys). The Site is bound along its northern edge by Blackburn Road and railway land to the south (serving the Metropolitan and Jubilee lines between West Hampstead Underground Station and Finchley Road). The West Hampstead Underground Station, together with retail facing onto West End Lane, lies to the west of the Site.

1.1.3 Opposite the Site are a number of developments, including the part 6, part 8 storey iQ Student Accommodation (at Haywood House, Blackburn Road), the three storey Clockwork Factory, as well as five x three storey residential properties closer to the West End Lane end of Blackburn Road. The Clockwork Factory is subject to a new planning application, which seeks consent for three residential buildings of up to nine storeys in height.

1.1.4 To the northeast, the Site is bound by a pocket of industrial land and two commercial units owned and operated by Audi. Further to the east of the Site comprises the O2 Shopping Centre, which contains a mix of uses including retail units, community uses and restaurants, two large commercial superstores and associated car parking.

1.1.5 The Site contains no listed buildings and is not within a Conservation Area however it neighbours the South Hampstead Conservation Area, located to the south of the Site. Although not currently an allocated site, the Site sits within the West Hampstead Interchange Area and a Call for Sites application has been submitted.

1.1.6 The Site has the benefit of an implemented scheme, consented in 2004 under planning permission with reference PWX0202103 dated 6 January 2004 (the '**2004 Permission'**), which will provide 14 residential units within a western block, as well as a four storey eastern block, comprising two storeys of warehouse floorspace and two storeys of office floorspace (the '**Implemented Development'**).

1.1.7 To add three additional floors of commercial floorspace to the eastern block forming part of the Implemented Development, the Applicant seeks full planning permission for the following description of development (herein '**the Proposed Development'**):

"The erection of three floors of commercial floorspace (Use Class Eg), together with cycle parking, and associated works."

1.1.8 In tandem, the Applicant has submitted a section 73 application to alter conditions attached to the 2004 Permission to substitute certain drawings authorised by the 2004 Permission in order to provide for the additional three storeys to be constructed on the eastern block as part of the Proposed Development. The section 73 application also seeks consent for certain internal changes within the eastern block to suit the Applicant's operational needs, as well as improvements to external fenestration. The description of development for the section 73 application is as follows:

"Variation of Condition 2 (approved plans) pursuant to planning permission [PWX0202103] dated 06.01.2004 for Redevelopment of whole site by the erection of a 4 storey eastern block comprising two Class B8 and eight Class B1 units with associated service yard, together with a 4 storey plus basement western block comprising 8 dwellinghouses and 6 self-contained flats with associated underground car parking. Changes include: revisions to ground floor elevation and roof plan" (referred to as the '**S73 Development'**).

1.1.9 While this TS has been prepared in support of the application for full planning permission only, it considers the operational phase of the Site following completion of the S73 Development and the Proposed Development.

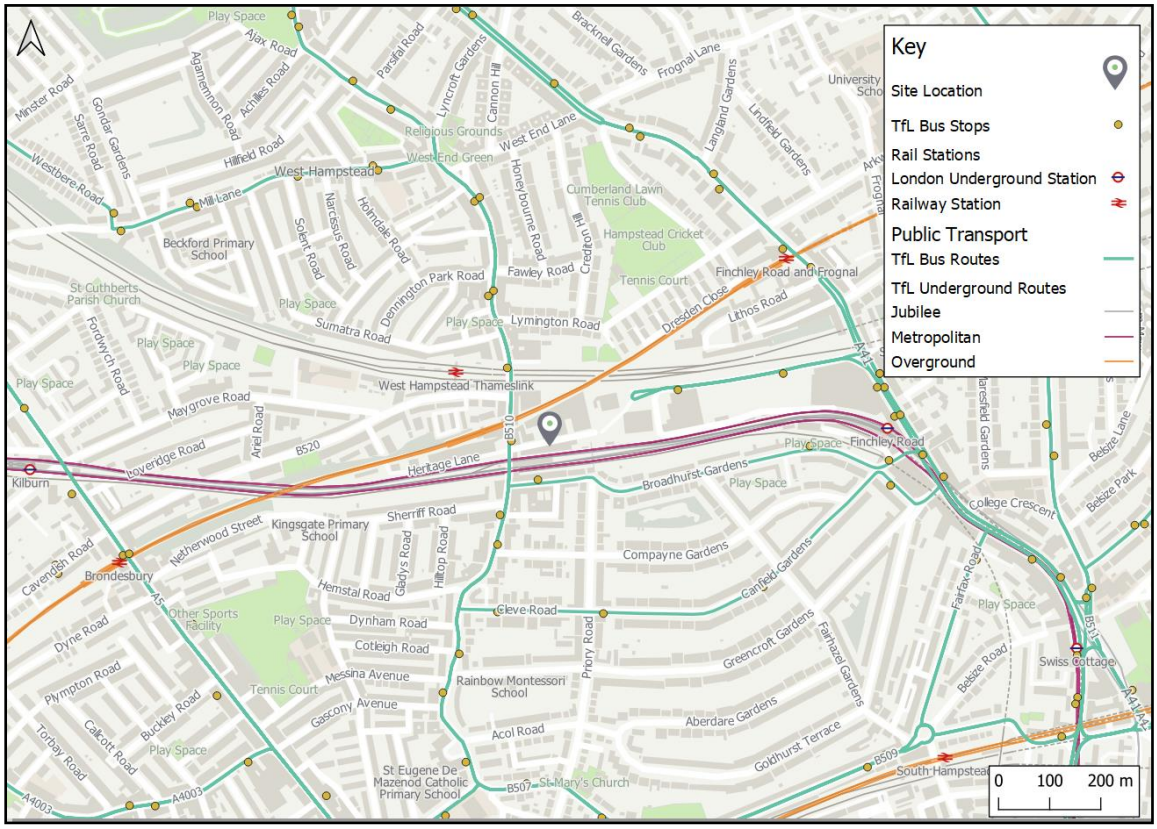
1.1.10 The overarching vision behind the proposals is to optimise the Site, providing additional commercial space above the already implemented proposals to contribute to the wider objectives for this part of West Hampstead ('**West Hampstead Interchange Area'**).

1.1.11 The proposals have been the subject to pre-application discussions with Camden Council. Likewise, there has been positive public consultation with surrounding occupiers, both residential and local businesses.

1.2 SITE LOCATION

1.2.1 **Figure 1-1** shows the location of the Site in relation to the surrounding context.

Figure 1-1: Site location and local context



1.3 SITE DESCRIPTION

1.3.1 The Site currently comprises a two-storey industrial/warehouse unit, occupied by BDL, with an associated service yard and parking. The Site is accessed via Blackburn Road only.

1.4 PLANNING HISTORY

1.4.1 As noted above, the Site has the benefit of the Implemented Development authorised by the 2004 Permission.

1.4.2 The description of development authorised by the 2004 Permission reads as follows:

"Redevelopment of whole site by the erection of a 4-storey eastern block comprising two Class B8 and eight Class B1 units with associated service yard, together with a 4 storey plus basement western block comprising 8 dwellinghouses and 6 self-contained flats with associated underground carparking."

1.4.3 An application for minor non-material amendment to the 2004 Permission was granted by LBC on 4 May 2022 (ref: 2022/0509/P). That amendment concerned condition 1 attached to the 2004 Permission.

1.4.4 A Certificate of Lawfulness application was submitted on 21 October 2022 to confirm that the 2004 Permission has been lawfully implemented (application reference 2022/4576/NEW). At the time of writing, the application is pending determination.

1.4.5 The Implemented Development represents the baseline situation at the Site for the purpose of this report.

1.5 PROPOSED DEVELOPMENT

1.5.1 The Proposed Development will introduce additional office floorspace to the Site, comprising an increase of 3,633 sqm (Gross Internal Area (GIA)) floor area over the Implemented Development. It is proposed that the additional office space will be car-free.

1.5.2 The implemented and proposed area schedule is shown in **Table 1-1**.

Table 1-1: Implemented and Proposed Accommodation Schedule

LAND USE		IMPLEMENTED	PROPOSED	PROPOSED TOTAL
Builders Merchant (GIA)		2,306sqm	-	2,306sqm
Residential	Flats	6	-	6
	Houses	8	-	8
	GIA	1,886sqm	-	1,886sqm
Office (GIA)		1,301sqm	3,633sqm	4,934sqm
Total (Units / GIA)		**14 units / 5,493sqm**	**3,633sqm**	**14 Units / 9,126sqm**

1.6 PRE-APPLICATION ENGAGEMENT

1.6.1 Pre-application discussions have taken place between the Applicant and LBC to inform the design of the Proposed Development and the scope of assessment.

1.7 REPORT PURPOSE

1.7.1 The purpose of this TS is to: establish the Site's accessibility credentials and the potential for future site users to travel by sustainable modes; assess the proposed access, parking, delivery and servicing arrangements in context with best practice guidance; and, present the multi-modal trip generating characteristics and associated impacts on the local highway and transport networks.

1.7.2 This report has been prepared in accordance with relevant national and local planning policies, most notably, the National Planning Policy Framework, National Planning Practice Guidance, and LBC's Local Plan. Transport for London's ('**TfL'**) guidance on the production of Transport Assessments and Transport Statements has also been considered in the preparation of this report.

DOCUMENT STRUCTURE

1.7.3 The remainder of this TS is structured as follows:

- **Section 2** – reviews the relevant national, regional, and local transport planning policies;
- **Section 3** – summarises the Site's baseline transport conditions;
- **Section 4** – describes the proposals ;
- **Section 5** – determines the trip generation of the Proposed Development and considers its impacts; and
- **Section 6** – provides a summary and conclusion to the report.

2 POLICY BACKGROUND

2.1 INTRODUCTION

2.1.1 This section considers the Proposed Development in context with relevant national, regional and local transport policies to demonstrate compliance with their underlying principles. The following policy documents have been considered:

- National Planning Policy Framework – July 2021;
- National Planning Practice Guidance – 2014;
- The London Plan – March 2021;
- Mayor's Transport Strategy – March 2018;
- Sustainable Transport, Walking and Cycling London Plan Guidance – December 2022; and
- LBC Local Plan – February 2017.

2.2 NATIONAL POLICY

NATIONAL PLANNING POLICY FRAMEWORK (JULY 2021)

2.2.1 The latest National Planning Policy Framework ('**NPPF'**) was published in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied. At its heart, the NPPF sets out a presumption in favour of sustainable development (Paragraph 11).

2.2.2 The NPPF promotes sustainable transport and notes that transport issues should be considered at the earliest stages of development proposals (Paragraph 104).

2.2.3 The Proposed Development supports the NPPF through the following:

- The Site is located in an area with excellent public transport access;
- The proposed site layout, which is accessible by pedestrian and cycle movements;
- Not having significant adverse impacts on the transport network or on highways safety;
- The separation of the service yard from the rest of the Site minimises potential conflict between vehicles and pedestrians and cyclists on-site; and
- The efficient delivery of goods has been considered through the provision of dedicated loading/unloading areas.

2.2.4 Paragraph 111 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

2.2.5 Within this context, Paragraph 112 states that applications for development should:

(a) 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;

(b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

(c) 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;

(d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

(e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

NATIONAL PLANNING PRACTICE GUIDANCE – TRAVEL PLANS, TRANSPORT ASSESSMENTS AND STATEMENTS (2014)

2.2.6 The National Planning Practice Guidance ('**NPPG'**) provides further information on the level of detail required for Travel Plans ('**TP'**), Transport Assessments ('**TA'**) and Statements.

2.2.7 Paragraph 004 of the NPPG defines TAs as thorough assessments of the transport implications of development, while TSs are a 'lighter-touch' evaluation to be used where this would be more proportionate to the potential impact of the development (i.e. in the case of developments with anticipated limited transport impacts).

2.2.8 Paragraph 007 states that TPs, TAs and TSs should be:

- Proportionate to the size and scope of the proposed development to which they relate;
- Be tailored to particular local circumstances; and
- Be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators and Highways Agency where there may be implications for the strategic road network and other relevant bodies.

2.2.9 Paragraph 015 identifies the information which should be included in TAs and TSs, noting that the scope and level of detail will vary from site to site.

2.3 REGIONAL POLICY

LONDON PLAN (MARCH 2021)

2.3.1 The London Plan is part of the statutory development plan and aims to ensure that London's transport is easy, safe and convenient for everyone and actively encourages more walking and cycling.

2.3.2 Policy T1 notes that development proposals should support a target that 80% of all trips in London are to be made by foot, cycle or public transport by 2041. It states that:

"All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated".

2.3.3 Policy T2 relates to 'Healthy Streets' and seeks development that delivers patterns of land use that facilitate residents making shorter, regular trips by walking or cycling. The Healthy Streets Approach recognises the importance of promoting and facilitating active modes of travel by making developments permeable and highly connected by foot and cycle, with reduced vehicle dominance.

2.3.4 Policy T4 identifies that development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity. TAs are required to support development proposals assessing any impacts on the capacity of the transport network and should focus on embedding the Healthy Streets approach within, and in the vicinity of new development.

2.3.5 Policy T5 sets out that development should encourage cycling and provides minimum cycle parking standards. Cycle parking and cycle parking areas should allow easy access and provide facilities for larger and adapted bikes and all cyclists. In places of employment, supporting facilities are recommended, including changing rooms, maintenance facilities, lockers and shower facilities. The policy also states that all cycle parking should be designed in accordance with guidance contained within the London Cycle Design Standards (LCDS).

2.3.6 Table 10.2 of the London Plan provides the minimum cycle parking standards for land use classes prior to their amendments in 2020. LBC is identified as a borough where higher cycle parking standards apply. The Greater London Authority (GLA) issued a clarification note in December 2020 which confirmed that where the London Plan refers generally to the B Use Class, the relevant policies should be applied as if this were a reference to Use Classes E(g), B2 and B8.

2.3.7 The relevant cycle parking standards based are shown in **Table 2-1.**

Table 2-1: London Plan – Relevant Minimum Cycle Parking Standards

LAND USE CLASS	MINIMUM CYCLE PARKING STANDARDS	
	LONG-STAY	SHORT-STAY
B1 Business Offices	1 space per 75sqm (GEA*)	First 5,000 sqm: 1 space per 500 sqm Thereafter: 1 space per 5,000 sqm (GEA)
B2 General Industrial / B8 Storage or Distribution	1 space per 500 sqm (GEA)	1 space per 1,000 sqm (GEA)
C3-C4 Dwellings (all)	1 space per studio or 1 person 1 bedroom dwelling 1.5 spaces per 2 person 1 bedroom dwelling 2 spaces per all other dwellings	5 to 40 dwellings: 2 spaces Thereafter: 1 space per 40 dwellings

**Gross External Area*

2.3.8 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').

2.3.9 Part G of Policy T6 notes that, where car parking is provided in new developments, provision should be made for infrastructure for electric or other ultra-low emission vehicles.

2.3.10 No specific parking standards for B8 use are provided in the London Plan. Policy T6.2 (Office Parking) Part C notes that car parking provisions at Use Classes Order B2 (general industrial) and B8 (storage or distribution) employment uses should have regard to these office parking standards and take account of the significantly lower employment density in such developments. The relevant maximum parking standards are copied below in **Table 2-2** for reference.

Table 2-2: London Plan – Relevant Maximum Parking Standards

LAND USE	LOCATION	MAXIMUM PARKING PROVISION
B1 and B8 (Based on Office standards)	Outer London	Up to 1 space per 100 sqm (GIA)
C3-C4 Residential	All areas of PTAL 5 – 6	Car-free*

**with the exception of disabled parking*

MAYOR'S TRANSPORT STRATEGY (MARCH 2018)

2.3.11 The Mayor's Transport Strategy ('**MTS'**) was published in March 2018 and sets out the Mayor's policies and proposals to reshape transport in London over the next 25 years. The central aim of the MTS is for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041.

2.3.12 Three key themes are at the heart of the strategy:

1. Healthy Streets and healthy people

   The MTS promotes a new Healthy Streets approach to reduce car dependency and increase active, efficient and sustainable travel. Street environments should be designed to encourage walking and cycling to assist Londoners with staying healthy.

2. A good public transport experience

   For longer trips, public transport is the most efficient way for people to travel and should be attractive to facilitate a mode shift away from car use. Improvements to the public transport network are outlined including new infrastructure.

3. New homes and jobs

   This section of the MTS highlights the projected growth of London's population, over the coming decades and sets out the need for the city's growth to be shaped by the 'Good Growth' principles. Promoting high-density, mixed-use and well-connected developments that enable the city to grow sustainable and positively.

2.3.13 The MTS sets out Good Growth principles for the delivery of new homes and jobs that use transport to:

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

2.3.14 The relevant transport principles of Good Growth are noted to be:

- Good access to public transport;
- High-density, mixed-use developments;
- People choose to walk and cycle;
- Car-free and car-lite places;
- Inclusive, accessible design; and

- Carbon-free travel.

2.3.15 The Proposed Development would deliver the transport principles of Good Growth through:

- Providing high-density mixed-use development in an appropriate location. The inner London location provides a number of local facilities and amenities which will mean shorter journeys to key destinations and further encourage travel by foot and car-free lifestyles;
- Facilities that will encourage walking and cycling, such as convenient access points and cycle parking;
- A 'car-free' approach; and
- Inclusive and accessible design enabling access for everyone travelling to and from the development.

SUSTAINABLE TRANSPORT, WALKING AND CYCLING LONDON PLAN GUIDANCE (DECEMBER 2022)

2.3.16 The Sustainable Transport, Walking and Cycling London Plan Guidance ('**LPG'**) was published in December 2022 and helps support planning authorities and applicants in meeting the requirements of London Plan Policy T3, as well as also supporting delivery against other policies including T1 Strategic approach to transport, and T2 Healthy Streets. It also provides guidance to explain how Development Plans and development proposals should support walking, cycling and public transport. In particular, the LPG prioritises permeability and connectivity in walking and cycle routes, and states that development proposals should not harm, or make unviable, the current operation or future enhancement of the bus network.

