

Lee Valley Estates

**Lock Keepers Cottages, Haringey
N17 9NE**

Transport Statement

April 2020

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1 INTRODUCTION

1.1 Caneparo Associates has been appointed by Lee Valley Estates ('the Applicant') to provide traffic and transport advice in relation to their proposed redevelopment of the Lock Keeper's Cottages at the Tottenham Locks within the London Borough of Haringey (LBH).

1.2 The site is situated on a peninsular between Pymmes Brook and the River Lea, currently accommodating two cottages, which originally accommodated staff who operated the adjacent Tottenham Locks. The site is bound by A503 Ferry Lane to the south and lies between the Hale Village development to the west (developed by Lee Valley Estates (LVE)) and the Hale Wharf development to the east. The proposal includes cycle spaces in line with Draft New London Plan standards and will be car-free for all elements of the development, except for disabled parking.

1.3 The planning application proposal relates to:

"Redevelopment of the site comprising the demolition of existing buildings and the erection of a new building ranging in height from 3 to 6 storeys to accommodate 13 residential units (Class C3), employment floorspace (Class B1) at upper ground and first floor level and retail floorspace (Class A1/A3) at lower ground floor level, along with associated landscaping and public realm improvements, cycle parking provision, plant and storage and other associated works"

1.4 A copy of the Architect's proposed ground floor and basement layout plans are included at **Appendix A**.

1.5 This report has been written with the benefit of pre-application advice from LBH. Whilst the general principle of the development is supported, additional information and detail was required relating to disabled parking, cycle parking and access, which is addressed within this report.

1.6 This Transport Statement (TS) considers practical matters namely trip generation, accessibility, car and cycle parking provision, waste collection and delivery arrangements associated with the development.

1.7 The remainder of the report is set out as follows;

- Section 2 - summarises the existing site conditions;
- Section 3 - details the accessibility of the site via various modes of travel;

- Section 4 - describes the development proposal;
- Section 5 - provides relevant planning policy;
- Section 6 - examines the trip generation;
- Section 7 - assesses the effects of the development proposal; and,
- Section 8 - provides a summary and conclusion.

2 EXISTING SITUATION

The Site and Surrounding Area

- 2.1 The site is situated on the northern side of A503 Ferry Lane in Tottenham within the London Borough of Haringey (LBH). It is in a mixed-use area, which includes light industrial and retail uses, in addition to surrounding residential dwellings and is situated within 280m walking distance from Tottenham Hale Rail Station.
- 2.2 The site location relative to the local highway network and surrounding transport connections is provided in **Figure 2.1** below.

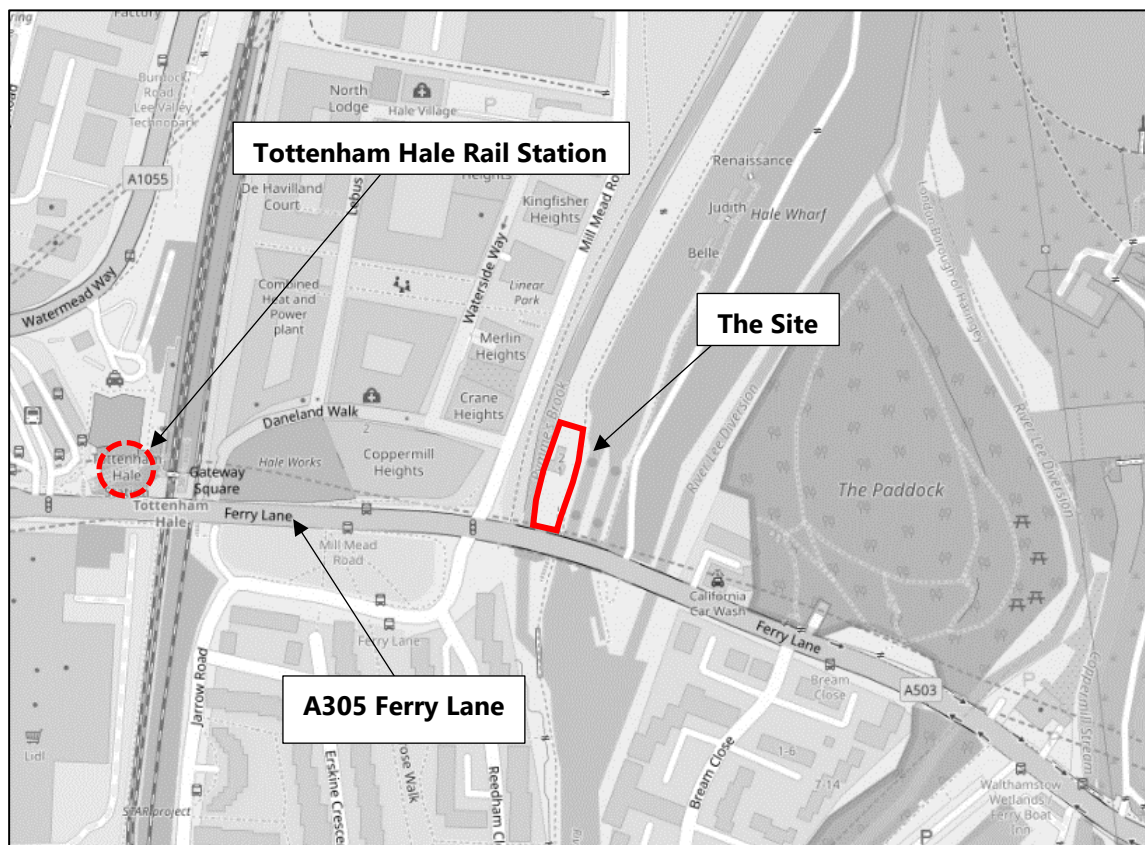


Figure 2.1: Site Location Plan

© Openstreetmap 2019

Existing Highway Network

A503 Ferry Lane

- 2.3 A503 Ferry Lane is a two-way road that extends between The Hale to the west and becomes Forest Road to the east. Ferry Lane provides westbound access towards Tottenham Hale Rail Station and Tottenham town centre, and eastbound access towards Blackhorse Road Rail Station and subsequently towards Walthamstow town centre. The road measures approximately 10.5m in width across the site frontage and accommodates cycle lanes on both sides of the carriageway.
- 2.4 The section of Ferry Lane located immediately adjacent to the site has a cycle lane marked by a solid white line, demarcating that the cycle lane is mandatory, and drivers must stay out of it at all times. As such, vehicles cannot park or drive in the cycle lane. It is also categorised as a route 'signed or marked for use by cyclists on a mixture of quiet or busier roads' by TfL.

Mill Mead Road

- 2.5 Mill Mead Road, which bounds the Pymmes Brook boundary of the site to the west, forms a signalised crossroads junction with A503 Ferry Lane. It has a speed limit of 20mph and is categorised by double yellow lines on its western side and a cycle lane on its eastern side. Mill Mead Road has a Zebra Crossing facility with tactical paving to enable safe crossing for pedestrians, located within 130m to the north of its junction with Ferry Lane. The road is subject to double yellow line parking restrictions along its length, which restricts waiting at any time.

Controlled Parking Zone

- 2.6 The local area is not within a controlled parking zone (CPZ); however, there are no feasible opportunities to park on-street within the proximity of the site, with private parking controls existing on the Ferry Lane Estate, within Hale Village and across Heron Wharf. As such, the local area is subject to stringent parking controls, which would prevent future residents from the site being able to realistically own a car and to park on-street.

Census Data

2.7 The 2011 Census has been interrogated for 'Haringey 015', in which the site is located to establish the method of journey to work for the 'workplace' (i.e. people who work locally) and 'workday' (i.e. people who live locally and travel to work) population in the Middle Super Output Area (MSOA).

2.8 The workplace data is outlined in **Table 2.1** below, which illustrates that public transport is responsible for over 40% of all trips to work by employees who work in the area.

Table 2.1: Employee Modal Split – 'Haringey 015'	
Mode	Percentage (%)
Underground	15.0%
Train	10.3%
Bus	15.9%
Taxi	0.3%
Motorcycle	1.0%
Car Driver	46.9%
Car Passenger	3.2%
Bicycle	2.2%
Walking	5.1%

2.9 The data outlined in **Table 2.2** below shows the residential modal split (i.e. how residents travel), therefore, relies upon the 'workday' population in the MSOA. This outlines that public transport is used by 70% of local residents.

Table 2.2: Residential Modal Split – 'Haringey 015'	
Mode	Percentage (%)
Underground	35.5%
Train	10.7%
Bus	23.3%
Taxi	0.2%
Motorcycle	0.7%
Car Driver	19.7%
Car Passenger	1.3%
Bicycle	2.2%
Walking	6.3%

3 ACCESSIBILITY

- 3.1 The site is accessible by non-car modes being located within walking and cycling distance of residential and employment areas. As such, there are opportunities for visitors of the site to use modes other than the private car, namely by walking, cycling and public transport.

Pedestrians

- 3.2 A person's willingness to walk is dependent on many factors including access to a car, safety, road congestion, weather, gradients, parking, health, direction of route, and purpose of journey. It is generally accepted that for journeys of up to 2km walking is an appropriate mode to replace car trips and this is set out in The Institution of Highways and Transportation (IHT) Guidelines ('Guidelines for Providing for Journeys on Foot' 2000) which suggests a maximum 'acceptable' walking distance for pedestrians without mobility impairment of 2km.
- 3.3 A 2km walking catchment from the site includes several public transport nodes, shops and services within parts of South Tottenham, Walthamstow, Stamford Hill and Harringay.
- 3.4 The roads surrounding the site provide a wide array of transport, retail, educational and commercial properties, which is confirmed in **Table 3.1** below.

Table 3.1: Approximate Walk Distances to Local Amenities		
Location	Distance (approximate metres)	Approximate Walking Time
Ferry Lane/Jarrow Road Bus Stop	85m	1 min
Tottenham Hale Rail Station, Ferry Lane	275m	3 mins
Little Engineers Nursery, Eagle Heights	350m	4 mins
Tottenham Hale/Ferry Lane Bus Stop	415m	5 mins
Ferry Lane Primary School, Erskine Road	450m	5 mins
Tottenham Hale Retail Park, Broad Lane	500m	5 mins
Ferry Island Retail Park, Station Road	550m	6 mins

- 3.5 As part of the Hale Wharf development, two new bridges will be constructed across Pymmes Brook and the River Lea, linking Mill Mead Road with the peninsular the site is located on and the Hale Wharf development. Each bridge will provide step-free access and will provide significant

benefits to the site and local area by providing access for disabled users of the canal, including the proposed retail (Class: A1/A3).

