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# **Transport Assessment**

# 41-49 & 49-59 Battersea Park Road, Wandsworth

# Watkin Jones Group

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Making Sustainability Happen

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### **Revision Record**

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# 1.0 Introduction

- 1.1 SLR has been appointed by Watkin Jones Group to provide highways and transport advice in relation to a planning application for mixed use residential development located at 41 – 49 Battersea Park Road and 49 - 59 (BMW) Battersea Park Road Wandsworth. The development is located on the existing Bookers Wholesale Warehouse and former BMW Nine Elms Garage. The site is located within the London Borough of Wandsworth (LBW).
- 1.2 The proposals seek to develop the site for a mix of 762 student accommodation units and 55 affordable housing units spread across three blocks, with associated commercial space at ground floor level. The site is proposed to be car-free in nature, with the exception of Blue Badge parking spaces and one car club space. Cycling parking will be provided in accordance with adopted London Plan standards (2021).
- 1.3 The site has an extant permission for redevelopment under Use Classes A1 A5 and B1 which was granted by Wandsworth Borough Council (WBC) in March 2019 (Planning Reference: 2015/6813). The permitted development comprises:

"Demolition of all existing buildings and construction of new buildings of between 5 storeys and 18 storeys, containing 307 residential units, business (Class B1) floorspace and flexible retail/restaurant and cafe/business floorspace (Class A1-A5 and B1), CHP basement, vehicle and cycle parking, plant and associated works, landscaping and a new access onto Sleaford street".

- 1.4 The remainder of this Transport Assessment (TA) is structured as follows:
  - **Chapter 2**: provides a description of the surrounding transport network as well as how the proposed development adheres to the Healthy Streets Approach;
  - **Chapter 3**: gives a review of relevant planning policy in relation to the proposed development;
  - **Chapter 4**: provides an overview of the proposed development including access by active travel modes;
  - **Chapter 5**: describes the Active Travel Zone setting out how people of all abilities will make key journeys;
  - **Chapter 6**: presents an assessment of the likely trip generation of the site through a multi-modal assessment and determines the level of impact on London wide network;
  - **Chapter 7**: considers the programme and potential impacts associated with the construction of the proposed development; and
  - Chapter 8: provides a summary and conclusion to the report.

# 2.0 Site and Surroundings

### Introduction

2.1 This section of the report will examine the sites existing and future accessibility, specifically focusing on accessibility by sustainable means. The site will be critically examined as to how people of all abilities will be accessing the site and its nearby facilities.

### **Site Location**

- 2.2 The proposed development is located on Battersea Park Road, 1.2km to the east of Battersea high street and 4.7km south of Central London. The site is bound to the north by Battersea Park Road, east by New Covent Garden Market Access Road, south by a railway line operated by South Western Railway, and west by ongoing development related to the Battersea Power Station Phase 4a planning permission.
- 2.3 The site location is shown within **Figure 2.1**.



#### Figure 2.1: Site Location Plan

## Walking and Cycling

- 2.4 Pedestrian access to the site is good with wide, lit, well-surfaced pavements along Battersea Park Road. Dropped kerbs and tactile paving are also present at various crossing points along the road. Further lit footways are available along both the eastern and western boundaries of the site.
- 2.5 A signalised pedestrian crossing is present directly at the sites northern frontage providing access to the northern footway along Battersea Park Road, and in turn, the new Battersea Power Station Underground Station.



- 2.6 There is a shared cycle/footway located along New Covent Garden Market Access Road which runs along the eastern border of the site. This ties into an on-road cycle lane at Battersea Park Road to the north. This cycle lane at times merges to become a shared bus, taxi and cycle lane, and continues west for 1km before joining Cycle Superhighway 8 (CS8).
- 2.7 The CS8 cycle highway provides a cycle route between Wandsworth and Lambeth Bridge. From here central London can be accessed.

#### Proposed changes to Battersea Park Road – Nine Elms Corridor

- 2.8 TfL are transforming a 2.5km stretch of Nine Elms lane and Battersea Park Road which will support the regeneration of the area. The proposals comprise a series of updates to Battersea Park Road to make it more suitable for those wishing to cycle, walk or use public transport in the area.
- 2.9 The proposals would include, but are not limited to, the introduction of protected cycleways with physical segregation, new bus stops, updated junctions to improve cycle safety and a new 20mph speed limit.
- 2.10 Phase one of this work was completed in August 2021. This is between Duchess Bridge and Sleaford Street (Sleaford Street borders the western boundary of the site). Improvements along this section of road included:
  - New paving along both sides of Battersea Park Road;
  - Segregated cycle lanes in both directions along Battersea Park Road;
  - Improved bus stops in both directions along Battersea Park Road;
  - A new cycle link between Thessaly Road and Battersea Park Road and a cycle crossing across Battersea Park Road;
  - A new controlled pedestrian crossing providing direct access to the new Battersea Power Station Underground Station; and
  - A new junction providing access to Prospect Way access road next to Battersea Power Station Underground Station.
- 2.11 The western section of the corridor, between Macduff Road and Duchess Rail Bridge (400m to the west of the site) has been identified for further improvements. A public consultation on the proposals for this section of the corridor was completed in early 2023, with construction due to start in 2025.
- 2.12 Designs are currently being developed for the eastern section of the scheme; this includes Nine Elms Lane and a short section of Battersea Park Road (east of Sleaford Street). This will include the installation of a new segregated cycle lane. Works along this section are planned to begin in March 2024.
- 2.13 Given the Nine Elms Corridor transverses along the northern boundary of the site at Battersea Park Road, residents and users of the proposed development will have direct benefit from the aforementioned improvements.

## Public Transport Accessibility Level (PTAL)

#### **Current PTAL**

- 2.14 The Public Transport Accessibility Level (PTAL) is a theoretical measure of the accessibility of a given point to the surrounding public transport network, taking into account walk access time and service availability. The method used is essentially a way of measuring the density of the public transport network at a particular point.
- 2.15 The PTAL measure, reflects:
  - The walking distance from the point of interest to the public transport access points;
  - The reliability of the service modes available;
  - The number of services available within the catchment; and
  - The level of service at the public transport access points i.e. average waiting time.
- 2.16 The WebCAT online planning tool indicates the site currently has a PTAL of '3', with a section of the site ranked at PTAL '4' which corresponds to 'moderate' accessibility. The WebCAT output illustrating the PTAL is provided in **Appendix A** and the PTAL map for this site is shown within **Figure 2.2**.



#### Figure 2.2: Current PTAL Extract

2.17 As illustrated within **Figure 2.2**, the majority of the site is classified as PTAL '3' with a small section to the southeast classified as PTAL '4'.

#### Manual PTAL

2.18 It is noted that the current PTAL score for the site does not take into account the recent opening of Battersea Power Station Underground Station, as shown in **Figure 2.3**. This new station is within a 200m walking distance of the site and provides access to the northern line, offering 6 services per hour across the day. This will therefore improve public transport accessibility of the site as a result.

Figure 2.3: Battersea Power Station Underground Station on the Northern Line



- 2.19 On this basis, a manual PTAL calculation has been completed. This is contained in **Appendix B**.
- 2.20 The manual PTAL calculation increases the PTAL score for the site from a '3' to a '5' indicating a very good level of public transport accessibility.

### **Public Transport**

#### **Bus Services**

- 2.21 The closest bus stops to the site are Battersea Power (Stop A) and Battersea Power (Stop F). Both these stops are located under 100m walking distance from the site access onto Battersea Park Road and are serviced by the 156, 344 and 436 TfL bus services.
- 2.22 Both of these bus stops have shelters, seating and timetables. Bus Stop F can be accessed on foot directly along the southern footway of Battersea Park Road. Bus Stop A requires pedestrians to cross via the new signalised crossing point at the sites northern frontage.
- 2.23 A summary of the bus services and their frequencies is outlined within Table 2.1.

Bus – –			Approximat		e Frequency (Per Hour)		
Service	Bus Stop	Route	Weekday	Saturday	Sunday		
156	Battersea Power (Stop A) Eastbound	Wimbledon Bus Station – Vauxhall Bus Station	8	7	5		
156	Battersea Power (Stop F) Westbound	Vauxhall Bus Station – Wimbledon Bus Station	8	7	5		
344	Battersea Power (Stop A) Eastbound	Clapham Junction Station – Liverpool Street Station	8	8	8		
344	Battersea Power (Stop F) Westbound	Liverpool Street Station – Clapham Junction Station	8	8	8		
436	Battersea Power (Stop A) Eastbound	Molesworth Street – Battersea Park Station	6	6	5		
436	Battersea Power (Stop F) Westbound	Battersea Park Station – Molesworth Street	6	6	5		

					-	-	
Table 2.1:	Bus Services	Stopping at	t Battersea	Power (	Stop /	A or	F)
							- /

2.24 As shown above, bus stops A and F provide frequent services throughout each day of the week to a range of destinations including Wimbledon and Liverpool Street, making this a frequent and viable means of transport for residents and users of the proposed development.

#### **Rail and Underground Services**

- 2.25 The closest railway station to the site is Battersea Power Station Underground Station which is located approximately 200m west of the site along Battersea Park Road. This station can be accessed on foot using the pavements and crossing facilities along Battersea Park Road.
- 2.26 Battersea Power Station Underground Station opened on 20 September 2021, and therefore has new and modern infrastructure, as well as step-free access. The station is serviced by the Northern Line which operates between this station and High Barnet.
- 2.27 Battersea Park Rail Station is located 650m west of the site and can be accessed by foot along Battersea Park Road. Both the London Overground and Southern Rail operate at this station.
- 2.28 An overview of the services and frequency of services available at both Battersea Power Station Underground Station and Battersea Park Rail Station is provided within **Table 2.2**.

Operator	Pouto	Approximate Frequency Per Hour (One-Way)				
Operator	Roule	Weekday	Saturday	Sunday		
	Battersea Power	Station Undergrou	und Station			
Northern Line	Battersea Power Station - High Barnet	10 per hour	8 per hour	8 per hour		
Northern Line	Battersea Power Station - Edgware	10 per hour	No Service	No Service		
	Battersea Park Rail Station					
Overground	Battersea Park Station - Dalston Junction	5 per day	5 per day	No Service		
Southern Railway	Selhurst – London Victoria	4 per hour	2 per hour	2per hour		
Southern Railway	Epsom Downs – London Victoria	2 per hour	2 per hour	2 per hour		
Southern Railway	West Croydon – London Victoria	4 per hour	4 per hour	2 per hour		
Southern Railway	London Victoria – London Bridge	2 per day	2 per hour	No Service		

#### Table 2.2: Underground and Railway Services

2.29 As shown within **Table 2.2** Battersea Power Station Underground Station is serviced frequently by the Northern Line which provides services across central London, extending north to High Barnet and Edgware. Battersea Park Rail Station offers frequent services to locations including London Victoria, Epsom Downs and West Croydon.

#### Car Clubs

- 2.30 Zipcar is the largest car club network currently operating in London. It provides easy and convenient access to cars and vans on a short-term rental basis, therefore allowing employees to use a car when they require one, without having to use a private vehicle. Car clubs have grown significantly in popularity over recent years and have the potential to reduce car ownership and use across London.
- 2.31 There are four Zipcar vehicles located within 1km of the site. The closest is 400m, or a 5minute walk south of the site on Ascalon Street.
- 2.32 Additionally, Enterprise offers three car club vehicles within 1km of the site. Two of these are located in the same place, 500m to the west of the site access at the Battersea Power Station. One further vehicle is available from New Mill Road, 400m, or a 5-minute walk east of the site.
- 2.33 As outlined within this report at paragraph 4.21 it is proposed that the site will provide one additional car club space.

#### **Electric Vehicle Charging Points**

2.34 There is one Electric Vehicle Charging Point (EVCP) located within walking distance of the site. The EVCP is located at Battersea Power Station off Kirtling Street and is within 150m, or a 3-minute walk, from the site. The EVCP is available 24-hours a day and is operated by Pod Point.

#### Cycle Hire

- 2.35 There are 8 Santander Cycle docking stations within 1km of the site. Each of these docking stations has between 22 and 30 bicycle docks. The nearest docking station is located just 120m west of the site on Battersea Park Road, with 27 bicycles available.
- 2.36 Multiple docking stations are located west of the site, with two docking stations located around the south-eastern access to Battersea Park and a further docking station located further west on side streets connecting to Battersea Park Road. Two docking stations are also located near Chelsea Bridge.
- 2.37 Travelling east out of the site, two further docking stations 'Riverlight South, Nine Elms' and 'Riverlight North, Nine Elms' are available. 'Riverlight South' has 26 bicycles and is located just 400m from the site.
- 2.38 The ample number of docking stations in the area would allow residents to hire a bicycle when they may not wish to use public transport. It should also be noted that there are numerous Santander docking stations located throughout Inner London and as such this promotes the use of bicycle hire as part of a multi-modal journeys to and from the site.

#### **Highway Network**

#### Battersea Park Road (A3205)

- 2.39 Battersea Park Road is a two-way single carriageway road with an east-west alignment. The road operates at 30mph across the frontage of the site. However, some sections further west operate at 20mph, and it is currently being proposed by TfL that a 20mph speed limit is enforced along Battersea Park Road's entire length. These proposals are part of the wider proposals to update Battersea Park Road (introduced above). The consultation on these proposals is ongoing and will end on the 27th March 2022.
- 2.40 Sections of Battersea Park Road have cycle lanes and bus lanes running in both directions. Double red lines preventing stopping and loading are also present.
- 2.41 To the east, Battersea Park Road connects to Nine Elms Lane which provides access to Vauxhall. To the west, the A3205 provides access to both the A214 and A217 at Wandsworth Roundabout.

#### A217

2.42 The A217 is a dual carriageway road with street lighting and a 30mph speed limit. The A217 can be used to access the A3.



A3

- 2.43 The A3 travels due southwest from Wandsworth, providing the most direct route out of the city. The nature of the A3 changes as it progresses out of the city. Initially the A3 is a two-way single carriageway road with a 20 or 30mph speed limit. The road has street lighting and single red line parking restrictions. There are cycle lanes and traffic lights to note along this section of road.
- 2.44 The A3 then becomes a dual carriageway road as it approaches Putney Heath. Here it operates at 40mph. The A3 continues into Surrey, providing access to the M25 at the Wisley Interchange Roundabout.

### **On Site and Nearby Public Realm**

#### Healthy Streets Approach

- 2.45 The Healthy Streets Approach is the system of policies and strategies to help Londoners reduce their single occupancy vehicle movements and encourage walking, cycling and the use of public transport. The overall aim of the Healthy Streets Approach is to help create vibrant city where people can live active and healthy lives, by putting this ethos at the heart of decision making.
- 2.46 The Healthy Streets Approach is based on ten indicators which describe the experience of people using streets. The indicators are essential for healthy street environment. The ten indicators are:
  - Pedestrian from all walks of life;
  - People choose to walk, cycle and use public transport;
  - Easy to cross;
  - Shade and shelter;
  - Places to stop and rest;
  - Not too noisy;
  - People feel safe;
  - Things to see and do;
  - People feel relaxed; and
  - Clean air.
- 2.47 A higher emphasis is applied to the two main indicators 'Pedestrians from all walks of life' and 'People choose to walk, cycle and use of public transport'. The following eight indicators describe essential elements required to support the two main indicators.
- 2.48 The ten indicators have helped inform the design principles when considering the public realm and transport proposals for the proposed development as follows.

#### Pedestrians from all walks of life

- 2.49 Walking and cycling to the site will be promoted given the associated personal health and global environmental benefits with come with active travel. It will be ensured that the site links in with the existing infrastructure to increase the ease and attractiveness of active travel.
- 2.50 To ensure that pedestrians from all walks of life can access the development, the crossings around the site are installed with tactile paving and dropped kerbs, a feature that is replicated across most of the crossings in the local area.

#### People Choose to Walk, Cycle and use Public Transport

- 2.51 The site will provide sufficient cycle parking for residents and visitors as stated within the London Plan 2021 Policy. The provision of cycle parking alongside the provision of cycle infrastructure in the form of on-road cycle lanes along Battersea Park Road, should encourage the uptake of cycling in the surrounding area for future residents of the site.
- 2.52 Furthermore, some of the surrounding local amenities provide short stay cycle parking in the form of Sheffield stands. This will ensure future residents can access local amenities through active travel.
- 2.53 As described above, there are regular crossing facilities provided across the local road network. In addition, the footways along Battersea Park Road will allow people to access the area in all directions, such as Battersea High Street further to the south west, and Vauxhall Bus and Rail Station to the north east. This accessibility to multiple services and public transport stops will encourage further walking trips rather than using private vehicles.
- 2.54 In terms of public transport, the site lies within 200m of the nearest underground station, and within 650m of the nearest national rail services. It also lies within 200m of the nearest bus stops which have 3 services operating with an average of 7 or 8 buses per hour each. This should help to get people to choose public transport when commuting to work/university or going further afield for other activities not available through active travel.

#### Easy to Cross

2.55 As stated previously, there are two crossing points available across the roads surrounding the site, both along Battersea Park Road and the associated roads at the junctions. These have dropped kerbs and tactile paving. The regular crossing points are implemented at the major junctions along Battersea Park Road in the form of controlled pedestrian crossings.

#### Shade and Shelter

- 2.56 A number of new trees are proposed as part of the scheme which will provide shade and shelter for residents and other users travelling through the site. In addition, Tree Protection Orders are in place for existing trees on north-eastern corner of the plot.
- 2.57 Along Battersea Park Road, the main places of shade and shelter are the bus stop shelters, which are implemented at most of the bus stops on the routes. In addition, some of the buildings along the road provide overhangs which can offer shelter from bad weather, along with two rail bridges to the west.



#### **Places to Stop and Rest**

2.58 As mentioned previously, the bus shelters contain benches that people can rest on whilst walking. In addition, benches are provided within some sections of the public realm between Cringle Street and New Mill Road to the east of the site.

#### Not too Noisy

- 2.59 The site is set on one minor access street, and two major access roads to the surrounding area. Battersea Park Road has the most traffic out of the three roads surrounding the site, hence it creates the most noise along its length.
- 2.60 The proposed development will be set back from Battersea Park Road and will be shielded from noise with landscaping including planting, trees and structural features.

#### **People Feel Safe**

2.61 Battersea Park Road has a regular flow of traffic in terms of vehicles and pedestrians so future residents when travelling will be overlooked by the passers-by and the commercial and residential units. Furthermore, the surrounding residential roads are well lit and lined with houses and flats to overlook pedestrians and cyclists.

#### Things to See and Do

2.62 There are multiple shop and retail businesses along Battersea Park Road to the east and west. Given the substantial redevelopment coming forward in the area, in particular at Nine Elms Lane to the east, new commercial facilities and restaurants will be opening up prior to the occupation of the proposed development. In addition, Battersea Park is located 700m to the west of the site offering access to a large green space for recreational and leisure activities.

#### **People Feel Relaxed**

2.63 The footways along Battersea Park Road are wide enough for multiple people to walk down at once, with the footway bordering the north of the site also being made wider as part of the proposals.

#### **Clean Air**

- 2.64 The development proposals have set out that the site will only be providing blue badge parking and a car club space. This will naturally lead to a lower level of traffic when compared to the existing use for the site, which contains on-site car parking.
- 2.65 Cycle parking will be provided to encourage the uptake of travel by sustainable modes of transport. In addition, short-stay spaces will be provided within the public realm for visitors to the site. This will enable access to the site via active travel, again reducing emissions associated with the proposed development.

# 3.0 Planning Policy

3.1 This section of the TA sets out the relative transport planning policy and how they have been considered in line with the proposed development.

### National Planning Policy Framework (December 2023)

- 3.2 The National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government in December 2023. This replaces all previous versions of the NPPF.
- 3.3 The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.
- 3.4 Considering the development proposals, NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that (Paragraph 114):

*"a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;* 

b) safe and suitable access to the site can be achieved for all users;

*c)* the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

- 3.5 This has been taken into account as the proposed development will be car-free in nature with a strong emphasis on pedestrian and cycle permeability through and around the site.
- 3.6 Furthermore, Paragraph 115 of the NPPF 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".

3.7 It is demonstrated within Chapter 6 of this TA that the proposed development has a net decrease in traffic generation when compared to the extant permission for the site. Furthermore, as shown in Chapter 6, the site will generate a nominal number of vehicle movements across the road network and as such this is not deemed to constitute an 'unacceptable' impact. As a result, the scheme complies with Paragraph 115.