2.3.17 Development proposals adjacent to or adjoining the rail networks should enable access, appropriate protection, and operational and other requirements identified through discussions with TfL and other relevant authorities to be met. This may require design mitigation – for example, to prevent noise and vibrations being transmitted from future rail infrastructure into any proposed new homes. As requirements for future schemes, including those affecting land, may not be in the public domain, discussions with TfL and Network Rail are critical to ensure sustainable development.

2.4 LOCAL POLICY

LBC LOCAL PLAN (JULY 2017)

2.4.1 LBC's Local Plan was published in 2017 and sets out the spatial vision and plan for the future of the borough and how it will be delivered. The Local Plan addresses the needs of the borough for new homes and jobs plus the infrastructure needed to support growth from 2011 up to 2036.

2.4.2 The Site falls within the West Hampstead Interchange Area, which includes the land around the three stations (served by London Underground, London Overground and Thameslink) and incorporates the land towards the Finchley Road / Swiss Cottage town centre including the O2 car park land.

2.4.3 The Council expects developments in the area to contribute to:

- *a mix of uses, including substantial new housing (including affordable housing), town centre, employment and community uses, and green/open space (with any substantial new town centre uses located within the designated Finchley Road / Swiss Cottage town centre part of the growth area);*

- *improved transport interchange accessibility and capacity and improved pedestrian and bicycle movement and routes;*
- *a substantially improved street environment around transport facilities, including improved crossing and wider pavements;*
- *sustainable and safe design of the highest quality that respects the character and heritage value of West Hampstead; and*
- *prioritise the use of decentralised energy networks.*

2.4.4 Chapter 6 focuses on managing the impact of development. LBC will consider information received within TAs, TPs and Delivery and Servicing Management Plans to assess the transport impacts of development. In instances where existing or committed capacity cannot meet the additional need generated by the development, LBC will expect proposals to provide information to indicate the likely impacts of the development and the steps that will be taken to mitigate those impacts.

2.4.5 Any development or works affecting the highway will also be expected to avoid disruption to the highway network, particularly emergency vehicle routes and avoid creating a shortfall to existing on-street parking conditions or amendments to Controlled Parking Zones. To avoid congestion and protect residential amenity, developments will be expected to provide on-site servicing facilities wherever possible.

2.4.6 Chapter 10 focuses on transport in the borough, with paragraph 10.7 stating that LBC will consider the impacts of movements to, from and within a site, including links to existing transport networks via TAs, TPs, delivery and servicing management plans and construction management plans. To promote sustainable transport choices, development should prioritise the needs of pedestrians and cyclists and ensure that sustainable transport will be the primary means of travel to and from the site.

2.4.7 Policy T2 (Parking and Car-Free Development)states that LBC will limit the availability of parking and require all new developments in the borough to be car-free through:

- *Not issuing on-street or on-site parking permits in connection with new developments and use legal agreements to ensure that future occupants are aware that they are not entitled to on-street parking permits;*
- *Limiting on-site parking to:*
  - *i. spaces designated for disabled people where necessary, and/or*
  - *ii. essential operational or servicing needs;*
- *Supporting the redevelopment of existing car parks for alternative uses; and*
- *Resisting the development of boundary treatments and gardens to provide vehicle crossovers and on-site parking.*

2.4.8 On redevelopment proposals, paragraph 10.19 states that:

'The Council will consider retaining or re-providing existing parking provision where it can be demonstrated that the existing occupiers are to return to the address when the development is completed. This is common where an existing dwelling or block is being extended or subdivided. It can also occur where a change of use brings a site or property into residential occupation. If a development is to have new occupiers, this should be car-free.'

2.5 SUMMARY

2.5.1 A review of policy at national, regional and local levels highlights a need for development to be located in an accessible location, which is demonstrated in **Section 3**. In addition, there is a need to ensure parking and cycle parking are provided at an appropriate level that reflects the accessibility of the site, details of which are included in **Section 4**. Subsequently, **Section 5** demonstrates that the Proposed Development will have no significant impact on the surrounding transport networks. It is therefore considered that the Proposed Development accords with national and local policy requirements.

3 BASELINE CONDITIONS

3.1 INTRODUCTION

3.1.1 This section provides a review of the Site in terms of land use, access and servicing arrangements.

3.2 EXISTING SITE USE

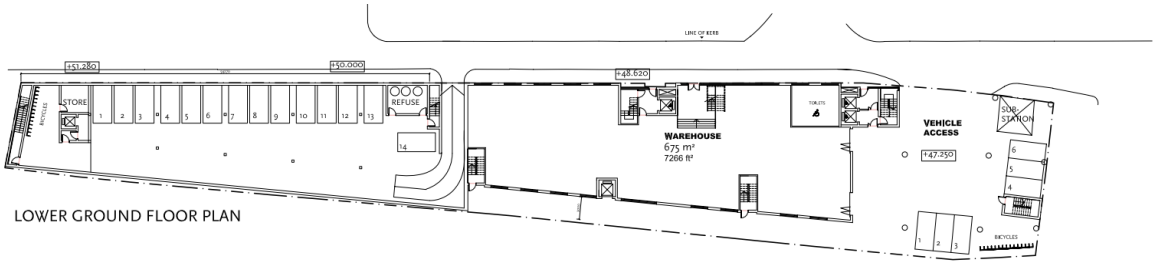
3.2.1 The Site is currently occupied by various warehouses (between one and two storeys), with an associated service yard and parking. The Site is accessed via Blackburn Road only.

3.3 IMPLEMENTED DEVELOPMENT

3.3.1 The Implemented Development comprises a four storey eastern block comprising two Class B8 and eight Class B1 units with associated service yard, together with a four-storey plus basement western block comprising eight dwelling houses and six self-contained flats with associated underground car parking (14 spaces for the residential block and six spaces for the B8 / B1 block).

3.3.2 **Figure 3-1** illustrates the consented site layout of the Implemented Development.

Figure 3-1: Implemented Site Layout (Lower Ground Floor Level)



3.3.3 Drawings of the Implemented Development and the Proposed Development can be found in **APPENDIX A**.

3.4 EXISTING SITE ACCESS

3.4.1 The Site is accessed via Blackburn Road. There are currently two vehicular access points although it is noted that one is currently not in use.

3.5 IMPLEMENTED DEVELOPMENT SITE ACCESS

3.5.1 The Implemented Development includes two points of access along Blackburn Road. The first provides access to the lower ground floor parking area associated with the residential units via a vehicular ramp, while the second access serves the non-residential site uses and leads to a service yard with six parking spaces.

3.6 EXISTING SUSTAINABLE TRANSPORT CONDITIONS

3.6.1 This section reviews the Site's accessibility by walking, cycling and public transport; the local highway network; and provides an analysis of personal injury accident ('**PIA'**) data.

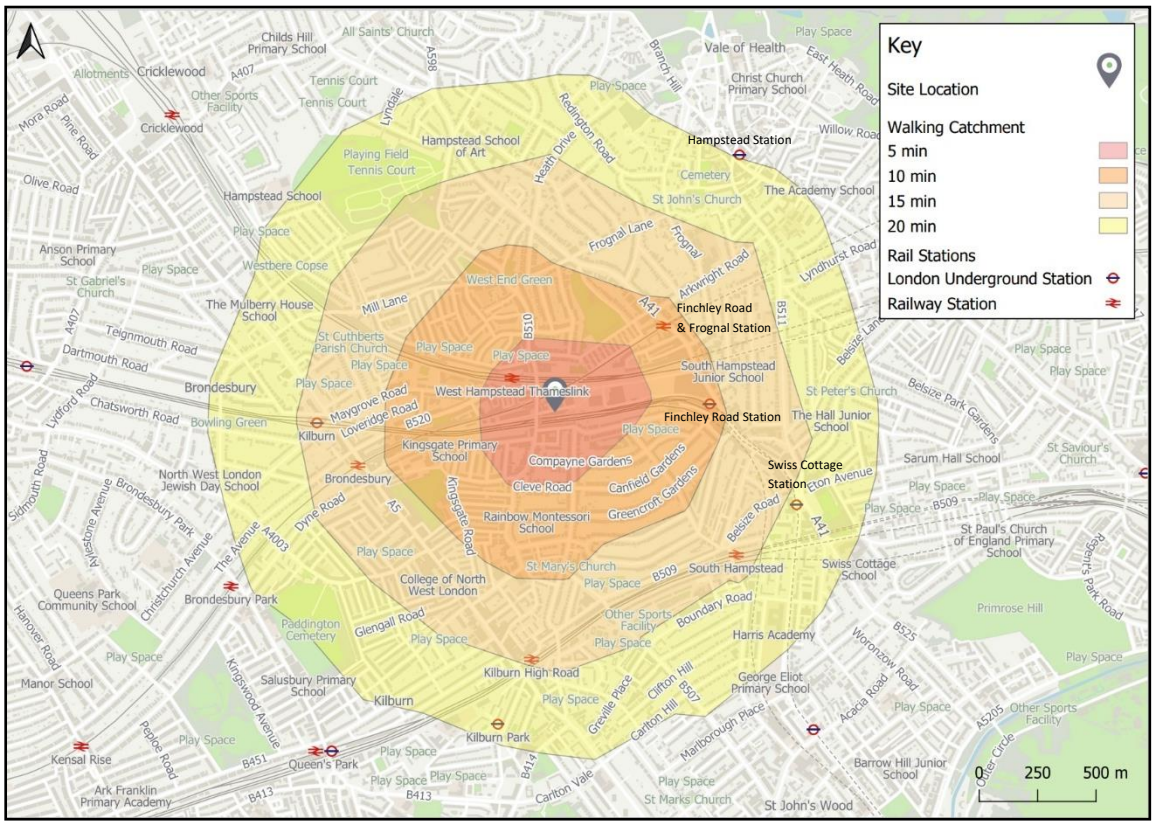
WALKING

3.6.2 The National Travel Survey identifies that walking is the most frequent travel mode used for short-distance trips (within 1 mile / 1.6 km)[1]. Infrastructure that supports travel on foot is therefore important to promote sustainable and active travel as a viable alternative to short car trips.

3.6.3 Well-lit footways are provided on both sides of Blackburn Road and West End Lane in the vicinity of the Site. Dropped kerbs are provided at all crossing points, with most also having tactile paving. Controlled pedestrian crossing points are provided at appropriate intervals along West End Lane, and 20mph speed limits help create attractive environments for pedestrian movement in the local area.

3.6.4 **Figure 3-2** below shows walking isochrones from the Site, illustrating the walking accessibility and catchment surrounding the Proposed Development.

Figure 3-2: Walking Isochrones Map



[1] National Travel Survey 2021: Mode share, journey lengths and public transport use - GOV.UK (www.gov.uk)

3.6.5 **Figure 3-2** illustrates that a number of London Underground and railway stations can be reached within a 20-minute walk of the Site. These include:

- Within 5 minutes: West Hampstead Station;
- Within 10 minutes: Finchley Road Station, Finchley Road & Frognal Station;
- Within 15 minutes: Kilburn, Brondesbury, Kilburn High Road and South Hampstead Stations; and
- Within 20 minutes: Kilburn Park and Swiss Cottage Stations.

CYCLING

3.6.6 The National Travel Survey highlights that the average cycle trip is currently 3.6 miles (5.1km)[2], however, journeys up to three times the average distance are not uncommon for regular commuters, accepting that fitness and physical ability, journey purpose and conditions are relevant factors.

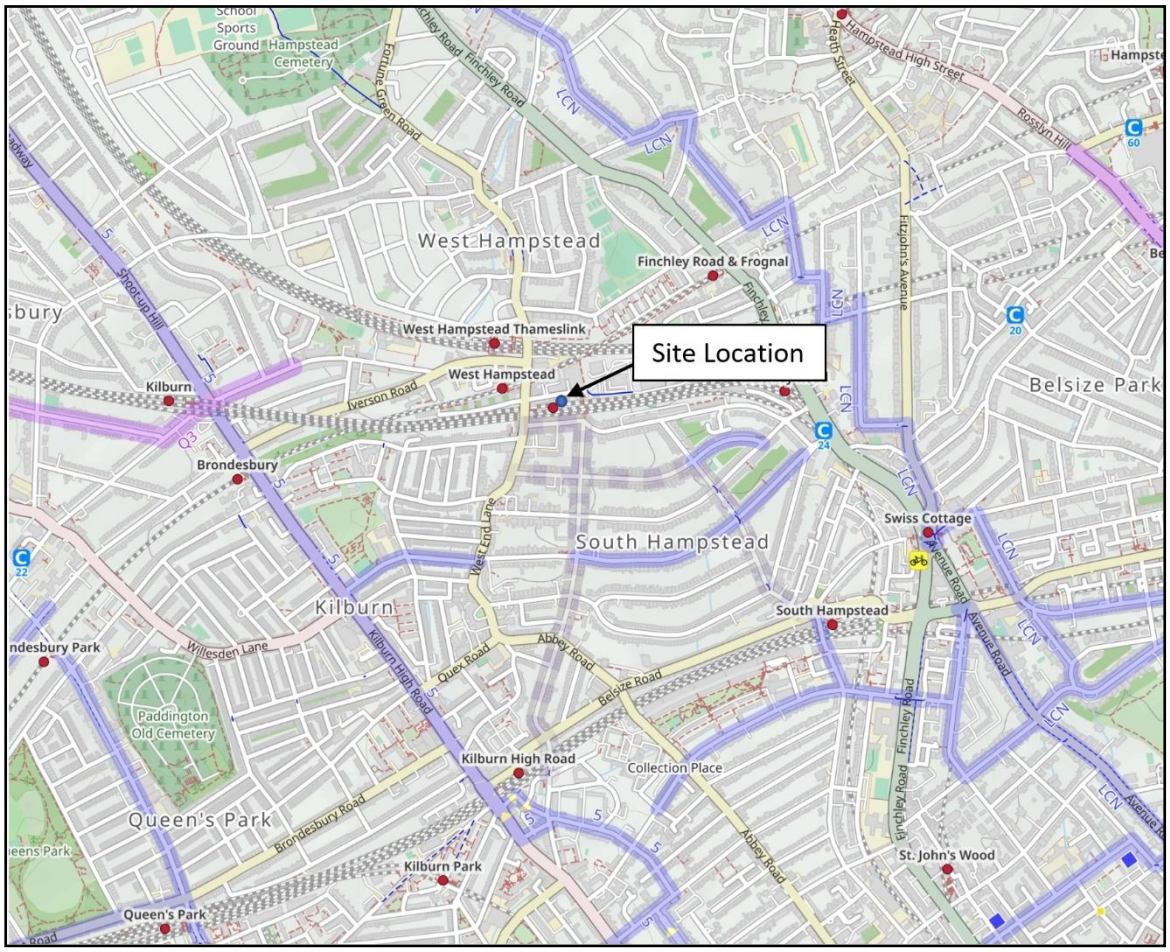
3.6.7 There are several cycle routes in the vicinity of the Site with a shared footway/cycle route located to the east of the Site at the end of Blackburn Road linking the site to the O2 Centre and Finchley Road London Underground station and facilitating east-west journeys made on foot or by cycle.

3.6.8 Local Cycle Route 5 runs along the A5 in proximity to the Site, providing a recommended on-road route south into central London and north as far as Edgeware, as shown in **Figure 3-3**.

3.6.9 Quietway 3 can be joined near Kilburn Underground Station, and this provides a quiet route west through Dollis Hill to Gladstone Park.

[2] Walking and cycling statistics, England: 2021 - GOV.UK (www.gov.uk)

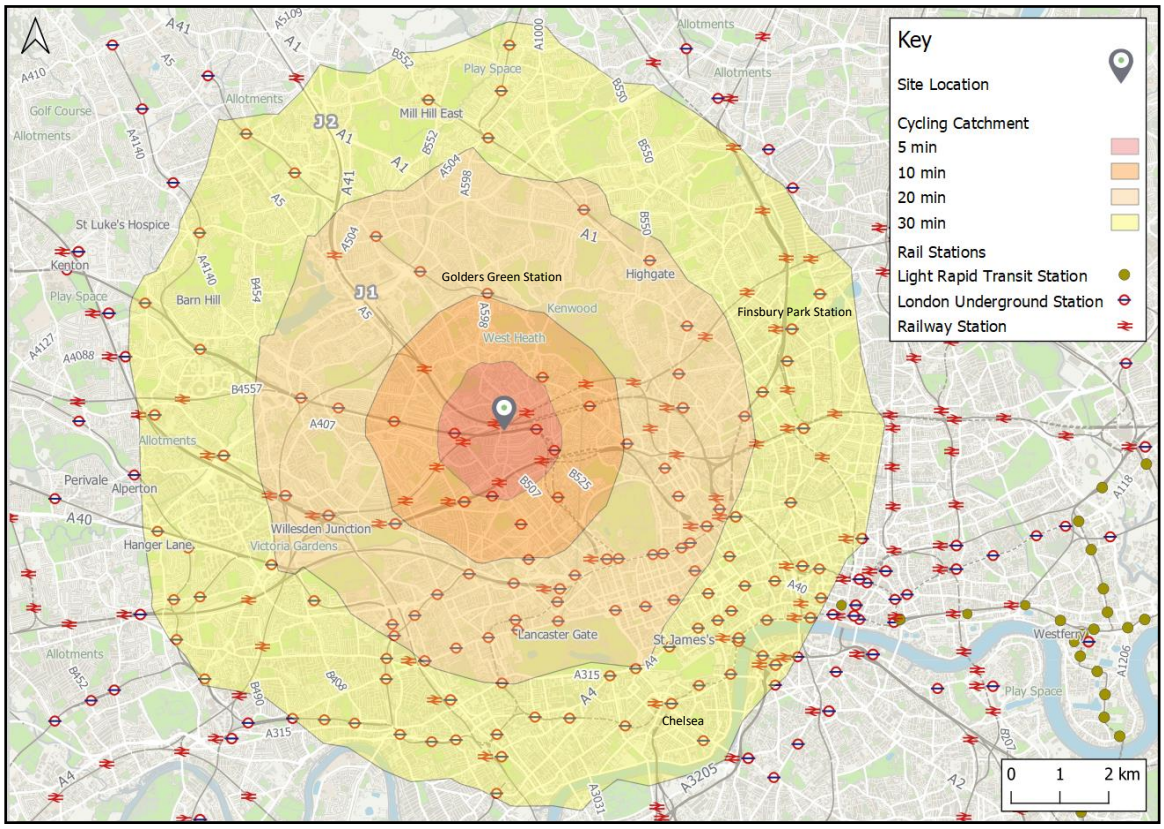
Figure 3-3: Local Cycle Routes



* Source: Openstreetmap.org

3.6.10 **Figure 3-4** shows cycling isochrones from the Site for typical 5, 10, 20 and 30-minute cycle times.