Cycling

- 3.6 Guidance on cycling can be found in the '*Cycle Friendly Infrastructure*' guidelines published by the CIHT. This guidance highlights previous research by the Department for Transport that three quarters of all journeys are less than 5 miles (8km) of which 60% are undertaken by private cars. The guidelines highlight that there is a '*substantial potential*' for substituting cycling for driving for distances up to 5 miles.
- 3.7 There is good infrastructure for cycling within the vicinity of the site, with several cycle friendly roads in the local area. TfL's Local Cycling Guide 4, indicates that A503 Ferry Lane is categorised as a route that is 'signed or marked for use by cyclists on a mixture of quiet or busier roads.' The part of Ferry Lane immediately adjacent to the site is marked by cycle lanes.

Public Transport Accessibility

Public Transport Accessibility Level (PTAL)

- 3.8 Public Transport Accessibility Levels (PTAL) are a theoretical measure of the accessibility of a given point to the public transport network, considering walking time and service availability. The method is essentially a way of measuring the density of the public transport network at a point.
- 3.9 The PTAL is categorised in six levels, 1 to 6 where 6 represents a high level of accessibility and 1 a low level of accessibility. The PTAL levels 1 and 6 are further subdivided into 'a' and 'b' levels, with level 'a' indicating the location is rated towards the lower end of the PTAL category and 'b' towards the higher end.
- 3.10 This site has a PTAL rating of 6a, which is an excellent level of accessibility. The PTAL assessment score includes bus stops that are located within 640m of the site (located within approximately eight minutes walking distance) and Underground/Rail stations within 960m of the site (located within approximately 12 minutes walking distance). The PTAL report is included at **Appendix B**.

Bus Services

- 3.11 The nearest bus stops to the site are located on Ferry Lane. As detailed in **Table 3.1** the bus stops are located within a short walk of the site. **Table 3.2** presents a summary of the bus services available from these stops.

Table 3.2: Bus Services Accessible from the Site				
Service No.	Route	Frequency (minutes)		
		Mon-Fri	Saturday	Sunday
W4	Oakthorpe Park – Jarrow Road	9-12	10-20	12-30
41	Tottenham Hale - Archway	7-13	9-15	9-15
76	Tottenham Hale - Waterloo	8-13	8-15	8-15
123	Ilford – Wood Green Station	7-12	10-13	10-14
192	Enfield Town – Edmonton Green	9-12	10-15	10-15
230	Upper Walthamstow – Wood Green Station	10-15	10-15	13-15

Source: TfL (2019)

- 3.12 Based on the information outlined in **Table 3.2**, up to 6 standard (non-school) bus routes are accessible within a 640m walking distance of the site. Moreover, between Monday to Friday, there are a total of 28 bus services during the peak hour. The bus routes outlined provide services to Wood Green, Ilford, Crouch End, Enfield Town and Edmonton Green town centres.

London Underground and Rail Services

- 3.13 Tottenham Hale London Underground Station is located within a 280m walking distance from the site to the west. It is in Travelcard Zone 3 and is served by the Victoria Line, which provides a total peak hour service of 36 trains per hour. It also operates a night tube service on Friday and Saturday nights between Walthamstow Central and Brixton Underground stations, with a frequency of a train every 10 minutes. Tottenham Hale has been identified as a step-free station in the London Underground network.
- 3.14 Tottenham Hale Station is also served by the Lea Valley line, which forms part of the West Anglia Main Line providing National Rail services. This provides services between London Liverpool Street Station to the south and to Cheshunt, Northumberland Park and Ponders End stations to the north. It also forms part of the Stansted Express service, which connects London Liverpool Street Station with Stansted Airport.

Car Clubs

3.15 There are existing Zipcar car club vehicles within walking proximity of the site. The closest locations are outlined below:

- The junction of Springfield Road / Antill Road (900m walk distance) – 2 spaces; and,
- The junction of Park View Road / Buller Road (1100m walk distance) – 1 space.

4 DEVELOPMENT PROPOSAL

4.1 The proposal seeks to demolish the existing buildings and to replace them with a new development of 6 storeys comprising a 72.8 sqm GIA retail use (Use Class A1/A3), 817.9 sqm GIA office use (Use Class B1) and 13 residential units (Use Class C3).

4.2 The breakdown of the 13 residential units is as follows:

- 5 x 1-bedroom units;
- 7 x 2-bedroom units; and,
- 1 x 3-bedroom unit.

Access

4.3 The existing pedestrian access into the site is currently achieved from a ramp on Ferry Lane. This provides access to the lower level and the tow path, which is unaffected by the proposed development. The existing site currently has no direct vehicular access.

4.4 The proposed development will seek to overcome the existing topographical challenges by elevating the ground floor level so that it is at the same height as the footway on Ferry Lane, enabling level access into the building.

Car Parking

4.5 The scheme will be car-free for all elements of the development, except for disabled parking in accordance with the Draft New London Plan. Following the advice provided in the pre-application consultation, a single disabled parking space will be provided.

4.6 Owing to the constrained nature of the site, it is not possible to provide any disabled parking within the site confines, nor is it possible to accommodate any parking on-street locally. A disabled parking space is therefore, proposed on Waterside Way, adjacent to its junction with Daneland Walk within the Hale Village Development. Further details of the proposed disabled parking arrangement are outlined in Section 7.

Cycle Parking

- 4.7 The Draft New London Plan outlines cycle parking provision for all relevant land class uses on-site.
- 4.8 Based on the breakdown of the flats, 24 long stay cycle parking spaces (inclusive of 2 larger, accessible racks for cargo bikes) have been provided. With respect to the commercial elements. It is proposed that their long stay spaces will be provided within a shared secure and covered store at the lower ground level which provide access to 4 Sheffield stands (equating to 8 spaces).
- 4.9 With respect to visitor cycle parking, a single Sheffield stand with space for two cycles will be provided within the A1/A3 retail spill out area, providing space for visitors. In addition, 2 Sheffield stands (4 cycle spaces) will be provided at ground floor level within the entrance plaza for visitors to the offices and the residential elements.

Servicing and Refuse Collection

- 4.10 All refuse collections would continue to be undertaken in a similar arrangement to the existing situation, whereby vehicles are required to service on-street.
- 4.11 Servicing activity is proposed to take place from A305 Ferry Lane, immediately outside of the site, which is the same as the extant servicing location. Across all uses, the proposed development is expected to be served by 3-5 deliveries per day.
- 4.12 The residential bin store will be located at lower ground level within a dedicated store. Site management will move bins via the secure ramp on the western side of the building to ground floor level for collection. Access via the ramp will be secured and for the use of site management only and designed to be a suitable gradient.

Workplace Travel Plan

- 4.13 The Applicant is committed to ensuring that, where practical, sustainable transport choices are promoted to residents and employees at the site. As such, a Workplace Travel Plan (WTP) has been submitted to support the planning application and submitted separately.

5 TRANSPORT PLANNING POLICY

5.1 This Section provides a summary of the relevant transport policies at a national (Central Government), regional (London Plan), and local (London Borough of Haringey) level. The following policy documents are relevant to the proposals:

- National Planning Policy Framework (2019);
- The Adopted London Plan (2016);
- The Draft London Plan 'Consolidated Suggested Changes Version' (2019);
- Haringey Local Plan Strategic Policies (2017);
- Haringey Borough Plan 2019-2023 (2018); and
- Haringey Transport Strategy (March 2018).

National Transport Policy

National Planning Policy Framework (2019)

5.2 The National Planning Policy Framework (NPPF) was updated in February 2019 and sets out the Government's planning policies for England and how these are expected to be applied.

5.3 Chapter 9 – 'Promoting Sustainable Transport' sets out central government national transport policy, with Paragraph 102 setting out that *"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

- a) The potential impacts of development on transport networks can be addressed;*
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places."

5.4 A summary of the pertinent proposed policy directions taken from Chapter 9 (Promoting Sustainable Transport) is summarised below.

"108. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

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; and

c) 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.

109. Development should only be prevented or refused on highways grounds if the residual cumulative impacts on the road network or road safety would be severe.

110. Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

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

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

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

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

- 5.5 The site is in a highly accessible location and it is considered that there are no significant residual cumulative impacts due to the proposed development.

Regional Transport Policy

The London Plan (2016)

- 5.6 The London Plan (2016) is a Spatial Development Strategy which sets out the framework for the development of London over the next 20-25 years.
- 5.7 Policy 6.1 sets out several strategic aims, key aims include:
- a) encouraging patterns and modes of development that reduce the need to travel, especially by car;*
 - b) seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand;*
 - c) supporting measures that encourage shifts to more sustainable modes and appropriate demand management; and*
 - d) promoting walking by ensuring an improved urban realm."*

The Draft London Plan 'Consolidated Suggested Changes Version' (2019)

- 5.8 Though currently in draft format, the Draft New London Plan still forms a material consideration in planning decisions and, as such, is included within this report. Six core 'good growth' policies are identified and state the following with regards to transport:

"Policy GG2 Making the best use of land – Point E: Plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth.

Policy GG3 Creating a healthy city – Point B: Promote more active and healthy lives for all Londoners and enable them to make healthy choices.

Policy GG3 Creating a healthy city – Point C: Use the Healthy Streets Approach to prioritise health in all planning decisions."

- 5.9 Policy T4 – Assessing and mitigating transport impacts provides the following advice:

B. "Transport assessments should be submitted with development proposals to ensure that any impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be required in accordance with relevant Transport for London guidance."

- 5.10 With regards to car parking, the Draft New London Plan outlines that locations with a PTAL of 5-6, are to have car-free provision, which is supported by the development.
- 5.11 With regards to cycle parking, **Table 5.1** below sets out the draft cycle parking minimum standards for all the site's land class uses.