#### **Planning Practice Guidance**

3.8 Planning Practice Guidance (PPG), which is available from the Ministry of Housing, Communities and Local Government website, supports the overarching aims of the NPPF.



- 3.9 Relevant transport guidance for planning applications is provided in "Travel plans, Transport Assessments and Statements" (March 2014) which identifies that the Transport Assessment of a planning application should typically consider the following (paragraph 15):
  - information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport);
  - information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;
  - data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;
  - a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;
  - an assessment of trips from all directly relevant committed development in the area (i.e. development that there is a reasonable degree of certainty will proceed within the next three years);
  - data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;
  - an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area;
  - an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);
  - measures to improve the accessibility of the location (such as provision/ enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;
  - a description of parking facilities in the area and the parking strategy of the development;
  - ways of encouraging environmental sustainability by reducing the need to travel; and
  - measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.
- 3.10 This TA has been structured to take into consideration each of these points, where relevant.

### Adopted London Plan (March 2021)

- 3.11 The London Plan (March 2021) replaces all reiterations of the previous London Plans for the period of 2019 to 2041. As the overall strategic plan for London, it sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20 25 years.
- 3.12 Chapter 10 of the London Plan focusses on Transport policies. Policy T1 'Strategic approach to transport' states that:

"A Development Plan should support, and development proposals should facilitate:

- the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041
- the proposed transport schemes set out in Table 10.1.

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."

3.13 Therefore, the impact of the proposed development of elements of the transport network, including walking, cycling and public transport have been considered within this TA as part of a multi-modal assessment.

#### **Cycle Parking**

- 3.14 The proposed development will accord with cycle parking requirements as set out within Policy T5 'Cycling' of the adopted London Plan.
- 3.15 An extract of the minimum cycle parking standards for residential dwellings are shown in **Table 3.1** below. The standards for both long-stay (i.e. residents) and short-stay (i.e. visitors) parking are presented.

Use Class Long-Stay		Short-Stay
Student Accommodation0.75 spaces per bedroom		1 space per 40 bedrooms
Residential (Class C3 – C4)	<ol> <li>space per studio or 1 person 1 bedroom dwellings</li> <li>spaces per 2 person 1 bedroom dwelling</li> <li>spaces per all other dwellings</li> </ol>	5 – 40 dwellings: 2 spaces Thereafter: 1 space per 40 dwellings
Commercial (Class A1 – A5)	1 space per 175sqm GEA	1 space per 20sqm (GEA)

#### Table 3.1: New London Plan (2021) Minimum Cycle Parking Standards

3.16 Further details of the proposed cycle parking for the site, and how this accords with the London Plan, is set out in Chapter 4 of this TA.

#### Vehicle Parking

3.17 Policy T6.1 'Residential Parking' highlights the level of parking provision permitted for developments of different land uses and size. With regards to residential developments, the PTAL score associated with the area the development is in determines the parking standards. **Table 3.2** presents the vehicle parking standards for residential developments in areas of PTAL 4 or above.

#### Table 3.2: Maximum Residential Parking Standards

Use Class	PTAL	Maximum Parking Provision
Residential	Inner London PTAL 4 or above	Car Free (With the exception of disabled persons parking)

3.18 On this basis, the proposed development will be car-free in nature, with the exception of disabled parking which will be provided in accordance with the adopted London Plan. Further details of the parking proposals are set out within **Chapter 4** of this TA.

### Mayor's Transport Strategy (2018)

- 3.19 In line with Policy 1, the Proposed Development will be car-free in nature and therefore will aid the target of 80% of trips in London to be made on foot, by cycle or using public transport by 2041.
- 3.20 Policy 2 seeks to:

"Make London a city where people choose to walk and cycle more often by improving street environments, making it easier for everyone to get around on foot and by cycle, and promoting the benefits of active travel. The Mayor's aim is that, by 2041, all Londoners do at least the 20 minutes of active travel they need to stay healthy each day."

- 3.21 Chapter 3 'Healthy streets and healthy people' focuses on delivering attractive street environments London-wide that promote active travel such as walking and cycling. As part of the Healthy Streets approach, this Transport Assessment includes both existing and proposed walking/cycling networks within its Active Travel Zone assessment to ensure highquality, direct links are available between the site and key destinations.
- 3.22 The development adheres to the Vision Zero approach which aims for all deaths and serious injuries from road collisions to be eliminated from London's streets by 2041. An assessment of the most recent collision data for the Active Travel Zone will be used to determine 'dangerous' areas and provide mitigation measures to improve safety at these locations.

### London Borough of Wandsworth (LBW) Local Plan (Adopted 2023)

- 3.23 The London Borough of Wandsworth will work together with the London Plan to direct development within the area. This local plan sets out the key policies that will be referred to when new development proposals are presented to the council. The local plan was adopted in 2023 and will guide development until 2038.
- 3.24 Site allocation NE2 '41-49 Nine Elms Lane and 49-59 Battersea Park Road, SW8' corresponds to the site location for this proposed development.
- 3.25 The site is allocated for the "*mixed use development, including residential and commercial uses, with frontages onto Battersea Park Road, Sleaford Street and the street adjacent to New Covent Garden Market. Development should include the creation of a boulevard to the east of the site that provides links further north and is a pleasant place where all users can*



be accommodated in a balanced way." This is in line with the proposed plans for this development.

- 3.26 With regards to parking, NE2 states "*A car club should be provided for residential / commercial use and surrounding area.*". This will be provided along Sleaford Street as part of the proposed development.
- 3.27 Also noted within NE2, proposals at this site will be required to:

"Provide road space along with financial contributions to design and construct TfL's Nine Elms Corridor proposal which will deliver consisted bus infrastructure. Developers will be expected to bring forward improvements such as the upgrading of the signalised junction of the CGMA/BPR/Pump House Lane junction or to fund improvements if these are to be delivered as part of the Nine Elms Corridor Scheme."

- 3.28 The developer will also provide space along the site frontage that is in line with and complements the TfL corridor scheme to improve Battersea Park Road.
- 3.29 With regards to active travel, NE2 states:

"Proposals should make improvements to Sleaford Street, including ensuring a usable footway width on the eastern side, as it is currently of a sub-standard width. To the south, the site should ensure the continuation of the east-west cycle route along the viaduct, and the potential cycling and walking bridge across the CGMA access road, including land access."

- 3.30 As part of the development proposals, the footway along Sleaford Street will be adjusted and resurfaced to provide a minimum 2m wide footway. In addition, new landscaping in the form of planting/vegetation will be provided to improve the characteristic of the street.
- 3.31 In relation to the east-west cycle route, the area to the rear at the southern end of the site has been left available to safeguard space for a new cycle route.

# 4.0 Development Proposals

4.1 The development proposals comprise:

"Application for Phased Full Planning Permission for: Demolition of the existing building and construction of three new buildings, together comprising Residential (Use Class C3) and Student Accommodation (Sui Generis) along with Commercial, Business and Service (Use Class E) and/or Local Community and Learning (Class F) floorspace. Associated works include hard and soft landscaping, car parking and new vehicular access / servicing, and other ancillary works."

- 4.2 The proposals seek to develop the site for a mix of 762 student accommodation units and 55 affordable housing units spread across three blocks, with associated commercial space at ground floor level.
- 4.3 The proposed site layout is contained within **Appendix C.**

### **Pedestrian and Cycle Access**

4.4 Pedestrian and cycle access to the site will be gained via the site frontages onto Battersea Park Road, New Covent Garden Market Access Road, and Sleaford Street. A landscaped central spine route is proposed to run through the site in a north-south alignment providing pedestrian and cycle access to each of the blocks, and associated cycle storage areas, within the development.

#### Vehicular Access

- 4.5 Vehicular access will be gained along Sleaford Street, New Covent Garden Market Access Road and the internal link road. As the site is predominantly car-free, the only vehicles expected to be accessing the site will be delivery and servicing vehicles, vehicles associated with move in / out days for the student blocks, and emergency vehicles.
- 4.6 Further details of how each of these vehicle types are expected to access the site are set out below.

#### **Delivery and Servicing Vehicle Access**

- 4.7 The proposed development will align with the servicing arrangement of the extant permission as follows:
  - Inset Loading Bay on New Covent Garden Market Access Road;
  - Inset Loading Bay on Sleaford Street; and
  - Through-Route for Service Vehicles between New Covent Garden Market Access Road and Sleaford Street (bollard controlled).
- 4.8 The through-route allows for larger vehicles to access/egress the site in a forward gear as it is not possible for large vehicles to turn at the end of Sleaford Street. This route will only be used by a small number of vehicles delivering large goods. As per the extant permission, it is proposed that the route be controlled by bollards to restrict general through traffic.

- 4.9 Refuse collection vehicles will access the site via Sleaford Street and will utilise the throughroute to exit via New Covent Garden Market Access Road. Refuse collection will take place in close proximity to the proposed ground floor bin stores for each block.
- 4.10 Deliveries for the residential element of the scheme at Block A (i.e. the western building) will be made via the loading bay on Sleaford Street. For those delivering using LGV's, use of the through-route will not be required. Hence ensuring that this section of the site can be designed as a pedestrian-led landscaped environment, only allowing occasional, managed and controlled access of larger vehicles.
- 4.11 It is understood that the peak operation of the New Covent Garden Market peaks between 11pm and 7am. As such, where possible servicing movements will be encouraged to occur outside of these hours. Further details of the delivery and servicing strategy, along with swept path analysis, are set out within the Delivery and Servicing Management Plan (DSMP).

#### Moving In / Out Management

4.12 In relation to student moving in/out times, the two loading bays and through-route will be used for loading/unloading, these locations are shown at **Figure 4.1**.



#### Figure 4.1: Student Move in/Move out Parking Locations

4.13 A moving day strategy will be developed by the on-site management team to ensure vehicle movements do not impede the public highway.



- 4.14 Prior to arrival at the site, all residents will be contacted by email to confirm the arrival arrangements and move-in procedure. This will include travel information with regard to key airports, main line railway stations and the local Battersea Power Station tube station. The cost of taxis from these key arrival hubs would also be provided. Information relating to the cost of public car parking facilities close to the site will also be provided.
- 4.15 In order to reduce the total impact of the site on the local transport network students will be able occupy their accommodation up to three days before their tenancy starts at no additional charge. This would ensure that the arrivals are spread over a three-day period, as opposed to a single day. Furthermore, in order to minimise the highways impact, a booking system would be implemented that would require residents to book an arrival slot helping to spread arrivals across the three days. Limited time slots would be built into the system to avoid congested arrival periods.
- 4.16 All residents will also be informed about local car parks before they arrive. It will be advised that if residents arrive early they should park away from the site before they have been checked. This will help to minimise congestion around the site. In addition, once a resident arrives at the site, they will be met at reception and checked in within a couple of minutes, they will then be advised as to where they can park at the site. This quick turnaround time will reduce vehicle dwell time at the site.
- 4.17 In order to manage traffic on the day, additional staff will be employed for the move in days to help manage congestion and to help direct residents quickly to their accommodation. Furthermore, the site management will liaise with the local police and traffic management bodies to agree a strategy to avoid blocked roads and parking problems.
- 4.18 The move out process would be managed in a similar fashion to the move in process, and students would be expected to confirm their move out times and dates. Notwithstanding this, students would be expected to move-out over a longer period at the end of term and as such a lower number of movements would be expected for move-out days when compared to move-in days.
- 4.19 Students would not need to move their belongings out over the Christmas and Easter holidays meaning that students would only move in and out once a year.

#### **Emergency Vehicle Access**

4.20 Emergency access will be taken from Sleaford Street, along the through-route and out through New Covent Garden Market Access Road. This will allow fire tenders to reach the cores of each building within an acceptable distance.

### Parking

#### Car Parking

- 4.21 The proposed development will be car-free in nature with the exception of 4 Blue Badge spaces and 1 Car Club space. No other car parking bays are to be provided due to the site's central location and high PTAL rating in line with the adopted London Plan.
- 4.22 The proposed parking spaces are proposed to be provided on Sleaford Street, as per the consented scheme. The Blue Badge Bays will be provided as follows:

- 2 x Residential Blue Badge Bays;
- 1 x Student Blue Badge Bay;
- 1 x Commercial Blue Badge Bay; and
- 1 x Car Club Bay.
- 4.23 The above bays are shown within **Figure 4.2**.

Figure 4.2: Parking Bays along Sleaford Street



- 4.24 The Blue Badge bays will be provided from the outset, in accordance with Policy T6.5 'Non-Residential Disabled Persons Parking' of the London Plan which requires 3% of residential dwellings to have at least 1 bay per dwelling.
- 4.25 The car club space has been provided in accordance with the Schedule 3 of the S106 agreement from the extant permission which states that 1 space is to be provided along Sleaford Street. This also adheres to the NE2 site allocation requirement set out within the LBW emerging local plan. The car club space will deliver a scheme for car sharing and will be made available to occupiers/residents of the site and general members of the public who wish to become members of the scheme.
- 4.26 All parking spaces will be fitted with active electric vehicle charging facilities.

#### Cycle Parking

- 4.27 Cycling parking will be provided on site for the residential, student accommodation and commercial uses in line with Policy T5 'Cycle Parking' the adopted London Plan (**Table 3.1**).
- 4.28 The proposed cycle parking provision for this site is shown within **Table 4.1**.

#### Table 4.1: Proposed Cycle Parking

Use Class	Long-Stay	Short-Stay
Student Accommodation	572	19
Residential (Class C3 – C4)	104	3
Commercial (Class A1 – A5)	3	28
Total	678	50

4.29 The long-stay spaces will be provided at ground floor level as dedicated cycle stores within each of the buildings. The short-stay spaces will be located at various points within the public realm and will be placed at suitable locations in relation to entrance points and existing cycle infrastructure. **Figure 4.3** highlights the proposed locations of the short stay cycle parking spaces.





**Proposed Private and Public Land** 

4.30 The proposed loading bay and parking spaces along Sleaford Street are shown to be partly located outside of the red-line boundary. Therefore it is proposed that the applicant undertake a Section 247 and Section 38 Agreement which would allow the parking spaces to become private and the loading bay to become public highway with a 2m wide continuous public footway to the rear. This is shown in **Figure 4.4**.



#### Figure 4.4: Proposed Public and Private Land

# 5.0 Active Travel Zone Assessment

- 5.1 This section of the TA will describe the Active Travel Zone (ATZ) in detail and how the ATZ has been established. It will also detail how people of all abilities will make key journeys within the established ATZ that are essential to supporting car free lifestyles.
- 5.2 Under the TfL guidance for Transport Assessments, it is required an ATZ is carried out to understand the context of the development and how residents can live a car-free lifestyle. The aim of the assessment is to understand the local characteristics and identify any potential improvements required to encourage active travel in this area.

### Key Destinations, Journeys and Routes

5.3 The ATZ is defined by TfL as a 20-minute cycle (approximately 5km) around the proposed development, as shown in **Figure 5.1** and **Appendix D.** The ATZ therefore includes key destinations such as North Finchley, Brent Cross, Finchley, East Finchley, Barnet, and Wood Green.



#### Figure 5.1: ATZ 20 Minute Cycle

- 5.4 Within the ATZ all the potential key active travel destinations from the site have been mapped. This includes the following:
  - Public transport stops;
  - Public transport stations;
  - London's strategic cycle network;
  - Green space;
  - Town centres;
  - Leisure or Sports Centre;
  - Medical Centres or doctors' surgeries;
  - Educational facilities; and
  - Places of worship.
- 5.5 The most relevant active travel destinations to the proposed development have then been selected from the list above and the ATZ has been scaled down around these key destinations to provide a smaller neighbourhood in line with the TfL guidance. This smaller neighbourhood provides all the key features required to support a car free lifestyle.

### **Key Routes**

- 5.6 Given the proposed development is predominately accommodation (student and residential), key destinations relative to this land use have been identified. It is proposed that a healthy street walking audit of the following routes will be undertaken:
  - Route 1: Battersea Park Road Nine Elms Lane Parry Street Bondway (Sainsburys Local - Bus Stops – Riverside Medical Centre – Vauxhall Bus Terminal -Vauxhall Rail Station)
  - Route 2: Battersea Park Road Queenstown Road (Bus Stops Battersea Power Station – Newton Prepatory School – St Marys Roman Catholic Primary School – Our Lady of Mount Carmel and St Joseph Church - Queenstown Road Rail Station)
  - Route 3: Battersea Park Road Queens Circus (Bus Stops Battersea Power Station – Tesco Express – London Battersea Adventist Church – Battersea Park – Cycle Superhighway 8)
- 5.7 All of these routes include/pass multiple key destinations. These routes are identified within **Figure 5.2** and contained in **Appendix E**.

#### Figure 5.2: Key ATZ Routes



- 5.8 A site visit was undertaken along the key ATZ routes on Thursday 17th March 2022, between the off-peak hours of 09:00-15:00. The photographs taken are shown along each of the routes in **Appendix F.**
- 5.9 It should be noted that at the time of the site visit parts of the routes were impacted by ongoing construction work. This means the current conditions along these routes will likely differ from those that will be present once the proposed development is operational. This has been taken into consideration when determining potential improvements.

# Route 1 - Sainsbury's Local, Nearest Bus Stops, Riverside Medical Centre, Vauxhall Bus Station, Vauxhall Station

5.10 This route runs from the site along Battersea Park Road (A3205) to the northeast, crossing over the A3036, and ending around 1.5km away at Vauxhall Station. From this ending point, national rail, underground and bus services are available.

5.11 The route mainly runs along wide smooth pavements, with tactile paving and dropped kerbs at junctions with side roads/adjoining streets. There are also regular controlled pedestrian crossing points along Battersea Park Road at key junctions which comprise tactile paving and dropped kerb to aid access for disabled or visually impaired users, as shown in **Photograph 1**.



#### Photograph 1: Public Realm, Footways and Crossing Point along Route 1

- 5.12 There is some vegetation present along this route, with some plants set in pots in some of the developments currently constructed to the north of Battersea Park Road. There is also vegetation set out in the US Embassy to the south of the route, with a short hedgerow. This improves the character of the route and makes it a more pleasant environment for non-motorised road users.
- 5.13 There are also regular bus stops, with provided shelters and benches to allow for people to stop, rest and take shelter. There is also provision of lean-on benches within Vauxhall Bus Station. Seating is also provided within an area of public realm between Cringle Street and New Mill Lane.
- 5.14 At the time of the site visit it was observed that the road had a medium level of traffic, with a high number of HGVs. This is likely due to the ongoing construction works associated with new developments at Nine Elms Lane and along Battersea Park Road. The amount of traffic did not make it off-putting to walk the route, as the footways were wide enough to fit multiple people walking side by side. There is also regular street lighting, and the footways are all visible to the carriageway making it a safe route to use at night time.

5.15 Most of the route has sections of cycle lanes, either segregated from the traffic flow as seen in **Photograph 2**, or with a bus lane as seen in **Photograph 3**. There is also Sheffield stands available at multiple locations along the route, including at the Waitrose store as shown in **Photograph 2**.

Photograph 2: Cycle Lane and Sheffield Stand Parking along Route 1





Photograph 3: Cycle and Bus Lane along Route 1

Potential Improvements

5.16 There was no "least attractive area" identified for this route, with most of the route suffering from a high level of traffic and associated traffic noise. This could in part be due to the high level of construction and development going on in the area currently. However, additional trees or planting will be provided to help absorb some of the noise.

#### Route 2 - Battersea Power Station Underground Station, Newton Prep School, St Mary's R.C. Primary School, Battersea Park Station, Queenstown Road Station

- 5.17 This route runs south west along Battersea Park Road (A3205), to the intersection with the A3216. The route then heads south east along the A3216, ending at Queenstown Road Rail Station. This route runs for about 1km.
- 5.18 As seen from the photographs taken on this route, the footways are mainly wide and smooth, especially close to the site and the Battersea Power Station Underground Station. Controlled pedestrian crossing points are available at major road junctions, for example between Battersea Park Road and Savona Street, and at the junction between Battersea Park Road and the A3216. These crossings also have tactile paving and dropped kerbs, along with dropped kerbs between minor road junctions off Battersea Park Road.
- 5.19 Some of the paving along the frontage of the site on Battersea Park Road is cracked or uneven, as shown in **Photograph 4**, and the footway does naturally narrow at some points, such as in **Photographs 5 and 6**, but these can fit multiple people through at once, apart



from isolated sections such as at lampposts. **Photograph 7** shows some businesses encroaching out into the footway which can also create pinch points with higher footfall.



