SEPTEMBER 2025

Healthy Streets Transport Assessment

Motspur Park Gas Holder Site

ICENI PROJECTS LIMITED ON BEHALF OF BERKELEY HOMES (WEST LONDON) LIMITED

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September 2025

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CONTENTS

APPENDICES

1. INTRODUCTION

Overview

1.1 This Healthy Streets Transport Assessment (TA) has been prepared by Iceni Projects ('Iceni') on behalf of Berkeley Homes (West London) Limited ('the Applicant') to support a Full Planning Application for a residential redevelopment on land in Motspur Park, south of West Barnes Lane (the Site) situated in Royal Borough of Kingston upon Thames (RBKuT). The northern access to the Site however, sits within the London Borough of Merton (LBM).

1.2 The description of development is as follows:

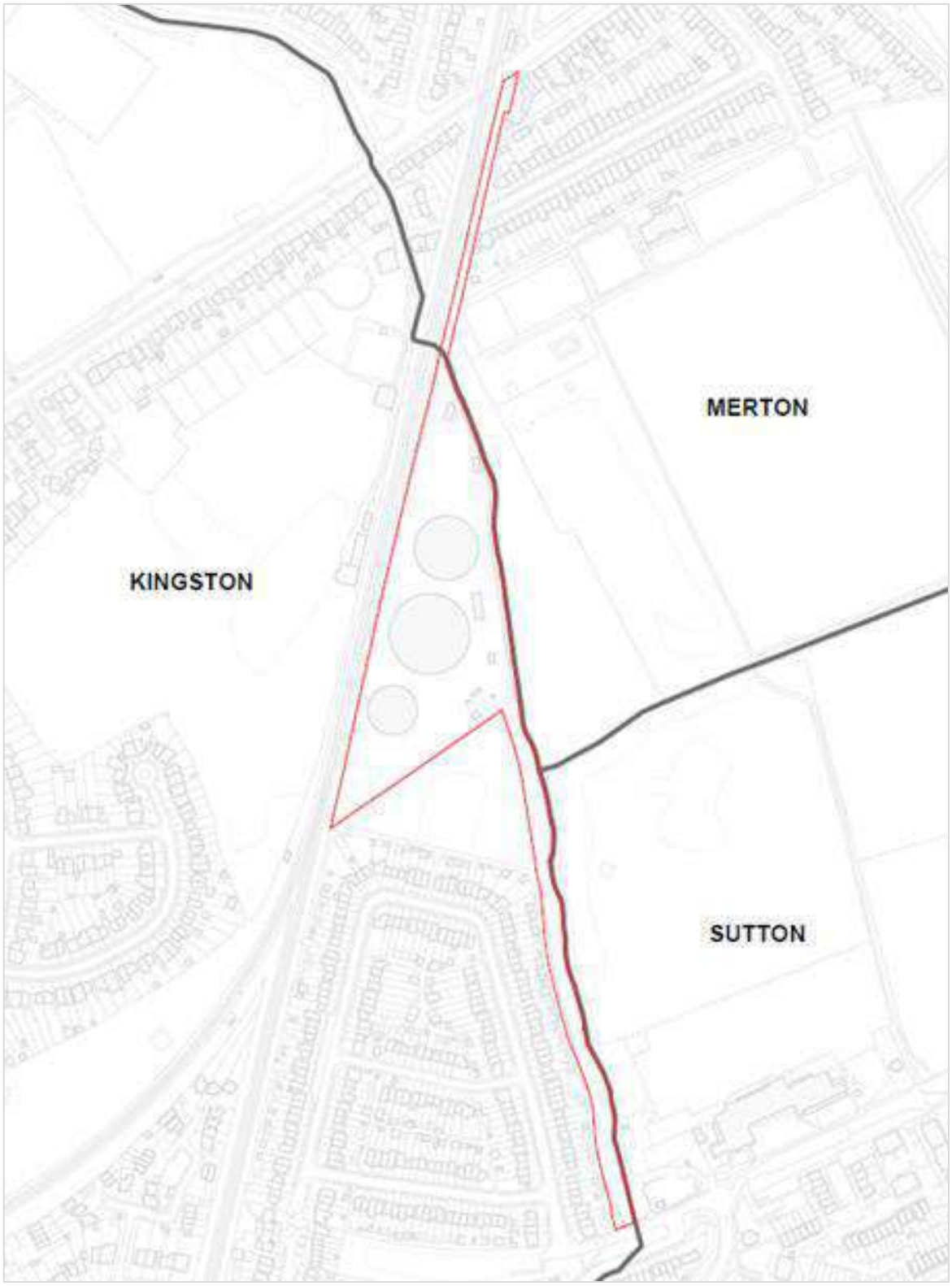
Demolition of existing gasholders and associated above ground structures / buildings and redevelopment to provide a residential development and ancillary residential facilities (C3 Use Class), together with associated works to the existing accesses and internal vehicular routes, new pedestrian and cycle routes, the provision of new publicly accessible open space, amenity space, hard and soft landscaping, cycle and car parking, works to the brook embankment, re-siting of some gas infrastructure, ground works and plant.

1.3 The development also comprises a cross-boundary application given the red line crosses LBM's boundary around the northern access. The description of development within LBM's jurisdiction is therefore as follows:

Works to vehicle access onto West Barnes Lane, including hard and soft landscaping and new public realm and associated ground works.

1.4 A plan demonstrating the Site boundary in relation to the Borough boundaries of RBKuT, LBM and the London Borough of Sutton (LBS) is provided in **Figure 1-1**.

Figure 1-1 Site Location and Borough Boundaries

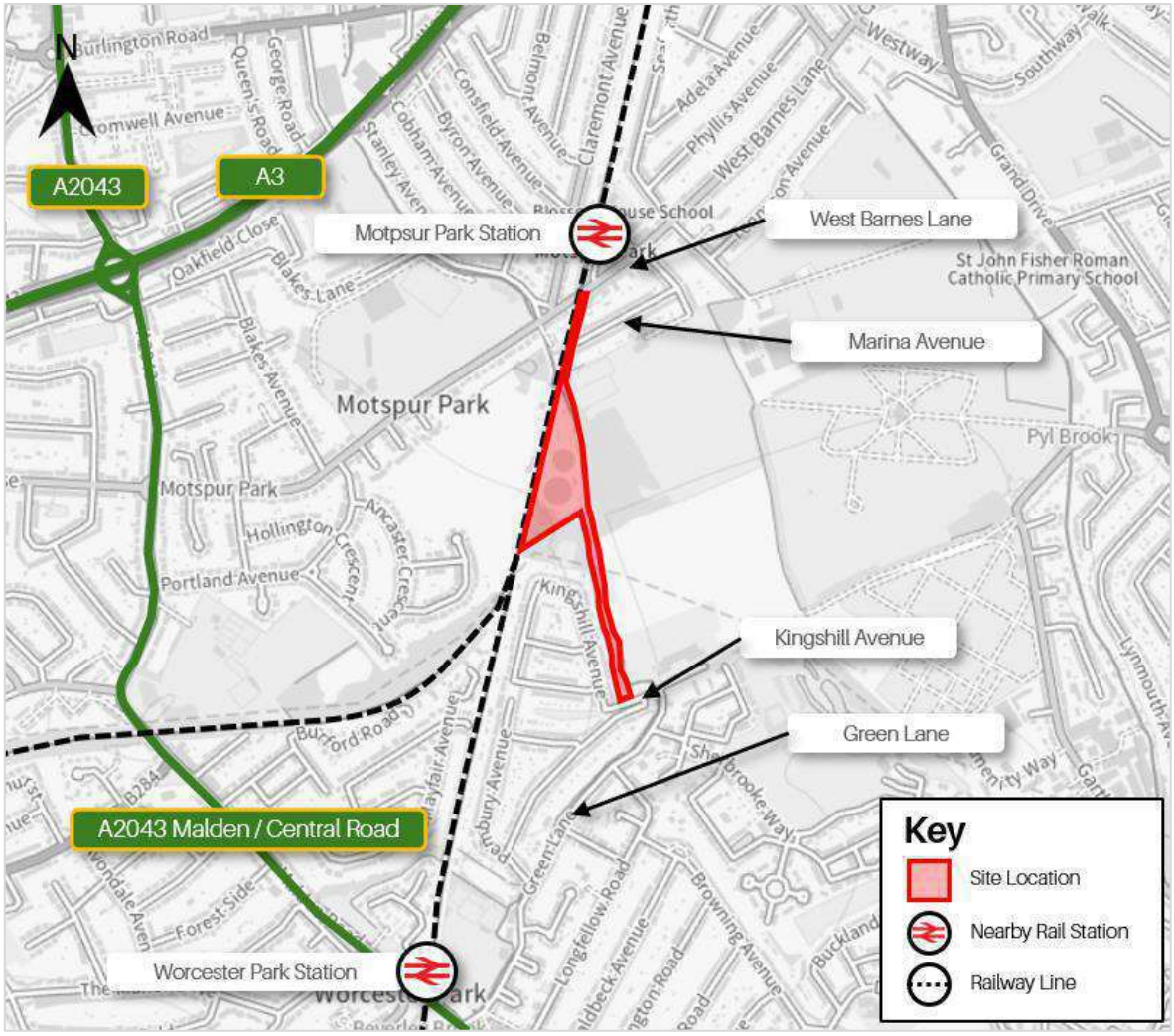


1.5 The Proposed Development comprises a total of 586 residential dwellings (C3), inclusive of 35% affordable homes by habitable room – comprised of 50% affordable rent and 50% shared ownership.

1.6 This Healthy Streets TA has been prepared in accordance with Transport for London's (TfL) Healthy Streets criteria and includes a day time and night time Healthy Streets Active Travel Zone (ATZ) assessment to evaluate the quality of walking / cycling routes in the local area, further details of which are detailed within Chapter 5.

1.7 The Site location is confirmed in **Figure 1-2**, with the full Proposed Development layout provided in **Appendix A1**.

Figure 1-2 Site Location



Development Vision

1.8 The central aspirations for the proposed development with regard to transport is focused on the following:

- Integrating the Site with its locality by enhancing permeability for pedestrians and cyclists to the north and south. The aim is to not only deliver a scheme which provides a high-quality active

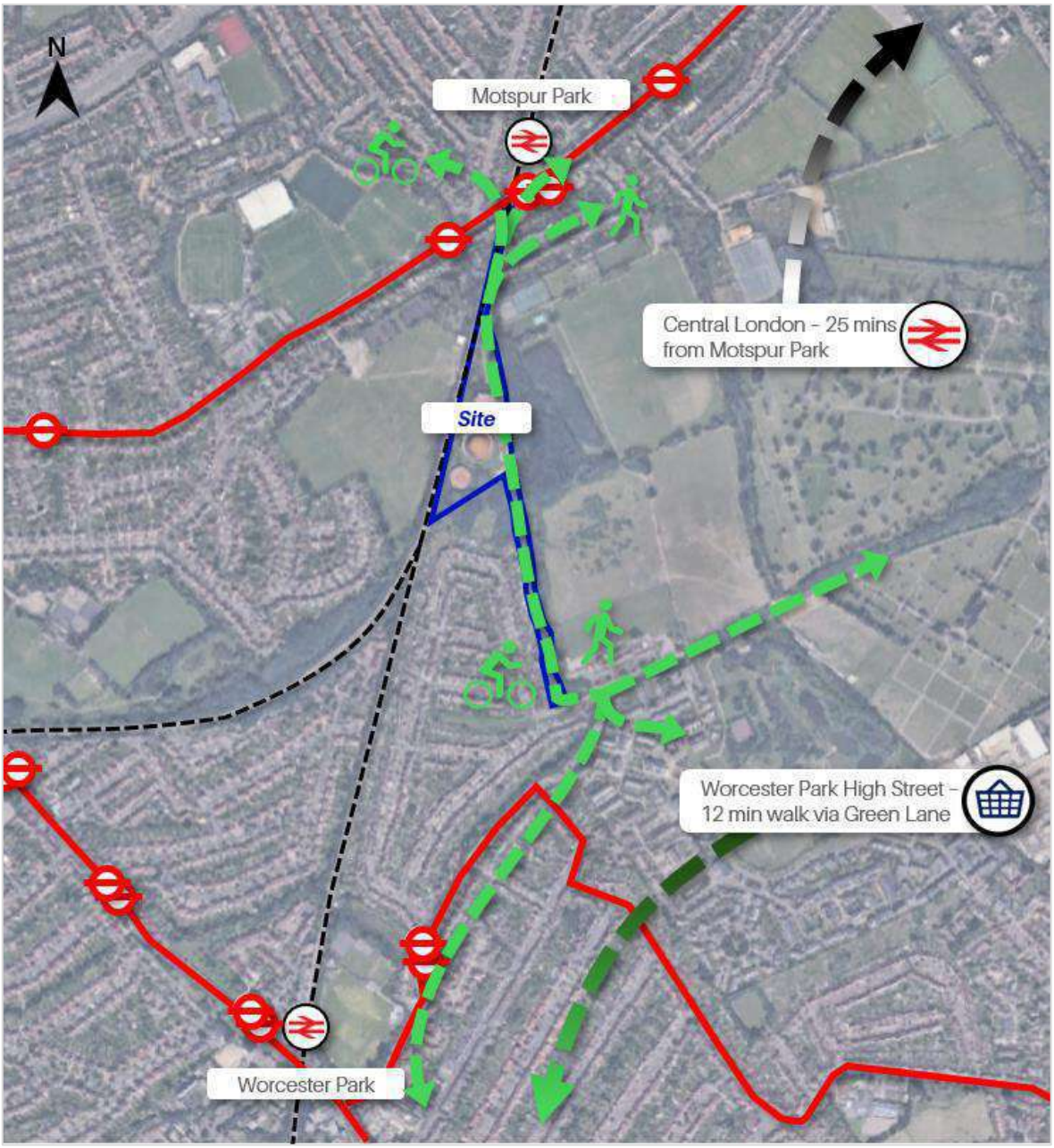
travel infrastructure for prospective residents, but also benefit existing residents in the locality with the introduction of a route along a prominent desire line between the Motspur Park and Worcester Park Stations.

- Embedding active travel at the heart of the scheme through the provision of internal pedestrian and cycle routes and high-quality on-site cycle storage facilities. Cycle parking will be London Plan and London Cycle Design Standards compliant. The quality of stands will be met with 5% enlarged bays and 20% Sheffield Stands. Visitor parking will also be provided.

1.9 These aspirations are in accordance with the National Design Guide and NPPF policy 117 part a) to firstly consider cycle and pedestrian in any development.

1.10 To support the above aspirations, a vision plan is provided on **Figure 1-3**, which illustrates how the Proposed Development will provide a wider connectivity benefit to the locality.

Figure 1-3 Vision Plan



Planning History

1.11 Historically, the Site has been subject to previous pre-application correspondence between the Applicant, RBKuT and TfL on highways matters. While certain matters in relation to the previous scheme have since been superseded by the pre-application correspondence in relation to the Proposed Development, the matters raised as part of previous consultation are enclosed within the Transport Assessment Scoping Report (TASR) provided in **Appendix A2**.

Pre-Application Correspondence

1.12 Extensive pre-application correspondence has been undertaken with the relevant authorities, inclusive of the submission of a TASR to RBKuT, LBM and TfL to agree the transport approach from the outset of the scheme. The TASR is provided for reference in **Appendix A2**.

1.13 The following consultations were undertaken as part of pre-application correspondence:

- TfL pre-app with LBM and RBKuT – 7th January 2025.
- RBKuT Highways Meeting – 7th March 2025.
- LB Sutton Highways Meeting – 18th March 2025.
- Greater London Authority (GLA) final pre-app – 21st August 2025.
- Meeting with Network Rail and South Western Rail (SWR) – 24th September 2025.

TfL Consultation

1.14 Following the TfL pre-application meeting, a revised version of the TASR was submitted to TfL and all highway authority stakeholders, to agree matters following feedback raised during the initial meeting. The principal matters concerned the forecast mode share and trip generation for the scheme. Following the submission of the revised TASR and a series of email exchanges, TfL subsequently confirmed that *"given the relatively low vehicle movements predicted at the Green Lane / Central Road junction, TfL are happy with a no modelling approach."* and since this agreed position, the number of parking spaces proposed is less, which has further reduced the forecast development traffic impact locally.

1.15 The written correspondence is provided in **Appendix A3** for reference.

1.16 A formal written response was received from TfL on the 24th January 2025, with the following principal matters raised within the response:

*"**Site Location and Context***

- *It is noted that that a manual PTAL (Public Transport Accessibility Level) calculation has been undertaken to reflect the potential enhanced connectivity of the site and whilst the PTAL remains 2 the accessibility index has improved. Furthermore, the centre of the site has increased from 0 to 1a with the introduction of the southern access.*

Healthy Streets and Vision Zero

- *At the initial screening meeting TfL queried whether there was a need for a formal crossing point on West Barnes Lane. This should be investigated.*

- *The proposal should ensure that the Healthy Streets approach is considered both throughout the site and within the local area. In terms of aligning to London Plan policy T2 Healthy Streets, the development proposals should:*

    - *Demonstrate how it will deliver improvements that support the ten Healthy Streets Indicators in line with Transport for London guidance.*

    - *Reduce the dominance of vehicles on London's streets whether stationary or moving (including through a reduction in car parking).*

    - *Be permeable at all times of day by foot and cycle and connect to local walking and cycling networks as well as public transport.*

- *An Active Travel Zone (ATZ) Assessment will be undertaken. The TASR includes routes to key destinations. It will be for Kingston and Merton to confirm that these are acceptable. A night-time assessment to assess the safety of routes to public transport nodes will also be required. TfL's night-time assessment advice note is currently being finalised and will be circulated as soon as it is available.*

Car Parking

- *The TASR states that car parking will be provided at a ratio of 0.26 spaces per unit. Based on the current development quantum this would equate to a total of 143 car parking spaces. Whilst this would accord with London Plan Policy T6.1, TfL would support a further reduction in car parking provision which would further encourage sustainable travel. Disabled person parking will be provided for 3% of dwellings from the onset. A Car Parking Management Plan (CPMP) will be required and should detail how parking will be allocated, managed, enforced, and monitored, and where additional disabled parking spaces could be provided should demand arise.*

Cycle Parking

- *The TASR states that where possible cycle parking will be provided in accordance with London Plan Standards. Given the housing mix has not been clarified it is not possible to identify the minimum long-stay cycle parking requirement for the site. However, based on the current development quantum 14 short stay spaces will be required.*

- *The London Cycle Design Standards (LCDS) recommended that at least 5% of all spaces should be capable of accommodating a larger cycle. TfL would also recommend that at least 20% of*

spaces are Sheffield stands at standard spacing. This is to ensure that long-stay cycle parking is suitable for all types of users.

Trip Generation

- *The TRICS database has been used to determine the predicted residential trip generation. Whilst the 'privately owned' flat trip rate appears low this is balanced out with the 'affordable' flat trip rate and the combined resultant total person trips are acceptable.*
- *Mode share is based on 2011 Census data and adjusted to account for the restrained parking provision. Since the meeting the vehicle mode share has been further adjusted using local car ownership data to quantify the ratio of cars to dwellings from all three boroughs (Sutton, Merton and Kingston) and this is now acceptable to TfL.*
- *The applicant proposes to use TfL's methodology for the proposed service vehicle trip generation. The applicant should provide justification to adjust the current linked trip assumption.*

Highways Impact

- *It is noted that vehicle distribution is based on TfL's Travel Demand Forecast Dashboard using the Forecast Travel Demand by Mode or Trip Purpose dataset which is accepted.*

Crossrail 2 (CR2)

- *Since the Safeguarding Direction 2015, TfL have focused on the central section because of uncertainty around the scheme. While we would like to protect the area around Motspur Park it is not protected by safeguarding. The CR2 team would like to be kept informed of the site layout as it progresses. In the future were CR2 to be resumed a comprehensive review of this area and how the transport network and construction needs could be accommodated would need to be undertaken."*

1.17 The full written TfL response is provided for reference in **Appendix A3**.

RBKuT Consultation

1.18 No written pre-application response was received from RBKuT in the lead up to submission of the proposals, as such it is unavailable to include as part of this TA.

Transport Documents

1.19 This TA is accompanied by the following transport-related documents which will be submitted to support the broader Full planning application:

- Travel Plan (TP);
- Delivery and Servicing Management Plan (DSMP);
- Car Park Management Plan (CPMP); and
- Outline Construction Logistics Plan (CLP).

Document Structure

1.20 The remainder of this TA is structured as follows:

Existing Situation

- This Chapter provides an overview of the Site's context in relation to the local area and road network, the sustainable transport connectivity, PTAL assessment and a review of traffic collision data.

Planning Policy

- This Chapter reviews the transport-related National, Regional and Local planning policies which are relevant to the Proposed Development.

Development Proposals

- This Chapter details the Proposed Development, inclusive of matters relating to the development quantum, access arrangements, internal layout, active travel connections, car and cycle parking provision, deliveries and servicing arrangements.

Active Travel Zone Assessment

- This Chapter evaluates the key active travel routes envisaged to be used by prospective residents at the development in accordance with the ten Healthy Streets indicators and identifies potential areas for improvement.

Trip Generation and Distribution

- This Chapter forecasts the proposed multi-modal trip generation associated with the Proposed Development, based on local mode share data. Using the forecast trip generation, this Chapter also sets out a traffic distribution methodology for the development using TfL data.

Summary and Conclusion

- This Chapter summarises the key matters of the TA and ultimately concludes that Outline planning permission should not withheld on transport grounds.

2. EXISTING SITUATION

Site Overview

2.0 This Chapter provides an analysis of the Site's locality in relation to the surrounding transport networks, in addition to a review of the TfL Web-based Connectivity Assessment Toolkit (WebCAT) PTAL and TIM tools.

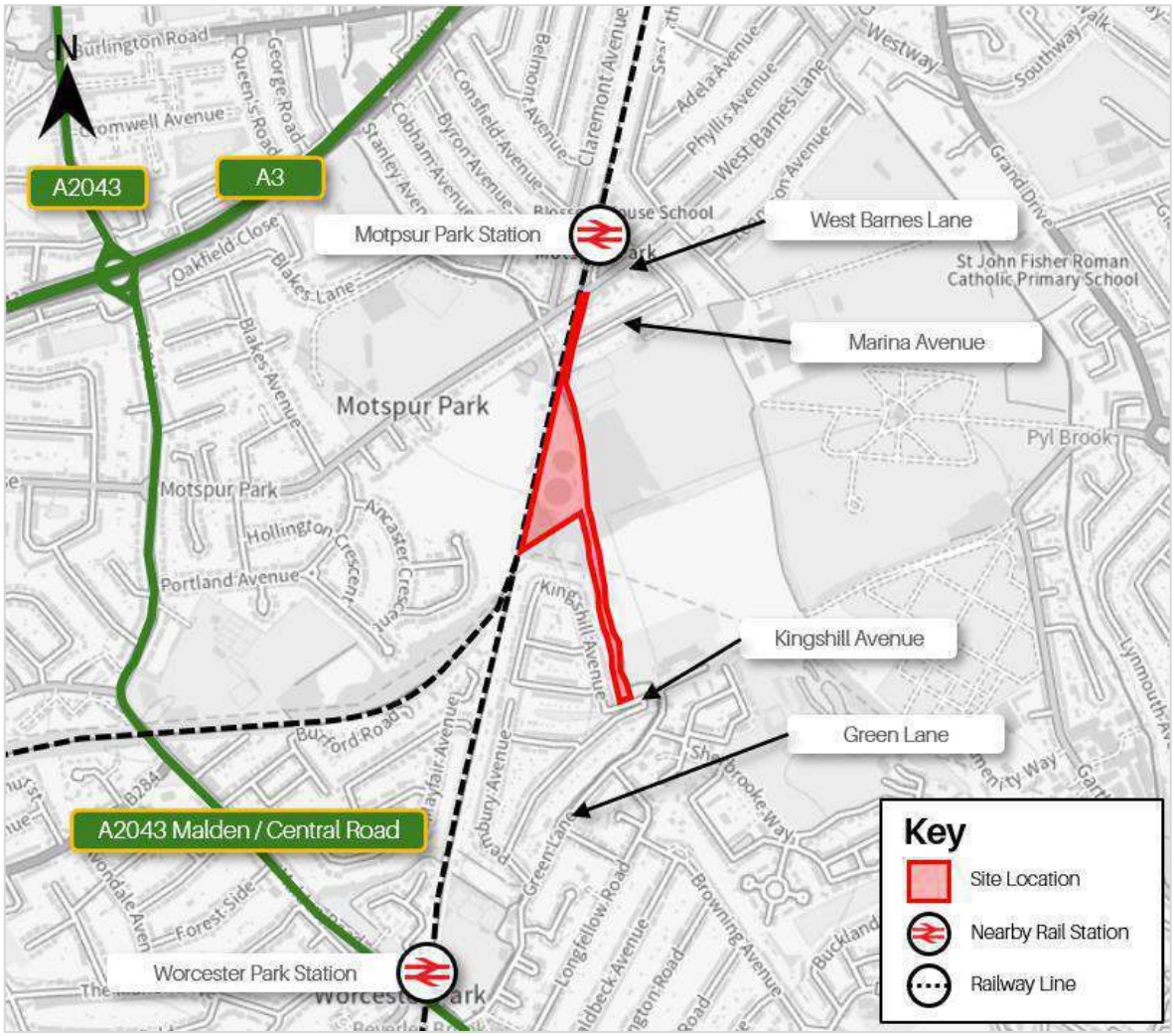
2.1 The development Site is a triangular parcel of land approximately 3ha in size, situated on the eastern boundary of RBKuT, currently accessed from West Barnes Lane adjacent to the northernmost point of the Site, with an additional existing access situated at the southernmost portion of the Site, from Kingshill Avenue.

2.2 The entire Site is currently private and therefore is closed to the public, with gated access points at both of the existing access locations.

2.3 The Site is bound by the Beverly Brook and adjacent woodland on the eastern boundary, an SWR Line on the western boundary and existing residential areas are situated north and south of the Site. Motspur Park and the associated High Street lies to the north of the Site, with Worcester Park to the south, with the High Street located further south along the A2043.

2.4 A Site location plan is provided on **Figure 2-1**, which shows the local transport networks and their location in relation to the Site.

Figure 1-1 Site Location Plan



2.5 The majority of the Site, with the exception of the area surrounding the northern access, is designated as Metropolitan Open Land (MOL). The Sir Joseph Hood Local Nature Reserve is an area of land over the Beverley Brook designated as a Site of Importance to Nature Conversation (SINC) within LBM. The Manor Park SINC is also situated approximately 100m southwest of the site, within RBKuT.

2.6 Part of the proposals require the retention of on-site gas infrastructure. There are two compounds which must remain on Site and both have influence over how the Site can be accessed and laid out for residential use. In addition, the retained gas infrastructure requires ad hoc maintenance provide predominantly by vans. However, on rare occasions, larger articulated vehicles require access to the Site to replace components. Currently, larger vehicles access the Site via the existing West Barnes Road access adjacent to the level crossing.

2.7 West Barnes Lane is a single carriageway road subject to a 20mph speed limit and extends on a northeast/southwest axis to the north of the Site.

2.8 The existing northern access from West Barnes Lane is pictured in **Photo 1**.

Photo 1 – Northern Access (Existing) – West Barnes Lane

2.9 As indicated in **Photo 1** above, there is an existing gated vehicular access from West Barnes Lane at the northernmost point of the Site, with the connection provided in the form of a standard bellmouth. Also visible to the right-hand side of the image are the facilities associated with the adjacent level crossing on West Barnes Lane, over which the SWR line runs. The existing access and level crossing on West Barnes Lane are immediately adjacent to one-another, with the level crossing situated to the west of the access.

2.10 Kingshill Avenue is a single carriageway road subject to a 30mph speed limit and extends parallel to the southernmost portion of the Site. Diverging south from Kingshill Avenue via a four-armed mini-roundabout is Green Lane, which is a residential road subject to a 20mph speed limit routeing south and providing a connection toward Worcester Park.

2.11 The existing southern access from Kingshill Avenue, is taken via a simple dropped kerb and is pictured in **Photo 2**.

Photo 2 – Southern Access (Existing) – Kingshill Avenue

Walking and Cycle Connectivity

2.12 The local road network is supported by a good quality provision of adjacent footways and crossings, comprised of the following:

- Continuous footway provision on both sides of the carriageway on surrounding roads, including West Barnes Lane to the north of the site, Kingshill Avenue and on a portion of Green Lane south of the site; and

- A number of zebra and controlled crossings on the local road network, as well as a controlled pelican crossing at the Green Lane / A2043 crossroads junction featuring dropped kerbs and tactile paving.

- The level crossing on West Barnes Lane also provides regular opportunities to cross West Barnes Lane whist traffic is stationary.

2.13 Both West Barnes Lane and the A2043 support a high density of retail and commercial uses inclusive of cafes, supermarkets, convenience stores, restaurants and pubs.

2.14 The public realm on West Barnes Lane features a number of benches, public Sheffield stands, an e-bike and e-scooter stands on the northern side of the carriageway and wide footways – as confirmed in **Photo 3**.

Photo 3 – West Barnes Lane Public Realm

2.15 The A2043 also benefits from a high-quality public realm, featuring a variety of seating, public Sheffield stands and street planting – pictured in **Photo 4**.

Photo 4 – A2043 Public Realm

2.16 Based on the guidance later detailed in **Chapter 3** relating to appropriate walking distances – 800m is a typical distance which people are willing to walk to reach local amenities, but this does not represent an upper threshold given that people will be willing to walk further to a cluster of amenities and if the route is attractive. As such, a summary of the prominent amenities within a 1km walk of the Site is provided in **Table 2.1**. The summary provided is not exhaustive given there are a number of cafes and smaller independent retail units.

Table 2.1 Accessible Amenities – 1km Walking Distance (from the Site access points)

Amenity	Amenity Type	Walking Distance
Northern Access		
Lucky Fish Bar	Takeaway	50m
Coco Hair & Beauty	Hairdresser	90m

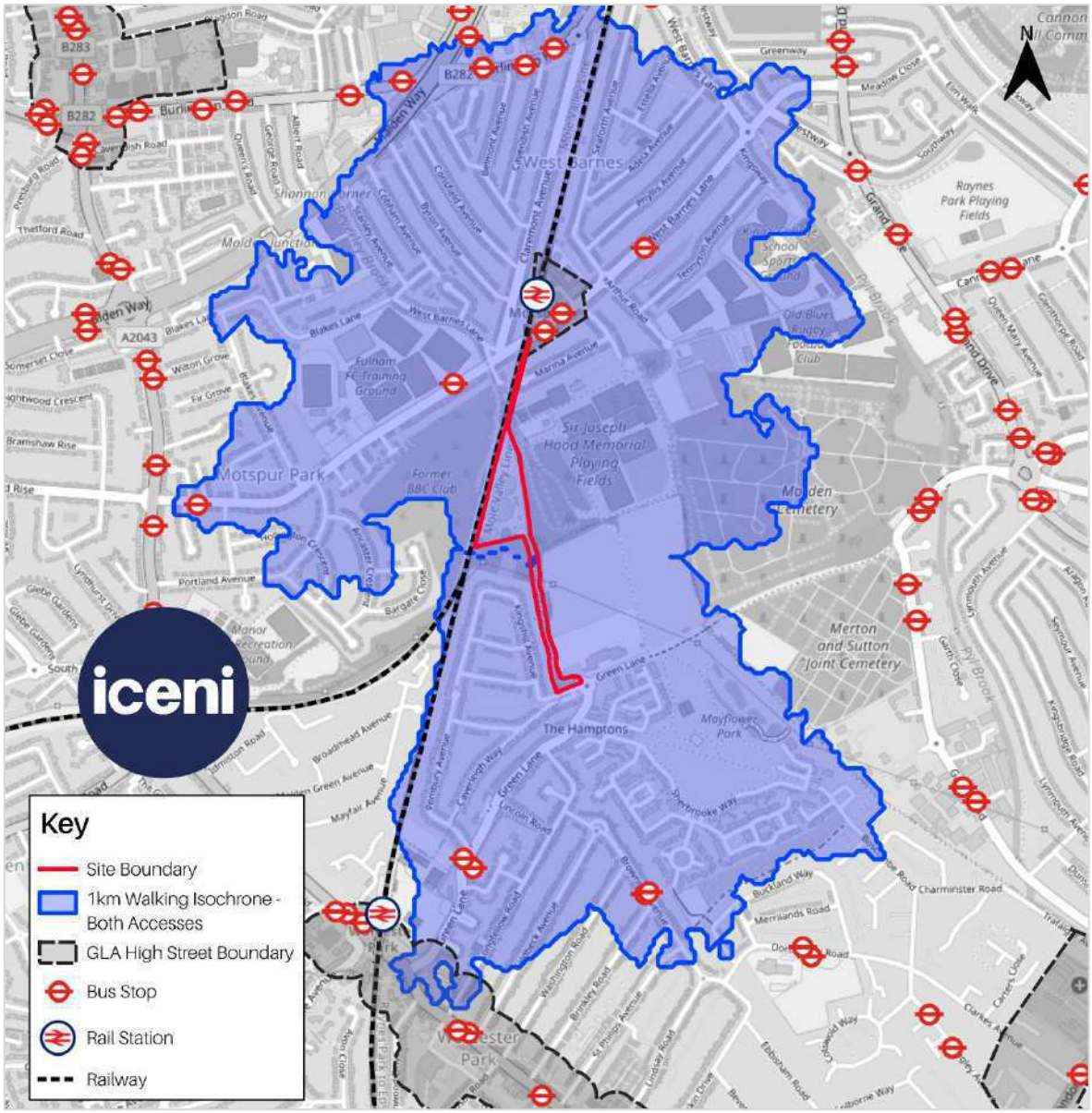
Earl Beatty	Pub	100m
Kami's Barber Shop	Barber	150m
Griffiths Pharmacy	Pharmacy	170m
Motspur Park Post Office	Post Office	180m
West Barnes Surgery	Doctor's Surgery	750m
Southern Access		
Green Lane Primary & Nursery School	Education	50m
Grace Church	Church	120m
Worcester Park Cricket Club	Sports / Recreation	700m
Pavilion Fish & Chips	Takeaway	900m
Poundland	Convenience	900m
The Brook	Pub	900m
Worcester Barbers	Barbers	950m
Starbucks	Café	950m
Moonlight Hair & Beauty Salon	Hairdressers	1km
Iceland	Supermarket	1km

2.17 As demonstrated in **Table 2.1**, there is a wealth of existing amenities situated both north and south of the Site in Motspur Park and Worcester Park. South of the Site, there are additional prominent amenities just beyond the 1km walking distance such as Waitrose, Superdrug, Sainsbury's Local and Manor Drive doctor's surgery.

2.18 An ATZ assessment is set out at **Chapter 5**, which evaluates the quality of active travel routes envisaged to be used by prospective residents at the development according to TfL's ten Healthy Streets indicators. Possible improvements to network deficiencies are explored as part of the ATZ assessment.

2.19 A 1km walking isochrone from both of the proposed access locations, the nearby High Streets and public transport nodes are plotted in relation to the Site in **Figure 2-2**.

Figure 2-2 Walking Plan



2.20 In regard to cycling – there are a number of existing cycling facilities two local cycle routes near to the site, situated north and south on West Barnes, comprised of the following:

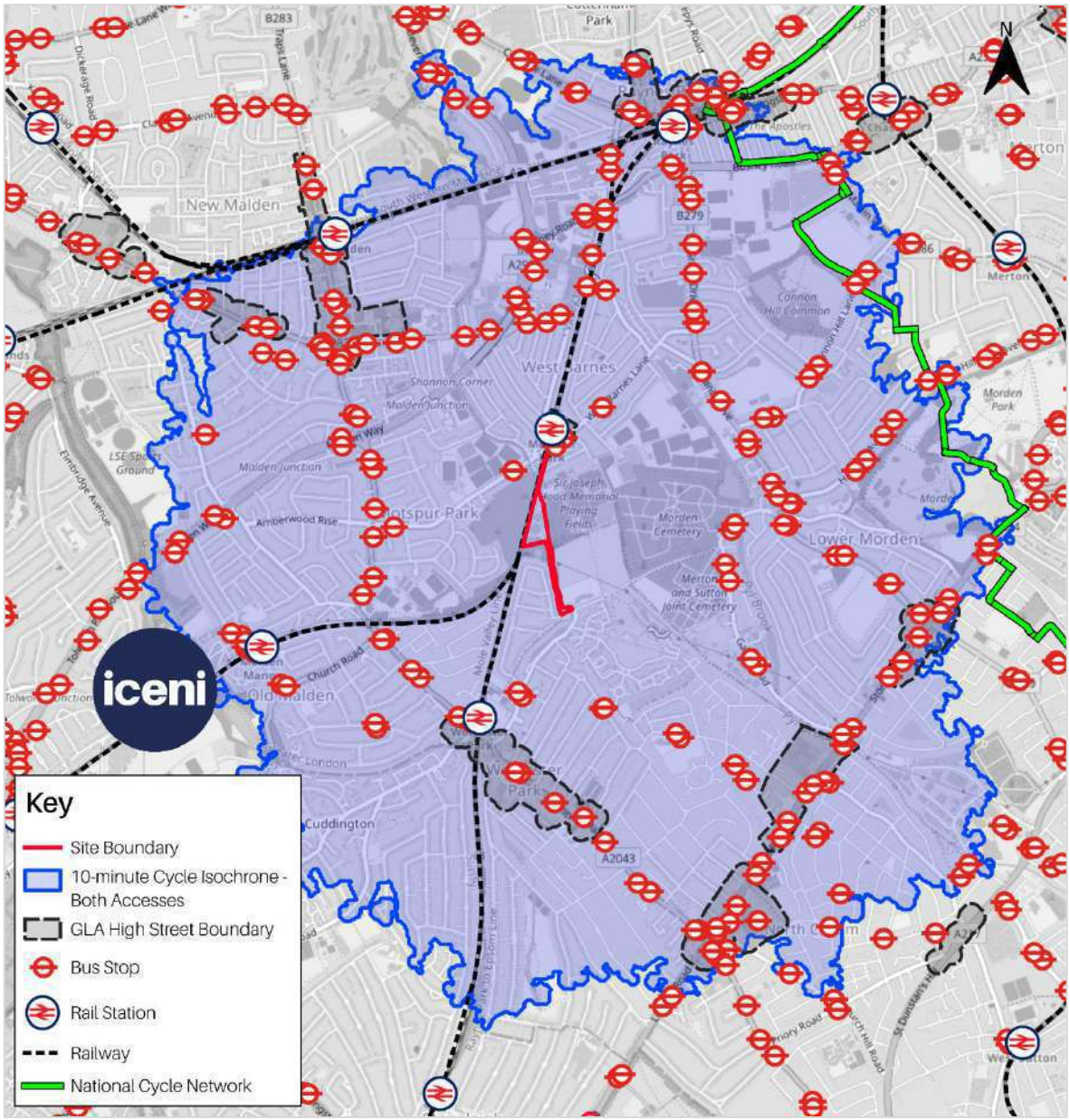
- A marked on-carriageway cycle lane located on Motspur Park Road, routeing southwest from the Rail Crossing adjacent to the proposed northern access location. The cycle lane then merges with the carriageway as Motspur Park becomes West Barnes Lane;
- A marked on-carriageway cycle lane located on the A2043 Central Road/Malden Road to the south of the site, routeing on a northwest/southeast axis;
- Advanced stop line facilities also exist on the A2043 at junctions along its extent; and

- As confirmed in the above photos, there is a generous provision of public Sheffield stands for storing bicycles within the local public realm. These on-street stands also benefit from natural surveillance.

2.21 The National Cycle Network (NCN) Route 208 is located approximately a 7-minute cycle journey east of the site, which provides a connection towards Wimbledon Station, comprised of both traffic-free and on-road routes along its extent.

2.22 The existing nearby cycle facilities in relation to the Site, and a 10-minute cycle isochrone are demonstrated on **Figure 2-3**. The 10-minute cycle isochrone is based upon the concept of the 20-minute neighbourhood – thereby equating to a 10-minute outbound and 10-minute return journey.

Figure 2-3 Existing Local Cycle Facilities



Public Transport Connectivity

2.23 The Site benefits from close proximity to two rail stations – the nearest being Motspur Park, situated approximately 140m (taken from the proposed northern access) directly north of the Site on West Barnes Lane, which equates to a 2-minute walk, although in reality this will be longer from the centre of the Site – equating to 500m to Motspur Park. The other station being Worcester Park Station, situated approximately 1km south of the site on the A2043 Malden Road, equating to approximately a 15-minute walk. From the centre of the Site – this distance increases to approximately 1.5km to Worcester Park station. As Motspur Park is served by two lines, it is envisaged most people will use this station as it provides a more frequent service than Worcester Park.

2.24 Motspur Park and Worcester Park stations benefit from access to South Western Rail services, which provides direct connectivity to Central London and beyond London toward the south coast. Motspur Park benefits from a total of 8 cycle parking spaces provided in the form of Sheffield Stands adjacent to the eastern entrance – pictured in **Photo 5**. There are also additional Sheffield stands situated at the western entrance of the station from Claremont Avenue – pictured in **Photo 6**.

Photo 5 – Motspur Park Station Cycle Parking – eastern entrance

Photo 6 – Motspur Park Station Cycle Parking – western entrance

2.25 Worcester Park station also benefits from a total of 76 cycle parking spaces which are sheltered and CCTV-monitored, provided in the form of two-tier racks adjacent to the entrance to platform 1 and the car park – pictured in **Photo 7**.

Photo 7 – Worcester Park Station Cycle Parking

2.26 A summary of the destinations accessible from Motspur Park and Worcester Park and the corresponding journey times and peak-hour frequencies is provided in **Table 2.2**.

Table 2.2 Rail Service Summary – Worcester Park / Motspur Park

Destination	Approx. Journey Time	Approx. Peak Hour Frequency
Motspur Park		
Chessington South	14 minutes	Every 30 minutes
London Waterloo	25 minutes	Every 10 minutes
Dorking	31 minutes	Every 30 minutes
Guildford	49 minutes	Every two hours
Worcester Park		
London Waterloo	28 minutes	Every 10 minutes
Dorking	28 minutes	Every 30 minutes

Guildford	46 minutes	Every 40 minutes

2.27 The nearest bus stop is situated on West Barnes Lane stop B, immediately adjacent to the existing northern access, provided in the form of a shelter with seating and a flagpole. The K5 service operates every half an hour through the stop on West Barnes Lane.

2.28 There is also an additional bus stop located on Green Lane, approximately 550m south of the proposed southern access provided in the form of a flagpole. The S3 service operates every 20 minutes through these stops.

2.29 Further south of the site, there are the additional 'Longfellow Road' existing bus stops situated approximately 1.1km south on the A2043 (Stop E and D), approximately a 15-minute walk from the proposed southern access location.

2.30 A summary of the bus services accessible at the nearest stops and their corresponding routeing, approximate frequencies across weekday, Saturday and Sunday services is provided in **Table 2.3**.

Table 2.3 Bus Service Summary – West Barnes Lane / Green Lane / A2043

Service	Route	Weekday Frequency	Saturday Frequency	Sunday Frequency
West Barnes Lane Stops				
K5	Dysart Avenue – Morden Station	Every 35 minutes		No service
Green Lane Stops				
S3	Belmont Station – Malden Manor Station	Every 20 minutes		No service
A2043 Longfellow Road Stops				
151	Shotfield – Worcester Park Station	Every 10 minutes		Every 20 minutes
213	Fairfield Bus Station – Sutton Bus Garage	Every 10 minutes		
613	School service			
627	School service			

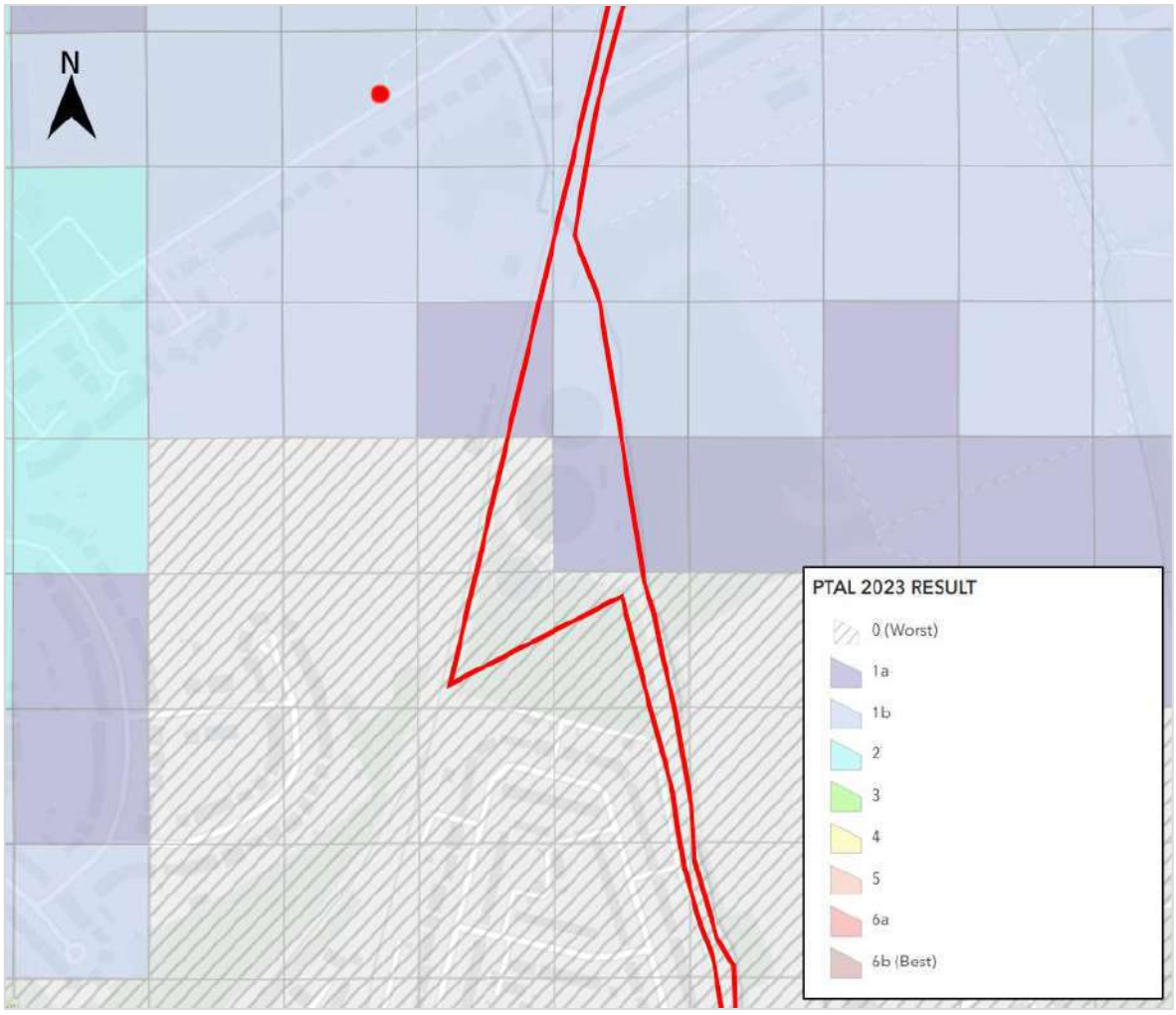
2.31 As demonstrated in **Table 2.2**, there are a number of regular bus services which are accessible from the Site and provide onward connectivity to surrounding areas and nearby stations such as Raynes

Park, Malden Manor Station and Worcester Park Station. While the stops on the A2043 are noted to be further afield, the frequency of these services and the fact that they operate across the week is envisaged to increase the attraction of these stops to prospective residents at the development – as the value and catchment of public transport nodes increases with the provision of regular services.