Table 5.1: Cycle Parking Minimum Standards		
Use Class	Long-stay	Short-stay
A1 Food Retail Use	From a threshold of 100sqm: 1 space per 175 sqm (GEA)	From a threshold of 100 sqm: First 750 sqm: 1 space per 40 sqm (GEA); thereafter 1 space per 300 sqm (GEA)
A2-A5 Retail Use	From a threshold of 100 sqm: 1 space per 175 sqm (GEA)	From a threshold of 100 sqm: 1 space per 40 sqm (GEA)
B1 Office	1 space per 150 sqm	First 5,000 sqm: 1 space per 500 sqm Thereafter: 1 space per 5,000 sqm (GEA)
C3 residential	1 space per studio or 1 person 1-bedroom dwelling; 1.5 spaces per 2 person 1-bedroom dwelling; 2 spaces per all other dwellings	5 to 40 dwellings: 2 spaces; thereafter, 1 space per 40 dwellings

Local Guidance

Haringey Local Plan Strategic Policies (2017 alterations)

- 5.12 Haringey's Local Plan sets out the key visions for LBH up to 2026. It was originally adopted by LBH in March 2013, this version however, provides updates, which also consider national and London Plan related policies, which in turn affect planning on a local level. This updated version was adopted in July 2017.
- 5.13 Whilst the Local Plan does identify that LBH is well served by public transport, it does nonetheless, mention that 'a package of measures is required to restrict car use, promote sustainable transport options and change travel behaviour.'
- 5.14 It also outlines transport amongst its key principles:
- "Integrate transport and land use – creating a comprehensive public transport network that is accessible and safe for all and encourages residents to choose more sustainable modes of transport including public transport, walking and cycling."*
- 5.15 This TS aims to support and reaffirm the sustainable modes available within LBH.

Haringey Borough Plan 2019-2023 (2018)

- 5.16 LBH's Borough Plan was in consultation until 11 December 2018. It involved significant engagement with residents and local partners. It set out five priorities, which are as follows:
1. *"Housing – a safe, stable and affordable home for everyone whatever their circumstances;*
 2. *People – our vision is a Haringey where strong families, strong networks and strong communities nurture all residents to live well and achieve their potential;*
 3. *Place – a place with strong, resilient and connected communities where people can lead active and healthy lives in an environment that is safe, clean and green;*
 4. *Economy – a growing economy which provides opportunities for all our residents and supports our businesses to thrive; and*
 5. *Your Council – the way the council works."*
- 5.17 It emphasises the importance of sustainable transport use to encourage residents to be more active and to *"live longer, healthier lives and a place where people feel safe and secure in their own homes and neighbourhoods."*

5.18 Within Outcome 10: A cleaner, accessible and attractive place, it outlines a shift in *“modal shift to walking, cycling and public transport % mode share by Haringey resident based on average daily trips (TfL).”* It sets a target of this comprising 81% of all transport modes by 2022/23 and 88% by 2041.

5.19 Transport also forms a key component of Outcome 11: A culturally engaged place, in particular, *“b. Improve connectivity around the borough especially for pedestrians and cyclists.”* This is elaborated in the following points:

- *“Deliver major infrastructure projects to improve transport links in the borough, including improvements at Tottenham Hale and Seven Sisters;*
- *Make it easier to cycle around and through the borough by working with Transport for London on new cycle routes;*
- *Improve walking, cycling and bus networks, as well as public transport interchanges, enabling people to move easily around the borough and through the borough; and*
- *Coordinate and manage all street works, liaising with utility companies, neighbouring boroughs and Transport for London, to minimise disruption and congestion on the road network. ”*

Haringey Transport Strategy (2018)

5.20 This Transport Strategy sets out the transport vision for LBH for the next 10 years. It has provided an update of the existing Transport Strategy and considers Greater London-wide policy.

5.21 It also sets out Haringey’s vision, which is as follows:

“to deliver a transport system that matches our growth and prosperity ambitions, whilst also improving our environment, providing accessible choices and making walking, cycling and the use of public transport a first choice for all.”

5.22 Further to this, it will aim to achieve the vision via the following outcomes:

1. *“A public transport network that is better connected, has greater capacity and is more accessible, supporting our growth ambitions;*
2. *Active travel the default choice, with more people choosing to travel by walking or cycling;*
3. *An improved air quality and a reduction in carbon emissions from transport; and*
4. *A well maintained road network that is less congested and safer.”*

Policy Summary

- 5.23 Transport policy at all levels advocates locating new developments in areas that are accessible by public transport, walking and cycling. The development proposal is suitably located for the uptake of sustainable travel modes as well as providing car and cycle parking in accordance with relevant policy guidance. Cycle parking is provided in line with the Draft New London Plan standards, which is more onerous than and exceeds the adopted policy. This will be discussed in further detail in Section 6.

6 MULTI-MODAL TRIP GENERATION ASSESSMENT

6.1 This section of the report considers the likely trip generation which arises from the proposed development. The trip generation by each mode of transport to and from the site has been investigated throughout a typical weekday to establish the net increase in trips.

Proposed B1 Office Trip Generation

6.2 To calculate the trip generation of the proposed office use, the TRICS trip rate database was interrogated for multi-modal surveys for Greater London sites. Sites were selected under the use class 'Employment – Office' with a PTAL rating of 5-6, to reflect the proposed development's location and the number of dwellings proposed whilst returning a reasonable dataset to inform an analysis.

6.3 The arrival and departure multi-modal trip rates (per unit) for the morning and evening weekday peak hour periods and weekday 12-hour daily period are summarised in **Table 6.1** below. The office TRICS output is presented at **Appendix C**.

Table 6.1: Total Person Trip Rate & Trip Generation – 817.9m ² Office						
Time Period	Trip Rates			Trip Generation		
	Arrive	Depart	Total	Arrive	Depart	Total
AM Peak	2.173	0.000	2.173	18	0	18
PM Peak	0.189	2.331	2.520	2	19	21
Total Day	11.965	11.840	23.805	98	97	195

6.4 The office element of the proposals is expected to generate 18 person trips across the AM peak, 21 person trips across the PM peak and 195 person trips across an entire day.

6.5 The person trips can be apportioned against the modal split data set out in Section 2 to understand the different ways in which people will travel to and from the site. However, the modal split data has been adjusted by reducing car travel to 0% to reflect the development proposals (being car-free) and its highly accessible location. Therefore, the car driver modal split (and associated modes) have been reduced with a subsequent increase in active modes and public transport use.

- 6.6 A summary of the multi-modal trip generation of the proposed office is summarised in **Table 6.2** below.
- 6.7 Based on the modal split reallocation below, around 82% of the trips below will take place by public transport modes (underground, train and bus). Most of the remainder of trips (circa 15%) will be made by cycling and walking.

Table 6.2: Multi-Modal Trip Generation – 817.9m ² Office Use											
Mode	Census Modal %	Modified Modal %	AM Peak 08:00-09:00			PM Peak 17:00-18:00			Daily		
			In	Out	Total	In	Out	Total	In	Out	Total
Underground	15.0%	30.1%	5	0	5	0	6	6	29	29	59
Train	10.3%	20.7%	4	0	4	0	4	4	20	20	40
Bus	15.9%	32.0%	6	0	6	0	6	7	31	31	62
Taxi	0.3%	0.5%	0	0	0	0	0	0	0	0	1
Motorcycle	1.0%	2.0%	0	0	0	0	0	0	2	2	4
Car Driver	46.9%	0.0%	0	0	0	0	0	0	0	0	0
Car Pass.	3.2%	0.0%	0	0	0	0	0	0	0	0	0
Bicycle	2.2%	4.5%	1	0	1	0	1	1	4	4	9
Walking	5.1%	10.2%	2	0	2	0	2	2	10	10	20
Total Person	100%	100%	18	0	18	2	19	21	98	97	195
<i>Notes: Figures rounded to nearest whole numbers.</i>											

Proposed C3 Residential Generation

- 6.8 To calculate the trip generation of the proposed 13 residential units, the TRICS trip rate database was interrogated for multi-modal surveys for Greater London sites. Sites were selected under the use class 'Residential – Flats Privately Owned' within suburban and edge of town locations with a PTAL rating of 5-6, to reflect the proposed development's location and the number of dwellings proposed whilst returning a reasonable dataset to inform an analysis.
- 6.9 The arrival and departure multi-modal trip rates (per unit) for the morning and evening weekday peak hour periods and weekday 12-hour daily period are summarised in **Table 6.3** below. The residential TRICS output is presented at **Appendix D**.

Table 6.3: Total Person Trip Rate & Trip Generation – 13 Residential Units

Time Period	Trip Rates			Trip Generation		
	Arrive	Depart	Total	Arrive	Depart	Total
AM Peak	0.103	0.720	0.823	1	9	11
PM Peak	0.299	0.084	0.383	4	1	5
Total Day	2.591	2.588	5.179	34	34	67

- 6.10 The residential element of the proposals is expected to generate 11 person trips across the AM peak, 5 person trips across the PM peak and 67 person trips across an entire day.
- 6.11 The person trips can be apportioned against the modal split data set out in Section 2 to understand the different ways in which people will travel to and from the site. However, the modal split data has been adjusted by reducing car travel to 0% to reflect the development proposals (being car-free) and its highly accessible location. Therefore, the car driver and car passenger modal splits have been reduced with a subsequent increase in active modes and public transport use.
- 6.12 A summary of the multi-modal trip generation of the proposed residential dwellings is summarised in **Table 6.4** below.

Table 6.4: Multi-Modal Trip Generation – 13 Residential Units

Mode	Census Modal %	Modified Modal %	AM Peak 08:00-09:00			PM Peak 17:00-18:00			Daily		
			In	Out	Total	In	Out	Total	In	Out	Total
Underground	35.5%	45.0%	1	4	5	2	0	2	15	15	30
Train	10.7%	13.6%	0	1	1	1	0	1	5	5	9
Bus	23.3%	29.5%	0	3	3	1	0	1	10	10	20
Taxi	0.2%	0.3%	0	0	0	0	0	0	0	0	0
Motorcycle	0.7%	0.9%	0	0	0	0	0	0	0	0	1
Car Driver	19.7%	0.0%	0	0	0	0	0	0	0	0	0
Car Pass.	1.3%	0.0%	0	0	0	0	0	0	0	0	0
Bicycle	2.2%	2.8%	0	0	0	0	0	0	1	1	2
Walking	6.3%	8.0%	0	1	1	0	0	0	3	3	5
Total Person	100%	100%	1	9	11	4	1	5	34	34	67

Notes: Figures rounded to nearest whole numbers.