#### Photograph 4: Cracked Paving along Route 2



#### Photograph 5: Narrowing Footway Near Bridge at Route 2

Photograph 6: Narrowing Footway Near Bus Stop on Route 2 due to Hoarding





#### Photograph 7: Businesses Encroaching onto Footway along Route 2

5.20 There is very little vegetation set out along this route mainly due to the built-up nature of the area. There are a couple of trees located on this route as set out in **Photograph 8** which provides shade and shelter.
#### Photograph 8: Tree along Route 2



- 5.21 In terms of seating, the bus shelters provide benches inside, which are regularly set along the route. Similarly to route 1 there is a medium level of traffic, but not enough to feel unsafe on these sections. These sections can also still fit multiple people walking down in the same direction. There was some litter left around some of the bus stops, as well as on the main footway as seen in **Photographs 6 and 7**, but these were spread out and uncommon.
- 5.22 Street lighting is also present at regular intervals along the route including underneath the railway bridges.
- 5.23 There are multiple services available along this route, such as cafes and supermarkets located around **Photograph 7**. Cycle parking is available outside both of the stations on this route, with the Sheffield stands shown in **Photograph 9** outside Queenstown Road Rail Station. Cycle lanes are provided along sections of the route, such as in **Photographs 4** and **10** for example, along with on the A3216, as shown in **Photograph 11**.



#### Photograph 9: Sheffield Stands outside Queenstown Road Rail Station along Route 2

Photograph 10: Cycle Lanes along Battersea Park Road along Route 2





#### Photograph 11: Cycle Lanes along the A3216 on Route 2

#### Potential Improvements

- 5.24 As described above, cracked paving is evident along the southern side of Battersea Park Road along the northern boundary of the site. This area will be re-paved as part of the development proposals.
- 5.25 In addition, it is noted that little vegetation or planting is provided along the route, therefore additional streetscaping, including trees, shrubs and planting would enhance the character of the route and make it more pleasant. In line with this, additional litter bins could be provided along the route to reduce street litter observed on the walking audit.

# Route 3 - Battersea Power Station Underground Station, Tesco Express, Battersea Park

- 5.26 This route follows a very similar route to Route 2, heading south west along Battersea Park Road, until it turns west onto Prince of Wales Drive. The route heads along this road and then crosses the roundabout junction between the Prince of Wales Drive, the A3216, and Carriage Drive South, where the route ends opposite Battersea Park. This route runs for around 800m.
- 5.27 Controlled pedestrian crossings are available at multiple junctions, along with around the Battersea Park Roundabout Junction. These controlled pedestrian crossings also feature tactile paving and dropped kerbs.
- 5.28 The footways along this route are wide and smooth for most of its length, with only some sections of narrow footways. These were partially identified in Route 2. **Photograph 12** also shows some narrowing of the footway due to residential waste bins. It is unclear whether



these were located here for waste collection day, or whether these bins are located here permanently. However, there is still room to fit through this section with minimal conflict.

5.29 Most of Prince of Wales Drive has cycle lanes down both sides of the road, with a constant cycle lane on the northern side except for a section of repaved road. There are also cycle lanes identified around the A3216/Prince of Wales Drive/Carriage Drive South roundabout, which are segregated from the main carriageway as shown in **Photograph 13**.



#### Photograph 12: Residential Bins along Route 3



#### Photograph 13: Segregated Cycleways along Queens Circus on Route 3

- 5.30 In terms of vegetation, there is some set out on a section of Prince of Wales Drive, along with some within Battersea Park and trees aligning the roundabout alongside. Bus shelters are also located along this road which have seating inside.
- 5.31 In terms of traffic, Prince of Wales Drive is quieter than Battersea Park Road, and the roundabout next to Battersea Park did not have a high volume of traffic passing through. The route also felt safe to walk down, with regular street lighting, including underneath the rail bridge. Even though the rail bridge could be considered the least attractive section of the route, there have been attempts to improve it, with the addition of display boards on each side.
- 5.32 The route did not have much litter, dirt or dust located along it that hasn't already been recognised on Route 2, apart from a section of wet pavement under the rail bridge along Prince of Wales Drive. This is shown in **Photograph 14** below:



Photograph 14: Wet Pavement Observed near to Railway Bridge of Route 3

#### Potential Improvements

5.33 It is recommended that the cause of the wet pavement shown in **Photograph 14**, is investigated as it could be that there is a gutter/drainage issue at the railway bridge. It is noted that the weather conditions on the day of the audit were dry, therefore, in wet or rainy conditions the situation could be worsened making it difficult or unpleasant for pedestrians or cyclists to utilise the footway.

#### **Key Routes Summary**

- 5.34 Following an assessment of the key routes, the following potential improvements have been identified:
  - **Route 1**: Additional planting/landscaping along the route could potentially help absorb some of the traffic noise
  - **Route 2**: Resurface cracked/uneven footway along southern side of Battersea Park Road + additional planting to enhance character + additional litter bins to reduce street litter
  - **Route 3:** Investigate and fix potentially faulty gutter/drainage at the railway underpass at Prince of Wales Drive

#### **Collision Data**

- 5.35 The latest available five-year personal injury collision (PIC) data has been obtained from TfL for the period up to August 2023. The full PIC report is contained in **Appendix G.**
- 5.36 **Figure 5.3** shows the location of the PIC records along each of the ATZ routes at a local neighbourhood level.





Figure 5.3: Smaller ATZ Neighbourhood Plan with Collison Data Plot

- 5.37 In total there were 284 individual incidents, and 309 casualties. Of these casualties, 2 were determined as fatal, 56 were serious and the other 251 as slight. The two fatal incidents are reviewed below:
  - Battersea Park Roundabout (July 2019) Involved a goods vehicle and scooter. In this incident a witness saw a scooter rider hitting a pothole and then falling resulting in fatal injury. It is therefore suggested that this section of the roundabout be reviewed to determine whether this pothole has since been fixed, and if not, appropriate road resurfacing take place.
  - Queens Town Road, (December 2019) Involved a coach and a double decker bus. The contributing factor given was 406 "failed to judge other person's path or speed". This is deemed driver error and is an isolated incident therefore no potential improvements are deemed necessary at this junction.
- 5.38 Clusters of incidents have also been reviewed, with the definition of a cluster as 2 or more Killed or Seriously Injured (KSI) incidents, as stated within the ATZ guidance. There were 7 clusters identified and these are detailed in **Table 5.1** below. The clusters are as follows:
  - Cluster 1: A3216 Queenstown Road to the North of Queens Circus;
  - Cluster 2: Queenstown Road Junction with Majestic Wine Warehouse Access Road
  - Cluster 3: A3216/A3205 Battersea park Road Signalised Crossroad Junction;
  - Cluster 4: Battersea Park Road at Sleaford Street Junction;
  - Cluster 5: Battersea Park Road at Kirtling Street Junction

- Cluster 6: Battersea Park Road at Cringle Street Junction; and
- Cluster 7: A3205 Nine Elms Lane/A3036 Wandsworth Road Signalised Junction

#### Table 5.1: Collision Cluster Review

Reference	Date	Vehicles	Contributing Factors				
Collision Cluster 1: A3216 Queenstown Road To The North Of Queens Circus							
1210322145	31/07/2021	Pedal Cycle and Car	None Given				
1220365014	12/03/2022	Pedestrian and Car	Failed to Look Properly, Careless, Reckless or in a Hurry. Wrong use of Pedestrian Crossing Facility				
1220370542	12/04/2022	Pedal Cycle and Car	Cyclist not Displaying Lights at Night and Failure to Look Properly				
Queenstov	Collision Cluster 2: Queenstown Road Junction with Majestic Wine Warehouse Access Road						
1190223648	08/11/2019	Pedal Cycle and Car	None Given				
1210311321	03/06/2021	Motorcycle 51-125 CC and Car	Stationary or Parked Vehicles and Failed to Look Properly				
Collision Cluster 3:							
A3216/A3205 Battersea park Road Signalised Crossroad Junction							
1190163984	17/02/2019	Motorcycle 126-250cc and Bus/Coach with more than 17 passengers	Failed to Look Properly				
1190178861	01/05/2019	Pedal Cycle and Bus/Coach with more than 17 passengers	None Given				
1200275790	23/10/2020	Motorcycle above 500cc and Pedestrian	None Given				
	Collisio Battersea Park Road a	on Cluster 4: at Sleaford Street Junction					
1200252914	23/06/2020	Agricultural Vehicle and Pedal Cycle	Failed to look properly				

Reference	Date	Vehicles	Contributing Factors				
1200279701	16/11/2020	Car and Motorcycle 51- 125cc	Junction restart (Moving off at a junction), Stationary or Parked Vehicle(s), Stationary or Parked Vehicle(s)				
	Collisic Battersea Park Road	on Cluster 5: at Kirtling Street Junction					
1220365719	16/03/2022	Car and Bus	Failed to Look Properly, Failed to Judge Other Person's Path or Speed				
1220366192	06/02/2022	Pedal Cycle and Taxi / PHV	None Given				
	Collisic Battersea Park Road	on Cluster 6: at Cringle Street Junction					
1180138177	10/10/2018	Pedestrian and Motorcycle 51-125cc	Failed to look properly, Failed to judge vehicle's path or speed				
1190162130	07/02/2019	Motorcycle below 50cc and Pedestrian	Failed to look properly				
1190204975	12/09/2019	PHV and Pedal Cycle	Sudden Braking, Failed to judge other person's path of speed, Failed to look properly, Failed to judge other person's path or speed				
1190218614	15/11/2019	Pedal Cycle and Car	Failed to look properly, Dazzling Headlights, Rider wearing dark clothing at night, Not displaying lights at night or in poor visibility, Failed to look properly				
A3205 Ni	Collision Cluster 7: A3205 Nine Elms Lane/A3036 Wandsworth Road Signalised Junction						
1200258249	23/07/2020	Pedal Cycle and Car	None Given				
1200284193	11/12/2020	Pedal Cycle and Car	None Given				

Reference	Date	Vehicles	Contributing Factors
1220415094	08/12/2022	Pedestrian and Car	Slippery Road (Weather) and Failed to Look Properly

- 5.39 In these clusters of collisions, there were none that referenced the road layout or geometry, with the most common factors being "Failed to look properly" and "Failed to judge other person's path or speed".
- 5.40 Of the KSI clusters, 10 of the serious incidents involved a pedestrian, these are detailed further in **Table 5.2.**

 Table 5.2: Pedestrian Collision Review

Reference	Date	Contributing Factors
1190163527	14/02/2019	Failed to look properly
1190172445	31/02/2019	Failed to look properly
1200231157	17/01/2020	Failed to look properly
1200275790	23/10/2020	None Given
1210312425	23/10/2020	None Given
1220365014	12/03/2022	Failed to Look Properly, Careless, Reckless or in a Hurry. Wrong use of Pedestrian Crossing Facility
1220399083	12/09/2022	Careless, Reckless or in a Hurry
1220404595	14/10/2022	Failed to look properly
1220412582	24/11/2022	Slippery road (weather) and Failed to judge other person's path
1220415094	08/12/2022	Slippery road (weather) and Failed to look properly

- 5.41 Of the incidents that give factors, the road layout/geometry is not involved at any point, with the only mention of the infrastructure being the incorrect use of it.
- 5.42 It is important to note that as previously set out in **Section 2**, Battersea Park Road and Nine Elms Lane are subject to a committed TfL road improvement schemes. Part of the improvements along Battersea Park Road have already been implemented between the Duchess Rail Bridge and Sleaford Street to the west of the site, with the section to the Vauxhall gyratory north of the site coming in Summer 2023, and the section to the southwest coming in Summer 2024 depending on the results of the consultancy.

5.43 Therefore, there are already measures being put in place to reduce the number of incidents on these roads, and as such, no further improvement measures are recommended within this report.

## **Healthy Streets Characteristics Check**

- 5.44 To assess the characteristics of a healthy and active neighbourhood, the following factors have been mapped within the smaller neighbourhood ATZ plan:
  - Land use and density;
  - Street density;
  - Public transport density;
  - Access to green spaces; and,
  - Committed developments.
- 5.45 The healthy streets characteristics check at the smaller neighbourhood level is shown in **Figure 5.4** and is contained in **Appendix H.**

#### Figure 5.4: Smaller ATZ Neighbourhood Plan with Healthy Streets Characteristics Check



- 5.46 This check demonstrates that the surrounding area has a high street density allowing access to the key amenities. This reinforces a good uptake active travel modes. Further there is a high density of public transport options surrounding the site, which will be easily accessible via walking/cycling from the site encouraging uptake.
- 5.47 **Figure 5.4** further shows that the site is well connected to an extensive network of streets, thus helping shorten travel distances and enhance connections to key destinations on foot or by bike.
- 5.48 Although the site is severed to the south by the railway line, this does not impact the site users accessing key destinations easily. Most of the key destinations, such as public transport, green spaces, retail and other facilities, are located either east or west along Battersea Park Road.
- 5.49 A number of committed developments are coming forward within the local area, all of which are allocated within Wandsworth's Local Plan. In proximity to the site these include:
  - Site 14 & 25: Sleaford Street & Dairy Crest Distribution Depot Mixed use development including residential;
  - Site 29: New Covent Garden Market, Entrance Site Residential-led mixed-use development with improved transport capacity and a new permeable network of streets and urban spaces including amenity space. Provision for a primary school including some nursery provision and sports pitches on part of the site;
  - Site 18: Royal Mail Group Site, Nine Elms Mixed-use development including residential. Provision for a primary school including some nursery provision and sports pitches on part of the site;
  - Site 1: Battersea Power Station Mixed use development including retail, leisure, hotel, business, and residential accommodation and renovation of the landmark listed power station building. The site will also be required to provide community facilities including health provision (GP facility), children's play space, a library and a neighbourhood office for the Metropolitan Police to serve the area. The site will provide a new underground station as part of the Northern Line Extension that will serve a considerable part of the Opportunity Area and act as a catalyst for regeneration;
  - Site 3: Former Petrol Filling Station, Battersea Park Road Mixed use development with business and residential use as part of the main Battersea Power Station site;
  - Site 11: Cable & Wireless, Ballymore Site 6, Battersea Park Road Mixed use development including residential; and
  - Site 9: Tideway Industrial Estate Mixed use development including residential and continuation of the Thames Path.
- 5.50 With these developments comes investment in the public realm which will further enhance the healthy characteristics of the neighbourhood in the future by promoting walking/cycling and public transport use and improving amenity.
- **5.51** Furthermore, as previously mentioned, the TfL Nine Elms Lane/Battersea Park Road committed improvement scheme will greatly enhance active travel and public transport through the area through enhanced cycle lanes, widened footways, and improved bus priority. TfL will deliver this scheme but the developer will provide contributions.

## 6.0 London Wide Network

### Introduction

- 6.1 This section outlines the level of multimodal trips that are likely to be generated as a result of the proposed development in comparison to the extant permission for the site.
- 6.2 As the proposed development will be car-free in nature with the exception of Blue Badge bays, this is a reduction on the parking provision from the extant permission. As a result, vehicle trips are expected to be lower than the current consent. Therefore, multi-modal person trips will be considered within this TA as opposed to just vehicle trips.
- 6.3 Furthermore, the previous use for the site has been a Booker Cash & Carry and a BMW garage. Whilst it is noted that BMW garage is no longer in use, the Booker warehouse is still operational. Traffic surveys undertaken at the Booker warehouse observed circa 650 daily vehicle movements. Therefore, the proposals will result in a very large reduction of vehicle trips to the site, both on the New Covent Garden Market Access Road and the local highway network.

## **Proposed Person Trip Generation**

- 6.4 The proposed trip generation has been determined by trip rates extracted from the industrystandard TRICS database. The trip generation for the residential and student accommodation are set out in turn below.
- 6.5 It is assumed that no additional person trips are expected as a result of the commercial space as these trips are likely to form part of existing trips, either pass-by trips within the local area, or as part of residents trips contained within the site itself.

#### **Residential Person Trip Generation**

- 6.6 The TRICS database has been interrogated for person trips rates of sites with the following parameters:
  - Land Use 03/C Residential/Flats Privately Owned;
  - Less than 500 dwellings;
  - Surveys from January 2015 December 2019;
  - London only; and
  - Edge of Town & Free-Standing excluded
- 6.7 The resultant trip rates and trip generation are shown below in **Table 6.1**. The full TRICS report is contained in **Appendix I.**

Time Devied	Trip I	Rate (Per Dwe	lling)	Total Person Trips		
Time Period	In	Out	Two-Way	In	Out	Two-Way
07:00-08:00	0.056	0.289	0.345	3	16	19
08:00-09:00	0.075	0.471	0.546	4	26	30
09:00-10:00	0.101	0.234	0.335	6	13	18
10:00-11:00	0.114	0.175	0.289	6	10	16
11:00-12:00	0.138	0.15	0.288	8	8	16
12:00-13:00	0.117	0.136	0.253	6	7	14
13:00-14:00	0.131	0.159	0.29	7	9	16
14:00-15:00	0.126	0.119	0.245	7	7	13
15:00-16:00	0.187	0.157	0.344	10	9	19
16:00-17:00	0.23	0.151	0.381	13	8	21
17:00-18:00	0.275	0.154	0.429	15	8	24
18:00-19:00	0.377	0.161	0.538	21	9	30
19:00-20:00	0.311	0.127	0.438	17	7	24
20:00-21:00	0.198	0.108	0.306	11	6	17
Daily Trip Rates:	2.436	2.591	5.027	134	143	276

#### Table 6.1: Residential Person Trip Rates (TRICS-Derived)

#### Student Accommodation Person Trip Generation

- 6.8 The TRICS database has been interrogated for person trips rates of sites with the following parameters:
  - Land Use 03/G Residential/Student Accommodation;
  - Between 200 1,100 units;
  - Surveys from January 2015 December 2019;
  - London only; and
  - Edge of Town & Free-Standing excluded

6.9 The resultant trip rates and trip generation are shown below in **Table 6.2**. The full TRICS report is contained in **Appendix J**.

	Trip I	Rate (Per Dwe	lling)	Total Person Trips		
Time Period	In	Out	Two-Way	In	Out	Two-Way
07:00-08:00	0.011	0.041	0.052	8	31	40
08:00-09:00	0.014	0.109	0.123	11	83	94
09:00-10:00	0.018	0.095	0.113	14	72	86
10:00-11:00	0.027	0.086	0.113	21	66	86
11:00-12:00	0.035	0.066	0.101	27	50	77
12:00-13:00	0.041	0.063	0.104	31	48	79
13:00-14:00	0.055	0.074	0.129	42	56	98
14:00-15:00	0.051	0.061	0.112	39	46	85
15:00-16:00	0.076	0.042	0.118	58	32	90
16:00-17:00	0.081	0.035	0.116	62	27	88
17:00-18:00	0.082	0.04	0.122	62	30	93
18:00-19:00	0.078	0.038	0.116	59	29	88
19:00-20:00	0.074	0.03	0.104	56	23	79
20:00-21:00	0.1	0.029	0.129	76	22	98
Daily Trip Rates:	0.743	0.809	1.552	566	616	1,183

#### Table 6.2: Student Accommodation Person Trip Rates (TRICS-Derived)

#### **Total Person Trip Generation**

6.10 The total person trip generation is shown in **Table 6.3** below.

#### **Table 6.3: Total Person Trip Generation**

The Destad	Total Person Trips			
Time Period	In	Out	Two-Way	
07:00-08:00	11	47	59	
08:00-09:00	15	109	124	
09:00-10:00	19	85	105	
10:00-11:00	27	75	102	
11:00-12:00	34	59	93	
12:00-13:00	38	55	93	
13:00-14:00	49	65	114	
14:00-15:00	46	53	99	
15:00-16:00	68	41	109	
16:00-17:00	74	35	109	
17:00-18:00	78	39	117	
18:00-19:00	80	38	118	
19:00-20:00	73	30	103	
20:00-21:00	87	28	115	
Daily Trip Rates:	700	759	1,459	

## **Multi-Modal Trip Generation**

#### **Residential Multi-Modal**

- 6.11 The modal split for the residential use is based on commuting modes taken from the 2011 census data from WU03EW 'Location of Usual Residence and Place of Work by Method of Travel to Work' for the super output area 'Wandsworth 002.
- 6.12 **Table 6.4** gives the modal split of the uplifted multi-modal trips for the proposed development.