Figure 3-4: Cycling Isochrones Map



3.6.11 **Figure 3-4** illustrates that several major residential and employment areas are within suitable cycle distances from the Site, including Bond Street, Oxford Street, Kensington and London Victoria.

PUBLIC TRANSPORT ACCESSIBILITY LEVEL ('**PTAL**')

3.6.12 PTAL is used to assess the connectivity of a site to the public transport network in consideration of the access time and frequency of services. It considers rail stations within a 12-minute walk (960m) of the site and bus stops within an eight-minute walk (640m) and is undertaken using the AM peak hour operating patterns of public transport services. An Access Index ('**AI**') score is calculated that is used to define a PTAL score.

3.6.13 TfL's online Web based Connectivity Assessment Tool ('**WebCAT**') shows that the PTAL of the Site ranges from 6a to 6b, indicating that the Site has excellent accessibility to public transport services. The WebCAT PTAL output is summarised in **Figure 3-5.**

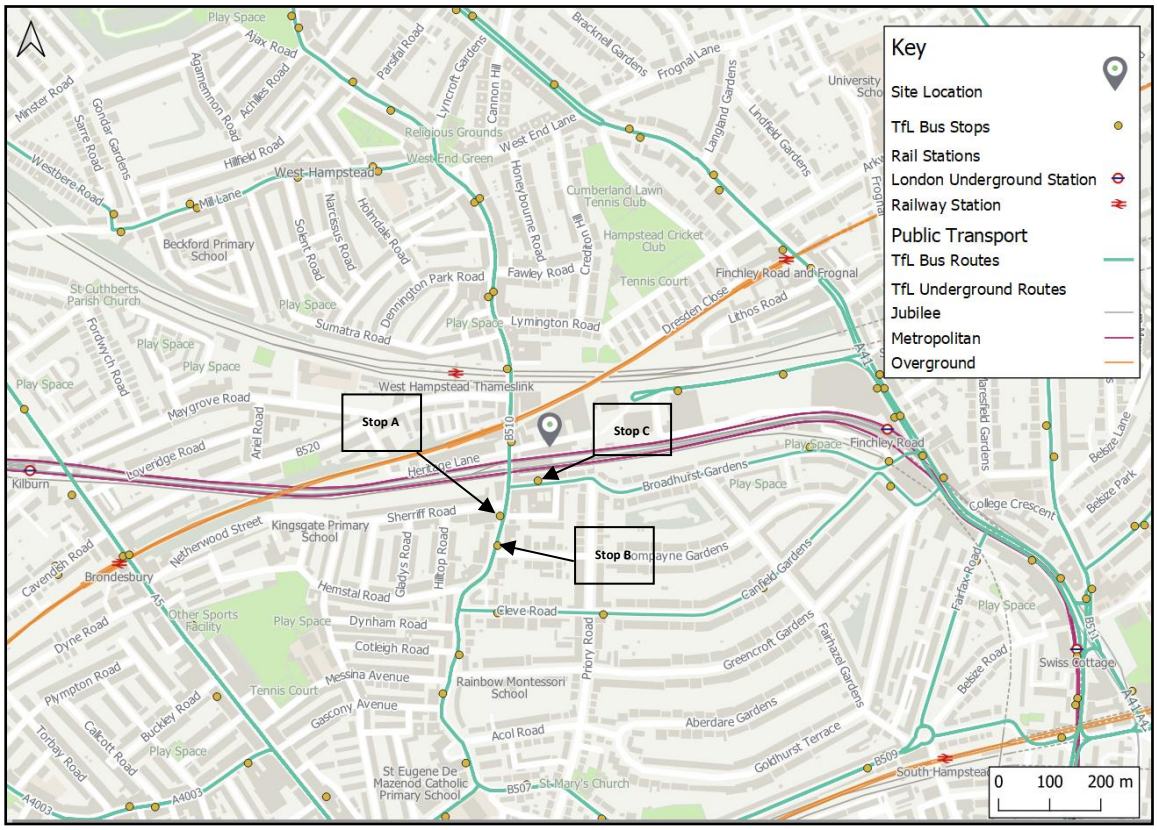
Figure 3-5: Site PTAL Map

BUS NETWORK

3.6.14 The nearest bus stops are located on West End Lane, approximately 200m south of the Site (a 2–3 minute walk). West Hampstead Station (Stop A) provides northbound services while Compayne Gardens (Stop B) provides southbound services, with both bus stops featuring seating and shelters.

3.6.15 These bus stops are shown on the local public transport network provided below in **Figure 3-6**.

Figure 3-6: Local Public Transport Services



**Note: Stop W shown near the Site on West End Lane on the above plan was removed in 2018.*

3.6.16 Stop A provides northbound services for routes 139, 328 and C11, while Stop B serves bus routes 139 and 328 only. Stop C also provides southbound services for route C11. All buses are operated by TfL.

3.6.17 A summary of the bus services and their frequencies is provided in **Table 3-1**.

Table 3-1: Bus Service Frequency

SERVICE	ROUTE	AM PEAK HOUR FREQUENCY (SERVICES PER HOUR)	PM PEAK HOUR FREQUENCY (SERVICES PER HOUR)
139	Waterloo Station – Charing Cross Station – Piccadilly Circus - Baker Street Station – West Hampstead Station – Golders Green Station	7	7
328	Limerston Street – Earls Court Station – High Street Kensington Station – Notting Hill Gate Station – Westbourne Park Station - Kilburn Park Station – Kilburn High Road Station – West Hampstead Station – Golders Green Station	5	5
C11	Archway – Gospel Oak Station – Belsize Park Station – Swiss Cottage Station - Finchley Road Station – West Hampstead Station – Cricklewood Station – Brent Cross Shopping Centre	6	6

**Frequency and operating times are approximate and subject to timetable changes*

Source: Timetables - Transport for London (tfl.gov.uk)

3.6.18 As can be seen from **Table 3-1,** there are three bus routes which serve the Site. All three routes operate at a high frequency in the AM and PM peak hours, with at least five peak hour services per route.

LONDON UNDERGROUND

3.6.19 The nearest London Underground station to the Site is West Hampstead Station, located approximately a one-minute walk to the south of the Site. West Hampstead is on the Jubilee line which provides services and connects the Site with key central locations including Oxford Street, Westminster, and London Bridge. It is also noted that the Jubilee Line provides a direct connection to every other London Underground service and a number of rail stations. The station is in Travelcard Zone 2.

3.6.20 **Table 3-2** summarises the high-frequency services available from West Hampstead Station.

Table 3-2: London Underground Service Frequency from West Hampstead Station

LINE	ROUTE	AM PEAK HOUR FREQUENCY (SERVICES PER HOUR)	PM PEAK HOUR FREQUENCY (SERVICES PER HOUR
Jubilee	Stanmore - Stratford	30	30

Source: Timetables - Transport for London (tfl.gov.uk)

LONDON OVERGROUND

3.6.21 West Hampstead station is also the nearest London Overground station to the Site, located approximately a 2-minute walk to the northwest of the Site. **Table 3-3** summarises the Overground services available.

Table 3-3: London Overground Service Frequency from West Hampstead Station

LINE	DESTINATION	AM PEAK HOUR FREQUENCY (SERVICES PER HOUR)	PM PEAK HOUR FREQUENCY (SERVICES PER HOUR)
Overground	Richmond	5	5
	Clapham Junction	5	5
	Stratford	10	10
	Total	**20**	**20**

Source: Timetables - Transport for London (tfl.gov.uk)

RAIL NETWORK

3.6.22 The closest rail station to the Site is West Hampstead, served by the Thameslink. This connects the Site with locations such as Brighton, Bedford, and St Albans. **Table 3-4** summarises the services available from key locations.

Table 3-4: Rail Service Frequency to West Hampstead Rail Station

LINE	DESTINATION	AM PEAK HOUR FREQUENCY	PM PEAK HOUR FREQUENCY
Thameslink	St Albans City	5	5
	Sutton	2	2
	Luton	4	4
	Bedford	4	4
	Rainham	2	2
	Brighton	4	4
	Total	**21**	**21**

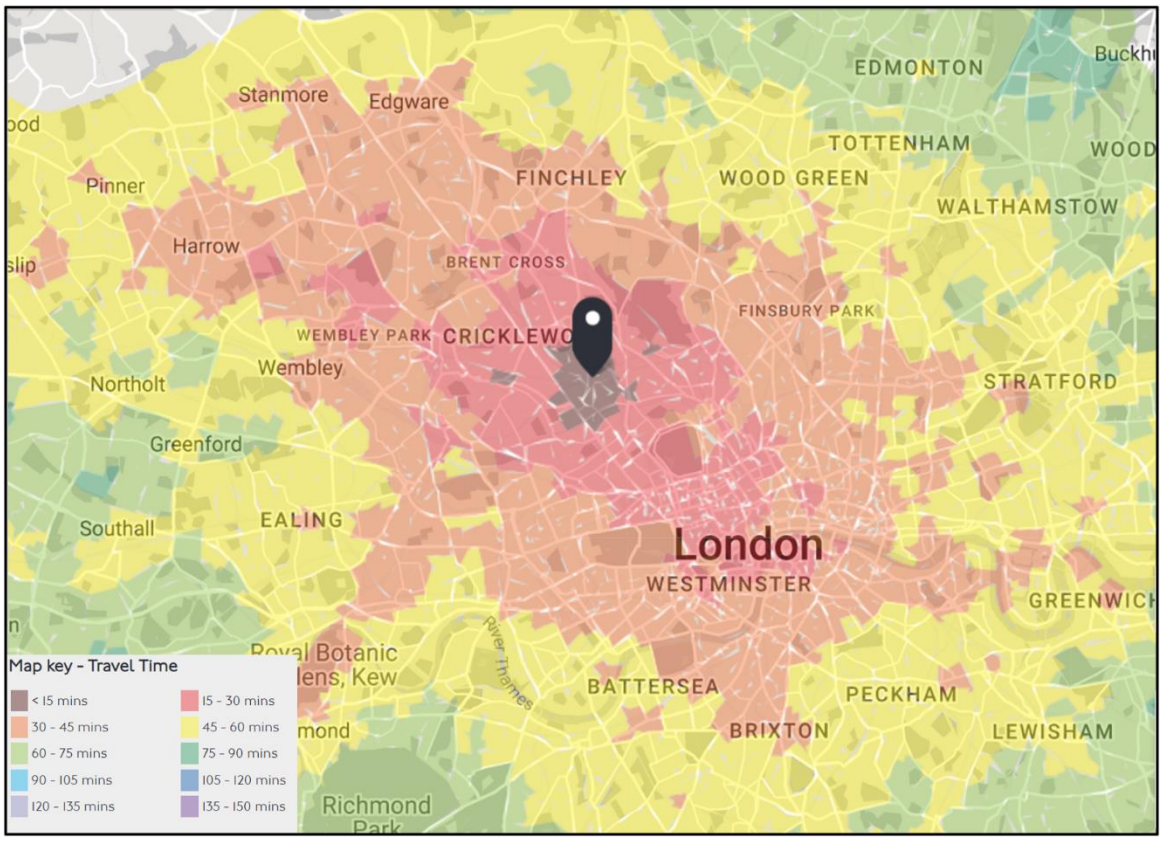
Source: Timetables - Transport for London (tfl.gov.uk)

3.6.23 As can be seen in **Table 3-4**, West Hampstead railway station provides 21 services in both the AM and PM peak hours.

PUBLIC TRANSPORT TIME MAPPING

3.6.24 Time Mapping (‘**TIM’**) is a tool developed by TfL within their WebCAT suite of tools to assess connectivity in terms of travel times, taking into account public transport service ranges and interchange opportunities. Time Mapping for the Site, travelling by public transport during the AM peak, is presented in **Figure 3-7**.

Figure 3-7: TIM Mapping



Source: WebCAT planning tool - Transport for London (tfl.gov.uk)

3.6.25 **Figure 3-7** shows that the entirety of central London can be reached within a 30 - 45 minutes journey, whilst the majority of south and east London can be reached within a 45 - 60 minutes journey.

SUSTAINABLE TRANSPORT SUMMARY

3.6.26 The Site is accessible via good-quality walking and cycling networks which provide direct routes to a variety of residential and employment areas. Public transport access to the Site is high, and there are multiple opportunities to interchange between modes. Fast, convenient routes from Central London via London Underground, Overground and rail services will also enable public transport to be a genuine option for travel to/from the Site.

3.7 HIGHWAY NETWORK

3.7.1 The Site is accessed from Blackburn Road, which is a two-way cul-de-sac road that connects with the B510 West End Lane at its western end. Both Blackburn Road and the B510 are subject to a 20mph speed limit in the vicinity of the Site.

3.7.2 The B510 is a key north-south route through Hampstead, connecting with the A41, Finchley Road to the north (1.5km) and the A5 to the south (1.1km). The A23 is a single carriageway road in the vicinity of the Site with two lanes in each direction and is part of the TfL Road Network (TLRN). To the south of the Site, the road becomes a dual carriageway and connects with the A5, Kilburn High Road. The speed limit along the A232 is 30mph in the vicinity of the Site.

3.8 PARKING, LOADING AND CAR CLUB

3.8.1 The Implemented Development's parking provision comprises 14 parking spaces associated with the residential element and six spaces associated with the builders merchant element. All parking spaces are provided on the lower ground floor level.

3.8.2 Blackburn Road has double yellow lines on both sides of the road for much of its length, while a 50m stretch on its western side has various parking restrictions including pay and display bays and weight-restricted parking during certain hours. There are also cycle parking stands and motorcycle parking bays on the northern side of the road.

3.8.3 A car club bay is also present on Blackburn Road in front of the Site, providing a convenient method of travel for existing and future users of the Site.

3.8.4 The builders merchant servicing strategy of the Implemented Development comprises vehicles driving into the on-site service yard to unload deliveries. Due to the constrained nature of the Site, larger delivery vehicles are required to reverse into the service yard from Blackburn Road. Other smaller vehicles would load on-street from Blackburn Road. All servicing and delivery activity for the residential and office uses are to be undertaken on-street from Blackburn Road.

3.8.5 The level of servicing activity is detailed in **Section 5** of this report.

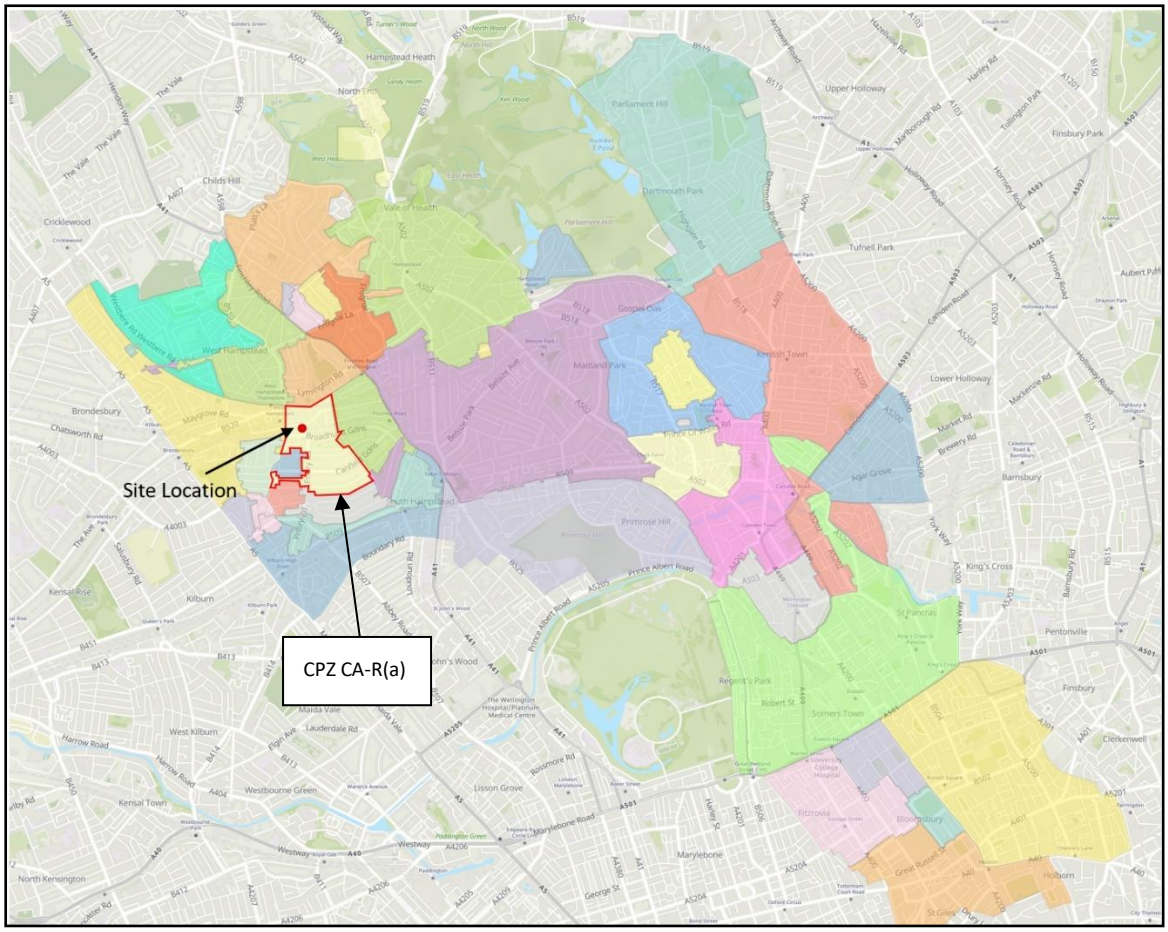
CONTROLLED PARKING ZONES

3.8.6 The Site is located within LBC Controlled Parking Zone (CPZ) CA-R(a)[3]. The CPZ-controlled hours are as follows:

- Monday – Friday: 8:30 – 18:30; and
- Saturday and Sunday: No controlled hours.