Proposed A1/A3 Retail Trip Generation

6.13 The trip generation of the A1/A3 retail element will principally be made of pass-by, diverted and linked trips which are already on the local network. The retail use's location as part of a direct route to Tottenham Hale Station and limited size (less than 100sqm) would not make it a destination in its own right. It is therefore, considered unlikely that the retail use would result in newly generated trips. As such, for the aforementioned reasons, the person trip generation of the retail use has not been calculated within this report.

Trip Generation Summary

6.14 **Table 6.5** below provides the total number of trips generated by the development.

Table 6.5 Total Person Trip Generation (Entire Development)									
Mode	AM Peak 08:00-09:00			PM Peak 17:00-18:00			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Underground	6	4	10	2	6	8	45	44	89
Train	4	1	5	1	4	5	25	25	49
Bus	6	3	9	2	6	8	41	41	82
Taxi	0	0	0	0	0	0	1	1	1
Motorcycle	0	0	0	0	0	0	2	2	4
Car Driver	0	0	0	0	0	0	0	0	0
Car Pass.	0	0	0	0	0	0	0	0	0
Bicycle	1	0	1	0	1	1	5	5	11
Walking	2	1	3	0	2	3	13	13	25
Total Person	19	9	28	5	20	26	132	130	262

6.15 Based on the above, the following points are noted:

- It is estimated that the proposed development would generate an additional 28 total person trips per hour during the traditional weekday morning peak period (08:00-09:00), 26 total person trips per hour during the traditional weekday evening peak period (17:00-18:00). Between 07:00 and 19:00 on a weekday it is estimated that the proposed development would generation an additional 262 total person trips (132 arrivals and 130 departures).

- It is estimated that the proposed development would generate an additional 24 total public transport trips during the AM peak hour (08:00-09:00), 21 total public transport trips during the PM peak hour and 220 total public transport trips during the day.
- During the traditional peak hour periods, as a car-free scheme, it is estimated that the proposed residential use and office extension would not generate any material additional vehicle trips in the context of background demand in the surrounding area, except for servicing and trips associated with the single disabled parking bay.
- It is evident from the trip generation calculations above, in addition to the modal split adjustment included within **Tables 6.2** and **6.4** that most people will access the site by sustainable modes of transport.
- As stated in Outcome 10 of LBH's Borough Plan, a target of walking, cycling and public transport to comprise 81% of all transport modes by 2022/23 and 88% by 2041 was outlined. The result of this site being car-free, would therefore mean that the 2041 targets would be exceeded, as indicated by the reassigned modal split in **Tables 6.2** and **6.4**.

7 EFFECTS OF DEVELOPMENT

7.1 The following section outlines the effects of the development and how they will be mitigated.

Access

7.2 Existing pedestrian access into the site is currently achieved from a ramp on A305 Ferry Lane. This provides access to a lower level and the tow path. The existing site has no direct vehicular access.

7.3 The proposed development will seek to overcome the existing topographical challenges. It will construct a step-free access, which will link the site to Mill Mead Road at ground floor level so that it is at the same height as the footway on Ferry Lane, which will enable level access into the building.

7.4 Two new bridges will be constructed across Pymmes Brook and the River Lea, associated with the Hale Wharf development, linking Mill Mead Road with the peninsular the site is located on and Hale Wharf. Each bridge will provide step-free access and will provide significant benefits to the site for disabled site users.

Car Parking

7.5 The proposed development is car-free, with the exception of disabled car parking in accordance with London Plan car parking standards for properties located in an Outer London PTAL area of 6a.

7.6 A single disabled parking space is proposed to be allocated to the site within the Hale Village development (which is owned and controlled by LVE). The closest parking space within the development is located on Waterside Way, adjacent to its junction with Daneland Walk and is currently secured as a private parking space for LVE. It is proposed that this space is re-allocated to be a disabled parking space to serve the proposed development only.

7.7 The proposed parking space is located a c.150m walk distance from the site entrance (a 2-minute walk time) and is step-free throughout, benefitting from recent improvements delivered as part of the Hale Village development which made improvements to the local highway network, including the pedestrian crossing facilities at the junction between Mill Mead Road and Ferry Lane. This is also being enhanced, by providing level access to the site (which is currently not possible). The walking route between the site and the proposed parking space is illustrated in **Figure 7.1**.

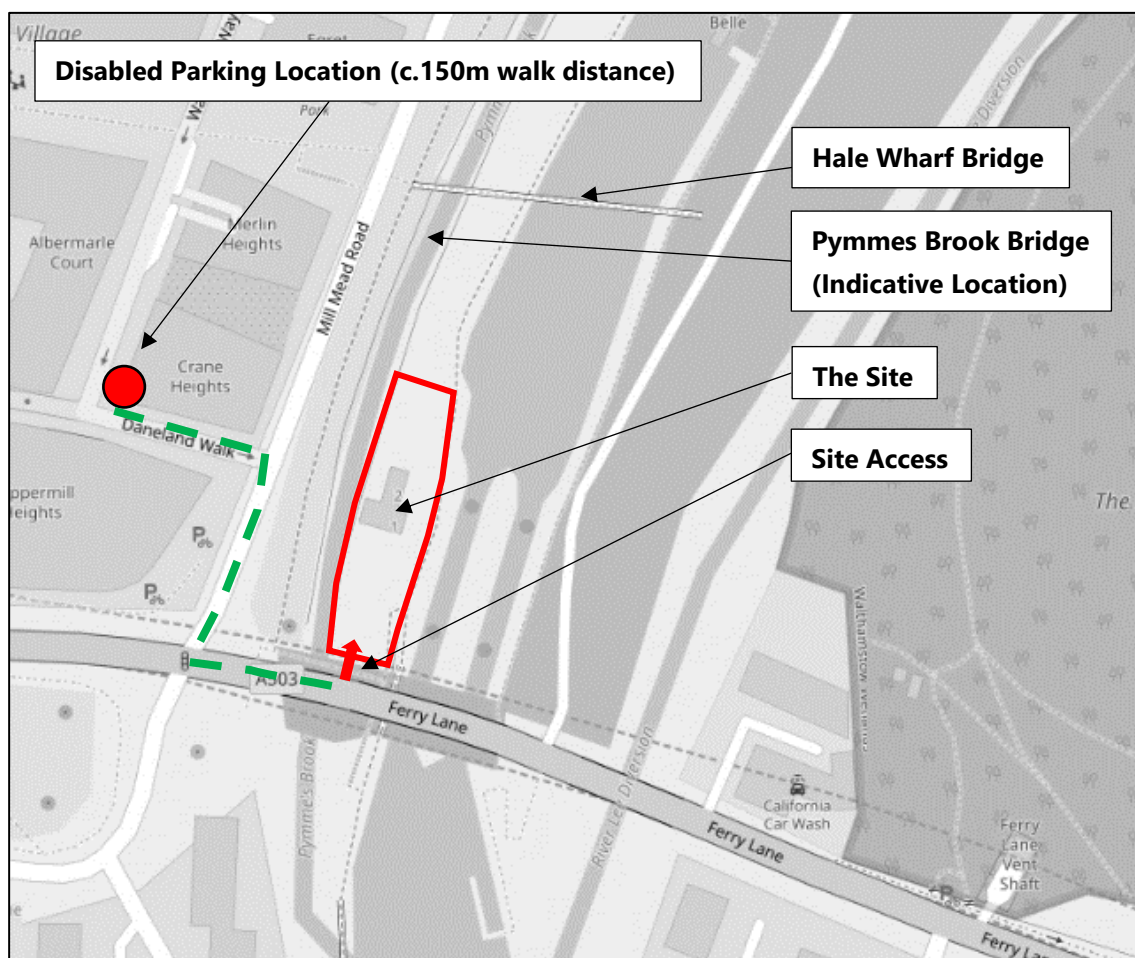


Figure 7.1: Disabled Parking Location Plan

©OpenStreetMap.com

7.8 It is outlined within Building Regulations Part M, that *"The approach route should be safe and convenient for everyone, including older and disabled people and some wheelchair users. It should adopt the shallowest gradient that can reasonably be achieved and be step-free where possible"*. It goes on to state that car parking will satisfy the requirements of Part M if *"at least one parking bay designated for disabled people is provided on firm and level ground as close as feasible to the principle entrance of the building"*. As set out above, the route between the site and the disabled bay is step-free and follows a route with a very shallow gradient, and is the closest feasible location for it, and therefore accords with the requirements of Building Regulations.

7.9 It is noted that British Standards 8300 - Design of an accessible and inclusive built environment recommends that parking spaces should be within 50m of the building. Owing to the aforementioned site constraints, this is not possible. However, the route is step-free and located as close as is feasible, in accordance with Building Regulations.

- 7.10 It is therefore considered that the proposed location of the disabled bay is acceptable.

Cycle Parking

- 7.11 Cycle parking will be provided in accordance with Draft New London Plan minimum standards. Based on the breakdown of the flats, 24 long stay cycle parking spaces (inclusive of 2 larger, accessible racks for cargo bikes) have been provided. With respect to the commercial elements. It is proposed that their long stay spaces will be provided within a shared secure and covered store at the lower ground level which provide access to 4 Sheffield stands (equating to 8 spaces) – exceeding draft London Plan requirements.
- 7.12 With respect to visitor cycle parking, a single Sheffield stand with space for two cycles will be provided within the A1/A3 retail spill out area, providing space for visitors. In addition, 2 Sheffield stands (4 cycle spaces) will be provided at ground floor level within the entrance plaza for visitors to the offices and the residential elements.
- 7.13 As the A1/A3 retail use is under 100sqm, London Plan policy states that cycle parking on-site is not required; however, it is being provided, nonetheless.
- 7.14 All cycle parking will be designed to be secure, convenient and weatherproof. Residential cycle parking will be located to the east of site, immediately adjacent to the site's residential access. It is also noted that 5% of cycle parking should be suitable for a larger cycle. As such, the development includes 2 cargo bicycle spaces located in residential cycle store on the upper ground floor, therefore meeting this requirement.
- 7.15 Locations of the cycle parking storage facilities are shown in the Architect's layout plans at **Appendix A.**

Workplace Travel Plan

- 7.16 A Workplace Travel Plan has been produced to put in place the management tools deemed necessary to enable staff and visitors of the office element to make more informed decisions about their travel to and from the site. It is designed to minimise the adverse impacts of their travel on the environment, which is achieved by setting out a strategy for eliminating the barriers that prevent the use of sustainable modes of transport.