#### Table 6.4: Mode Split (Residential)

Mode	Percentage
Underground, metro, light rail or tram	23%
Train	14%
Bus, minibus or coach	30%
Тахі	0%
Motorcycle, scooter or moped	2%
Driving a car or van	11%
Passenger in a car or van	0%
Bicycle	8%
On foot	11%
Other	1%
Total	100%

6.13 Given the proposed development will be car-free in nature, this modal split has been adjusted to take account of a 0% car driver mode share, as shown below in **Table 6.5**.

#### Table 6.5: Adjusted Mode Split (Residential)

Mode	Percentage
Underground, metro, light rail or tram	25%
Train	16%
Bus, minibus or coach	32%
Тахі	0%
Motorcycle, scooter or moped	2%
Driving a car or van	0%
Passenger in a car or van	0%
Bicycle	10%
On foot	13%
Other	2%

Total 100%
------------

6.14 This method of travel to work will be used to determine the modal split for the residential trips associated with the proposed development and is set out for the typical peak hours/daily below in **Table 6.6**.

|--|

Mode	AM P	eak (08:00 – (	9:00)	PM P	eak (18:00 – 1	9:00)
	In	Out	Total	In	Out	Total
Underground and rail	2	11	12	9	4	12
Bus, minibus or coach	1	8	10	7	3	9
Taxi	0	0	0	0	0	0
Motorcycle, scooter or moped	0	1	1	0	0	1
Driving a car or van	0	0	0	0	0	0
Passenger in a car or van	0	0	0	0	0	0
Bicycle	0	3	4	2	1	4
On foot	1	3	4	3	1	4
Total	4	26	30	21	9	30

#### **Student Accommodation Multi-Modal Trips**

- 6.15 Student accommodation trips by mode has been determined by the mode share average taken from TRICS surveys of comparable student accommodation sites in London, as shown in **Appendix K.**
- 6.16 The modal split is shown in **Table 6.7.**

#### Table 6.7: Modal Split (Student Accommodation)

Mode	%
Underground and rail	23%
Bus, minibus or coach	21%
Тахі	2%
Motorcycle, scooter or moped	2%
Driving a car or van	0%
Passenger in a car or van	2%
Bicycle	4%
On foot	46%
Total	100%

- 6.17 **Table 6.7** indicates 46% of users of the site are expected to make trips on foot, 23% via underground or rail service, and 21% via local bus services.
- 6.18 This student mode share has been applied to the person trips to determine the multi-modal trip generation for the typical peak hours and across the day, as shown below in **Table 6.8**.

Table 6.8: Student Accommodation Multi-Modal Trip Generation

<b>N</b> Ø o sla	AM P	eak (08:00 – 0	9:00)	PM Peak (18:00 – 19:00)		
Mode	In	Out	Total	In	Out	Total
Underground and rail	2	19	22	14	7	21
Bus, minibus or coach	2	17	20	12	6	19
Тахі	0	2	2	1	1	2
Motorcycle, scooter or moped	0	2	2	1	1	2
Driving a car or van	0	0	0	0	0	0
Passenger in a car or van	0	1	1	1	0	1
Bicycle	0	3	4	2	1	4
On foot	5	38	43	27	13	41

Total	11	83	94	59	29	88

#### Total Multi-Modal Trip Generation

6.19 The total multi-modal trip generation for the proposed development is shown in **Table 6.9.** 

Table 6.9: Total Multi-Modal Trip Generation

	AM P	eak (08:00 – 0	9:00)	PM Peak (18:00 – 19:00)		
Ivioae	In	Out	Total	In	Out	Total
Underground and rail	4	30	34	22	10	33
Bus, minibus or coach	4	26	29	19	9	28
Taxi	0	2	2	1	1	2
Motorcycle, scooter or moped	0	2	2	2	1	2
Driving a car or van	0	0	0	0	0	0
Passenger in a car or van	0	1	1	1	0	1
Bicycle	1	7	7	5	2	7
On foot	5	42	47	30	14	45
Total	15	109	124	80	38	118

## Net Change in Person Trips Against Extant Consent

- 6.20 The person trips generated from the proposed development have been compared to the extant consent to determine the net change.
- 6.21 The trip generation from the extant permission has been extracted from Table 5.9 of the Transport Assessment which was completed by SLR (formerly Vectos) in November 2015 to support the planning application. This is set out below in **Table 6.10**.

	AM P	eak (08:00 – 0	9:00)	PM Peak (18:00 – 19:00)		
Mode	In	Out	Total	In	Out	Total
Underground and rail	28	63	91	48	25	73
Bus, minibus or coach	15	36	51	27	14	41
Тахі	1	1	2	1	1	2
Motorcycle, scooter or moped	2	3	5	2	2	4
Driving a car or van	8	13	21	11	10	21
Passenger in a car or van	1	1	2	1	1	2
Bicycle	7	20	27	15	7	22
On foot	10	20	30	15	9	24
Total	72	157	229	120	69	189

#### Table 6.10: Multi-Modal Trip Generation from Extant Consent

6.22 The net change in person trips between the proposed development and the extant consent is shown in **Table 6.11**.

Table 6.1	1:	Multimodal	Net	Trip	Generation
	••	mannoau	1101	P	Contraction

Mode	AM P	eak (08:00 – 0	9:00)	PM Peak (18:00 – 19:00)		
Wode	In	Out	Total	In	Out	Total
Underground and rail	-24	-33	-57	-26	-15	-40
Bus, minibus or coach	-11	-10	-22	-8	-5	-13
Taxi	-1	+1	0	0	0	0
Motorcycle, scooter or moped	-2	-1	-3	0	-1	-2
Driving a car or van	-8	-13	-21	-11	-10	-21
Passenger in a car or van	-1	0	-1	0	-1	-1
Bicycle	-6	-13	-20	-10	-5	-15



On foot	-5	+22	+17	+15	+5	+21
Total	-57	-48	-105	-40	-31	-71

- 6.23 As shown above, when compared to the extant consent, the proposed development has an overall net decrease in person trips across the peak hours. This is in part due to the change in proposed use from solely resident, to predominantly student accommodation. This has shifted movements outside of the typical peak hours due to the differing lecture schedules and study times of the students.
- 6.24 Given the high mode share on foot applied to student-related trips, the pedestrian movements are the only mode to have a net increase when compared to the extant consent in the peak hours. As shown in **Table 6.11** this results in a net addition of 17 pedestrian movements in the AM peak hour of 08:00 09:00, and 21 pedestrian movement in the PM peak hour of 18:00 19:00.
- 6.25 This increase is overall deemed to be minimal once these movements are distributed across the wider footway networks. However, this increase will be mitigated through significant public realm improvements being delivered by the proposals which will open up and widen footway provision along Battersea Park Road and Sleaford Street.
- 6.26 Based on the above, it can be shown that the impact of additional pedestrian movements will be suitably mitigated. As a result, no further impact assessment of the proposed development on the transport network is deemed necessary within this TA.

## **Delivery and Servicing**

6.27 To determine the expected level of daily traffic generation associated with servicing and deliveries, survey data has been taken from comparable residential, student accommodation and commercial sites. These are set out in turn below.

#### **Residential S&D Traffic Generation**

- 6.28 The TRICS database has been interrogated for servicing and delivery trips rates of sites with the following parameters:
  - Land Use 03/C Residential/Flats Privately Owned;
  - Less than 500 dwellings;
  - Surveys from January 2017 December 2019;
  - London only; and
  - Edge of Town & Free-Standing excluded
- 6.29 The full TRICS report is contained at **Appendix L.** The resultant trip rates and associated

#### 6.30 trip generation for 55 residential dwellings are shown overleaf in **Table 6.12**.

	Trip Rate (Per Dwelling)			Т	n	
Time Period	In	Out	Two-Way	In	Out	Two-Way
07:00-08:00	0.006	0.006	0.012	0	0	1
08:00-09:00	0.011	0.006	0.017	1	0	1
09:00-10:00	0.015	0.011	0.026	1	1	1
10:00-11:00	0.017	0.011	0.028	1	1	2
11:00-12:00	0.015	0.021	0.036	1	1	2
12:00-13:00	0.013	0.015	0.028	1	1	2
13:00-14:00	0.015	0.018	0.033	1	1	2
14:00-15:00	0.007	0.006	0.013	0	0	1
15:00-16:00	0.011	0.015	0.026	1	1	1
16:00-17:00	0.02	0.021	0.041	1	1	2
17:00-18:00	0.01	0.008	0.018	1	0	1
18:00-19:00	0.014	0.014	0.028	1	1	2
19:00-20:00	0.014	0.014	0.028	1	1	2
20:00-21:00	0.004	0.006	0.01	0	0	1
Daily Trip Rates:	0.172	0.172	0.344	9	9	19

#### Table 6.12: Residential Servicing and Delivery Trip Rates (TRICS-Derived)

6.31 Following a pre-app meeting held with TfL and LBW on 11th February 2022, TfL provided servicing trip information based on 2014 TfL Household Freight surveys. The daily trip rates and resultant trip generation is shown in **Table 6.13**.

#### Table 6.13: Residential Servicing and Delivery Trip Rates (TfL data)

Time	Trip Rate (Pe	er Dwelling)	Trip Generation		
Period	One-Way	Two-Way	One-Way	Two-Way	
Daily	0.215	0.43	12	24	

- 6.32 It is important to note that TfL further advised that 20% of these deliveries will likely be linked trips providing a delivery to more than one household in the residential development. Therefore, the actual number of daily vehicles would be 9. This aligns with the TRICS-derived daily total of 9 vehicles.
- 6.33 In addition, TfL advised that daily trip profiles for residential movements could be taken from TRICS data. Therefore, the servicing and delivery movements shown in Table 6.12 are deemed to reflect typical trips for the residential aspect of the scheme.
- 6.34 To determine the breakdown of vehicle types, servicing trip information has been obtained from the TRICS database for the same survey sites used above. The resultant vehicle breakdown is shown in **Table 6.14**.

	Number	Breakd	own Of Servicing Vehi	cles (%)
TRICS Reference	Of Units	Car/Motorcycle	LGV	HGV
BE-03-C-01	79	0%	92%	8%
BM-03-C-01	160	0%	90%	10%
HM-03-C-02	194	20%	71%	10%
IS-03-C-07	185	17%	83%	0%
WF-03-C-01	97	0%	57%	43%
Average	-	7%	79%	14%
Daily Delivery & Servicing Vehicles	55	1	9	2

#### Table 6.14: Residential Servicing and Delivery Vehicle Breakdown (TRICS data)

6.35 As shown above, the proposed residential element of the scheme is forecast to attract 12 delivery and servicing vehicles per day, of which 2 are expected to be HGVs requiring access along the through-route.

#### Student S&D Traffic Generation

- 6.36 The TRICS database has been interrogated servicing and delivery trips rates for sites with the following parameters:
  - Land Use 03/G Residential/Student Accommodation;
  - Between 200 1,100 units;
  - Surveys from January 2017 December 2019;
  - London only; and
  - Edge of Town & Free-Standing excluded

6.37 The full TRICS report is contained at **Appendix M**. The resultant trip rates and associated trip generation for 762 student accommodation dwellings are shown below in **Table 6.15**.

Table 6.15: Student Accommodation Servicing and Delivery	<b>Trip Rates (TRICS-</b>
Derived)	

Time Devied	Trip Rate (Per Dwelling)			Trip Generation		
Time Period	In	Out	Two-Way	In	Out	Two-Way
07:00-08:00	0.002	0.002	0.004	2	2	3
08:00-09:00	0	0	0	0	0	0
09:00-10:00	0.002	0.002	0.004	2	2	3
10:00-11:00	0.003	0.002	0.005	2	2	4
11:00-12:00	0.004	0.005	0.009	3	4	7
12:00-13:00	0	0.001	0.001	0	1	1
13:00-14:00	0.003	0.002	0.005	2	2	4
14:00-15:00	0.004	0.004	0.008	3	3	6
15:00-16:00	0.002	0.002	0.004	2	2	3
16:00-17:00	0.003	0.003	0.006	2	2	5
17:00-18:00	0.001	0.001	0.002	1	1	2
18:00-19:00	0	0	0	0	0	0
19:00-20:00	0.002	0.001	0.003	2	1	2
20:00-21:00	0	0.001	0.001	0	1	1
Daily Trip Rates:	0.026	0.026	0.052	20	20	40

- 6.38 As with the student element, a sense check has been completed taking student accommodation servicing trip rates from traffic surveys completed in March 2019 at the Paris Gardens scheme in Southwark (17/AP/4230). The scheme provides student accommodation of circa. 300 student bedrooms and is therefore deemed a suitable comparison.
- 6.39 The trip rates and resultant trip generation for daily totals are given below in **Table 6.16**.

# Table 6.16: Student Accommodation Servicing and Delivery Trip Rates (Paris Gardens Survey-Derived)

Time Deried	Trip Rate (Per Dwelling)			Trip Generation		
Time Period	In	Out	Two-Way	In	Out	Two-Way
Daily Trip Rates:	0.020	0.020	0.040	15	15	30

- 6.40 Therefore, based on the above, it can be assumed that the student accommodation element will attract between 15 20 servicing and delivery vehicles a day.
- 6.41 To determine the breakdown of vehicle types, servicing trip information has been obtained from the TRICS database for the same survey sites used above. It should be noted that some of the survey sites did not contain this information. The resultant vehicle breakdown is shown in **Table 6.17.**

#### Table 6.17: Student Accommodation Servicing and Delivery Vehicle Breakdown (TRICS data)

	Number Of Units	Breakdown Of Servicing Vehicles (%)				
Trics Reference		Car/Motorcycle	LGV	HGV		
HM-03-G-01 / 01	235	93%	7%	0%		
HM-03-G-02 / 01	217	70%	27%	3%		
LB-03-G-02	1,100	4%	93%	4%		
Average	-	55%	42%	2%		
Daily Delivery & Servicing Vehicles	762	11	9	0		

6.42 As shown above, the proposed student element of the scheme is forecast to attract 20 delivery and servicing vehicles per day, of which none on a typical day are expected to be HGVs. Although it is noted that occasional HGV movements will occur.

#### **Commercial S&D Traffic Generation**

- 6.43 No comparable commercial sites have been identified on the TRICS database that contain servicing and delivery survey information. Therefore, commercial servicing trip rates have been taken from the BBC Television Centre development. The commercial aspect of the scheme accounted for circa. 2,000sqm of space as part of a mixed-use scheme. Therefore, they are deemed suitable to provide a forecast on servicing trip rates for the Battersea Park Road scheme.
- 6.44 The proposed commercial space currently stands at 551sqm. The trip rates and resultant trip generation for daily totals are given below in **Table 6.18**.



Time Desired	Trip Rate (Per 100sqm)			Trip Generation		
Time Period	In	Out	Two-Way	In	Out	Two-Way
Daily Trip Rates:	0.530	0.530	1.060	3	3	6

#### Table 6.18: Commercial Servicing and Delivery Trip Rates (BBC Survey-Derived)

- 6.45 Therefore, based on the above, it can be assumed that the commercial element will attract approximately 3 servicing and delivery vehicles per day.
- 6.46 Given the small scale of the commercial aspect of the scheme, and the relatively low number of daily vehicles expected, it is envisaged that no more than 1 of the 2 daily movements will be an HGV requiring access along the through-route.

#### **Total Servicing and Delivery Traffic Generation**

- 6.47 It is forecast that the proposed development will attract 35 servicing and delivery vehicles a day, made up of 20 student-related vehicles, 12 residential-related vehicles, and 3 commercial-related vehicles.
- 6.48 Based on the hourly profile information from TRICS, it is clear that these movements will be spread across the day. Furthermore, servicing data derived from the same TRICS survey information indicates that only 3 vehicles per day will likely be 10m vehicles or larger (i.e. HGVs), with 2 vehicles associated with the residential aspect of the scheme, and 1 vehicles associated with either the commercial or student aspect of the scheme.
- 6.49 The forecast number of servicing vehicles using each loading bay per day is outlined within **Table 6.19** below.

Loading Bay	Car/Motorbike	Lgv	Hgv	Total
Sleaford Street	1	12	3	15
New Covent Garden Market Access Road	11	8	0	20
Site Internal Through Road	0	0	3	3
Total	12	20	3	35

#### Table 6.19: Servicing Trips by Loading Bay

6.50 It is deemed that the loading bays on Sleaford Street and New Convent Garden Market Access Road are more than sufficient to accommodate the forecast demand and as demonstrated above, the route through the site will only be required for a very small level of larger delivery and servicing vehicles on a daily basis.

### **Design Solutions and Mitigations**

#### **Design Solutions**

#### Pedestrian Environment Improvements

6.51 The site will contain north-south and east-west pedestrian links through the site which will improve the connectivity and permeability of the site to residents and the surrounding community. Throughout the development, disabled access will be provided to ensure ease of access for those with reduced mobility as well as for people using pushchairs.

#### Cyclist Environment Improvements

6.52 The development will provide cycle parking in line with London Plan and London Cycle Design Standards. In addition, land at the southern end of the site will be safeguarded for the proposed east-west cycle route along the viaduct.

#### Mitigations

#### Travel Plan

- 6.53 An overarching Travel Plan (TP) has been prepared as standalone document to accompany the planning submission which takes into account the residential, student accommodation and commercial aspects of the scheme.
- 6.54 The TP's includes further details of existing travel behaviour and sets out a range of measures and initiatives to encourage a reduction in car use and promote sustainable modes of travel. It also includes details of the management and implementation of the TP as well as initial targets and a monitoring and review programme.
- 6.55 The key objectives of the TP are to encourage active travel to reduce strain on public transport services. The main objective is given below:

"To reduce the need to travel off-site wherever possible and practicable. Where travel in the local area and further afield is unavoidable, active travel will be supported and incentivised in order to achieve a modal shift towards walking and cycling."

- 6.56 The transport principles reflect the objectives set out above and can be summarised as the following:
  - Increase the use of active travel i.e. walking and cycling;
  - Reduce the need to travel where possible; and
  - Minimise the impact of the development on the surrounding area.
- 6.57 The TP includes the distribution of a Welcome Pack which will provide information on the accessibility of the site by walking, cycling, the cycle hires scheme, and public transport as well as information on the best online resources for additional information.

6.58 Furthermore, the TP will set out targets in terms of modal shift and incentives such as public transport information and cycle training to encourage sustainable modes of travel.

**Delivery and Servicing Management Plan** 

- 6.59 To minimise the impact of delivery activity, a Delivery and Servicing Management Plan (DSMP) has been developed as a standalone document.
- 6.60 The DSMP sets out the objectives and strategies for managing deliveries and freight movements to and from the development site. The objectives of the DSMP include the following:
  - Promoting smarter operations of freight that reduce the need for freight movement overall or that reduce or eliminate trips particularly in peak periods;
  - Encouraging greater use of sustainable freight modes;
  - Encouraging the use of greener vehicles;
  - Managing the on-going development and delivery of the DSMP;
  - Communication of the site servicing / delivery facilities (through dissemination of information);
  - Communication of the DSMP measures; and
  - Encouraging the most efficient use of freight vehicles and servicing/delivery trips.

#### Car Parking Management Plan

6.61 A Car Parking Management Plan (CPMP) has been produced as a standalone document to accompany the planning application. The document sets out the management tasks and strategy on how car parking spaces including how they monitored to ensure they are being used appropriately. The CPMP will also outline how permits will be issued to residents on a first come first serve basis.

# 7.0 Construction

7.1 This section considers the programme and potential impacts associated with the construction of the proposed development. This section identifies the key considerations in the development of the construction strategy, principles which would be expected to be followed and potential initiatives which may be implemented.

## **Objectives**

- 7.2 The key objectives of the construction strategy for the proposed development are as follows:
  - Minimise the impact of construction vehicles on the local community and the local transport networks;
  - Minimise the impact of construction activity on the environment;
  - Ensure a safe environment, both within and around the site;
  - Ensure the best practice is followed include CLOCS and FORS; and
  - Deliver the development safely, efficiently and on time.

## **Context, Considerations and Challenges**

7.3 In addition to the key planning policies identified in **Chapter 3**, the London Plan identifies a need to manage the level of HGVs on the highway network during the construction of new development.

#### **Community Considerations**

- 7.4 **Chapter 2** provides information on the accessibility of the site and challenges associated with the general development. With specific reference to the construction phases, the following are key challenges and community considerations:
  - Impact of construction traffic on pedestrians using Battersea Park Road, New Convent Garden Market Access Road and Sleaford Street;
  - Impact of increase in HGV activity and turning movements on cyclists and motorised vehicles using Battersea Park Road; and
  - Ensuring that construction vehicles do not use inappropriate routes including routes which provide access to key community facilities such as schools.