3.8.7 A map showing the extent of LBC CPZs is presented in **Figure 3-8**.

Figure 3-8: LBC CPZ Map



Source: lbcamden.maps.arcgis.com

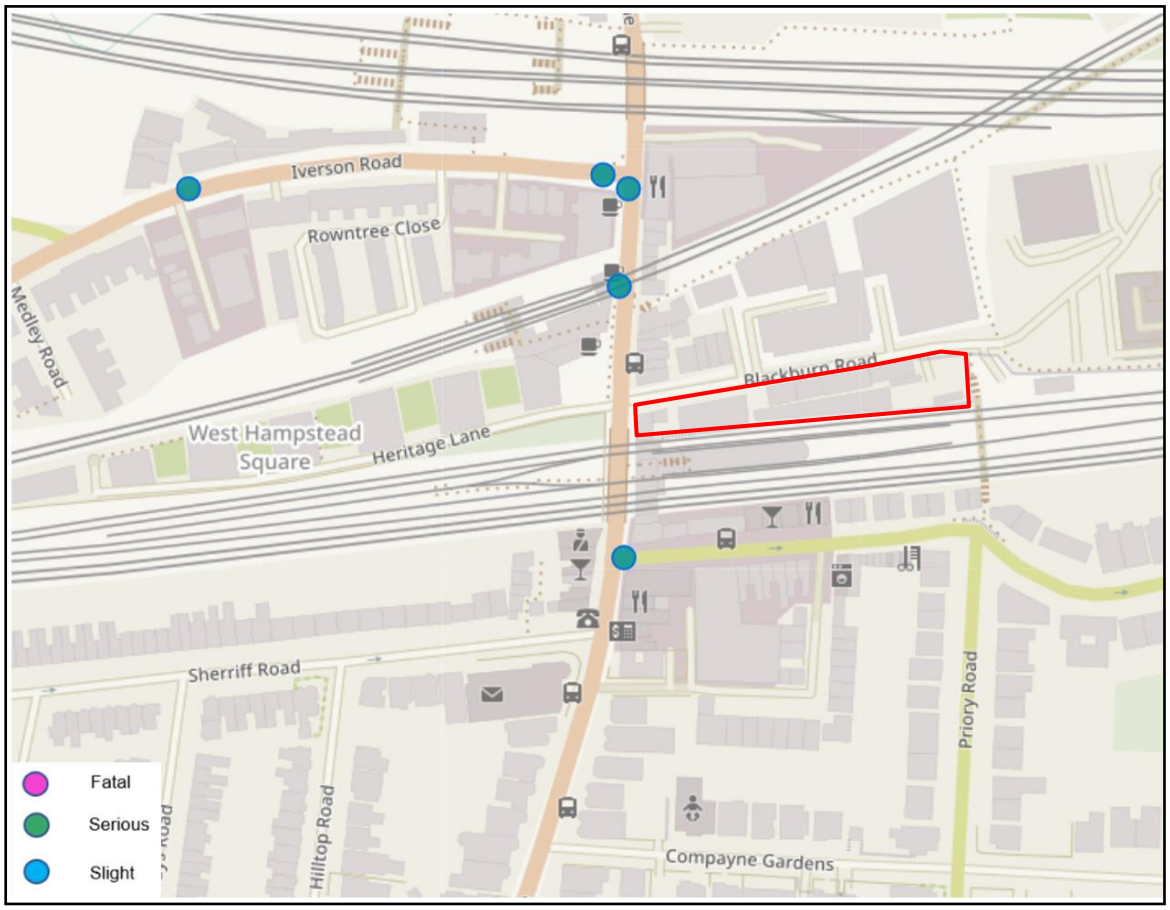
[3] Controlled parking zones - Camden Council

3.9 PERSONAL INJURY ACCIDENT DATA

3.9.1 Personal Injury Accident (‘**PIA’**) data has been obtained from the ‘TfL Road Safety Collision Data Extracts’[4] for the most recent three-year period (January 2019 - December 2021).

3.9.2 The study area reviewed and the location of accidents within the stated time period are shown in **Figure 3-9**, with the study area comprising Blackburn Road and the local surrounding roads. The data presents all Killed or Seriously Injured (‘**KSI’**) collisions, with all ‘slight’ collisions excluded.

Figure 3-9: PIA Record 2019-2021



3.9.3 A total of five serious collisions were recorded within the study area between January 2019 and December 2021. The collisions resulted in a total of five casualties. There were no ‘fatal’ collisions, and it is noted that no collisions occurred at the junction of Blackburn Road and B510 West End Lane.

[4] Microsoft Power BI – TfL Road Safety Data Reports

3.9.4 **Table 3-5** summarises the recorded collisions by year and severity. The total number of collisions has reduced each year, with no collisions occurring in the most recent year, 2021.

Table 3-5: Collision By Severity By Year

ACCIDENT SEVERITY	2019	2020	2021	TOTAL
Serious	4	1	0	5
Fatal	0	0	0	0
Total	**4**	**1**	**0**	**0**

Source: Microsoft Power BI – TfL Road Safety Data Reports

3.9.5 Analysis of the recorded collisions is provided below:

- Tuesday 1st January 2019: a southbound vehicle turning left onto Broadhurst Gardens collided with a pedestrian exiting the public house who fell into the road;
- Tuesday 26th February 2019: a southbound vehicle on West End Lane was attempting to right turn onto Iverson Road when it collided with a northbound motorcyclist on West End Lane;
- Friday 10th May 2019: a collision occurred on West End Lane, whereby a car overtaking a stopped taxi collided with a pedestrian waiting to enter the taxi;
- Monday 5th August 2019: a vehicle travelling westbound on Iverson Road collided with an eastbound vehicle. The eastbound vehicle then collided with a parked vehicle; and
- Sunday 12th December 2022: a collision occurred on West End Lane between a private hire/taxi vehicle and a pedestrian.

3.9.6 The variety and low frequency of collisions within the three-year period suggest that there are no existing safety issues with Blackburn Road or West End Lane in the vicinity of the Site.

4 PROPOSED DEVELOPMENT

4.1 INTRODUCTION

4.1.1 This section describes the Proposed Development, the parking and loading strategy and the proposed access arrangements.

4.2 DEVELOPMENT DESCRIPTION

4.2.1 The Proposed Development will introduce additional office floor space to the Site, comprising an increase of 3,633 sqm (Gross Internal Area (GIA)) floor area over the Implemented Development. It is proposed that the additional office space will be car-free.

4.2.2 The implemented and proposed uses of the Site and the associated floor areas are summarised in **Table 4-1.**

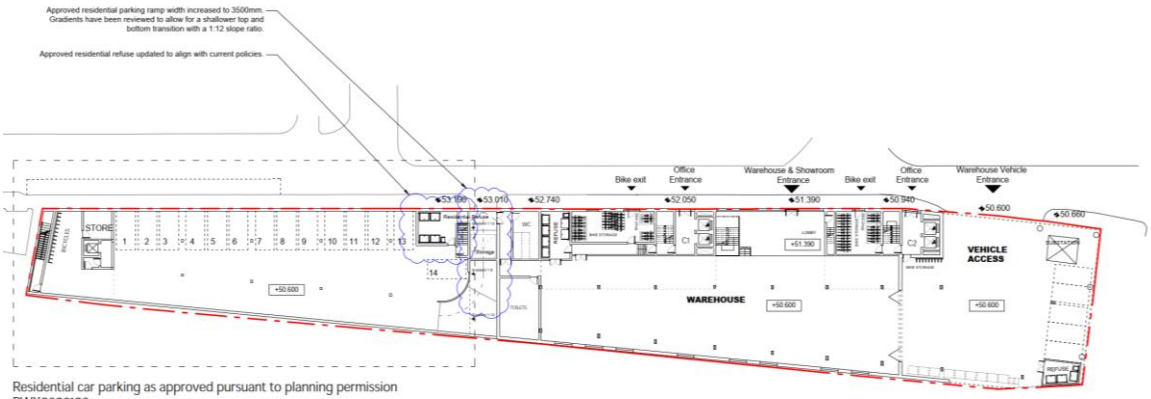
Table 4-1: Accommodation schedule for Implemented Development and Proposed Development

LAND USE		IMPLEMENTED	PROPOSED	PROPOSED TOTAL
Builders Merchant (GIA)		2,306sqm		2,306sqm
Residential	Flats	6		6
	Houses	8		8
	GIA	1,886sqm		1,886sqm
Office (GIA)		1,301sqm	3,633sqm	4,934sqm
Total (Units / GIA)		**14 units / 5,493sqm**	**3,633sqm**	**14 Units / 9,126sqm**

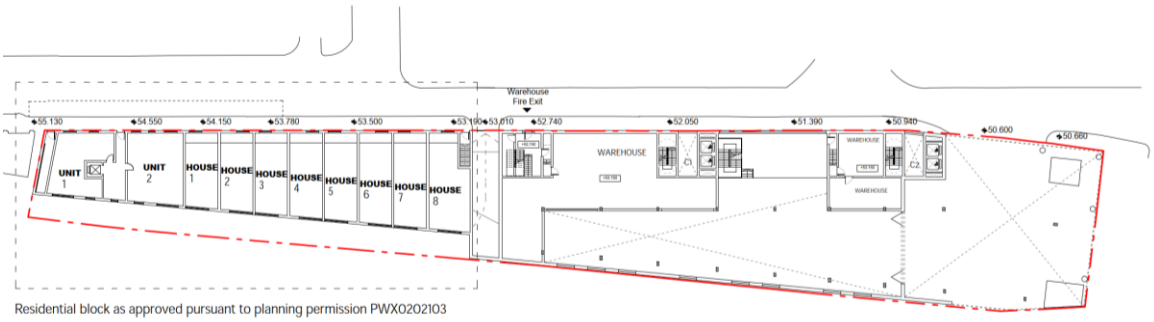
4.2.3 Changes to be introduced by the Proposed S73 Development include widening the consented residential parking ramp and updating residential refuse provision to align with current policies.

4.2.4 The proposed S73 Development layout at lower ground and upper ground level is shown in **Figure 4-1**, as well as in full in **APPENDIX A**.

Figure 4-1: Proposed Lower Ground and Upper Ground Floor Layouts



Lower Ground Floor Level



Upper Ground Floor Level

4.3 PROPOSED ACCESS ARRANGEMENTS

4.3.1 Vehicular access to the post development Site will be retained as per the Implemented Development arrangements. The western access from Blackburn Road will continue to provide access and egress to the residential element, while the eastern access will serve the builders merchant element. The western access and ramp leading from the western access to the lower ground floor residential car park are proposed to be widened slightly to facilitate access by vehicles.

4.3.2 New pedestrian entrances for the residential, office and warehouse elements will be provided from Blackburn Road, leading to associated stairwells, lifts and cycle parking facilities. A pedestrian-only entrance to the warehouse showroom will be provided, however, signage will advise vehicle drivers in the warehouse service yard of the potential presence of pedestrians who may use this area.

4.3.3 Vehicle tracking has been undertaken on the proposed plans to show that large cars and servicing vehicles can safely access, egress and manoeuvre within the proposed site layout for the post development Site. These drawings can be found in **APPENDIX B**.

4.4 PROPOSED PARKING ARRANGEMENTS

4.4.1 The proposed new office units will be car-free in accordance with London Plan and LBC parking policy. The 14 parking spaces for the residential element will be retained while the parking spaces for the builders merchant element will be reduced by one space, with five remaining. One of the five parking spaces will be provided with active electric vehicle charging infrastructure, equating to a 20% provision for the builders merchant element, in accordance with LBC guidance[5].

4.4.2 The retained provision will provide for the operational needs of the post development Site while avoiding trips by car being encouraged due to an oversupply of parking. The provision is also compliant with the relevant London Plan standards for the scheme (as set out in **Section 2** of this report).

4.5 CYCLE PARKING PROVISION

4.5.1 Cycle parking will be provided on-site for residents, and staff and visitors of the office and builders merchant uses. The cycle parking requirements, as set out in the London Plan, are shown in **Table 4-2** below along with the proposed provision.

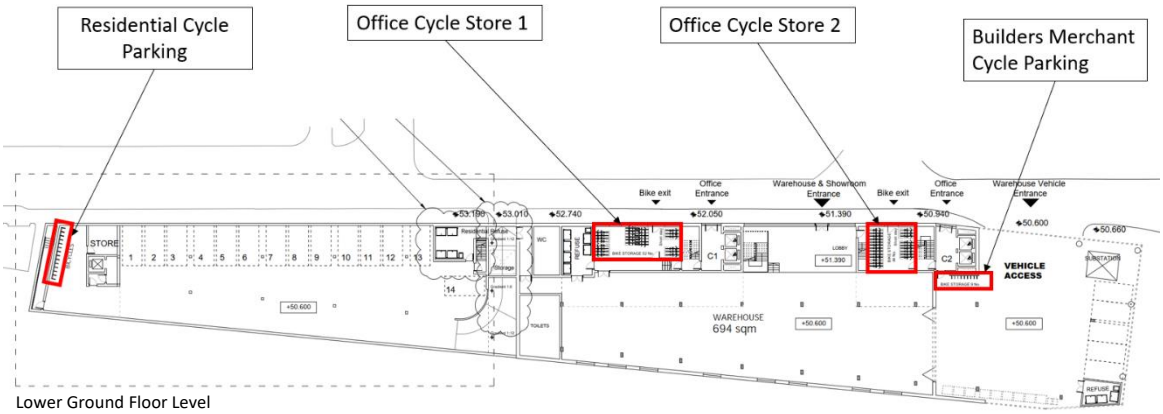
Table 4-2: Required and Proposed Cycle Parking Provision

LAND USE	LONG-STAY REQUIREMENT	SHORT-STAY REQUIREMENT	LONG-STAY PROPOSED	SHORT-STAY PROPOSED
C3 Residential (14 x 3-bed units)	28	2	28	2
B8 Builders Merchant (3,161sqm GEA)	7	4	7	4
B1 Office (6,144sqm GEA)	82	11	82	11
Total	**117**	**17**	**117**	**17**

4.5.2 Based on the London Plan standards for cycle parking, it is proposed that a total of 117 long-stay and 17 short-stay spaces are provided on-site. All cycle parking will be located on the lower ground floor level as shown in **Figure 4-2**.

[5] Camden Planning Guidance: Transport (January 2021)

Figure 4-2: Proposed Location of Cycle Parking



4.5.3 Short-stay cycle parking is proposed to be located within the secure cycle stores due to the lack of accessible areas within the curtilage of the Site. Visitors intending to use the short-stay cycle parking will be granted access to the cycle stores by staff management, and this arrangement will be promoted via signage and travel guidance to the Site on the office tenants' websites.

4.5.4 Cycle parking will be provided via a mix of two-tier racks, Sheffield Stands, and wall-mounted cycle stands. Larger cycles will be accommodated at the end of the run of long-stay cycle parking, with the provision amounting to 5% of the overall number of stands in accordance with LCDS. Direct access to the office cycle stores from Blackburn Road is proposed to avoid the need to negotiate multiple doors as per LCDS guidance. Access will be controlled by RFID cards/fobs or similar and will be monitored by CCTV.

4.5.5 The potential to provide cargo bike parking associated with the builders merchant element will also be explored by the Applicant. This would provide a sustainable freight option for short journeys and would reduce vehicle trips associated with the Site. It is noted that the use of cargo bikes is likely to be for incidental trips in the first instance and so this element has not been considered in the trip generation assessment undertaken for this TS.

4.5.6 Supporting facilities will be provided in compliance with the London Plan guidance. This will comprise changing rooms, maintenance facilities, lockers (two per three long-stay spaces) and showers (one per ten long-stay spaces).

4.6 DELIVERIES AND SERVICING

4.6.1 All deliveries and servicing for the residential and office elements will be taken from Blackburn Road using the double yellow lines present on both sides of the road in keeping with the baseline. The delivery and servicing arrangements for the builders merchant element will also remain in accordance with the baseline strategy at the Site. As such, the majority of servicing activity will be accommodated off-street within the service yard, accessed via the eastern access from Blackburn Road.

4.6.2 Delivery, refuse and servicing vehicles will be accommodated within the Site.

4.6.3 **APPENDIX B** provides swept path analysis to demonstrate that 13.6m and 10.7m articulated vehicles can access and egress the post development Site.

4.6.4 The servicing trip generation of the post development Site is discussed in the next chapter of this report.

4.7 WASTE MANAGEMENT

4.7.1 Facilities for the management of waste produced by the post developmet Sitehave been informed by LBC's Waste and Recycling in Planning Policy guidance[6].

4.7.2 Each land use at the Site will have separate waste stores at lower ground floor level for Site users to deposit their segregated waste.

4.7.3 Refuse collection will take place as per the baseline arrangements. As such, on collection days, refuse bins will be presented in the on-site service yard of the builder merchant element by the facilities management team, and the Refuse Collection Vehicle ('**RCV'**) will drive into the service yard to access the bins.

4.7.4 In accordance with the guidance, the route between the waste stores and the RCV will:

- be free from steps or kerbs;
- have a solid foundation;
- have a smooth solid surface; and
- be level and have a gradient of no more than 1:12, with a minimum width of 2 metres.