- 7.17 It also sets out a range of sustainable transport measures that can be implemented or considered for implementation by the Travel Plan Coordinator (TPC) at the Development.

Delivery & Servicing

Deliveries

- 7.18 It is understood that the existing properties at the site are serviced directly from Ferry Lane via the ramped access, with vehicles required to stop on the carriageway. It is believed that the occupiers of the cottages move their bins to the roadside for collection on the day of waste collection.
- 7.19 Owing to the constrained nature of the site, it is not possible to accommodate vehicles within the site curtilage and all vehicles must be accommodated on-street as per the existing situation. It is proposed that servicing activity continues to occur from A305 Ferry Lane, as per the existing situation. As mentioned previously, the ground floor of the site will be constructed at the same level as the footway, which is a tangible benefit of the scheme.
- 7.20 The residential units will have a limited demand for servicing, as research suggests that flatted developments typically generate circa 12-15 deliveries per 100 units per day. It is reasonable to suggest that the proposed 13 residential units will generate circa 1 delivery per day. It is also likely that the office and retail uses, will collectively generate within the region of 2-3 deliveries over the course of a typical day.
- 7.21 This will result in a total of 3-5 deliveries per day, which will be expected to be undertaken by transit van/7.5T type vehicles with some limited access required by 10m rigid type vehicles, i.e. refuse vehicles, house moves, appliance deliveries.
- 7.22 It is likely that most deliveries to the residential units will comprise regular post vans/bikes, internet shopping, supermarket delivery vans, and occasional large goods vehicles such as furniture deliveries.

Delivery & Servicing Plan

- 7.23 The proposed servicing strategy will be secured through the implementation of a robust Delivery & Servicing Plan (DSP), which will set out the measures required to control deliveries and servicing.

- 7.24 This will provide LBH with enforcement powers should these measures/restrictions not be adhered to, which represents a greater level of control than is currently the case for the existing use on-site and is thus deemed to be a net benefit of the scheme.
- 7.25 The DSP will outline the measures that will be implemented with regards to servicing and delivery activity, including:
- Set out the number, type and profile of delivery and servicing vehicles;
 - Outline measures to ensure deliveries do not take place during peak hours;
 - Identify contact details for personnel responsible for the management of the DSP; and
 - Summarise the measures to monitor and review the DSP.
- 7.26 The DSP will be submitted separate to this TS as part of the planning application. It is anticipated that the DSP will be secured by planning condition for implementation prior to occupation of the development.

Refuse Collection

- 7.27 Refuse storage will be separated within the building with dedicated stores for residential, office and retail use. All refuse will be managed by LVE, who will move bins to be collected adjacent to the footway just before collection before returning them afterwards. It is confirmed the location of the temporary bin storage will not obstruct the pavement and be within 10m of the location of the waste collection vehicle.
- 7.28 The residential waste store will be located at lower ground level within a dedicated store. Site management will move bins via the secure ramp on the western side of the building to ground floor level for collection. Access via the ramp will be secured and for the use of site management only and designed to be a suitable gradient.
- 7.29 Waste calculations and a Site Waste Management Plan (SWMP) setting out how the refuse will be stored and collected will be submitted as a separate document.

8 SUMMARY AND CONCLUSION

Summary

- 8.1 Caneparo Associates has been appointed by Lee Valley Estates ('the Applicant') to provide traffic and transport advice in relation to their proposed redevelopment of the Lock Keeper's Cottages at the Tottenham Locks within the London Borough of Haringey (LBH).
- 8.2 The planning application seeks to demolish the existing Lock Keeper's Cottages, and to construct 13 residential flats, in addition to 817.9 sqm (GIA) of B1 office floor area and 72.8 sqm (GIA) of A1/A3 retail use with associated access, cycle parking and improvements to public realm. The proposed development will be car-free except for disabled parking. A single disabled parking space will be provided off-site within the Hale Village Development. The proposal has been assessed by taking into consideration relevant policy and the existing site conditions.
- 8.3 In summary:
- It has been determined that when using trip rates from the TRICS database, the proposed development could generate 28 person trips during the AM peak hour, 25 person trips during the PM peak hour and 262 person trips over the day. As the site is a car-free development, the trips will be predominantly by sustainable transport modes including public transport, cycling and walking;
 - The site benefits from nearby frequent bus services, which provide onward routes to several other town centres, in addition to rail stations for further onward travel. Its PTAL rating of 6a, indicates that it has excellent accessibility to public transport;
 - The elevation of the proposed development to make the ground floor the same level as the footway on Ferry Lane, is conducive to easier access for disabled site users;
 - Cycle parking will be provided in accordance with the Draft New London Plan, exceeding the current London Plan standards. The provision will offer secure, sheltered and accessible cycle parking facilities and meets the Draft New London Plan standards for all the relevant land uses. It is also noted that 5% of cycle parking is suitable for accessible bicycles (cargo bicycles);

- A Workplace Travel Plan (WTP) has been prepared, which recognises the highly accessible location of the Site, and identifies a range of measures and targets aimed at creating modal shift from public transport to more active modes (walking and cycling);
- A Site Waste Management Plan (SWMP) has been submitted separately to this document detailing the site's waste storage and collection facilities for each element. As per the existing situation, all refuse collections will be undertaken on-street with LVE Management in place to move bins to a location adjacent to the Ferry Lane footway;
- A Delivery & Servicing Plan (DSP) has been provided to set out the measures to manage deliveries and servicing associated with the proposed development, ensuring that impacts on other highway users are mitigated. It has been determined that delivery and servicing activities at the proposed site will fall within the daily variation on the local highway network; and,
- The development would be in accordance with relevant policy guidance and the proposed residential and employment uses are appropriate for this site and can be successfully accommodated by the local transport network and existing public transport facilities.

Conclusion

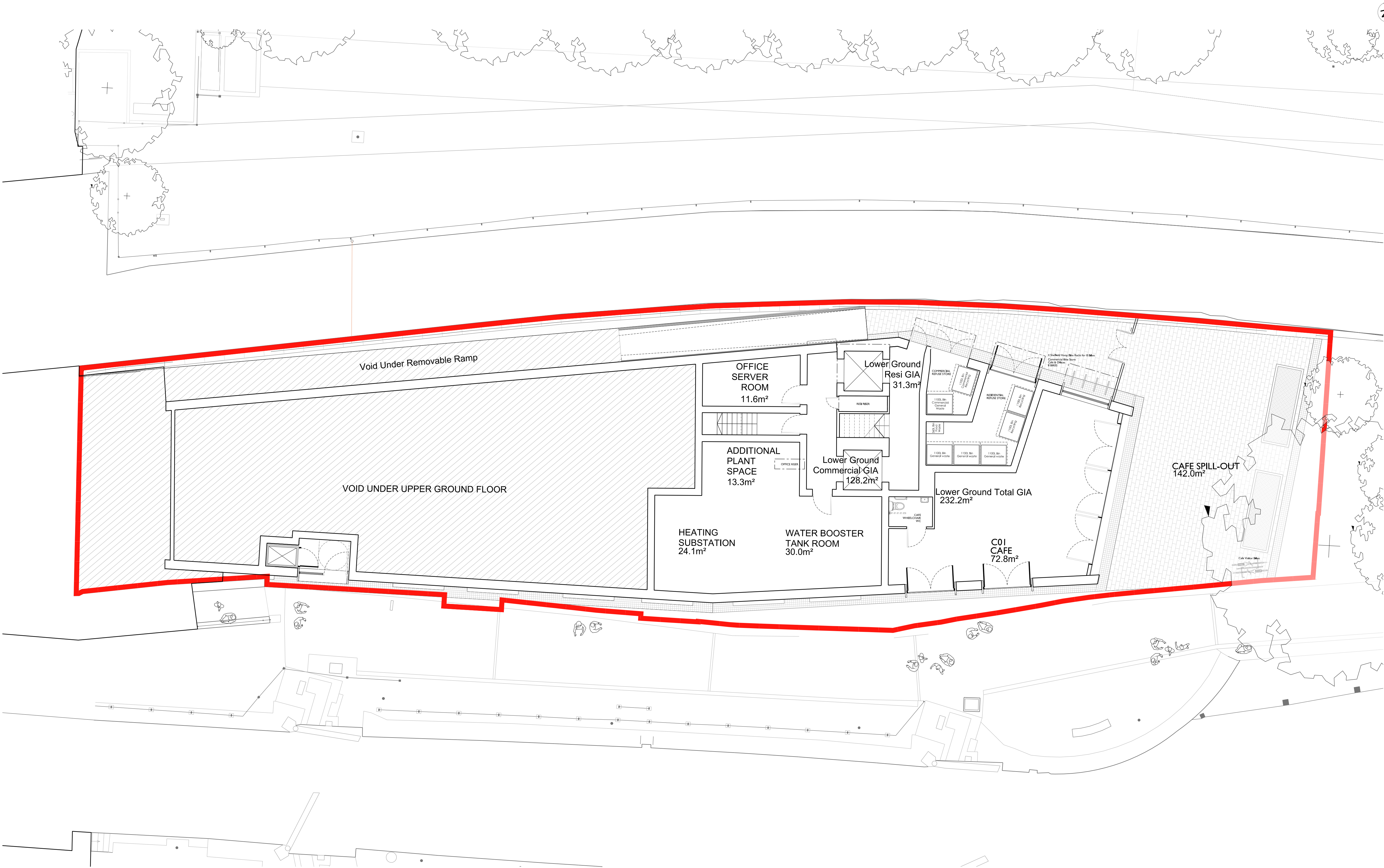
8.4 In conclusion, it is considered that the development proposal is appropriate for the location and accords with relevant adopted national, regional and local policy guidance. In the case of cycle parking, the provision exceeds the adopted standards for each land use, by adhering to the more onerous Draft New London Plan's standards. An assessment of the effects of the development identifies that it will not result in a material impact on the local transport network.