Public Transport Accessibility Level (PTAL)

2.32 According to TfL's WebCAT site, the majority of the Site has a public transport accessibility level (PTAL) of 0-1b (very poor and poor respectively) – confirmed in **Figure 2-4**.

Figure 2-4 TfL PTAL Mapping



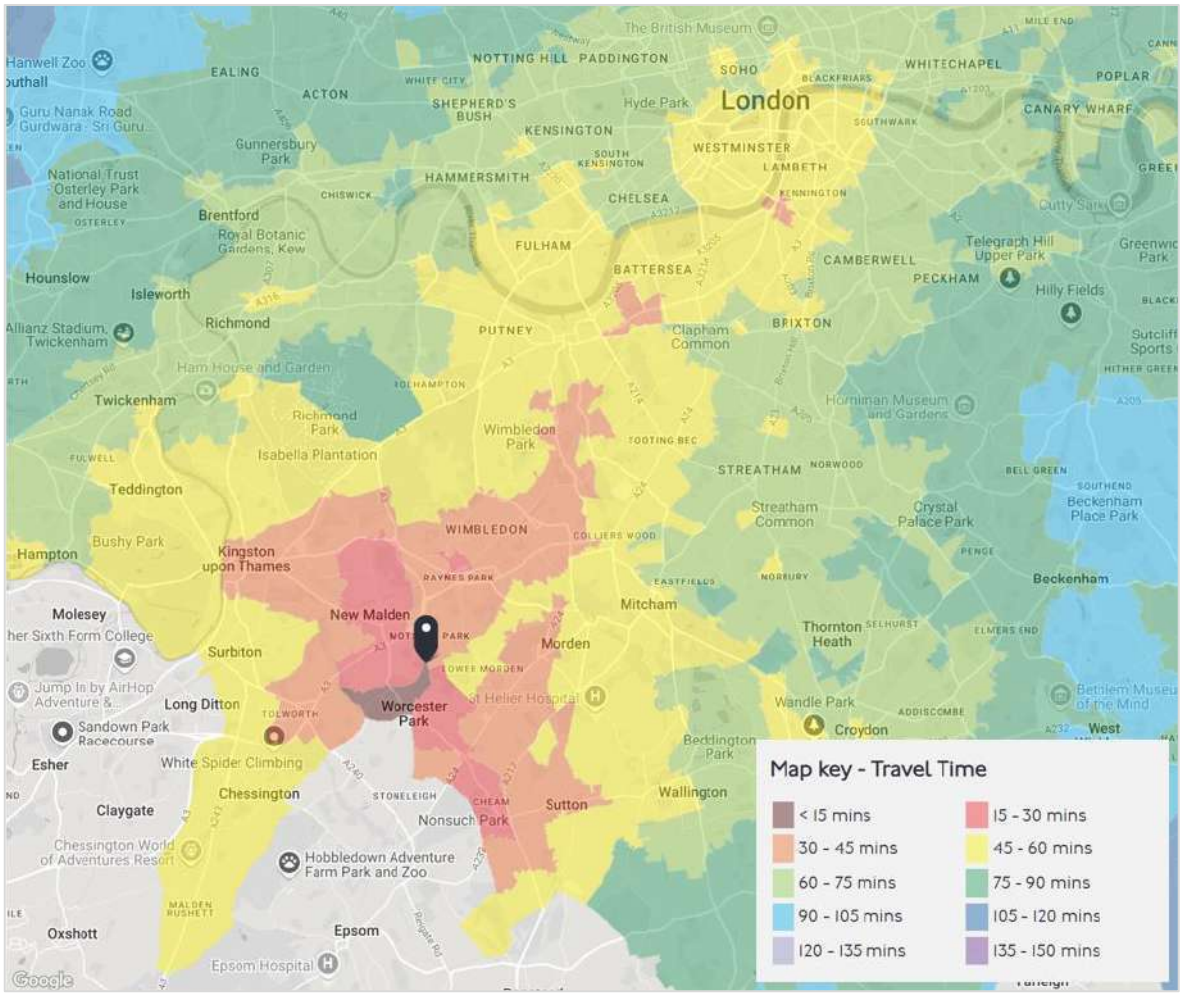
2.33 Notwithstanding the above, the development proposes improvements to deliver pedestrian and cycle connections to the north towards Motspur Park Station, as well as existing bus stops situated on West Barnes Lane. Furthermore, the proposals will open the site to provide a north-south connection for pedestrians and cyclists between the existing Motspur Park and Worcester Park, thereby enhancing the connectivity between the two.

2.34 The PTAL WebCAT report output is provided in full in **Appendix A4**.

Time Mapping (TIM)

2.35 A review of TfL's Time mapping (TIM) tool was undertaken at pre-application stage (it is noted the TIM mapping feature is unavailable currently), several Central London locations are accessible within approximately an hour. The TIM mapping is demonstrated on **Figure 2-5**.

Figure 2-5 TIM Mapping



2.36 The list of Central London and local town centre locations accessible from the Site based on TfL's TIM tool are demonstrated in **Table 2.4**.

Table 2.4 Central London and Local Town Centre Locations – TIM

Location	Travel Time*
Worcester Park	Less than 15 minutes
Raynes Park, New Malden, North Cheam	15 – 30 minutes
Clapham Junction, Vauxhall, Wimbledon, Kingston upon Thames, Sutton, Morden	30 – 45 minutes

Oxford Circus, Covent Garden, Westminster, Waterloo, Battersea, Wandsworth, Fulham, Brixton	45 – 60 minutes

**TfL's TIM tool includes the walking time to stations within the calculation, hence the discrepancy between the information above and the journey times provided in Table 2.2.*

Summary

2.37 Overall, the foregoing demonstrates the Site is located within an inherently sustainable location and the development is well positioned to capitalise upon this further with the proposal to reopen the Site to its surroundings. Despite the relatively lowPTAL score, the proximity to a plethora of sustainable transport infrastructure in Motspur Park and Worcester Park stations, as well as a number of regular bus services within a convenient walk of the Site means that the proposal to link the two areas to the north and south will have a noticeable positive impact on enhancing the existing infrastructure.

2.38 Both Motspur Park and Worcester Park evidently benefit from a cluster of amenities and trip attractors along their respective High Streets; most prominently Worcester Park provides a diverse range of prominent amenities which prospective residents will be able to reach within a convenient walk.

2.39 Overall, the Site is evidently in a sustainable location which benefits from an excellent level of connectivity and therefore accords with the provisions set out at paragraph 110 of the NPPF – detailed further in the following Chapter.

3. PLANNING POLICY

Overview

3.1 This Chapter of the TA examines the context of the Site and how this relates to relevant planning policies and guidelines. It also sets out the appropriate walking and cycling distances to be considered and details the "measure" of sustainability.

3.2 The following national and local planning documents have been reviewed:

- *The National Planning Policy Framework (NPPF) (February 2025);*
- *Planning Practice Guidance - Travel Plans, Transport Assessments and Statements (PPG) (March 2014);*
- *Building Regulations (2010) - Infrastructure for the charging of electric vehicles; Approved Document S (updated April 2023);*
- *The London Plan (July 2021);*
- *Royal Borough of Kingston upon Thames Core Strategy (April 2012);*
- *Merton Local Plan – 2037/38 (2024); and*
- *A Transport Plan for Royal Borough of Kingston upon Thames: Second Local Implementation Plan (2011-2031).*

3.3 It is noted the Site is partially situated within LBM's boundary and as such, LBM policies are applicable to the development. Given the broad similarity and alignment between the policies of the Boroughs, RBKuT's policies have only been summarised in this Chapter to prevent duplication, but the Applicant fully acknowledges that LBM policies are also applicable.

National Planning Policy Framework (NPPF) – February 2025

3.4 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. Planning law requires that applications for planning permission be determined in accordance with local development plans and that the NPPF must be taken into account when preparing the development plan and is therefore a material consideration in planning decisions. The main objective of the NPPF is to achieve sustainable development.

3.5 The NPPF was adopted in March 2012, however, revised documents have been published in July 2018, February 2019, July 2021 and September 2023. This latest version was recently updated in December 2024 and therefore replaces the previous versions. A further amendment was made in February 2025 to correct some footnotes regarding paragraph 155.

3.6 Sustainable transport modes in the NPPF are defined as *"any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra-low and zero emission vehicles, car sharing and public transport."* It is worth noting from the outset that sustainable transport can include the car.

3.7 With regard to transport policy, Chapter 9 of the NPPF is titled 'Promoting sustainable transport' and includes the following text relevant to this proposal:

NPPF Paragraph 109

"Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solution that deliver well-designed, sustainable and popular places. This should involve:

a) making transport considerations an important part of early engagement with local communities;

b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;

c) understanding and addressing the potential impacts of development on transport networks;

d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;

e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and

f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains."

3.8 Paragraph 109 looks for development to deliver a vision led approach to identify transport solutions, realising opportunities from existing and proposed transport infrastructure to promote walking, cycling and public transport.

NPPF Paragraph 110

"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

3.9 Paragraph 110 states that significant development should be focused on existing sustainable locations or locations which can deliver sustainable development by reducing the need to travel and offering a choice of transport modes. It does, however, recognise the opportunities will vary between urban and rural areas, which needs to be considered as part of the decision making.

NPPF Paragraph 111

Planning policies should:

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

e) provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements; and

f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the General Aviation Strategy.

3.10 Paragraph 111 states that developments should provide attractive and well-designed walking and cycling networks, drawing on the Local Cycling and Walking Infrastructure Plans (LCWIPs) where available.

NPPF Paragraph 115

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

a) sustainable transport modes are prioritised taking account of the vision for the site, 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 Code48; 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 through a vision-led approach.

3.11 Paragraph 115 part d) is largely a repeat of Paragraph 116 below which is widely understood. It does, however, not only mention following *"mitigation to an acceptable degree"* but also seeks to introduce these *"through a vision-led approach"*. Iceni understand this in the context of the rest of the NPPF to be seen as promoting sustainable travel first to reduce the impact of the car on the network. Mitigation to an acceptable degree also needs to be considered in the context of what is necessary to make the development acceptable in planning terms, directly related to the development and fairly and reasonably related in scale and kind.

NPPF Paragraph 116

"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, following mitigation, would be severe, taking into account all reasonable future scenarios."

3.12 Paragraph 116 states that development should only be refused on highways grounds where there is an unacceptable impact on safety or the residual cumulative impacts on the road network, following mitigation as per Paragraph 115 part d), would be severe (which it is recognised is often a subjective judgement in the context of the NPPF).

3.13 Appeal APP/F2360/W/22/3295498 & APP/F2360/W/22/3295502 (Jan 2024) helps us understand the context of Paragraph 116. With reference to local junction capacity analysis the Inspector quotes that *"Even if there would be a large change in relative journey times in the peak hours, this would not substantiate a severe adverse impact"*, going on to state when referring to the NPPF that *"it is not the aim of the policy to protect the convenience of commuting drivers"*.

NPPF Paragraph 117

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.

3.14 Paragraph 117 makes it very clear that within the context of the above policies, development should first give priority to walking and cycling and then to public transport. It goes on to recognise the need of people with disabilities and reduced mobility in relation to all modes of transport and enforces that sustainable transport also includes ultra-low emission vehicles.

3.15 Following the introduction of this paragraph in NPPF 2018 (originally paragraph number 110), the Ministry of Housing, Communities & Local Government document National Design Guide, Planning practice guidance for beautiful, enduring and successful places, January 2021 was published which explained the Government's position. This document helps put paragraph 117 in context.

3.16 Paragraph 82 of the design guide, *"M2 Active Travel"*, states that *"priority is given to pedestrian and cycle movements, subject to location and the potential to create connections."* This same paragraph also states that *"public rights of way are protected, enhanced and well linked into the wider network*

of pedestrian and cycle routes" – a clear recognition that cycles and pedestrians first is not only about footways but footpaths.

3.17 This National Design Guide follows the introduction of the priority for pedestrians and cyclist in the NPPF and is the Government's own view on their own policy. The National Design Guide is firstly guidance and not absolute and secondly, the design guide recognises the constraints of not always being able to deliver these connections – stating that priority should be given to these *"subject to location and the potential to create"* them. This clarification adds further weight to the use of "should" in Paragraph 117(a) as it confirms that there are circumstances when these may not be necessary/appropriate/feasible to make the proposals acceptable, but pedestrians and cycles should form the starting point, before moving on to consider public transport.

NPPF Paragraph 118

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored."

3.18 Paragraph 118 reinforces the message throughout the NPPF to further seek to encourage sustainable travel and reduce the need to use the car through the use of a travel plan and vision led reports.

3.19 The definition of a vision-led approach in the NPPF glossary is set out as:

"an approach to transport planning based on setting outcomes for a development based on achieving well-designed, sustainable and popular places, and providing the transport solutions to deliver those outcomes as opposed to predicting future demand to provide capacity (often referred to as 'predict and provide')."

3.20 This TA considers the Proposed Development and impact assessment in the context of the NPPF.

3.21 The overarching vision and transport strategy for the Proposed Development is to encourage and prioritise active travel as a realistic primary mode of transport for shorter, everyday trips. Given the Site's proximity to both Motspur Park and Worcester Park station there is significant potential to encourage sustainable travel patterns.

3.22 The development proposals will aim to build on the level of existing connectivity in the area linking the Site with local amenities in areas to the north and south and trip attractors through targeted

improvements to walking and cycling access. This will align with policy which sets out the aspiration for a significant shift away from private car use to public transport, walking and cycling.

3.23 The Site is in a sustainable location, with a good level of opportunity to travel by train, bus, cycle and walking. The Proposed Development will therefore follow the advice provided within the NPPF in regard to transport.

Planning Practice Guidance - Travel Plans, Transport Assessments and Statements (PPG) – March 2014

3.24 Information contained as part of the PPG provides advice for travel plans, transport assessments and statements in decision taking. The PPG was most recently updated in February 2024, with the transport-related guidance published in March 2014.

> *"Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of the development in order to promote sustainable development. They are required for all developments which generate significant amounts of movement."*

3.25 Transport Assessments and Statements are ways of assessing the potential transport impacts of developments (and they may propose mitigation measures to promote sustainable development. Where that mitigation relates to matters that can be addressed by management measures, the mitigation may inform the preparation of Travel Plans).

3.26 This TA follows the advice provided within the PPG and accords with providing the information which should be included as part of an assessment.

3.27 The Site is in an area with good public transport accessibility which will provide opportunities for all prospective residents and users of the Site to use modes other than the car. The development will connect the pedestrian networks to the north and south of the Site and within proximity to public transport services.

3.28 Sustainable travel will be further encouraged through the associated Travel Plan, and it is therefore considered that the Site accords well with PPG.

Sustainable Distances for Walking and Cycling

3.29 The NPPF replaced PPG13 which gave clear guidance on the acceptable walking and cycling distance thresholds. In the absence of quoted distances in the current NPPF, the matter is to a

degree subjective and should in particular be considered in relation to NPPF paragraph 110 which clearly acknowledges not all locations can be treated the same.

3.30 As such, while no longer policy, there are two key aspects within PPG13 which are still of relevance when determining a site's sustainable travel access. Paragraph 74 states about walking that:

> *"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under two kilometres. Walking also forms an often-forgotten part of all longer journeys by public transport and car."*

3.32 Paragraph 77 goes on to state that:

> *"Cycling also has potential to substitute for short car trips, particularly those under five kilometres, and to form part of a longer journey by public transport."*

3.33 It is considered that the walking and cycling distances referred to in PPG13 remain valid and should not be overlooked when determining the walking and cycling accessibility of development sites. This is further supported by current guidance, the full context of which is often overlooked.

3.34 Manual for Streets (MfS, 2007) at Paragraph 4.4.1 states *"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km."*. Here we start to see the introduction of 800m as the desirable distance (but not the upper threshold).

3.35 Although more dated, The Institute of Highways provided guidance on desirable walk distances and speeds in their publication 'Providing for Journeys on Foot' (2000). This was one of the documents which provided the walking speeds we still generally use today of 1.4m/s, which equates to 400m in five minutes or three miles per hour. The document also went on to provide various walking distances depending on the land use being visited, stating a preferred upper maximum distance of 800m to Town Centres, 2km for commuting, schools and sightseeing and 1.2km for other land uses.

3.36 This reference to 800m is quoted again in the Chartered Institution of Highways & Transportation (CIHT) document 'Planning for Walking' (2015), where at paragraph 6.3 it states *"Most people will only walk if their destination is less than a mile away. Land use patterns most conducive to walking*

are thus mixed in use and resemble patchworks of 'walkable neighbourhoods', with a typical catchment of around 800m or 10 minutes' walk (see 6.4 below)."

3.37 Paragraph 6.4 states *"Walking neighbourhoods are typically characterised as having a range of facilities within 10 minutes' walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating"*. It is worth noting, however, that this paragraph sits under the heading *"Traditional compact town layouts"*.

3.38 Regarding the reference to "Most people" and "most conducive" this needs to be understood in context. These words are used based on the percentage movements and should not be construed as limits. Turning to paragraphs 2.1 and 2.2 of the same document puts the distances in more context, stating at paragraph 2.1 that 80% of journeys less than 1 mile are made wholly on foot, something which has apparently changed little in 30 years. At paragraph 2.2 it acknowledges that between 1 mile and 2 miles over a quarter of journeys are made by foot (26%), more than by bus. Beyond 2 miles walking trips are outnumbered by the bus. As such, this gives clear evidence that 800m is the desirable distance and not the upper threshold, especially given the number of people prepared to walk between 1 mile (1.6km) and 2 miles (3.2km).

3.39 The second cycling and walking investment strategy (CWIS2) (March 2023), seeks to increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035. Interestingly, the government strategy defines "short journeys" as: "trips of less than 5 miles, which start and end within a town or city (a one-way course of travel with a single main purpose), it should be noted 5 miles is 8km.

3.40 Further guidance on a view of acceptable walking, in particular for education distances can be found on the government's "free school transport". For students to be eligible for free transport they need to be located outside the walking threshold assumed for an able body person. These distances used to access their eligibility for free travel are greater than 2 miles (3.2km) for a child under 8 years and greater than 3 miles (4.8km) for children over 8 years.

3.41 Turning to cycling, this can fluctuate through the year and can be influenced by the weather and terrain. The increase in electric cycle use has helped to "level the playing field" with regard to terrain and cycle ability/mobility. Within the industry it seems to be generally accepted that cycle speeds of 10mph and distances of 3 to 7 miles are not unreasonable.

3.42 In summary, and as supported by case law, although 800m remains the desirable goal, in reality people will walk further, and 2km or indeed 3.2km is not an unreasonable upper threshold. As for cycling the guidance would suggest that an upper threshold of 5miles (8km) is not unreasonable. Of

course, it needs to be recognised that these upper thresholds still do not prevent individuals from walking or cycling further, whilst also acknowledging not everyone has the same level of mobility.

Building Regulations (2010) - Infrastructure for the charging of electric vehicles; Approved Document S (updated April 2023)

3.43 As recognised by NPPF, electric vehicles are one of the options available to residents when considering sustainable travel. Although many local authorities have their own guidance it is important to also acknowledge the national Building Regulations 2010 with regard to the requirements for electric charging on new developments/sites.

3.44 Approved Document S, Infrastructure for the charging of electric vehicles dictates the national requirements the development should not drop below.

3.45 For residential use in general where parking is provided at a 1:1 ratio or greater, as a minimum, 1 electric charging point is required per dwelling, whether the space is located on the dwelling plot or not. These spaces need not be provided where the average connection point cost is greater than £3,600, or where the associated parking is within a covered car park. Should this result in a lower than 1 EV space per dwelling ratio then the residual spaces should have passive provision bring this back to a 1:1 ratio.

The London Plan

3.46 The London Plan is the primary Mayoral policy addressing the key housing and employment issues in order to shape the way London develops, with the most recent version adopted in March 2021, known as London Plan 2021.

3.47 London Plan 2021 places an increased focus towards sustainable modes of travel. The main ambition of the plan is that 80% of all trips in London will be by foot, cycle, or public transport by 2041. Development proposals should therefore deliver patterns of land use that facilitate shorter, regular trips by walking and cycling where possible, or alternatively the use of public transport.

3.48 The policies contained within London Plan 2021 have been reviewed as part of the preparation of this TA, and they are referred to at specific points throughout as necessary.

Kingston Core Strategy

3.49 The Kingston Core Strategy (CS) was adopted in April 2012 and forms the core document of the Local Development Framework (LDF) to guide development and change in Borough over the plan period of 15 years.

3.50 The CS represents the adopted policy position of RBKuT at the time of writing, however the Borough is in the process of preparing a New Local Plan. RBKuT consulted on the first draft Local Plan between November 2022 and February 2023. RBKuT is currently considering the responses to the Regulation 18 Consultation and intends to undertake and additional consultation under Regulation 18 given the significant changes to the NPPF.

3.51 Given the early stage of the Local Plan review and the Council's intention to undertake an additional Regulation 18 consultation, the initial Regulation 18 draft policies are given no weight.

3.52 The CS is underpinned by the Kingston Plan, which sets out the following key themes and corresponding objectives:

- *"Theme 1 – A Sustainable Kingston: protecting and enhancing the environment for us and for future generations*
    - *Objective 1 – Tackle climate change, reduce our ecological footprint and 'reduce, reuse and recycle'*
    - *Objective 2 – Ensure the sustainable development of our Borough and the promotion of sustainable transport*
- *Theme 2 – Prosperous and inclusive: sharing prosperity and opportunity*
    - *Objective 4 – Sustain and share economic prosperity*
    - *Objective 5 – Raise educational standards and close gaps in attainment*
    - *Objective 6 – Increase supply of housing and its affordability*
- *Theme 3 – Safe, healthy and strong: preventing problems and promoting responsibility and independence*
    - *Objective 7 – Make communities safer*
    - *Objective 8 – Improve overall health and reduce health inequalities*
    - *Support people to be independent*
    - *Encourage people to take an active part in the social and cultural life of the community"*

3.53 The policies set out within the CS are separated across the key themes underpinning the Kingston Plan, with policies relating to sustainable travel detailed within *'Theme 1: A Sustainable Kingston'.* The policies pertaining to transport are summarised below:

Policy CS 5: Reducing the need to travel

"To reduce the need to travel, particularly by car the Council will:

- *Protect and enhance the availability of employment and key facilities including shops, healthcare and leisure facilities within local communities.*
- *Locate major trip generating development in accessible locations well served by public transport including Surbiton, New Malden, Tolworth and Kingston Town Centres. Sites that have poor levels of accessibility by sustainable modes will not usually be considered suitable for development that could generate high numbers of trips.*
- *Retain the Aggregates Depot, Kingston Road, Tolworth to provide a strategic rail-based aggregates facility (Strategic Rail Freight Site)."*

Policy CS6: Sustainable Travel

"To support and encourage the use of public transport, cycling and walking the Council will:

- *Promote and enhance the strategic cycling and walking networks, as shown on the Proposals Map.*
- *Enhance and promote the Borough's network of quiet residential roads, traffic free routes and open spaces as attractive, safe and convenient walking and cycle routes.*
- *Provide infrastructure such as cycle lanes and crossing facilities to overcome barriers like busy roads and rail lines.*
- *Enhance secure and convenient cycle parking across the borough at key locations including town centres, shops, and stations.*
- *Promote cycling and walking through school and workplace travel plans, plus supportive measures like cycle training.*
- *Work with and lobby partners to improve existing train services, increase capacities, frequencies, and late-night services, and improve access and fairness including rezoning of Surbiton and Kingston stations*
- *Work with and lobby partners to improve sub regional, orbital and cross boundary public transport particularly to serve catchments of major trip attractors including Kingston town centre, Kingston University and Kingston Hospital.*

- *Work with and lobby Transport for London to improve the Borough's network of local bus services particularly in areas of low public transport accessibility such as the south of the Borough.*
- *Improve integration between transport modes particularly to provide improved accessibility to train stations."*

Policy CS 7: Managing Vehicle Use

"To manage car use to ensure sustainability, road safety and reduce congestion the Council will:

- *Support and promote the use of car share and car club schemes including expanding the network of on-street car club bays.*
- *Support the use of low-emission vehicles including the provision of electric vehicle charging points.*
- *Implement traffic management measures to ensure highway safety, improve residential amenity, whilst maintaining the economic vitality of the town centres.*
- *Manage on and off-street parking provision to promote sustainability and residential amenity, whilst maintaining the economic vitality of the town centres.*
- *Encourage efficient, safe and sustainable freight transport.*
- *Promote park and ride facilities to Kingston Town Centre as a sub-regional transport priority."*

Policy DM8: Sustainable Transport for New Development

"To support and promote the use of sustainable modes of travel to development sites the Council will:

- *Require all significant new development, including schools, workplaces and residential developments to develop and implement a robust and effective Travel Plan.*
- *Prioritise the access needs of pedestrians and cyclists in the design of new developments and protect and enhance pedestrian and cycle access routes to, and where possible, through development sites, including the protection or enhancement of the strategic cycling and walking networks, as shown on the proposals map.*
- *Require new development to provide facilities on-site for cyclists as appropriate, including showers, lockers and secure, convenient cycle parking, in accordance with the minimum standards.*

- *Require development to make a financial contribution towards sustainable transport improvements and initiatives in line with the planning obligations SPD/CIL."*

Policy DM 9: Managing Vehicle Use for New Development

"To ensure that new development does not contribute to congestion or compromise highway safety the Council will:

- *Require all major developments to submit a Transport Assessment based on TfL's best practice guidance.*
- *Require new development to comply with car parking standards and implement parking management schemes.*
- *Restrict eligibility for on-street parking permits for residents of new development located in controlled parking zones.*
- *Require new development to provide car club and electric vehicle infrastructure where appropriate in accordance with minimum standards."*

Merton Local Plan 2037/38

3.54 The LBM Local Plan was formally adopted on the 20th November 2024 and forms the main document as part of the development plan and is the statutory planning framework for the Borough. Merton's development plan comprises the following documents:

- The Local Plan 2024 – 2037/38
- London Plan 2021
- South London Waste Plan 2022-2037
- Estates Local Plan (2018)

3.55 Chapter sixteen is titled 'Sustainable Travel' and sets out the Borough's principal policies relating to transport planning over the term of the Local Plan. The key policies which are relevant to the development are summarised below.

Strategic Policy T16.1 Sustainable Travel

- *"Merton Council aims to deliver an efficient, safe and sustainable transport system that will:*
  - *Improve road safety outcomes in line with The Mayor's Vision Zero target.*

- *Reduce traffic congestion and parking dominance on Merton's streets.*
- *Address public health concerns associated with sedentary lifestyles through more active travel choices.*
- *Minimise the vehicular emissions that contribute towards climate change and local air pollution.*

- *To do this we will:*
  - *Plan spatial development in accordance with the transport principles for good growth and the "20-minute neighbourhood" approach, to create complete, compact and connected communities that facilitate walking, cycling and the use of public transport and reduce the need to travel by car.*
  - *Apply the Healthy Streets Approach to create accessible streets and public areas where it is safe and convenient to socialise, walk, cycle and use public transport.*
  - *Encourage and enable people to choose active travel modes, by implementing a comprehensive network of safe and convenient cycle and walking routes and providing supporting measures such as secure cycle parking, cycle training and route finding.*
  - *Work with Transport for London (TfL) and Transport Operators to promote and seek improvements to public transport infrastructure and services.*
  - *Encourage the management of vehicle use and parking to improve road safety outcomes reduce traffic dominance and minimise impact on the transport network.*
  - *Reduce vehicular emissions through supporting a switch to car clubs and electric vehicles and encouraging efficient, low-emission freight and delivery trips."*

Policy T16.2 Prioritising active travel choices

- *"To encourage and enable active travel choices we will require development proposals to:*
  - *Design the layout of development sites in accordance with the Healthy Streets Approach and prioritise safe and convenient access routes for pedestrians, cyclists and those with disabilities.*
  - *Ensure sites connect to and integrate well with the surrounding cycle, pedestrian and public transport networks and make suitable contributions towards improving routes where required.*

- *Protect and enhance any existing publicly accessible cycle and pedestrian routes that cross development sites and maximise opportunities to improve public accessibility by providing new connections through sites.*

- *Provide secure, covered cycle parking facilities that meet London Plan minimum standards (higher level requirements) and are designed to a high standard, having regard to the London Cycling Design Standards. Facilities should include provision for charging of electric cycles and a minimum of 5% of cycle spaces should accommodate users of non-standard cycles.*

- *Provide suitable showers, lockers and changing facilities within developments that will provide employment.*

- *Make provision for or a contribution towards publicly accessible cycle parking and cycle and scooter hire schemes where required."*

Policy T16.3 Managing the transport impacts of development

- *"To manage and mitigate any impacts on the transport network in an efficient, safe and sustainable way, development proposals will be required to:*

  - *Submit a transport statement or assessment with regard to the latest TfL guidance, which demonstrates that the scale and type of development is appropriate to the transport accessibility of the site and that proposals will not have a detrimental impact on the transport network. Mitigation measures to address adverse transport impacts, including through highways improvements and/ or financial contributions may be required to make the proposals acceptable.*

  - *Demonstrate that any detrimental impact on road safety can be mitigated to an acceptable degree with regard to The Mayor's Vision Zero target for road safety.*

  - *Demonstrate how trips generated by the development will be managed to maximise sustainable travel patterns and reduce reliance on vehicle trips. Developments that are expected to generate a significant number of trips will be required to develop a Travel Plan with regard to TfL's latest guidance.*

  - *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport.*

  - *Demonstrate how any impacts on the transport network during the construction phase of the development will be managed and mitigated, with priority given to maintaining safe and inclusive access for pedestrians, cyclists and public transport users. Developments that will have an impact on the transport network during construction will be required to develop a*

Construction Logistics Plan informed by TfL's latest Construction Logistics Planning guidance.

- *Demonstrate that the proposals and site layout make adequate provision for safe and suitable access to the site for all users.*

- *Demonstrate that the development will adequately facilitate efficient, safe and low-emission delivery and servicing trips and where a significant number of delivery trips are expected to be generated, develop a Delivery and Servicing Plan with regard to TfL's latest guidance."*

Policy T16.4 Parking and Low Emission Vehicles

- *"Development proposals should manage car use and parking to ensure safety, reduce reliance on car use and support a transition to lower emissions vehicles.*

- *Developments should provide the minimum level of car parking necessary taking into consideration the site accessibility by public transport (PTAL), in accordance with London Plan parking standards. Developments in areas with good public transport accessibility, including Town Centres and all locations with a PTAL rating of 5 to 6, will be expected to be car free.*

- *All new development in Controlled Parking Zones, including conversions to multiple dwellings, will be required to be permit free, with all future occupants of that development being ineligible for on-street parking permits.*

- *Financial contributions will be sought for new or enhanced parking controls where they are considered necessary to promote road safety and protect existing residential or business amenity.*

- *Disabled persons' parking should be provided in accordance with London Plan standards be accommodated within the development site where possible and be provided with electric vehicle charge points.*

- *Development that provides on-site parking provision must provide electric vehicle charging infrastructure which is appropriate to the scale and type of development and which meets or exceeds requirements set out in Building Regulations Approved Document S and the London Plan. The proposals must set out a strategy for the ongoing operation, management and maintenance of the EV charging infrastructure.*

- *Residential developments that provide parking will be expected to support car club use as an alternative to car ownership, by funding a free trial use package for new residents for at least three years. Where appropriate, on-site parking spaces should be allocated to an appropriate number of car club vehicles which will be provided with electric vehicle charging infrastructure and be included within the London Plan maximum parking standards.*

- *Development that provides any new provision or an amended layout of on-site car parking provision, should demonstrate that the proposals do not compromise pedestrian amenity, highway safety or increase flood risk. Any developments providing multiple or communal car parking spaces will be required to submit a Parking Design and Management Plan."*

Policy T16.5 Supporting transport infrastructure

- *"To protect existing transport infrastructure and to ensure that new infrastructure is provided to support growth and a low carbon future:*
    - *Existing land and buildings used for all transport network functions, including public transport services, will be protected from development, unless alternative facilities are provided to the satisfaction of relevant strategic transport authorities and service providers that enable existing transport operations to be maintained and expanded if necessary.*
    - *Land identified for new transport facilities and other related infrastructure will be safeguarded and secured through planning obligation.*
    - *Redevelopment of existing public transport sites must demonstrate how services and access for all users will be protected and improved through the provision of new or upgraded facilities and adequately maintained during the construction phase of development.*
    - *Development proposals should support capacity, connectivity and other improvements to the bus network and ensure that buses can operate efficiently to, from and within developments, and provide supporting infrastructure as required.*
    - *Development proposals for infrastructure required to decarbonise transport operations will be supported."*

3.56 Based on a review of LBM's Local Plan, the Proposed Development accords with all of the transport-related policies as there is a clear focus on prioritising sustainable development, reducing transport impacts and avoiding the reliance on private motorised vehicles through designing development layouts which prioritise alternative modes of travel – all of which is covered across policies T16.1, T16.2, T16.3 and T16.4. This TA has also considered a Healthy Streets approach and will deliver London Plan compliant cycle parking within the development, thereby aligning with Policy T16.2.

Policy Summary

3.57 The Proposed Development accords with prevailing Local transport-related policy in a similar fashion as it does with National Policy – there is a discernible trend towards ensuring that new development prioritises active travel connectivity and infrastructure provision, as well as encouraging the production of quality, sustainable and healthy places for residents. Active travel permeability and

placemaking are core aspirations for the development, evidenced by the provision of cycle parking and proximity to a number of active travel and public transport links – as set out in **Chapter 4**.

3.58 Overall, the development is demonstrably located within a sustainable location, and satisfies the characteristics of sustainable development as per Paragraph 110 within the NPPF.

3.59 The layout has also been designed to ensure that the public amenity surrounding the development is not negatively impacted, by the operation of the development, demonstrated by the evaluation of the locality as set out in the Active Travel Zone assessment in **Chapter 5**.

4. DEVELOPMENT PROPOSALS

Development Overview

4.1 This Chapter details the Proposed Development, inclusive of matters relating to the access strategy, design of the internal layout, cycle and car parking provision, delivery and servicing arrangements and high-level construction logistics.

Accommodation Schedule

4.2 The Proposed Development is a residential development comprised of circa 586 homes of Use Class C3, inclusive of 35% affordable homes (by unit number for TA purposes only given it is not possible to breakdown TRICS data by habitable rooms) which equates to a total of 177 affordable homes. Existing gas infrastructure is retained on Site and access to this is required as part of the layout and access strategy.

4.3 A summary of the proposed tenures across each of the proposed blocks is provided in **Table 4.1**.

Table 4.1 Tenure Type by Block

Tenure	Number of Homes					**Total**
	Block A	Block B	Block C	Block D	Block E	
Affordable Intermediate	0	60	26	16	0	**103**
Affordable Rent	0	0	0	72	0	**72**
Private	156	63	115	0	77	**411**
Total	**156**	**123**	**142**	**88**	**77**	**586**

4.4 A summary of the proposed accommodation schedule is provided in **Table 4.2**.

Table 4.2 Proposed Accommodation Schedule – 586 Homes

Dwelling Type	Number of Dwellings
1-bedroom 1-person	40
1-bedroom 2-person	194
2-bedroom 3-person	99
2-bedroom 4-person	193
3-bedroom 5-person	52
3-bedroom 6-person	8
Total	**586**

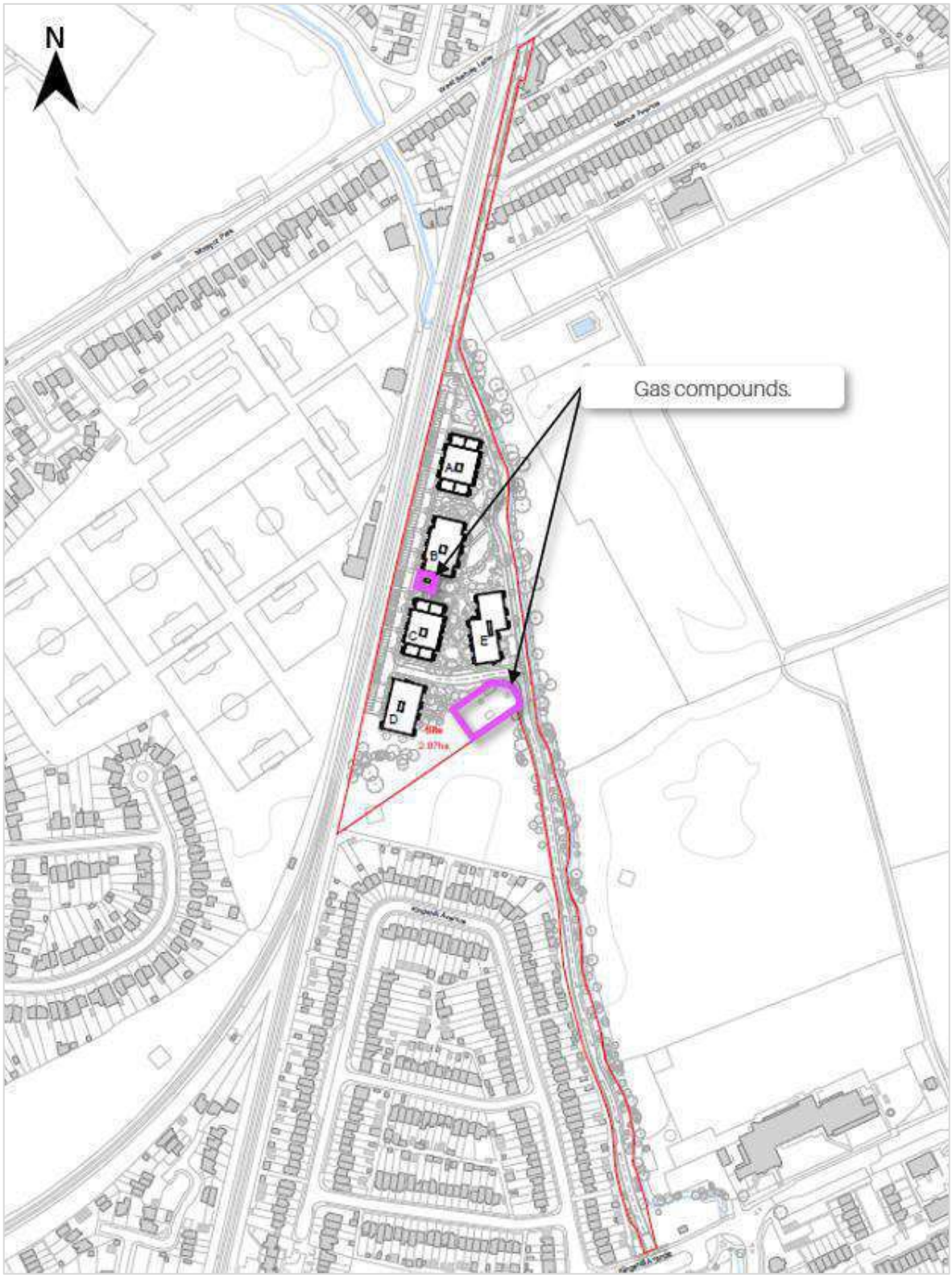
Proposed Access and Internal Layout

4.5 As introduced in **Chapter 1**, the key aspirations for the proposed development regarding transport is a focus on the following:

- Embedding active travel at the heart of the scheme through the provision of internal pedestrian and cycle routes and robust on-site cycle storage facilities.
- Integrating the Site with its locality by enhancing permeability for pedestrians and cyclists in north, south and eastern directions. The aim is to not only deliver a scheme which provides a high-quality active travel infrastructure for prospective residents, but also benefit existing residents in the locality with the introduction of a prominent desire line between the Motspur Park and Worcester Park Stations.

4.6 A plan demonstrating the Proposed Development layout, as well as the gas compound locations within the development is provided in **Figure 4-1** as per Maccreanor Lavington's general arrangement drawing, provided in full at **Appendix A1**.

Figure 4-1 Proposed Development Layout – As per Maccreanor Lavington's GA Drawing



4.7 The scheme proposes three main access locations, comprised of the following:

- Retained and improved access from West Barnes Lane for pedestrians, cyclists and emergency vehicles;

- New access from Marina Avenue for pedestrians and cyclists; and
- New multimodal access from Kingshill Avenue to the south of the development, which will serve as the only vehicular access into the development.

4.8 A Stage 1 Road Safety Audit (RSA) will be undertaken in the determination period and submitted to RBKuT to validate the design of the proposed accesses. It is understood based on officer feedback at pre-application stage that the principle and the overarching design of the access strategy is acceptable.

Northern Access

4.9 The existing northern access will be retained as a pedestrian and cyclist access, and improved through the provision of a continuation of the existing footway along West Barnes Road, with a dropped kerb to safeguard access for emergency vehicles. From the access point, access for pedestrians and cyclists will extend south into the rest of the site. This route will be controlled by removable bollards.

4.10 The northern access is designed to introduce a desire line towards Motspur Park station for pedestrians and cyclists, and importantly provide a north-south connection for residents to the south of the Site.

4.11 Emergency access to the development will be granted via the proposed northern access. To preclude unfettered car use at the northern access, design measures such as manual bollards will be introduced to ensure priority for pedestrians, cyclists and emergency vehicles is maintained.

4.12 Due to the proximity of the northern access to the adjacent level crossing, the change from a vehicular access to active travel and emergency vehicle access only, removes slow moving vehicles from immediately east of barriers controlling the level crossing. This is considered a highway improvement and will further reduce the risk of vehicles queueing or blocking the existing level crossing.

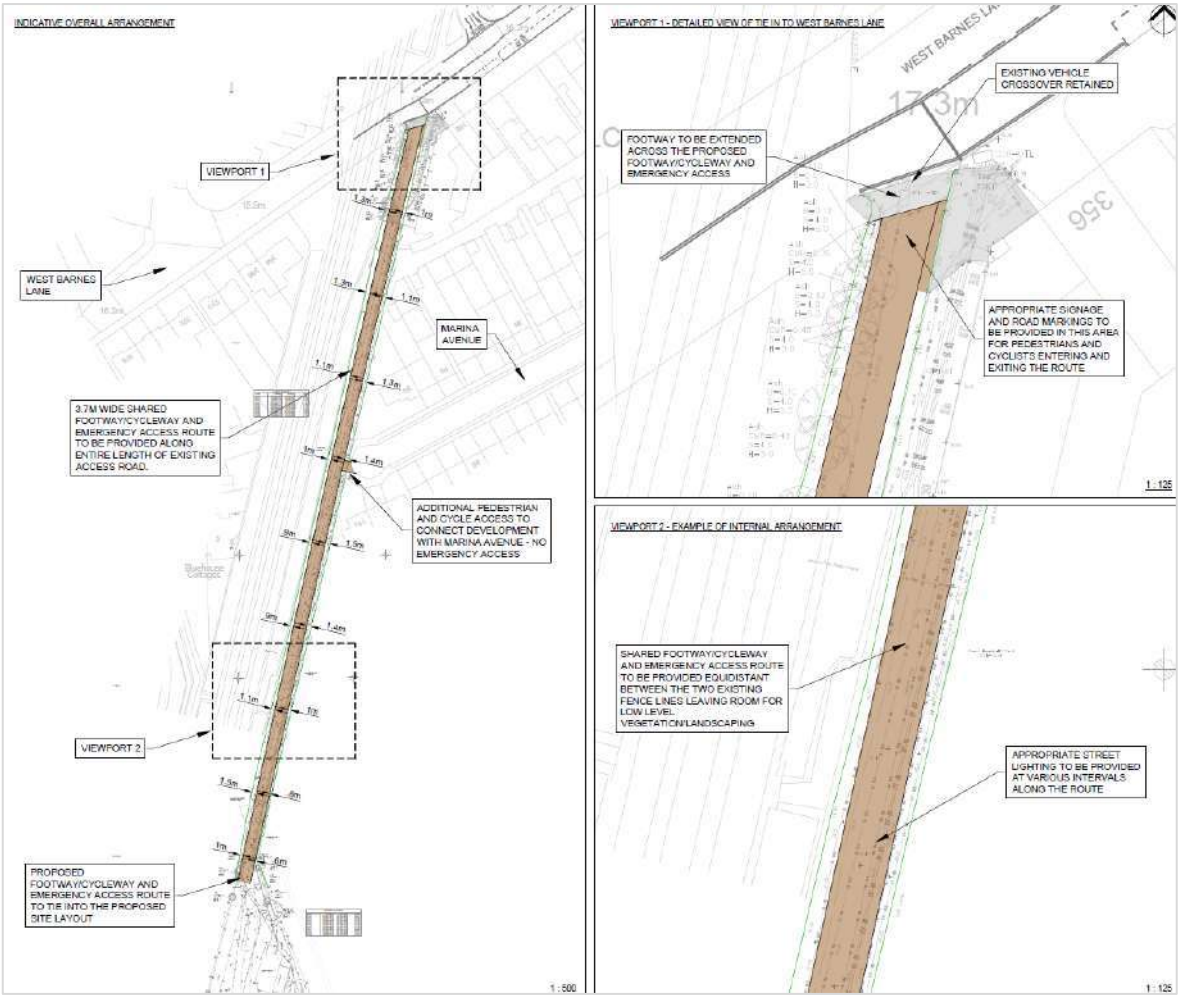
4.13 It is understood from correspondence with TfL that there is potential that there may be parts of the northern access location that are proposed to be safeguarded for the Crossrail 2 development.