4.7.5 Once the bins have been emptied in to the RCV, the collection operatives will return them to the waste presentation area. The facilities management team will then return the bins to the respective waste stores.

4.7.6 Swept path analysis shown in **APPENDIX B** demonstrates that an 11.18m refuse vehicle can access and egress the post development Site layout.

4.7.7 Further details on the proposed waste management strategy are provided in the Delivery and Servicing Plan ('**DSP'**) submitted with the application.

[6] https://www.croydon.gov.uk/sites/default/files/2022-05/Bin%20guidance%20for%20architects%20and%20developers.pdf

5 TRIP GENERATION AND IMPACT ASSESSMENT

5.1 OVERVIEW

5.1.1 This section of the report details the methodology for assessing the multi-modal trip generating potential of the Proposed Development and the associated impact on the surrounding highway and transport networks during what is generally considered as the weekday AM peak hour (08:00 – 09:00) and PM peak hour (17:00 – 18:00) periods.

5.1.2 The change in trip generation has been considered against the Implemented Development baseline due to its associated trips being permitted on the surrounding transport networks.

5.2 IMPLEMENTED DEVELOPMENT TRIP GENERATION

5.2.1 The baseline builders merchant element will be used by employees and customers, while trips associated with the consented office space are likely to be made predominantly by employees. Residential developments typically generate trips by residents and infrequent visitors.

5.2.2 The current occupier of the builders merchant located at the Site, BDL , has a policy for employing staff who live locally to the Site, so journeys to work by staff following the redevelopment of the Site are likely to be short, with some made on foot or by bike. Trips by customers are likely to comprise a mix of 'new' trips and trips that already exist on the network, due to people commonly combining trips to retail developments with other journeys.

5.2.3 The paragraphs below explain the methodology employed for forecasting the trip generation of each of the Implemented Development land uses.

IMPLEMENTED DEVELOPMENT TRIP GENERATION – BUILDERS MERCHANT ELEMENT

5.2.4 The original trip generation assessment submitted in support of the application for the Implemented Development is not available on LBC's planning portal website.[7] As the Implemented Development is not fully built out, the baseline trip generation has been based on a survey from another builders merchant site owned by BDL. The trip rates calculated from the survey have been applied to the floor area of the Implemented Development's builder merchant element to scale the trips appropriately.

[7] Planning Application Search (camden.gov.uk)

5.2.5 The reference site is the Jewson builders merchant at 239 Horn Lane, Ealing, ('**the Jewson Site**') which was surveyed via an Automatic Traffic Count ('**ATC'**) survey between Thursday 9th December 2021 and 14th December 2021. The survey recorded all vehicular movements accessing and egressing via the site access onto Horn Lane, with the data being categorised by vehicle class (motorcycles, Cars/LGVs, OGV 1 and 2 and PSV). The six-day survey was then averaged to develop a typical profile of vehicle trips that the site generates. Jewson leases the Jewson Site from BDL and provides a similar operation to the builders merchant currently located at the Site and later to form part of the Implemented Development. The GIA of the Jewson Site was 2,600 sqm at the time of the survey, and so the Jewson Site is also similar in scale to the builders merchant element (2,306 sqm). While the PTAL of the Jewson Site is lower (PTAL 2-3), it is considered that trips to builders merchants are typically less likely to be affected by levels of public transport accessibility than other types of development.

5.2.6 The Trip Rate Information Computer System ('**TRICS'**) database was also consulted to identify surveys of similar sites, however, it was found that there were no surveys of builders merchant sites in Greater London. As such, the Jewson Site ATC survey is considered to be the most representative data available.

5.2.7 The trip rates calculated from the Jewson Site ATC survey are provided in **Table 5-1**. As previously mentioned, it has been assumed that trips made by active and sustainable modes are likely to be minimal due to the nature of builders merchant land uses, and therefore these have not been considered as part of the assessment.

Table 5-1 Implemented Development – Builders Merchant Trip Rates

TRIPS PER 100SQM	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY (00:00-00:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Cars / light goods vehicles (LGV)	0.385	0.385	0.769	0.038	0.077	0.115	2.769	2.769	5.538
Motorcycles	0.000	0.038	0.038	0.000	0.000	0.000	0.115	0.115	0.231
Heavy goods vehicles (HGV)	0.115	0.077	0.192	0.000	0.000	0.000	0.115	0.192	0.308
Total	**0.500**	**0.500**	**1.000**	**0.038**	**0.077**	**0.115**	**3.000**	**3.077**	**6.077**

**Figures may not sum due to rounding.*

5.2.8 The level of trips associated with the builders merchant element has been calculated by applying the consented quantum (2,306 sqm GIA) to the trip rates identified from the Jewson Site survey shown in **Table 5-1**.

5.2.9 The resultant trips per travel mode are shown in **Table 5-2**. Given the nature and scale of the Implemented Development, trips are assumed to primarily comprise vehicle trips by customers and staff. As it was not possible to isolate the servicing trips from the ATC survey undertaken at the Jewson Site, the HGV trips have been assumed to be the site's servicing demand.

Table 5-2: Implemented Builders Merchant Trip Rates and Trips by Mode

VEHICLE TYPE	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY (00:00-00:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Cars / LGVs	9	9	**18**	1	2	**3**	64	64	**128**
Motorcycles	0	1	**1**	0	0	**0**	3	3	**5**
HGVs	3	2	**4**	0	0	**0**	3	4	**7**
Total	**12**	**12**	**23**	**1**	**2**	**3**	**69**	**71**	**140**

**Figures may not sum due to rounding.*

5.2.10 As such, the baseline builders merchant element is likely to generate around 23 two-way vehicle trips in the AM peak hour (08:00-09:00), and three two-way vehicle trips in the PM peak hour (17:00-18:00). Across a typical weekday, the baseline builders merchant is likely to generate a total of 140 two-way vehicle trips, including seven two-way servicing trips. It is also noted that BDL (the current occupier of the builders merchant at the Site) has advised that deliveries typically avoid the peak hours, and so this level of servicing is deemed to be a worst-case estimate.

IMPLEMENTED DEVELOPMENT TRIP GENERATION - RESIDENTIAL ELEMENT

5.2.11 The TRICS database has been interrogated to identify surveys of similar residential developments using the following criteria:

- Land use category: 03 Residential – C Flats Privately Owned;
- Location type: Town Centre or Edge of Town Centre;
- Sites in Greater London Only;
- PTAL ratings of 4 and above; and
- Sites with less than 50 Units.

5.2.12 It is noted that the TRICS category "C: Flats Privately Owned" was used instead of "K: Mixed Private Houses and Flats" as this category had no surveys of sites with PTALs over 3 and was therefore considered not to be representative of the Site.

5.2.13 **Table 5-3** shows details of the comparator site surveys extracted from the TRICS database. A copy of the TRICS output report is attached in **Table 5-3**.

Table 5-3: Extracted TRICS Surveys – Residential Use

SITE REF	DEVELOPMENT NAME	SITE LOCATION	MAIN LOCATION TYPE	PTAL	DATE OF SURVEY
HM-03-C-01	Block Of Flats	Vanston Place, Hammersmith And Fulham	Town Centre	5	16/07/2014
IS-03-C-05	Block Of Flats	Lever Street, Islington	Edge of Town Centre	6a	29/06/2016
IS-03-C-06	Block Of Flats	Caledonian Road, Holloway	Edge of Town Centre	6a	27/06/2016
SK-03-C-02	Block Of Flats	Lamb Walk, Southwark	Edge of Town Centre	6b	23/04/2015
WF-03-C-02	Blocks Of Flats	Grosvenor Road, Waltham Forest	Edge of Town Centre	4	25/05/2021
WF-03-C-04	Blocks Of Flats	Grosvenor Road, Waltham Forest	Edge of Town Centre	4	25/05/2021
WF-03-C-05	Blocks Of Flats	New Wanstead, Waltham Forest	Edge of Town Centre	4	25/05/2021

5.2.14 **Table 5-4** below provides the weekday person trip rates calculated using the TRICS surveys, and the number of trips generated when applied to the 14 units associated with the Implemented Development.

Table 5-4: Implemented Development Residential Trip Rates and Total Person Trips

TIME PERIOD	TOTAL PERSON TRIP RATES (PER UNIT)			TOTAL PERSON TRIPS FORECAST (14 UNITS)		
	IN	OUT	TOTAL	IN	OUT	TOTAL
AM peak hour (08:00-09:00)	0.108	0.307	0.415	2	4	**6**
PM peak hour (17:00-18:00)	0.278	0.148	0.426	4	2	**6**
Daily (06:00-21:00)	2.314	2.474	4.788	32	35	**67**

5.2.15 **Table 5-5** shows the travel modal split upon which the Implemented Development's rresidential trips have been applied. The modal split has been based on the 2011 Census *Method of Travel to Work* data for residents living within the Middle Super Output Area ('**MSOA'**) in which the Site lies (Camden 010)[8]. It has been assumed that whilst each of the 14 residential units has a parking space, regular trips (for example commuting) are not necessarily made by car due to the proximity of the Site to three London Underground, Overground and rail stations as well as bus services. As such, the Census mode share data has been applied without change when calculating the level of trips associated with the Implemented Development.

[8] Nomis - Official Census and Labour Market Statistics (nomisweb.co.uk)

5.2.16 As the Site cannot be surveyed to understand exactly how resident trips are made due to the Implemented Development not being fully constructed, this is considered to be a suitable method for estimating the likely trip generation.

Table 5-5: Census Data Mode Shares – Travel to Work by Residents of Camden 010 MSOA

MODE	MODE SHARE
Pedestrians	6%
Cyclists	5%
Bus	7%
Underground	56%
Rail	16%
Car drivers	9%
Car passengers	0%
Motorcycle	1%
Total	**100%**

5.2.17 **Table 5-6** shows the forecasted trip number of trips per mode associated with the residential use, based on the 2011 Census *Method of Travel to Work* data.

Table 5-6: Implemented Development Residential Travel Demand by Mode

MODE	MODAL SPLIT	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TRIPS (06:00-21:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Pedestrians	6%	0	0	**0**	0	0	**0**	**2**	**2**	**4**
Cyclists	5%	0	0	**0**	0	0	**0**	**1**	**2**	**3**
Bus	7%	0	0	**0**	0	0	**0**	**2**	**3**	**5**
Underground	56%	1	2	**3**	2	1	**3**	**18**	**19**	**37**
Rail	16%	0	1	**1**	1	0	**1**	**5**	**6**	**11**
Car drivers	9%	0	0	**1**	0	0	**1**	**3**	**3**	**6**
Car passengers	0%	0	0	**0**	0	0	**0**	**0**	**0**	**0**
Motorcycle	1%	0	0	**0**	0	0	**0**	**0**	**0**	**1**
Total	**100%**	**2**	**4**	**6**	**4**	**2**	**6**	**32**	**35**	**67**

**Figures may not sum due to rounding.*

5.2.18 The servicing vehicle trip generation associated with the baseline residential element has also been forecast using the same TRICS site surveys as used above. As the surveys did not isolate servicing vehicle trips, all trips made by Ordinary Goods Vehicles (OGVs) and LGVs within the data have been assumed to relate to delivery and servicing activity. The trip rates and generated trips are shown in **Table 5-7**.

Table 5-7: Implemented Development Residential Servicing Demand

MODE	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TOTAL (06:00-21:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
LGV trip rates	0.017	0.011	0.028	0.011	0	0.011	0.153	0.141	0.294
OGV trip rates	0	0	0	0	0	0	0.012	0.012	0.024
Total Servicing trips (OGVs+LGVs)	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**2**	**4**

**Figures may not sum due to rounding.*

5.2.19 The baseline residential element is therefore likely to generate six two-way all-mode trips in each peak hour, with up to one two-way servicing trip taking place within these hours. Across a typical weekday, the residential units are likely to generate a total of 67 two-way all-mode trips, as well as four two-way trips by servicing vehicles.

IMPLEMENTED DEVELOPMENT TRIP GENERATION - OFFICE ELEMENT

5.2.20 The TRICS database was also interrogated to forecast the trip generation of the office element. The following criteria were used to identify comparable site surveys:

- Land use category: 02 Employment – A – Office;
- Location type: Town Centre or Edge of Town Centre;
- Sites in Greater London Only;
- Sites less than 15,000sqm; and
- PTAL ratings of 4 and above.

5.2.21 **Table 5-8** provides details of the comparator sites identified from the TRICS database. A copy of the TRICS output reports is attached at **APPENDIX C**.

Table 5-8: Extracted TRICS Surveys – Office Element

SITE REF	DEVELOPMENT NAME	SITE LOCATION	MAIN LOCATION TYPE	PTAL	DATE OF SURVEY
EN-02-A-01	Microsoft Offices	Genotin Road, Enfield	Town Centre	4	07/06/2022
HD-02-A-07	Data Centre	Millington Road, Hillingdon	Edge of Town Centre	4	19/05/2015
HM-02-A-01	Regus Offices	Queen Caroline Street, Hammersmith And Fulham	Town Centre	6b	13/11/2017
LB-02-A-01	Start Up Offices & Studios	Durham Street, Lambeth	Edge of Town Centre	6b	19/11/2018
LB-02-A-02	Music Company	Streatham High Road, Lambeth	Town Centre	6a	05/11/2019

5.2.22 The estimated trip generation of the office element has been calculated by applying the consented quantum (1,301 sqm GIA) to the person trip rates identified from the comparator site surveys shown in **Table 5-8**. This is demonstrated in **Table 5-9** below.

Table 5-9: Implemented Development Office Person Trip Rates and Trips

TIME PERIOD	TOTAL PERSON TRIP RATES (PER 100SQM)			TOTAL PERSON TRIPS (1,301SQM)		
	IN	OUT	TOTAL	IN	OUT	TOTAL
AM peak hour (08:00-09:00)	2.607	0.115	**2.722**	34	1	**35**
PM peak hour (17:00-18:00)	0.151	2.551	**2.702**	2	33	**35**
Daily (06:00-21:00)	9.792	3.436	**19.228**	127	123	**250**

5.2.23 **Table 5-10** shows the mode shares upon which the office trips have been calculated. The modal split has been based on the 2011 Census *Method of Travel to Work* data for residents living within the MSOA in which the Site lies (Camden 010).

5.2.24 As the Site is in an area with excellent accessibility by public transport (PTAL 6b), has no parking on-site for staff, and is within a CPZ, it has been assumed that no staff drive to work. As such, the mode share data has been adjusted to reflect this, with the car driver trips being redistributed to other modes in line with the existing proportions.

Table 5-10: Census Data Mode Shares – Travel to Work by employees working in Camden 010 MSOA

MODE	MODE SHARE	ADJUSTED MODE SHARE
Pedestrians	10%	14%
Cyclists	2%	3%
Bus	13%	19%
Underground	25%	36%
Rail	15%	22%
Car drivers	30%	0%
Car passengers	2%	2%
Motorcycle	1%	2%
Taxi	0%	1%
Total	**100%**	**100%**

**Figures may not sum due to rounding.*

5.2.25 **Table 5-11** shows the forecasted trip number of trips per mode associated with the Implemented Development's office element.

Table 5-11: Implemented Development Office Element Travel Demand by Mode

MODE	MODAL SPLIT	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TRIPS (06:00-21:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Pedestrians	14%	5	0	**5**	0	5	**5**	18	17	**35**
Cyclists	3%	1	0	**1**	0	1	**1**	4	4	**8**
Bus	19%	6	0	**7**	0	6	**7**	24	23	**48**
Underground	36%	12	1	**13**	1	12	**13**	46	44	**90**
Rail	22%	7	0	**8**	0	7	**8**	28	27	**55**
Car drivers	0%	0	0	**0**	0	0	**0**	0	0	**0**
Car passengers	2%	1	0	**1**	0	1	**1**	3	2	**5**
Motorcycle	2%	1	0	**1**	0	1	**1**	3	2	**5**
Taxi	1%	0	0	**0**	0	0	**0**	1	1	**3**
Total	**100%**	**34**	**1**	**35**	**2**	**33**	**35**	**126**	**122**	**248**

**Figures may not sum due to rounding.*

5.2.26 The office element's servicing vehicle trip generation has also been forecast using the same TRICS site surveys as used above. As with the residential trip generation assessment, the TRICS surveys did not isolate servicing vehicle trips, and so all trips made by OGVs and LGVs within the data have been assumed to relate to delivery and servicing activity. The trip rates and trips generated (applied to the office floor area of 1,301 sqm GIA) are shown in **Table 5-12**.

Table 5-12: Implemented Office Element Servicing Demand

MODE	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TOTAL (06:00-21:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
LGV trip rates	0.03	0.012	**0.042**	0	0.003	**0.003**	0.258	0.274	**0.532**
OGV trip rates	0.003	0.003	**0.006**	0	0	**0**	0.036	0.036	**0.072**
Total Servicing trips (OGVs+LGVs)	0	0	**1**	0	0	**0**	4	4	**8**

**Figures may not sum due to rounding.*

5.2.27 The baseline office element is therefore likely to generate around 35 two-way all-mode trips in the AM and PM peak hours respectively, with only one two-way servicing trip taking place within these hours. Across a typical weekday, the office units are likely to generate around 248 two-way all-mode trips, as well as eight two-way trips by servicing vehicles.

IMPLEMENTED DEVELOPMENT TRIP GENERATION - TOTAL

5.2.28 The trip generation forecast of each land use has been combined to understand the total baseline trip generation. This is shown in **Table 5-13**.