8.5 The proposal, therefore, accords with the NPPF's statement at paragraph 109 relating to the overall impact of a proposal which 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."

8.6 It is therefore, concluded that the development should not be refused on transport grounds.

Appendix A



Lower Ground Floor

Notes:

- Do not scale from this drawing; work to figured dimensions only.
- All information is to be checked on site for accuracy and fit.
- Report any discrepancies and omissions to RMA Architects.

H&S Notes - "ERIC" (Eliminate, Reduce, Isolate, Control)

Where RMA services on a project do not include for site inspections and works surveys, RMA do not warrant that 'as built' issue drawings are a complete and accurate record of what has been constructed.

Unless notified specifically by the responsible party, changes made on site to RMA design information has not been incorporated in this drawing.

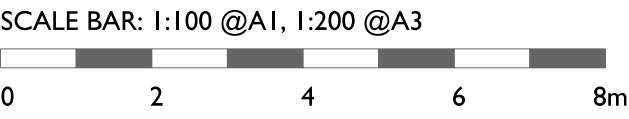


Diagram Key

VOIDS below Lower Ground Floor and Service Ramp

K	01.04.20	Areas Reviewed	AC	MMc
J	27.03.20	Issued for Planning	AC	MMc
-	11.11.19	First issued	MMc	CT
Rev	Date	Description	By	Chkd

RM_A

320C Highgate Studios
53-79 Highgate Road, London, NW5 1TL
020 7284 1414, rmaarchitects.co.uk

Key Plan

Project

THE LOCK KEEPERS

Client

LEE VALLEY ESTATES

Scale	Date	By	Checked
1:100 @A1	MMc	MMc	CT
1:200 @A3			

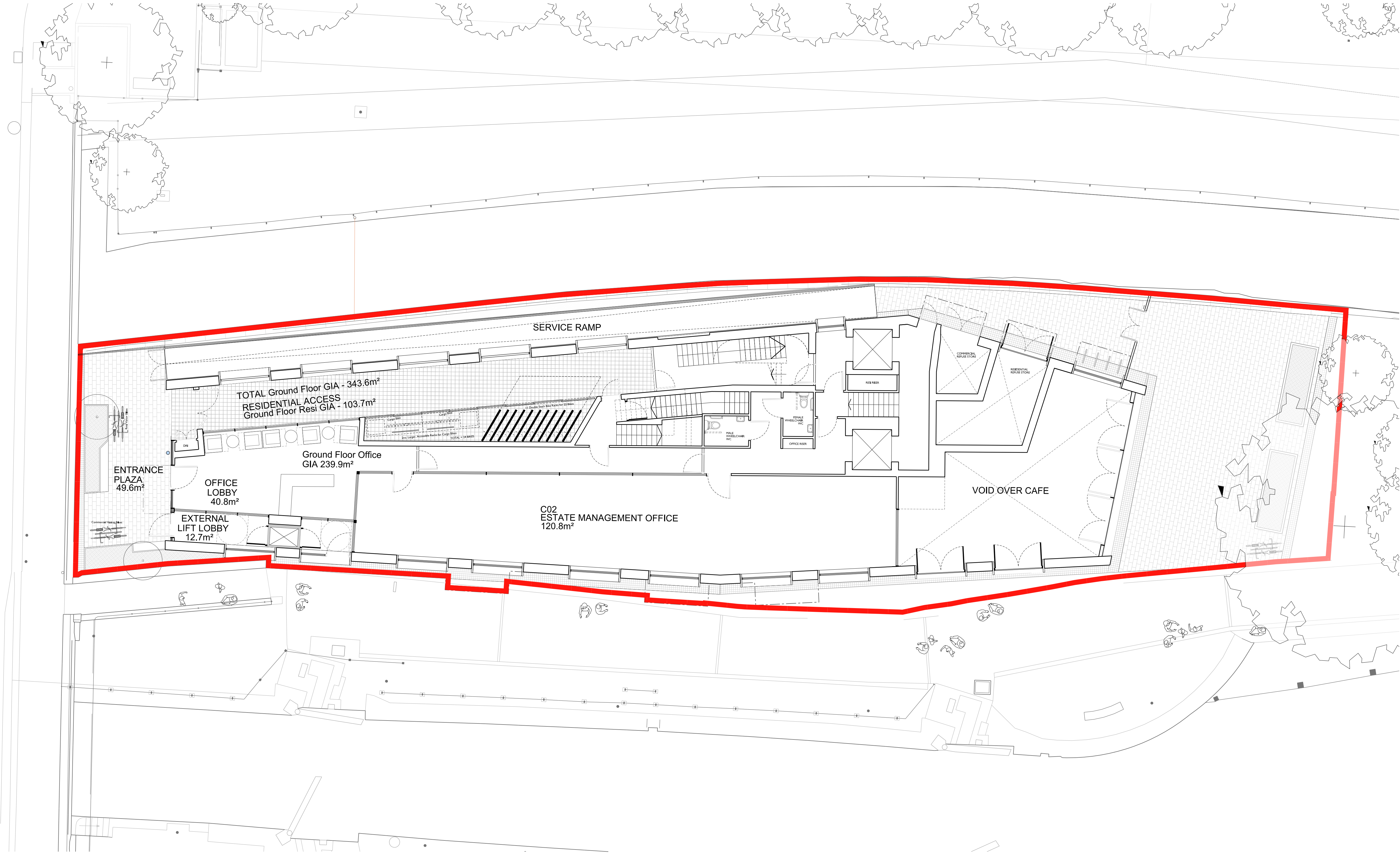
Drawing Title

Lower Ground Floor Plan

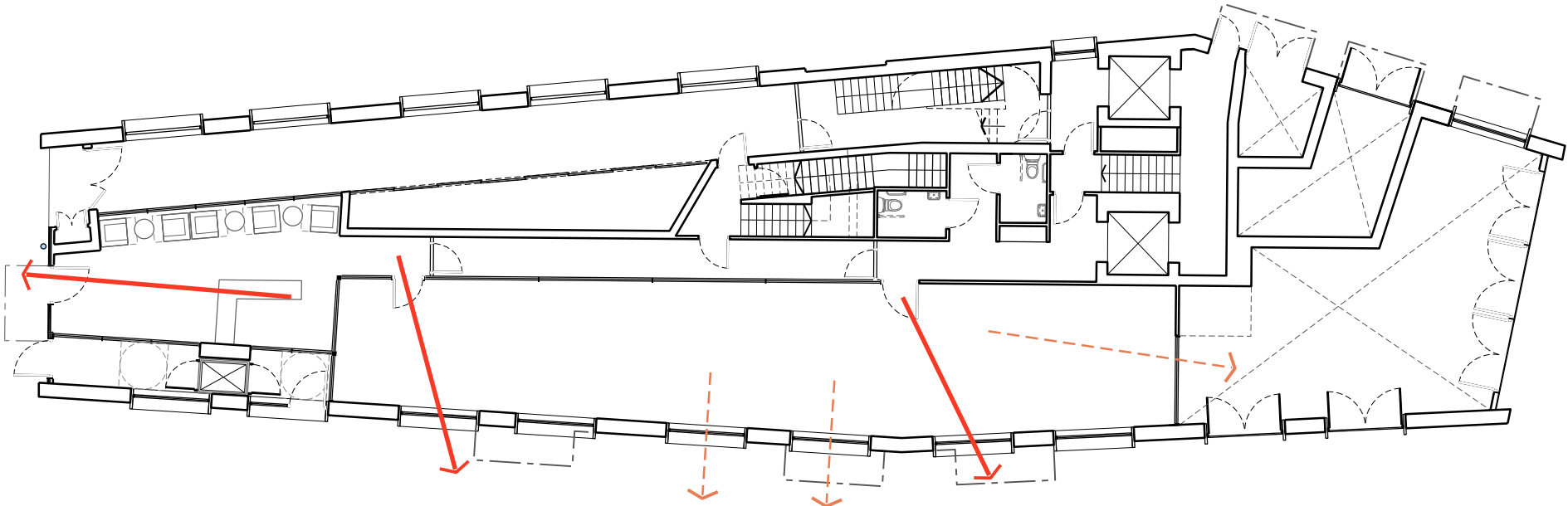
Drawing Status

PLANNING

Drawing No	Revision
1712_0109	K



Upper Ground Floor



VIEW HIERARCHY:
ENTRANCE
PRIMARY
SECONDARY



- Notes:
- Do not scale from this drawing; work to figured dimensions only.
 - All information is to be checked on site for accuracy and fit.
 - Report any discrepancies and omissions to RMA Architects.

H&S Notes - "ERIC" (Eliminate, Reduce, Isolate, Control)

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- Unless notified specifically by the responsible party, changes made on site to RMA design information has not been incorporated in this drawing.