## **Construction Programme**

7.5 Details of the construction programme including preconstruction design operations and mobilisation, construction duration and completion will be set out once the contractor for the site has been appointed.

## Site Logistics

#### Site Working Hours

7.6 No work will be permitted outside the hours of 08:00 – 18:00 Monday to Friday and 08:00 – 13:00 on a Saturday nor at any time on Sunday or Bank Holidays without prior written approval of the local authority.

#### Vehicle Routing and Site Access

- 7.7 The Site Manager will be responsible for developing and implementing a Site Traffic Management Plan in accordance with HSG144. Watkin Jones Group will work in partnership with TfL, LBW and the supply chain to reduce the impact of the development on the local community. This will include consultation to confirm the preferred access and egress routes to and from site. Consultation has already occurred with the residents at Viridian Apartments off Sleaford Street.
- 7.8 To minimise the potential impacts and ensure vehicles use appropriate roads, the routing of construction vehicles has been based on the following hierarchy:
  - Motorway;
  - Primary Road Network; and
  - Local Roads.
- 7.9 It is anticipated that the construction vehicles will use the strategic road network where possible. The route utilises the Transport for London Road Network (TLRN) via the A3205 (Battersea Park Road).

## **Deliveries and Off Loading**

- 7.10 All deliveries of materials to site or removal from site shall take place during the specified hours and in the manner specified in the CLP. The following principles will be adhered to:
  - A weekly delivery programme will be developed by the site management and discussed and agreed with contractors and circulated on Fridays to provide advance warning;
  - As part of the procedure for allocating delivery times to suppliers, care will be taken to reduce the number of vehicles travelling to the site within peak periods;
  - Wherever possible, deliveries will be taken onto site earlier to allow vehicles to be off loaded during peak times;
  - The site will endeavour to take receipt of deliveries during the site working hours:
  - Weekdays 08:00 to 18:00
  - Saturdays 08:00 to 13:00
  - Restricting deliveries to these hours will prevent any movements from taking place within the New Covent Garden Market peak hours of 11pm to 7am.
  - All vehicles will be taken onto site and off loaded within the development where possible. A lay by will be provided for vehicles to unload, further information on which shall be provided in the detailed Construction and Logistics Plan (CLP);



- All vehicles will be accompanied by a traffic marshal;
- Un-authorised or un-notified deliveries will be refused entry; and
- Queuing of trucks or lorries will not be permitted;
- The access along New Covent Garden Market Access Road should only be used for construction and service vehicles egressing the site and not for access to the site;
- No construction laybys will be located along New Covent Garden Market Access Road;
- No construction vehicles will enter the site via New Covent Garden Market Access Road at any time; and
- It will not be possible to close New Covent Garden Market Access Road.

#### Travel Planning and Car Parking

- 7.11 The site team will be vigilant to ensure that illegal parking is avoided and encourage construction workers to use public transport to travel to the site given its accessibility (based on the manual PTAL of 5 derived in **Chapter 2**). Any breaches will be strictly dealt with, and persistent offenders will be removed from the site.
- 7.12 During the site induction, personnel will also be advised that parking on local streets is not permitted.
- 7.13 During the procurement and site induction process, all operatives will be encouraged to use public transport wherever practicable. As described in **Chapter 2**, the site is served well by public transport.

## **Strategies to Reduce Impact**

7.14 **Table 7.1** sets out the proposed measures for the development.

#### Table 7.1: Summary of Measures

Measure	Details			
Measures Influencing Construction Vehicles and Deliveries				
Safety and environmental standards and programmes	Commitment for contractors and suppliers to follow CLOCS and be members of FORS			
Adherence to designated routes	Access routes to be followed by goods vehicles			
Delivery scheduling	Appropriate scheduling of deliveries to minimise impact			
Re-timing for out of peak deliveries	Where feasible, vehicle movements will be co-ordinated to take place outside of peak times considering both highway and pedestrian peaks			
Use of holding area and vehicle call off areas	Constructor to discuss the potential availability of holding/call off areas with LBW and TfL			
Other Measures				

Measure	Details
Provide sustainable travel information	LBW and Watkin Jones Group will ensure residents are provided with information relating to sustainable travel options and publicise relevant sustainable mode promotions

## Implementing, Monitoring and Updating

- 7.15 The measures outlined above will be reviewed during the construction project as required to ensure that it remains relevant and responds to any information or challenges which become apparent during construction. Information will be collated on the level of vehicle activity taking place at the site including vehicle numbers, size and type, arrival, departure, and duration timings, and how this compares to the schedule. Data will also be collected relating to logistics related incidents and injuries and any vehicle or operator non-compliance to safety requirements.
- 7.16 Contact details will be provided to allow residents and members of the public to report any perceived breaches of requirements and complaints. This could relate to vehicle route, inappropriate queuing or parking, or community concerns relating to construction activity.
- 7.17 Suitably worded conditions are requested to be attached to any planning permission for the submission and approval of a final detailed Construction and Environmental Management Plan (CEMP) and Construction Logistics Plan (CLP) and that any related discharge of conditions of S106 obligations are subject to consultation with CGMA.

# 8.0 Conclusion

- 8.1 On this basis of the above, it is considered that the site complies with transport tests set out in the NPPF:
  - The opportunities for sustainable transport modes have been taken up;
  - Safe and suitable access can be achieved for all people;
  - The residual cumulative impact of the development is not severe.
- 8.2 **Table 8.1** provides a summary of the key transport impacts and how the development will respond.

Chapter	Key Transport Impacts/Issues	Solutions/Mitigations		
Site and Surroundings	The site location benefits from a high level of public transport accessibility scoring a good PTAL rating (Manual PTAL 5, as shown in <b>Chapter 2</b> ). As such the development site provides an opportunity for a higher level of development density in transport planning policy terms.	Car-free with the exception of disabled bays and a car club bay; Provision of cycle parking; Delivery and Servicing Management Plan; Travel Plan; and Car Parking Management Plan		
Active Travel Zone	The development is well placed in respect the local amenities and public transport which can be accessed via active modes. The public transport facilities provide high frequency services.	Travel Plan; and Cycle Parking Provision		
London Wide Network	The development proposals have been shown to not have an adverse impact on the highways or public transport network surrounding the development. A minimal impact is forecast on pedestrian movements. There will be a large decrease in vehicle movements compared to the existing use.	Car-free scheme proposed which removes excessive traffic generation; Good level of existing public transport services; and Developer contributions towards TfLs pedestrian/cycle improvements along Battersea Park Road/Nine Elms		
Construction	The site is well located with respect to the strategic highway network to accommodate construction vehicles, Construction and Logistics Plan should take account of this and plan the phasing of the development accordingly.	Construction and Logistics Plan		

#### Table 8.1: Summary of Key Transport Impacts

8.3 Therefore, given the information and assessment provided throughout this TA, there are no transport reasons why the development cannot come forward and be granted planning permission.

8.3 Therefore, given the information and assessment provided throughout this TA, there are no transport reasons why the development cannot come forward and be granted planning permission.


# Appendix A Current PTAL







PTAL output for Base Year 3	
SW8 5AL Battersea Park Rd, Nine Elms, London SW8 5AL, UK Easting: 529388, Northing: 177217	
Grid Cell: 64597	
Report generated: 03/03/2022	
Calculation Parameters	
Dayof Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU ReliabilityFactor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail ReliabilityFactor	0.75



Calcu	lation data									
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	BATTERSEAP R SLEAFORD S	156	217.67	7.5	2.72	6	8.72	3.44	0.5	1.72
Bus	BATTERSEAP R SLEAFORD S	344	217.67	10	2.72	5	7.72	3.89	1	3.89
Rail	Battersea Park	'LNDNBDC-VICTRIC 2F01'	786.69	1.67	9.83	18.71	28.55	1.05	0.5	0.53
Rail	Battersea Park	'LNDNBDC-VICTRIC 2N05'	786.69	2	9.83	15.75	25.58	1.17	1	1.17
Rail	Battersea Park	'VICTRIC-SUTTON 2B90'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-LNDNBDC 2F02'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-LNDNBDC 2F06'	786.69	1.33	9.83	23.31	33.14	0.91	0.5	0.45
Rail	Battersea Park	'VICTRIC-LNDNBDC 2N04'	786.69	2	9.83	15.75	25.58	1.17	0.5	0.59
Rail	Battersea Park	'SDSD-VICTRIC 2P13'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'ECROYDN-VICTRIC 2P15'	786.69	1	9.83	30.75	40.58	0.74	0.5	0.37
Rail	Battersea Park	'COLSTWN-VICTRIC 2P17'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'CATERHM-VICTRIC 2P23'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-TATNHMC 2P33'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'SUTTON-VICTRIC 2R05'	786.69	0.67	9.83	45.53	55.36	0.54	0.5	0.27
Rail	Battersea Park	'VICTRIC-EPSDNS 2R06'	786.69	1.33	9.83	23.31	33.14	0.91	0.5	0.45
Rail	Battersea Park	'EPSDNS-VICTRIC 2R11 '	786.69	1.67	9.83	18.71	28.55	1.05	0.5	0.53
Rail	Battersea Park	'VICTRIC-EPSM 2R24'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-SUTTON 2R26'	786.69	0.67	9.83	45.53	55.36	0.54	0.5	0.27
Rail	Battersea Park	'NORWDJ-VICTRIC 2S05'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'WCROYDN-VICTRIC 2S07'	786.69	1.33	9.83	23.31	33.14	0.91	0.5	0.45
Rail	Battersea Park	'SUTTON-VICTRIC 2S15'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-EPSM 2S56 '	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-DORKING 2858'	786.69	0.33	9.83	91.66	101.49	0.3	0.5	0.15
Rail	Battersea Park	'VICTRIC-SUTTON 2S60'	786.69	1.33	9.83	23.31	33.14	0.91	0.5	0.45
Rail	Battersea Park	'VICTRIC-CATERHM 2Y79'	786.69	1.33	9.83	23.31	33.14	0.91	0.5	0.45
									Total Grid Cell Al:	13.24



### Appendix B Manual PTAL Calculation



PTAL Assessment

Reliability Factor	1
Bus	2.00
Rail	0.75
LUL	0.7

	AI	Accessibility
2.00	0-5	1
0.75	>5-10	2
0.75	>10-15	3
	>15-20	4
	>20-25	5
	>25	6

5

				Base	Year					
Mode	Service	Frequency (Mins)	Frequency (Services per Hour)	Walk Distance(m)	Scheduled Wait Time (mins)	Walk Time (mins)	Access Time (mins)	EDF	Weight	Accessibility Index
Bus	156	8	7.5	85	4.0	1.06	7.1	4.3	0.5	2.1
Bus	344	6	10.0	85	3.0	1.06	6.1	5.0	1.0	5.0
Rail	LNDNBDC-VICTRIC 2F01'	36	1.67	654	18	8	27	1.1	0.5	0.6
Rail	LNDNBDC-VICTRIC 2N05'	30	2.00	654	15	8	24	1.3	1.0	1.25
Rail	VICTRIC-SUTTON 2B90'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-LNDNBDC 2F02'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-LNDNBDC 2F06'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	VICTRIC-LNDNBDC 2N04'	30	2.00	654	15	8	24	1.3	0.5	0.63
Rail	SDSD-VICTRIC 2P13'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	ECROYDN-VICTRIC 2P15'	60	1.00	654	30	8	39	0.8	0.5	0.39
Rail	COLSTWN-VICTRIC 2P17'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	CATERHM-VICTRIC 2P23'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-TATNHMC 2P33'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	SUTTON-VICTRIC 2R05'	90	0.67	654	45	8	54	0.6	0.5	0.28
Rail	VICTRIC-EPSDNS 2R06'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	EPSDNS-VICTRIC 2R11'	36	1.67	654	18	8	27	1.1	0.5	0.56
Rail	VICTRIC-EPSM 2R24'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-SUTTON 2R26'	90	0.67	654	45	8	54	0.6	0.5	0.28
Rail	NORWDJ-VICTRIC 2S05'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	WCROYDN-VICTRIC 2507'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	SUTTON-VICTRIC 2S15'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-EPSM 2S56'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-SUTTON 2560'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	VICTRIC-CATERHM 2Y79'	45	1.33	654	23	8	31	1.0	0.5	0.48
									•	14.9
										4

				Future	Year					
Mode	Service	Frequency (Mins)	Frequency (Services per Hour)	Walk Distance(m)	Scheduled Wait Time (mins)	Walk Time (mins)	Access Time (mins)	EDF	Weight	Accessibility Index
Bus	156	8	7.5	85	4.0	1.06	7.1	4.3	0.5	2.1
Bus	344	6	10.0	85	3.0	1.06	6.1	5.0	1.0	5.0
Rail	LNDNBDC-VICTRIC 2F01'	36	1.67	654	18	8	27	1.1	0.5	0.56
Rail	LNDNBDC-VICTRIC 2N05'	30	2.00	654	15	8	24	1.3	1.0	1.25
Rail	VICTRIC-SUTTON 2B90'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-LNDNBDC 2F02'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-LNDNBDC 2F06'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	VICTRIC-LNDNBDC 2N04'	30	2.00	654	15	8	24	1.3	0.5	0.63
Rail	SDSD-VICTRIC 2P13'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	ECROYDN-VICTRIC 2P15'	60	1.00	654	30	8	39	0.8	0.5	0.39
Rail	COLSTWN-VICTRIC 2P17'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	CATERHM-VICTRIC 2P23'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-TATNHMC 2P33'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	SUTTON-VICTRIC 2R05'	90	0.67	654	45	8	54	0.6	0.5	0.28
Rail	VICTRIC-EPSDNS 2R06'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	EPSDNS-VICTRIC 2R11'	36	1.67	654	18	8	27	1.1	0.5	0.56
Rail	VICTRIC-EPSM 2R24'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-SUTTON 2R26'	90	0.67	654	45	8	54	0.6	0.5	0.28
Rail	NORWDJ-VICTRIC 2S05'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	WCROYDN-VICTRIC 2S07'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	SUTTON-VICTRIC 2S15'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-EPSM 2S56'	182	0.33	654	91	8	100	0.3	0.5	0.15
Rail	VICTRIC-SUTTON 2560'	45	1.33	654	23	8	31	1.0	0.5	0.48
Rail	VICTRIC-CATERHM 2Y79'	45	1.33	654	23	8	31	1.0	0.5	0.48
LUL	BATTERSEA POWER STATION - KENNINGTON	6	10.00	57	3.0	1	4	6.7	1.0	6.72
										21.6



## Appendix C Proposed Site Layout







Appendix D Active Travel Zone (20-minute Cycle **Isochrone**)







### Appendix E Key ATZ Routes

尜SLR





### Appendix F ATZ Walking Audit: **Route Photographs**























### Appendix G

Smaller Neighbourhood ATZ Plan with Collision Data





<u>Key:</u>

Site Location

Collision Data

Fatal

Serious

ATZ Routes

Route 1

Route 2

Route 3

41-49	Battersea	Park Ro	ad, Wa	ndsworth	th Watkin Jones
	Acc	cident N	Лар		Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.u
DRAWN: SHS	CHECKED: EG	DATE: 23/01/2024	SCALES:	NTS	DRAWING REFERENCE:

# B10 Battersea Park Road Personal Injury Collisions 60 months to end of August 2023 (Provisional)

Summary of Collisions Selected Site Reference and Description Topic Based Query

Date Period

Collision Count 284

The description of how the collision occurred and the contributory factors are the reporting officer's opinion at the time of reporting and may not be the result of extensive investigation. Note that self-reported collisions (introduced in September 2016) may have limited information. Descriptions have been automatically redacted to remove all personally identifiable information, but should you receive any in error please inform the Collisions Data Team as soon as practical. Self-reported collisions introduced in September 2016 may have limited information and tend to be lower in quality than police reports. The introduction of online self-reporting has made it easier for members of the public to report collisions to the police. There have been year on year increases in self-reports since this was introduced. This has contributed to an overall increase in the number of casualties reported on London's roads.

Pedestrian	41	14%	Fatal		2	1%				
Wet	60	21%	Serious		55	19%				
Dark	106	37%	Slight		227	80%				
Please note th	nat these figures re	epresent the numbe	er of collisions that	resulted in each t	ype of casualty.					
	1	2	3	4	5	6	7	8	9	10
Reference Day Date Light Conds Road Surface Severity Conflict	01180134468 SUNDAY 23/09/2018 19:39 DARK DRY SLIGHT	01180135998 SUNDAY 30/09/2018 04:05 DARK DRY SLIGHT	01180136341 TUESDAY 02/10/2018 07:20 LIGHT DRY SERIOUS	01180136846 THURSDAY 04/10/2018 16:04 LIGHT DRY SLIGHT	01180137464 FRIDAY 05/10/2018 08:00 LIGHT DRY SLIGHT	01180138177 WEDNESDAY 10/10/2018 17:02 LIGHT DRY SERIOUS	01180138528 FRIDAY 12/10/2018 08:10 LIGHT DRY SLIGHT	01180142214 TUESDAY 30/10/2018 14:15 LIGHT UNKNOWN (S/R) SLIGHT	01180143542 MONDAY 05/11/2018 14:28 LIGHT DRY SLIGHT	01180144461 FRIDAY 09/11/2018 18:19 DARK DRY SLIGHT
Ped Location Contributory (* denotes pre- 2005)	406 V002 B 406 V001 B		406 V001 A	999 C001 A	406 V002 A 405 V001 A	0 802 C001 B 803 C001 B			406 V001 B 405 V002 B	405 V001 B 705 V001 B 403 V002 B
Easting/Northing	528660 177150	530210 177820	530320 177990	529350 177420	528766 176942	529390 177460	530330 177990	528840 176960	528790 176960	528680 177000

	11	12	13	14	15	16	17	18	19	20
Reference Day Date Time Light Conds Road Surface Severity	01180144632 SATURDAY 10/11/2018 10:15 LIGHT UNKNOWN (S/R) SLIGHT	01180148504 FRIDAY 16/11/2018 21:20 DARK WET/DAMP SLIGHT	01180149637 SUNDAY 02/12/2018 22:20 DARK WET/DAMP SLIGHT	01180149809 TUESDAY 04/12/2018 09:10 LIGHT WET/DAMP SLIGHT	01180149880 TUESDAY 04/12/2018 14:30 LIGHT DRY SLIGHT	01180149956 TUESDAY 04/12/2018 21:42 DARK WET/DAMP SLIGHT	01180151695 WEDNESDAY 12/12/2018 17:45 DARK DRY SLIGHT	01180153292 THURSDAY 13/12/2018 19:02 DARK DRY SLIGHT	01190155354 WEDNESDAY 02/01/2019 07:10 DARK DRY SLIGHT	01190155869 SATURDAY 05/01/2019 13:42 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)				405 V002 A 307 V002 A 103 V002 A	405 V001 B		405 V001 A			0 802 C001 A 405 V001 B
Easting/Northing	529370 177440	528570 176810	530350 177820	530120 177840	529080 177220	529670 177640	529640 177630	529170 177270	530436 177849	528948 177132

	21	22	23	24	25	26	27	28	29	30
Reference Day Date Time Light Conds Road Surface Severity	01190157502 MONDAY 14/01/2019 06:02 DARK DRY SLIGHT	01190157841 WEDNESDAY 16/01/2019 16:15 DARK WET/DAMP SLIGHT	01190159206 WEDNESDAY 23/01/2019 21:33 DARK DRY SERIOUS	01190160448 WEDNESDAY 09/01/2019 07:05 DARK DRY SERIOUS	01190162130 THURSDAY 07/02/2019 18:45 DARK DRY SERIOUS	01190163100 WEDNESDAY 13/02/2019 12:20 DARK DRY SLIGHT	01190163377 THURSDAY 14/02/2019 08:40 LIGHT DRY SLIGHT	01190163527 THURSDAY 14/02/2019 20:25 DARK WET/DAMP SERIOUS	01190163984 SUNDAY 17/02/2019 11:50 LIGHT DRY SERIOUS	01190165048 FRIDAY 22/02/2019 18:22 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	301 V001 B	405 V001 A	403 V001 B 406 V002 B		405 V001 B		402 V001 A 706 V001 B	0 802 C001 A	405 V001 A	501 V002 A