Table 5-13: Total Implemented Development Travel Demand by Mode

MODE	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TOTAL (06:00-21:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Pedestrians	5	0	**5**	0	5	**5**	20	19	**39**
Cyclists	1	0	**1**	0	1	**1**	5	5	**11**
Bus	7	1	**7**	1	6	**7**	27	26	**52**
Underground	13	3	**16**	3	13	**16**	64	63	**127**
Rail	8	1	**9**	1	8	**9**	33	33	**66**
Car drivers	9	9	**18**	1	2	**3**	67	67	**134**
Car passengers	1	0	**1**	0	1	**1**	3	3	**5**
Motorcycle	1	1	2	0	1	1	6	5	**11**
Taxi	0	0	**0**	0	0	**0**	1	1	**3**
Total	**44**	**16**	**59**	**7**	**37**	**43**	**225**	**223**	**448**
Servicing trips	3	2	**6**	0	0	**0**	9	11	**19**

**Figures may not sum due to rounding.*

5.2.29 The Implemented Development is therefore likely to generate around 59 and 43 two-way all-mode trips in the AM and PM peak periods respectively, plus a further six two-way servicing trips in the AM peak period only. Across a typical weekday, the Implemented Development is likely to generate around 448 two-way all-mode trips plus around 19 two-way servicing trips.

5.3 TRIP GENERATION – PROPOSED DEVELOPMENT

5.3.1 The Proposed Development will increase the office element at the Site, with the total office floor area increasing from 1,301 sqm (as consented as part of the Implemented Development) to 4,934 sqm (GIA). This equates to an increase of 3,633 sqm. The trip rates used in the assessment of baseline office trip generation have been used for estimating the change in trips associated with the Proposed Development.

5.3.2 As no additional parking is included in the proposal for the additional office space, the modal split used for the Implemented Development has been re-used in this assessment for the Proposed Development.

5.3.3 The travel demand by all modes associated with the additional office floor space (3,633 sqm GIA) is shown in **Table 5-14.**

Table 5-14: Additional Travel Demand Associated with the Proposed Development

MODE	MODAL SPLIT	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TRIPS (06:00-21:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Pedestrians	14%	+13	+1	**+14**	+1	+13	**+14**	+50	+48	**+98**
Cyclists	3%	+3	0	**+3**	0	+3	**+3**	+11	+10	**+21**
Bus	19%	+18	+1	**+19**	+1	+18	**+19**	+68	+65	**+133**
Underground	36%	+34	+2	**+36**	+2	+33	**+35**	+128	+123	**+251**
Rail	22%	+21	+1	**+22**	+1	+20	**+22**	+78	+75	**+154**
Car drivers	0%	0	0	**0**	0	0	**0**	0	0	**0**
Car passengers	2%	0	0	**0**	0	0	**0**	0	0	**0**
Motorcycle	2%	+2	0	**+2**	0	+2	**+2**	+7	+7	**+14**
Taxi	1%	+1	0	**+1**	0	+1	**+1**	+4	+3	**+7**
Total	**100%**	**+94**	**+4**	**+98**	**+5**	**+92**	**+97**	**+352**	**+339**	**+692**
Servicing	-	+1	+1	**+2**	0	0	**0**	+11	+11	**+22**

**Figures may not sum due to rounding.*

5.3.4 As shown in **Table 5-14**, the additional office floor space is forecast to generate an additional 98 and 97 two-way all-mode trips in the AM and PM peak hours respectively, and 692 two-way all-mode trips across a typical day. With the estimated modal split applied, the additional office floor space is estimated to generate up to 36 two-way trips via London Underground in the peak hours, with lower increases in trips by other modes.

5.3.5 The additional floor space will also generate an additional 22 two-way daily servicing trips, with two two-way trips in the AM peak hour.

5.4 TRIP GENERATION – FUTURE TOTAL

5.4.1 The trips associated with the baseline and the Proposed Development have been combined to demonstrate the potential future trip generation of the post development Site. This is shown in **Table 5-15** below:

Table 5-15: Future Total Travel Demand by Mode

MODE	AM PEAK HOUR (08:00-09:00)			PM PEAK HOUR (17:00-18:00)			DAILY TRIPS (06:00-21:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Pedestrians	18	1	**19**	1	18	**19**	69	67	**137**
Cyclists	4	0	**4**	0	4	**4**	16	16	**32**
Bus	25	1	**26**	2	24	**26**	94	91	**185**
Underground	47	4	**52**	5	46	**51**	192	187	**379**
Rail	29	2	**30**	2	28	**30**	112	108	**220**
Car drivers	9	9	**18**	1	2	**3**	67	67	**134**
Car passengers	3	0	**3**	0	3	**3**	10	9	**19**
Motorcycle	3	1	**4**	0	3	**3**	13	12	**25**
Taxi	1	0	**1**	0	1	**1**	5	5	**10**
Total	**138**	**20**	**157**	**12**	**128**	**141**	**577**	**562**	**1,139**
Servicing	5	3	**8**	0	0	**0**	19	22	**41**

**Figures may not sum due to rounding.*

5.4.2 The post development Site is therefore likely to generate approximately 157 two-way all-mode trips in the AM peak period and 141 two-way all-mode trips in the PM peak period.. Eight two-way servicing trips are also expected in the AM peak period with none in the PM peak period. When the Implemented Development and the Proposed Development are considered together, the majority of trips are still predicted to continue to be made by sustainable modes, with public transport representing around two-thirds of the trips in each peak hour.

5.4.3 A TP will be implemented for the Proposed Development to maximise the number of trips made by sustainable modes. The TP will cover the entirety of the commercial element of the post development Site, which is an improvement on what was secured as part of the Implemented Development.

5.5 ASSESSMENT OF LONDON-WIDE NETWORK IMPACT

PUBLIC TRANSPORT TRIPS

BUS TRIPS

5.5.1 As a result of the Proposed Development, there is expected to be an increase of 19 two-way bus trips during the AM and PM peak hours. Within proximity of the Site, there are five bus routes which provide 18 services in each of the AM and PM peak hours. It is therefore concluded that the local bus services can accommodate the uplift in trips associated with the Proposed Development without having a material impact.

LONDON UNDERGROUND / RAIL TRIPS

5.5.2 The Proposed Development is expected to generate an additional 36 and 35 trips during the AM and PM peak hours by London Underground and an additional 22 trips during each of these peak hours by rail. The Jubilee line and London Overground services from West Hampstead Station provide frequent and high-capacity connections to a wide range of destinations across London. Given the high capacities of train carriages, the scale of the forecast uplift in the peak periods is likely to have a negligible impact on the level of service of these modes.

ACTIVE TRAVEL TRIPS

PEDESTRIAN TRIPS

5.5.3 The Proposed Development is expected to generate 14 trips made on foot during the AM and PM peak hours. These can be expected due to the car-free nature of the office element of the Proposed Development, and the Site's accessibility to local amenities, supporting the attractiveness of trips being taken by foot. This is likely to be accommodated on the surrounding footpath networks with negligible impacts on pedestrian comfort levels.

CYCLE TRIPS

5.5.4 The Proposed Development is expected to generate an additional three cycle trips in both the AM and PM peak hours, which will be further encouraged with the provision of high-quality long-stay and short-stay cycle parking and the Site's proximity to existing local cycleways.

LONDON-WIDE NETWORK IMPACT CONCLUSION

5.5.5 Based on the level of additional trips associated with the Proposed Development and the availability of high-capacity, high-frequency public transport services in proximity to the Site, it is determined that the Proposed Development will have no material impacts on the surrounding transport networks.

6 SUMMARY AND CONCLUSIONS

6.1.1 This TS, prepared by VTP, is submitted on behalf of HAML and BDL to accompany an application for full planning permission for the development at 14 Blackburn Road, London, NW6 1RZ.

6.1.2 The Site is occupied by various warehouses (between one and two storeys). The Site is bound along its northern edge by Blackburn Road and railway land to the south (serving the Metropolitan and Jubilee lines between West Hampstead Underground Station and Finchley Road). The West Hampstead Underground Station, together with retail facing on to West End Lane, lies to the west of the Site. The Site is accessible via good-quality walking and cycling networks which provide direct routes to a variety of residential and employment areas. Public transport access to the Site is high, with stations in the vicinity providing access to London Underground, Overground and Thameslink services. Local bus stops also serve a variety of bus routes, and there are multiple opportunities to interchange between modes. The PTAL of the Site is also 6b, indicating that the Site has excellent accessibility to public transport services.

6.1.3 The Site has the benefit of an implemented scheme, consented in 2004 under planning permission with reference PWX0202103 dated 6 January 2004, which will provide 14 residential units within a western block, as well as a four storey eastern block, comprising two storeys of warehouse floorspace and two storeys of office floorspace.

6.1.4 To add three additional floors of commercial floorspace to the eastern block forming part of the Implemented Development, the Applicant seeks full planning permission for the following description of development:

6.1.5 "The erection of three floors of commercial floorspace (Use Class Eg), together with cycle parking, and associated works."

6.1.6 In tandem, the Applicant has submitted a section 73 application to alter conditions attached to the 2004 Permission to substitute certain drawings authorised by the 2004 Permission in order to provide for the additional three storeys to be constructed on the eastern block as part of the Proposed Development. The section 73 application also seeks consent for certain internal changes within the eastern block to suit the Applicant's operational needs, as well as improvements to external fenestration. The description of development for the section 73 application is as follows:

6.1.7 "Variation of Condition 2 (approved plans) pursuant to planning permission [PWX0202103] dated 06.01.2004 for Redevelopment of whole site by the erection of a 4 storey eastern block comprising two Class B8 and eight Class B1 units with associated service yard, together with a 4 storey plus basement western block comprising 8 dwellinghouses and 6 self-contained flats with associated underground car parking. Changes include: revisions to ground floor elevation and roof plan"

6.1.8 It is proposed that the additional office space will be car-free. The 14 parking spaces for the implemented residential element will be retained while the parking spaces for the implemented builders merchant element will be reduced by one space, with five remaining. The retained provision will provide for the operational needs of the Site while avoiding trips by car being encouraged due to an oversupply of parking.

6.1.9 Cycle parking will be provided as part of the Proposed Development. There will be a minimum of 117 long-stay and 17 short-stay spaces provided, which is compliant with local and regional standards.

6.1.10 The additional office space is forecast to generate an additional 98 two-way all-mode trips in the AM peak hour and 92 two-way all-mode trips in the PM peak hour. Across a typical weekday, the proposals are expected to generate an additional 692 two-way all-mode trips. With an estimated modal split applied, the proposals are expected to generate an additional 36 and 35 two-way trips via London Underground in the AM and PM peak hours, respectively, with lower increases in trips by other modes. There are expected to be no additional car-based trips as a result of the Proposed Development due to the car-free nature of the proposals.

6.1.11 Deliveries for the builders merchant element will be accommodated within the post development Site as per the baseline strategy. All servicing and delivery activity for the post development residential and office uses will continue to be undertaken on-street from Blackburn Road. All refuse collection will take place on-site via the service yard.

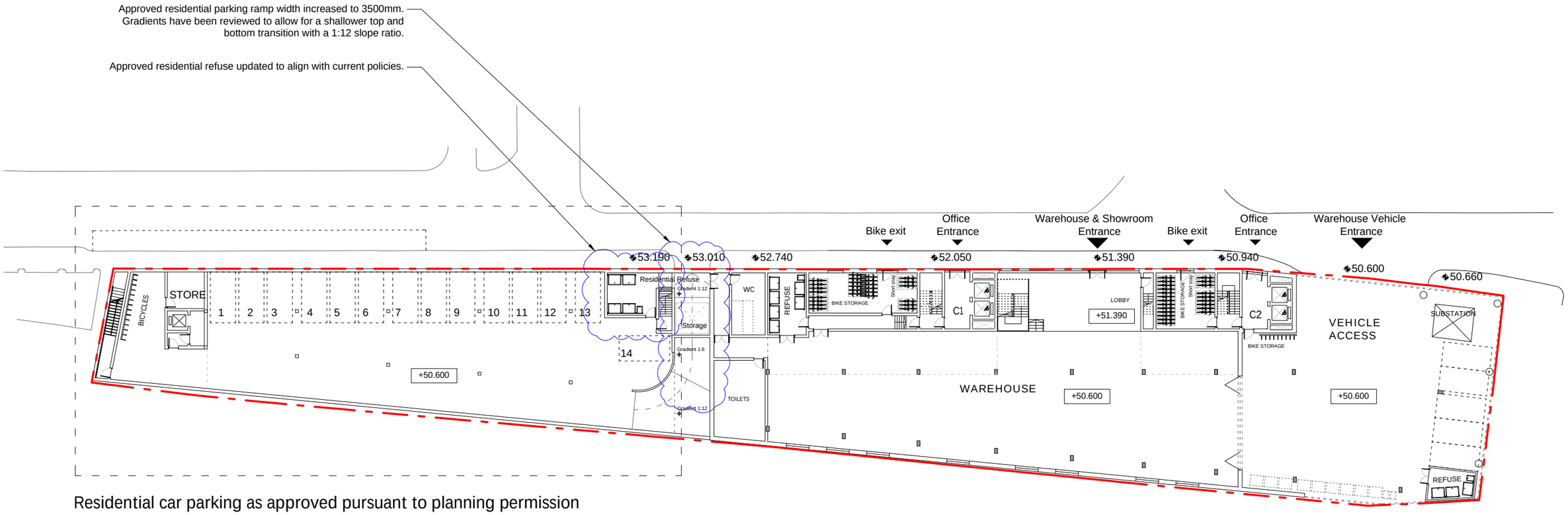
6.1.12 This TS has demonstrated that the Proposed Development would not result in an unacceptable impact on the local highway network or local amenity, and as such, there would be no reason to refuse the application on transport or highway grounds.

APPENDIX A

PROPOSED DEVELOPMENT PLANS

Approved residential parking ramp width increased to 3500mm. Gradients have been reviewed to allow for a shallower top and bottom transition with a 1:12 slope ratio.

Approved residential refuse updated to align with current policies.



Residential car parking as approved pursuant to planning permission PWX0202103

Key legend:
C1 - Core 1
C2 - Core 2

GENERAL NOTES:

THIS PLAN IS THE LOWER GROUND FLOOR PLAN WITHIN THE APPROVED BLK-P-102 B DRAWING UNDER PLANNING PERMISSION PWX0202103. THE RESIDENTIAL BLOCK HAS BEEN AMENDED IN THE AREAS SHOWN OUTLINED WITH A BLUE BUBBLE, WITH TEXT ADDED TO EXPLAIN THE CHANGES TO THE APPROVED SCHEME. THE REMAINDER OF THIS PLANS SHOWS THE S.73 AMENDMENTS RELATED TO THE COMMERCIAL PROPOSAL.

Rev	Notes	dd.mm.yy	By	Checked

Do not scale from this drawing. Check all dimensions on site:

FULL APPLICATION
Issued for information

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Project:
• 14 Blackburn Road
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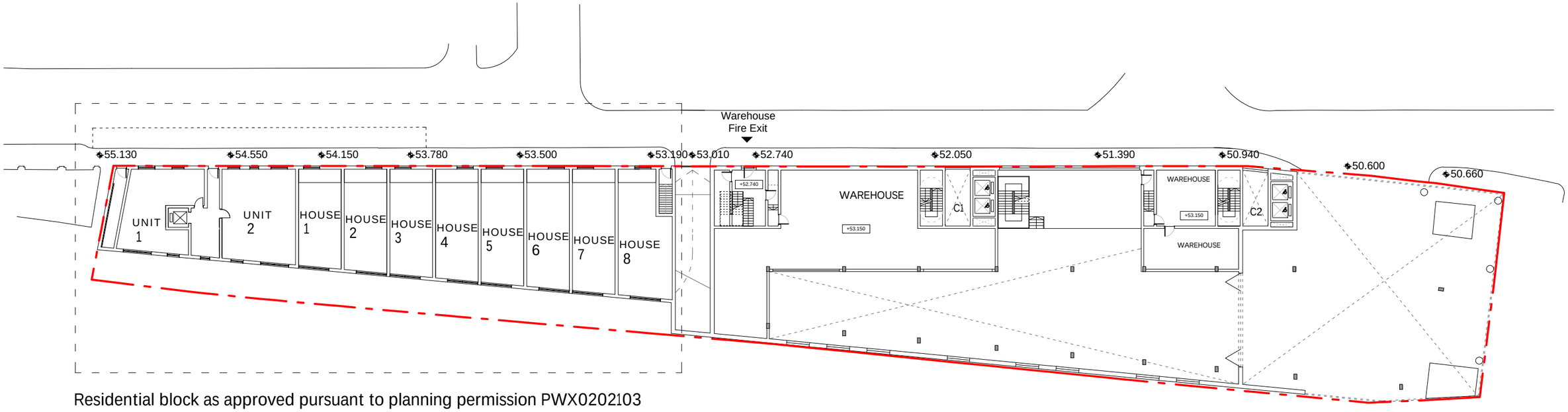
Title:
• PROPOSED
Lower Ground Floor Plan

Date: MAR 2023 | Drawn By: DM | Checked: SC

Scale: 1:200 @ A1, 1:400 @ A3

Project Ref:	Drawing No:	Revision:
• 21068	• P-099	-



Residential block as approved pursuant to planning permission PWX0202103

Key legend:

C1 - Core 1

C2 - Core 2

GENERAL NOTES:

THIS PLAN IS THE UPPER GROUND FLOOR PLAN WITHIN THE APPROVED BLK-P-102 B DRAWING UNDER PLANNING PERMISSION PWX0202103 INSOFAR AS THE RESIDENTIAL BLOCK IS CONCERNED. THE REMAINDER OF THIS PLANS SHOWS THE S.73 AMENDMENTS RELATED TO THE COMMERCIAL PROPOSAL.