4.14 Based on correspondence with TfL, it is understood that the level crossing immediately adjacent to the proposed northern access on West Barnes Lane will be subject to potentially being closed under preliminary Crossrail 2 plans however as there are no concrete plans at this stage, it has not been considered within the development proposals, only acknowledged that this development would not hamper any future CR2 plans.

4.15 As mentioned above, an additional pedestrian / cycle access will also be provided from Marina Avenue to the north of the development. Similar to the access from West Barnes Lane, unfettered vehicle access will be precluded by the width of the access. This access brings benefits from a safety and permeability perspective by providing alternative routes for those walking down the access from West Barnes Lane.

4.16 The design for the proposed northern access location on West Barnes Lane is demonstrated in **Figure 4-2**, provided as **Drawing I000551-501-B** in **Appendix A5**.

Figure 4-2 Proposed Northern Access on West Barnes Lane – as per Iceni Drawing I000551-501-B

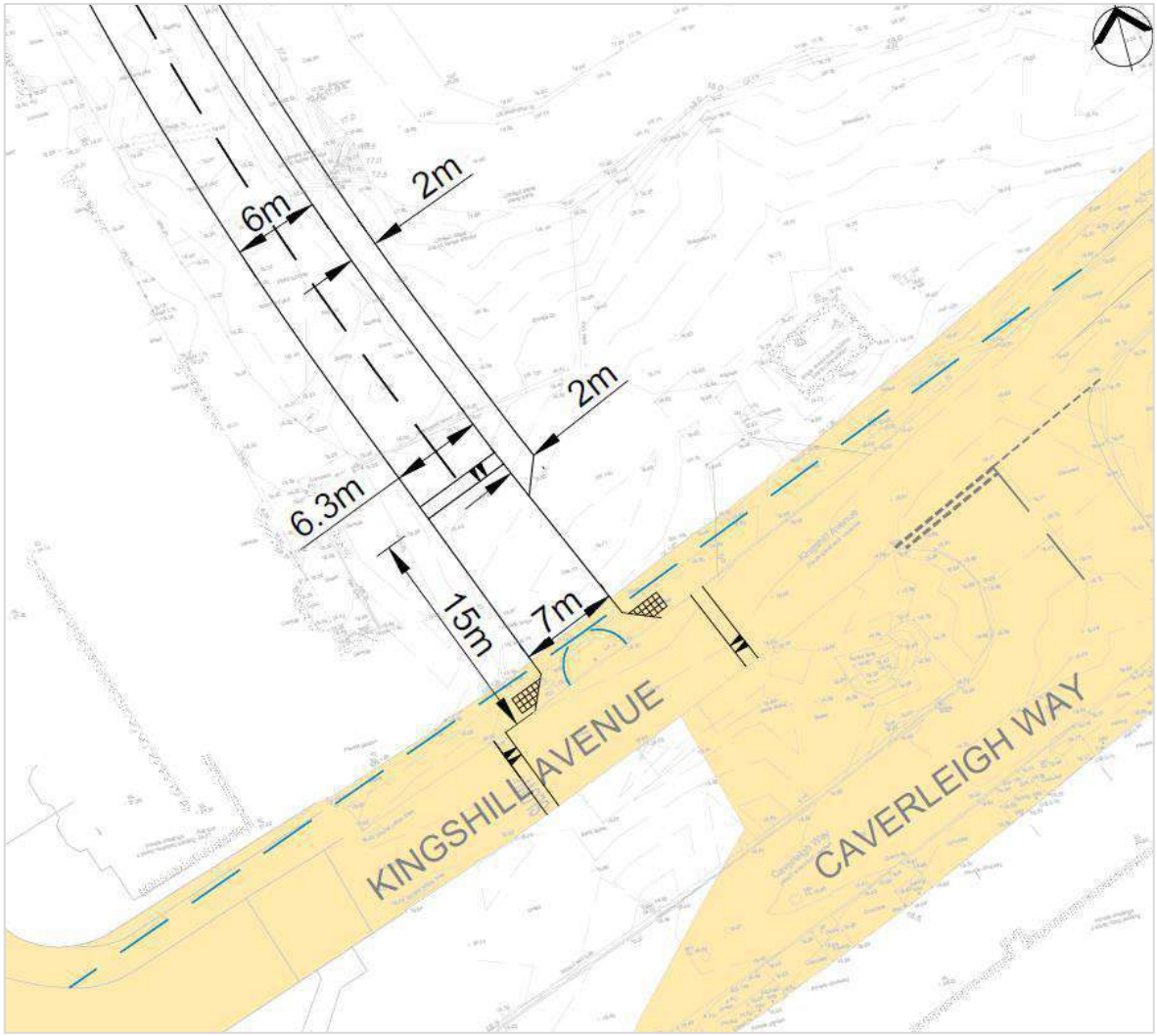


Southern Access

4.17 The primary vehicular access is take from the south along Kingshill Avenue via a new priority junction, providing access for pedestrians, cyclists, servicing and emergency vehicles. Pedestrian movements across the proposed new junction will be provided as the access will be part of a raised table to slow vehicle speeds in an area where vehicles are the guest and pedestrians have priority.

4.18 Kingshill Avenue is subject to a 30mph speed limit therefore, the proposed access has been designed in accordance with principles set out within Manual for Streets (MfS). Vehicular visibility splays according to MfS principles for the proposed access location on Kingshill Avenue are demonstrated in **Figure 4-3**, as per Iceni's **Drawing I000551-107** provided in full in **Appendix A5**.

Figure 4-3 Proposed Southern Access on Kingshill Avenue – as per Iceni Drawing I000551-107

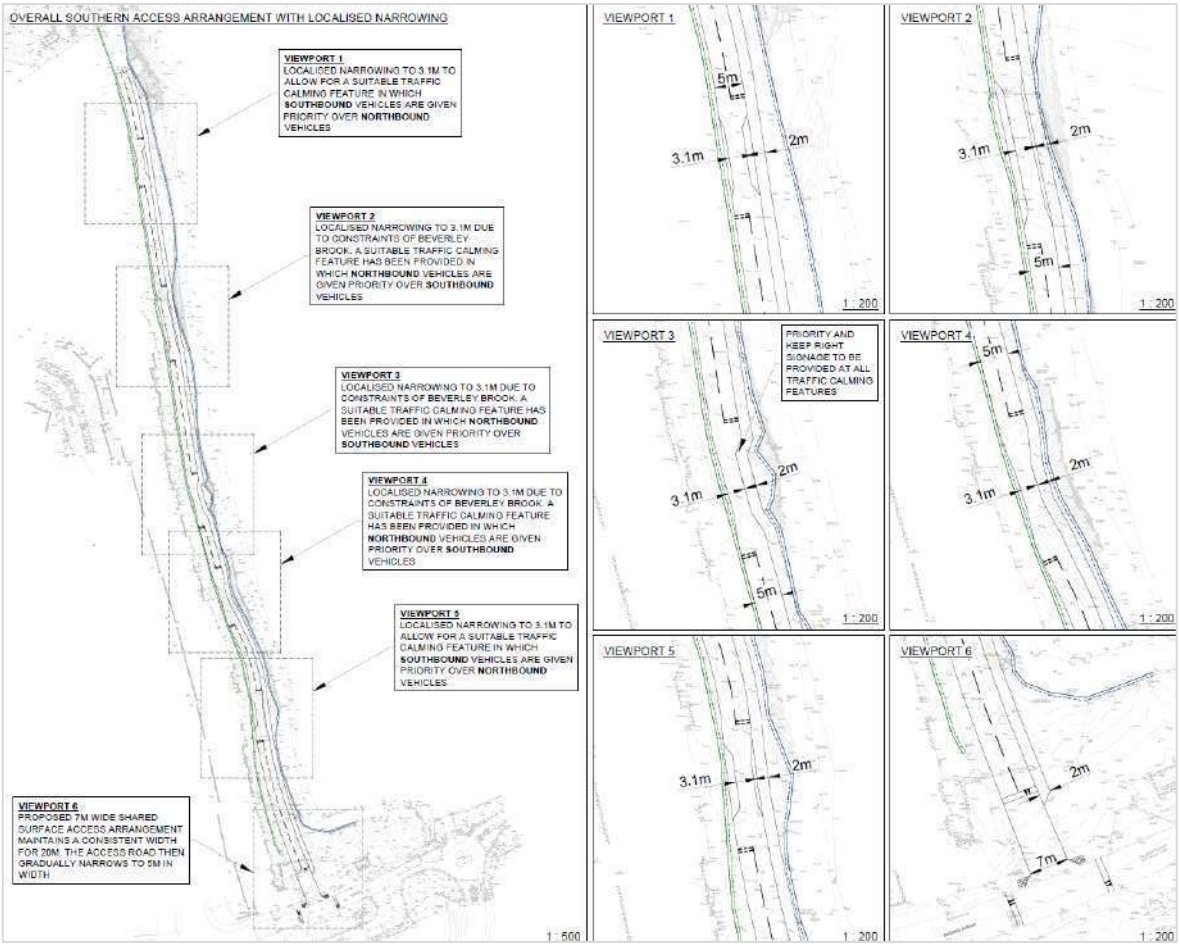


4.19 As demonstrated in **Figure 4-3**, the proposed southern access will feature a carriageway width broadly of 6m. The junction design shows the access road widens to 7m where it meets the back of the existing footway on Kingshill Avenue. This has been designed like this to accommodate a rare requirement for a large articulated vehicle to access the Site to maintain the retained onsite gas infrastructure.

4.20 The remainder of the access road between Kingshill Avenue and the internal layout is provided with a series of localised narrowing and one-way priority working. This is to ensure general traffic speed

is attenuated and to encourage priority for cyclists. The proposed arrangement for the internal southern access road is demonstrated in **Figure 4-4**, as per Iceni **Drawing I000551_105**.

Figure 4-4 Proposed Southern Access Road from Kingshill Avenue – as per Iceni Drawing I000551_105



4.21 The entrance into the Site is proposed as a shared surface space to provide pedestrians and cyclists with priority and enforce the space as active travel priority. Circa 20m north of Kingshill Avenue, a 2m-wide continuous pedestrian footway is proposed on eastern side of the access road carriageway. Cyclists will be directed to share the carriageway with vehicles, which is envisaged to be sufficiently low-traffic and low-speed to be a safe and attractive option for cyclists. The shared surface at the access indicates to drivers that they are now entering an area where they are the guest and that modes higher up in the traditional movement hierarchy, namely walking and cycling, have the priority. This encourages vehicles to enter the estate at a slow speed.

Pedestrian and Cycle Access

4.22 As set out already in this TA, the proposed design of the scheme ensures that permeability with the surrounding locality is enhanced, and active travel is prioritised within the layout.

4.23 At present from the proposed access location on Kingshill Avenue, pedestrians seeking to access Motspur Park station must travel beyond the Site and travel through the Sir Joseph Hood Memorial Playing Fields to the east of the Site to reach the station – equating to a 20-minute walk / 4-minute cycle (taken via Google Maps). Following the introduction of the Proposed Development and the route through the Site, this journey time will shorten to approximately a 12-minute walk or 4-minute cycle.

4.24 Oppositely, residents living north of the Site in Motspur Park will have their walking journey times to Worcester Park significantly reduced following the introduction of the development. Granted there will be the option of using the train to travel between the two locations, but the added attractiveness of walking between the two locations is anticipated to encourage north-south walking journeys. This added benefit is demonstrated in **Figure 4-5**.

Figure 4-5 Walking Reductions Between Motspur Park and Worcester Park

4.25 The scheme is proposing to deliver the following:

- Establish the 'reopening' of the site to the locality and enabling pedestrian and cycle journeys between Motspur Park and Worcester Park stations.
- North-south connections through the site to the locality; and
- A legible, convenient and segregated internal network throughout the Site for pedestrians and cyclists to enable access to residences, secure cycle storage areas and ensure that locals travelling through the site are able to conveniently navigate.

Swept Path Analysis

4.26 In order to confirm the Proposed Development layout will be able to accommodate the typical vehicles envisaged to access the Site – the following suite of swept path assessments have been prepared:

- **I000551_403.2C and I000551_403.3C**: Standard car swept path analysis demonstrating the most onerous car parking bays can be accessed.
- **I000551_403.4C and I000551_403.5C**: Fire tender vehicle swept path analysis utilising the southern access road from Kingshill Avenue.
- **I000551_403.8C and I000551_403.9C**: 10.7m refuse vehicle swept path analysis utilising the southern access road from Kingshill Avenue.
- **I000551_405.1B and I000551_405.2B**: Fire tender vehicle swept path analysis utilising the northern emergency access from West Barnes Lane.

4.27 The above swept path drawings are provided in full in **Appendix A5**.

Car Parking

4.28 The Proposed Development is promoting a parking ratio of 0.15 spaces per dwelling. Based on correspondence with TfL up this point, it is understood the final parking ratio is supported in principle based on prevailing London Plan policy. Berkeley Homes promote inclusive developments and so providing an element of parking on site allows for people with professions such as plumbers, midwives and taxi drivers who need access to a car the opportunity to live on their developments.

4.29 As set out in **Chapter 2**, the northern portion of the Site benefits from a PTAL of 0-1b therefore, the Site meets the criteria for Outer London PTAL 0 – 1 as per the London Plan, with these standards provided in **Table 4.3**.

Table 4.3 London Plan Maximum Parking Standards – Outer London PTAL 2 – 3

Dwelling Type	Number of Dwellings	Maximum Parking Provision

Outer London PTAL 0 – 1	1 – 2	Up to 1.5 spaces per dwelling
	3+	

4.30 Notwithstanding the above, a move towards lower parking provision is a clear policy across London, which is accompanied by a push for increased usage of sustainable modes of transport. Therefore, a parking ratio of 0.15 spaces per dwelling is appropriate and considerably lower than the policy requirement. It will promote sustainable travel whilst providing inclusive environments for people to live, so those with occupations requiring ownership of motor vehicles will have an opportunity to reside at the development with access to car parking.

4.31 With the 586 proposed dwellings, a parking ratio of 0.15 spaces per dwelling therefore necessitates the provision of 89 spaces.

4.32 It is envisaged that the opportunity for car parking overspill onto local roads will be precluded by the fact that the nearest local road from the proposed residential blocks is beyond 250m, which exceeds the limit set by the Lambeth Methodology for parking beat surveys. Essentially, people are unlikely to park their vehicles outside of the development due to lack of convenience and concerns about theft/damage. Parking overspill is not anticipated to occur on surrounding roads due to the following reasons:

- Parking at the development will be restrained by the proposed parking ratio, therefore residents will know whether they have access to a space when moving in or not; and
- The expectation that residents would walk beyond 250m, with the minimum distance to Kingshill Avenue exceeding 500m, to reach their parked vehicle is considered an unreasonable and highly improbable scenario;
- Up to three car club spaces are proposed to be included within the development which will again further reduce the need for people to own cars and in turn further reduce any minimal risk of overspill car parking. The provision of car clubs spaces will be staggered and based on when demand for them is triggered. For example, car club operator Zipcar claim that for every car club space they provide, it takes on average 10 – 14 vehicles off the road.

4.33 The entirety of the car parking provision will abut the SWR line bordering the eastern boundary of the Site. The appropriateness of this location is on the basis that it is situated away from the Beverley Brook, and functions as a buffer between the SWR line and the remainder of the development.

4.34 Full details regarding the management strategy for the proposed parking area on-Site is detailed within the Parking Management Plan (PMP) accompanying the wider planning submission.

Blue Badge Parking

4.35 In accordance with London Plan guidance, the proposed parking provision will include provision for blue badge holders at a ratio of 3% of the total number of dwellings from the outset – equating to the provision of 18 blue badge bays.

4.36 Should an increased demand for blue badge spaces arise, details on how an additional 7% of spaces can be delivered will be set out beyond occupation of the development.

Electric Vehicle (EV) Parking

4.37 Also in accordance with London Plan guidance, 20% of the total parking provision will have active Electric Vehicle Charging Points (EVCP) installed – equating to 18 bays. The remaining 80% will be equipped with passive EVCPs to accommodate for future demand.

Enterprise Car Club

4.38 To further the sustainable credentials of the development, the applicant has expressed a commitment to deliver a total of 3 Car Club spaces for use by prospective residents and the wider local community.

4.39 The delivery of a car club within the development would support the overarching sustainable vision for the scheme. Collaborative Mobility UK (CoMoUK) have demonstrated through research that, on average, car clubs remove 32 vehicles from the road network on a per space basis. As such, the provision of this within the development as a convenient and accessible option for prospective residents represents a utility to further reduce the cumulative traffic footprint of the proposed development.

4.40 To the above end, Enterprise have been contacted and these efforts will be progressed post-submission to secure an allocation of 3 car club spaces with RBKuT. One car club bay will be delivered within the red line boundary, with two additional spaces provided off-Site to the north and south of the development in the public highway, which will be available for use by the wider public. As such, the provision of the additional two off-Site car club bays will represent a wider community benefit. Details relating to this are still be worked through, with the exact locations of the off-Site bays to be confirmed following submission.

4.41 The car club bays will be supported with active EVCPs, further enhancing the sustainable credentials of the development.

4.42 It is envisaged the delivery of the car club bays may be phased to respond to the occupation rate and associated demand for the bays generated by the scheme. This will be confirmed by Enterprise following submission of the application.

Cycle Parking

4.43 In order to ascertain the proposed level of cycle parking provision for the development, the minimum standards as per the London Plan have been reviewed for C3 dwellings and summarised in **Table 4.4**.

Table 4.4 London Plan Minimum Cycle Parking Standards – C3 Dwellings

Use Class	Long-stay	Short-stay
C3 Dwellings	1 space per 1 person 1 bedroom dwelling 1.5 spaces per 2 person 1 bedroom dwelling 2 spaces per dwelling	5 to 40 dwellings: 2 spaces Thereafter: 1 space per 40 dwellings

4.44 Based on the London Plan minimum standards as per **Table 4.4** and the final schedule of accommodation as per **Table 4.2**, the proposed quantum of cycle parking across each block is summarised in **Table 4.5**.

Table 4.5 Proposed Cycle Parking – 586 dwellings

Dwelling Type	Block									
	A1		B1		C1		D1		E1	
	Long-stay	Short-stay	Long-stay	Short-stay	Long-stay	Short-stay	Long-stay	Short-stay	Long-stay	Short-stay
1B-1P	23	2	0	0	17	2	0	0	0	0
1B-2P	78	2	74	2	66	2	11	1	63	2
Other	162	3	148	3	162	3	162	3	70	2
Total	**263**	**7**	**222**	**5**	**245**	**7**	**173**	**4**	**133**	**4**

4.45 Based on the information presented in **Table 4.5**, the development proposes a total of 1035 long-stay cycle parking spaces for residents, and a total of 28 short-stay spaces for visitors.

4.46 The proposed cycle parking mix will be delivered as follows:

- 75% two-tier racks;
- 20% Sheffield stands; and
- 5% enlarged Sheffield stands.

4.47 The above cycle parking mix will therefore equate to the provision across the development as summarised in **Table 4.6**.

Table 4.6 Cycle Parking Mix – Long-stay / Resident Parking

Cycle Parking Mix (long-stay)	Block				
	A1	B1	C1	D1	E1
Enlarged (5%)	13	11	12	9	6
Sheffield (20%)	53	44	49	35	27
Two-tier (75%)	197	166	184	129	100
Total	**263**	**221**	**245**	**173**	**133**

4.48 All visitor parking will be provided in the form of Sheffield stands within safe, overlooked, publicly accessible areas in the form of 'Sheffield' stands and will be designed to be LCDS compliant.

4.49 Long-term resident cycle parking will comprise a mix of provision within the ground-floor of residential blocks as well as provision within separate cycle stores. Particular consideration will be given to ensure that separate cycle stores are sheltered, secure and benefit from sufficient surveillance and safety to design them to be as convenient for residents to use as is feasible.

4.50 Cycle parking area dimensions and access routes have been designed in accordance in accordance with the standards set out within the London Plan and will be designed to be compliant with TfL's London Cycling Design Standards (LCDS) document. Provision includes spaces for larger and non-standard cycles (e.g. cargo bikes) and ensuring that all cycle spaces for residents are secure, sheltered and conveniently located.

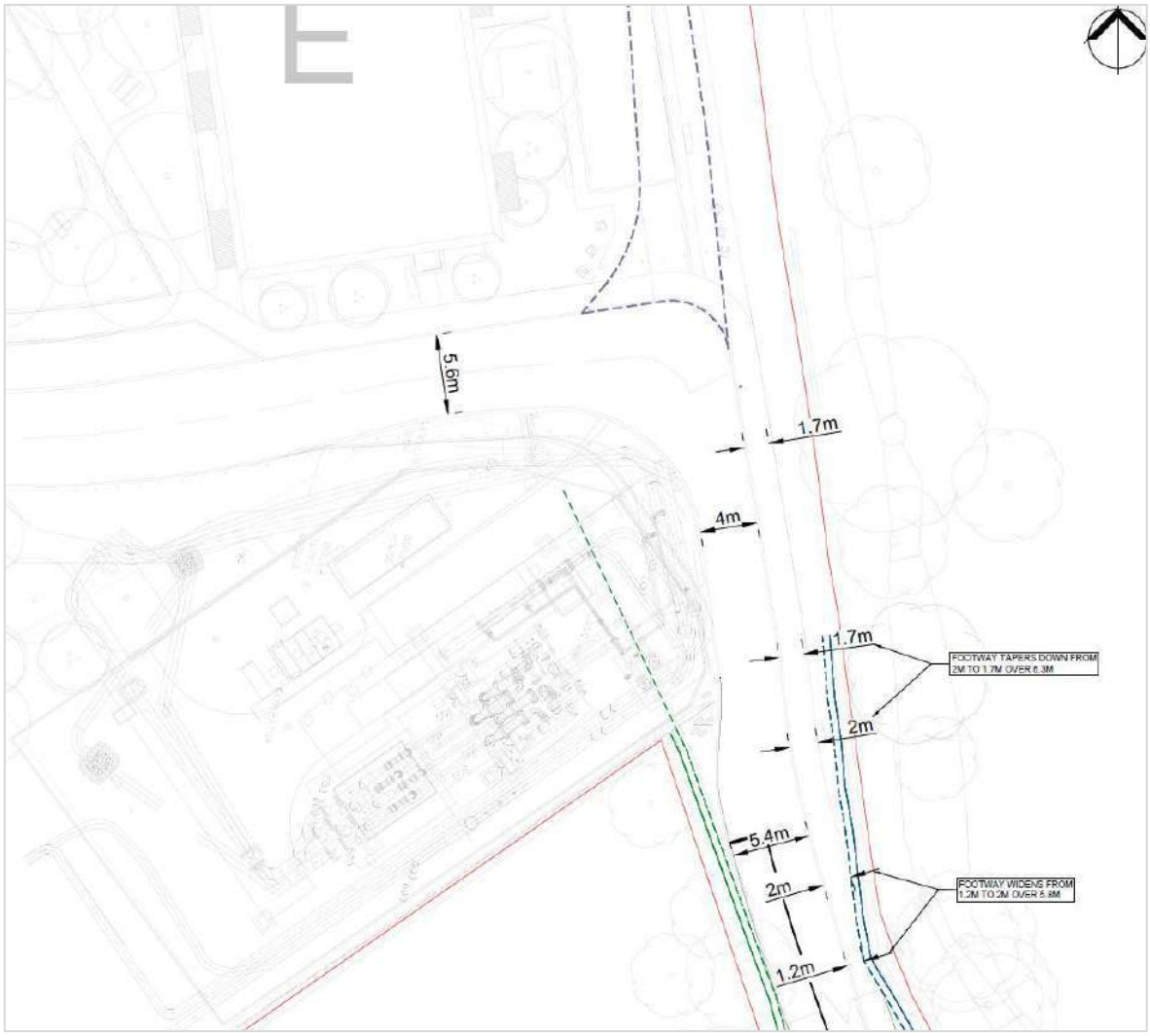
Retained Gas Facilities

4.51 There will be an element of the existing gas facilities operated by SGN which will need to be retained and accessed for maintenance purposes. As such, the internal layout has been designed to accommodate the largest possible vehicles envisaged to require access to the facilities – which could be an 18m low loader and 16.5m articulated HGV.

4.52 Within the proposed layout, the existing gas infrastructure to be retained on Site presents a significant constraint in company with the Beverley Brook. Vehicular access through a pinch point between the Beverley Brook and gas compound will be controlled by signalisation.

4.53 The dimensions of the signalised extent of the internal road adjacent to the gas compound are demonstrated in **Figure 4-6** as per Iceni **Drawing I000551_406**, provided in **Appendix A5**.

Figure 4-6 Internal Road Dimensions and Arrangement – Retained Gas Compound



4.54 As shown in **Figure 4-6**, the proposed footway adjacent to the carriageway narrows to 1.2m for a distance of 5.8m. Signal control is common for single carriageway ramp accesses to basement car parks and it has been demonstrated that a reasonable arrangement can be accommodated. The aforementioned swept path analysis drawings demonstrate that "every day" vehicle access through the signal junction will be accommodated. The following additional drawings have been prepared:

- **Drawing I000551_404.2**: Swept path analysis showing a 16.5m articulated vehicle will be able to access the retained gas compound using proposed overrun area opposite the compound access, and egress in a forward gear.

- **Drawing I000551_404.1D**: Swept path analysis showing an 18m low loader vehicle will be able to access the retained gas compound using proposed overrun area opposite the compound access, and egress in a forward gear.

- **Drawing I000551_104.2A**: Swept path analysis showing an 18m low loader and 16.5m articulated HGV will be able to access/egress the proposed southern access from Kingshill Avenue.

4.55 On the rare occasion that large vehicles are required to access the gas compound, notice will be given to residents and on-Site management while banksmen will be present to coordinate the larger vehicles accessing the Site and compound.

Deliveries and Servicing

4.56 The scheme is designed to ensure that deliveries and servicing can be undertaken within the development. The aforementioned refuse drawings demonstrate the layout will be able to accommodate the following:

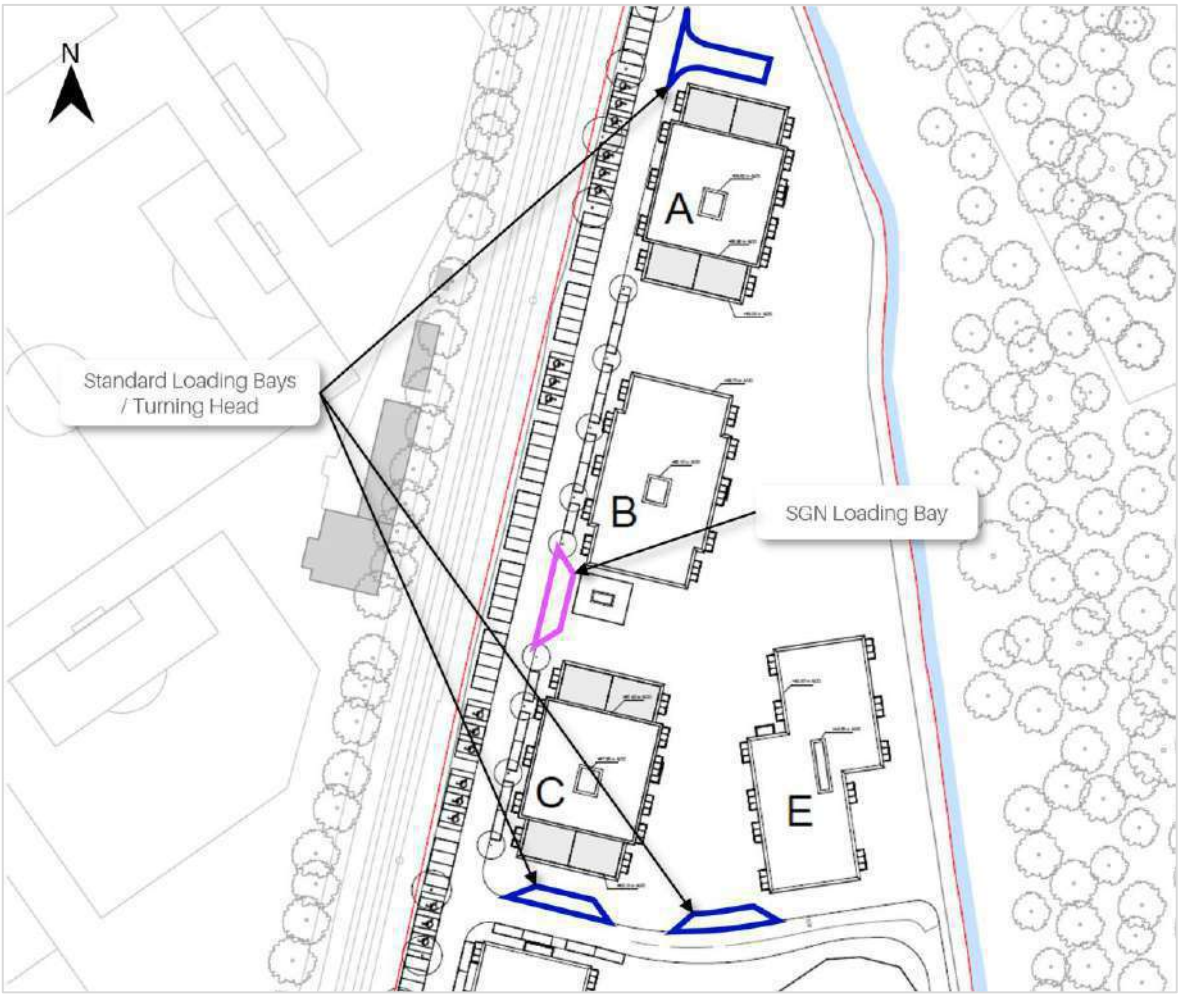
- Refuse vehicles will be able to access, egress and manoeuvre within the site to undertake collection; and
- Refuse collection areas will be provided within the development to ensure safe and efficient access for refuse vehicles.

4.57 Deliveries via light goods vehicles (LGVs) will be able to utilise proposed loading bays adjacent to block C and E to dwell within whilst they deliver.

4.58 An additional loading bay will be provided within the layout which will be solely for use by gas operators seeking to access the gas facility between block B and C. Manual bollards will be installed to preclude unfettered use of the loading bay.

4.59 The proposed internal loading bays are confirmed in **Figure 4-7**, as per the finalised layout.

Figure 4-7 Delivery Set-down Locations



4.60 In accordance with London Plan policy and RBKuT's feedback, a Delivery and Servicing Management Plan (DSMP) accompanies this TA which fully details matters relating to delivery and servicing at the development.

4.61 The anticipated level of trip generation associated with servicing of the proposed development is set out in **Chapter 6**.

Construction Logistics

4.62 Regarding construction access for the development, it is acknowledged that the context of the site and various constraints pertaining to access present challenges for construction vehicles. The proximity to the level crossing on West Barnes Lane adjacent to the northern access location means that construction vehicles must not obstruct the carriageway.

4.63 As such, to provide assurances that construction will be facilitated at the site, details relating to estimated construction traffic, swept path analysis and construction routeing are detailed further below.

4.64 A Detailed CLP will also be submitted by the Applicant to accompany the Full planning submission which details a regime of measures and management strategies to offset the impact of construction on the locality and other details. The forecast construction trip generation across each of the phases of construction is also detailed within the CLP.

Swept Path Analysis and Construction Routeing

4.65 Given the highway and access constraints locally, a preliminary construction routeing strategy has been considered at a high level at scoping stage.

4.66 The strategy for construction vehicle access to the Site is from the north via West Barnes Lane (left turn in only) and exit via the southern access on Kingshill Avenue to minimise impacts to the surrounding properties and network. TfL agreed this to be an appropriate strategy as part of the pre-application meeting on 7th January 2025.

4.67 To demonstrate the access locations will be able to facilitate the access / egress of the largest possible construction vehicles, the following swept path analysis has been undertaken:

- **Drawing I000551-602.1:** Swept path analysis for a 16.5m articulated HGV and an 18m low loader access at the northern access location on West Barnes Lane (left-turn in).
- **Drawing I000551-104.2:** Swept path analysis for a 16.5m articulated HGV and 18m low loader egress at the southern access location on Kingshill Avenue (left-turn out).

4.68 The drawings listed above are provided at **Appendix A5** for reference.

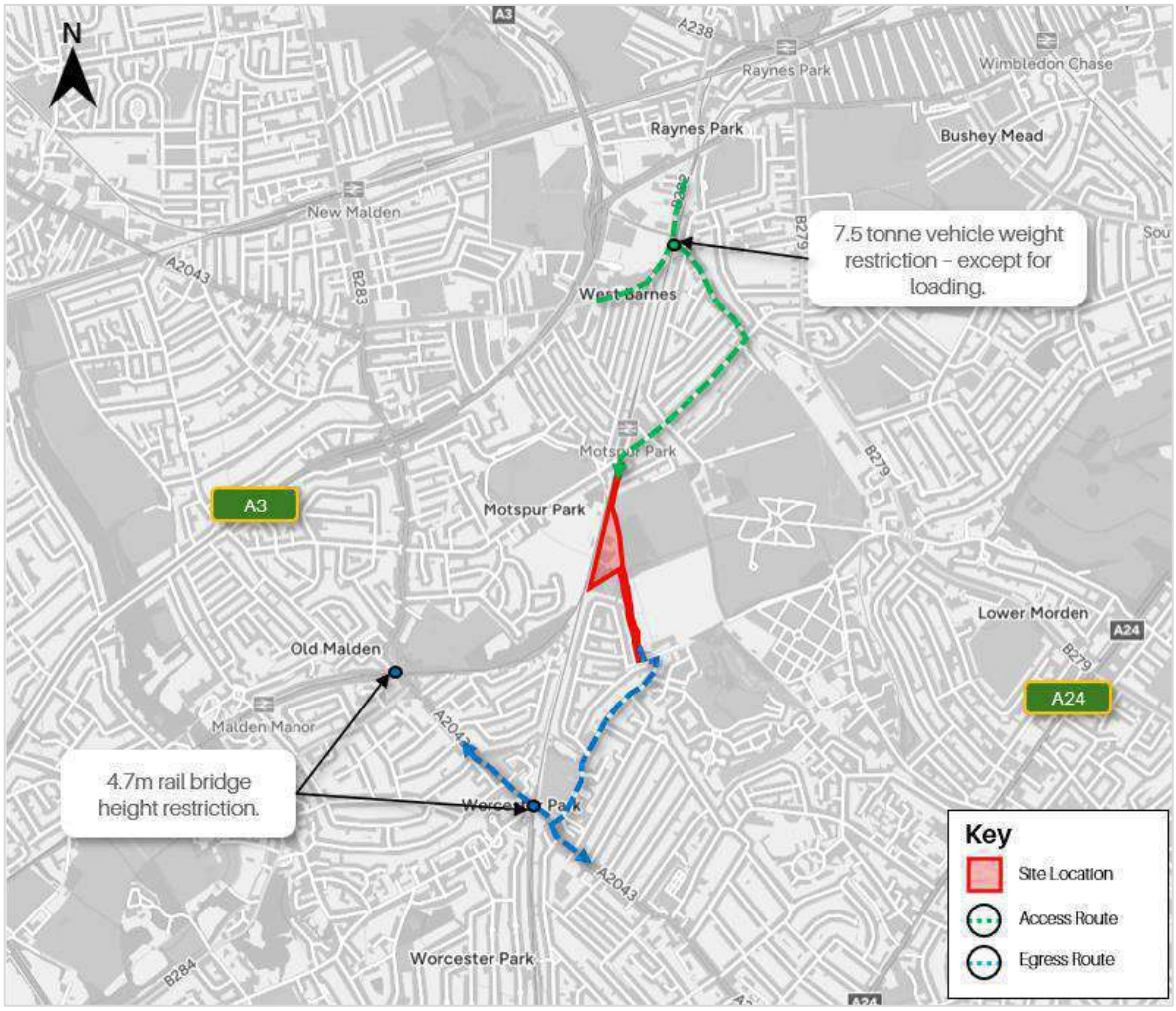
4.69 In relation to construction routeing, it is envisaged that all construction vehicles seeking to access the Site will be directed to / from the nearest road on the Strategic Road Network (SRN) – the nearest routes being the A24 and A3, situated east and west of the site respectfully.

4.70 Vehicles entering the northern access will be directed to the B282 and from there access West Barnes Lane towards the Site. Construction vehicles will be directed to access the site in this way so as to avoid the level crossing on West Barnes Lane, and so vehicles will always access the site via a left-turn in movement on West Barnes Lane.

4.71 Vehicles exiting via the southern access will be directed to Kingshill Avenue, Green Lane and then will depart in either direction on the A2043.

4.72 A construction routeing plan is provided below in **Figure 4-8** – the plan considers access from the northern access and egress from southern access on West Barnes Lane and Kingshill Avenue respectively.

Figure 4-8 Construction Routeing Plan – Access and Egress



4.73 As demonstrated on **Figure 4-8**, the following weight and height restrictions are situated on the access / egress routes:

- Two 4.7m rail bridge height restrictions along the A2043 Malden Road. The height restrictions can accommodate a 16.5m HGV and low loader. There are therefore no constraints posed by this height.
- Notice at the B282 / West Barnes Lane priority junction, no access for vehicles weighing over 7.5 tonnes – except for loading.

4.74 Despite the weight restriction at the junction of the B282 / West Barnes Lane, there is an exemption for loading vehicles. Construction activity is considered a loading activity and therefore construction vehicles associated with the Site will be exempt from the restriction. Given the low level of HGV trips set out above, this is not considered to be disruptive to the local amenity.

5. ACTIVE TRAVEL ZONE ASSESSMENT

Overview

5.0 This Chapter sets out an ATZ assessment undertaken at the Site. The purpose of this assessment is to evaluate pre-agreed key active travel routes which prospective residents are anticipated to make use of, thereby investigating any areas which may benefit from potential improvements. Both a day-time and night-time ATZ assessment were undertaken, in line with TfL guidance.

5.1 The ATZ assessment has been undertaken in accordance with TfL's Healthy Streets indicators, which are confirmed on **Figure 5-1** for clarity.

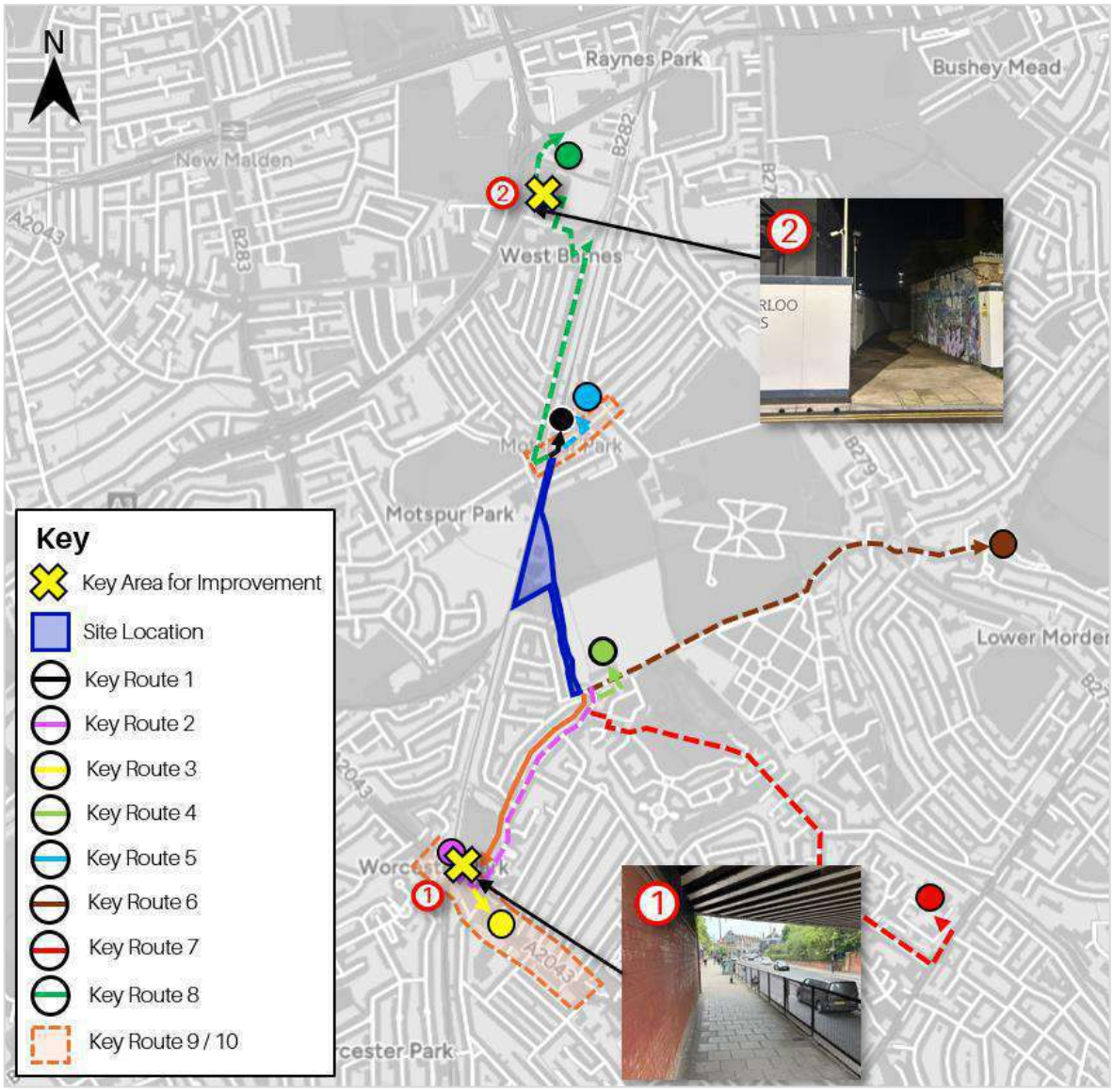
Figure 5-1 Healthy Streets Criteria

5.2 As agreed during pre-application consultation with RBKuT, LBM and TfL, the following ATZ routes to and from key destinations within the study area have been identified and evaluated via both a day-time and night-time Site visit:

- **Key Route 1:** Motspur Park Station and adjacent bus stops.
- **Key Route 2:** Worcester Park Station.
- **Key Route 3:** Longfellow Road bus stops.
- **Key Route 4:** Green Lane Primary & Nursery School.
- **Key Route 5**: Blossom House School.
- **Key Route 6:** Morden Park (only assessed as a day time route).
- **Key Route 7:** St. Anthony's Hospital.
- **Key Route 8:** Raynes Park High School.
- **Key Route 9:** Motspur Park High Street.
- **Key Route 10:** Worcester Park High Street.

5.3 A plan demonstrating the key routes, as well as any locations identified for potential improvements plotted in relation to the Site is provided in **Figure 5-1**.

Figure 5-1 ATZ Routes



Potential Areas for Improvement

5.4 In order to evaluate the quality of the identified key routes with regard to the Healthy Streets criteria, a day-time and night-time Site visit was undertaken on Wednesday 13th August and August 3rd September 2025 respectively.

5.5 It should be noted that some of the routes have significant coverage overlaps, and as such there are areas for improvement which pertain to more than one route.

5.6 Overall, the quality of the local active travel infrastructure is excellent, with continuous footways provided on both sides of the carriageway on all of the nearby roads, a variety of crossing arrangements in the form of controlled and uncontrolled crossings which pedestrians can already use to travel toward a variety of amenities and transport hubs. Additionally, there is generally

widespread provision of continuous street lighting along the majority of roads. The particular routes which benefitted from existing street conditions which strongly accord with the healthy streets characteristics as per TfL's guidance are the following:

- Motspur Park Station (key route 1);
- Green Lane Primary and Nursery School (key route 4);
- Blossom House School (key route 5);
- Green Lane (portion of key route 2/3/10)
- St Anthony's Hospital (key route 7); and
- Both Motspur Park and Worcester Park High Street (key route 9/10).

5.7 Overall, the day-time and night-time ATZ's determined a total of two areas where potential improvements could be explored. The improvements which are suggested principally relate to safety and the provision of lighting in certain locations, which became apparent during the night-time ATZ. Certain sections of the routes especially lacked perceived safety due to the absence of lighting and the lack of natural surveillance.

5.8 The potential improvements associated with the day-time and night-time ATZ assessments, as plotted on **Figure 5-2**, are set out in **Table 5.1**, with the corresponding photographs provided further below.

Table 5.1 ATZ Routes – Potential Improvements

Route	Location	Possible Improvement	Iceni Commentary
2	Underpass on northern side of A2043	Provision of lighting – subject to land/structure ownership	While there is continuous street lighting along the majority of the A2043, there is a noticeable lack of lighting at the underpass and the staircases leading to Worcester Park station entrance. Given the isolation of the pedestrian footway from the carriageway, there is a potential perceived safety issue present at this section – which could be exacerbated during late night with less footfall and surveillance.