Easting/Northing	530200 177850	528938 177127	528689 176930	530337 178026	529388 177453	530281 177944	529268 177330	528976 177164	528697 176878	529367 177445
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	31	32	33	34	35	36	37	38	39	40
Reference Day Date Time Light Conds Road Surface Severity	01190165355 SUNDAY 24/02/2019 20:25 DARK DRY SLIGHT	01190167102 TUESDAY 05/03/2019 10:47 LIGHT DRY SLIGHT	01190167173 FRIDAY 01/03/2019 17:19 LIGHT DRY SLIGHT	01190167597 WEDNESDAY 06/03/2019 20:08 DARK DRY SLIGHT	01190167775 FRIDAY 08/03/2019 10:26 LIGHT DRY SLIGHT	01190169565 SUNDAY 17/03/2019 04:05 DARK DRY SLIGHT	01190169584 THURSDAY 14/03/2019 17:55 LIGHT DRY SLIGHT	01190169938 MONDAY 18/03/2019 07:57 LIGHT WET/DAMP SLIGHT	01190170198 WEDNESDAY 20/03/2019 11:03 LIGHT DRY SLIGHT	01190172445 SUNDAY 31/03/2019 04:34 DARK DRY SERIOUS
Conflict										
Ped Location Contributory (* denotes pre- 2005)	410 V002 A	0 810 C001 A 802 C001 B		405 V002 A	406 V001 A	50M 802 C001 A 803 C001 A 806 C001 A 405 V001 B		X 802 C001 A	703 V002 B 703 V001 B	50M 405 V001 B
Easting/Northing	529305 177350	530201 177841	528704 176859	528686 177087	528667 177120	530311 177828	529650 177634	528644 177046	529220 177302	530357 177822

	41	42	43	44	45	46	47	48	49	50
Reference Day Date Time Light Conds Road Surface Severity	01190174510 THURSDAY 11/04/2019 04:20 DARK DRY SLIGHT	01190174789 FRIDAY 12/04/2019 12:20 LIGHT DRY SERIOUS	01190175917 THURSDAY 18/04/2019 09:35 LIGHT DRY SLIGHT	01190176668 WEDNESDAY 24/04/2019 06:45 LIGHT DRY SLIGHT	01190177829 MONDAY 29/04/2019 17:20 LIGHT DRY SLIGHT	01190178507 THURSDAY 02/05/2019 18:45 LIGHT WET/DAMP SLIGHT	01190178861 WEDNESDAY 01/05/2019 09:53 LIGHT DRY SERIOUS	01190179283 TUESDAY 07/05/2019 07:40 LIGHT DRY SLIGHT	01190180677 MONDAY 13/05/2019 20:45 DARK DRY SERIOUS	01190182374 TUESDAY 21/05/2019 07:10 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	406 V002 A 405 V002 A	405 V001 A 409 V001 A			306 V001 B 405 V001 A 710 V001 B	405 V002 A		602 V002 B	602 V001 A 309 V001 A	

Easting/Northing	529379 177262	530335 178009	528682 176975	528667 176866	530219 177826	528826 176991	528694 176888	529342 177361	528895 177079	530240 177829
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	51	52	53	54	55	56	57	58	59	60
Reference Day Date Time Light Conds Road Surface Severity	01190187694 MONDAY 17/06/2019 07:40 LIGHT DRY SERIOUS	01190188746 FRIDAY 21/06/2019 18:25 LIGHT DRY SLIGHT	01190189338 MONDAY 24/06/2019 17:30 LIGHT DRY SERIOUS	01190191035 TUESDAY 02/07/2019 07:15 LIGHT DRY SLIGHT	01190192143 SUNDAY 07/07/2019 15:20 LIGHT DRY SLIGHT	01190192305 FRIDAY 28/06/2019 21:00 LIGHT DRY SLIGHT	01190193113 FRIDAY 12/07/2019 08:34 LIGHT DRY FATAL	01190197941 SUNDAY 04/08/2019 18:00 LIGHT DRY SLIGHT	01190199535 WEDNESDAY 14/08/2019 16:05 LIGHT WET/DAMP SERIOUS	01190202742 SUNDAY 01/09/2019 20:33 DARK DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	405 V001 A 307 V002 A	904 U001 A	408 V001 B		0 107 V001 B	x	101 V002 A		403 V001 A 406 V002 B	403 V001 A 404 V001 B 405 V001 B 406 V002 B
Easting/Northing	530438 177814	530184 177841	529085 177243	529367 177439	530187 177801	528796 176963	528677 176999	530337 178019	529609 177616	528686 176973

	61	62	63	64	65	66	67	68	69	70
Reference Day Date Time Light Conds Road Surface Severity	01190204975 THURSDAY 12/09/2019 19:25 LIGHT DRY SERIOUS	01190205703 MONDAY 16/09/2019 11:00 LIGHT DRY SLIGHT	01190205793 MONDAY 16/09/2019 20:05 DARK DRY SLIGHT	01190206022 WEDNESDAY 18/09/2019 06:50 LIGHT DRY SLIGHT	01190209453 FRIDAY 04/10/2019 07:35 LIGHT WET/DAMP SLIGHT	01190214852 TUESDAY 29/10/2019 20:00 DARK DRY SLIGHT	01190218614 FRIDAY 15/11/2019 17:28 DARK WET/DAMP SERIOUS	01190218746 THURSDAY 14/11/2019 18:00 DARK UNKNOWN (S/R) SLIGHT	01190219307 TUESDAY 19/11/2019 07:40 LIGHT DRY SLIGHT	01190219458 MONDAY 18/11/2019 16:30 DARK DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	408 V002 B 406 V001 A 405 V001 A 406 V002 B	408 V001 A	405 V001 A	405 V002 A 405 V001 A	50M 802 C001 A	409 V001 A	405V001B705V002B507V001A506V001A405V002B		50M 801 C001 B	
Easting/Northing	529383 177451	528531 176789	530241 177895	528961 177060	529545 177560	529828 177739	529368 177447	529640 177633	528995 177177	528633 177357

	71	72	73	74	75	76	77	78	79	80
Reference Day Date Time Light Conds Road Surface Severity	01190221676 FRIDAY 29/11/2019 17:01 DARK DRY SLIGHT	01190223318 FRIDAY 06/12/2019 14:23 LIGHT WET/DAMP SLIGHT	01190223648 FRIDAY 08/11/2019 08:45 LIGHT DRY SERIOUS	01190224696 FRIDAY 13/12/2019 05:38 DARK WET/DAMP SLIGHT	01190226651 SUNDAY 22/12/2019 04:30 DARK WET/DAMP FATAL	01190226691 SUNDAY 22/12/2019 13:15 LIGHT DRY SLIGHT	01190227366 FRIDAY 27/12/2019 05:00 LIGHT DRY SLIGHT	01200231157 FRIDAY 17/01/2020 13:40 LIGHT DRY SERIOUS	01200231317 FRIDAY 17/01/2020 01:00 DARK WET/DAMP SLIGHT	01200231913 WEDNESDAY 22/01/2020 06:20 DARK WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)		405 V002 B 605 V002 B		103 V001 B   405 V001 A   601 V001 A   703 V001 B   406 V001 B   306 V001 A	406 V001 B	405 V002 A 403 V002 A	403 V001 A 701 V002 A 503 V002 A	0 802 C001 A		105 V001 A 405 V001 A 405 V002 A
Easting/Northing	529208 177298	528679 176983	528658 177211	528994 177169	528643 177267	530278 177935	528884 177061	529058 177228	529540 177587	530188 177830

	81	82	83	84	85	86	87	88	89	90
Reference Day Date Time Light Conds Road Surface Severity	01200232466 FRIDAY 24/01/2020 15:30 LIGHT DRY SLIGHT	01200234186 MONDAY 03/02/2020 08:30 LIGHT DRY SLIGHT	01200234276 SUNDAY 02/02/2020 03:40 DARK WET/DAMP SLIGHT	01200234387 TUESDAY 04/02/2020 07:20 LIGHT DRY SLIGHT	01200235051 FRIDAY 07/02/2020 07:18 LIGHT DRY SLIGHT	01200235556 SUNDAY 09/02/2020 17:44 DARK WET/DAMP SLIGHT	01200236619 SATURDAY 15/02/2020 02:35 DARK WET/DAMP SLIGHT	01200239868 TUESDAY 03/03/2020 21:10 DARK DRY SLIGHT	01200240906 SUNDAY 08/03/2020 18:30 DARK WET/DAMP SLIGHT	01200245471 MONDAY 20/04/2020 19:08 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	307 V002 B	405 V002 B		408 V002 A 406 V001 B 406 V002 B		301 V001 A	408 V002 B 401 V002 B	405 V001 B	X 802 C001 A	405 V002 A 406 V002 A 505 V002 B
Easting/Northing	528668 177120	528679 176984	530331 178017	530269 177921	528690 176905	528705 177063	530192 177839	530223 177872	528888 177060	528758 176946

	91	92	93	94	95	96	97	98	99	100
Reference Day Date Time Light Conds Road Surface Severity	01200249109 TUESDAY 26/05/2020 10:18 LIGHT DRY SERIOUS	01200252231 SUNDAY 17/05/2020 06:50 LIGHT DRY SLIGHT	01200252545 SATURDAY 20/06/2020 17:55 LIGHT DRY SLIGHT	01200252914 TUESDAY 23/06/2020 08:11 LIGHT DRY SERIOUS	01200254362 TUESDAY 30/06/2020 18:00 LIGHT DRY SLIGHT	01200257622 TUESDAY 21/07/2020 06:00 LIGHT DRY SLIGHT	01200257729 TUESDAY 21/07/2020 18:00 LIGHT DRY SLIGHT	01200258088 THURSDAY 23/07/2020 13:10 LIGHT UNKNOWN (S/R) SLIGHT	01200258249 THURSDAY 23/07/2020 05:45 LIGHT DRY SERIOUS	01200261399 TUESDAY 11/08/2020 07:37 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	601 V002 B 405 V002 A 406 V002 A 308 V002 A	0		405 V001 B		403 V001 A 404 V001 A 405 V001 A 602 V001 A	407 V002 B			407 V001 A 407 V002 A
Easting/Northing	530331 177989	529515 177564	530283 177943	529227 177298	528657 177212	528692 176906	528641 177288	529010 177190	530171 177808	528665 177211

	101	102	103	104	105	106	107	108	109	110
Reference Day Date Time Light Conds Road Surface Severity	01200262421 MONDAY 17/08/2020 07:43 LIGHT DRY SERIOUS	01200262605 MONDAY 17/08/2020 19:28 LIGHT DRY SLIGHT	01200263494 SATURDAY 22/08/2020 22:20 DARK DRY SERIOUS	01200264098 THURSDAY 20/08/2020 08:34 LIGHT UNKNOWN (S/R) SLIGHT	01200264256 THURSDAY 27/08/2020 08:01 LIGHT DRY SERIOUS	01200264386 THURSDAY 27/08/2020 19:00 LIGHT WET/DAMP SERIOUS	01200264403 THURSDAY 27/08/2020 22:00 DARK WET/DAMP SLIGHT	01200264770 SATURDAY 29/08/2020 13:00 LIGHT DRY SLIGHT	01200264901 SUNDAY 30/08/2020 22:20 DARK DRY SLIGHT	01200264918 SATURDAY 29/08/2020 12:34 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	101 V001 B 410 V001 A		501 V001 B		701 V001 A	405 V002 B	707 V001 B	0	X 801 C001 A 701 V001 B 809 C001 A	405 V001 A
Easting/Northing	529807 177514	528656 177087	529068 177227	529043 177226	528667 177365	529969 177826	529060 177220	530240 177905	529281 177345	530286 177941

	111	112	113	114	115	116	117	118	119	120
Reference Day Date Time Light Conds Road Surface Severity	01200267340 FRIDAY 11/09/2020 21:09 DARK DRY SLIGHT	01200267524 SUNDAY 13/09/2020 15:10 LIGHT DRY SLIGHT	01200268196 WEDNESDAY 09/09/2020 06:40 DARK DRY SLIGHT	01200268311 THURSDAY 17/09/2020 08:59 LIGHT DRY SLIGHT	01200268856 SUNDAY 20/09/2020 01:20 DARK DRY SLIGHT	01200268936 SUNDAY 20/09/2020 10:15 LIGHT DRY SLIGHT	01200269333 TUESDAY 22/09/2020 13:48 LIGHT DRY SLIGHT	01200269392 TUESDAY 22/09/2020 15:30 LIGHT DRY SLIGHT	01200270910 WEDNESDAY 19/08/2020 13:30 LIGHT WET/DAMP SLIGHT	01200271070 THURSDAY 01/10/2020 06:55 LIGHT WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)		309 V001 A 406 V001 A		701 V001 A	405 V001 B   403 V001 B   405 V002 B   310 V002 B   406 V001 B	405V002B404V002B403V002B406V001B403V001B	410 V001 A	50M 50M		103 V002 B 408 V002 B 406 V001 B
Easting/Northing	528781 177071	529162 177272	529238 177314	529063 177228	528663 177127	528724 176907	530216 177838	528709 176852	529345 177410	529644 177623
	121	122	123	124	125	126	127	128	129	130
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Reference Day Date Time Light Conds Road Surface Severity	01200271539 FRIDAY 02/10/2020 23:30 DARK WET/DAMP SLIGHT	01200271611 FRIDAY 02/10/2020 19:00 DARK WET/DAMP SLIGHT	01200273146 SUNDAY 11/10/2020 10:58 LIGHT DRY SLIGHT	01200273784 WEDNESDAY 14/10/2020 14:23 LIGHT DRY SLIGHT	01200274180 FRIDAY 16/10/2020 18:40 DARK DRY SLIGHT	01200274233 FRIDAY 16/10/2020 23:10 LIGHT DRY SLIGHT	01200275026 WEDNESDAY 21/10/2020 09:35 LIGHT WET/DAMP SLIGHT	01200275251 TUESDAY 20/10/2020 13:00 LIGHT DRY SLIGHT	01200275790 FRIDAY 23/10/2020 13:40 LIGHT DRY SERIOUS	01200279079 THURSDAY 12/11/2020 16:43 DARK DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	410 V002 B 602 V002 A 501 V002 A 103 V002 B 103 V001 B		0 801 C001 A 802 C001 A	405 V002 A	404 V001 B 405 V001 B 403 V001 B 405 V002 B	509 V002 B	701 V002 B	0	x	405 V002 A 406 V001 B
Easting/Northing	529084 177243	529654 177624	530311 177913	530291 177847	528519 176793	528696 176870	529224 177298	530211 177828	528698 176880	528681 176987

	131	132	133	134	135	136	137	138	139	140
Reference Day Date Time Light Conds Road Surface Severity	01200279122 THURSDAY 12/11/2020 18:00 DARK DRY SERIOUS	01200279701 MONDAY 16/11/2020 15:00 LIGHT WET/DAMP SERIOUS	01200281417 THURSDAY 26/11/2020 19:00 DARK DRY SLIGHT	01200281632 SATURDAY 28/11/2020 10:00 LIGHT DRY SLIGHT	01200281968 MONDAY 30/11/2020 10:50 LIGHT UNKNOWN (S/R) SLIGHT	01200283974 MONDAY 07/12/2020 10:20 LIGHT UNKNOWN (S/R) SERIOUS	01200284193 FRIDAY 11/12/2020 15:25 LIGHT DRY SERIOUS	01200286587 FRIDAY 25/12/2020 22:15 DARK DRY SLIGHT	01200286737 SUNDAY 27/12/2020 15:42 LIGHT DRY SLIGHT	01200292468 FRIDAY 18/09/2020 00:30 DARK DRY SERIOUS
Conflict										
Ped Location Contributory (* denotes pre- 2005)		402 V001 B 701 V001 B 701 V002 B		50M 810 C001 A						405 V001 A
Easting/Northing	529192 177295	529227 177305	529650 177634	530348 177951	530182 177820	528649 176868	530167 177814	528663 177092	528694 176903	528682 177098

	141	142	143	144	145	146	147	148	149	150
Reference Day Date Time Light Conds Road Surface Severity	01210288640 WEDNESDAY 13/01/2021 18:56 DARK DRY SLIGHT	01210289394 WEDNESDAY 20/01/2021 09:25 LIGHT WET/DAMP SLIGHT	01210289514 TUESDAY 19/01/2021 22:45 DARK WET/DAMP SLIGHT	01210290295 TUESDAY 26/01/2021 14:15 LIGHT WET/DAMP SLIGHT	01210291146 TUESDAY 02/02/2021 08:00 LIGHT WET/DAMP SLIGHT	01210293886 TUESDAY 23/02/2021 13:00 LIGHT DRY SERIOUS	01210293898 MONDAY 22/02/2021 17:20 DARK WET/DAMP SLIGHT	01210294328 THURSDAY 25/02/2021 09:00 LIGHT DRY SLIGHT	01210294351 FRIDAY 26/02/2021 12:00 LIGHT DRY SLIGHT	01210295468 SATURDAY 06/03/2021 06:10 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	405 V002 B	103 V001 A 405 V001 A		401 V001 A	405 V001 B	408 V001 B			301 V002 B 406 V002 A	408 V002 A 406 V002 A
Easting/Northing	528925 177104	528689 176923	528716 176906	528655 177084	530097 177870	530387 177983	528538 176791	528855 177070	530406 177826	530223 177825

	151	152	153	154	155	156	157	158	159	160
Reference Day Date Time Light Conds Road Surface Severity	01210296061 WEDNESDAY 10/03/2021 08:01 LIGHT DRY SLIGHT	01210296555 FRIDAY 12/03/2021 18:15 LIGHT DRY SLIGHT	01210296936 MONDAY 15/03/2021 12:45 LIGHT DRY SLIGHT	01210298342 THURSDAY 25/03/2021 06:50 LIGHT DRY SLIGHT	01210299919 SATURDAY 03/04/2021 20:25 DARK UNKNOWN (S/R) SLIGHT	01210300568 WEDNESDAY 07/04/2021 15:45 LIGHT DRY SLIGHT	01210301340 TUESDAY 13/04/2021 08:18 LIGHT DRY SLIGHT	01210306970 WEDNESDAY 12/05/2021 21:29 DARK DRY SERIOUS	01210307909 MONDAY 17/05/2021 21:00 DARK WET/DAMP SLIGHT	01210309126 SUNDAY 23/05/2021 23:11 DARK WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	710 V001 B 405 V001 B 701 V002 B 406 V002 B		50M					405 V001 A 402 V001 A 410 V001 A	406 V002 B	103 V001 A 405 V002 A
Easting/Northing	528746 176828	529502 177554	529388 177459	529773 177690	528664 176874	530152 177757	528691 176931	530405 177813	528696 176875	528662 177131

	161	162	163	164	165	166	167	168	169	170
Reference Day Date Time Light Conds Road Surface Severity	01210309196 MONDAY 03/05/2021 18:50 LIGHT WET/DAMP SLIGHT	01210311321 THURSDAY 03/06/2021 15:55 LIGHT DRY SERIOUS	01210312425 WEDNESDAY 09/06/2021 12:17 LIGHT DRY SERIOUS	01210314628 SATURDAY 19/06/2021 13:50 LIGHT DRY SLIGHT	01210316969 FRIDAY 02/07/2021 16:15 LIGHT DRY SLIGHT	01210318814 TUESDAY 13/07/2021 10:12 LIGHT DRY SLIGHT	01210318932 TUESDAY 13/07/2021 16:20 LIGHT DRY SLIGHT	01210320402 THURSDAY 22/07/2021 16:55 LIGHT DRY SLIGHT	01210321287 THURSDAY 15/07/2021 23:18 DARK DRY SLIGHT	01210321410 WEDNESDAY 28/07/2021 18:15 LIGHT WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)		701 V002 A 701 V001 A 405 V002 B	50M 602 V001 B 701 V001 A 801 C001 A 802 C001 A	50M 808 C001 A 701 V001 A	308 V002 A 602 V002 B	602 V001 B	0	405 V002 A 404 V002 B 306 V001 B		405 V002 B 701 V002 B 405 V001 B
Easting/Northing	528661 177122	528651 177210	528687 176957	528801 176784	530287 177828	530320 177930	528883 177059	529651 177629	530195 177846	529262 177333