Rev	Notes	dd.mm.yy	By	Checked

Do not scale from this drawing. Check all dimensions on site:

FULL APPLICATION
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Title:
• PROPOSED
Upper Ground Floor Plan

Date: MAR 2023	Drawn By: DM	Checked: SC

Scale: 1:200 @ A1, 1:400 @ A3

Project Ref:	Drawing No:	Revision:
• 21068	• P-100	-

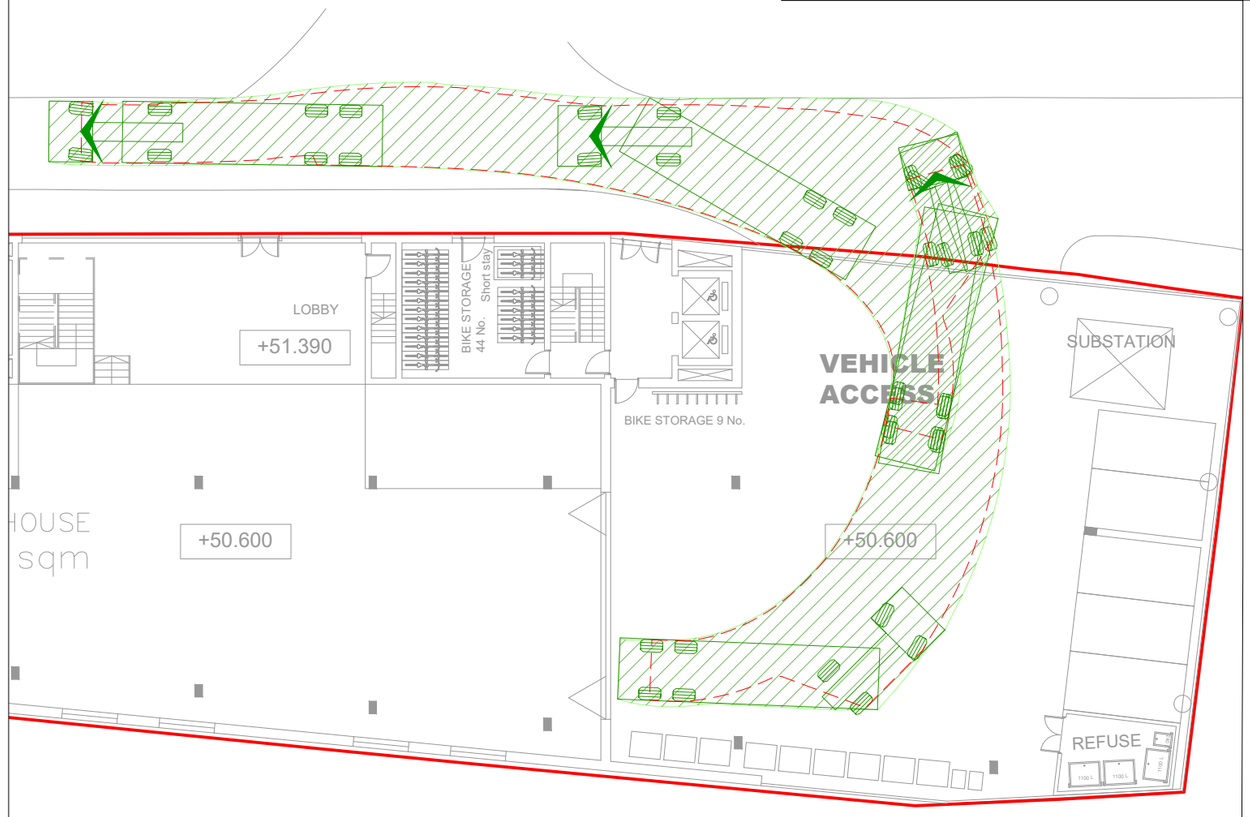
APPENDIX B

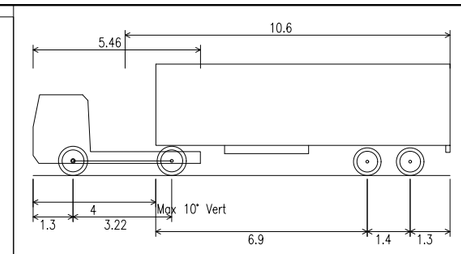
SWEPT PATH ANALYSIS

N

ENTERING

EXITING





13.6m Artic Vehicle	
Overall Length	13.600m
Overall Width	2.500m
Overall Body Height	0.475m
Min Body Ground Clearance	0.450m
Max Track Width	2.450m
Lock to Lock Time	5.00 sec
Kerb to Kerb Turning Radius	6.610m

1:250

0 5m 10m 15m 20m 25m

Rev	Date	Description	Drn	Chk	App
C	22/03/23	SITE LAYOUT UPDATED	TC	PM	MD
B	08/03/23	NEW SITE PLAN / NEW SPA	IZ	MD	MD
A	08/12/22	FIRST ISSUE	IZ	MD	MD

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

VELOCITY Transport Planning

Drawing Status: S2 - FOR INFORMATION

Client: BUILDER DEPOT

Architect: KSR ARCHITECTS LLP

Project Title: 14 BLACKBURN ROAD

Drawing Title: SWEPT PATH ANALYSIS OF A 13.6m ARTICULATED VEHICLE REVERSING INTO THE SITE

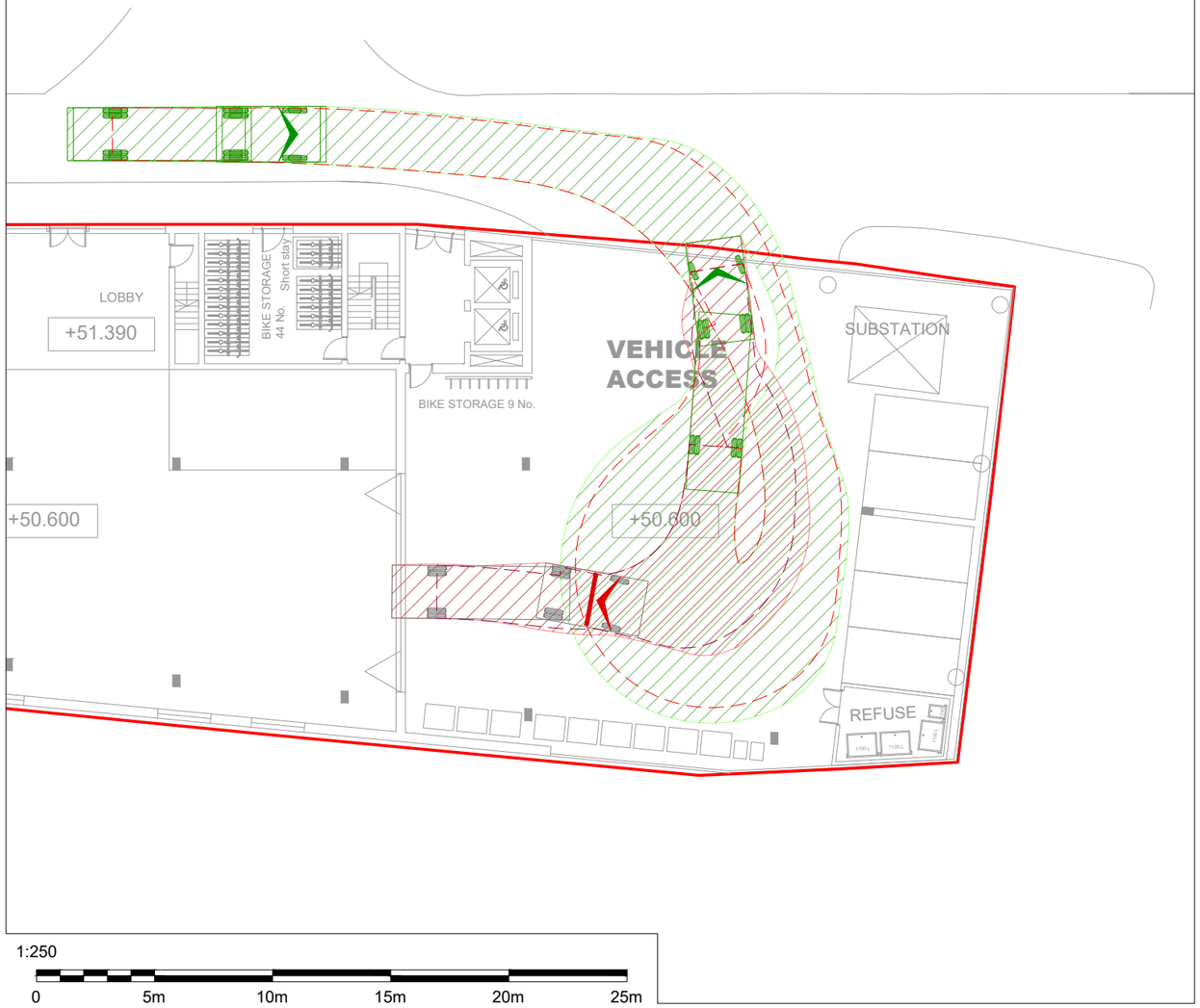
Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	08/12/22	IZ	MD	MD

Project Ref	Drawing Number	Rev
22-227	22-227-T-005	C

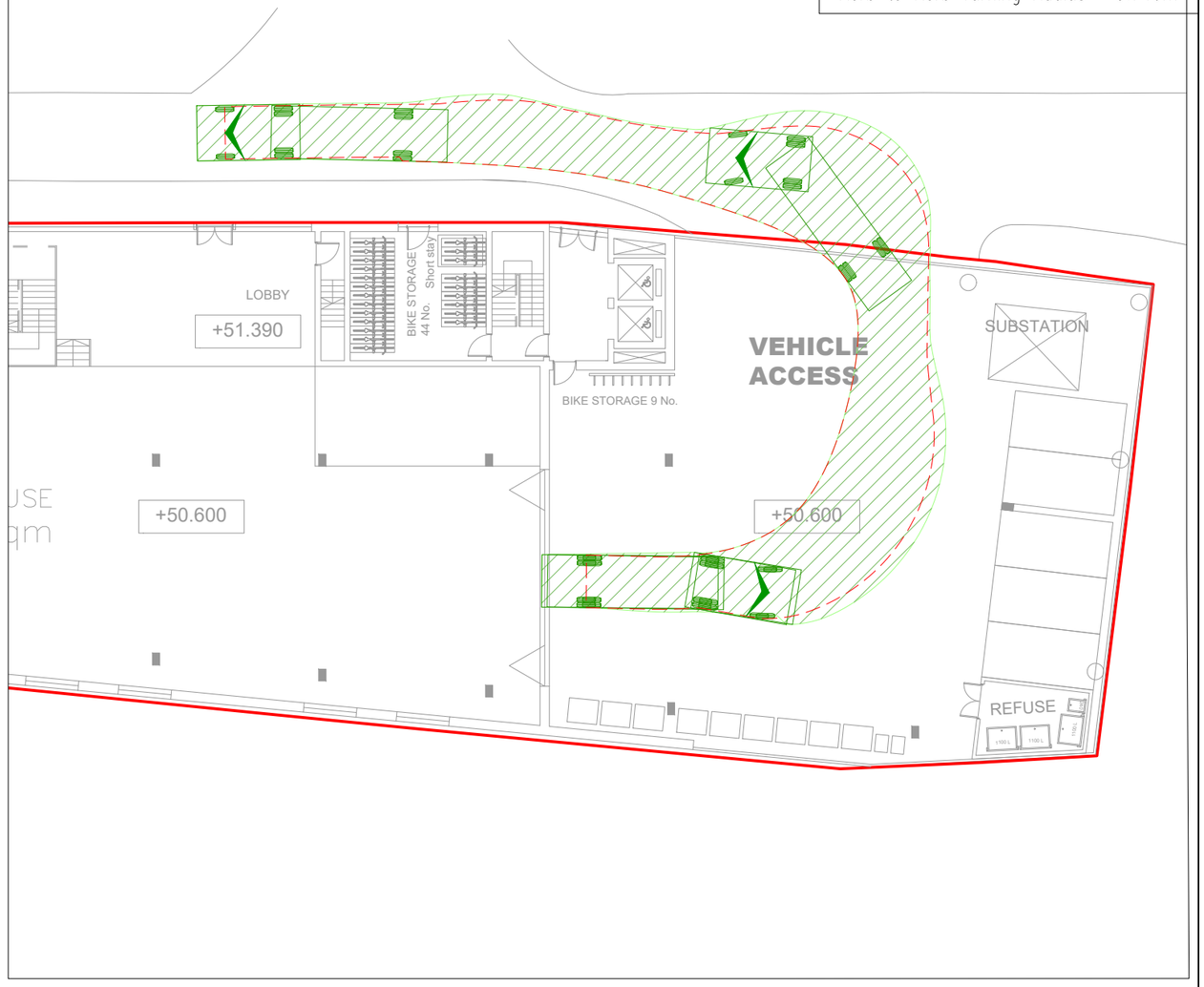
Drawing file: 22-227-T-005-006-C - Swept paths - Artic.dwg Date: Mar 22, 2023 - 1:50pm

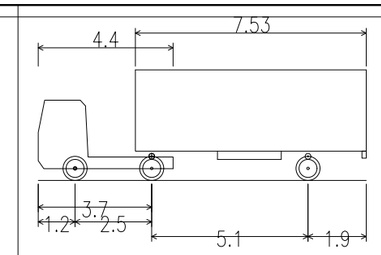
N

ENTERING



EXITING





Small Articulated Vehicle	
Overall Length	10.700m
Overall Width	2.360m
Overall Body Height	3.604m
Min Body Ground Clearance	0.382m
Track Width	2.240m
Lock to Lock Time	6.00 sec
Kerb to Kerb Turning Radius	5.740m

1:250

0 5m 10m 15m 20m 25m

Rev	Date	Description	Drn	Chk	App
C	22/03/23	SITE LAYOUT UPDATED	TC	PM	MD
B	08/03/23	NEW SITE PLAN / NEW SPA	IZ	MD	MD
A	08/12/22	FIRST ISSUE	IZ	MD	MD

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

VELOCITY Transport Planning

Drawing Status: S2 - FOR INFORMATION

Client: BUILDER DEPOT

Architect: KSR ARCHITECTS LLP

Project Title: 14 BLACKBURN ROAD

Drawing Title: SWEPT PATH ANALYSIS OF A 10.7m ARTICULATED VEHICLE ENTERING THE SITE IN A FORWARD GEAR

Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	08/12/22	IZ	MD	MD

Project Ref	Drawing Number	Rev
22-227	22-227-T-006	C

Drawing file: 22-227-T-005-006-C - Swept paths - Artic.dwg Date: Mar 22, 2023 - 1:50pm

Rev	Date	Description	Drn	Chk	App
C	22/03/23	SITE LAYOUT UPDATED	TC	PM	MD
B	08/03/23	UPDATED SITE LAYOUT / NEW SPA	IZ	MD	MD
A	11/01/23	FIRST ISSUE	IZ	MD	MD

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

VELOCITY
Transport Planning

Drawing Status: S2 - FOR INFORMATION

Project Title: 14 BLACKBURN ROAD

Client: BUILDER DEPOT

Drawing Title: SWEPT PATH ANALYSIS OF STANDARD DESIGN VEHICLE ACCESSING AND EXITING PARKING AREA

Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	11/01/23	IZ	MD	MD

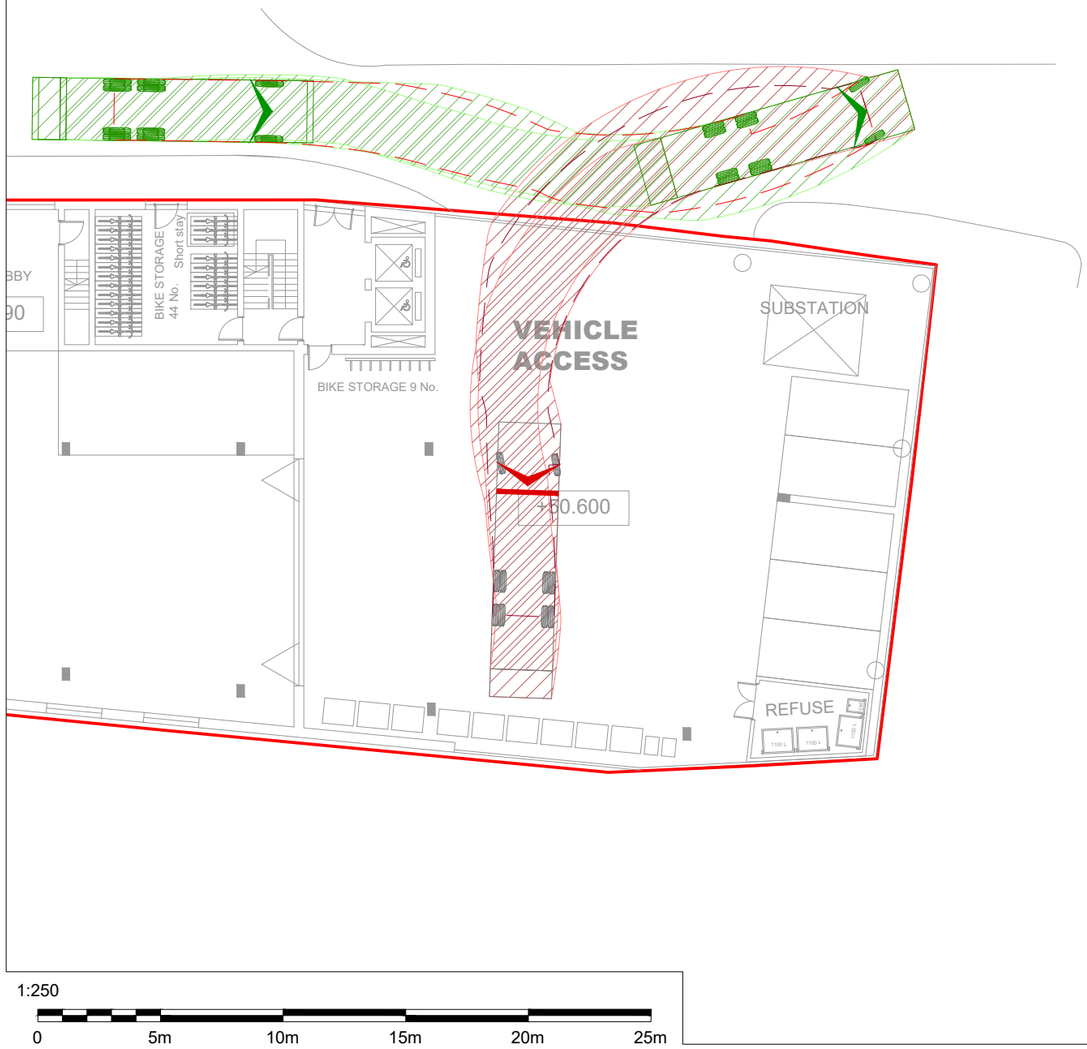
Architect: KSR ARCHITECTS LLP

Project Ref	Drawing Number	Rev
22-227	22-227-T-009	C

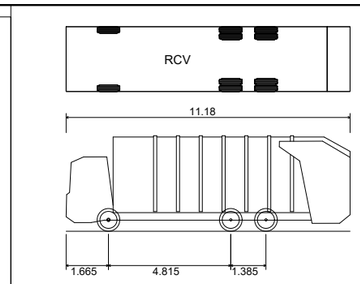
Drawing file: 22-227-T-009-C - Swept path - Car.dwg Date: Mar 22, 2023 - 2:46pm