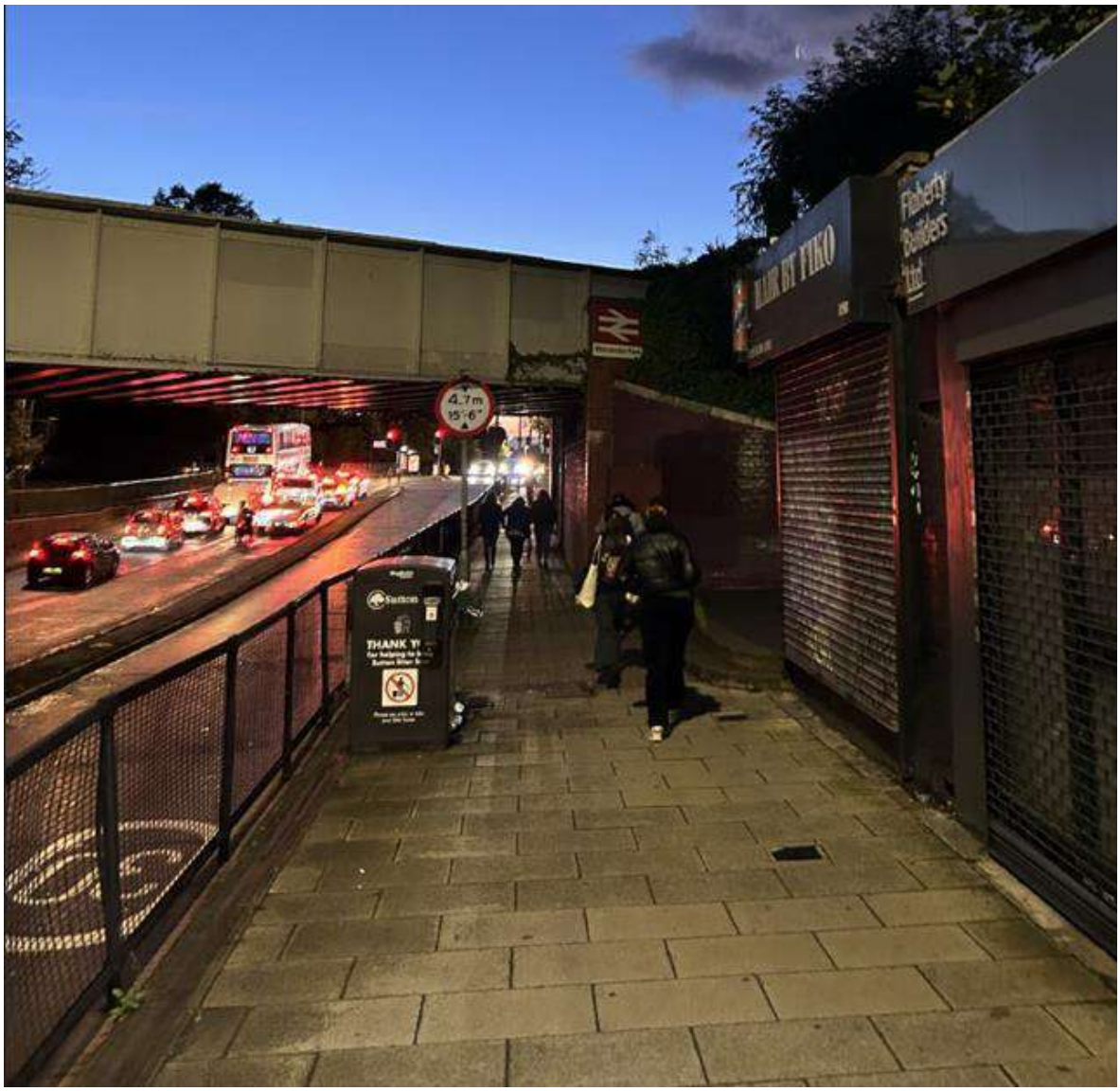
Route	Location	Possible Improvement	Iceni Commentary
8	Pedestrian footpath east of the B282 Beverley Way	Provision of lighting.	As pictured in **Photo 12 and 13**, this section also represents a perceived less safe area at night given the isolation of the route and lack of lighting and surveillance. There is a perceived potential lack of safety in this section of the route at night.

5.9 The corresponding photographs of the areas for possible improvements along the key routes as identified in **Table 5.1** are provided below, with images displayed for both the night-time and day-time ATZ assessments.

5.10 The area for improvement for key route 2 is pictured in **Photo 8** and **Photo 9**.

Photo 8 – Area for Improvement – Key Route 2 (Daytime ATZ)

Photo 9 – Area for Improvement – Key Route 2 (Night-time ATZ)



The area for improvement for key route 8 is pictured in **Photo 10 and 11**.

Photo 10 – Area for Improvement – Key Route 8 (Daytime ATZ)

Photo 11 – Area for Improvement – Key Route 8 (Night-time ATZ)

ATZ Summary

5.11 Overall, as mentioned the locality benefits from an excellent quality of public realm with regard to the TfL's Healthy Streets indicators.

5.12 Possible areas for improvement have been identified and improvements suggested which principally relate to an absence of lighting and the perceived level of safety at night in specific locations. Despite the suggestions for improvement, it is not considered that the areas identified compromise the overall quality of the surrounding active travel routes, and will not negatively impact the experience of prospective residents of the development.

6. TRIP GENERATION

Overview

6.0 This Chapter forecasts the anticipated level of trip generation associated with the proposed development, in addition to an indicative traffic impact and distribution exercise.

6.1 The development proposes 586 new residential dwellings on the former Motspur Park Gasholders Site, inclusive of 35% affordable tenure. As the site has not been in operation for a number of years, the existing trip generation at the Site is assumed to be zero.

Proposed Trip Generation

6.2 The proposed trip generation accommodates for both the private and affordable dwellings proposed as part of the scheme. The scheme, at this stage, is targeting 35% affordable. For the purposes of the trip generation, an assumption of 35% affordable dwellings has been considered.

6.3 It should be noted that the proposed private and affordable trip rates were agreed with TfL as part of pre-application correspondence.

Private Dwellings

6.4 In order to ascertain trip rates for the private dwellings as part of the proposed development, the TRICS database (version 7.11.3) has been interrogated to obtain 'total person' multi-modal trip rates with the following parameters selected:

- Land use category: 03 'Residential';
- Subcategory: C 'Flats Privately Owned';
- Selected regions: Greater London;
- Selected locations: Suburban Area (PPS6 Out of Centre), Edge of Town and Neighbourhood Centre (PPS6 Local Centre);
- Number of surveyed sites: 5

6.5 A summary of the proposed total person trip rates and trip generation for the private dwellings across the AM and PM peak hours of 08:00 – 09:00 AM and 17:00 – 18:00 PM respectively is provided in **Table 6.1**, with the full TRICS output provided in **Appendix A6**.

Table 6.1 TRICS Total Person Trip Generation – 381 Private Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trip Rates	0.052	0.413	0.465	0.273	0.135	0.408
Private Dwelling Trips	20	157	177	104	51	155

6.6 As demonstrated in **Table 6.1**, the development is anticipated to generate in the order of 177 trips in a typical weekday AM peak period, comprised of 20 arrivals and 157 departures. During the PM peak period, the development is anticipated to generate in the order of 155 trips, comprised of 104 arrivals and 51 departures.

Affordable Dwellings

6.7 In order to ascertain trip rates for the affordable dwellings as part of the proposed development, the TRICS database (version 7.11.3) has been interrogated to obtain 'total person' multi-modal trip rates with the following parameters selected:

- Land use category: 03 'Residential';
- Subcategory: D 'Affordable/Local Authority Flats';
- Selected regions: Greater London;
- Selected locations: Edge of Town Centre and Neighbourhood Centre (PPS6 Local Centre);
- Number of surveyed sites: 3

6.8 A summary of the proposed total person trip rates and trip generation for the affordable dwellings across the AM and PM peak hours of 08:00 – 09:00 AM and 17:00 – 18:00 PM respectively is provided in **Table 6.2**, with the full TRICS output provided in **Appendix A6**.

Table 6.2 TRICS Total Person Trip Generation – 174 Affordable Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trip Rates	0.126	0.592	0.718	0.324	0.194	0.518
Affordable Dwelling Trips	22	103	125	56	34	90

6.9 As demonstrated in **Table 6.2**, the development is anticipated to generate in the order of 125 trips in a typical weekday AM peak period, comprised of 22 arrivals and 103 departures. During the PM peak period, the development is anticipated to generate in the order of 90 trips, comprised of 56 arrivals and 34 departures.

Gross Proposed Trips

6.10 The combined proposed development trips for both the private and affordable dwellings across a typical weekday AM and PM peak are summarised in **Table 6.3**.

Table 6.3 Gross Proposed Trip Generation – 586 Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trips	42	260	302	160	85	246

6.11 In order to ascertain a representative mode share for the development, the 2011 Census *"Method of travel to work"* dataset has been utilised. As the Site is situated on the borders of LBK, LBM and LBS – the data for the following Middle Super Output Areas (MSOA) has been obtained:

- Merton 020 MSOA (E02000708).
- Kingston Upon Thames 015 MSOA (E02000612).
- Sutton 006 MSOA (E02000845).

6.12 The mode share data from the above local MSOAs has been combined and is summarised in **Table 6.4**.

Table 6.4 Method of Travel to Work (2011 Census) – Average of Merton 020, Kingston 015 and Sutton 006 MSOAs

Method of Travel	% Share
Rail	35%
Bus, minibus or coach	7%
Taxi	1%
Motorcycle, scooter or moped	1%
Driving a car or van	43%
Passenger in a car or van	2%
Bicycle	3%
On foot	6%

Other	0%
***Total**	**100%**

**Subject to rounding*

6.13 As mentioned, the proposals include for a restrained car parking provision of 0.15 spaces per dwelling. The mode shares provided in **Table 6.4** therefore overestimate the number of car trips which will be generated by the development, due to a mode share of 43% car drivers being disproportionate to the restrained parking provision.

6.14 As such, the mode shares have been recalculated using local car ownership data to quantify the ratio of cars to dwellings in the Boroughs of Merton, Sutton and Kingston and obtain a reduction factor to apply to the mode share in the local area and derive a representative car driver mode share for the proposals.

6.15 The most recently available car ownership data has therefore been obtained from the 2021 Census *"Car or van availability"* dataset for the Boroughs of Kingston upon Thames, Merton and Sutton – summarised in **Table 6.5**.

Table 6.5 Local Car Ownership (2021 Census) – Total of Kingston upon Thames, Merton and Sutton Boroughs

Number of cars or vans	Kingston upon Thames	Merton	Sutton	Total
No cars or vans in household	16,866	27,009	18,782	62,657
1 car or van in household	31,444	38,843	38,668	108,955
2 cars or vans in household	13,381	12,570	18,785	44,736
3 or more cars or vans in household	3,935	3,304	6,113	13,352
Total households	**65,626**	**81,726**	**82,348**	**229,700**

6.16 Using the total number of dwellings demonstrated in **Table 6.5** – 229,700 households – the ratio of cars to dwellings has been calculated in the following way:

- To calculate the total number of households with cars in Kingston, Merton and Sutton:

  108,955 + 44,736 + 13,352 = 167,043 households with cars

- To calculate the ratio of cars to dwellings in local MSOAs:

  167,043 (households with cars) / 229,700 (total households in local Boroughs) = 0.73.

6.17 Therefore, taking the proposed car parking ratio of 0.15 spaces per dwelling, and dividing this by the ratio of 0.73 cars per dwelling in the local Boroughs – a reduction factor of 0.4 has been obtained which can be applied to the 43% car driver mode share provided in **Table 6.4**. As such, the proposed car driver mode share for the development is reduced to 8%, which is proportional to the level of proposed parking provision.

6.18 TfL agreed as part of pre-application correspondence that the above methodology is acceptable. It is acknowledged that TfL in agreeing to this methodology were agreeing to a ratio of 15.5% at the time, however the car parking ratio has reduced significantly since the agreement, hence a lower car driver mode share is now being applied.

6.19 On the above basis, the Census data mode shares in **Table 6.4** have been recalculated assuming the revised car driver mode share and all other modes are redistributed on a pro rata basis using the Census data. To then quantify the proposed multi-modal trip generation for the development, the revised mode shares have been applied to the total person trips provided in **Table 6.3**. The proposed multi-modal trips across a typical weekday AM and PM peak are therefore demonstrated in **Table 6.6**.

Table 6.6 Proposed Multi-Modal Trip Generation – 586 Dwellings

Mode of Travel	Mode Share	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
Rail	57%	24	148	172	91	48	140
Bus	12%	5	31	36	19	10	29
Taxi	1%	0	3	3	2	1	3
Motorcycle, scooter or moped	2%	1	6	7	4	2	6
Car or van	8%	3	20	24	13	7	19
Passenger	4%	2	10	12	6	3	10
Bicycle	5%	2	13	15	8	4	12
On foot	10%	4	26	30	16	8	24
Other	1%	0	2	3	1	1	2
***Total**	**100%**	**42**	**260**	**302**	**160**	**85**	**246**

**Subject to rounding*

6.20 Pursuant to **Table 6.6**, a key summary of the proposed trip generation is characterised as follows:

- A total of 302 trips in the AM peak period, comprised of 42 arrivals and 260 departures in addition to a total of 246 departures in the PM peak period, comprised of 160 arrivals and 85 departures;

- A total of 24 car driver trips in the AM peak period, comprised of 3 arrivals and 20 departures in addition to a total of 19 car trips in the PM peak period, comprised of 13 arrivals and 7 departures; and

6.21 Using the same trip generation methodology and for robustness, the daily vehicular profile for the proposed trip generation is summarised in **Table 6.7**.

Table 6.7 Proposed Vehicular Trip Generation – Daily Profile

Time Range	Vehicular Trips		
	Arrive	Depart	Total
07:00-08:00	5	21	26
08:00-09:00	6	40	47
09:00-10:00	10	19	29
10:00-11:00	7	12	20
11:00-12:00	11	15	26
12:00-13:00	13	15	28
13:00-14:00	11	12	24
14:00-15:00	14	15	29
15:00-16:00	26	17	44
16:00-17:00	26	14	39
17:00-18:00	25	13	38
18:00-19:00	28	12	40
19:00-20:00	25	14	39
20:00-21:00	18	9	27
Daily Trips	**226**	**229**	**455**

6.22 As demonstrated above, over the course of a typical weekday, the proposed development is anticipated to generate 226 arrivals and 229 departures. This level of trip generation will be comfortably accommodated within the 89 proposed parking bays (approximately 2 arrivals and departures per parking space per day), thereby supporting the position that this provision is sufficient.

Servicing Trips

6.23 In order to calculate the trip generation associated with servicing for the proposed development, accepted TfL guidance recommends a ratio of deliveries per dwelling across a typical day of 0.43.

Using this ratio – the development is anticipated to generate in the order of 252 associated trips with the dwellings. However, in reality this does not equate to one vehicle per trip, as a number of trips will be 'linked trips' which represent one vehicle visiting multiple homes within the development. As such, the 252 servicing trips are reduced by a factor of 20% to account for linked trips – which equates to a total of 202 trips across a typical weekday. Dividing this across a typical 12-hour day gives an hourly delivery rate of 17 deliveries per hour associated with the development. The 20% linked trip assumption was applied as part of a previously approved St Williams Homes London scheme, whereby TfL provided this assumption to agree servicing trip rates.

6.24 The above assumptions are deemed as acceptable by TfL as part of pre-application correspondence, they were also discussed with RBKuT and LBM.

6.25 The DSMP submitted as part of the application incorporates measures seeking to consolidate deliveries at the development so as to minimise the disruption of deliveries within the Site and mitigate any impacts on the local road network associated with delivery trips for the development. As such the number of servicing trips set out is likely to be lower meaning the assessment is very much a worst-case assessment.

Traffic Impact and Distribution

6.26 Informed by the trip generation exercise above, a preliminary traffic impact and distribution exercise has been undertaken. The scope of the assessment has been agreed with TfL, RBKuT, LBM and in conjunction with officers at LBS. The following junctions have then been assessed to calculate the traffic impact on the local junction network.

- Proposed Site access on Kingshill Avenue.
- Green Lane / Kingshill Avenue mini-roundabout.
- Green Lane / Longfellow Road priority junction.

6.27 Whilst it is also acknowledged that there are congestion issues at the A2043 Central Road / Green Lane signalised junction. TfL and the local boroughs have agreed this junction does not need modelling as the traffic flows generated from the Site will not lead to a severe impact at this junction. It is also noted that TfL have recently upgraded the signals to allow the junction to operate better and therefore improve congestion issues.

6.28 As detailed above, the vehicle trip generation for the scheme will be negligible – equating to less than one vehicle every minute, including servicing vehicles,. As such, the associated traffic impact of the scheme is considered to be minimal on surrounding junctions and modelling for a traffic

footprint of this scale would not typically be deemed necessary, however the junctions immediately adjacent to the site have been assessed in any case.

Manual Classified Count Surveys

6.29 To provide baseline data, Manual Classified Count (MCC) surveys were undertaken on Thursday 3rd July 2025. This was a normal school day for Green Lane Primary School.

Indicative Distribution and Assignment

6.30 For the purposes of this distribution exercise, as agreed at scoping stage, The TfL dashboard for trips in London has been used. This data set outlines how commuter journeys associated with the development will travel to other Boroughs within London and areas around London. These were identified as key commuting areas based on a review of TfL's *Travel Demand Forecast Dashboard* using the *Forecast Travel Demand by Mode or Trip Purpose* dataset. The following parameters were selected:

- From Borough: Kingston upon Thames
- Forecast Year: 2019 Base Year
- Mode: Car & Motorcycle
- Trip Purpose: All

6.31 Using the TfL Travel Demand Forecast Dashboard and the proposed car journeys presented in **Table 6.6**, the share of car journeys travelling to/from the development to local settlements is demonstrated in **Table 6.8**.

Table 6.8 Local Distribution of Car Journeys – Weekday AM and PM Peaks

Destination	Distribution	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
Kingston upon Thames	54%	2	11	13	7	4	10
Berks, Hants and Surrey	18%	1	4	4	2	1	3
Richmond upon Thames	8%	0	2	2	1	1	1
Merton	7%	0	1	2	1	0	1
Sutton	4%	0	1	1	0	0	1
Wandsworth	3%	0	1	1	0	0	1
Hounslow	1%	0	0	0	0	0	0

Croydon	1%	0	0	0	0	0	0
Sussex & Kent	1%	0	0	0	0	0	0
Hammersmith & Fulham	1%	0	0	0	0	0	0
Ealing	1%	0	0	0	0	0	0
Total	**100%**	**3**	**20**	**24**	**13**	**7**	**19**

6.32 The distributed commuter trips in **Table 6.8** have been assigned to the local road network using the following road assignments:

- A2043 east;
- A2043 west; and
- Browning Avenue.

6.33 Using the above assignment, the anticipated car journeys associated with the proposed development across the weekday AM and PM peaks are provided in **Table 6.9**.

Table 6.9 Assigned Proposed Car Journeys – Weekday AM and PM Peaks

Destination	Distribution	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
A2043 east	10%	0	2	2	1	1	2
A2043 west	86%	3	18	20	11	6	17
Browning Avenue	5%	0	1	1	1	0	1
Total	**100%**	**3**	**20**	**24**	**13**	**7**	**19**

6.34 The key conclusions from **Table 6.9** are as follows:

- A total of 96% of car journeys will be routeing through the A2043 / Green Lane junction, equating to 22 total journeys in the AM peak period and 19 total journeys in the PM peak period, around one vehicle every 3-minutes. These numbers do not include servicing vehicles, but it is assumed the majority of the 17 servicing and delivery trips per hour generated would also use this junction, which is less than one vehicle every 3-minutes. Albeit some would already be on the network servicing the residential units surrounding the Site.

- A total of 5% commuter of car journeys will be routeing along Browning Avenue, equating to a 1 total journeys in the AM peak period and 1 total journeys in the PM peak period.

Junction Modelling

6.35 The tables below summarise the junction capacity results for the junctions set out above.

Table 6.10 Site Access Junction Capacity Assessment - PICADY

2030 Development Case	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
Stream B- C	0.0	0.04	0.0	0.02
Stream B - A	0.0	0.00	0.0	0.00
Stream C - AB	0.0	0.02	0.0	0.04

6.36 This demonstrates that with the development fully occupied, there will be no capacity issues.

Table 6.11 Green Lane / Kingshill Avenue Junction Capacity Assessment - ARCADY

2025 Observed	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
School Access	0.0	0.00	0.0	0.02
Green Lane (E)	0.0	0.02	0.0	0.01
Green Lane (S)	0.0	0.04	0.0	0.03
Kingshill Avenue	0.0	0.02	0.0	0.02
2030 Baseline	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
School Access	0.0	0.00	0.0	0.02
Green Lane (E)	0.0	0.02	0.0	0.01
Green Lane (S)	0.0	0.04	0.0	0.03
Kingshill Avenue	0.0	0.02	0.0	0.02
2030 Development Case	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
School Access	0.0	0.00	0.0	0.02
Green Lane (E)	0.0	0.02	0.0	0.01
Green Lane (S)	0.0	0.05	0.0	0.03
Kingshill Avenue	0.0	0.03	0.0	0.03

6.37 Again, the results indicate that despite the development traffic generated, there are no anticipated capacity concerns with this junction.

Table 6.12 Green Lane / Longfellow Road Junction Capacity Assessment - PICADY

2025 Observed	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
Stream B- C	0.0	0.01	0.0	0.01
Stream B - A	0.0	0.04	0.1	0.06
Stream C - AB	0.0	0.01	0.0	0.01
2030 Baseline	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
Stream B- C	0.0	0.01	0.0	0.01
Stream B - A	0.0	0.04	0.1	0.06
Stream C - AB	0.0	0.01	0.0	0.01
2030 Development Case	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)	
	Queue (Veh)	RFC	Queue (Veh)	RFC
Stream B- C	0.0	0.01	0.0	0.01
Stream B - A	0.0	0.04	0.1	0.06
Stream C - AB	0.0	0.01	0.0	0.02

6.38 As can be seen, there are not anticipated to be any capacity issues with the junctions immediately outside of the Site, with little to no queueing and no recorded delay. As such it is considered that there is not a severe impact caused by traffic generated by this Site.

6.39 The PICADY and ARCADY modelling results displayed in **Tables 6.10, 6.11 and 6.12** are provided in full in **Appendix A7**.

Public Transport Trip Generation Assessment

6.40 Due to the location of the Site, in close proximity to Motspur Park Railway Station, there are anticipated to be a number of trips on the rail network. These are predominantly expected to head into London in the AM peak and returning in the PM peak, although there will be some who are travelling south west from the site in the morning and returning in the evening.

6.41 An assessment of the proposed rail journeys has been undertaken using the gross trip generation figures displayed in **Table 6.13** as a robust figure. The public transport trips from this table are repeated below for ease.

Table 6.13 Proposed Multi-Modal Trip Generation – 586 Dwellings

Mode of Travel	Mode Share	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total

Rail	57%	24	148	172	91	48	140
Bus	12%	5	31	36	19	10	29

6.42 This demonstrates that there will be up to 172 rail trips in the AM peak period and 140 in the PM peak. If it is assumed that all departures are journeying into London in the AM and returning in the PM this provides a worst-case assessment.

6.43 In the AM peak, the busiest period, there are 5 trains departing Motspur Park towards London. This would result in the following number of trips per service, assuming an even distribution.

Table 6.14 Assumed Rail Services – Motspur Park

Motspur Park Trains per Service	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Motspur Park	5	30	34	18	10	28

6.44 When this is split by the number of carriages per train (8 carriages – as a worst case), this equates to another 4 passengers per carriage. It is considered that this level of impact would fall within daily variation of trips and would therefore not have a significant impact. The Applicant is however in discussions with South Western Railway about any improvements that can be made to reduce impacts for existing railway passengers.

6.45 Following a meeting with Network Rail and SWR on the 24th September 2025, it is also understood that an SWR upgrade is underway on the existing line operating at Motspur Park and Worcester Park stations, which will progressively introduce new rolling stock to deliver capacity improvements and modernise services. The new rolling stock will be 10-carriages in length and therefore, additional capacity will be delivered which will accommodate the demand associated with prospective residents of the development.

6.46 In terms of bus patronage, there are anticipated to be 36 trips in the AM peak and 29 in the PM peak. These trips are likely to be split between the K5 service to the north of the site and the S3 and other buses along the A2043. As there are multiple services on offer to residents, it is not expected that there would be any considerable increase in terms of passengers per bus. TfL have also indicated that they would not seek a contribution from the site towards public transport improvements further adding to weight to there being limited impact in this regard.

7. SUMMARY AND CONCLUSION

Summary of the Report

7.0 This Healthy Streets TA has been prepared by Iceni Projects on behalf of Berkeley Homes (West London) Limited to support a Full Planning Application for the residential redevelopment on land in Motspur Park, south of West Barnes Lane situated in RBKuT. The northern access to the Site however, sits within LBM.

7.1 The Proposed Development comprises a total of 586 residential dwellings (C3), inclusive of 35% affordable homes by habitable room – comprised of 50% affordable rent and 50% shared ownership.

7.2 This main findings of this Healthy Streets TA include the following:

- Despite the PTAL score as per TfL's WebCAT tool, the Application Site is evidently located in a sustainable location, and the proposals to re-open the Site to the public and provide a key north-south connection between Motspur Park and Worcester Park is considered to significantly bolster the permeability of the development with the surrounding area and enhance broader connectivity, pursuant to prevailing policy.

- Three main access locations will be delivered as part of the scheme, inclusive of a combined pedestrian / cycle / emergency access from West Barnes Lane, as well as an additional pedestrian / cycle access from Marina Avenue toward to the north of the Site, and an additional multi-modal access from Kingshill Avenue at the southernmost portion of the development.

- The internal layout will deliver a legible and segregated network of pedestrian / cycle routes to ensure pedestrians and cyclists will be able to move through and within the development conveniently.

- Overall, the Proposed Development will deliver a total of 1035 long-stay and 28 short-stay cycle parking spaces – in accordance with the minimum standards as per the London Plan. All cycle parking will be provided to an LCDS compliant quality in terms of access and design.

- The Proposed Development will also provide car parking at a ratio of 0.15 – equating to a total of 89 car parking spaces provided adjacent to the western boundary of the development. The final provision of car parking is inclusive of London Plan compliant levels of blue badge bays and EVCPs.

- The Applicant is liaising with Enterprise to deliver a total of 3 additional car club bays; comprised of one on-Site and two off-Site bays within the public highway to the north and south of the

development. Details on how the off-Site bays will be delivered are not yet finalised and will be confirmed by the Applicant post-submission.

- A day-time and night-time ATZ assessment has been undertaken in accordance with TfL's Healthy Streets indicators which ultimately determined that the surrounding locality benefits from a high-quality public realm, with extensive footway and crossing facility provision on the surrounding roads. The assessment identified a total of 3 areas where possible improvements could be explored, however the presence of these deficiencies does not wholly compromise the broader quality of the surrounding public realm.

- A multi-modal trip generation assessment has been undertaken, informed by local car ownership data and the proposed car parking ratio which ultimately determined that the forecast trip generation inclusive of 24 cars during the AM peak period and 19 cars during the PM peak constitutes a negligible impact on the local road network. The forecast servicing trip generation will also generate in the order of 202 journeys across a typical weekday, equating to 17 deliveries per hour – which was agreed as acceptable with TfL, RBKuT and LBM as part of pre-application correspondence.

- The potential impact of the Proposed Development on public transport infrastructure has been assessed, focusing on train and bus usage. Analysis shows that, even in a worst-case scenario, increased rail passengers would only amount to approximately 4 additional people per carriage, which is considered to fall within normal daily fluctuations and will not cause significant issues.

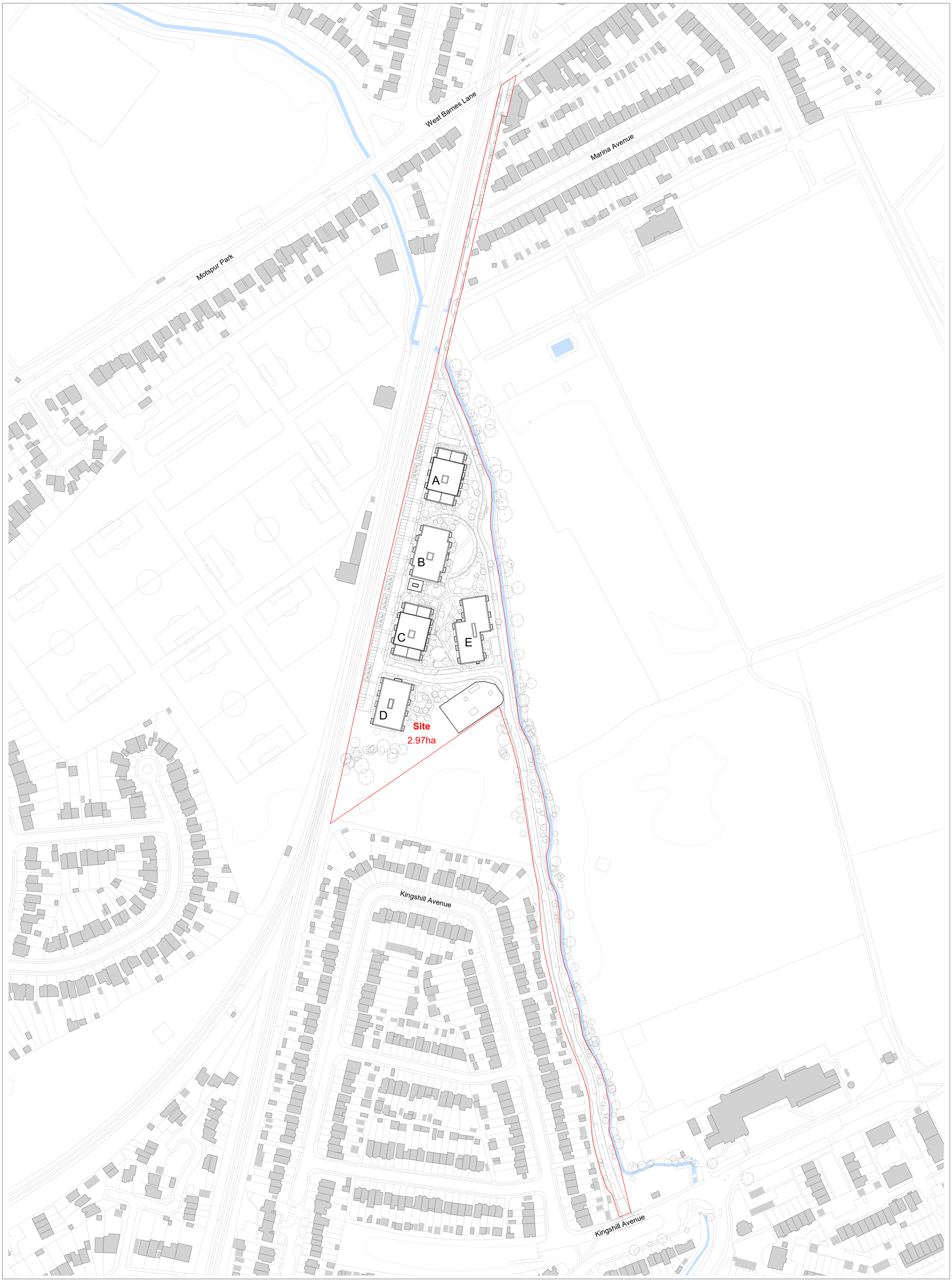
- The Applicant is also liaising with SWR to explore possible service improvements. Regarding buses, the expected increase in patronage is modest and can be absorbed by existing services, with no substantial rise in passengers per bus anticipated. Transport for London (TfL) has confirmed that no financial contribution for public transport improvements is required from the development, supporting the view that the overall impact will be limited. In conclusion, the report finds that the proposed development is unlikely to result in significant adverse effects on public transport services in the area.

Conclusion

7.3 The foregoing demonstrates that the Proposed Development accords with National, Regional and Local prevailing policy. The assessments undertaken also demonstrate that the scheme will not have an impact on local transport networks which can be characterised as severe.

7.4 On the above basis, this TA ultimately concludes that Full planning permission for the proposals should not be withheld on transport grounds.

A1. PROPOSED DEVELOPMENT LAYOUT



0 25 75m

Parking space type	Parking no.
C3 Parking Standard (no.)	71
C3 Parking Accessible (no.)	18
	89

Rev	Details	Date
P48	S2-Suitable for Information	26/09/2025
P47	S2-Suitable for Information	19/09/2025
P46	S2-Suitable for Information	12/09/2025
P43	S2-Suitable for Information	22/08/2025
P39	S2-Suitable for Information	22/07/2025
P38	S2-Suitable for Information	21/07/2025
P35	S2-Suitable for Information	01/07/2025
P33	S2-Suitable for Information	19/06/2025

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Proj. No. 594

Project: Motspur Park

Sheet Name: Proposed Site Location Plan

CDE ID: U096-MAC13-SW-XX-DR-A-005-101000

Status: S2-Suitable for Information

Berkeley Homes (West London) Ltd.

Scale: 1:1250 | Size: A1 | Rev.: P48

A2. ICENI TRANSPORT ASSESSMENT SCOPING REPORT – JANUARY 2025

JANUARY 2025

Motspur Park Gas Holder Site

Transport Assessment Scoping Report – Revision A

ICENI PROJECTS LIMITED
ON BEHALF OF BERKELEY
HOMES (WEST LONDON)
LIMITED

Iceni Projects Limited on behalf of

Berkeley Homes (West London)

Limited

January 2025

Motspur Park Gas Holder Site
TRANSPORT ASSESSMENT SCOPING REPORT –
REVISION A

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CONTENTS

APPENDICES

1. INTRODUCTION

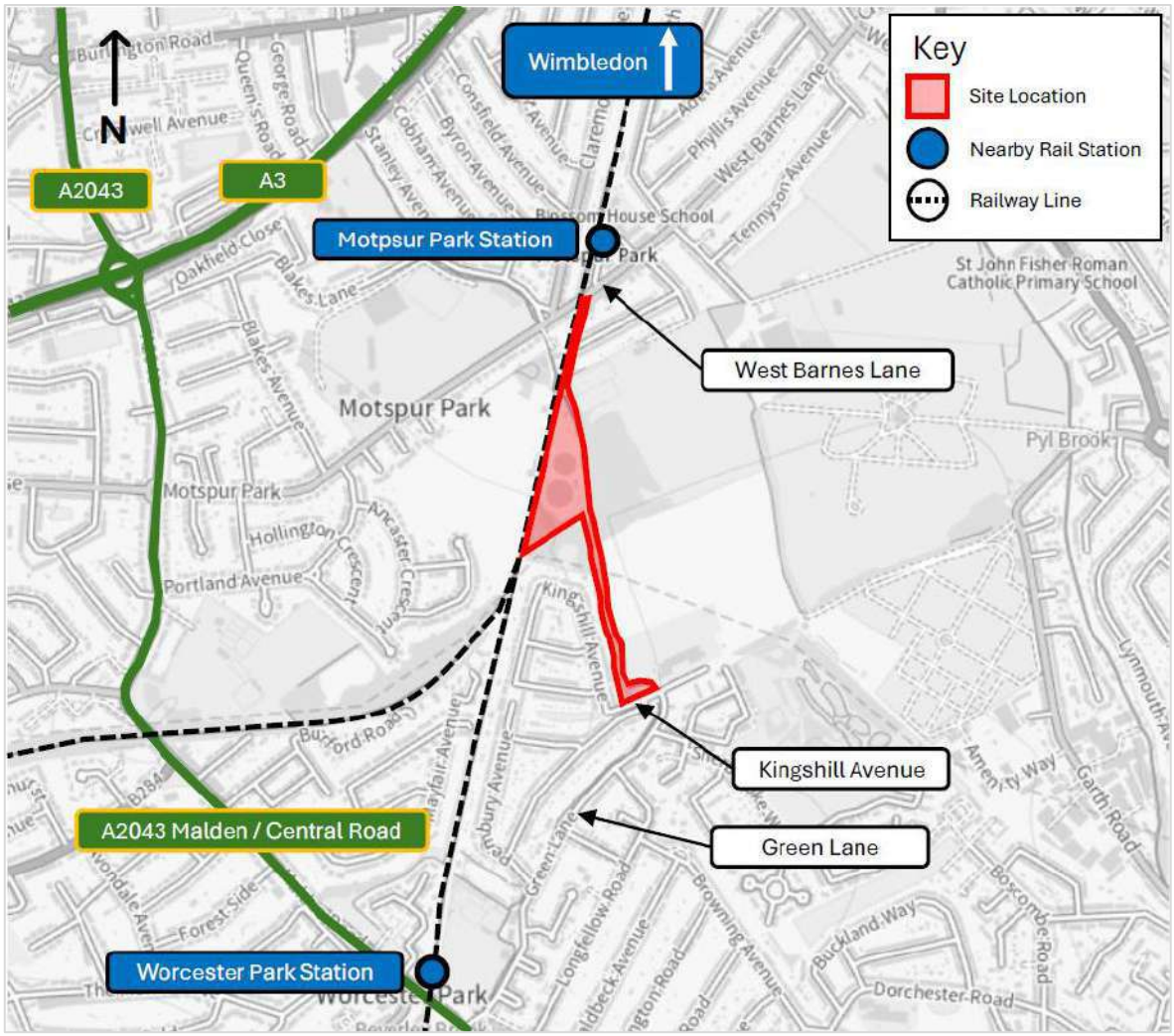
1.1 This Transport Assessment Scoping Report (TASR) has been prepared by Iceni Projects on behalf of Berkeley Homes (West London) Limited (Berkeley Homes) for a Full Planning Application for a residential development on the former Motspur Park Gasholders site (the Site) situated in Royal Borough of Kingston upon Thames (RBKuT) and partially also within the London Boroughs of Merton (LBM) and Sutton (LBS).

1.2 The proposals seek Full planning permission for the development of circa 550 residential homes, inclusive of circa 35% affordable homes. The proposals also include for publicly accessible amenity space, in addition to potential new connections to the Sir Jospeh Hood Memorial Playing Fields to the east, and also improvements to the site to enable pedestrian and cycle access through the development.

1.3 This TASR sets out the intended approach for a Healthy Streets Transport Assessment (TA) associated with the forthcoming planning application.

1.4 The site's location is demonstrated broadly in red on **Figure 1-1**.

Figure 1-1 Site Location



1.5 In preparation of the TA, consideration will be given to the 'Healthy Streets Approach'. This is reflected throughout this TASR where necessary, and the ten indicators outlined within Healthy Streets will be referred to during the early stages of the design.

1.6 Iceni Projects have undertaken a number of large-scale planning applications since TfL launched the new Healthy Streets TA guidance in 2019 and are therefore well versed in the requirements for sites such as this. This includes the Active Travel Zone (ATZ) of the Site and the necessary public TA's.

Development Vision

1.7 The central aspirations for the proposed development with regard to transport is a focus on the following:

- Reintegrating the Site with its locality by enhancing permeability for pedestrians and cyclists in north, south and eastern directions. The aim is to not only deliver a scheme which provides

a high-quality active travel infrastructure for prospective residents, but also benefit existing residents in the locality with the introduction of a prominent desire line between the Motspur Park and Worcester Park Stations.

- Embedding active travel at the heart of the scheme through the provision of internal pedestrian and cycle routes and robust on-site cycle storage facilities. Where London Plan quantities may not be able to be achieved, it is considered that a balanced approach of the design considerations alongside the overall benefits of the proposals mentioned above sufficiently offset any marginal shortfalls in provision. The quality of stands will be met with 5% enlarged bays and 20% Sheffield Stands, where possible.

Planning History

1.8 The Site and emerging proposals have been the subject of a number of pre-application discussions in recent years, as follows:

- **March 2019**: TfL pre-application meeting.
- **May 2019**: RBKuT pre-application meeting.
- **July 2019**: Joint RBKuT and GLA pre-application meeting.
- **2020**: Follow-up correspondence with the GLA and the Deputy Mayor.
- **February 2023**: Representations to RBKuT Local Plan Regulation 18 consultation.
- **March 2023:** RBKuT pre-application meeting.

1.9 The following transport-related matters were raised during the TfL pre-application meeting in 2019, undertaken by Vectos on behalf of Scotia Gas Networks (SGN):

- **Design and Development Principals**
- *"Car parking is proposed at 0.5 spaces per unit or less. Given the congested nature of the surrounding highway network TfL would encourage a restrained approached to car parking."*
- **Healthy Streets**
- *"There is currently no permeability through the site. However, it is likely that there will be public access for pedestrians and cyclist through the site which will significantly improve permeability and connectivity to the north and south. TfL would strongly encourage this to make it acceptable from a Healthy Streets perspective."*

- **Vision Zero**

- *"Is there a need for a formal crossing point on West Barnes Lane? Where is the pedestrian desire line to access Motspur Park station?*

- *Ensure cyclists can easily and safely access the proposed quietways cycle route to the south.*

- *When undertaking accident analysis, even if no discernible cause of accidents, the analysis should identify if there are any interventions (whether it be improving signage or lining to something more significant) which could prevent an accident in the future."*

- **Network Impact**

- *"In terms of the signal operation, TfL receive a significant number of complaints for this area as a result of the extensive queues in both peaks. This will need to be taken into consideration when determining car parking provision."*

1.10 It is acknowledged the above comments were raised in relation to a previous version of the scheme, however they remain pertinent to any forthcoming application at the Site. Therefore, the TfL screening feedback has been provided for reference at **Appendix A2**.

1.11 Following the pre-application meeting on the 29th March 2023, the following transport-related matters were raised in relation to the scheme:

- *"Motspur Park train station is situated approximately 380 metres to the north of the site, providing services to London Waterloo (via Wimbledon), Dorking, Guildford and Chessington South. The TA/Travel Plan should demonstrate how use of this station would be promoted to pedestrians and cyclists.*

- *The improvements to pedestrian/cycle accessibility through the site and beyond, including a new pedestrian and cycle path linking Kingshill Avenue from the south to West Barnes Lane to the north together with pedestrian trails connecting the site into the Sir Joseph Hood Memorial Playing Fields and woodland to the east is welcomed in principle, and accessibility to local attractors should be detailed in a forthcoming Healthy Streets compliant transport assessment (TA). However, a robust assessment would be needed to fully address the impacts of the additional traffic movements on the junctions affected along with the wider high network. As discussed at the meeting there is already significant congestion on Green Lane (Sutton).*

- *While noting the ecological considerations, Highways would expect the cycle/pedestrian corridors to provide an environment that is perceived to be attractive and safe, including reasonable illumination, but this would need to be sympathetic to the surrounding characteristics and context of the site.*

- *A full travel plan and a delivery and servicing plan (DSP) should be included. 145 on-site parking spaces are proposed for 550 residential units (26%) and we would expect that the management of this parking provision is detailed in a parking management plan (PMP). Electric vehicle charging (EVCP) and accessible parking should be included in line with London Plan standards.*

- *Cycle parking also be provided so as to meet London Plan minimum standards and also include provisions for larger cycles and be readily accessible following London Cycle Design Standards.*

- *The northern access will be converted for pedestrian cycle use and as such would offer a route to Motspur Park Station. It was mentioned briefly at the pre-app meeting that there might be scope to widen this to accommodate vehicles as part of a shared access. This could help balance the traffic impacts but the needs of pedestrians/cyclists should be prioritised.*

- *It is suggested that a scoping report should be prepared and agreed with RBK Highways to confirm agreement with the trip generation methodology and to agree the scope of any traffic surveys/modelling that may be required, taking additionally into consideration feedback received from Transport for London and adjoining boroughs.*

- *Given the scale of the development proposed, Highways would expect that at least an Outline Construction Logistics Plan should be submitted at the time of any forthcoming planning application."*

1.12 On the above basis, the following transport-related documents will be submitted to accompany a Full Planning application:

- Healthy Streets Transport Assessment (TA);
- Travel Plan (TP);
- Delivery and Servicing Management Plan (DSMP);
- Car Park Management Plan (CPMP); and
- Outline Construction Logistics Plan (CLP).

Pre-Application Correspondence

1.13 This version of the TASR is a revised version which follows a pre-application meeting in relation to the proposed scheme with TfL on the 7th January 2025, which highways officers from RBK/LBS and RBM also attended. Therefore, this version of the TASR intends to agree matters following feedback raised during the pre-application meeting to develop a clear strategy in the lead up to the preparation of a full planning application.

2. EXISTING SITUATION AND SUSTAINABLE TRAVEL ASSESSMENT

Site Overview

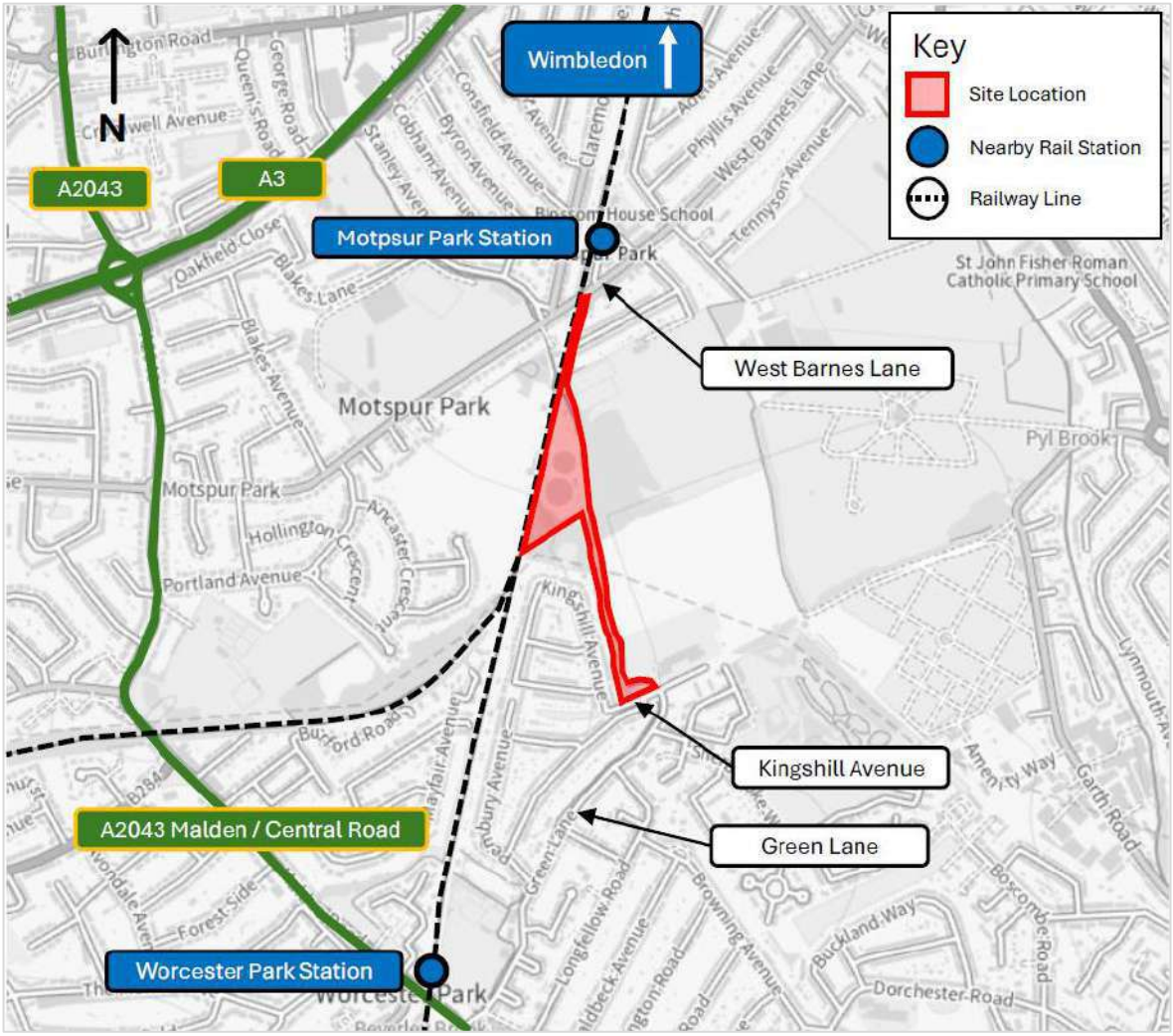
2.1 The development Site is a triangular parcel of land approximately 3ha in size, situated on the eastern boundary of RBKuT, currently accessed from West Barnes Lane adjacent to the northernmost point of the Site, with an additional existing access situated at the southernmost portion of the Site, from Kingshill Avenue.