SCALE BAR: 1:100 @A1, 1:200 @A3

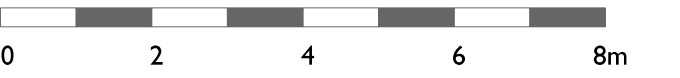


Diagram Key

N	01.04.20	Areas Reviewed	AC	MMc
M	27.03.20	Issued for Planning	AC	MMc
A	09.09.19	First issued	CN	CT
Rev	Date	Description	By	Chkd

RM_A

320C Highgate Studios
53-79 Highgate Road, London, NW5 1TL
020 7284 1414, rmaarchitects.co.uk

Key Plan

Project

THE LOCK KEEPERS

Client

LEE VALLEY
ESTATES

Scale	Date	By	Checked
1:100 1:200	@A1 @A3	Sept 2019	CN CT

Drawing Title

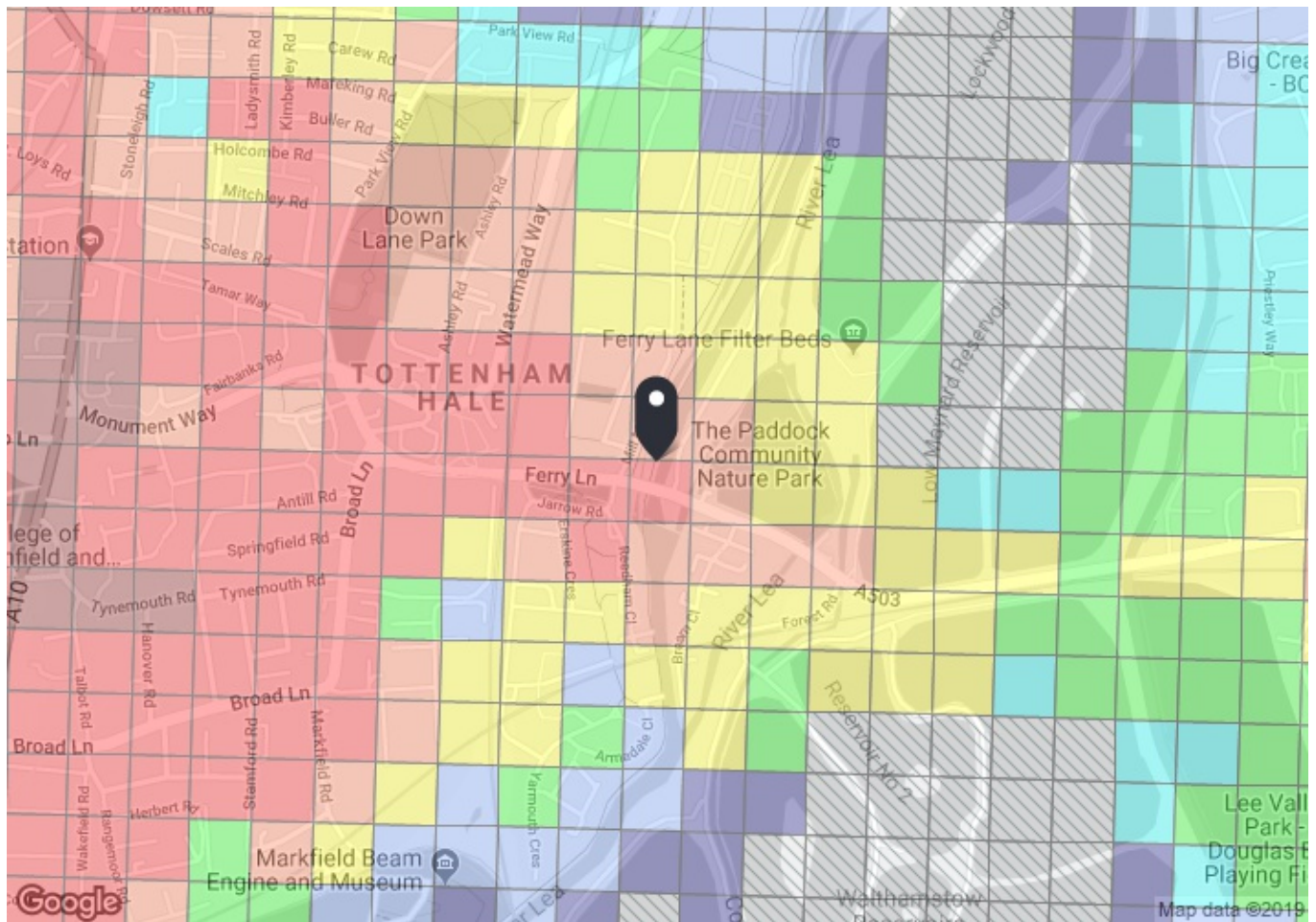
Upper Ground
Floor Plan

Drawing Status

PLANNING

Drawing No	Revision
1712_0110	N

Appendix B



PTAL output for Base Year 6a

N17 9NE
London N17 9NE, UK
Easting: 534742, Northing: 189487

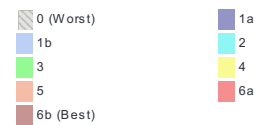
Grid Cell: 128536

Report generated: 05/08/2019

Calculation Parameters

Day of 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 Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Map key - PTAL



Map layers

 PTAL (cell size: 100m)

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	FERRY LANE JARROW ROAD	230	83.56	5	1.04	8	9.04	3.32	0.5	1.66
Bus	FERRY LANE JARROW ROAD	W4	83.56	6	1.04	7	8.04	3.73	1	3.73
Bus	FERRY LANE JARROW ROAD	123	83.56	5.5	1.04	7.45	8.5	3.53	0.5	1.76
Bus	TOTTENHAM HALE FERRY LANE	41	412.08	12	5.15	4.5	9.65	3.11	0.5	1.55
Bus	TOTTENHAM HALE FERRY LANE	192	412.08	6	5.15	7	12.15	2.47	0.5	1.23
Bus	TOTTENHAM HALE FERRY LANE	76	412.08	8	5.15	5.75	10.9	2.75	0.5	1.38
Rail	Tottenham Hale	'STANAI- LIVST 1B05'	272.44	1.33	3.41	23.31	26.71	1.12	0.5	0.56
Rail	Tottenham Hale	'STANAI- LIVST 1B07'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'STANAI- LIVST 1B09'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'STANAI- LIVST 1B11'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'STANAI- LIVST 1B15'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'STANAI- LIVST 1B17'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'LIVST- STANAI 1B20'	272.44	1.33	3.41	23.31	26.71	1.12	0.5	0.56
Rail	Tottenham Hale	'STANAI- LIVST 1B21'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'LIVST- STANAI 1B22'	272.44	2	3.41	15.75	19.16	1.57	1	1.57
Rail	Tottenham Hale	'LIVST- STANAI 1B24'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'STANAI- LIVST 1B25'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'CAMBDGE- LIVST 1H81'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'KLYNN- LIVST 1H83'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'CAMBDGE- LIVST 1H85'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'CAMBDGE- LIVST 1H91'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'CAMBDGE- LIVST 2H05'	272.44	1	3.41	30.75	34.16	0.88	0.5	0.44
Rail	Tottenham Hale	'CAMBDGE- LIVST 2H07'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'LIVST- CAMBDGE 2H08'	272.44	1.33	3.41	23.31	26.71	1.12	0.5	0.56
Rail	Tottenham Hale	'LIVST- CAMBDGE 2H12'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'HERTFDE- LIVST 2O03'	272.44	2	3.41	15.75	19.16	1.57	0.5	0.78
Rail	Tottenham Hale	'LIVST- HERTFDE 2O08'	272.44	2	3.41	15.75	19.16	1.57	0.5	0.78
Rail	Tottenham Hale	'HERTFDE- STFD 2O61'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'STFD- BROXBRN 2O62'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'BROXBRN- STFD 2O63'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'STFD- BSHPSFD 2S02'	272.44	1	3.41	30.75	34.16	0.88	0.5	0.44
Rail	Tottenham Hale	'BSHPSFD- STFD 2S05'	272.44	0.67	3.41	45.53	48.93	0.61	0.5	0.31
Rail	Tottenham Hale	'BSHPSFD- STFD 2S09'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'ELYY- LIVST 2H13'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
Rail	Tottenham Hale	'ELYY- LIVST 2H15'	272.44	0.33	3.41	91.66	95.06	0.32	0.5	0.16
LUL	Tottenham Hale	'Brixton- WalthamstowC'	272.44	15.67	3.41	2.66	6.07	4.94	1	4.94

Total Grid Cell AI: 26.51

Appendix C

Calculation Reference: AUDIT-358901-191001-1014

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON	
BT	BRENT	1 days
KN	KENSINGTON AND CHELSEA	1 days

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

Secondary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	920 to 2255 (units: sqm)
Range Selected by User:	408 to 5000 (units: sqm)

Parking Spaces Range:	All Surveys Included
-----------------------	----------------------

Public Transport Provision:

Selection by:	Include all surveys
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Date Range:	01/01/11 to 17/06/19
-------------	----------------------

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

Selected survey days:

Monday	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	2 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Neighbourhood Centre (PPS6 Local Centre)	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:

Development Zone	1
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

B1	2 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

50,001 to 100,000	1 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	2 days
-----------------	--------

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
------------	--------

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

Travel Plan:

Yes	1 days
No	1 days

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

PTAL Rating:

5 Very Good	1 days
6a Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1	BT-02-A-03 EMPIRE WAY WEMBLEY	OFFICES	BRENT
	Suburban Area (PPS6 Out of Centre) Development Zone		
	Total Gross floor area:		920 sqm
	Survey date: WEDNESDAY		03/06/15
2	KN-02-A-01 LADBROKE GROVE KENSAL GREEN	FRUIT DRINKS COMPANY	KENSINGTON AND CHELSEA
	Neighbourhood Centre (PPS6 Local Centre) Built-Up Zone		
	Total Gross floor area:		2255 sqm
	Survey date: MONDAY		17/06/19
	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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