N

ENTERING



EXITING



RCV

Overall Length	11.180m
Overall Width	2.550m
Overall Body Height	3.760m
Min Body Ground Clearance	0.312m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.150m

1:250

0 5m 10m 15m 20m 25m

Rev	Date	Description	Drn	Chk	App
B	22/03/23	SITE LAYOUT UPDATED	TC	PM	MD
A	08/03/23	FIRST ISSUE	IZ	MD	MD

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

VELOCITY Transport Planning

Drawing Status: S2 - FOR INFORMATION

Project Title: 14 BLACKBURN ROAD

Client: BUILDER DEPOT

Drawing Title: SWEPT PATH ANALYSIS OF A RCV ENTERING AND EXITING SITE

Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	08/03/23	IZ	MD	MD

Architect: KSR ARCHITECTS LLP

Project Ref	Drawing Number	Rev
22-227	22-227-T-011	B

Drawing file: 22-227-T-011-B - Swept path - RCV.dwg Date: Mar 22, 2023 - 1:49pm

APPENDIX C

TRICS OUTPUTS

Filtering Summary

Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-50 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-42 DWELLS	
Date Range	Minimum: 01/01/14	Maximum: 09/06/22
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	3
	Wednesday	2
	Thursday	1
Main Location Types selected	Town Centre	1
	Edge of Town Centre	6
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	6 - Selected
	Servicing vehicles Excluded	2 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	25,001 to 50,000	3
	50,001 to 100,000	1
	100,001 or More	3
Population <5 Mile ranges selected	500,001 or More	7
Car Ownership <5 Mile ranges selected	0.5 or Less	3
	0.6 to 1.0	4
PTAL Rating	4 Good	3
	5 Very Good	1
	6a Excellent	2
	6b (High) Excellent	1

Calculation Reference: AUDIT-361901-230324-0310

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	HM	HAMMERSMITH AND FULHAM	1 days
	IS	ISLINGTON	2 days
	SK	SOUTHWARK	1 days
	WF	WALTHAM FOREST	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 6 to 42 (units:)
Range Selected by User: 6 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 09/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	2 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Edge of Town Centre	6

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	4
Built-Up Zone	2
High Street	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:
Servicing vehicles Included 6 days - Selected

Secondary Filtering selection:

Use Class:

C3	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000	3 days
50,001 to 100,000	1 days
100,001 or More	3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

500,001 or More	7 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	3 days
0.6 to 1.0	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

4 Good	3 days
5 Very Good	1 days
6a Excellent	2 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

Site(1):	HM-03-C-01	Site area:	0.13 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	42
Location:	FULHAM	Housing density:	323
Postcode:	SW6 1AY	Total Bedrooms:	74
Main Location Type:	Town Centre	Survey Date:	16/07/14
Sub-Location Type:	High Street	Survey Day:	Wednesday
PTAL:	5 Very Good	Parking Spaces:	38
Site(2):	IS-03-C-05	Site area:	0.03 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	15
Location:	FINSBURY	Housing density:	500
Postcode:	EC1V 3QY	Total Bedrooms:	27
Main Location Type:	Edge of Town Centre	Survey Date:	29/06/16
Sub-Location Type:	Built-Up Zone	Survey Day:	Wednesday
PTAL:	6a Excellent	Parking Spaces:	
Site(3):	IS-03-C-06	Site area:	0.06 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	14
Location:	HOLLOWAY	Housing density:	467
Postcode:	N7 9RB	Total Bedrooms:	21
Main Location Type:	Edge of Town Centre	Survey Date:	27/06/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	6a Excellent	Parking Spaces:	
Site(4):	SK-03-C-02	Site area:	0.10 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	29
Location:	BERMONDSEY	Housing density:	290
Postcode:	SE1 3TT	Total Bedrooms:	55
Main Location Type:	Edge of Town Centre	Survey Date:	23/04/15
Sub-Location Type:	Built-Up Zone	Survey Day:	Thursday
PTAL:	6b (High) Excellent	Parking Spaces:	2
Site(5):	WF-03-C-02	Site area:	0.27 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	28
Location:	WANSTEAD	Housing density:	104
Postcode:	E11 2HQ	Total Bedrooms:	52
Main Location Type:	Edge of Town Centre	Survey Date:	25/05/21
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	4 Good	Parking Spaces:	31
Site(6):	WF-03-C-04	Site area:	0.44 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	42
Location:	WANSTEAD	Housing density:	95
Postcode:	E11 2EL	Total Bedrooms:	76
Main Location Type:	Edge of Town Centre	Survey Date:	25/05/21
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	4 Good	Parking Spaces:	42
Site(7):	WF-03-C-05	Site area:	0.11 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	6
Location:	WANSTEAD	Housing density:	55
Postcode:	E11 2SP	Total Bedrooms:	12
Main Location Type:	Edge of Town Centre	Survey Date:	25/05/21
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	4 Good	Parking Spaces:	19

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 4.09

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	7	25	0.017	7	25	0.074	7	25	0.091
08:00 - 09:00	7	25	0.023	7	25	0.017	7	25	0.040
09:00 - 10:00	7	25	0.040	7	25	0.040	7	25	0.080
10:00 - 11:00	7	25	0.051	7	25	0.057	7	25	0.108
11:00 - 12:00	7	25	0.045	7	25	0.040	7	25	0.085
12:00 - 13:00	7	25	0.068	7	25	0.074	7	25	0.142
13:00 - 14:00	7	25	0.057	7	25	0.074	7	25	0.131
14:00 - 15:00	7	25	0.017	7	25	0.045	7	25	0.062
15:00 - 16:00	7	25	0.040	7	25	0.034	7	25	0.074
16:00 - 17:00	7	25	0.040	7	25	0.045	7	25	0.085
17:00 - 18:00	7	25	0.057	7	25	0.017	7	25	0.074
18:00 - 19:00	7	25	0.051	7	25	0.040	7	25	0.091
19:00 - 20:00	6	22	0.030	6	22	0.007	6	22	0.037
20:00 - 21:00	6	22	0.030	6	22	0.022	6	22	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.566			0.586			1.152

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	6 - 42 (units:)
Survey date date range:	01/01/14 - 09/06/22
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	7	25	0.000	7	25	0.000	7	25	0.000
08:00 - 09:00	7	25	0.000	7	25	0.000	7	25	0.000
09:00 - 10:00	7	25	0.006	7	25	0.006	7	25	0.012
10:00 - 11:00	7	25	0.000	7	25	0.000	7	25	0.000
11:00 - 12:00	7	25	0.000	7	25	0.000	7	25	0.000
12:00 - 13:00	7	25	0.006	7	25	0.000	7	25	0.006
13:00 - 14:00	7	25	0.000	7	25	0.006	7	25	0.006
14:00 - 15:00	7	25	0.000	7	25	0.000	7	25	0.000
15:00 - 16:00	7	25	0.000	7	25	0.000	7	25	0.000
16:00 - 17:00	7	25	0.000	7	25	0.000	7	25	0.000
17:00 - 18:00	7	25	0.000	7	25	0.000	7	25	0.000
18:00 - 19:00	7	25	0.000	7	25	0.000	7	25	0.000
19:00 - 20:00	6	22	0.000	6	22	0.000	6	22	0.000
20:00 - 21:00	6	22	0.000	6	22	0.000	6	22	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 4.09

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.048	1	42	0.000	1	42	0.048
07:00 - 08:00	7	25	0.068	7	25	0.256	7	25	0.324
08:00 - 09:00	7	25	0.108	7	25	0.307	7	25	0.415
09:00 - 10:00	7	25	0.102	7	25	0.301	7	25	0.403
10:00 - 11:00	7	25	0.125	7	25	0.227	7	25	0.352
11:00 - 12:00	7	25	0.176	7	25	0.108	7	25	0.284
12:00 - 13:00	7	25	0.210	7	25	0.176	7	25	0.386
13:00 - 14:00	7	25	0.148	7	25	0.170	7	25	0.318
14:00 - 15:00	7	25	0.102	7	25	0.148	7	25	0.250
15:00 - 16:00	7	25	0.125	7	25	0.153	7	25	0.278
16:00 - 17:00	7	25	0.193	7	25	0.153	7	25	0.346
17:00 - 18:00	7	25	0.278	7	25	0.148	7	25	0.426
18:00 - 19:00	7	25	0.250	7	25	0.148	7	25	0.398
19:00 - 20:00	6	22	0.269	6	22	0.082	6	22	0.351
20:00 - 21:00	6	22	0.112	6	22	0.097	6	22	0.209
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.314			2.474			4.788

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	7	25	0.006	7	25	0.000	7	25	0.006
08:00 - 09:00	7	25	0.017	7	25	0.011	7	25	0.028
09:00 - 10:00	7	25	0.011	7	25	0.017	7	25	0.028
10:00 - 11:00	7	25	0.023	7	25	0.017	7	25	0.040
11:00 - 12:00	7	25	0.011	7	25	0.011	7	25	0.022
12:00 - 13:00	7	25	0.034	7	25	0.023	7	25	0.057
13:00 - 14:00	7	25	0.023	7	25	0.023	7	25	0.046
14:00 - 15:00	7	25	0.000	7	25	0.011	7	25	0.011
15:00 - 16:00	7	25	0.000	7	25	0.006	7	25	0.006
16:00 - 17:00	7	25	0.006	7	25	0.011	7	25	0.017
17:00 - 18:00	7	25	0.011	7	25	0.000	7	25	0.011
18:00 - 19:00	7	25	0.011	7	25	0.011	7	25	0.022
19:00 - 20:00	6	22	0.000	6	22	0.000	6	22	0.000
20:00 - 21:00	6	22	0.000	6	22	0.000	6	22	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.153			0.141			0.294

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Filtering Summary

Land Use	02/A	EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range	408-15000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	2036-11950 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 07/06/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	2
	Tuesday	3
Main Location Types selected	Town Centre	3
	Edge of Town Centre	2
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	5 - Selected
	Servicing vehicles Excluded	1 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	25,001 to 50,000	2
	50,001 to 100,000	2
	100,001 or More	1
Population <5 Mile ranges selected	250,001 to 500,000	1
	500,001 or More	4
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	3
	1.1 to 1.5	1
PTAL Rating	4 Good	2
	6a Excellent	1
	6b (High) Excellent	2
Filter by Site Operations Breakdown	All Surveys Included	

Calculation Reference: AUDIT-361901-230324-0334

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	EN	ENFIELD	1 days
	HD	HILLINGDON	1 days
	HM	HAMMERSMITH AND FULHAM	1 days
	LB	LAMBETH	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 2036 to 11950 (units: sqm)
Range Selected by User: 408 to 15000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 07/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	3
Edge of Town Centre	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Commercial Zone	1
Built-Up Zone	3
High Street	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:

25,001 to 50,000	2 days
50,001 to 100,000	2 days
100,001 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	4 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

4 Good	2 days
6a Excellent	1 days
6b (High) Excellent	2 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

Site(1):	EN-02-A-01	Gross floor area:	6552 sqm
Development Name:	MICROSOFT OFFICES		
Location:	ENFIELD		
Postcode:	EN1 2AG	No of Employees:	480
Main Location Type:	Town Centre	Survey Date:	07/06/22
Sub-Location Type:	Built-Up Zone	Survey Day:	Tuesday
PTAL:	4 Good	Parking Spaces:	104
Site(2):	HD-02-A-07	Gross floor area:	11950 sqm
Development Name:	DATA CENTRE		
Location:	HAYES		
Postcode:	UB3 4AZ	No of Employees:	1014
Main Location Type:	Edge of Town Centre	Survey Date:	19/05/15
Sub-Location Type:	Commercial Zone	Survey Day:	Tuesday
PTAL:	4 Good	Parking Spaces:	915
Site(3):	HM-02-A-01	Gross floor area:	2036 sqm
Development Name:	REGUS OFFICES		
Location:	HAMMERSMITH		
Postcode:	W6 9DX	No of Employees:	0
Main Location Type:	Town Centre	Survey Date:	13/11/17
Sub-Location Type:	Built-Up Zone	Survey Day:	Monday
PTAL:	6b (High) Excellent	Parking Spaces:	
Site(4):	LB-02-A-01	Gross floor area:	10200 sqm
Development Name:	START UP OFFICES & STUDIOS		
Location:	VAUXHALL		
Postcode:	SE11 5JH	No of Employees:	0
Main Location Type:	Edge of Town Centre	Survey Date:	19/11/18
Sub-Location Type:	Built-Up Zone	Survey Day:	Monday
PTAL:	6b (High) Excellent	Parking Spaces:	12
Site(5):	LB-02-A-02	Gross floor area:	3054 sqm
Development Name:	MUSIC COMPANY		
Location:	STREATHAM		
Postcode:	SW16 1ER	No of Employees:	296
Main Location Type:	Town Centre	Survey Date:	05/11/19
Sub-Location Type:	High Street	Survey Day:	Tuesday
PTAL:	6a Excellent	Parking Spaces:	

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.85

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	6758	0.435	5	6758	0.038	5	6758	0.473
08:00 - 09:00	5	6758	1.030	5	6758	0.047	5	6758	1.077
09:00 - 10:00	5	6758	0.293	5	6758	0.071	5	6758	0.364
10:00 - 11:00	5	6758	0.201	5	6758	0.092	5	6758	0.293
11:00 - 12:00	5	6758	0.080	5	6758	0.089	5	6758	0.169
12:00 - 13:00	5	6758	0.109	5	6758	0.157	5	6758	0.266
13:00 - 14:00	5	6758	0.112	5	6758	0.095	5	6758	0.207
14:00 - 15:00	5	6758	0.077	5	6758	0.112	5	6758	0.189
15:00 - 16:00	5	6758	0.059	5	6758	0.130	5	6758	0.189
16:00 - 17:00	5	6758	0.065	5	6758	0.414	5	6758	0.479
17:00 - 18:00	5	6758	0.050	5	6758	0.817	5	6758	0.867
18:00 - 19:00	5	6758	0.012	5	6758	0.408	5	6758	0.420
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.523			2.470			4.993

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	2036 - 11950 (units: sqm)
Survey date date range:	01/01/14 - 07/06/22
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	6758	0.006	5	6758	0.006	5	6758	0.012
08:00 - 09:00	5	6758	0.003	5	6758	0.003	5	6758	0.006
09:00 - 10:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
10:00 - 11:00	5	6758	0.009	5	6758	0.009	5	6758	0.018
11:00 - 12:00	5	6758	0.006	5	6758	0.006	5	6758	0.012
12:00 - 13:00	5	6758	0.003	5	6758	0.003	5	6758	0.006
13:00 - 14:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
14:00 - 15:00	5	6758	0.006	5	6758	0.006	5	6758	0.012
15:00 - 16:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
16:00 - 17:00	5	6758	0.003	5	6758	0.003	5	6758	0.006
17:00 - 18:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
18:00 - 19:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.036			0.036			0.072

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.85

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	6758	0.917	5	6758	0.056	5	6758	0.973
08:00 - 09:00	5	6758	2.607	5	6758	0.115	5	6758	2.722
09:00 - 10:00	5	6758	1.776	5	6758	0.204	5	6758	1.980
10:00 - 11:00	5	6758	0.601	5	6758	0.216	5	6758	0.817
11:00 - 12:00	5	6758	0.444	5	6758	0.361	5	6758	0.805
12:00 - 13:00	5	6758	0.799	5	6758	1.021	5	6758	1.820
13:00 - 14:00	5	6758	1.181	5	6758	0.982	5	6758	2.163
14:00 - 15:00	5	6758	0.728	5	6758	0.663	5	6758	1.391
15:00 - 16:00	5	6758	0.343	5	6758	0.592	5	6758	0.935
16:00 - 17:00	5	6758	0.204	5	6758	1.154	5	6758	1.358
17:00 - 18:00	5	6758	0.151	5	6758	2.551	5	6758	2.702
18:00 - 19:00	5	6758	0.041	5	6758	1.521	5	6758	1.562
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.792			9.436			19.228

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	6758	0.018	5	6758	0.009	5	6758	0.027
08:00 - 09:00	5	6758	0.030	5	6758	0.012	5	6758	0.042
09:00 - 10:00	5	6758	0.021	5	6758	0.027	5	6758	0.048
10:00 - 11:00	5	6758	0.033	5	6758	0.038	5	6758	0.071
11:00 - 12:00	5	6758	0.030	5	6758	0.027	5	6758	0.057
12:00 - 13:00	5	6758	0.033	5	6758	0.027	5	6758	0.060
13:00 - 14:00	5	6758	0.015	5	6758	0.027	5	6758	0.042
14:00 - 15:00	5	6758	0.033	5	6758	0.036	5	6758	0.069
15:00 - 16:00	5	6758	0.018	5	6758	0.024	5	6758	0.042
16:00 - 17:00	5	6758	0.027	5	6758	0.044	5	6758	0.071
17:00 - 18:00	5	6758	0.000	5	6758	0.003	5	6758	0.003
18:00 - 19:00	5	6758	0.000	5	6758	0.000	5	6758	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.258			0.274			0.532

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*