2.2 West Barnes Lane is a single carriageway road subject to a 20mph speed limit and extends on a northeast/southwest axis to the north of the site.

2.3 Kingshill Avenue is a single carriageway road subject to a 30mph speed limit and extends parallel to the southernmost portion of the Site. Diverging south from Kingshill Avenue via a four-armed mini-roundabout is Green Lane, which is a residential road subject to a 20mph speed limit routeing south and providing a connection toward Worcester Park.

2.4 The Site is bound by the Beverly Brook and adjacent woodland on the eastern boundary, a South Western Railway (SWR) Line on the western boundary and existing residential areas are situated north and south of the Site. The site location plan has been re-provided on **Figure 2-1** which confirms the local road network in relation to the Site.

Figure 2-1 Site Location Plan



2.5 The majority of the Site, with the exception of the area surrounding the northern access, is designated as Metropolitan Open Land (MOL). The Sir Joseph Hood Local Nature Reserve is an area of land over the Beverley Brook designated as a Site of Importance to Nature Conversation (SINC) within LBM. The Manor Park SINC is also situated approximately 100m southwest of the site, within LBK.

Public Transport Accessibility Level (PTAL)

2.6 According to TfL's WebCAT site, the majority of the Site has a public transport accessibility level (PTAL) of 0-2 (very poor and poor respectively).

2.7 Notwithstanding the above, the development proposes improvements to deliver pedestrian and cycle connections to the north towards Motspur Park Station, as well as existing Bus Stops situated on West Barnes Lane. Furthermore, the proposals will open the site to provide a north-south connection for pedestrians and cyclists between the existing Motspur Park and Worcester Park rail stations, thereby enhancing the connectivity between the two.

2.8 As such, to reflect potential enhanced connectivity at the Site, a manual PTAL recalculation has been undertaken which demonstrates the Site still benefits from the same PTAL of 2, albeit with an improved accessibility index from 5.52 to 6.35.

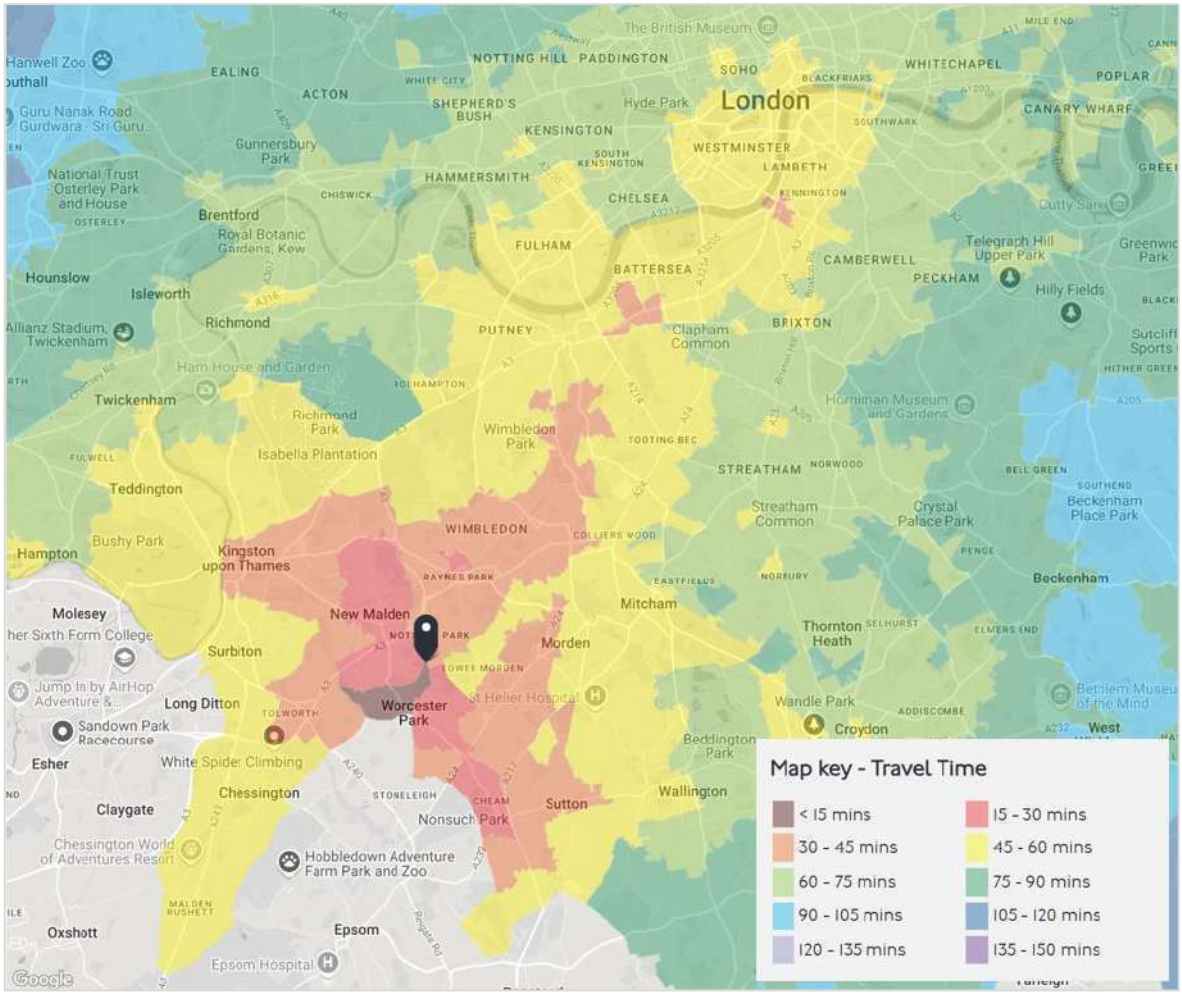
2.9 The centre of the Site currently has a PTAL of 0, following a manual calculation of the PTAL to the nearest bus stops on Green Lane, the accessibility index is improved from 0 to 1a for the centre of the site, given the introduction of a southern access.

2.10 The intention would be to submit the revision to the Street Analysis team at TfL for consideration and agreement. This manual PTAL calculation is summarised within a note included at **Appendix A3**.

Time Mapping (TIM)

2.11 Utilising TfL's Time mapping (TIM) tool, several Central London locations are accessible within approximately an hour. The TIM mapping is demonstrated on **Figure 2-2**.

Figure 2-2 TIM Mapping



2.12 The list of Central London and local town centre locations accessible from the Site based on TfL's TIM tool are demonstrated in **Table 2.1**.

Table 2.1 Central London and Local Town Centre Locations – TIM

Location	Travel Time
Worcester Park	Less than 15 minutes
Raynes Park, New Malden, North Cheam	15 – 30 minutes
Clapham Junction, Vauxhall, Wimbledon, Kingston upon Thames, Sutton, Morden	30 – 45 minutes
Oxford Circus, Covent Garden, Westminster, Waterloo, Battersea, Wandsworth, Fulham, Brixton	45 – 60 minutes

Public Transport Connectivity

2.13 The Site benefits from close proximity to two rail stations – the nearest being Motspur Park, situated approximately 140m (taken from the proposed northern access) directly north of the Site on West Barnes Lane, which equates to a 2-minute walk, although in reality this will be longer from the centre of the Site. The other station being Worcester Park Station, situated approximately 1km south of the site on the A2043 Malden Road, equating to approximately a 15-minute walk. As Motspur Park is served by two lines, it is envisaged most people will use this station as it provides a more frequent service than Worcester Park.

2.14 The nearest bus stop is situated on West Barnes Lane, immediately adjacent to the existing access location, through which the K5 service operates every half an hour. There is also an additional bus stop located on Green Lane, approximately 550m south of the proposed southern access location through which the S3 service operates every 20 minutes.

2.15 Further south of the site, there are additional existing bus stops situated on the A2403, approximately a 15-minute walk from the proposed southern access location. The 151, 213, 613 627 and E16 services operate at the existing bus stops on the A2043.

2.16 Full details regarding destinations and frequencies for the nearby public transport facilities will be provided within the TA, inclusive of accessibility and capacity assessments as detailed further below in this report.

Walking and Cycle Connectivity

2.17 There is a widespread existing provision of pedestrian facilities in the locality, comprised of the following:

- Continuous footway provision on both sides of the carriageway on surrounding roads, including West Barnes Lane to the north of the site, and a shared footway/cycleway on the eastern side of the carriageway on Green Lane south of the site; and

- A number of zebra and controlled crossings on the local road network.

2.18 Full details regarding the existing pedestrian facilities on the local road network, will be set out within the TA at planning application stage.

2.19 Possible improvements to pedestrian and cycle infrastructure, and connections to local public transport will be explored at the planning application stage, with details provided within the submitted TA and Active Travel Zone (ATZ) Assessment. These improvements will ensure that the development accords, where possible, with TfL's 10 Healthy Streets Indicators.

2.20 There are a number of existing cycling facilities two local cycle routes near to the site, situated north and south on West Barnes, comprised of the following:

- A marked on-carriageway cycle lane located on Motspur Park Road, routeing southwest from the Rail Crossing adjacent to the proposed northern access location. The cycle lane then merges with the carriageway as Motspur Park becomes West Barnes Lane;

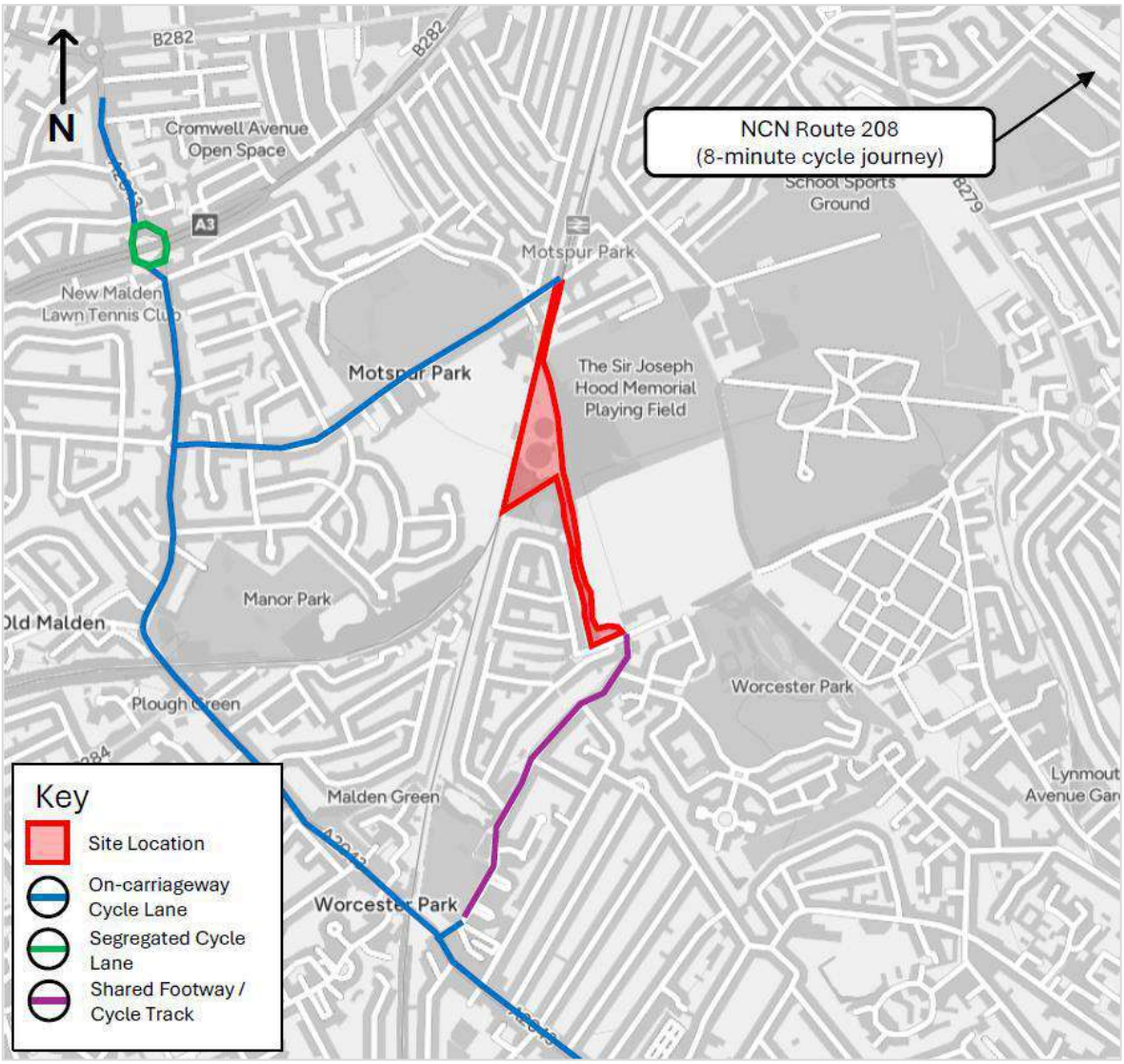
- A marked on-carriageway cycle lane located on the A2043 Central Road/Malden Road to the south of the site, routeing on a northwest/southeast axis; and

- Advanced stop line facilities also exist on the A2043 at junctions along its extent.

2.21 The National Cycle Network (NCN) Route 208 is located approximately a 7-minute cycle journey east of the site, which provides a connection towards Wimbledon Station, comprised of both traffic-free and on-road routes along its extent.

2.22 The existing nearby cycle facilities in relation to the Site, are demonstrated on **Figure 2-3**.

Figure 2-3 Existing Local Cycle Facilities



3. DEVELOPMENT PROPOSALS

3.1 The proposed development is a residential development comprised of circa 550 dwellings of Use Class C3, inclusive of 35% affordable homes (by unit number for TASR purposes only) which equates to 193 homes. The final provision will be determined by habitable rooms, subject to deliverability testing.

3.2 At this stage, details relating to the schedule of accommodation have not yet been determined, however these will be included at planning application stage and detailed within the forthcoming TA. As such, the proposed quantum of car and cycle parking will be determined in accordance with the proposed layout.

3.3 As indicated in Chapter 1, the key aspirations for the proposed development regarding transport is a focus on the following:

- Embedding active travel at the heart of the scheme through the provision of internal pedestrian and cycle routes and robust on-site cycle storage facilities.
- Reintegrating the Site with its locality by enhancing permeability for pedestrians and cyclists in north, south and eastern directions. The aim is to not only deliver a scheme which provides a high-quality active travel infrastructure for prospective residents, but also benefit existing residents in the locality with the introduction of a prominent desire line between the Motspur Park and Worcester Park Stations.

3.4 To the above end, this section contains details relating to an ATZ assessment to evaluate the constraints and opportunities regarding enhancing sustainable travel connections as part of the proposals.

3.5 The below section provides an initial overview of the proposed development from a highways perspective – covering the two proposed accesses, ATZ assessment, car and cycle parking, and delivery/servicing.

Proposed Access and Internal Layout

3.6 The scheme proposes two main access locations, comprised of a retained access from West Barnes Lane for pedestrians and cyclists and a new multimodal access from Kingshill Avenue to the south of the development, which will serve as the only vehicular access into the development. Albeit, emergency access will be possible from West Barnes Lane.

3.7 Pedestrian and cycle access over the Beverley Brook to the neighbouring Sir Joseph Hood Memorial Playing Fields and woodland will also be investigated which would potentially provide direct access for residents and locals to recreational green space.

3.8 At this stage, design details are indicative and subject to a Stage 1 Road Safety Audit at planning application stage, in addition to subsequent detailed design.

Northern Access

3.9 The existing northern access will be retained and improved to provide a bellmouth access for pedestrians and cyclists. From the access point, access for pedestrians and cyclists will extend south into the rest of the site.

3.10 The northern access is designed to introduce a desire line towards Motpsur Park station for pedestrians and cyclists, and importantly provide a north-south connection for residents to the south of the Site.

3.11 Emergency access to the development will be granted via the proposed northern access. To preclude unfettered car use at the northern access, design measures such as manual bollards will be introduced to ensure priority for pedestrians, cyclists and emergency vehicles is maintained.

3.12 As set out in Chapter 1, RBKuT stated the following in regard to the proposed northern access:

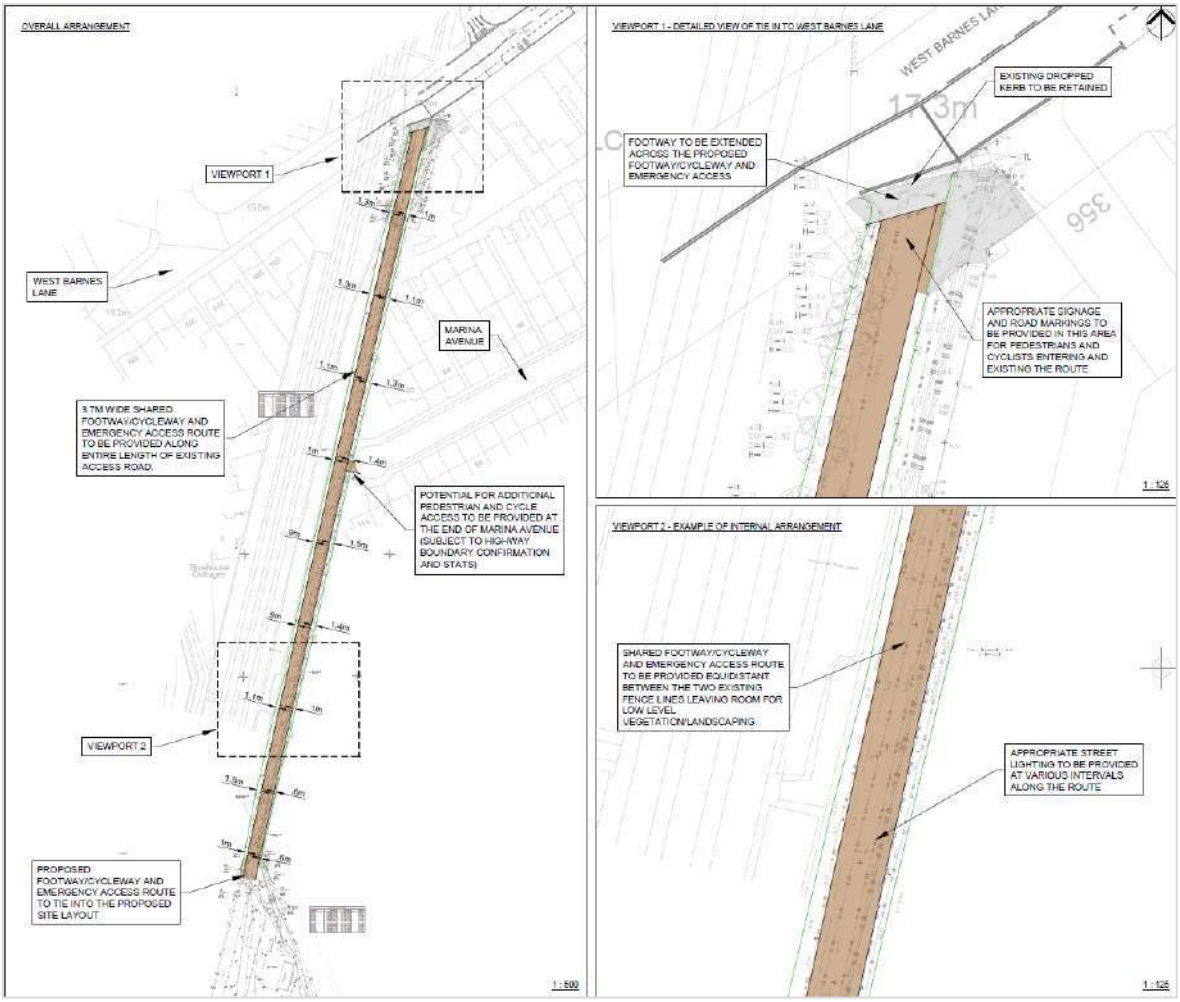
"The northern access will be converted for pedestrian cycle use and as such would offer a route to Motspur Park Station. It was mentioned briefly at the pre-app meeting that there might be scope to widen this to accommodate vehicles as part of a shared access. This could help balance the traffic impacts but the needs of pedestrians/cyclists should be prioritised."

3.13 Due to the proximity of the northern access to the adjacent level crossing, the proposals at this stage do not account for widening to enable two-way vehicular access into the Site, and therefore all vehicular trip generation will be associated with the southern access.

3.14 It is understood from correspondence with TfL that there is potential that there may be parts of the northern access location that are proposed to be safeguarded for the Crossrail 2 development. The extent to which this area will be affected is unknown at this stage, with TfL due to respond with further information. It is understood that the level crossing immediately adjacent to the proposed northern access on West Barnes Lane will be subject to closure under preliminary Crossrail 2 plans.

3.15 A preliminary design for the proposed northern access location on West Barnes Lane is demonstrated on **Figure 3-1**, provided as **Drawing I000551-501-A** at **Appendix A4**.

Figure 3-1 Proposed Northern Access on West Barnes Lane

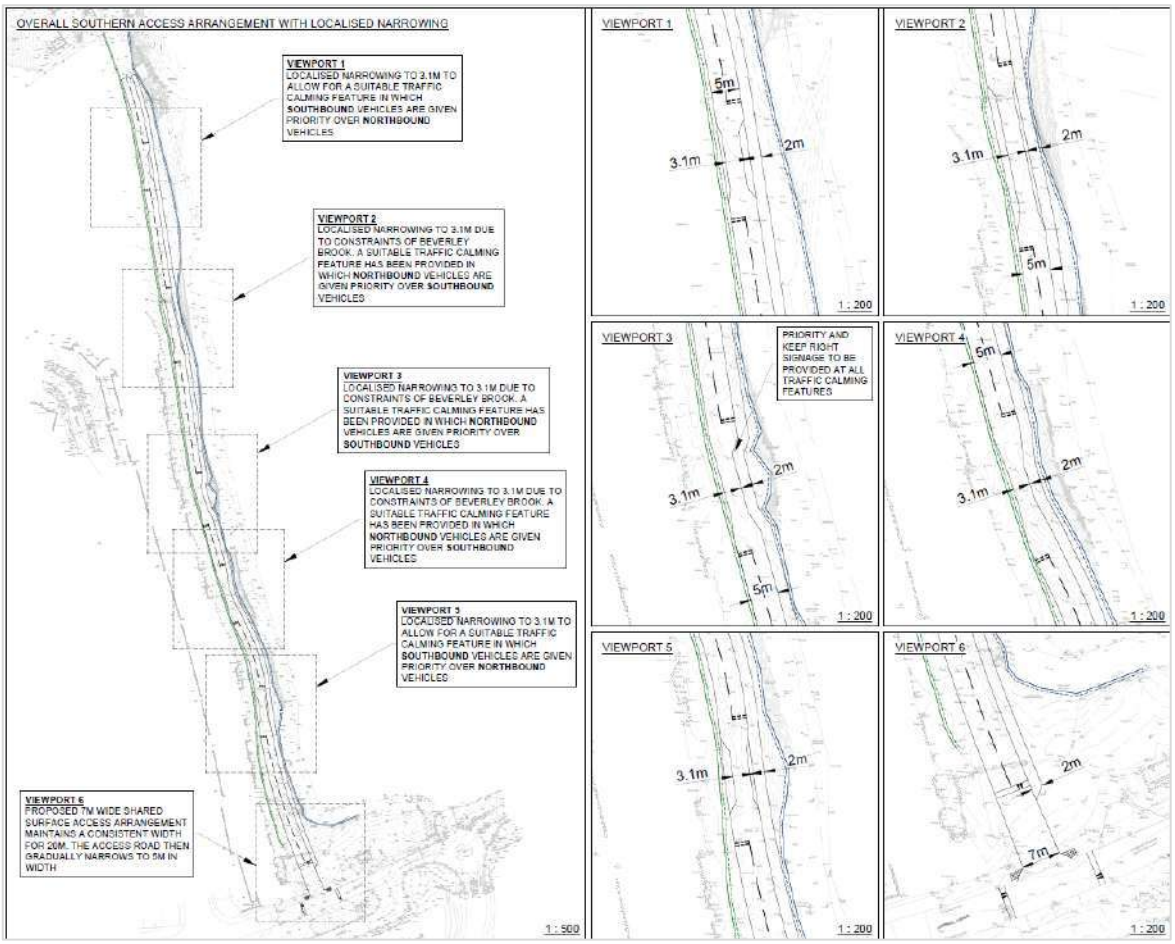


Southern Access

3.16 An additional southern multimodal access is proposed to connect to Kingshill Avenue at the south of the site to deliver a priority junction featuring access for pedestrians and cyclists. Pedestrian access across the junction will also be provided in the form of dropped kerbs and tactile paving.

3.17 Kingshill Avenue is subject to a 30mph speed limit therefore, the proposed access has been designed in accordance with principles set out within Manual for Streets (MfS). Vehicular visibility splays according to MfS principles for the proposed access location on Kingshill Avenue are demonstrated on **Figure 3-2**, provided as **Drawing I000551-105** at **Appendix A4**.

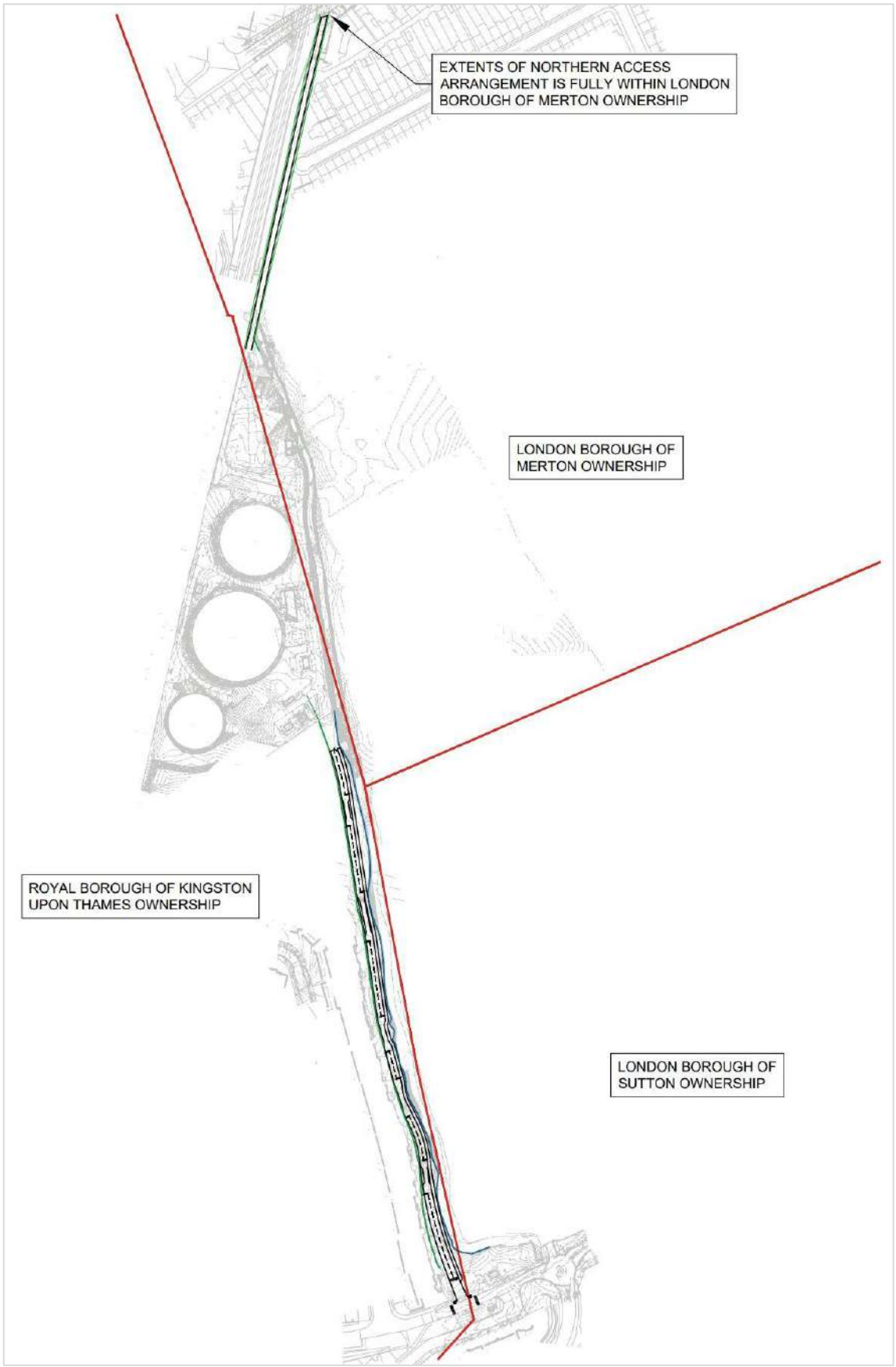
Figure 3-2 Proposed Southern Access on Kingshill Avenue



3.18 As demonstrated on **Figure 3-2**, the proposed southern access will feature a carriageway width of 6m, with a 2m wide continuous pedestrian footway on eastern side of the carriageway. Cyclists will be directed to share the carriageway with vehicles, which is envisaged to be sufficiently low-traffic and low-speed to be a safe and attractive option for cyclists.

3.19 The proposed northern and southern access designs are plotted in relation to the approximate boundaries of the RBKuT, LBS and LBM on **Figure 3-3**.

Figure 3-3 Northern and Southern Access Designs in Relation to Local Authority Boundaries



Pedestrian and Cycle Access

3.20 As set out already in this report, the proposed design of the scheme ensures that permeability with the surrounding locality is enhanced, and active travel is prioritised within the layout. Therefore, potential pedestrian and cycle connections on the eastern boundary of the site will be investigated.

3.21 The scheme is proposing to deliver the following:

- Establish the 'reopening' of the site to the locality and enabling pedestrian and cycle journeys between Motspur Park and Worcester Park stations, as well as potential connections across the Beverley Brook to recreational amenities;
- North-south and eastern connections through the site to the locality; and
- A legible, convenient and segregated internal network throughout the Site for pedestrians and cyclists to enable access to residences, secure cycle storage areas and ensure that locals travelling through the site are able to conveniently navigate.

Active Travel Zone Assessment

3.22 In line with TfL's Healthy Streets approach, to assess the quality of active travel routes to nearby amenities which are envisaged to be used by prospective residents at the development, the forthcoming Healthy Streets TA will include an ATZ assessment.

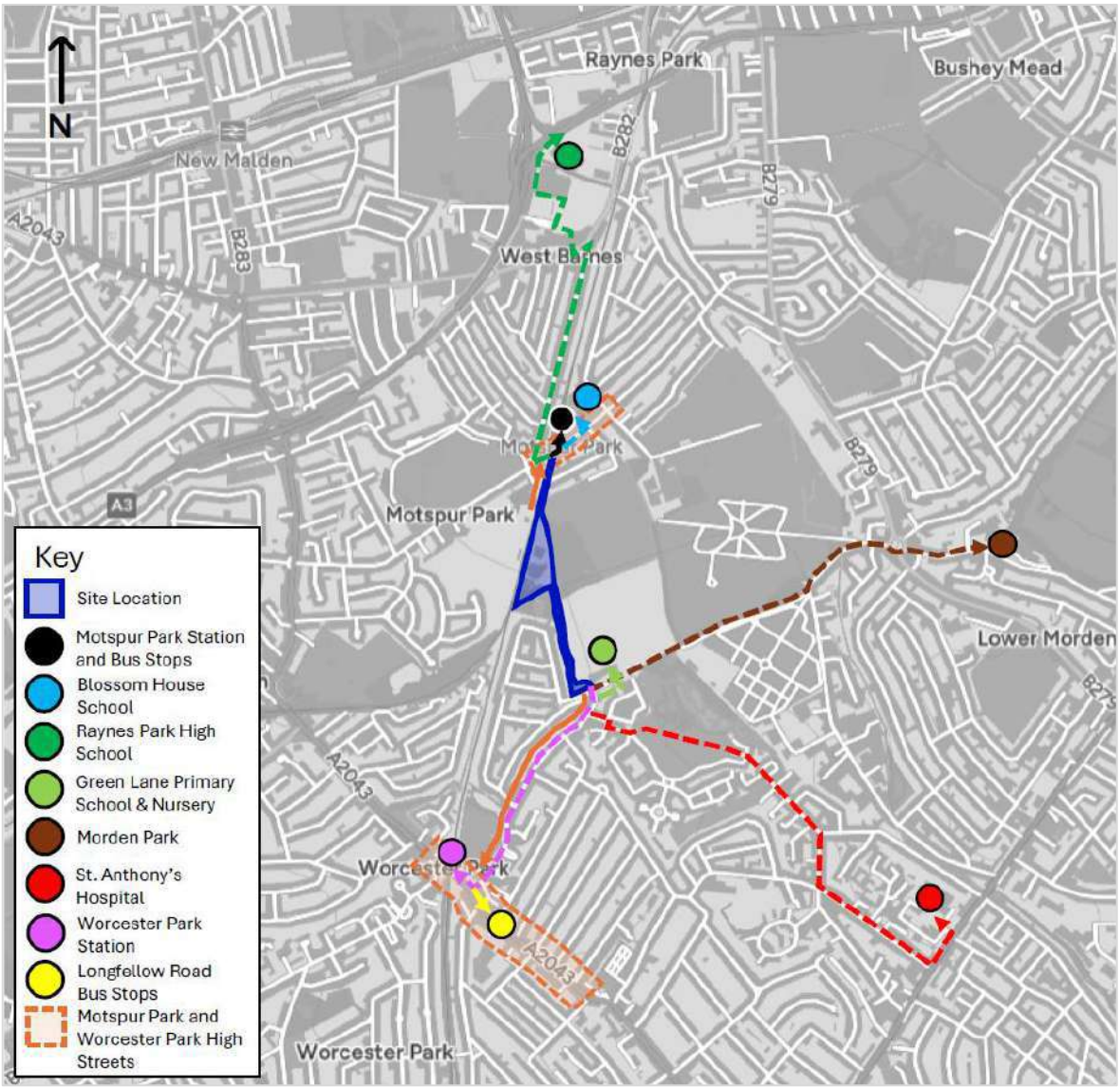
3.23 The following ATZ routes to and from the key destinations within the study area have been identified, with agreement sought with RBKuT/TfL on the appropriateness of their selection:

- **Key Route 1:** Motspur Park Station and adjacent bus stops.
- **Key Route 2:** Worcester Park Station.
- **Key Route 3:** Longfellow Road bus stops.
- **Key Route 4:** Green Lane Primary & Nursery School.
- **Key Route 5**: Blossom House School.
- **Key Route 6:** Morden Park.
- **Key Route 7:** St. Anthony's Hospital.
- **Key Route 8:** Raynes Park High School.

- **Key Route 9:** Motspur Park High Street.
- **Key Route 10:** Worcester Park High Street.

3.24 The identified Key Routes and destinations are confirmed on **Figure 3-4**.

Figure 3-4 ATZ Routes



Car Parking

3.25 Within TfL's response, dated 26th March 2019, they stated the following with regard to the proposed level of car parking:

"Car parking is proposed at 0.5 spaces per unit or less. Given the congested nature of the surrounding highway network TFL would encourage a restrained approach to car parking."

3.26 The proposed development is therefore promoting a parking ratio of 0.26 spaces per dwelling. RBKuT expressed no initial concerns with this proposed parking ratio within their 2023 pre-application response.

3.27 As set out in Chapter 2, the northern portion of the Site benefits from a PTAL of 2 therefore, the Site meets the criteria for "Outer London PTAL 2 – 3" as per the London Plan, with these standards provided in **Table 3.1**. Given the pre-application feedback from LBK and TfL, it is not deemed necessary to use parking standards for PTAL 0 – 1 sites as relevant in this case.

Table 3.1 London Plan Maximum Parking Standards – Outer London PTAL 2 – 3

Location	Number of beds	Maximum parking provision
Outer London PTAL 2 – 3	1 – 2	Up to 0.75 spaces per dwelling
	3+	Up to 1 space per dwelling

3.28 Notwithstanding the above, a move towards lower parking provision is a clear policy across London, which is accompanied by a push for increased usage of sustainable modes of transport. Therefore, a parking ratio of 0.26 spaces per dwelling is appropriate and considerably lower than the policy requirement. It will promote sustainable travel whilst providing inclusive environments for people to live so those with occupations requiring ownership of motor vehicles will have an opportunity to reside at the development with access to car parking.

3.29 With the 550 proposed dwellings, a parking ratio of 0.26 spaces per dwelling therefore necessitates the provision of 143 spaces. As mentioned, this level of proposed parking is subject to change following a finalised proposed layout.

3.30 It is envisaged that the opportunity for car parking overspill onto local roads will be precluded by the fact that the nearest local road from the proposed residential blocks is beyond 250m, which exceeds the limit set by the Lambeth Methodology for parking beat surveys. Parking overspill is not anticipated to occur on surrounding roads due to the following reasons:

- Parking at the development will be restrained by the proposed parking ratio; and
- The expectation that residents would walk beyond 250m, with the minimum distance to Kingshill Avenue exceeding 500m, to reach their parked vehicle is considered an unreasonable and highly improbable scenario;
- A number of car club spaces are proposed to be included within the development which will again further reduce the need for people to own cars and in turn further reduce any minimal

risk of overspill car parking. For example, car club operator Zipcar claim that for every car club space they provide, it takes on average 10 – 14 vehicles off the road.

3.31 In accordance with London Plan guidance, the proposed parking provision will include provision for blue badge holders at a ratio of 3% of the total number of dwellings from the outset. Should increased demand for blue badge spaces arise, details on how an additional 7% of spaces can be delivered will be set out beyond occupation of the development.

3.32 Also in accordance with London Plan guidance, 20% of the total parking provision will have active Electric Vehicle Charging Points (EVCP) installed. The remaining 80% will be equipped with passive EV charging facilities to accommodate for future demand.

3.33 Full details on the proposed provision of blue badge and EV bays will be set out within the TA at planning application stage.

3.34 At this stage, the proposed location for the car parking is to abut the SWR line bordering the eastern boundary of the Site. The appropriateness of this location is on the basis that it is situated away from the Beverley Brook, and functions as a buffer between the SWR line and the remainder of the development. There are no intentions to deliver basement parking or podium parking as part of the development.

3.35 In line with RBKuT's feedback and London Plan guidance, the management of the proposed parking area on-Site will be set out within a Parking Management Plan (PMP) at planning application stage, with the relevant approvals sought on matters relating to this.

3.36 To further the sustainable credentials of the development, the applicant has expressed a commitment to investigate the delivery of a number of Car Club spaces for use by residents within the development.

3.37 The delivery of a car club within the development would support the overarching sustainable vision for the scheme. Collaborative Mobility UK (CoMoUK) have demonstrated through research that, on average, car clubs remove 32 vehicles from the road network on a per space basis. As such, the provision of this within the development as a convenient and accessible option for prospective residents represents a utility to further reduce the cumulative traffic footprint of the proposed development.

3.38 To the above end, Enterprise have been contacted and these efforts will be progressed to confirm an allocation of car club spaces within the forthcoming TA submission, subject to agreement with RBKuT and TfL.

Cycle Parking

3.39 Where possible, cycle parking will be provided in accordance with the standards set out within the London Plan and will be designed to be compliant with TfL's London Cycling Design Standards (LCDS) document, including space for larger cycles (e.g. cargo bikes) and ensuring that all cycle spaces for residents are secure, sheltered and conveniently located.

3.40 Long-term resident cycle parking will comprise a mix of provision within the ground-floor of residential blocks as well as provision within separate cycle stores. Particular consideration will be given to ensure that separate cycle stores are sheltered, secure and benefit from sufficient surveillance and safety to design them to be as convenient for residents to use as is feasible.

3.41 Visitor cycle parking spaces will be provided within publicly accessible areas in the form of 'Sheffield' stands and will be designed to be LCDS compliant.

Deliveries and Servicing

3.42 The scheme will be designed to ensure that deliveries and servicing can be undertaken within the development. The proposed layout is still emerging at this stage, and therefore vehicle swept path analysis for the largest vehicle envisaged to access the site will be confirmed as part of the TA submission to demonstrate the following:

- Refuse vehicles will be able to access, egress and manoeuvre within the site to undertake collection; and
- Refuse collection areas will be provided within the development to ensure safe and efficient access for refuse vehicles.

3.43 In accordance with London Plan policy and RBKuT's feedback, a Delivery and Servicing Plan (DSP) will accompany the TA submission which will fully detail matters relating to delivery and servicing at the development, inclusive of the anticipated number of trips associated with servicing.

3.44 The anticipated level of trip generation associated with servicing of the proposed development is set out in Chapter 4.

Construction Logistics

3.45 Regarding construction access for the development, it is acknowledged that the context of the site and various constraints pertaining to access present challenges for construction vehicles. The proximity to the rail crossing on West Barnes Lane adjacent to the northern access location means that construction vehicles must not obstruct the carriageway.

3.46 As such, to provide assurances at this stage that construction will be facilitated at the site, details relating to estimated construction traffic, swept path analysis and construction routeing are detailed further below.

3.47 At planning application stage, an Outline Construction Logistics Plan (CLP) will accompany the Full application which will set out, in full, a regime of measures and site management strategies to offset the impact of construction on the locality and other details to be agreed with RBKuT and TfL.

Estimated Construction Traffic

3.48 Informed through prior experience on residential Berkeley developments within London, the anticipated daily construction traffic for the scheme is summarised in **Table 3.2**.

Table 3.2 Anticipated Construction Traffic – Daily

All Vehicles		HGVs	
One-way	Two-way	One-way	Two-way
51	102	10	20

3.49 On the above basis, the hourly construction traffic generation (across a typical 8-hour working day) is forecast to be in the order of 13 vehicles, inclusive of 3 HGVs per hour – which equates to one HGV every 20 minutes.

3.50 It should be noted that the above figures are indicative at this stage and based on related Central London experience. The final numbers of anticipated construction traffic are therefore subject to potential change as there are limitations to accurately predicting this prior to contractor appointment. At the point when a construction contractor is appointed for the scheme, more precise construction traffic generation across the different phases of construction will be set out within an Outline CLP.

Swept Path Analysis and Construction Routeing

3.51 Given the highway and access constraints locally, a preliminary construction routeing strategy has been considered at a high level at scoping stage.

3.52 Currently, the strategy for construction vehicle access to the Site is from the north via West Barnes Lane and exit via the southern access on Kingshill Avenue to minimise impacts to the surrounding properties and network. TfL agreed this to be an appropriate strategy as part of the pre-application meeting on 7th January.

3.53 To demonstrate the access locations will be able to facilitate the access / egress of the largest possible construction vehicles, the following swept path analysis has been undertaken:

- **Drawing I000551-602.1:** Swept path analysis for a 16.5m articulated HGV and an 18m low loader access at the northern access location on West Barnes Lane (left-turn in).

- **Drawing I000551-602.2:** Swept path analysis for a 16.5m articulated HGV and 18m low loader egress at the southern access location on Kingshill Avenue (left-turn out).

3.54 The drawings listed above are provided at **Appendix A4** for reference.

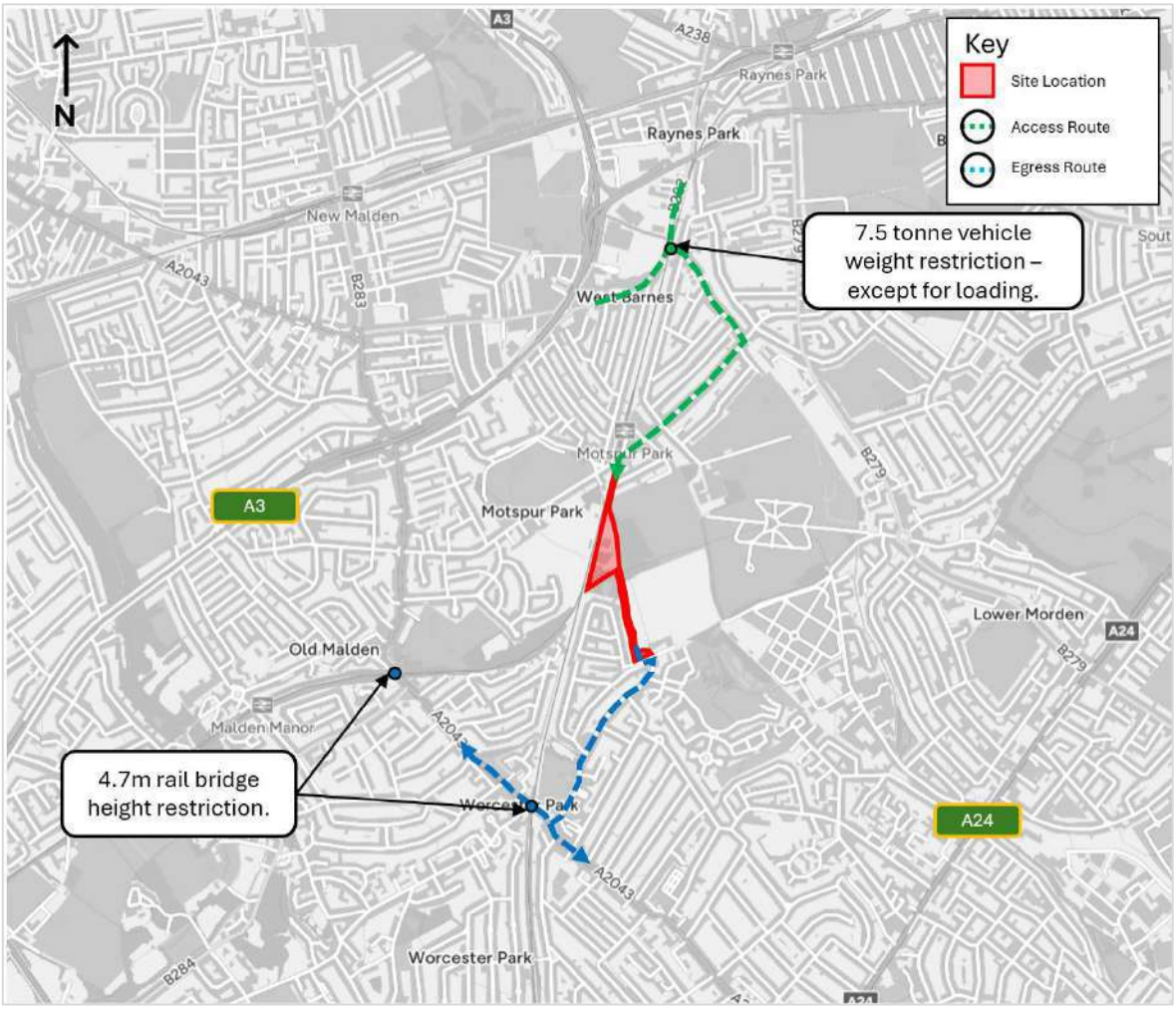
3.55 In relation to construction routeing, it is envisaged that all construction vehicles seeking to access the Site will be directed to / from the nearest road on the Strategic Road Network (SRN) – the nearest routes being the A24 and A3, situated east and west of the site respectfully.