Estimated TRIP rate value per 755 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 00:30												
00:30 - 01:00												
01:00 - 01:30												
01:30 - 02:00												
02:00 - 02:30												
02:30 - 03:00												
03:00 - 03:30												
03:30 - 04:00												
04:00 - 04:30												
04:30 - 05:00												
05:00 - 05:30												
05:30 - 06:00												
06:00 - 06:30												
06:30 - 07:00												
07:00 - 07:30	2	1588	0.094	0.713	2	1588	0.000	0.000	2	1588	0.094	0.713
07:30 - 08:00	2	1588	0.094	0.713	2	1588	0.000	0.000	2	1588	0.094	0.713
08:00 - 08:30	2	1588	0.567	4.280	2	1588	0.000	0.000	2	1588	0.567	4.280
08:30 - 09:00	2	1588	1.606	12.128	2	1588	0.000	0.000	2	1588	1.606	12.128
09:00 - 09:30	2	1588	2.016	15.219	2	1588	0.000	0.000	2	1588	2.016	15.219
09:30 - 10:00	2	1588	1.732	13.079	2	1588	0.000	0.000	2	1588	1.732	13.079
10:00 - 10:30	2	1588	0.598	4.518	2	1588	0.189	1.427	2	1588	0.787	5.945
10:30 - 11:00	2	1588	0.630	4.756	2	1588	0.031	0.238	2	1588	0.661	4.994
11:00 - 11:30	2	1588	0.157	1.189	2	1588	0.346	2.616	2	1588	0.503	3.805
11:30 - 12:00	2	1588	0.378	2.854	2	1588	0.378	2.854	2	1588	0.756	5.708
12:00 - 12:30	2	1588	0.378	2.854	2	1588	0.661	4.994	2	1588	1.039	7.848
12:30 - 13:00	2	1588	0.441	3.329	2	1588	1.165	8.798	2	1588	1.606	12.127
13:00 - 13:30	2	1588	0.693	5.231	2	1588	1.039	7.847	2	1588	1.732	13.078
13:30 - 14:00	2	1588	0.535	4.043	2	1588	1.008	7.609	2	1588	1.543	11.652
14:00 - 14:30	2	1588	0.567	4.280	2	1588	0.220	1.665	2	1588	0.787	5.945
14:30 - 15:00	2	1588	0.409	3.091	2	1588	0.441	3.329	2	1588	0.850	6.420
15:00 - 15:30	2	1588	0.252	1.902	2	1588	0.157	1.189	2	1588	0.409	3.091
15:30 - 16:00	2	1588	0.315	2.378	2	1588	0.441	3.329	2	1588	0.756	5.707
16:00 - 16:30	2	1588	0.094	0.713	2	1588	0.220	1.665	2	1588	0.314	2.378
16:30 - 17:00	2	1588	0.189	1.427	2	1588	0.252	1.902	2	1588	0.441	3.329
17:00 - 17:30	2	1588	0.126	0.951	2	1588	0.567	4.280	2	1588	0.693	5.231
17:30 - 18:00	2	1588	0.063	0.476	2	1588	1.764	13.317	2	1588	1.827	13.793
18:00 - 18:30	2	1588	0.031	0.238	2	1588	2.205	16.646	2	1588	2.236	16.884
18:30 - 19:00	2	1588	0.000	0.000	2	1588	0.756	5.707	2	1588	0.756	5.707
19:00 - 19:30												
19:30 - 20:00												
20:00 - 20:30												
20:30 - 21:00												
21:00 - 21:30												
21:30 - 22:00												
22:00 - 22:30												
22:30 - 23:00												
23:00 - 23:30												
23:30 - 24:00												
Total Rates:			11.965	90.362			11.840	89.412			23.805	179.774

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 D

Calculation Reference: AUDIT-358901-190815-0834

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
HK	HACKNEY	1 days
IS	ISLINGTON	3 days
SK	SOUTHWARK	1 days
WH	WANDSWORTH	1 days

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

Secondary 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 dwellings
 Actual Range: 9 to 30 (units:)
 Range Selected by User: 9 to 30 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 08/11/17

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

Selected survey days:

Monday	1 days
Wednesday	3 days
Thursday	2 days

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

Selected survey types:

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 undertaken using machines.

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	2

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

Selected Location Sub Categories:

Residential Zone	4
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:

Use Class:

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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
50,001 to 100,000	2 days
100,001 or More	3 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	5 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	4 days
0.6 to 1.0	2 days

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

Travel Plan:

Yes	1 days
No	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.

PTAL Rating:

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	HK-03-C-03 GREEN LANES FINSBURY PARK MANOR HOUSE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: WEDNESDAY	BLOCK OF FLATS 10 24/09/14	HACKNEY Survey Type: MANUAL
2	IS-03-C-03 FLORENCE STREET ISLINGTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: THURSDAY	BLOCK OF FLATS 9 21/11/13	ISLINGTON Survey Type: MANUAL
3	IS-03-C-05 LEVER STREET FINSBURY Edge of Town Centre Built-Up Zone Total Number of dwellings: Survey date: WEDNESDAY	BLOCK OF FLATS 15 29/06/16	ISLINGTON Survey Type: MANUAL
4	IS-03-C-06 CALEDONIAN ROAD HOLLOWAY Edge of Town Centre Residential Zone Total Number of dwellings: Survey date: MONDAY	BLOCK OF FLATS 14 27/06/16	ISLINGTON Survey Type: MANUAL
5	SK-03-C-02 LAMB WALK BERMONDSEY Edge of Town Centre Built-Up Zone Total Number of dwellings: Survey date: THURSDAY	BLOCK OF FLATS 29 23/04/15	SOUTHWARK Survey Type: MANUAL
6	WH-03-C-01 AMIES STREET CLAPHAM JUNCTION Edge of Town Centre Residential Zone Total Number of dwellings: Survey date: WEDNESDAY	BLOCKS OF FLATS 30 09/05/12	WANDSWORTH 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 VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	18	0.037	6	18	0.150	6	18	0.187
08:00 - 09:00	6	18	0.056	6	18	0.140	6	18	0.196
09:00 - 10:00	6	18	0.075	6	18	0.019	6	18	0.094
10:00 - 11:00	6	18	0.028	6	18	0.075	6	18	0.103
11:00 - 12:00	6	18	0.037	6	18	0.019	6	18	0.056
12:00 - 13:00	6	18	0.037	6	18	0.028	6	18	0.065
13:00 - 14:00	6	18	0.075	6	18	0.037	6	18	0.112
14:00 - 15:00	6	18	0.009	6	18	0.075	6	18	0.084
15:00 - 16:00	6	18	0.103	6	18	0.019	6	18	0.122
16:00 - 17:00	6	18	0.047	6	18	0.065	6	18	0.112
17:00 - 18:00	6	18	0.065	6	18	0.000	6	18	0.065
18:00 - 19:00	6	18	0.065	6	18	0.037	6	18	0.102
19:00 - 20:00	3	19	0.000	3	19	0.000	3	19	0.000
20:00 - 21:00	3	19	0.017	3	19	0.034	3	19	0.051
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.651			0.698			1.349

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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Parameter summary

Trip rate parameter range selected:	9 - 30 (units:)
Survey date date range:	01/01/11 - 08/11/17
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	18	0.000	6	18	0.009	6	18	0.009
08:00 - 09:00	6	18	0.000	6	18	0.047	6	18	0.047
09:00 - 10:00	6	18	0.000	6	18	0.009	6	18	0.009
10:00 - 11:00	6	18	0.000	6	18	0.000	6	18	0.000
11:00 - 12:00	6	18	0.000	6	18	0.000	6	18	0.000
12:00 - 13:00	6	18	0.009	6	18	0.009	6	18	0.018
13:00 - 14:00	6	18	0.009	6	18	0.000	6	18	0.009
14:00 - 15:00	6	18	0.000	6	18	0.000	6	18	0.000
15:00 - 16:00	6	18	0.000	6	18	0.000	6	18	0.000
16:00 - 17:00	6	18	0.000	6	18	0.009	6	18	0.009
17:00 - 18:00	6	18	0.019	6	18	0.009	6	18	0.028
18:00 - 19:00	6	18	0.000	6	18	0.000	6	18	0.000
19:00 - 20:00	3	19	0.069	3	19	0.000	3	19	0.069
20:00 - 21:00	3	19	0.000	3	19	0.000	3	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.106			0.092			0.198

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	18	0.019	6	18	0.093	6	18	0.112
08:00 - 09:00	6	18	0.019	6	18	0.168	6	18	0.187
09:00 - 10:00	6	18	0.019	6	18	0.093	6	18	0.112
10:00 - 11:00	6	18	0.037	6	18	0.065	6	18	0.102
11:00 - 12:00	6	18	0.028	6	18	0.019	6	18	0.047
12:00 - 13:00	6	18	0.056	6	18	0.000	6	18	0.056
13:00 - 14:00	6	18	0.019	6	18	0.037	6	18	0.056
14:00 - 15:00	6	18	0.037	6	18	0.047	6	18	0.084
15:00 - 16:00	6	18	0.084	6	18	0.019	6	18	0.103
16:00 - 17:00	6	18	0.121	6	18	0.047	6	18	0.168
17:00 - 18:00	6	18	0.075	6	18	0.065	6	18	0.140
18:00 - 19:00	6	18	0.112	6	18	0.056	6	18	0.168
19:00 - 20:00	3	19	0.103	3	19	0.052	3	19	0.155
20:00 - 21:00	3	19	0.069	3	19	0.086	3	19	0.155
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.798			0.847			1.645

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	18	0.009	6	18	0.150	6	18	0.159
08:00 - 09:00	6	18	0.019	6	18	0.252	6	18	0.271
09:00 - 10:00	6	18	0.019	6	18	0.103	6	18	0.122
10:00 - 11:00	6	18	0.009	6	18	0.047	6	18	0.056
11:00 - 12:00	6	18	0.028	6	18	0.000	6	18	0.028
12:00 - 13:00	6	18	0.009	6	18	0.019	6	18	0.028
13:00 - 14:00	6	18	0.028	6	18	0.019	6	18	0.047
14:00 - 15:00	6	18	0.019	6	18	0.028	6	18	0.047
15:00 - 16:00	6	18	0.047	6	18	0.019	6	18	0.066
16:00 - 17:00	6	18	0.019	6	18	0.000	6	18	0.019
17:00 - 18:00	6	18	0.131	6	18	0.009	6	18	0.140
18:00 - 19:00	6	18	0.121	6	18	0.009	6	18	0.130
19:00 - 20:00	3	19	0.276	3	19	0.034	3	19	0.310
20:00 - 21:00	3	19	0.086	3	19	0.017	3	19	0.103
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.820			0.706			1.526

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	18	0.084	6	18	0.458	6	18	0.542
08:00 - 09:00	6	18	0.103	6	18	0.720	6	18	0.823
09:00 - 10:00	6	18	0.178	6	18	0.252	6	18	0.430
10:00 - 11:00	6	18	0.065	6	18	0.224	6	18	0.289
11:00 - 12:00	6	18	0.093	6	18	0.037	6	18	0.130
12:00 - 13:00	6	18	0.112	6	18	0.056	6	18	0.168
13:00 - 14:00	6	18	0.131	6	18	0.093	6	18	0.224
14:00 - 15:00	6	18	0.065	6	18	0.150	6	18	0.215
15:00 - 16:00	6	18	0.336	6	18	0.056	6	18	0.392
16:00 - 17:00	6	18	0.215	6	18	0.131	6	18	0.346
17:00 - 18:00	6	18	0.299	6	18	0.084	6	18	0.383
18:00 - 19:00	6	18	0.290	6	18	0.103	6	18	0.393
19:00 - 20:00	3	19	0.448	3	19	0.086	3	19	0.534
20:00 - 21:00	3	19	0.172	3	19	0.138	3	19	0.310
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.591			2.588			5.179

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.