	171	172	173	174	175	176	177	178	179	180
Reference Day Date Time Light Conds Road Surface Severity	01210322145 SATURDAY 31/07/2021 16:30 LIGHT WET/DAMP SERIOUS	01210322843 THURSDAY 05/08/2021 14:05 LIGHT DRY SLIGHT	01210333221 FRIDAY 24/09/2021 08:45 LIGHT DRY SLIGHT	01210334181 MONDAY 27/09/2021 15:37 LIGHT DRY SLIGHT	01210334916 SATURDAY 02/10/2021 01:05 DARK DRY SLIGHT	01210335009 FRIDAY 01/10/2021 20:30 DARK DRY SLIGHT	01210335616 MONDAY 04/10/2021 15:00 LIGHT DRY SLIGHT	01210335821 WEDNESDAY 28/07/2021 18:30 LIGHT WET/DAMP SERIOUS	01210337040 SUNDAY 10/10/2021 16:10 LIGHT DRY SLIGHT	01210339208 SATURDAY 23/10/2021 02:20 DARK DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)		403 V001 B 605 V002 B 405 V001 B 406 V002 B	602 V001 B		405 V001 A 405 V002 A 605 V002 B 602 V002 A					405 V001 A 408 V002 B
Easting/Northing	528668 177141	530353 177821	528665 176873	528641 177075	530402 177827	528746 177063	529257 177324	528686 176979	530117 177848	529518 177567

	181	182	183	184	185	186	187	188	189	190
Reference Day Date Time Light Conds Road Surface Severity	01210340454 FRIDAY 29/10/2021 17:50 DARK WET/DAMP SLIGHT	01210341009 SUNDAY 31/10/2021 14:40 LIGHT WET/DAMP SLIGHT	01210341023 MONDAY 01/11/2021 08:34 LIGHT DRY SLIGHT	01210341024 MONDAY 01/11/2021 07:53 LIGHT DRY SLIGHT	01210341925 WEDNESDAY 27/10/2021 15:35 LIGHT DRY SLIGHT	01210342051 FRIDAY 05/11/2021 09:00 LIGHT DRY SLIGHT	01210342770 SUNDAY 07/11/2021 19:35 DARK UNKNOWN (S/R) SLIGHT	01210346588 SUNDAY 28/11/2021 03:10 DARK DRY SERIOUS	01210348016 FRIDAY 03/12/2021 09:11 LIGHT WET/DAMP SLIGHT	01210349977 SUNDAY 12/12/2021 20:00 DARK WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	408 V002 B 405 V002 B 408 V001 B 405 V001 B	403 V001 A	405 V001 A 403 V001 A	701 V001 A 701 V002 A		X 410 V001 B 602 V001 A 804 C001 A		410 V001 A 306 V001 A 501 V001 A		
Easting/Northing	528725 176913	528787 176959	529260 177333	528694 176878	530240 177825	530308 177838	528702 176861	528803 176776	528891 177050	528782 176957

	191	192	193	194	195	196	197	198	199	200
Reference Day Date Time Light Conds Road Surface Severity	01210351884 SATURDAY 25/12/2021 19:00 DARK WET/DAMP SLIGHT	01210351969 FRIDAY 17/12/2021 16:20 DARK DRY SLIGHT	01210351993 SATURDAY 25/12/2021 23:31 DARK DRY SLIGHT	01210364827 THURSDAY 09/12/2021 17:50 DARK DRY SLIGHT	01220353838 MONDAY 10/01/2022 07:10 DARK DRY SLIGHT	01220358240 THURSDAY 27/01/2022 00:30 DARK DRY SLIGHT	01220358993 SATURDAY 05/02/2022 22:20 DARK DRY SLIGHT	01220360984 THURSDAY 17/02/2022 19:00 DARK WET/DAMP SLIGHT	01220362847 MONDAY 28/02/2022 21:49 DARK WET/DAMP SLIGHT	01220363228 WEDNESDAY 02/03/2022 20:23 DARK WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)				x	710 V001 B				405 V002 A	405 V001 A 403 V001 A
Easting/Northing	528663 177132	530286 177945	530365 178003	528889 177063	530223 177827	530430 177813	530334 178012	530261 177926	529628 177623	528992 177174

	201	202	203	204	205	206	207	208	209	210
Reference Day Date Time Light Conds Road Surface Severity	01220363724 SATURDAY 05/03/2022 14:56 LIGHT WET/DAMP SLIGHT	01220364094 SATURDAY 05/03/2022 21:30 DARK DRY SLIGHT	01220365014 SATURDAY 12/03/2022 18:25 DARK DRY SERIOUS	01220365719 WEDNESDAY 16/03/2022 19:04 DARK WET/DAMP SERIOUS	01220366192 SATURDAY 26/02/2022 15:15 LIGHT DRY SERIOUS	01220367780 SATURDAY 26/03/2022 14:00 LIGHT DRY SLIGHT	01220370225 SUNDAY 10/04/2022 18:30 LIGHT DRY SLIGHT	01220370542 TUESDAY 12/04/2022 23:20 DARK DRY SERIOUS	01220371387 SATURDAY 16/04/2022 15:25 LIGHT DRY SLIGHT	01220371393 TUESDAY 12/04/2022 14:05 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	403 V001 A	X	50M 802 C001 A 804 C001 A 808 C001 A	405 V002 A 406 V002 A			0 805 U001 A 410 V001 B	506 V002 B 405 V001 B		

Easting/Northing	528696 176877	530420 177813	528660 177123	529294 177348	529282 177345	528662 177131	530333 177987	528667 177126	529261 177333	530284 177941
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	211	212	213	214	215	216	217	218	219	220
Reference Day Date Time Light Conds Road Surface Severity	01220373462 FRIDAY 29/04/2022 12:17 LIGHT DRY SLIGHT	01220374103 TUESDAY 03/05/2022 02:23 DARK DRY SLIGHT	01220375962 THURSDAY 12/05/2022 13:52 LIGHT DRY SLIGHT	01220378261 TUESDAY 24/05/2022 08:11 LIGHT DRY SERIOUS	01220378520 WEDNESDAY 25/05/2022 16:30 LIGHT DRY SLIGHT	01220378537 WEDNESDAY 25/05/2022 18:30 LIGHT DRY SLIGHT	01220379090 SATURDAY 28/05/2022 10:25 LIGHT DRY SLIGHT	01220380729 TUESDAY 07/06/2022 06:10 LIGHT DRY SLIGHT	01220382343 TUESDAY 14/06/2022 18:30 LIGHT DRY SLIGHT	01220382504 TUESDAY 14/06/2022 19:23 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	405 V001 A 407 V001 A 406 V001 A 405 V002 B	401 V001 A 502 V001 B 601 V001 B 602 V001 A		0 405 V001 B	405 V001 A 406 V002 A 404 V001 A	408 V001 A 405 V002 A 406 V001 B 406 V002 A	408 V001 A 509 V002 A	50M 802 C002 A	509 V002 B	
Easting/Northing	530164 177778	529460 177517	530282 177944	528521 176790	528598 176831	529572 177594	528855 177099	528858 177068	530415 177817	530222 177834

Reference Day Date Time Light Conds Road Surface Severity	221 01220383947 WEDNESDAY 22/06/2022 14:05 LIGHT DRY SLIGHT	222 01220386942 THURSDAY 07/07/2022 10:45 LIGHT DRY SERIOUS	223 01220388444 THURSDAY 14/07/2022 17:45 LIGHT DRY SLIGHT	224 01220388641 FRIDAY 15/07/2022 15:25 LIGHT DRY SLIGHT	225 01220388798 FRIDAY 15/07/2022 14:03 LIGHT DRY SLIGHT	226 01220391969 WEDNESDAY 03/08/2022 17:45 LIGHT DRY SLIGHT	227 01220394018 SUNDAY 14/08/2022 21:58 DARK DRY SLIGHT	228 01220395721 WEDNESDAY 24/08/2022 23:45 DARK DRY SLIGHT	229 01220397708 THURSDAY 24/03/2022 11:35 LIGHT DRY SLIGHT	230 01220398850 TUESDAY 06/09/2022 08:00 LIGHT UNKNOWN (S/R) SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	X 801 C001 A	405 V001 A		0 801 C001 A 802 C001 A			306 V001 B 403 V001 B 601 V001 B 602 V001 B	509 V001 A		
Easting/Northing	529129 177228	528792 176931	528651 177209	528688 176943	529376 177443	529615 177624	529633 177637	529944 177792	528690 177087	530274 177825

	231	232	233	234	235	236	237	238	239	240
Reference Day Date Time Light Conds Road Surface Severity	01220399083 MONDAY 12/09/2022 18:54 DARK DRY SERIOUS	01220399185 TUESDAY 13/09/2022 13:38 LIGHT WET/DAMP SLIGHT	01220402555 MONDAY 26/09/2022 15:30 LIGHT DRY SLIGHT	01220404306 WEDNESDAY 12/10/2022 18:09 LIGHT UNKNOWN (S/R) SLIGHT	01220404595 FRIDAY 14/10/2022 16:45 LIGHT WET/DAMP SERIOUS	01220407195 FRIDAY 28/10/2022 22:54 DARK DRY SLIGHT	01220408110 WEDNESDAY 02/11/2022 22:30 DARK WET/DAMP SLIGHT	01220408432 FRIDAY 04/11/2022 13:32 LIGHT DRY SLIGHT	01220408824 SATURDAY 05/11/2022 16:20 LIGHT DRY SLIGHT	01220409394 WEDNESDAY 09/11/2022 11:15 LIGHT WET/DAMP SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	0 602 V001 A	401 V002 A 405 V002 A 406 V002 A	x		0 405 V001 A	306 V001 A 405 V002 B	501 V002 A	410 V002 A		405 V001 B 406 V002 A
Easting/Northing	528591 176823	530339 178024	530401 177824	528664 177121	528634 177347	529812 177715	530295 177937	529065 177228	528801 176779	528672 176976

	241	242	243	244	245	246	247	248	249	250
Reference Day Date Time Light Conds Road Surface Severity	01220411633 SUNDAY 20/11/2022 01:05 DARK UNKNOWN (S/R) SLIGHT	01220412347 TUESDAY 22/11/2022 20:40 DARK DRY SLIGHT	01220412582 THURSDAY 24/11/2022 18:15 DARK WET/DAMP SERIOUS	01220412691 THURSDAY 24/11/2022 19:40 DARK WET/DAMP SLIGHT	01220412755 THURSDAY 24/11/2022 20:28 DARK WET/DAMP SLIGHT	01220414528 SATURDAY 26/11/2022 17:05 DARK DRY SLIGHT	01220415094 THURSDAY 08/12/2022 07:30 LIGHT FROST/ICE SERIOUS	01220415577 SATURDAY 10/12/2022 13:30 LIGHT DRY SLIGHT	01220418651 SUNDAY 25/12/2022 15:17 LIGHT DRY SLIGHT	01220423033 THURSDAY 10/11/2022 16:00 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)			0 103 V001 A 406 V001 B				X 103 V001 B 405 V001 A 802 C001 A	406 V001 A		
Easting/Northing	530409 177829	530236 177894	528815 176980	529380 177454	530380 177965	528704 176878	530166 177831	528889 177067	530339 177819	528664 177132

	251	252	253	254	255	256	257	258	259	260
Reference Day Date Time Light Conds Road Surface Severity	01230419865 THURSDAY 05/01/2023 17:30 DARK DRY SLIGHT	01230421612 MONDAY 16/01/2023 06:47 DARK DRY SERIOUS	01230421869 WEDNESDAY 11/01/2023 12:28 LIGHT DRY SLIGHT	01230422581 FRIDAY 20/01/2023 18:26 DARK DRY SLIGHT	01230423248 SUNDAY 22/01/2023 12:01 LIGHT UNKNOWN (S/R) SLIGHT	01230423565 WEDNESDAY 25/01/2023 22:40 DARK WET/DAMP SERIOUS	01230424873 FRIDAY 27/01/2023 19:30 DARK DRY SLIGHT	01230426757 FRIDAY 10/02/2023 08:15 LIGHT DRY SLIGHT	01230427814 SATURDAY 18/02/2023 05:05 DARK DRY SLIGHT	01230430177 FRIDAY 03/03/2023 06:10 DARK DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	403 V001 B 405 V002 B 405 V001 A	405 V001 B 406 V001 B 406 V002 B				104 V001 A 405 V001 A 406 V002 B 507 V002 A 707 V001 B		0	602 V001 A 710 V001 B	306 V002 A
Easting/Northing	528673 177134	530310 177824	529973 177811	528649 177045	530431 177815	530286 177940	529074 177236	530320 178005	529577 177585	529230 177301

	261	262	263	264	265	266	267	268	269	270
Reference Day Date Time Light Conds Road Surface Severity	01230434552 MONDAY 27/03/2023 21:13 DARK DRY SLIGHT	01230434940 WEDNESDAY 29/03/2023 22:04 DARK WET/DAMP SLIGHT	01230435604 MONDAY 03/04/2023 09:15 LIGHT DRY SLIGHT	01230437455 THURSDAY 23/03/2023 16:58 LIGHT DRY SLIGHT	01230439010 SUNDAY 23/04/2023 14:24 LIGHT DRY SLIGHT	01230440796 WEDNESDAY 03/05/2023 00:05 DARK DRY SLIGHT	01230441118 SATURDAY 29/04/2023 08:25 LIGHT UNKNOWN (S/R) SLIGHT	01230442160 TUESDAY 09/05/2023 19:05 LIGHT UNKNOWN (S/R) SLIGHT	01230445366 FRIDAY 26/05/2023 20:08 LIGHT DRY SLIGHT	01230447993 FRIDAY 09/06/2023 16:25 LIGHT DRY SERIOUS
Conflict										
Ped Location Contributory (* denotes pre- 2005)	403 V001 A	710 V002 A 605 V001 A	405 V001 B 405 V002 B	410 V001 A	405 V001 A	0			405 V001 A	406 V002 A

528686 177116

529003 177158

528681 176996

530282 177950

530287 177940

530285 177940

Easting/Northing

528694 176883

528879 177050

528664 176875

528639 177289

	271	272	273	274	275	276	277	278	279	280
Reference Day Date Time Light Conds Road Surface Severity	01230448421 SUNDAY 11/06/2023 20:29 LIGHT DRY SLIGHT	01230450157 MONDAY 19/06/2023 21:23 DARK DRY SLIGHT	01230451655 FRIDAY 23/06/2023 08:15 LIGHT DRY SLIGHT	01230452623 SATURDAY 01/07/2023 16:40 LIGHT DRY SLIGHT	01230453860 FRIDAY 07/07/2023 21:30 DARK DRY SERIOUS	01230456419 THURSDAY 20/07/2023 23:20 DARK DRY SLIGHT	01230458169 SUNDAY 30/07/2023 19:03 LIGHT WET/DAMP SLIGHT	01230458381 TUESDAY 01/08/2023 12:05 LIGHT DRY SLIGHT	01230458459 TUESDAY 01/08/2023 06:20 LIGHT DRY SLIGHT	01230460310 SATURDAY 12/08/2023 20:05 LIGHT DRY SLIGHT
Conflict										
Ped Location Contributory (* denotes pre- 2005)	305 V002 A 405 V002 A 602 V002 B	405 V001 A		408 V001 A	307 V002 A   308 V002 A   403 V002 A   409 V002 A   406 V002 A	405 V001 A				
Easting/Northing	529652 177628	529645 177632	528674 176962	528925 177107	530294 177821	529075 177238	529040 177220	530187 177829	528693 176878	530288 177938

	281	282	283	284
Reference Day Date Time Light Conds Road Surface Severity	01230460672 MONDAY 14/08/2023 10:26 LIGHT WET/DAMP SERIOUS	01230460999 THURSDAY 17/08/2023 09:03 LIGHT DRY SERIOUS	01230461504 SUNDAY 20/08/2023 05:43 LIGHT DRY SERIOUS	01230466600 MONDAY 28/08/2023 14:00 LIGHT DRY SLIGHT
Conflict				
Ped Location Contributory (* denotes pre- 2005)	402 V001 B 808 C001 B	302 V002 A	501 V004 B	

Easting/Northing	530312 177845	530280 177944	530344 178005	529266 177333
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# Appendix H

Smaller Neighbourhood ATZ Plan: Healthy Streets Characteristic Check







# **Appendix I**

TRICS Report: Residential Person Trip Rates



TRICS 7.8.4 211221 B20.35 Database right	of TRICS Consortium Limited, 2022. All right	s reserved Thursday 20/01/22 Page 1			
VECTOS 97 TOTTENHAM COURT ROAD LC	NDON	Licence No: 152301			
Filtering Summary					
Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED			
Selected Trip Rate Calculation Parameter Range 9-493 DWELLS					
Actual Trip Rate Calculation Parameter Range	14-472 DWELLS				
Date Range	Minimum: 01/01/15	Maximum: 30/06/21			
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 Tuesday Wednesday Thursday	2 4 4 3			
Main Location Types selected	Town Centre Edge of Town Centre Suburban Area (PPS6 Out of Centre) Neighbourhood Centre (PPS6 Local Centre)	2 6 2 3			
Population within 500m	All Surveys Included				
Population <1 Mile ranges selected	25,001 to 50,000 50,001 to 100,000 100,001 or More	6 3 4			
Population <5 Mile ranges selected	250,001 to 500,000 500,001 or More	1 12			
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0	5 8			
PTAL Rating	3 Moderate 5 Very Good 6a Excellent 6b (High) Excellent	3 4 4 2			

Calculation Reference: AUDIT-152301-220120-0112

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

<u>Selected regions and areas:</u> 01 GREATER LONDON

GREA	TER LONDON	
BE	BEXLEY	1 days
BM	BROMLEY	1 days
ΒT	BRENT	2 days
HG	HARINGEY	1 days
HM	HAMMERSMITH AND FULHAM	1 days
HO	HOUNSLOW	1 days
IS	ISLINGTON	3 days
SK	SOUTHWARK	2 days
WF	WALTHAM FOREST	1 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: Actual Range: Range Selected by User:	No of Dwellings 14 to 472 (units: ) 9 to 493 (units: )			
Parking Spaces Range:	All Surveys Included			
Parking Spaces per Dwelling Range: All Surveys Included				
Bedrooms per Dwelling Ran	ge: All Surveys Included			
Percentage of dwellings priv	vately owned: All Surveys Included			
Public Transport Provision:				

Selection by:

Include all surveys

Date Range: 01/01/15 to 30/06/21

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.

lays
lays
lays
lays

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

Selected survey types:	
Manual count	13 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.

<u>Selected Locations:</u>	
Town Centre	2
Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	2
Neighbourhood Centre (PPS6 Local Centre)	3

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.

4

5

4

<u>Selected Location Sub Categories:</u> Development Zone Residential Zone Built-Up Zone

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.

Secondary Filtering selection:

<u>Use Class:</u> C3

13 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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	6 days
50,001 to 100,000	3 days
100,001 or More	4 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	12 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	5 days
0.6 to 1.0	8 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	6 days
No	7 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.