3.56 Vehicles entering the northern access will be directed to the B282 and from there access West Barnes Lane towards the Site. Construction vehicles will be directed to access the site in this way so as to avoid the level crossing on West Barnes Lane, and so vehicles will always access the site via a left-turn in movement on West Barnes Lane.

3.57 Vehicles exiting via the southern access will be directed to Kingshill Avenue, Green Lane and then will depart in either direction on the A2043. Low

3.58 A construction routeing plan is provided below on **Figure 3-5** – the plan considers access from the northern access and egress from southern access on West Barnes Lane and Kingshill Avenue respectively.

Figure 3-5 Construction Routeing Plan – Access and Egress



3.59 As demonstrated on **Figure 3-5**, the following weight and height restrictions are situated on the access / egress routes:

- Two 4.7m rail bridge height restrictions along the A2043 Malden Road. The height restrictions can accommodate a 16.5m HGV and low loader. There are therefore no constraints posed by this height.
- Notice at the B282 / West Barnes Lane priority junction, no access for vehicles weighing over 7.5 tonnes – except for loading.

3.60 Despite the weight restriction at the junction of the B282 / West Barnes Lane, there is an exemption for loading vehicles. Construction activity is considered a loading activity and therefore construction vehicles associated with the Site will be exempt from the restriction. Given the low level of HGV trips set out above, this is not considered to be disruptive to the local amenity.

4. TRIP GENERATION AND DISTRIBUTION

4.1 This Chapter forecasts the anticipated level of trip generation associated with the proposed development, in addition to an indicative traffic impact and distribution exercise.

4.2 As already confirmed in this TASR, the development proposes circa 550 new residential dwellings on the former Motspur Park Gasholders Site, inclusive of 35% affordable tenure. As the site has not been in operation for a number of years, the existing trip generation at the Site is assumed to be zero.

Proposed Trip Generation

4.3 The proposed trip generation accommodates for both the private and affordable dwellings proposed as part of the scheme. The scheme, at this stage, is targeting 35% affordable. For the purposes of the trip generation, an assumption of 35% affordable dwellings has been considered.

Private Dwellings

4.4 In order to ascertain trip rates for the private dwellings as part of the proposed development, the TRICS database (version 7.11.3) has been interrogated to obtain 'total person' multi-modal trip rates with the following parameters selected:

- Land use category: 03 'Residential';
- Subcategory: C 'Flats Privately Owned';
- Selected regions: Greater London;
- Selected locations: Suburban Area (PPS6 Out of Centre), Edge of Town and Neighbourhood Centre (PPS6 Local Centre);
- Number of surveyed sites: 5

4.5 A summary of the proposed total person trip rates and trip generation for the private dwellings across the AM and PM peak hours of 08:00 – 09:00 AM and 17:00 – 18:00 PM respectively is provided in **Table 4.1**, with the full TRICS output provided in **Appendix A5**.

Table 4.1 TRICS Total Person Trip Generation – 358 Private Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trip Rates	0.052	0.413	0.465	0.273	0.135	0.408

Private Dwelling Trips	19	148	166	98	48	146

4.6 As demonstrated in **Table 4.1**, the development is anticipated to generate in the order of 166 trips in a typical weekday AM peak period, comprised of 19 arrivals and 148 departures. During the PM peak period, the development is anticipated to generate in the order of 146 trips, comprised of 98 arrivals and 48 departures.

Affordable Dwellings

4.7 In order to ascertain trip rates for the affordable dwellings as part of the proposed development, the TRICS database (version 7.11.3) has been interrogated to obtain 'total person' multi-modal trip rates with the following parameters selected:

- Land use category: 03 'Residential';
- Subcategory: D 'Affordable/Local Authority Flats';
- Selected regions: Greater London;
- Selected locations: Edge of Town Centre and Neighbourhood Centre (PPS6 Local Centre);
- Number of surveyed sites: 3

4.8 A summary of the proposed total person trip rates and trip generation for the affordable dwellings across the AM and PM peak hours of 08:00 – 09:00 AM and 17:00 – 18:00 PM respectively is provided in **Table 4.2**, with the full TRICS output provided in **Appendix A5**.

Table 4.2 TRICS Total Person Trip Generation – 192 Affordable Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trip Rates	0.126	0.592	0.718	0.324	0.194	0.518
Affordable Dwelling Trips	24	114	138	62	37	100

4.9 As demonstrated in **Table 4.2**, the development is anticipated to generate in the order of 138 trips in a typical weekday AM peak period, comprised of 24 arrivals and 114 departures. During the PM peak period, the development is anticipated to generate in the order of 100 trips, comprised of 62 arrivals and 37 departures.

Gross Proposed Trips

4.10 The combined proposed development trips for both the private and affordable dwellings across a typical weekday AM and PM peak are summarised in **Table 4.3**.

Table 4.3 Gross Proposed Trip Generation – 550 Dwellings

	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Two way	Arrive	Depart	Two way
Trips	43	262	304	160	86	246

4.11 In order to ascertain a representative mode share for the development, the 2011 Census *"Method of travel to work"* dataset has been utilised. As the Site is situated on the borders of LBK, LBM and LBS – the data for the following Middle Super Output Areas (MSOA) has been obtained:

- Merton 020 MSOA (E02000708).
- Kingston Upon Thames 015 MSOA (E02000612).
- Sutton 006 MSOA (E02000845).

4.12 The mode share data from the above local MSOAs has been combined and is summarised in **Table 4.4**.

Table 4.4 Method of Travel to Work (2011 Census) – Average of Merton 020, Kingston 015 and Sutton 006 MSOAs

Method of Travel	% Share
Rail	35%
Bus, minibus or coach	7%
Taxi	1%
Motorcycle, scooter or moped	1%
Driving a car or van	43%
Passenger in a car or van	2%
Bicycle	3%
On foot	6%
Other	0%
***Total**	**100%**

**Subject to rounding*

4.13 As mentioned, the proposals include for a restrained car parking provision of 0.26 spaces per dwelling. The mode shares provided in **Table 4.4** therefore overestimate the number of car trips

which will be generated by the development, due to a mode share of 43% car drivers being disproportionate to the restrained parking provision.

4.14 As such, the mode shares have been recalculated using local car ownership data to quantify the ratio of cars to dwellings in the Boroughs of Merton, Sutton and Kingston and obtain a reduction factor to apply to the mode share in the local area and derive a representative car driver mode share for the proposals.

4.15 The most recently available car ownership data has therefore been obtained from the 2021 Census *"Car or van availability"* dataset for the Boroughs of Kingston upon Thames, Merton and Sutton – summarised in **Table 4.5**.

Table 4.5 Local Car Ownership (2021 Census) – Total of Kingston upon Thames, Merton and Sutton Boroughs

Number of cars or vans	Kingston upon Thames	Merton	Sutton	Total
No cars or vans in household	16,866	27,009	18,782	62,657
1 car or van in household	31,444	38,843	38,668	108,955
2 cars or vans in household	13,381	12,570	18,785	44,736
3 or more cars or vans in household	3,935	3,304	6,113	13,352
Total households	**65,626**	**81,726**	**82,348**	**229,700**

4.16 Using the total number of dwellings demonstrated in **Table 4.5** – 229,700 households – the ratio of cars to dwellings has been calculated in the following way:

- To calculate the total number of households with cars in Kingston, Merton and Sutton:
    - 108,955 + 44,736 + 13,352 = 167,043 households with cars
- To calculate the ratio of cars to dwellings in local MSOAs:
    - 167,043 (households with cars) / 229,700 (total households in local Boroughs) = 0.73.

4.17 Therefore, taking the proposed car parking ratio of 0.26 spaces per dwelling, and dividing this by the ratio of 0.73 cars per dwelling in the local Boroughs – a reduction factor of 0.4 has been obtained

which can be applied to the 43% car driver mode share provided in **Table 4.4**. As such, the proposed car driver mode share for the development is reduced to 15.5%, which is proportional to the level of proposed parking provision.

4.18 TfL agreed as part of pre-application correspondence that the above methodology is acceptable.

4.19 On the above basis, the Census data mode shares in **Table 4.4** have been recalculated assuming the revised car driver mode share and all other modes are redistributed on a pro rata basis using the Census data. To then quantify the proposed multi-modal trip generation for the development, the revised mode shares have been applied to the total person trips provided in **Table 4.3**. The proposed multi-modal trips across a typical weekday AM and PM peak are therefore demonstrated in **Table 4.6**.

Table 4.6 Proposed Multi-Modal Trip Generation – 550 Dwellings

Mode of Travel	Mode Share	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
Rail	52%	22	136	159	83	45	128
Bus	11%	5	29	33	18	9	27
Taxi	1%	0	3	3	2	1	3
Motorcycle, scooter or moped	2%	1	6	7	4	2	5
Car or van	15%	7	41	47	25	13	38
Passenger	4%	2	10	11	6	3	9
Bicycle	5%	2	12	14	7	4	11
On foot	9%	4	24	28	14	8	22
Other	1%	0	2	2	1	1	2
***Total**	**100%**	**43**	**262**	**304**	**160**	**86**	**246**

**Subject to rounding*

4.20 Pursuant to **Table 4.6**, a key summary of the proposed trip generation is characterised as follows:

- A total of 304 trips in the AM peak period, comprised of 43 arrivals and 262 departures in addition to a total of 246 departures in the PM peak period, comprised of 160 arrivals and 86 departures;
- A total of 47 car trips in the AM peak period, comprised of 7 arrivals and 41 departures in addition to a total of 38 car trips in the PM peak period, comprised of 25 arrivals and 13 departures; and

- A total of 28 pedestrian journeys in the AM peak period, comprised of 4 arrivals and 24 departures in addition to a total of 22 pedestrian journeys in the PM peak period, comprised of 14 arrivals and 8 departures.

4.21 Using the same trip generation methodology and for robustness, the daily vehicular profile for the proposed trip generation is summarised in **Table 4.7**.

Table 4.7 Proposed Vehicular Trip Generation – Daily Profile

Time Range	Vehicular Trips		
	Arrive	Depart	Total
07:00-08:00	5	21	26
08:00-09:00	7	41	47
09:00-10:00	10	19	30
10:00-11:00	8	12	20
11:00-12:00	11	16	26
12:00-13:00	13	15	28
13:00-14:00	11	12	24
14:00-15:00	14	16	29
15:00-16:00	27	18	45
16:00-17:00	26	14	40
17:00-18:00	25	13	38
18:00-19:00	28	12	40
19:00-20:00	25	14	39
20:00-21:00	18	9	27
Daily Trips	**228**	**231**	**459**

4.22 As demonstrated above, over the course of a typical weekday, the proposed development is anticipated to generate 228 arrivals and 231 departures. This level of trip generation will be comfortably accommodated within the 143 proposed parking bays (approximately 1.6 arrivals and departures per parking space per day), thereby supporting the position that this provision is sufficient.

Servicing Trips

4.23 In order to calculate the trip generation associated with servicing for the proposed development, accepted TfL guidance recommends a ratio of deliveries per dwelling across a typical day of 0.43. Using this ratio – the development is anticipated to generate in the order of 237 associated trips with the dwellings. However, in reality this does not equate to one vehicle per trip, as a number of trips will be 'linked trips' which represent one vehicle visiting multiple homes within the development. As such, the 237 servicing trips are reduced by a factor of 20% to account for linked trips – which equates

to a total of 189 trips across a typical weekday. Dividing this across a typical 12-hour day gives an hourly delivery rate of 16 deliveries per hour associated with the development. The 20% linked trip assumption was applied as part of a previously approved St Williams Homes London scheme, whereby TfL provided this assumption to agree servicing trip rates.

4.24 The above assumptions are deemed as acceptable by TfL as part of pre-application correspondence.

4.25 It is acknowledged that 16 deliveries per hour may be unrepresentative, and this methodology is indicative at this stage therefore, as the application progresses information will be sought with the applicant to derive representative and proportional servicing trips drawing on existing occupied schemes in Greater London. Should the proportion of linked servicing trips be proposed to be increased further, sufficient evidence and justification will be provided to inform this.

4.26 In addition, the DSP submitted at planning application stage will incorporate measures seeking to consolidate deliveries at the development so as to minimise the disruption of deliveries within the site and mitigate any impacts on the local road network associated with delivery trips for the development.

Traffic Impact and Distribution

4.27 Informed by the trip generation exercise above, a preliminary traffic impact and distribution exercise has been undertaken following RBKuT's and TfL's comments regarding congestion on the local road network.

Proposed Modelling Scope

4.28 A full traffic impact assessment will be set out within the forthcoming TA submission. The TA will seek to assess the following junctions in vicinity of the Site:

- Proposed Site access on Kingshill Avenue.
- Green Lane / Kingshill Avenue mini-roundabout.
- Green Lane / Longfellow Road priority junction.
- A2043 Central Road / Green Lane signalised junction.

4.29 As detailed above, the trip generation for the scheme will be negligible – equating to just over one vehicle every minute, considered a worst case scneario. As such, the associated traffic impact of the scheme is considered to be minimal on surrounding junctions and modelling for a traffic footprint of this scale would not typically be deemed necessary, however the existing congestion on the local road network, notably the A2043 / Green Lane signalised junction, is acknowledged and therefore

the TA will include a modelling exercise to potentially identify existing congested movements and therefore opportunities for improving the flow of buses, and the experience for pedestrians on the local network.

4.30 The projected development impact in future year scenarios will be assessed using industry-standard modelling software packages ARCADY, PICADY and LinSig.

4.31 Agreement with Highways Officers is sought on the above scope of junctions to be assessed. Relevant approvals will also be sought with TfL's Network Performance team on the specification of the traffic surveys and the base LinSig model to be assessed at planning application stage.

Manual Classified Count Surveys

4.32 Manual Classified Count (MCC) surveys will be undertaken to ascertain base year traffic flows on the scope of junctions identified above.

4.33 The MCC surveys will be undertaken using the following specification:

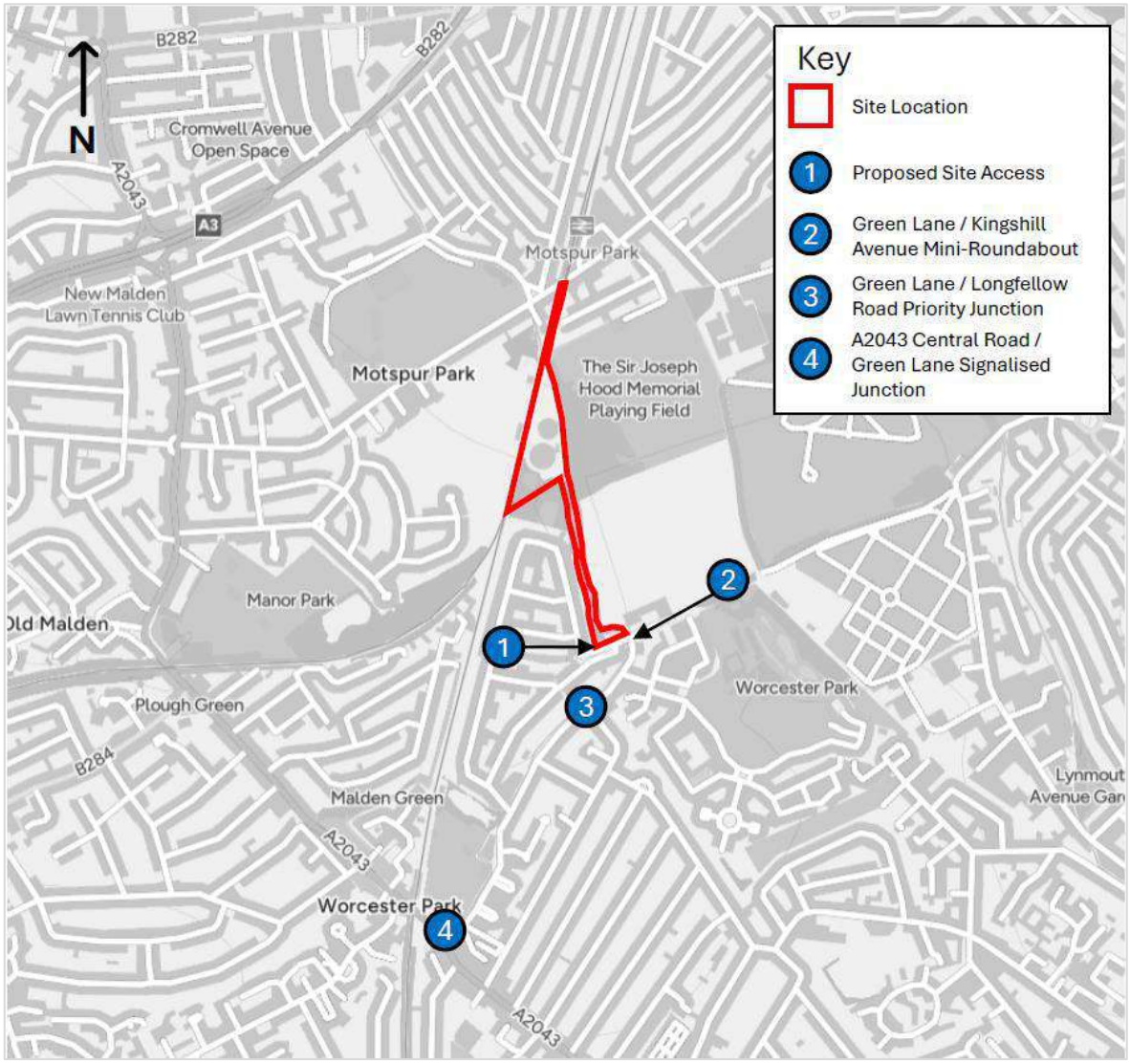
- Undertaken during the hours of 07:00 – 10:00 AM and 14:00 – 19:00 PM from Monday to Sunday during school term time;
- A local review of scheduled roadworks, if there are any planned, will be undertaken to ensure the surveys do not coincide with these;
- Results will provide a tabulated breakdown of turning counts across vehicle classifications on each arm of the surveyed junctions over 15-minute periods within each hour; and
- Observed vehicle queue length surveys will be undertaken at each junction.

4.34 The relevant approvals will be sought with TfL's Network Performance team prior to the instruction of the traffic surveys to ensure they are deemed appropriate.

Indicative Distribution and Assignment

For the purposes of this distribution exercise, the A2043 Central Road / Green Lane signalised junction has been identified as a key junction, through which the majority of traffic associated with the development will be travelling. The location of the A2043 / Green Lane signalised junction, in addition to the proposed modelling scope of junctions in relation to the Site is confirmed on **Figure 4-1**.

Figure 4-1 Proposed Modelling Scope



4.35 A local traffic distribution exercise has been undertaken to quantify how commuter journeys associated with the development will travel to other Boroughs within London and areas around London. These were identified as key commuting areas based on a review of TfL's *Travel Demand Forecast Dashboard* using the *Forecast Travel Demand by Mode or Trip Purpose* dataset. The following parameters were selected:

- From Borough: Kingston upon Thames

- Forecast Year: 2019 Base Year
- Mode: Car & Motorcycle
- Trip Purpose: All

4.36 Using the TfL Travel Demand Forecast Dashboard and the proposed car journeys presented in **Table 4.6**, the share of car journeys travelling to/from the development to local settlements is demonstrated in **Table 4.8**.

Table 4.8 Local Distribution of Car Journeys – Weekday AM and PM Peaks

Destination	Distribution	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
Kingston upon Thames	54%	4	22	25	13	7	21
Berks, Hants and Surrey	18%	1	7	8	4	2	7
Richmond upon Thames	8%	1	3	4	2	1	3
Merton	7%	0	3	3	2	1	3
Sutton	4%	0	2	2	1	1	1
Wandsworth	3%	0	1	1	1	0	1
Hounslow	1%	0	1	1	0	0	1
Croydon	1%	0	0	0	0	0	0
Sussex & Kent	1%	0	0	0	0	0	0
Hammersmith & Fulham	1%	0	0	0	0	0	0
Ealing	1%	0	0	0	0	0	0
Hillingdon	0%	0	0	0	0	0	0
Kensington and Chelsea	0%	0	0	0	0	0	0
Bed, bucks and Oxon	0%	0	0	0	0	0	0
Lambeth	0%	0	0	0	0	0	0
Brent	0%	0	0	0	0	0	0
Bromley	0%	0	0	0	0	0	0
Herts & Essex	0%	0	0	0	0	0	0
Westminster	0%	0	0	0	0	0	0
Barnet	0%	0	0	0	0	0	0

Bexley	0%	0	0	0	0	0	0
Southwark	0%	0	0	0	0	0	0
Camden	0%	0	0	0	0	0	0
Enfield	0%	0	0	0	0	0	0
Greenwich	0%	0	0	0	0	0	0
Haringey	0%	0	0	0	0	0	0
Harrow	0%	0	0	0	0	0	0
Lewisham	0%	0	0	0	0	0	0
Total	**100%**	**7**	**41**	**47**	**25**	**13**	**38**

4.37 The distributed commuter trips in **Table 4.8** have been assigned to the local road network using the following road assignments:

- A2043 east;
- A2043 west; and
- Browning Avenue.

4.38 Using the above assignment, the anticipated car journeys associated with the proposed development across the weekday AM and PM peaks are provided in **Table 4.9**.

Table 4.9 Assigned Proposed Car Journeys – Weekday AM and PM Peaks

Destination	Distribution	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
		Arrive	Depart	Total	Arrive	Depart	Total
A2043 east	10%	1	4	5	2	1	4
A2043 west	86%	6	35	40	21	11	33
Browning Avenue	5%	0	2	2	1	1	2
Total	**100%**	**7**	**41**	**47**	**25**	**13**	**38**

4.39 The key conclusions from **Table 4.9** are as follows:

- A total of 95% of car journeys will be routeing through the A2043 / Green Lane junction, equating to 45 total journeys in the AM peak period and 37 total journeys in the PM peak period.

- A total of 17% commuter of car journeys will be routeing along Browning Avenue, equating to a 2 total journeys in the AM peak period and 2 total journeys in the PM peak period.

4.40 Agreement with Highways Authorities is sought on the appropriateness of the traffic impact and distribution methodology detailed above.

5. SUMMARY

Summary

5.1 This TASR has been prepared by Iceni Projects on behalf of Berkeley Homes for a Full Planning Application for a residential development on the former Motspur Park Gasholders site situated in the LBM, RBKuT and partially also within LBS.

5.2 This version of the TASR follows a formal pre-application meeting with TfL and the Boroughs on the 7th January 2025, from which there have been amendments on the basis of feedback during the meeting. Therefore, further agreement is sought on the matters set out within this TASR to progress to the preparation of a Healthy Streets TA at planning application stage.

5.3 This TASR has concluded the following transport-related matters in association with the development proposals:

- The proposals seek Full planning permission for the development of circa 550 residential homes, inclusive of 35% affordable tenure.
- The proposals also include for publicly accessible amenity space, in addition to the potential provision of connections towards a wooded area abutting the eastern boundary of the site, and also improvements to the site to enable pedestrian and cycle access through the site.
- The key vision for the proposed development is to provide the facilities to encourage the uptake of active travel amongst residents and also introduce a key public amenity for existing residents in the locality by 'opening up' the Site to provide enhanced connections, which are currently restricted by the nature of the Site.
- The development proposes a restrained approach to car parking provision with a ratio of 0.26 spaces per dwelling – equating to circa 143 parking spaces. This number is subject to change following a finalised layout. Blue badge bays and EV charging facilities will be provided in accordance with London Plan guidance.
- Enterprise have been contacted to commence arrangements on introducing a number of car club spaces at the development for residents, to be confirmed as the application progresses.
- Preliminary construction details are set out within this TASR, inclusive of anticipated levels of construction traffic, swept path analysis for the largest envisaged construction vehicles and routeing plans demonstrating how vehicles will access / egress the Site during construction.

- Where possible, the development will provide a mix of cycle parking within the residential blocks as well as separate cycle stores in accordance with London Plan guidance and will be designed to be LCDS compliant – thereby being sheltered, secure and conveniently located for all residents. Communal visitor storage will also be provided. Details on cycle parking are to be provided following a proposed schedule of accommodation.

- A daytime and nighttime ATZ assessment will be undertaken as part of a TA submission, with 10 Key Routes identified within Chapter 3 of this TASR. Agreement is sought with TfL and RBKuT Highways Officers on the appropriateness of the routes.

- A multi-modal trip generation exercise has been undertaken, which demonstrates that the proposals are anticipated to generate in the order of 304 total person trips in the AM peak, comprised of 47 car journeys and 28 pedestrian trips. During the PM peak, the proposals will generate 246 total person trips, comprised of 38 car journeys and 22 pedestrian trips.

- Using the trip generation exercise undertaken, an indicative traffic impact and distribution exercise was also undertaken, ultimately determining that 95% of car journeys will route through the A2043 / Green Lane signalised junction and the remaining 5% of journeys will travel on Browning Avenue.

- Agreement with Highways Officers is sought on the appropriateness of the trip generation and distribution methodologies set out within this TASR.

A1. RED LINE BOUNDARY

A2. 2019 SCHEME TFL SCOPING RESPONSE

Initial Screening

Feedback & Guidance

SGN Site, Motspur Park

26/03/2019

EVERY JOURNEY MATTERS

Initial Screening meeting – Feedback Form

Please note this document is issued without prejudice and represents an officer level view which could change. It may not reflect the future position(s) of the Mayor, GLA and TfL in relation to your planning proposal.

General Information (when booked)

Meeting Booker Name & Company	Asa Plant Vectos			**Developer**	SGN		
Borough & Address (with postcode)	RB Kingston SGN Site, West Barnes Lane, Motspur Park KT4 8DB			**Rough expected completion:**	2022		
Agenda	Development Proposals Access Options Highways impacts CR2 Healthy Streets / Vision Zero			**TfL Attendees**	Lucy Simpson - TfL Spatial Planning Michal Miklasz - TfL Modelling Liaison		
Car Parking?	☒	**How much? (# or ratio)**	0.5 per unit or less	**Development land use(s) & size**	Circa 350 units	**> or nr. 1000 units / 10k sq m**	☐

Network Impact (pre-meeting)

Is the site located on/near…?	**TLRN?**	☐	**SRN ?**	☐	**Current SCN i.e. CSH, QWs:**	☒	**Future SCN:**	☒	**LU infra-structure:**	☐	**Rail infra-structure:**	☒	NR/ Future CR2	<- 'TfL' or 'NR'	
ongoing/confirmed/aspirational TfL scheme(s) * e.g. A10 20mph trial**		☐	**TfL land ?**	☐	**Crowded** station/line?**	☐	**TfL Commercial development?**	☐	**Bus priority investment* ?**	☐	**Bus infra-structure (e.g. station/depot/etc)**	☐	TfL operated ? ->	☐	
Nearest current/future London-wide strategic cycle network:	Quietway - Croydon Town Centre to Worcester Park via Sutton Town Centre (proposed) - finishes Worcester Park south of the site. Mini-Holland – NW.5 Cambridge Road/Kingston Road (proposed) – ends in New Malden NW of the site. Mini Holland - LM.4 New Malden to Raynes Park Link (under construction) – starts in New Malden NW of the site.														

*** as shown on internal TfL Surface Playbook 'ST Strategy & Network Development – 'Projects & Programmes' and/or 'MTS' Reference maps, 2010-2030 timescale

** >3 standing/m^2 Figure 32, p. 195, MTS. Further analysis welcome: http://crowding.data.tfl.gov.uk/

* see 'Bus Priority Programme' shown on TfL Surface Playbook 'City Planning' map

General Notes (e.g. pre-meeting info provided by meeting booker)

Vectos have been appointed by SGN to provide transport planning advice regarding a potential residential development on a disused gas works site off West Barnes Lane.

A Transport Strategy Note (TSN) dated November 2018 was submitted with the meeting request form.

The proposal includes circa 350 residential units.

Vehicle access is currently from a narrow road which runs in a north south direction from West Barnes Lane. There is also access form Kingshill Avenue to the south.

It is proposed to retain vehicular access to the south of the site via Kingshill Avenue and provide pedestrian cycle access only to the north.

Borough comments (if invited or spoken to separately)

Meeting (start)

non-TfL Preapp?	☐	**Who? When?**	High level discussions with the GLA, nothing formal to date	**Design Review? (e.g. by Mayor's Design Advocates, local DR Panel, CABE)**	☐	**Who? When?**	

Meeting (during)

Full TA required? (not Transport Statement)	☒	*Please check yellow boxes & fill free text boxes as appropriate.*						
Key Destinations	Bus Stop(s)	Station(s)	Town Centre(s)	Park(s)	School(s)/ College(s)	Hospital(s) Doctor(s)	Major Employment	Other large developments
Did you identify/discuss local…?	☒	☒	☐	☐	☐	☐	☐	☒
Name(s) & likely impacted modes/services/lines:	Bus stops on both West Barnes Lane (route K5) and Green Lane (route S3)	Motspur Park Rail Station (NR) located to north of site. Routes to Waterloo. Future CR2 station.						Former BBC Sports Ground (17/15279) located adjacent to site on opposite side of railway line
	Walking	Cycling	Step-free		Private Car	Taxi / Private Hire	Deliveries & Servicing	Other
Access to the site/immediate surroundings by:	☐	☒	☒		☐	☐	☐	☐
Comments:		2 mini-Holland schemes and a Quietways scheme in close proximity to the site.	No step-free access at the moment but proposed as part of CR2					

General Feedback (after)

DESIGN & DEVELOPMENT PRINCIPLES *e.g. access, parking, land use*	• Car parking is proposed at 0.5 spaces per unit or less. Given the congested nature of the surrounding highway network TfL would encourage a restrained approached to car parking. • Vehicle access only to the south from Kingsmill Avenue. • Pedestrian and cycle access to the south and the north via the existing access road • CR2 would increase the frequency of trains stopping at Motspur Park to 8 trains per hour to Central London. Station improvements include the provision of step-free access. CR2 proposals also include the closure of both of the level crossings on West Barnes Lane (there's one just south of Motspur Park station) and another between Motspur Park and Raynes Park stations. One of the options for a replacement highway crossing (and the worksite needed to construct it) would clash with the northernmost tip of the site and the narrow access road between the site and West Barnes Lane.
HEALTHY STREETS *i.e. key local Active Travel routes, journeys and destinations, urban design, walking, cycling* *For inspiration…* *Healthy Streets Check for Planning Assessment*	• There is currently no permeability through the site. However, it is likely that there will be public access for pedestrians and cyclist through the site which will significantly improve permeability and connectivity to the north and south. TfL would strongly encourage this to make it acceptable from a Healthy Streets perspective. • A high quality pedestrian and cycling environment to modes of public transport (bus stops on West Barnes Lane and Green Lane and Motspur Park station and Worcester Park station) should be created. • The proposed pedestrian and cycle access route to the north should be well lit and designed to reduce perceptions of danger.

VISION ZERO *i.e . potential clusters of serious/fatal collisions HGVs, high speeds, especially on key routes to public transport, town centre(s), park(s), etc* *+ local TfL Safer Junctions projects, future Road Safety Audits*	• Is there a need for a formal crossing point on West Barnes Lane? Where is the pedestrian desire line to access Motspur Park station? • Ensure cyclists can easily and safely access the proposed quietways cycle route to the south. • When undertaking accident analysis, even if no discernable cause of accidents, the analysis should identify if there are any interventions (whether it be improving signage or lining to something more significant) which could prevent an accident in the future.
NETWORK IMPACT *i.e. key junctions/corridors/stations/stops + any specific data & info TfL can share now to support production of the TA e.g. nearby ongoing/forthcoming TfL schemes, surveys, etc.*	• No modelling currently exists for this section of the A2043 Malden Road/Central Road. The borough are in the early stages of specifying traffic surveys with a view to building LINSIG and VISSIM models of the area. They are looking at improvements at the A2043 Malden Road/Park Terrace/Station Approach junction, and A2043 Central Road/Green Lane junction. • In terms of the signal operation, TfL receive a significant number of complaints for this area as a result of the extensive queues in both peaks. This will need to be taken into consideration when determining car parking provision. • The proposed Croydon Town Centre to Worcester Park Quiteway is located south of the site. This route would run from Worcester Park rail station on Central Road, along Green Lane and Longfellows Road, Lincoln Road and Brownings Avenue. The route is currently at the pre-feasibility stage and there are no designs or models. The option which Sutton would like to look at around this area is a modal filtering scheme to reduce through traffic. Programmed year of delivery 2021/22.

Specific Feedback (after)

TfL Case Officer specifies-> 4-8 Key Journeys / Routes to the Key Destinations in the Active Travel Zone (ATZ = 20mins cycle around Site)	Briefly discussed the need to map routes to rail station (Motspur park and Worcester Park), bus stops and key destinations. This is expected to be picked up in further detail at a full TfL pre-application meeting.							
Mapped on ATZ Map in TA?	☐	☐	☐	☐	☐	☐	☐	☐
With photographic acceptability survey? (point of view every 150m)	☐	☐	☐	☐	☐	☐	☐	☐
NOTE: all ATZ Mapping in TAs must include		KSIs	TfL Safer Junctions	S278 required?	If 'Yes', * Stage 1 RSA	S278 ** with TfL? (i.e. on TLRN)	Cost of works > £200k (if known)	If both 'Yes', * Healthy Streets Check for Designers
Vision Zero		☒	☒	☐	☐	☐	☐	☐
Do you recommend major changes to the development proposals discussed (e.g. car-free)?			☒			**Did they understand your feedback and agree to consider it?**		☒
Do you recommend a full TfL Preapp?			☒			**Did they agree?**		☐
Strategic modelling recommended?			☐			**Rough expected app submission date:**		
Local modelling recommended?			☒					

	… get people to walk & cycle & use public transport?	…increase wait times at pedestrian crossings?	…crowd footways?	…cause Bus delays?	…change existing signals?	…create new signals?	…disrupt Bus Operations? (inc. during construction)	…pay S106 to TfL for capacity reasons?	… be pleasant and welcoming for pedestrians from all walks of life?	

IF KNOWN AT THIS STAGE, Is the development likely to…	☒	☐	☐	☒	☐	☐	☐	☐	☒
Comments:	Car parking likely to be less than 0.5 per unit.			Additional vehicle trips on Green Lane and at the Green Lane / Central Road junction could impact on bus JTs					Improve permeability through the site
Types of analysis potentially required:	Further work on rail impacts e.g. station crowding	Local Modelling Screening Report by Modelling Liaison Officer	Pedestrian Modelling	Pedestrian Comfort Levels (PCL)	Microsim (e.g. VISSIM)	Local Junction Modelling (e.g. LINSIG)	Bus Compensation methodology for construction impacts	Strategic Future Transport Context Report	Strategic Modelling (full)
	☐	☒	☐	☐	☒	☒	☐	☐	☐

** must be undertaken in accordance with SQA-0170. Please contact TfLsafetyaudit@tfl.gov.uk &/or HealthyStreetsEngineering@tfl.gov.uk*
**** initially check Surface Playbook 'Modelling Library' map then speak with our Surface Modelling Liaison Officer*

If Strategic or Local Modelling is recommended or scheme is > or nr. 1000 units / 10k sq m, further meeting(s) will be required with relevant team(s).
All TAs should be based on the new TfL Healthy Streets template BELOW/NEXT PAGE & consult TfL Spatial Planning's website with a TfL Outline Construction Logistics Plan (CLP) as a chapter in the TA (not separately) – template available HERE

Local Modelling Screening Report

Date:	22/03/2019
Name of TfL officer completing Report:	Michal Miklasz
Name of Area or Technical Manager who has signed off:	Andrew Hinde

Comments on STUDY AREA:	Study area has not been defined but should at least consider junctions grouped under the same SCOOT region 473, namely junctions between Station approach outside of Worcester Park up to Washington Road/ Windsor Road junctions. Should microsimulation modelling be required, the extent of modelling analysis may need reviewing and include Quietways sections outside of A2043.				
Accepted by TfL?	☐	**Not yet?**	☒	**Further information needed:**	Further refinement on potential trip generation will allow for more detail scoping

Comments on EXPECTED AREA OF IMPACT:	Please see above comments				
Accepted by TfL?	☐	**Not yet?**	☒	**Further information needed:**	Please see above comments

Comments on SURVEY REQUIREMENTS:	Survey scope hasn't been defined in provided note but should at least consider Green Lane corridor between A2043 and Quieitways and access road junctions as well as junctions within SCOOT region.				
Accepted by TfL?	☐	**Not yet?**	☒	**Further information needed:**	Details of surveys specification can be defined once modeling tool is confirmed.

Comments on EXPECTED TIMESCALES::	To be confirmed once modelling scope and methodology is defined				
Accepted by TfL?	☐	**Not yet?**	☒	**Further information needed:**	Yes

ANY RECOMMENDED CONTACTS elsewhere in TfL for data sharing/further discussions:

Healthy Streets TA
recommended Contents & Chapters
last updated 13.2.2018

1. Introduction

i.e. What is being built? Why? When? And how specifically will it support Healthy Streets, Vision Zero, and the Mayor's Transport Strategy?

Help us to understand how strategic transport policies will be delivered, not just what they are. Explain the integration between transport and the proposed development's key characteristics, principles and design.

How has transport planning contributed to important decisions and trade-offs in the design and planning process? Focus on your collaboration with other built environment disciplines in the project team.

2 Transport planning for people

i.e. Who is the development for? When will they travel there and why?

Healthy Streets and Vision Zero are about putting people first. We need to know your new development will be a pleasant and convenient place for people of all abilities to walk, cycle and use public transport - including people already in the area.

To show us, make clear first who will use the new development and why. This includes any visitors. Our Travel in London reports and Transport Classification of Londoners

demographic segments can help.

The rest of the TA should continue to put people first. Help us understand how and why people will be able to travel actively, sustainably and safely - at the 3 key spatial scales of a Healthy Streets TA, and whilst the scheme is being built.

3. Site and surroundings

i.e. How can people of all abilities move around the site and its immediate surroundings? This means the site itself, and just beyond its red line boundary.

For each of the bullet points below, please explain the transport conditions and challenges people will face on site - both before and after the proposed development is built:

- Access
  TfL priority is Walking, Cycling and Public Transport over private vehicles.

- On-site/nearby public realm
  How does it meet our Healthy Streets indicators and London Plan policy requirements? This includes proposed Highway Works.

- Servicing
  How have sustainability, efficiency and Londoners' safety fed into the development principles and design?

- Parking
  Cycle (always) and if proposed Car (discouraged except for disabled people, see draft London Plan Policy T6.1 and Table 10.6).

A Stage 1 Road Safety Audit is required for any highway works proposed. You should also explain how the highway works will be safely implemented and maintained. The Healthy Streets Check for Designers should be completed for any street works expected to cost over £200,000, even on local highway, and audited for accuracy by TfL. If they are included, TfL and the local Council should always review these checks before your planning application is determined. If we do not approve the results, they will not be treated as valid.

4. Active Travel Zone (ATZ)

i.e. How will people of all abilities make key journeys in the ATZ that are essential to support car-free lifestyles?

The ATZ is a 20 minute cycle around the site, available from our WebCAT planning tool.

This is a step by step part of the assessment with maps, photos and some text. Detailed guidance is available on our website from March 2019.

5. London-wide network

i.e. How will people of all abilities travel smoothly and easily from the development onto London's public transport and highway networks?

This chapter will include:

- Trip Generation
  Especially Public Transport including link trips e.g. from Bus or Cycle to LU or Rail. This should be based on the most relevant and latest data available. For some sites and land uses, new survey data may need to be collected.

- Design solutions (preferred)
  and/or
  Mitigation for network capacity impacts (e.g. S106, MCIL, etc.)

- Modelling (when required)
  Based on valid models and recent data using industry standard software prepared by suitable qualified professionals and if necessary audited by independent experts and/or TfL.

6. Construction

A completed TfL CLP should be provided for major applications or other applications with construction impacts that need to be mitigated, example, in a busy pedestrian area or next to a major junction.

TfL Freight Outline CLP template PDF

This is required even if the eventual construction company is unknown.

Our template has been designed to recommend a good construction methodology and mitigate the key construction impacts. It includes a spreadsheet tool for calculating how many construction trips there will be. Particular attention should be given to the safety of pedestrians and cyclists.

You must deal with all construction phases and consider meanwhile uses if possible.

7. Conclusion

	Key transport impacts / issues	**Solutions / mechanisms**
Site and surroundings		
Active Travel Zone (ATZ)		
London-wide network		

Chapters:	1. Introduction	2. Transport planning for	3. Site and Surroundings	4. Active Travel Zone	5. London-wide network	6. Construction	7. Conclusion
London Plan policies: (MOST IMPORTANT)	T1 Strategic approach to transport; GG2 Making the best use of land; GG6 Increasing efficiency	GG3 Creating a Healthy City; GG5 Growing a good economy	D7 Public realm; T7 Freight and servicing; T6 Car Parking; T5 Cycling (parking); G1 green infrastructure;	T2 Healthy Streets; G4 Local green and open space; D1 London's form and characteristics; G6	T3 Transport capacity, connectivity and safeguarding; T5 Cycling;	T7 Freight and servicing; SI15 Water transport	T4 Assessing and mitigating transport impacts; T9 Funding transport infrastructur through

Construction

Comment [g1]: i.e. compulsory and take precedence whenever other resources conflict or are unclear, based on our professional judgement and interpretation of the London Plan

Please consider including the table above to summarise key transport impacts and how your development will respond.

In response, outcomes like planning obligations, design changes and mitigation may need to be agreed by you, the borough and TfL before we can support your application receiving planning permission.

Please find Most Important, Essential and Helpful resources for producing your Healthy Streets TA on the next 3 pages (last updated February 2019).

Assessment/TA production resources (ESSENTIAL):	Mayor's Transport Strategy new London Plan TfL Business Plan TfL Improvements & Projects; new London Plan (inc Table 10.1); & local Borough mode shift targets	Our Travel in London reports and Transport Classification of Londoners; Walking Action Plan; Vision Zero Action Plan; Cycling Action Plan	Healthy Streets Toolkit inc. Healthy Streets Check for Designers TfL Streets toolkit includes our Streetscape Guidance London Cycling Design Standards & strategic cycle route design criteria (coming soon) SuDS in London – a guide Accessible Bus Stop Design guidance Kerbside Loading	Liveable Neighbourhoods Third LIPS guidance, part 2 'Implementing the MTS at a local level' Town Centre Strategies; SPDs; Site Briefs, etc Local Implementation Plans (LIPs) for all relevant CONFIRMED OR PROPOSED TRANSPORT IMPROVEMENTS	Strategic Cycling Analysis; TRICS; Mayoral CIL; our Open Data + Spatial Planning website!	TfL CLP Guidance & template; Freight Operator Recognition Scheme (FORS); CLOCS (Construction Logistics & Community Safety);	Mayor's Community Infrastructure Levy (MCIL)

Comment [g2]: i.e. you should use these to produce your Healthy Streets TA and we will use them to assess your application

Other resources (HELPFUL):	GLA Supplementary Planning Guidance (SPGs) e.g. Night-time Economy, Town Centres, etc London Environment Strategy London National Park City Mayor's Design Advocates & Good Growth by Design Urban Design London courses & publications	London 2050 Infrastructure Plan DfT Inclusive Transport Strategy Local Plan & Local Infrastructure Delivery Plan for LOCAL GROWTH & PLANNED INFRASTRUCTURE	'Small Change, Big Impact' case studies Better Streets Delivered Better Streets Delivered 2 TfL Deliveries Toolkits & Freight publications UDL Slow Streets source book London Greener City Fund London Tree Officers Association standard wording for conditions	Manual for Streets DfT Local Cycling & Walking Infrastructure Plan Technical Guidance	Mayor's Crossrail funding SPG Crossrail 2 Crossrail National Infrastructure Commission HS2 Deloitte on value of Open Data to TfL	Construction Logistics training resources Considerate Constructor's Scheme. Michael Barratt MBE's best practice hub	

Comment [g3]: i.e. can support production and assessment of a best practice Healthy Streets TA

Contact

spatialplanning@tfl.gov.uk
Level 9, 5 Endeavour Square, Westfield Avenue,
Stratford E20 1JN

EVERY JOURNEY MATTERS

A3. PTAL OUTPUT

WebCAT PTAL Report
==========
Site Details

Grid Cell: 22413

Easting: 522545
Northing: 167252

Report Date: 22/11/2024
Scenario: Base Year

Calculation Parameters

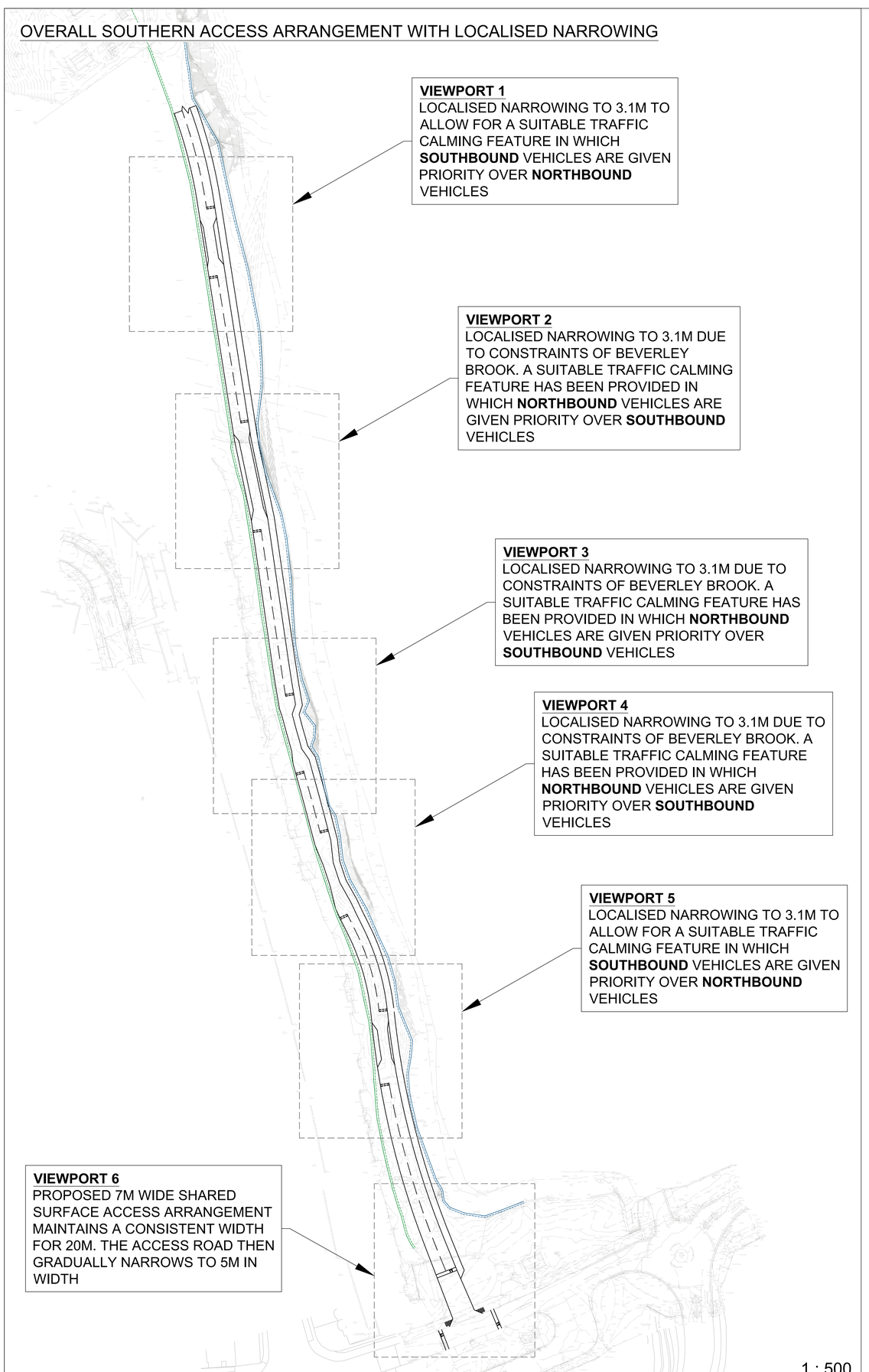
Day of Week: M-F
Time Period: AM Peak
Walk Speed: 4.8 kph
Bus Node Max Walk Access Time (mins): 8
Bus Reliability Factor: 2.0
LU Station Max Walk Access Time (mins): 12
LU Reliability Factor: 0.75
National Rail Station Max Walk Access Time (mins): 12
National Rail Reliability Factor: 0.75

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	MOTSPUR PARK STATION	K5	574.86	1	7.19	32	39.19	0.77	1	0.77
Rail	Motspur Park	'WATRLMN-DORKING 1D09'	687.23	2	8.59	15.75	24.34	1.23	1	1.23
Rail	Motspur Park	'DORKING-WATRLMN 1D10'	687.23	1	8.59	30.75	39.34	0.76	0.5	0.38
Rail	Motspur Park	'WATRLMN-EPSM 2D09 '	687.23	0.33	8.59	91.66	100.25	0.3	0.5	0.15
Rail	Motspur Park	'GUILDFD-WATRLMN 2D10'	687.23	1.33	8.59	23.31	31.9	0.94	0.5	0.47
Rail	Motspur Park	'WATRLMN-GUILDFD 2D11'	687.23	1.67	8.59	18.71	27.3	1.1	0.5	0.55
Rail	Motspur Park	'EFNGHMJ-WATRLMN 2D16'	687.23	0.67	8.59	45.53	54.12	0.55	0.5	0.28
Rail	Motspur Park	'EPSM-WATRLMN 2D92 '	687.23	1	8.59	30.75	39.34	0.76	0.5	0.38
Rail	Motspur Park	'WATRLMN-CHSSS 2M09 '	687.23	2	8.59	15.75	24.34	1.23	0.5	0.62
Rail	Motspur Park	'CHSSS-WATRLMN 2M10 '	687.23	2	8.59	15.75	24.34	1.23	0.5	0.62

Total Grid Cell AI: 5.45
PTAL: 2

A4. ACCESS AND SWEPT PATH DRAWINGS

OVERALL SOUTHERN ACCESS ARRANGEMENT WITH LOCALISED NARROWING



VIEWPORT 1
LOCALISED NARROWING TO 3.1M TO ALLOW FOR A SUITABLE TRAFFIC CALMING FEATURE IN WHICH **SOUTHBOUND** VEHICLES ARE GIVEN PRIORITY OVER **NORTHBOUND** VEHICLES

VIEWPORT 2
LOCALISED NARROWING TO 3.1M DUE TO CONSTRAINTS OF BEVERLEY BROOK. A SUITABLE TRAFFIC CALMING FEATURE HAS BEEN PROVIDED IN WHICH **NORTHBOUND** VEHICLES ARE GIVEN PRIORITY OVER **SOUTHBOUND** VEHICLES

VIEWPORT 3
LOCALISED NARROWING TO 3.1M DUE TO CONSTRAINTS OF BEVERLEY BROOK. A SUITABLE TRAFFIC CALMING FEATURE HAS BEEN PROVIDED IN WHICH **NORTHBOUND** VEHICLES ARE GIVEN PRIORITY OVER **SOUTHBOUND** VEHICLES

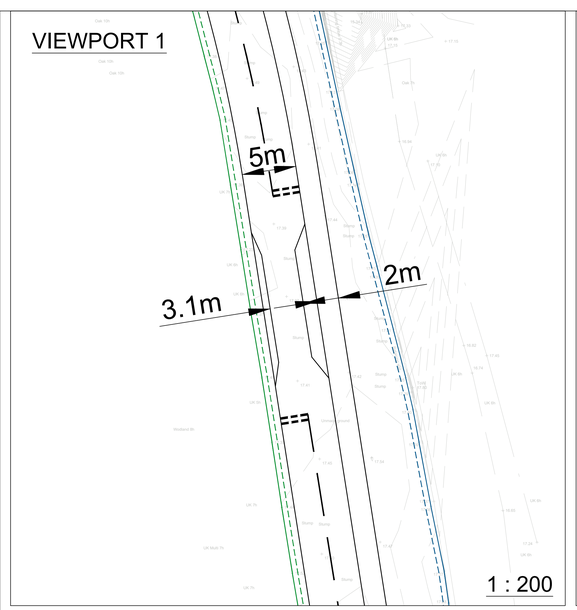
VIEWPORT 4
LOCALISED NARROWING TO 3.1M DUE TO CONSTRAINTS OF BEVERLEY BROOK. A SUITABLE TRAFFIC CALMING FEATURE HAS BEEN PROVIDED IN WHICH **NORTHBOUND** VEHICLES ARE GIVEN PRIORITY OVER **SOUTHBOUND** VEHICLES

VIEWPORT 5
LOCALISED NARROWING TO 3.1M TO ALLOW FOR A SUITABLE TRAFFIC CALMING FEATURE IN WHICH **SOUTHBOUND** VEHICLES ARE GIVEN PRIORITY OVER **NORTHBOUND** VEHICLES

VIEWPORT 6
PROPOSED 7M WIDE SHARED SURFACE ACCESS ARRANGEMENT MAINTAINS A CONSISTENT WIDTH FOR 20M. THE ACCESS ROAD THEN GRADUALLY NARROWS TO 5M IN WIDTH

1 : 500

VIEWPORT 1



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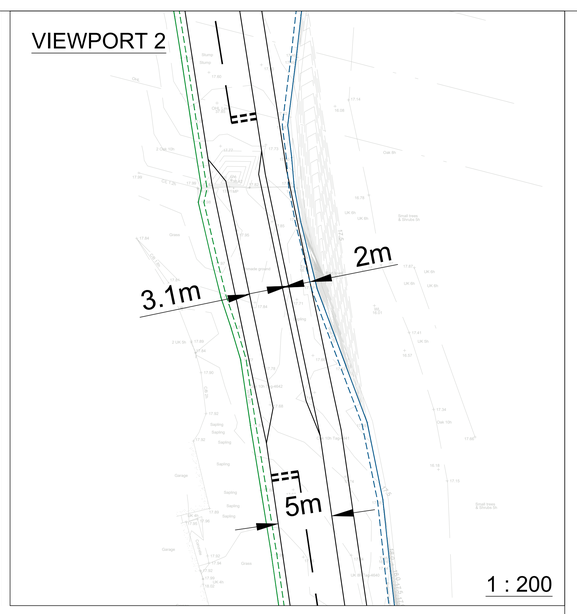
VIEWPORT 2



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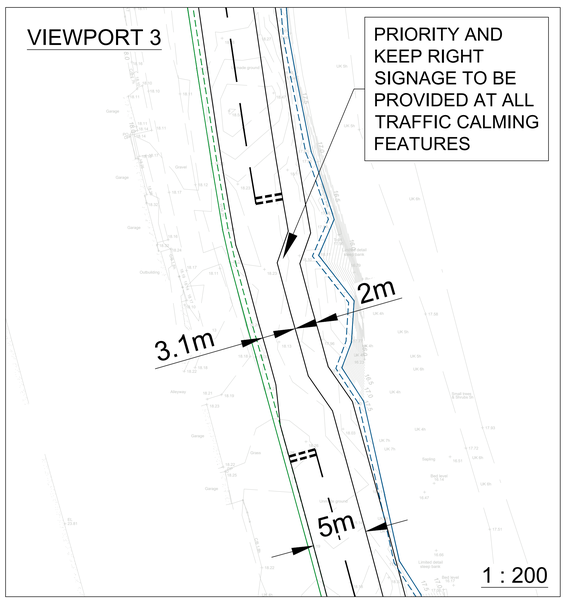
VIEWPORT 3



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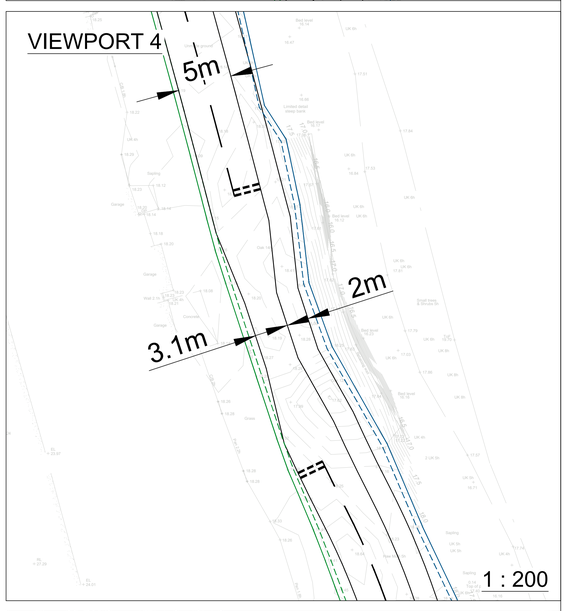
VIEWPORT 4



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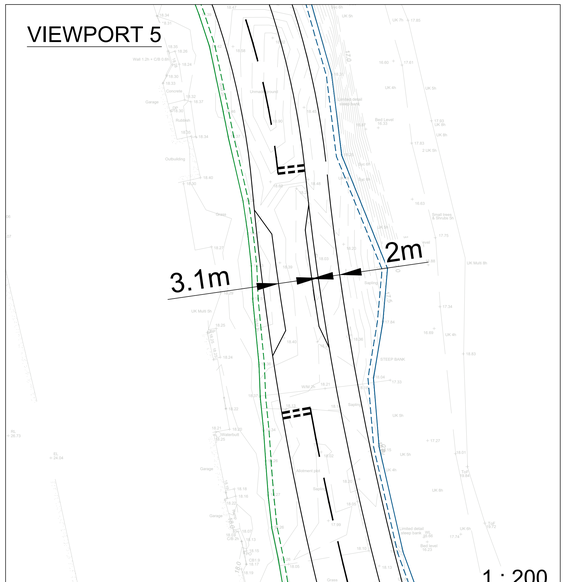
VIEWPORT 5



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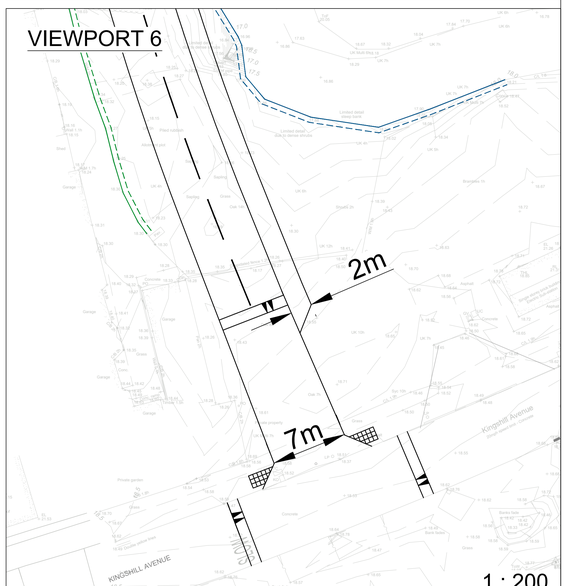
VIEWPORT 6



1 : 200

NOTES:

1. THIS DRAWING IS INDICATIVE AND SUBJECT TO DISCUSSIONS WITH LOCAL & NATIONAL HIGHWAY AUTHORITIES. THIS DESIGN IS ALSO SUBJECT TO CONFIRMATION OF LAND OWNERSHIP, TOPOGRAPHY, LOCATION OF STATUTORY SERVICES, DETAILED DESIGN AND TRAFFIC MODELLING.
2. THIS DRAWING IS BASED UPON TOPOGRAPHICAL MAPPING DRAWING NUMBER 18235SE-01-05 REV C SUPPLIED BY BERKELEY GROUP AND ICENI PROJECTS LTD. SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.

KEY:

EXISTING FENCE LINE

0.5M OFFSET BUFFER LINE FROM THE EXISTING FENCE LINE

TOP OF EXISTING BEVERLEY BROOK

0.5M OFFSET BUFFER LINE FROM TOP OF EXISTING BEVERLEY BROOK

EXAMPLE OF SIGNAGE TO BE PROVIDED:

PRIORITY OVER ONCOMING VEHICLES SIGNAGE TO BE USED WHERE VEHICLES HAVE PRIORITY WHEN NAVIGATING THROUGH THE TRAFFIC CALMING/NARROWING

GIVE WAY TO ONCOMING VEHICLES SIGNAGE TO BE USED WHERE VEHICLES HAVE TO GIVE WAY WHEN NAVIGATING THROUGH THE TRAFFIC CALMING/NARROWING

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mail@iceniprojects.com

CLIENT

ST EDWARD (BERKELEY HOMES)

PROJECT

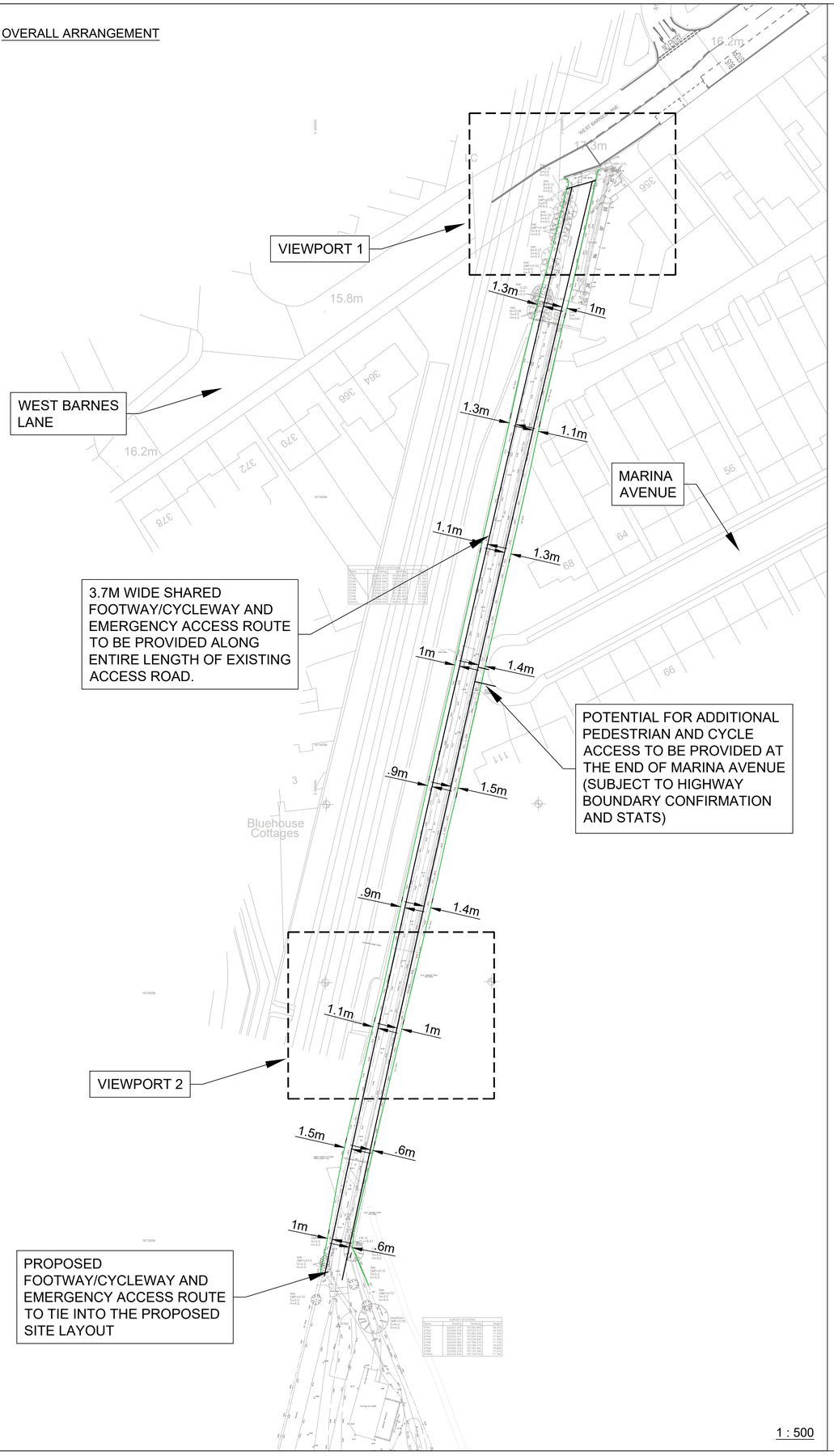
MOTSPUR PARK GAS HOLDERS

TITLE

POTENTIAL SOUTHERN SITE ACCESS ARRANGEMENT

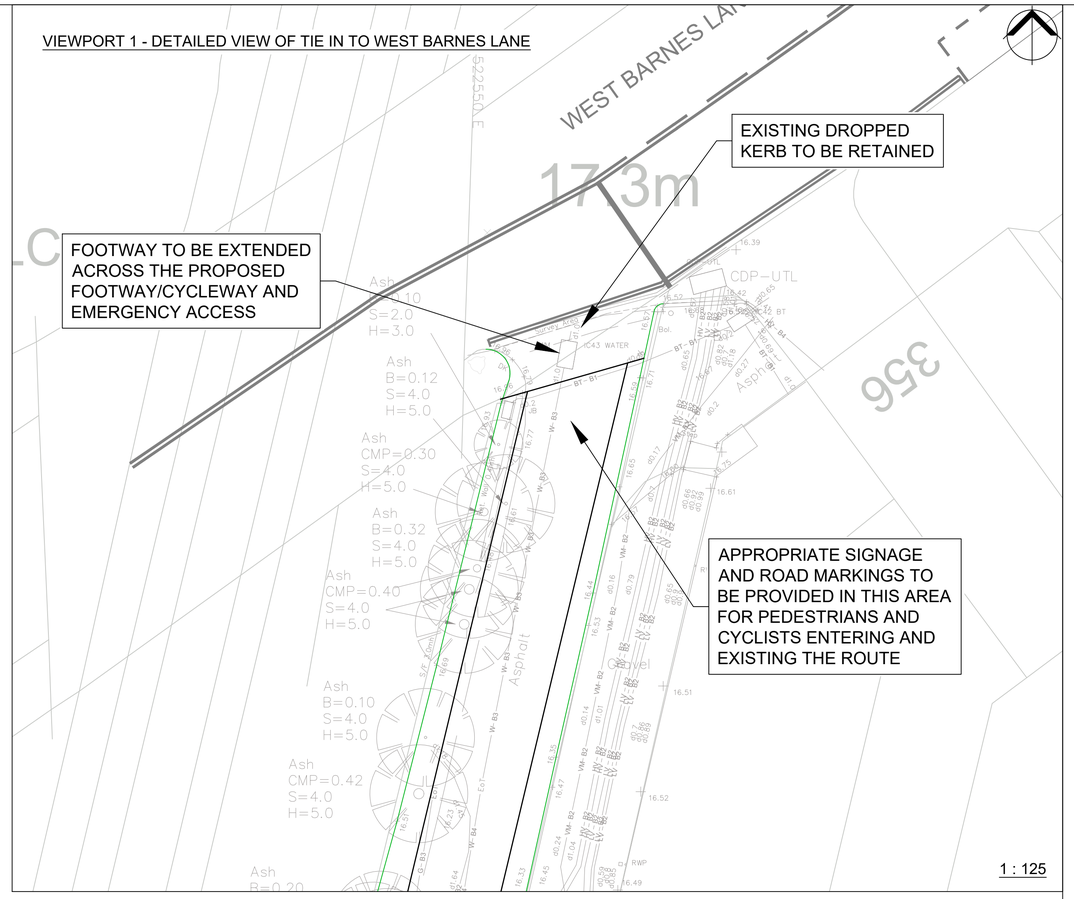
DRAWN BY	CHECKED BY	APPROVED BY
AP	SB 03.01.2025	RA 03.01.2025
SCALE @ A0	DATE	
AS SHOWN	03.01.2025	
PROJECT NO.	DRAWING NO.	REV.
I000551	105	-

OVERALL ARRANGEMENT



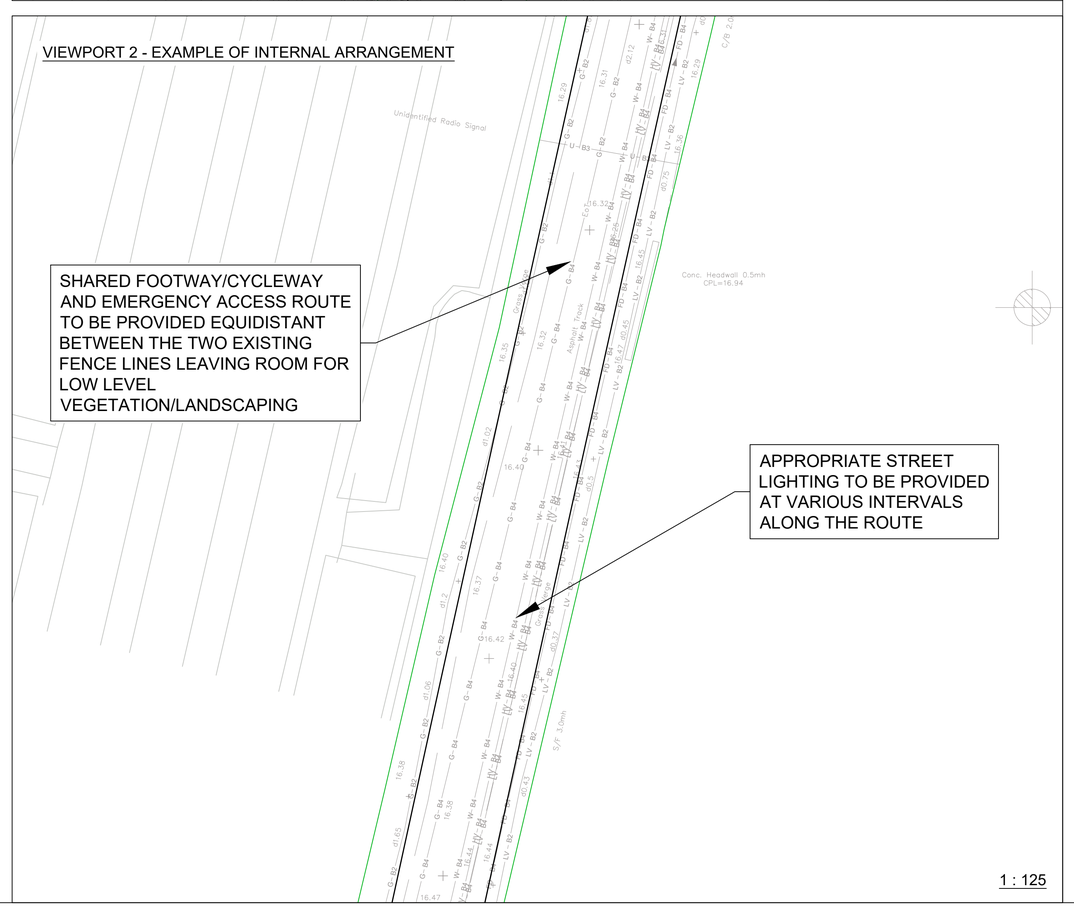
1 : 500

VIEWPORT 1 - DETAILED VIEW OF TIE IN TO WEST BARNES LANE



1 : 125

VIEWPORT 2 - EXAMPLE OF INTERNAL ARRANGEMENT



1 : 125

NOTES:
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2. THIS DRAWING IS BASED UPON DRAWING TITLED WORCESTER GAS HOLDER TOPO AND PAS128 UTILITY SURVEY SUPPLIED BY SURESCAN AND ICENI PROJECTS LTD. SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.

REV	DATE	AMENDMENTS	DRAWN	CHK	APP
A	21.11.2024	DIMENSIONS ADDED	AP	RA	RA

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CLIENT

ST EDWARD (BERKELEY HOMES)

PROJECT

MOTSPUR PARK GAS HOLDERS

TITLE

POTENTIAL SHARED FOOTWAY/CYCLEWAY

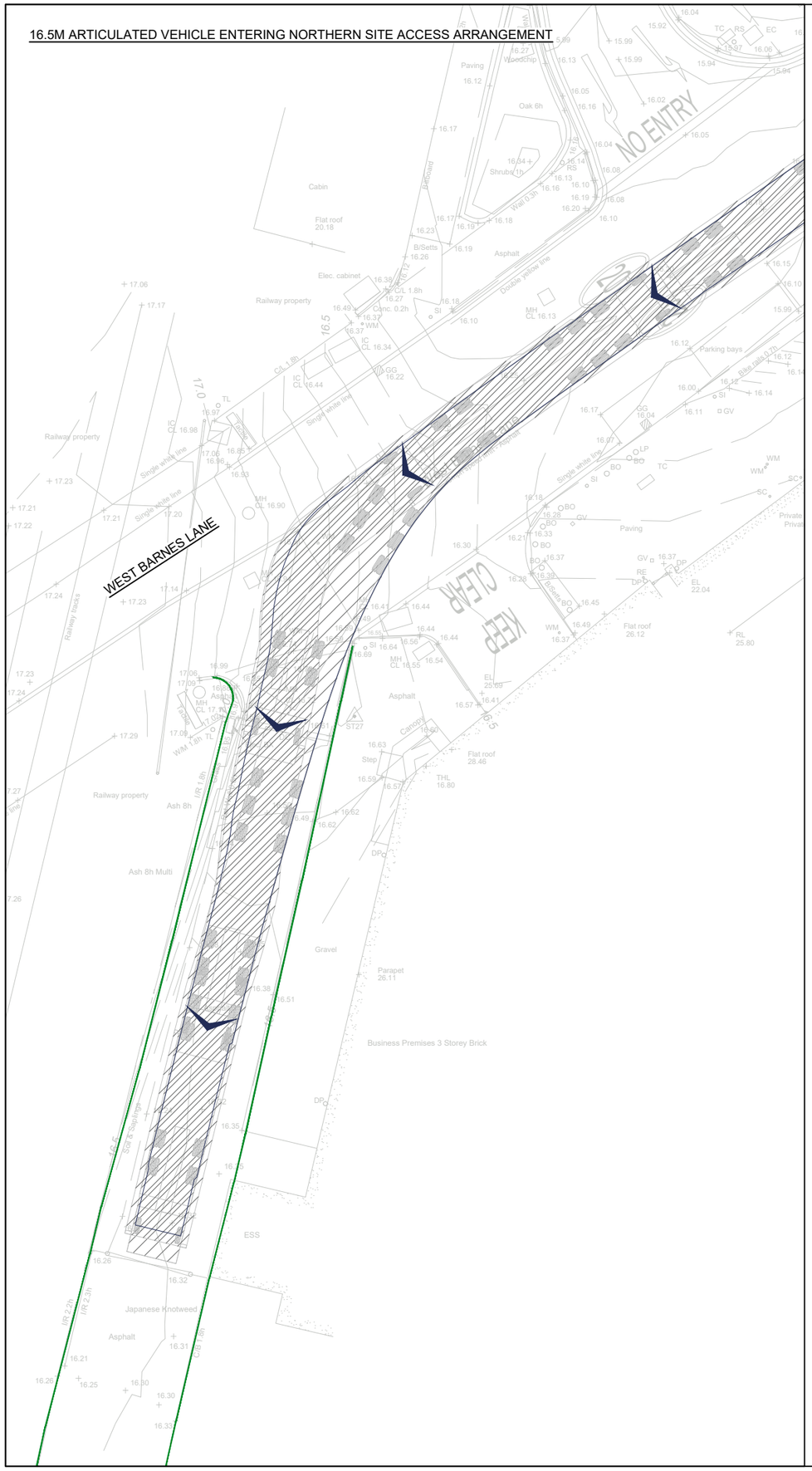
AND EMERGENCY ACCESS ROUTE ARRANGEMENT

DRAWN BY	CHECKED BY	APPROVED BY
AP	RA 20.11.2024	RA 20.11.2024

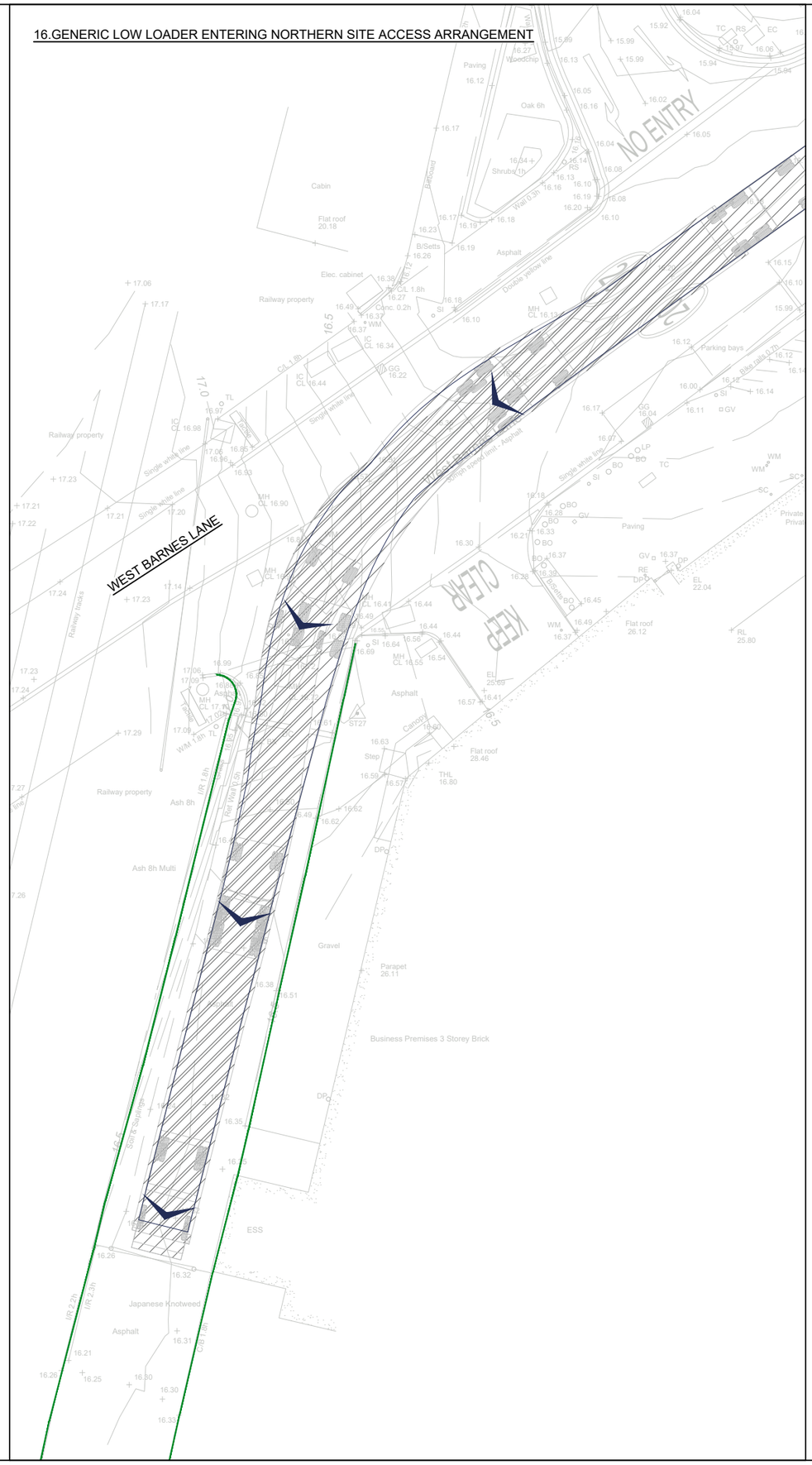
SCALE @ A1	DATE
AS SHOWN	20.11.2024

PROJECT NO.	DRAWING NO.	REV.
I000551	501	A

16.5M ARTICULATED VEHICLE ENTERING NORTHERN SITE ACCESS ARRANGEMENT



16.GENERIC LOW LOADER ENTERING NORTHERN SITE ACCESS ARRANGEMENT



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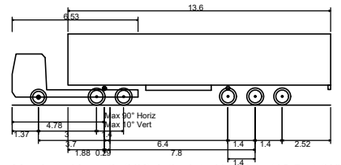
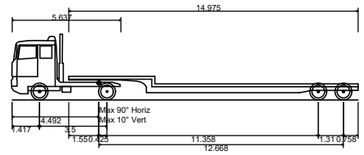
2. THIS DRAWING IS BASED UPON TOPOGRAPHICAL MAPPING DRAWING NUMBER 18235SE-01-05 REV C SUPPLIED BY BERKELEY GROUP AND ICENI PROJECTS LTD. SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.

VEHICLE PROFILE:



Max Legal Length (UK) Articulated Vehicle (16.5m) (Wing Mirrors)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m



Generic 18m Low Loader

Overall Length	17.918m
Overall Width	2.540m
Overall Body Height	3.408m
Min Body Ground Clearance	0.332m
Max Track Width	2.520m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.400m

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PROJECT

MOTSPUR PARK GAS HOLDERS

TITLE

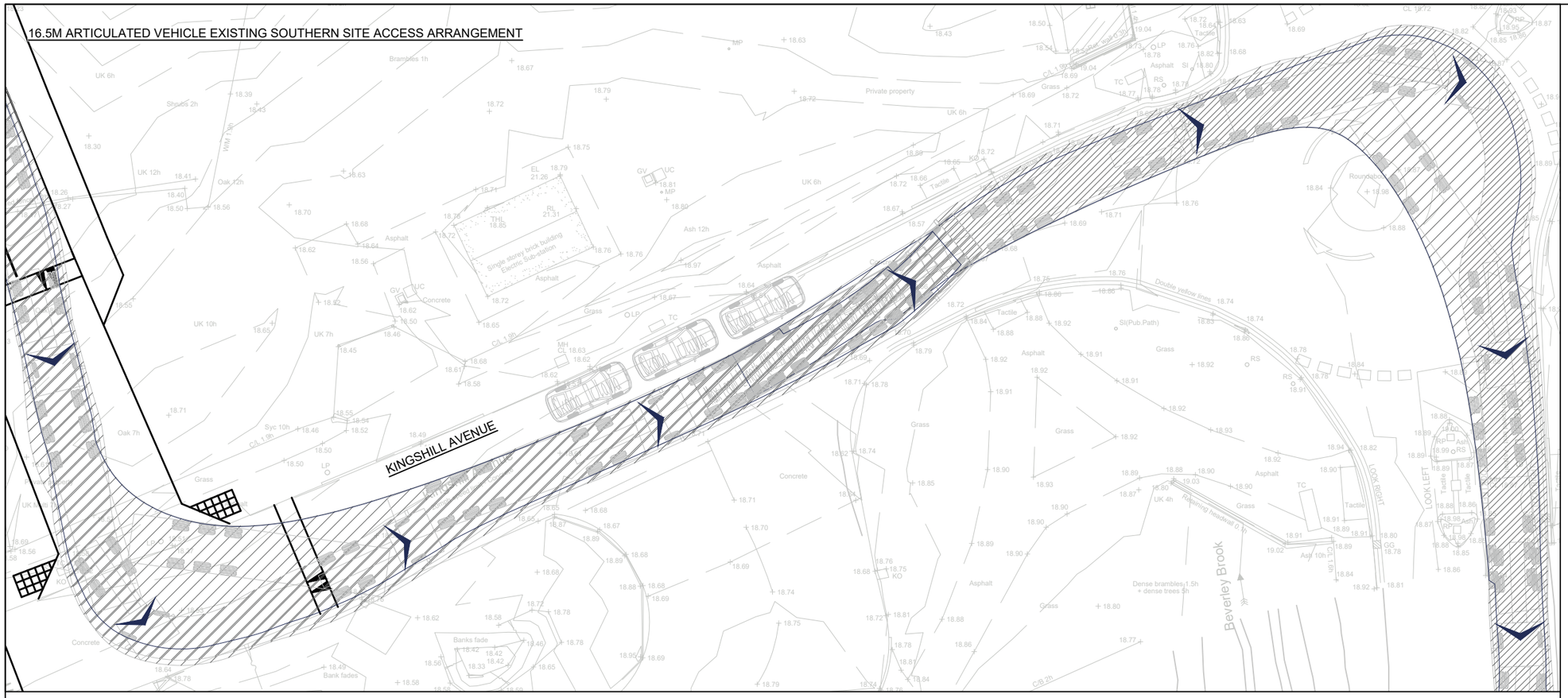
CONSTRUCTION VEHICLE TRACKING ASSESSMENT

(NORTHERN SITE ACCESS ARRANGEMENT - ENTERING)

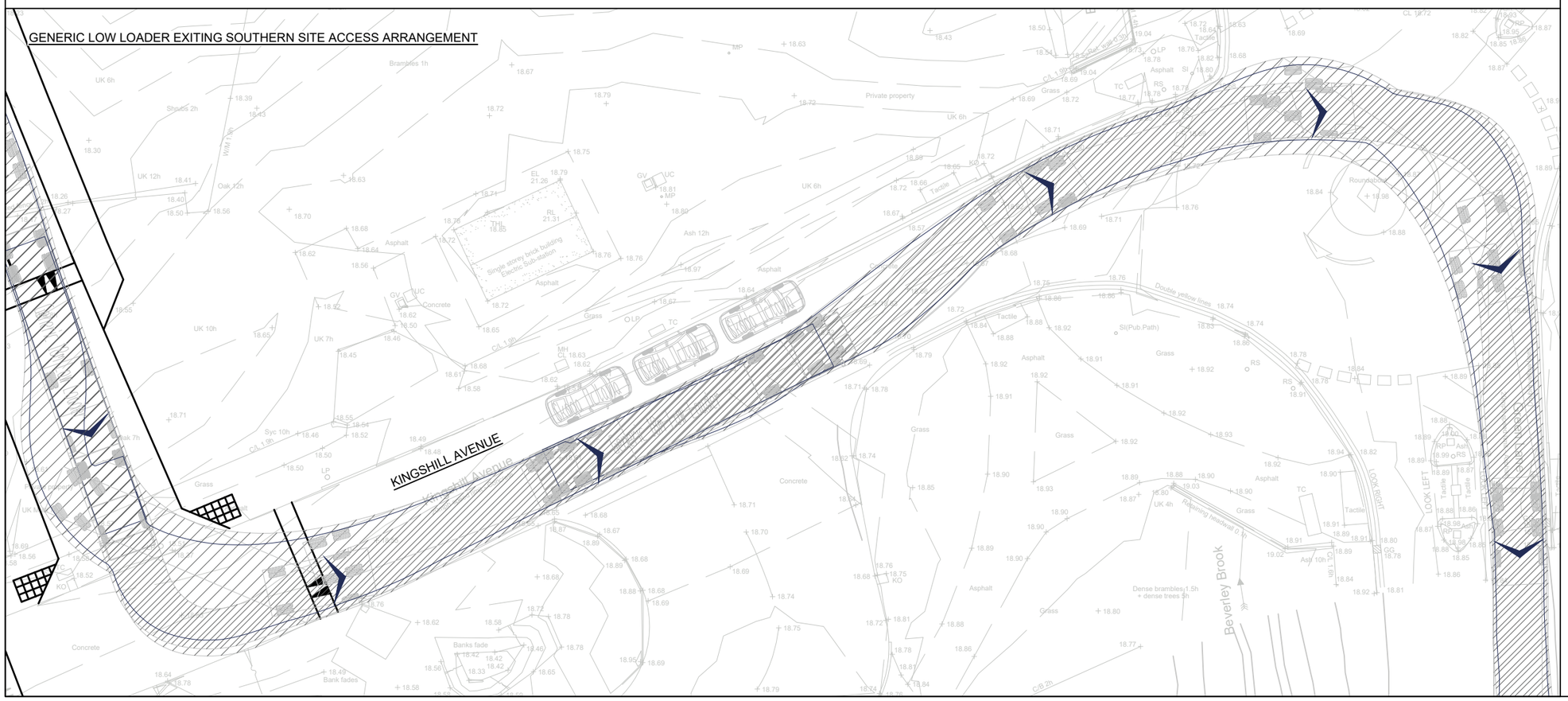
DRAWN BY	CHECKED BY	APPROVED BY
AP	SB 09.01.2025	RA 09.01.2025

SCALE @ A3	DATE	
1 : 250	09.01.2025	
PROJECT NO.	DRAWING NO.	REV.
I000551	602.1	-

16.5M ARTICULATED VEHICLE EXISTING SOUTHERN SITE ACCESS ARRANGEMENT



GENERIC LOW LOADER EXITING SOUTHERN SITE ACCESS ARRANGEMENT

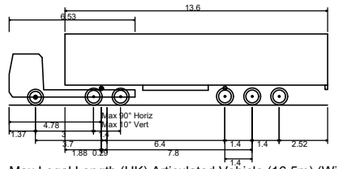


NOTES:

1. THIS DRAWING IS INDICATIVE AND SUBJECT TO DISCUSSIONS WITH LOCAL & NATIONAL HIGHWAY AUTHORITIES. THIS DESIGN IS ALSO SUBJECT TO CONFIRMATION OF LAND OWNERSHIP, TOPOGRAPHY, LOCATION OF STATUTORY SERVICES, DETAILED DESIGN AND TRAFFIC MODELLING.

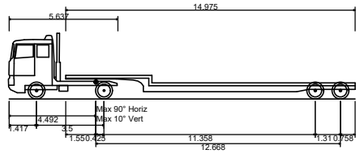
2. THIS DRAWING IS BASED UPON TOPOGRAPHICAL MAPPING DRAWING NUMBER 18235SE-01-05 REV C SUPPLIED BY BERKELEY GROUP AND ICENI PROJECTS LTD. SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.

VEHICLE PROFILE:



Max Legal Length (UK) Articulated Vehicle (16.5m) (Wing Mirrors)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m



Generic 18m Low Loader

Overall Length	17.918m
Overall Width	2.540m
Overall Body Height	3.408m
Min Body Ground Clearance	0.332m
Max Track Width	2.520m
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CLIENT

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PROJECT

MOTSPUR PARK GAS HOLDERS

TITLE

CONSTRUCTION VEHICLE TRACKING ASSESSMENT

(SOUTHERN SITE ACCESS ARRANGEMENT - EXITING)

DRAWN BY	CHECKED BY	APPROVED BY
AP	SB 09.01.2025	RA 09.01.2025

SCALE @ A3	DATE	
1 : 250	09.01.2025	
PROJECT NO.	DRAWING NO.	REV.
I000551	602.2	-

A5. TRICS OUTPUT REPORTS

Iceni Projects 114-116 Charing Cross Road London Licence No: 751001

Filtering Summary

Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	200-493 DWELLS	
Actual Trip Rate Calculation Parameter Range	203-493 DWELLS	
Date Range	Minimum: 01/01/16	Maximum: 14/11/19
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	Tuesday	3
	Wednesday	2
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	2
	Edge of Town	1
	Neighbourhood Centre (PPS6 Local Centre)	2
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	5 - Selected
	Servicing vehicles Excluded	1 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	10,001 to 15,000	1
	15,001 to 20,000	1
	25,001 to 50,000	3
Population <5 Mile ranges selected	125,001 to 250,000	1
	250,001 to 500,000	1
	500,001 or More	3
Car Ownership <5 Mile ranges selected	0.6 to 1.0	4
	1.1 to 1.5	1
PTAL Rating	2 Poor	2
	3 Moderate	1
	5 Very Good	2

Calculation Reference: AUDIT-751001-241104-1142

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	BT	BRENT	1 days
	HG	HARINGEY	1 days
	HO	HOUNSLOW	1 days
	HV	HAVERING	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:	203 to 493 (units:)
Range Selected by User:	200 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: 01/01/16 to 14/11/19

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:

Tuesday	3 days
Wednesday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1
Neighbourhood Centre (PPS6 Local 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:

Industrial Zone	1
Development Zone	1
Residential Zone	2
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.