<u>PTAL_Rating:</u>	
3 Moderate	3 days
5 Very Good	4 days
6a Excellent	4 days
6b (High) Excellent	2 days

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

LIST OF SITES relevant to selection parameters

1	BE-03-C-01 CROOK LOG BEXLEYHEATH	BLOCKS OF FLATS		BEXLEY
2	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i> BM-03-C-01 RINGER'S ROAD BROMLEY	s: <i>WEDNESDAY</i> BLOCKS OF FLATS	79 <i>19/09/18</i>	<i>Survey Type: MANUAL</i> BROMLEY
3	Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> BT-03-C-01 LAKESIDE DRIVE PARK ROYAL	s: <i>MONDAY</i> BLOCKS OF FLATS	160 <i>12/11/18</i>	<i>Survey Type: MANUAL</i> BRENT
4	Suburban Area (PPS) Development Zone Total No of Dwellings <i>Survey date:</i> BT-03-C-02 ENGINEERS WAY WEMBLEY	6 Out of Centre) S: <i>WEDNESDAY</i> BLOCKS OF FLATS	170 <i>28/09/16</i>	<i>Survey Type: MANUAL</i> BRENT
5	Suburban Area (PPS) Development Zone Total No of Dwellings <i>Survey date:</i> HG-03-C-01 BREAM CLOSE TOTTENHAM HALE	6 Out of Centre) s: <i>WEDNESDAY</i> BLOCKS OF FLATS	472 <i>30/11/16</i>	<i>Survey Type: MANUAL</i> HARINGEY
6	Neighbourhood Cent Residential Zone Total No of Dwellings <i>Survey date:</i> HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	re (PPS6 Local Centre) s: <i>TUESDAY</i> BLOCKS OF FLATS	255 <i>18/06/19</i>	<i>Survey Type: MANUAL</i> HAMMERSMITH AND FULHAM
7	Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> HO-03-C-04 LONDON ROAD ISLEWORTH	s: <i>TUESDAY</i> BLOCKS OF FLATS	194 <i>30/04/19</i>	<i>Survey Type: MANUAL</i> HOUNSLOW
	Neighbourhood Cent Residential Zone Total No of Dwellings <i>Survey date:</i>	re (PPS6 Local Centre) s: <i>TUESDAY</i>	203 <i>03/07/18</i>	Survey Type: MANUAL

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8	I S-03-C-05 LEVER STREET FINSBURY	BLOCK OF FLATS		ISLINGTON
9	Edge of Town Centre Built-Up Zone Total No of Dwelling: <i>Survey date:</i> I S-03-C-06 CALEDONIAN ROAD HOLLOWAY	s: <i>WEDNESDAY</i> BLOCK OF FLATS	15 <i>29/06/16</i>	<i>Survey Type: MANUAL</i> ISLINGTON
10	Edge of Town Centre Residential Zone Total No of Dwelling: <i>Survey date:</i> IS-03-C-07 CITY ROAD ISLINGTON	s: <i>MONDAY</i> BLOCK OF FLATS	14 <i>27/06/16</i>	<i>Survey Type: MANUAL</i> ISLINGTON
11	Edge of Town Centre Development Zone Total No of Dwellings <i>Survey date:</i> SK-03-C-02 LAMB WALK BERMONDSEY	s: <i>THURSDAY</i> BLOCK OF FLATS	185 <i>06/06/19</i>	<i>Survey Type: MANUAL</i> SOUTHWARK
12	Edge of Town Centre Built-Up Zone Total No of Dwelling: <i>Survey date:</i> SK-03-C-03 MARITIME STREET SURREY QUAYS	s: <i>THURSDAY</i> BLOCKS OF FLATS	29 <i>23/04/15</i>	<i>Survey Type: MANUAL</i> SOUTHWARK
13	Neighbourhood Cent Development Zone Total No of Dwelling: <i>Survey date:</i> WF-03-C-01 ERSKINE ROAD WALTHAMSTOW	re (PPS6 Local Centre) s: <i>THURSDAY</i> BLOCKS OF FLATS	233 <i>14/11/19</i>	<i>Survey Type: MANUAL</i> WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i>	s: TUESDAY	97 <i>05/11/19</i>	Survey Type: MANUAL

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This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

#### 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): 4.86

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	13	162	0.056	13	162	0.289	13	162	0.345
08:00 - 09:00	13	162	0.075	13	162	0.471	13	162	0.546
09:00 - 10:00	13	162	0.101	13	162	0.234	13	162	0.335
10:00 - 11:00	13	162	0.114	13	162	0.175	13	162	0.289
11:00 - 12:00	13	162	0.138	13	162	0.150	13	162	0.288
12:00 - 13:00	13	162	0.117	13	162	0.136	13	162	0.253
13:00 - 14:00	13	162	0.131	13	162	0.159	13	162	0.290
14:00 - 15:00	13	162	0.126	13	162	0.119	13	162	0.245
15:00 - 16:00	13	162	0.187	13	162	0.157	13	162	0.344
16:00 - 17:00	13	162	0.230	13	162	0.151	13	162	0.381
17:00 - 18:00	13	162	0.275	13	162	0.154	13	162	0.429
18:00 - 19:00	13	162	0.377	13	162	0.161	13	162	0.538
19:00 - 20:00	12	154	0.311	12	154	0.127	12	154	0.438
20:00 - 21:00	12	154	0.198	12	154	0.108	12	154	0.306
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.436			2.591			5.027

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.



## **Appendix J**

TRICS Report: Student Accomodation Person Trip Rates



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VECTOS 97 TOTTENHAM COURT ROAD LC	NDON	Licence No: 152301
Filtering Summary		
Land Use	03/G	RESIDENTIAL/STUDENT ACCOMMODATION
Selected Trip Rate Calculation Parameter Range	e 100-1100 RESIDE	
Actual Trip Rate Calculation Parameter Range	103-1100 RESIDE	
Date Range	Minimum: 01/01/13	Maximum: 09/03/20
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday Tuesday Wednesday Thursday	1 2 2 1
Main Location Types selected	Town Centre Edge of Town Centre Suburban Area (PPS6 Out of Centre)	1 4 1
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	25,001 to 50,000 50,001 to 100,000 100,001 or More	3 2 1
Population <5 Mile ranges selected	250,001 to 500,000 500,001 or More	2 4
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0	1 5
PTAL Rating	2 Poor 4 Good 5 Very Good 6a Excellent 6b (High) Excellent	1 1 1 2 1

Licence No: 152301

### VECTOS 97 TOTTENHAM COURT ROAD LONDON

Calculation Reference: AUDIT-152301-210527-0511

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use	:	03 - RESIDENTIAL
Category	:	G - STUDENT ACCOMMODATION
MULTI-MO	DE	DAL TOTAL PEOPLE

Selected regions and areas: 01 GREATER LONDON

GREA	ATER LONDON	
CN	CAMDEN	1 days
ΗK	HACKNEY	1 days
HM	HAMMERSMITH AND FULHAM	1 days
KI	KINGSTON	2 days
LB	LAMBETH	1 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:	Number of residents			
Actual Range:	103 to 1100 (units: )			
Range Selected by User:	100 to 1100 (units: )			

Parking Spaces Range: All Surveys Included

Public Transport Provision: Selection by:

Date Range: 01/01/13 to 09/03/20

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.

Include all surveys

Selected survey days:	
Monday	1 days
Tuesday	2 days
Wednesday	2 days
Thursday	1 days

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

<u>Selected survey types:</u>	
Manual count	6 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.

1
4
1

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	3
Built-Up Zone	3

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.

#### Secondary Filtering selection:

<u>Use Class:</u> C3

6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

TRICS 7.8.1 260521 B20.16 Database right of TRICS Consortium Limited, 2021. All rights reserved	Thursday 27/05/21 Page 3
VECTOS 97 TOTTENHAM COURT ROAD LONDON	Licence No: 152301
Secondary Filtering selection (Cont.):	
Population within 1 mile:	
25,001 to 50,000 3 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 2 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 5 days	
This data displays the number of selected surveys within stated ranges of average cars owned p within a radius of 5-miles of selected survey sites.	per residential dwelling,
Travel Plan	
Yes 1 days	
No. 5 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.

<u>PTAL_Rating:</u>	
2 Poor	1 days
4 Good	1 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.

RICS 7.8.1	260521 B20.16 Database right of T	TRICS Consortium Limited, 20	021. All rights reserved	Thursday 27/05/21 Page 4
ECTOS 97	7 TOTTENHAM COURT ROAD LONDO	NC		Licence No: 152301
<u>LIST</u>	OF SITES relevant to selection parame	<u>eters</u>		
1	CN-03-G-01 STUDENT FLA SAINT PANCRAS WAY KING'S CROSS	TS	CAMDEN	
2	Edge of Town Centre Built-Up Zone Total Number of residents: <i>Survey date: TUESDAY</i> HK-03-G-01 STUDENT FLA GREEN LANES STOKE NEWINGTON	571 <i>14/11/17</i> TS	<i>Survey Type: MANUAL</i> HACKNEY	
3	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of residents: <i>Survey date: MONDAY</i> HM-03-G-01 STUDENT FLA PADDENSWICK ROAD HAMMERSMITH	103 <i>09/03/20</i> TS	<i>Survey Type: MANUAL</i> HAMMERSMITH AND FU	LHAM
4	Edge of Town Centre Residential Zone Total Number of residents: <i>Survey date: THURSDAY</i> KI -03-G-01 STUDENT FLA PENRHYN ROAD KINGSTON UPON THAMES	235 <i>31/10/19</i> TS	<i>Survey Type: MANUAL</i> KINGSTON	
5	Edge of Town Centre Built-Up Zone Total Number of residents: <i>Survey date: WEDNESDAY</i> KI-03-G-02 STUDENT FLA CAMBRIDGE ROAD KINGSTON UPON THAMES NORBITON	200 <i>12/06/19</i> TS	<i>Survey Type: MANUAL</i> KINGSTON	
6	Edge of Town Centre Residential Zone Total Number of residents: <i>Survey date: WEDNESDAY</i> LB-03-G-02 STUDENT FLA WESTMINSTER BRIDGE RD LAMBETH	300 <i>26/06/19</i> TS	<i>Survey Type: MANUAL</i> LAMBETH	
	Town Centre Built-Up Zone Total Number of residents: <i>Survey date: TUESDAY</i>	1100 <i>27/11/18</i>	Survey Type: MANUAL	

V

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

#### TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION MULTI - MODAL TOTAL PEOPLE Calculation factor: 1 RESIDE BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	RESIDE	Rate	Days	RESIDE	Rate	Days	RESIDE	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	6	418	0.011	6	418	0.041	6	418	0.052
08:00 - 09:00	6	418	0.014	6	418	0.109	6	418	0.123
09:00 - 10:00	6	418	0.018	6	418	0.095	6	418	0.113
10:00 - 11:00	6	418	0.027	6	418	0.086	6	418	0.113
11:00 - 12:00	6	418	0.035	6	418	0.066	6	418	0.101
12:00 - 13:00	6	418	0.041	6	418	0.063	6	418	0.104
13:00 - 14:00	6	418	0.055	6	418	0.074	6	418	0.129
14:00 - 15:00	6	418	0.051	6	418	0.061	6	418	0.112
15:00 - 16:00	6	418	0.076	6	418	0.042	6	418	0.118
16:00 - 17:00	6	418	0.081	6	418	0.035	6	418	0.116
17:00 - 18:00	6	418	0.082	6	418	0.040	6	418	0.122
18:00 - 19:00	6	418	0.078	6	418	0.038	6	418	0.116
19:00 - 20:00	6	418	0.074	6	418	0.030	6	418	0.104
20:00 - 21:00	6	418	0.100	6	418	0.029	6	418	0.129
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.743			0.809			1.552

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.



**Appendix K TRICS Extract: Student Accomodation Mode** Share



### TRICS Extract: Student Accommodation Mode Share

Mode	
Underground, metro, light rail or tram	23%
Train	
Bus, minibus or coach	21%
Taxi	2%
Motorcycle, scooter or moped	2%
Driving a car or van	0%
Passenger in a car or van	2%
Bicycle	4%
On foot	46%
Other method of travel to work	0%
Total	100%

Note: Uses same survey references as those used in the trip generation assessment

### All Times

Modal Split Percentages



# Appendix L

# TRICS Report: Residential Servicing & Delivery Trip Rates


TRICS 7.8.4 220222 B20.37 Database right	of TRICS Consortium Limited, 2022. All right	s reserved	Friday 04/03/22 Page 1
VECTOS 97 TOTTENHAM COURT ROAD LO	NDON		Licence No: 152301
Filtering Summary			
Land Use	03/C	RESIDENTIAL/FLATS	PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	9-493 DWELLS		
Actual Trip Rate Calculation Parameter Range	79-194 DWELLS		
Date Range	Minimum: 01/01/17	Maximum: 30/06/21	
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 Tuesday Wednesday Thursday	1 2 1 1	
Main Location Types selected	Town Centre Edge of Town Centre	2 3	
Population within 500m	All Surveys Included		
Population <1 Mile ranges selected	25,001 to 50,000 50,001 to 100,000 100,001 or More	2 2 1	
Population <5 Mile ranges selected	500,001 or More	5	
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0	2 3	
PTAL Rating	3 Moderate 5 Very Good 6a Excellent 6b (High) Excellent	1 2 1 1	

Calculation Reference: AUDIT-152301-220304-0337

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : C - FLATS PRIVATELY OWNED MULTI-MODAL Servicing Vehicles

Selected regions and areas: 01 GREATER LONDON

GREA	TER LONDON	
BE	BEXLEY	1 days
BM	BROMLEY	1 days
HM	HAMMERSMITH AND FULHAM	1 days
IS	ISLINGTON	1 days
WF	WALTHAM FOREST	1 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:	79 to 194 (units: )
Range Selected by User:	9 to 493 (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: 01/01/17 to 30/06/21

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.

<u>Selected survey days:</u>	
Monday	1 days
Tuesday	2 days
Wednesday	1 days
Thursday	1 days

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

<u>Selected survey types:</u>	
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.

> 2 3

<u>Selected Locations:</u>	
Town Centre	
Edge of Town Centre	

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:	
Development Zone	1
Residential Zone	2
Built-Up Zone	2

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.

Secondary Filtering selection:

## <u>*Use Class:*</u> C3

5 days

5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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	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:	·
500,001 or More	-

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

Car ownership within 5 miles:	
0.5 or Less	2 days
0.6 to 1.0	3 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.

<u>Travel Plan:</u>	
Yes	2 days
No	3 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.

<u>PTAL_Rating:</u>	
3 Moderate	1 days
5 Very Good	2 days
6a Excellent	1 days
6b (High) Excellent	1 days

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

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Friday 04/03/22

Licence No: 152301

Page 4

# VECTOS 97 TOTTENHAM COURT ROAD LONDON

LIST OF SITES relevant to selection parameters

1	BE-03-C-01 CROOK LOG BEXLEYHEATH	BLOCKS OF FLATS		BEXLEY
2	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i> BM-03-C-01 RINGER'S ROAD BROMLEY	s: <i>WEDNESDAY</i> BLOCKS OF FLATS	79 <i>19/09/18</i>	<i>Survey Type: MANUAL</i> BROMLEY
3	Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	s: <i>MONDAY</i> BLOCKS OF FLATS	160 <i>12/11/18</i>	<i>Survey Type: MANUAL</i> HAMMERSMITH AND FULHAM
4	Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> I S-03-C-07 CITY ROAD ISLINGTON	s: <i>TUESDAY</i> BLOCK OF FLATS	194 <i>30/04/19</i>	<i>Survey Type: MANUAL</i> ISLINGTON
5	Edge of Town Centre Development Zone Total No of Dwellings <i>Survey date:</i> WF-03-C-01 ERSKINE ROAD WALTHAMSTOW	s: <i>THURSDAY</i> BLOCKS OF FLATS	185 <i>06/06/19</i>	<i>Survey Type: MANUAL</i> WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i>	s: TUESDAY	97 <i>05/11/19</i>	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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

		ARRIVALS		DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	143	0.006	5	143	0.006	5	143	0.012
08:00 - 09:00	5	143	0.011	5	143	0.006	5	143	0.017
09:00 - 10:00	5	143	0.015	5	143	0.011	5	143	0.026
10:00 - 11:00	5	143	0.017	5	143	0.011	5	143	0.028
11:00 - 12:00	5	143	0.015	5	143	0.021	5	143	0.036
12:00 - 13:00	5	143	0.013	5	143	0.015	5	143	0.028
13:00 - 14:00	5	143	0.015	5	143	0.018	5	143	0.033
14:00 - 15:00	5	143	0.007	5	143	0.006	5	143	0.013
15:00 - 16:00	5	143	0.011	5	143	0.015	5	143	0.026
16:00 - 17:00	5	143	0.020	5	143	0.021	5	143	0.041
17:00 - 18:00	5	143	0.010	5	143	0.008	5	143	0.018
18:00 - 19:00	5	143	0.014	5	143	0.014	5	143	0.028
19:00 - 20:00	5	143	0.014	5	143	0.014	5	143	0.028
20:00 - 21:00	5	143	0.004	5	143	0.006	5	143	0.010
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.172			0.172			0.344

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.



**Appendix M TRICS Report: Student Accomodation Servicing & Delivery Trip Rates** 



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VECTOS 97 TOTTENHAM COURT ROAD LO	NDON	Licence No: 152301
Filtering Summary		
Land Use	03/G	RESIDENTIAL/STUDENT ACCOMMODATION
Selected Trip Rate Calculation Parameter Range	e 100-1100 RESIDE	
Actual Trip Rate Calculation Parameter Range	200-1100 RESIDE	
Date Range	Minimum: 01/01/17	Maximum: 25/06/21
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday Wednesday Friday	2 2 1
Main Location Types selected	Town Centre Edge of Town Centre	1 4
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	25,001 to 50,000 50,001 to 100,000	3 2
Population <5 Mile ranges selected	250,001 to 500,000 500,001 or More	2 3
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0	1 4
PTAL Rating	4 Good 6a Excellent 6b (High) Excellent	2 2 1

Calculation Reference: AUDIT-152301-220304-0325

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : G - STUDENT ACCOMMODATION MULTI-MODAL Servicing Vehicles

### Selected regions and areas: 01 GREATER LONDON

GREA	ATER LONDON	
CN	CAMDEN	1 days
HM	HAMMERSMITH AND FULHAM	1 days
KI	KINGSTON	2 days
LB	LAMBETH	1 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:	Number of residents
Actual Range:	200 to 1100 (units: )
Range Selected by User:	100 to 1100 (units: )

Parking Spaces Range: All Surveys Included

Public Transport Provision: Selection by:

Include all surveys

Date Range: 01/01/17 to 25/06/21

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.

<u>Selected survey days:</u>	
Tuesday	2 days
Wednesday	2 days
Friday	1 days

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

<u>Selected survey types:</u>	
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.

> 1 4

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.

<u>Selected Location Sub Categories:</u>	
Residential Zone	2
Built-Up Zone	3

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.

Secondary Filtering selection:

## <u>Use Class:</u> C3

5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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	2 days

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

2 days
3 days

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

<u>Car ownership within 5 miles:</u>	
0.5 or Less	1 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.

<u>Travel Plan:</u>	
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.

Yes

<u>PTAL Rating:</u>	
4 Good	2 days
6a Excellent	2 days
6b (High) Excellent	1 days

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

Covid-19 Restrictions

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

7.8.4	220222 B20.37 Database right of TRICS	Consortium Limited,	2022. All rights reserved	Friday 04/03/22 Page 4
S 9	7 TOTTENHAM COURT ROAD LONDON			Licence No: 152301
LIST	OF SITES relevant to selection parameters			
I	SAINT PANCRAS WAY KING'S CROSS		CAMDEN	
	Edge of Town Centre			
	Built-Up Zone	571		
	Survey date: TUESDAY	14/11/17	Survey Type: MANL	UAL
2	HM-03-G-02 STUDENT FLATS PADDENSWICK ROAD HAMMERSMITH		HAMMERSMITH AND	FULHAM
	Edge of Town Centre			
	Residential Zone	017		
	Survey date: FRIDAY	25/06/21	Survey Type: MANL	JAL
3	KI-03-G-01 STUDENT FLATS		KINGSTON	
	PENRHYN ROAD			
	KINGSTON UPON THAMES			
	Edge of Town Centre			
	Total Number of residents:	200		
	Survey date: WEDNESDAY	12/06/19	Survey Type: MANL	JAL
4	KI-03-G-02 STUDENT FLATS		KINGSTON	
	KINGSTON UPON THAMES			
	NORBITON			
	Edge of Town Centre Residential Zone			
	Total Number of residents:	300		
	Survey date: WEDNESDAY	26/06/19	Survey Type: MANL	JAL
5	LB-03-G-02 STUDENT FLATS		LAMBETH	
	LAMBETH			
	Town Centre			
	Built-Up Zone	1100		
	I OTAL NUMBER OF RESIDENTS:	1100 <i>27/11/18</i>	SURVEN TUDE MAANI	
	Suivey date. IOLSUAT	21/11/10	σαινεγ τηρε. ΜΑΙνυ	

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

## TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION MULTI-MODAL Servicing Vehicles Calculation factor: 1 RESIDE BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	RESIDE	Rate	Days	RESIDE	Rate	Days	RESIDE	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	4	522	0.002	4	522	0.002	4	522	0.004
08:00 - 09:00	4	522	0.000	4	522	0.000	4	522	0.000
09:00 - 10:00	4	522	0.002	4	522	0.002	4	522	0.004
10:00 - 11:00	4	522	0.003	4	522	0.002	4	522	0.005
11:00 - 12:00	4	522	0.004	4	522	0.005	4	522	0.009
12:00 - 13:00	4	522	0.000	4	522	0.001	4	522	0.001
13:00 - 14:00	4	522	0.003	4	522	0.002	4	522	0.005
14:00 - 15:00	4	522	0.004	4	522	0.004	4	522	0.008
15:00 - 16:00	4	522	0.002	4	522	0.002	4	522	0.004
16:00 - 17:00	4	522	0.003	4	522	0.003	4	522	0.006
17:00 - 18:00	4	522	0.001	4	522	0.001	4	522	0.002
18:00 - 19:00	4	522	0.000	4	522	0.000	4	522	0.000
19:00 - 20:00	4	522	0.002	4	522	0.001	4	522	0.003
20:00 - 21:00	4	522	0.000	4	522	0.001	4	522	0.001
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 0.026 0.026 0.052						0.052			

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.



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