Inclusion of Servicing Vehicles Counts:

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

Secondary Filtering selection:

Use Class:

C3	5 days

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

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	3 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	4 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	3 days
No	2 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:

2 Poor	2 days
3 Moderate	1 days
5 Very Good	2 days

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

LIST OF SITES relevant to selection parameters

Site(1):	BE-03-C-02	Site area:	3.04 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	402
Location:	BELVEDERE	Housing density:	197
Postcode:	DA17 6FB	Total Bedrooms:	699
Main Location Type:	Edge of Town	Survey Date:	19/09/18
Sub-Location Type:	Industrial Zone	Survey Day:	Wednesday
PTAL:	2 Poor	Parking Spaces:	550
Site(2):	BT-03-C-02	Site area:	0.94 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	472
Location:	WEMBLEY	Housing density:	549
Postcode:	HA9 0NH	Total Bedrooms:	719
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/11/16
Sub-Location Type:	Development Zone	Survey Day:	Wednesday
PTAL:	5 Very Good	Parking Spaces:	151
Site(3):	HG-03-C-01	Site area:	2.66 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	255
Location:	TOTTENHAM HALE	Housing density:	181
Postcode:	N17 9DJ	Total Bedrooms:	378
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	18/06/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	5 Very Good	Parking Spaces:	110
Site(4):	HO-03-C-04	Site area:	1.02 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	203
Location:	ISLEWORTH	Housing density:	274
Postcode:	TW7 5FR	Total Bedrooms:	354
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	03/07/18
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	3 Moderate	Parking Spaces:	142
Site(5):	HV-03-C-02	Site area:	3.48 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	493
Location:	ROMFORD	Housing density:	258
Postcode:	RM7 0GR	Total Bedrooms:	1231
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/11/16
Sub-Location Type:	Built-Up Zone	Survey Day:	Tuesday
PTAL:	2 Poor	Parking Spaces:	246

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
SK-03-C-03	Too central

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.35

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.018	5	365	0.078	5	365	0.096
08:00 - 09:00	5	365	0.020	5	365	0.092	5	365	0.112
09:00 - 10:00	5	365	0.035	5	365	0.039	5	365	0.074
10:00 - 11:00	5	365	0.029	5	365	0.036	5	365	0.065
11:00 - 12:00	5	365	0.031	5	365	0.042	5	365	0.073
12:00 - 13:00	5	365	0.036	5	365	0.040	5	365	0.076
13:00 - 14:00	5	365	0.038	5	365	0.041	5	365	0.079
14:00 - 15:00	5	365	0.041	5	365	0.040	5	365	0.081
15:00 - 16:00	5	365	0.051	5	365	0.044	5	365	0.095
16:00 - 17:00	5	365	0.068	5	365	0.046	5	365	0.114
17:00 - 18:00	5	365	0.084	5	365	0.043	5	365	0.127
18:00 - 19:00	5	365	0.092	5	365	0.047	5	365	0.139
19:00 - 20:00	3	359	0.065	3	359	0.036	3	359	0.101
20:00 - 21:00	3	359	0.064	3	359	0.036	3	359	0.100
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.672			0.660			1.332

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

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

Parameter summary

Trip rate parameter range selected:	203 - 493 (units:)
Survey date date range:	01/01/16 - 14/11/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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 TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.002	5	365	0.001	5	365	0.003
08:00 - 09:00	5	365	0.002	5	365	0.003	5	365	0.005
09:00 - 10:00	5	365	0.002	5	365	0.001	5	365	0.003
10:00 - 11:00	5	365	0.001	5	365	0.001	5	365	0.002
11:00 - 12:00	5	365	0.001	5	365	0.001	5	365	0.002
12:00 - 13:00	5	365	0.001	5	365	0.001	5	365	0.002
13:00 - 14:00	5	365	0.002	5	365	0.002	5	365	0.004
14:00 - 15:00	5	365	0.002	5	365	0.002	5	365	0.004
15:00 - 16:00	5	365	0.001	5	365	0.001	5	365	0.002
16:00 - 17:00	5	365	0.001	5	365	0.001	5	365	0.002
17:00 - 18:00	5	365	0.002	5	365	0.002	5	365	0.004
18:00 - 19:00	5	365	0.002	5	365	0.002	5	365	0.004
19:00 - 20:00	3	359	0.002	3	359	0.002	3	359	0.004
20:00 - 21:00	3	359	0.001	3	359	0.001	3	359	0.002
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.021			0.043

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 OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.001	5	365	0.002	5	365	0.003
08:00 - 09:00	5	365	0.001	5	365	0.000	5	365	0.001
09:00 - 10:00	5	365	0.002	5	365	0.002	5	365	0.004
10:00 - 11:00	5	365	0.003	5	365	0.002	5	365	0.005
11:00 - 12:00	5	365	0.001	5	365	0.002	5	365	0.003
12:00 - 13:00	5	365	0.000	5	365	0.001	5	365	0.001
13:00 - 14:00	5	365	0.000	5	365	0.001	5	365	0.001
14:00 - 15:00	5	365	0.002	5	365	0.002	5	365	0.004
15:00 - 16:00	5	365	0.001	5	365	0.000	5	365	0.001
16:00 - 17:00	5	365	0.000	5	365	0.001	5	365	0.001
17:00 - 18:00	5	365	0.001	5	365	0.001	5	365	0.002
18:00 - 19:00	5	365	0.000	5	365	0.000	5	365	0.000
19:00 - 20:00	3	359	0.000	3	359	0.000	3	359	0.000
20:00 - 21:00	3	359	0.000	3	359	0.000	3	359	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.014			0.026

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 CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.000	5	365	0.008	5	365	0.008
08:00 - 09:00	5	365	0.001	5	365	0.014	5	365	0.015
09:00 - 10:00	5	365	0.002	5	365	0.004	5	365	0.006
10:00 - 11:00	5	365	0.002	5	365	0.002	5	365	0.004
11:00 - 12:00	5	365	0.002	5	365	0.002	5	365	0.004
12:00 - 13:00	5	365	0.001	5	365	0.003	5	365	0.004
13:00 - 14:00	5	365	0.003	5	365	0.003	5	365	0.006
14:00 - 15:00	5	365	0.002	5	365	0.004	5	365	0.006
15:00 - 16:00	5	365	0.004	5	365	0.002	5	365	0.006
16:00 - 17:00	5	365	0.004	5	365	0.001	5	365	0.005
17:00 - 18:00	5	365	0.007	5	365	0.001	5	365	0.008
18:00 - 19:00	5	365	0.006	5	365	0.000	5	365	0.006
19:00 - 20:00	3	359	0.004	3	359	0.001	3	359	0.005
20:00 - 21:00	3	359	0.002	3	359	0.000	3	359	0.002
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.045			0.085

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 VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.020	5	365	0.108	5	365	0.128
08:00 - 09:00	5	365	0.022	5	365	0.136	5	365	0.158
09:00 - 10:00	5	365	0.042	5	365	0.050	5	365	0.092
10:00 - 11:00	5	365	0.036	5	365	0.049	5	365	0.085
11:00 - 12:00	5	365	0.042	5	365	0.056	5	365	0.098
12:00 - 13:00	5	365	0.048	5	365	0.050	5	365	0.098
13:00 - 14:00	5	365	0.048	5	365	0.052	5	365	0.100
14:00 - 15:00	5	365	0.053	5	365	0.055	5	365	0.108
15:00 - 16:00	5	365	0.077	5	365	0.061	5	365	0.138
16:00 - 17:00	5	365	0.098	5	365	0.057	5	365	0.155
17:00 - 18:00	5	365	0.112	5	365	0.058	5	365	0.170
18:00 - 19:00	5	365	0.131	5	365	0.060	5	365	0.191
19:00 - 20:00	3	359	0.082	3	359	0.048	3	359	0.130
20:00 - 21:00	3	359	0.090	3	359	0.054	3	359	0.144
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.901			0.894			1.795

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.021	5	365	0.042	5	365	0.063
08:00 - 09:00	5	365	0.020	5	365	0.090	5	365	0.110
09:00 - 10:00	5	365	0.026	5	365	0.031	5	365	0.057
10:00 - 11:00	5	365	0.024	5	365	0.035	5	365	0.059
11:00 - 12:00	5	365	0.046	5	365	0.035	5	365	0.081
12:00 - 13:00	5	365	0.044	5	365	0.041	5	365	0.085
13:00 - 14:00	5	365	0.030	5	365	0.042	5	365	0.072
14:00 - 15:00	5	365	0.041	5	365	0.043	5	365	0.084
15:00 - 16:00	5	365	0.059	5	365	0.047	5	365	0.106
16:00 - 17:00	5	365	0.060	5	365	0.043	5	365	0.103
17:00 - 18:00	5	365	0.062	5	365	0.038	5	365	0.100
18:00 - 19:00	5	365	0.047	5	365	0.025	5	365	0.072
19:00 - 20:00	3	359	0.069	3	359	0.041	3	359	0.110
20:00 - 21:00	3	359	0.047	3	359	0.036	3	359	0.083
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.596			0.589			1.185

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 BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.002	5	365	0.039	5	365	0.041
08:00 - 09:00	5	365	0.005	5	365	0.062	5	365	0.067
09:00 - 10:00	5	365	0.013	5	365	0.025	5	365	0.038
10:00 - 11:00	5	365	0.009	5	365	0.019	5	365	0.028
11:00 - 12:00	5	365	0.010	5	365	0.021	5	365	0.031
12:00 - 13:00	5	365	0.016	5	365	0.023	5	365	0.039
13:00 - 14:00	5	365	0.015	5	365	0.019	5	365	0.034
14:00 - 15:00	5	365	0.019	5	365	0.020	5	365	0.039
15:00 - 16:00	5	365	0.024	5	365	0.019	5	365	0.043
16:00 - 17:00	5	365	0.035	5	365	0.023	5	365	0.058
17:00 - 18:00	5	365	0.037	5	365	0.018	5	365	0.055
18:00 - 19:00	5	365	0.057	5	365	0.016	5	365	0.073
19:00 - 20:00	3	359	0.045	3	359	0.015	3	359	0.060
20:00 - 21:00	3	359	0.034	3	359	0.014	3	359	0.048
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.321			0.333			0.654

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 RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.002	5	365	0.067	5	365	0.069
08:00 - 09:00	5	365	0.004	5	365	0.111	5	365	0.115
09:00 - 10:00	5	365	0.010	5	365	0.045	5	365	0.055
10:00 - 11:00	5	365	0.008	5	365	0.024	5	365	0.032
11:00 - 12:00	5	365	0.010	5	365	0.021	5	365	0.031
12:00 - 13:00	5	365	0.014	5	365	0.022	5	365	0.036
13:00 - 14:00	5	365	0.016	5	365	0.020	5	365	0.036
14:00 - 15:00	5	365	0.017	5	365	0.018	5	365	0.035
15:00 - 16:00	5	365	0.020	5	365	0.018	5	365	0.038
16:00 - 17:00	5	365	0.028	5	365	0.014	5	365	0.042
17:00 - 18:00	5	365	0.055	5	365	0.020	5	365	0.075
18:00 - 19:00	5	365	0.074	5	365	0.014	5	365	0.088
19:00 - 20:00	3	359	0.058	3	359	0.014	3	359	0.072
20:00 - 21:00	3	359	0.045	3	359	0.012	3	359	0.057
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.361			0.420			0.781

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.004	5	365	0.106	5	365	0.110
08:00 - 09:00	5	365	0.009	5	365	0.173	5	365	0.182
09:00 - 10:00	5	365	0.024	5	365	0.070	5	365	0.094
10:00 - 11:00	5	365	0.016	5	365	0.043	5	365	0.059
11:00 - 12:00	5	365	0.020	5	365	0.042	5	365	0.062
12:00 - 13:00	5	365	0.030	5	365	0.045	5	365	0.075
13:00 - 14:00	5	365	0.032	5	365	0.039	5	365	0.071
14:00 - 15:00	5	365	0.036	5	365	0.037	5	365	0.073
15:00 - 16:00	5	365	0.043	5	365	0.037	5	365	0.080
16:00 - 17:00	5	365	0.062	5	365	0.037	5	365	0.099
17:00 - 18:00	5	365	0.092	5	365	0.038	5	365	0.130
18:00 - 19:00	5	365	0.131	5	365	0.030	5	365	0.161
19:00 - 20:00	3	359	0.103	3	359	0.029	3	359	0.132
20:00 - 21:00	3	359	0.079	3	359	0.026	3	359	0.105
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.681			0.752			1.433

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.35

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.044	5	365	0.264	5	365	0.308
08:00 - 09:00	5	365	0.052	5	365	0.413	5	365	0.465
09:00 - 10:00	5	365	0.094	5	365	0.155	5	365	0.249
10:00 - 11:00	5	365	0.078	5	365	0.129	5	365	0.207
11:00 - 12:00	5	365	0.110	5	365	0.135	5	365	0.245
12:00 - 13:00	5	365	0.122	5	365	0.139	5	365	0.261
13:00 - 14:00	5	365	0.112	5	365	0.136	5	365	0.248
14:00 - 15:00	5	365	0.132	5	365	0.139	5	365	0.271
15:00 - 16:00	5	365	0.183	5	365	0.147	5	365	0.330
16:00 - 17:00	5	365	0.224	5	365	0.138	5	365	0.362
17:00 - 18:00	5	365	0.273	5	365	0.135	5	365	0.408
18:00 - 19:00	5	365	0.315	5	365	0.115	5	365	0.430
19:00 - 20:00	3	359	0.257	3	359	0.119	3	359	0.376
20:00 - 21:00	3	359	0.218	3	359	0.116	3	359	0.334
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.214			2.280			4.494

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 CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.013	5	365	0.068	5	365	0.081
08:00 - 09:00	5	365	0.015	5	365	0.084	5	365	0.099
09:00 - 10:00	5	365	0.026	5	365	0.032	5	365	0.058
10:00 - 11:00	5	365	0.022	5	365	0.029	5	365	0.051
11:00 - 12:00	5	365	0.025	5	365	0.033	5	365	0.058
12:00 - 13:00	5	365	0.028	5	365	0.032	5	365	0.060
13:00 - 14:00	5	365	0.032	5	365	0.032	5	365	0.064
14:00 - 15:00	5	365	0.033	5	365	0.034	5	365	0.067
15:00 - 16:00	5	365	0.047	5	365	0.038	5	365	0.085
16:00 - 17:00	5	365	0.062	5	365	0.042	5	365	0.104
17:00 - 18:00	5	365	0.072	5	365	0.036	5	365	0.108
18:00 - 19:00	5	365	0.084	5	365	0.040	5	365	0.124
19:00 - 20:00	3	359	0.058	3	359	0.030	3	359	0.088
20:00 - 21:00	3	359	0.058	3	359	0.033	3	359	0.091
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.575			0.563			1.138

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.003	5	365	0.006	5	365	0.009
08:00 - 09:00	5	365	0.002	5	365	0.003	5	365	0.005
09:00 - 10:00	5	365	0.005	5	365	0.003	5	365	0.008
10:00 - 11:00	5	365	0.003	5	365	0.004	5	365	0.007
11:00 - 12:00	5	365	0.005	5	365	0.006	5	365	0.011
12:00 - 13:00	5	365	0.006	5	365	0.005	5	365	0.011
13:00 - 14:00	5	365	0.003	5	365	0.005	5	365	0.008
14:00 - 15:00	5	365	0.003	5	365	0.003	5	365	0.006
15:00 - 16:00	5	365	0.002	5	365	0.005	5	365	0.007
16:00 - 17:00	5	365	0.005	5	365	0.003	5	365	0.008
17:00 - 18:00	5	365	0.008	5	365	0.004	5	365	0.012
18:00 - 19:00	5	365	0.003	5	365	0.003	5	365	0.006
19:00 - 20:00	3	359	0.003	3	359	0.003	3	359	0.006
20:00 - 21:00	3	359	0.004	3	359	0.001	3	359	0.005
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.055			0.054			0.109

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 MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.000	5	365	0.001	5	365	0.001
08:00 - 09:00	5	365	0.000	5	365	0.001	5	365	0.001
09:00 - 10:00	5	365	0.000	5	365	0.001	5	365	0.001
10:00 - 11:00	5	365	0.000	5	365	0.001	5	365	0.001
11:00 - 12:00	5	365	0.001	5	365	0.000	5	365	0.001
12:00 - 13:00	5	365	0.001	5	365	0.002	5	365	0.003
13:00 - 14:00	5	365	0.002	5	365	0.002	5	365	0.004
14:00 - 15:00	5	365	0.001	5	365	0.000	5	365	0.001
15:00 - 16:00	5	365	0.001	5	365	0.000	5	365	0.001
16:00 - 17:00	5	365	0.001	5	365	0.001	5	365	0.002
17:00 - 18:00	5	365	0.002	5	365	0.001	5	365	0.003
18:00 - 19:00	5	365	0.003	5	365	0.002	5	365	0.005
19:00 - 20:00	3	359	0.002	3	359	0.002	3	359	0.004
20:00 - 21:00	3	359	0.002	3	359	0.001	3	359	0.003
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.015			0.031

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 Underground Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.001	5	365	0.025	5	365	0.026
08:00 - 09:00	5	365	0.002	5	365	0.049	5	365	0.051
09:00 - 10:00	5	365	0.007	5	365	0.020	5	365	0.027
10:00 - 11:00	5	365	0.005	5	365	0.015	5	365	0.020
11:00 - 12:00	5	365	0.006	5	365	0.010	5	365	0.016
12:00 - 13:00	5	365	0.006	5	365	0.010	5	365	0.016
13:00 - 14:00	5	365	0.009	5	365	0.007	5	365	0.016
14:00 - 15:00	5	365	0.008	5	365	0.009	5	365	0.017
15:00 - 16:00	5	365	0.009	5	365	0.012	5	365	0.021
16:00 - 17:00	5	365	0.012	5	365	0.012	5	365	0.024
17:00 - 18:00	5	365	0.020	5	365	0.014	5	365	0.034
18:00 - 19:00	5	365	0.023	5	365	0.010	5	365	0.033
19:00 - 20:00	3	359	0.017	3	359	0.006	3	359	0.023
20:00 - 21:00	3	359	0.016	3	359	0.008	3	359	0.024
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.141			0.207			0.348

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 DLR Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.000	5	365	0.000	5	365	0.000
08:00 - 09:00	5	365	0.001	5	365	0.001	5	365	0.002
09:00 - 10:00	5	365	0.000	5	365	0.000	5	365	0.000
10:00 - 11:00	5	365	0.000	5	365	0.000	5	365	0.000
11:00 - 12:00	5	365	0.000	5	365	0.000	5	365	0.000
12:00 - 13:00	5	365	0.000	5	365	0.001	5	365	0.001
13:00 - 14:00	5	365	0.000	5	365	0.000	5	365	0.000
14:00 - 15:00	5	365	0.000	5	365	0.000	5	365	0.000
15:00 - 16:00	5	365	0.000	5	365	0.000	5	365	0.000
16:00 - 17:00	5	365	0.000	5	365	0.000	5	365	0.000
17:00 - 18:00	5	365	0.000	5	365	0.000	5	365	0.000
18:00 - 19:00	5	365	0.000	5	365	0.000	5	365	0.000
19:00 - 20:00	3	359	0.000	3	359	0.000	3	359	0.000
20:00 - 21:00	3	359	0.000	3	359	0.000	3	359	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.002			0.003

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 Overground Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.000	5	365	0.007	5	365	0.007
08:00 - 09:00	5	365	0.000	5	365	0.008	5	365	0.008
09:00 - 10:00	5	365	0.001	5	365	0.004	5	365	0.005
10:00 - 11:00	5	365	0.001	5	365	0.001	5	365	0.002
11:00 - 12:00	5	365	0.002	5	365	0.001	5	365	0.003
12:00 - 13:00	5	365	0.001	5	365	0.003	5	365	0.004
13:00 - 14:00	5	365	0.001	5	365	0.001	5	365	0.002
14:00 - 15:00	5	365	0.004	5	365	0.000	5	365	0.004
15:00 - 16:00	5	365	0.001	5	365	0.000	5	365	0.001
16:00 - 17:00	5	365	0.000	5	365	0.000	5	365	0.000
17:00 - 18:00	5	365	0.003	5	365	0.001	5	365	0.004
18:00 - 19:00	5	365	0.003	5	365	0.001	5	365	0.004
19:00 - 20:00	3	359	0.005	3	359	0.004	3	359	0.009
20:00 - 21:00	3	359	0.000	3	359	0.000	3	359	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.031			0.053

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 National Rail Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.001	5	365	0.035	5	365	0.036
08:00 - 09:00	5	365	0.002	5	365	0.053	5	365	0.055
09:00 - 10:00	5	365	0.003	5	365	0.021	5	365	0.024
10:00 - 11:00	5	365	0.002	5	365	0.009	5	365	0.011
11:00 - 12:00	5	365	0.003	5	365	0.010	5	365	0.013
12:00 - 13:00	5	365	0.007	5	365	0.008	5	365	0.015
13:00 - 14:00	5	365	0.007	5	365	0.013	5	365	0.020
14:00 - 15:00	5	365	0.005	5	365	0.009	5	365	0.014
15:00 - 16:00	5	365	0.010	5	365	0.006	5	365	0.016
16:00 - 17:00	5	365	0.016	5	365	0.002	5	365	0.018
17:00 - 18:00	5	365	0.032	5	365	0.005	5	365	0.037
18:00 - 19:00	5	365	0.048	5	365	0.003	5	365	0.051
19:00 - 20:00	3	359	0.036	3	359	0.005	3	359	0.041
20:00 - 21:00	3	359	0.029	3	359	0.004	3	359	0.033
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.201			0.183			0.384

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	365	0.002	5	365	0.039	5	365	0.041
08:00 - 09:00	5	365	0.005	5	365	0.062	5	365	0.067
09:00 - 10:00	5	365	0.013	5	365	0.025	5	365	0.038
10:00 - 11:00	5	365	0.009	5	365	0.019	5	365	0.028
11:00 - 12:00	5	365	0.010	5	365	0.021	5	365	0.031
12:00 - 13:00	5	365	0.016	5	365	0.023	5	365	0.039
13:00 - 14:00	5	365	0.015	5	365	0.019	5	365	0.034
14:00 - 15:00	5	365	0.019	5	365	0.020	5	365	0.039
15:00 - 16:00	5	365	0.024	5	365	0.019	5	365	0.043
16:00 - 17:00	5	365	0.035	5	365	0.023	5	365	0.058
17:00 - 18:00	5	365	0.037	5	365	0.018	5	365	0.055
18:00 - 19:00	5	365	0.057	5	365	0.016	5	365	0.073
19:00 - 20:00	3	359	0.045	3	359	0.015	3	359	0.060
20:00 - 21:00	3	359	0.034	3	359	0.014	3	359	0.048
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.321			0.333			0.654

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.*

Iceni Projects 114-116 Charing Cross Road London Licence No: 751001

Filtering Summary

Land Use	03/D	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY FLATS
Selected Trip Rate Calculation Parameter Range	15-339 DWELLS	
Actual Trip Rate Calculation Parameter Range	24-247 DWELLS	
Date Range	Minimum: 01/01/16	Maximum: 09/10/23
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	2
	Wednesday	1
Main Location Types selected	Edge of Town Centre	2
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	2 - Selected
	Servicing vehicles Excluded	1 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	50,001 to 100,000	1
	100,001 or More	2
Population <5 Mile ranges selected	500,001 or More	3
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	1
	1.1 to 1.5	1
PTAL Rating	5 Very Good	1
	6a Excellent	2

Calculation Reference: AUDIT-751001-241105-1106

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	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: 24 to 247 (units:)
Range Selected by User: 15 to 339 (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: 01/01/16 to 09/10/23

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

Selected survey days:

Monday	2 days
Wednesday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	2
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:

Residential 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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

C3	3 days

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

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

500,001 or More	3 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	1 days
1.1 to 1.5	1 days

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

Travel Plan:

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.

PTAL Rating:

5 Very Good	1 days
6a Excellent	2 days

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

LIST OF SITES relevant to selection parameters

Site(1):	BT-03-D-02	Site area:	0.30 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	38
Location:	KILBURN	Housing density:	127
Postcode:	NW6 5SY	Total Bedrooms:	84
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	20/04/22
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	6a Excellent	Parking Spaces:	19
Site(2):	IS-03-D-04	Site area:	0.99 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	247
Location:	HIGHBURY	Housing density:	650
Postcode:	N1 1LJ	Total Bedrooms:	475
Main Location Type:	Edge of Town Centre	Survey Date:	27/06/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	5 Very Good	Parking Spaces:	
Site(3):	WF-03-D-01	Site area:	0.28 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	24
Location:	WALTHAMSTOW	Housing density:	86
Postcode:	E17 9QZ	Total Bedrooms:	41
Main Location Type:	Edge of Town Centre	Survey Date:	09/10/23
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	6a Excellent	Parking Spaces:	19

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 6.06

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.032	3	103	0.055	3	103	0.087
08:00 - 09:00	3	103	0.039	3	103	0.061	3	103	0.100
09:00 - 10:00	3	103	0.036	3	103	0.032	3	103	0.068
10:00 - 11:00	3	103	0.019	3	103	0.019	3	103	0.038
11:00 - 12:00	3	103	0.036	3	103	0.045	3	103	0.081
12:00 - 13:00	3	103	0.032	3	103	0.049	3	103	0.081
13:00 - 14:00	3	103	0.013	3	103	0.019	3	103	0.032
14:00 - 15:00	3	103	0.029	3	103	0.026	3	103	0.055
15:00 - 16:00	3	103	0.045	3	103	0.045	3	103	0.090
16:00 - 17:00	3	103	0.058	3	103	0.058	3	103	0.116
17:00 - 18:00	3	103	0.074	3	103	0.045	3	103	0.119
18:00 - 19:00	3	103	0.068	3	103	0.039	3	103	0.107
19:00 - 20:00	3	103	0.074	3	103	0.055	3	103	0.129
20:00 - 21:00	3	103	0.036	3	103	0.019	3	103	0.055
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.591			0.567			1.158

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

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

Parameter summary

Trip rate parameter range selected:	24 - 247 (units:)
Survey date date range:	01/01/16 - 09/10/23
Number of weekdays (Monday-Friday):	3
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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.006	3	103	0.006	3	103	0.012
08:00 - 09:00	3	103	0.003	3	103	0.003	3	103	0.006
09:00 - 10:00	3	103	0.006	3	103	0.006	3	103	0.012
10:00 - 11:00	3	103	0.003	3	103	0.003	3	103	0.006
11:00 - 12:00	3	103	0.000	3	103	0.000	3	103	0.000
12:00 - 13:00	3	103	0.010	3	103	0.010	3	103	0.020
13:00 - 14:00	3	103	0.000	3	103	0.000	3	103	0.000
14:00 - 15:00	3	103	0.000	3	103	0.000	3	103	0.000
15:00 - 16:00	3	103	0.006	3	103	0.006	3	103	0.012
16:00 - 17:00	3	103	0.006	3	103	0.006	3	103	0.012
17:00 - 18:00	3	103	0.010	3	103	0.010	3	103	0.020
18:00 - 19:00	3	103	0.000	3	103	0.000	3	103	0.000
19:00 - 20:00	3	103	0.003	3	103	0.003	3	103	0.006
20:00 - 21:00	3	103	0.003	3	103	0.003	3	103	0.006
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.056			0.112

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.003	3	103	0.003	3	103	0.006
08:00 - 09:00	3	103	0.000	3	103	0.000	3	103	0.000
09:00 - 10:00	3	103	0.000	3	103	0.000	3	103	0.000
10:00 - 11:00	3	103	0.000	3	103	0.000	3	103	0.000
11:00 - 12:00	3	103	0.003	3	103	0.003	3	103	0.006
12:00 - 13:00	3	103	0.000	3	103	0.000	3	103	0.000
13:00 - 14:00	3	103	0.000	3	103	0.000	3	103	0.000
14:00 - 15:00	3	103	0.000	3	103	0.000	3	103	0.000
15:00 - 16:00	3	103	0.000	3	103	0.000	3	103	0.000
16:00 - 17:00	3	103	0.000	3	103	0.000	3	103	0.000
17:00 - 18:00	3	103	0.000	3	103	0.000	3	103	0.000
18:00 - 19:00	3	103	0.000	3	103	0.000	3	103	0.000
19:00 - 20:00	3	103	0.000	3	103	0.000	3	103	0.000
20:00 - 21:00	3	103	0.000	3	103	0.000	3	103	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.000	3	103	0.000	3	103	0.000
08:00 - 09:00	3	103	0.000	3	103	0.000	3	103	0.000
09:00 - 10:00	3	103	0.000	3	103	0.000	3	103	0.000
10:00 - 11:00	3	103	0.000	3	103	0.000	3	103	0.000
11:00 - 12:00	3	103	0.000	3	103	0.000	3	103	0.000
12:00 - 13:00	3	103	0.000	3	103	0.000	3	103	0.000
13:00 - 14:00	3	103	0.003	3	103	0.003	3	103	0.006
14:00 - 15:00	3	103	0.000	3	103	0.000	3	103	0.000
15:00 - 16:00	3	103	0.003	3	103	0.003	3	103	0.006
16:00 - 17:00	3	103	0.000	3	103	0.000	3	103	0.000
17:00 - 18:00	3	103	0.000	3	103	0.000	3	103	0.000
18:00 - 19:00	3	103	0.000	3	103	0.000	3	103	0.000
19:00 - 20:00	3	103	0.000	3	103	0.000	3	103	0.000
20:00 - 21:00	3	103	0.000	3	103	0.000	3	103	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.003	3	103	0.003	3	103	0.006
08:00 - 09:00	3	103	0.003	3	103	0.000	3	103	0.003
09:00 - 10:00	3	103	0.000	3	103	0.010	3	103	0.010
10:00 - 11:00	3	103	0.003	3	103	0.000	3	103	0.003
11:00 - 12:00	3	103	0.000	3	103	0.010	3	103	0.010
12:00 - 13:00	3	103	0.000	3	103	0.003	3	103	0.003
13:00 - 14:00	3	103	0.003	3	103	0.006	3	103	0.009
14:00 - 15:00	3	103	0.019	3	103	0.016	3	103	0.035
15:00 - 16:00	3	103	0.006	3	103	0.006	3	103	0.012
16:00 - 17:00	3	103	0.010	3	103	0.006	3	103	0.016
17:00 - 18:00	3	103	0.003	3	103	0.010	3	103	0.013
18:00 - 19:00	3	103	0.010	3	103	0.003	3	103	0.013
19:00 - 20:00	3	103	0.000	3	103	0.000	3	103	0.000
20:00 - 21:00	3	103	0.003	3	103	0.010	3	103	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.063			0.083			0.146

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.042	3	103	0.052	3	103	0.094
08:00 - 09:00	3	103	0.039	3	103	0.081	3	103	0.120
09:00 - 10:00	3	103	0.032	3	103	0.039	3	103	0.071
10:00 - 11:00	3	103	0.019	3	103	0.016	3	103	0.035
11:00 - 12:00	3	103	0.032	3	103	0.049	3	103	0.081
12:00 - 13:00	3	103	0.032	3	103	0.049	3	103	0.081
13:00 - 14:00	3	103	0.013	3	103	0.019	3	103	0.032
14:00 - 15:00	3	103	0.036	3	103	0.032	3	103	0.068
15:00 - 16:00	3	103	0.045	3	103	0.049	3	103	0.094
16:00 - 17:00	3	103	0.071	3	103	0.078	3	103	0.149
17:00 - 18:00	3	103	0.087	3	103	0.045	3	103	0.132
18:00 - 19:00	3	103	0.078	3	103	0.049	3	103	0.127
19:00 - 20:00	3	103	0.107	3	103	0.052	3	103	0.159
20:00 - 21:00	3	103	0.039	3	103	0.029	3	103	0.068
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.672			0.639			1.311

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.023	3	103	0.074	3	103	0.097
08:00 - 09:00	3	103	0.081	3	103	0.350	3	103	0.431
09:00 - 10:00	3	103	0.129	3	103	0.214	3	103	0.343
10:00 - 11:00	3	103	0.071	3	103	0.097	3	103	0.168
11:00 - 12:00	3	103	0.097	3	103	0.184	3	103	0.281
12:00 - 13:00	3	103	0.152	3	103	0.133	3	103	0.285
13:00 - 14:00	3	103	0.107	3	103	0.074	3	103	0.181
14:00 - 15:00	3	103	0.123	3	103	0.142	3	103	0.265
15:00 - 16:00	3	103	0.430	3	103	0.243	3	103	0.673
16:00 - 17:00	3	103	0.249	3	103	0.107	3	103	0.356
17:00 - 18:00	3	103	0.133	3	103	0.107	3	103	0.240
18:00 - 19:00	3	103	0.129	3	103	0.120	3	103	0.249
19:00 - 20:00	3	103	0.162	3	103	0.165	3	103	0.327
20:00 - 21:00	3	103	0.087	3	103	0.036	3	103	0.123
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.973			2.046			4.019

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.006	3	103	0.052	3	103	0.058
08:00 - 09:00	3	103	0.000	3	103	0.107	3	103	0.107
09:00 - 10:00	3	103	0.003	3	103	0.039	3	103	0.042
10:00 - 11:00	3	103	0.006	3	103	0.029	3	103	0.035
11:00 - 12:00	3	103	0.016	3	103	0.026	3	103	0.042
12:00 - 13:00	3	103	0.036	3	103	0.026	3	103	0.062
13:00 - 14:00	3	103	0.029	3	103	0.032	3	103	0.061
14:00 - 15:00	3	103	0.016	3	103	0.036	3	103	0.052
15:00 - 16:00	3	103	0.055	3	103	0.013	3	103	0.068
16:00 - 17:00	3	103	0.081	3	103	0.006	3	103	0.087
17:00 - 18:00	3	103	0.055	3	103	0.019	3	103	0.074
18:00 - 19:00	3	103	0.071	3	103	0.000	3	103	0.071
19:00 - 20:00	3	103	0.032	3	103	0.006	3	103	0.038
20:00 - 21:00	3	103	0.052	3	103	0.000	3	103	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.458			0.391			0.849

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.003	3	103	0.029	3	103	0.032
08:00 - 09:00	3	103	0.003	3	103	0.055	3	103	0.058
09:00 - 10:00	3	103	0.003	3	103	0.058	3	103	0.061
10:00 - 11:00	3	103	0.006	3	103	0.026	3	103	0.032
11:00 - 12:00	3	103	0.006	3	103	0.010	3	103	0.016
12:00 - 13:00	3	103	0.003	3	103	0.029	3	103	0.032
13:00 - 14:00	3	103	0.016	3	103	0.026	3	103	0.042
14:00 - 15:00	3	103	0.026	3	103	0.039	3	103	0.065
15:00 - 16:00	3	103	0.032	3	103	0.010	3	103	0.042
16:00 - 17:00	3	103	0.049	3	103	0.013	3	103	0.062
17:00 - 18:00	3	103	0.045	3	103	0.013	3	103	0.058
18:00 - 19:00	3	103	0.074	3	103	0.010	3	103	0.084
19:00 - 20:00	3	103	0.061	3	103	0.023	3	103	0.084
20:00 - 21:00	3	103	0.023	3	103	0.006	3	103	0.029
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.350			0.347			0.697

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.000	3	103	0.000	3	103	0.000
08:00 - 09:00	3	103	0.000	3	103	0.000	3	103	0.000
09:00 - 10:00	3	103	0.000	3	103	0.000	3	103	0.000
10:00 - 11:00	3	103	0.000	3	103	0.000	3	103	0.000
11:00 - 12:00	3	103	0.000	3	103	0.000	3	103	0.000
12:00 - 13:00	3	103	0.000	3	103	0.000	3	103	0.000
13:00 - 14:00	3	103	0.000	3	103	0.006	3	103	0.006
14:00 - 15:00	3	103	0.000	3	103	0.000	3	103	0.000
15:00 - 16:00	3	103	0.006	3	103	0.000	3	103	0.006
16:00 - 17:00	3	103	0.000	3	103	0.000	3	103	0.000
17:00 - 18:00	3	103	0.000	3	103	0.000	3	103	0.000
18:00 - 19:00	3	103	0.000	3	103	0.000	3	103	0.000
19:00 - 20:00	3	103	0.000	3	103	0.000	3	103	0.000
20:00 - 21:00	3	103	0.000	3	103	0.000	3	103	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.010	3	103	0.081	3	103	0.091
08:00 - 09:00	3	103	0.003	3	103	0.162	3	103	0.165
09:00 - 10:00	3	103	0.006	3	103	0.097	3	103	0.103
10:00 - 11:00	3	103	0.013	3	103	0.055	3	103	0.068
11:00 - 12:00	3	103	0.023	3	103	0.036	3	103	0.059
12:00 - 13:00	3	103	0.039	3	103	0.055	3	103	0.094
13:00 - 14:00	3	103	0.045	3	103	0.065	3	103	0.110
14:00 - 15:00	3	103	0.042	3	103	0.074	3	103	0.116
15:00 - 16:00	3	103	0.094	3	103	0.023	3	103	0.117
16:00 - 17:00	3	103	0.129	3	103	0.019	3	103	0.148
17:00 - 18:00	3	103	0.100	3	103	0.032	3	103	0.132
18:00 - 19:00	3	103	0.146	3	103	0.010	3	103	0.156
19:00 - 20:00	3	103	0.094	3	103	0.029	3	103	0.123
20:00 - 21:00	3	103	0.074	3	103	0.006	3	103	0.080
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.818			0.744			1.562

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
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): 6.06

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.078	3	103	0.210	3	103	0.288
08:00 - 09:00	3	103	0.126	3	103	0.592	3	103	0.718
09:00 - 10:00	3	103	0.168	3	103	0.359	3	103	0.527
10:00 - 11:00	3	103	0.107	3	103	0.168	3	103	0.275
11:00 - 12:00	3	103	0.152	3	103	0.278	3	103	0.430
12:00 - 13:00	3	103	0.223	3	103	0.239	3	103	0.462
13:00 - 14:00	3	103	0.168	3	103	0.165	3	103	0.333
14:00 - 15:00	3	103	0.220	3	103	0.265	3	103	0.485
15:00 - 16:00	3	103	0.576	3	103	0.320	3	103	0.896
16:00 - 17:00	3	103	0.460	3	103	0.210	3	103	0.670
17:00 - 18:00	3	103	0.324	3	103	0.194	3	103	0.518
18:00 - 19:00	3	103	0.362	3	103	0.181	3	103	0.543
19:00 - 20:00	3	103	0.362	3	103	0.246	3	103	0.608
20:00 - 21:00	3	103	0.204	3	103	0.081	3	103	0.285
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.530			3.508			7.038

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.019	3	103	0.036	3	103	0.055
08:00 - 09:00	3	103	0.032	3	103	0.055	3	103	0.087
09:00 - 10:00	3	103	0.019	3	103	0.013	3	103	0.032
10:00 - 11:00	3	103	0.010	3	103	0.010	3	103	0.020
11:00 - 12:00	3	103	0.016	3	103	0.023	3	103	0.039
12:00 - 13:00	3	103	0.006	3	103	0.029	3	103	0.035
13:00 - 14:00	3	103	0.010	3	103	0.013	3	103	0.023
14:00 - 15:00	3	103	0.026	3	103	0.023	3	103	0.049
15:00 - 16:00	3	103	0.026	3	103	0.026	3	103	0.052
16:00 - 17:00	3	103	0.036	3	103	0.036	3	103	0.072
17:00 - 18:00	3	103	0.052	3	103	0.029	3	103	0.081
18:00 - 19:00	3	103	0.058	3	103	0.029	3	103	0.087
19:00 - 20:00	3	103	0.058	3	103	0.039	3	103	0.097
20:00 - 21:00	3	103	0.026	3	103	0.013	3	103	0.039
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.394			0.374			0.768

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.003	3	103	0.010	3	103	0.013
08:00 - 09:00	3	103	0.003	3	103	0.003	3	103	0.006
09:00 - 10:00	3	103	0.006	3	103	0.010	3	103	0.016
10:00 - 11:00	3	103	0.006	3	103	0.006	3	103	0.012
11:00 - 12:00	3	103	0.013	3	103	0.013	3	103	0.026
12:00 - 13:00	3	103	0.013	3	103	0.010	3	103	0.023
13:00 - 14:00	3	103	0.000	3	103	0.003	3	103	0.003
14:00 - 15:00	3	103	0.003	3	103	0.003	3	103	0.006
15:00 - 16:00	3	103	0.006	3	103	0.000	3	103	0.006
16:00 - 17:00	3	103	0.010	3	103	0.013	3	103	0.023
17:00 - 18:00	3	103	0.010	3	103	0.003	3	103	0.013
18:00 - 19:00	3	103	0.006	3	103	0.006	3	103	0.012
19:00 - 20:00	3	103	0.006	3	103	0.006	3	103	0.012
20:00 - 21:00	3	103	0.000	3	103	0.000	3	103	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.085			0.086			0.171

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.000	3	103	0.000	3	103	0.000
08:00 - 09:00	3	103	0.000	3	103	0.000	3	103	0.000
09:00 - 10:00	3	103	0.003	3	103	0.003	3	103	0.006
10:00 - 11:00	3	103	0.000	3	103	0.000	3	103	0.000
11:00 - 12:00	3	103	0.003	3	103	0.006	3	103	0.009
12:00 - 13:00	3	103	0.003	3	103	0.000	3	103	0.003
13:00 - 14:00	3	103	0.000	3	103	0.000	3	103	0.000
14:00 - 15:00	3	103	0.000	3	103	0.000	3	103	0.000
15:00 - 16:00	3	103	0.003	3	103	0.010	3	103	0.013
16:00 - 17:00	3	103	0.006	3	103	0.003	3	103	0.009
17:00 - 18:00	3	103	0.003	3	103	0.003	3	103	0.006
18:00 - 19:00	3	103	0.003	3	103	0.003	3	103	0.006
19:00 - 20:00	3	103	0.006	3	103	0.006	3	103	0.012
20:00 - 21:00	3	103	0.006	3	103	0.003	3	103	0.009
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.036			0.037			0.073

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL Underground Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.000	3	103	0.019	3	103	0.019
08:00 - 09:00	3	103	0.003	3	103	0.032	3	103	0.035
09:00 - 10:00	3	103	0.003	3	103	0.042	3	103	0.045
10:00 - 11:00	3	103	0.006	3	103	0.019	3	103	0.025
11:00 - 12:00	3	103	0.003	3	103	0.006	3	103	0.009
12:00 - 13:00	3	103	0.003	3	103	0.026	3	103	0.029
13:00 - 14:00	3	103	0.006	3	103	0.010	3	103	0.016
14:00 - 15:00	3	103	0.019	3	103	0.019	3	103	0.038
15:00 - 16:00	3	103	0.016	3	103	0.003	3	103	0.019
16:00 - 17:00	3	103	0.026	3	103	0.006	3	103	0.032
17:00 - 18:00	3	103	0.029	3	103	0.013	3	103	0.042
18:00 - 19:00	3	103	0.055	3	103	0.010	3	103	0.065
19:00 - 20:00	3	103	0.029	3	103	0.016	3	103	0.045
20:00 - 21:00	3	103	0.019	3	103	0.000	3	103	0.019
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.217			0.221			0.438

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL Overground Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.000	3	103	0.000	3	103	0.000
08:00 - 09:00	3	103	0.000	3	103	0.010	3	103	0.010
09:00 - 10:00	3	103	0.000	3	103	0.010	3	103	0.010
10:00 - 11:00	3	103	0.000	3	103	0.006	3	103	0.006
11:00 - 12:00	3	103	0.003	3	103	0.003	3	103	0.006
12:00 - 13:00	3	103	0.000	3	103	0.003	3	103	0.003
13:00 - 14:00	3	103	0.010	3	103	0.016	3	103	0.026
14:00 - 15:00	3	103	0.006	3	103	0.013	3	103	0.019
15:00 - 16:00	3	103	0.013	3	103	0.006	3	103	0.019
16:00 - 17:00	3	103	0.019	3	103	0.006	3	103	0.025
17:00 - 18:00	3	103	0.016	3	103	0.000	3	103	0.016
18:00 - 19:00	3	103	0.013	3	103	0.000	3	103	0.013
19:00 - 20:00	3	103	0.013	3	103	0.006	3	103	0.019
20:00 - 21:00	3	103	0.003	3	103	0.006	3	103	0.009
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.085			0.181

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL National Rail Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.003	3	103	0.010	3	103	0.013
08:00 - 09:00	3	103	0.000	3	103	0.013	3	103	0.013
09:00 - 10:00	3	103	0.000	3	103	0.006	3	103	0.006
10:00 - 11:00	3	103	0.000	3	103	0.000	3	103	0.000
11:00 - 12:00	3	103	0.000	3	103	0.000	3	103	0.000
12:00 - 13:00	3	103	0.000	3	103	0.000	3	103	0.000
13:00 - 14:00	3	103	0.000	3	103	0.000	3	103	0.000
14:00 - 15:00	3	103	0.000	3	103	0.006	3	103	0.006
15:00 - 16:00	3	103	0.003	3	103	0.000	3	103	0.003
16:00 - 17:00	3	103	0.003	3	103	0.000	3	103	0.003
17:00 - 18:00	3	103	0.000	3	103	0.000	3	103	0.000
18:00 - 19:00	3	103	0.006	3	103	0.000	3	103	0.006
19:00 - 20:00	3	103	0.019	3	103	0.000	3	103	0.019
20:00 - 21:00	3	103	0.000	3	103	0.000	3	103	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.035			0.069

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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL Bus Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	103	0.006	3	103	0.052	3	103	0.058
08:00 - 09:00	3	103	0.000	3	103	0.107	3	103	0.107
09:00 - 10:00	3	103	0.003	3	103	0.039	3	103	0.042
10:00 - 11:00	3	103	0.006	3	103	0.029	3	103	0.035
11:00 - 12:00	3	103	0.016	3	103	0.026	3	103	0.042
12:00 - 13:00	3	103	0.036	3	103	0.026	3	103	0.062
13:00 - 14:00	3	103	0.029	3	103	0.032	3	103	0.061
14:00 - 15:00	3	103	0.016	3	103	0.036	3	103	0.052
15:00 - 16:00	3	103	0.055	3	103	0.013	3	103	0.068
16:00 - 17:00	3	103	0.081	3	103	0.006	3	103	0.087
17:00 - 18:00	3	103	0.055	3	103	0.019	3	103	0.074
18:00 - 19:00	3	103	0.071	3	103	0.000	3	103	0.071
19:00 - 20:00	3	103	0.032	3	103	0.006	3	103	0.038
20:00 - 21:00	3	103	0.052	3	103	0.000	3	103	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.458			0.391			0.849

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.*