MAY 2024

Transport Statement

Avalon House, 72 Lower Mortlake Road, Richmond TW9 2JY

ICENI PROJECTS LIMITED ON BEHALF OF BARINGS REAL ESTATE

Iceni Projects Limited on behalf of

Barings Real Estate

May 2024

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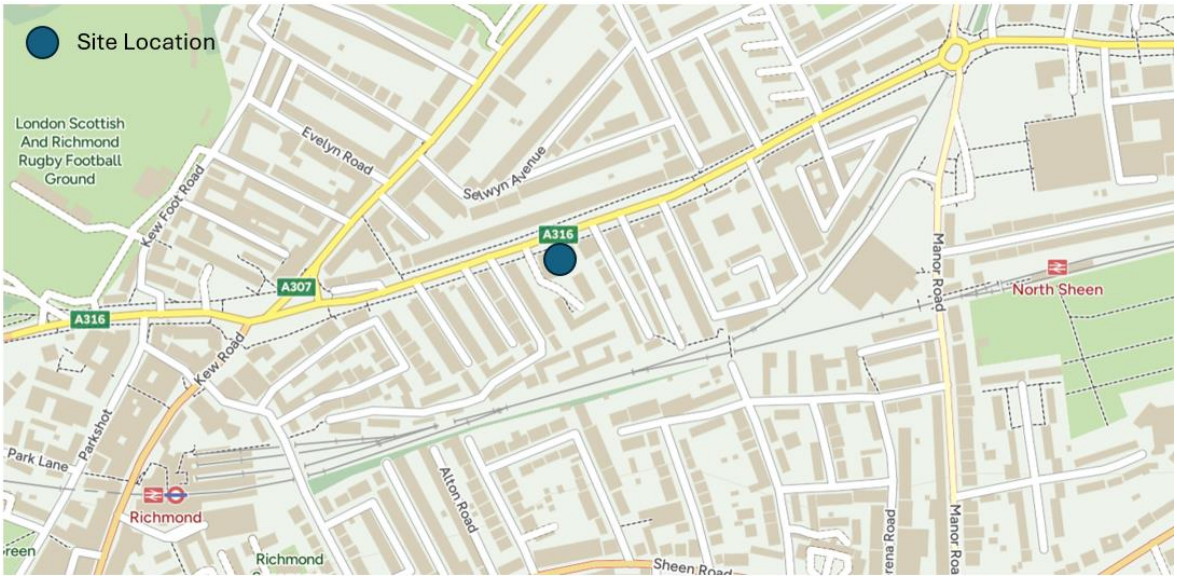
APPENDICES

1. INTRODUCTION

1.1 Iceni Projects has been instructed by Barings Real Estate ('the Applicant') to provide a Transport Statement (TS) for the proposed redevelopment of the existing Avalon House, 72 Lower Mortlake Rd, Richmond TW9 2JY ('the Site'). This TS supports a planning application for the development proposals, which include an increase in the amount of office floor space provided within the Site.

1.2 The Site falls within the jurisdiction of the London Borough of Richmond upon Thames (LBRuT) and is indicatively shown in **Figure 1-1.**

Figure 1-1 – Indicative Site Location



1.3 The planning application for Avalon House seeks planning permission for the following description of development:

Remove the existing roof and erection of a roof extension at fourth floor and rear extensions to floors ground – four to accommodate additional commercial floorspace (Class E), provision of rear and rooftop terraced amenity spaces, alterations to the ground floor entrance, recladding and remodelling of the façade, landscaping improvements to the rear carparking area, provision of end of journey and cycle parking facilities, associated building servicing and sustainability improvements, and other associated works.

Report Structure

1.4 This TS has been prepared to support the planning application for the above description of development. The report is structured as follows:

- **Section 2** provides summary of the existing site conditions, incorporating a description of the existing site use, walking and cycling facilities, public transport accessibility and the local highway network;
- **Section 3** provides an overview of relevant national, regional and local policies and outlines how the proposed development accords with these;
- **Section 4** provides a description of the development proposals, including access, parking, servicing and refuse collection arrangements;
- **Section 5** includes an assessment of the trip generation associated with the site; and
- **Section 6** provides a summary and draws conclusions.

1.5 This TS is accompanied by other transport documents including:

- A Framework Travel Plan
- A Framework Delivery and Servicing Plan
- An Outline Construction Management Plan.

2. THE SITE AND SURROUNDING AREA

The Existing Site

2.1 The Site comprises a three-storey commercial office building known as ‘Avalon House’ constructed in the early 2000s and accommodates 3,076sqm (GIA) of Commercial (Class E) floorspace.

2.2 The building comprises ground and first floor as brick/stone massing, the existing third floor and large roof extents are clad in a grey metal. To the rear the roof has a dormer which is where the current plant is located. The 'entrance' bay is expressed with a semicircular extrusion which pops up and creates a useable meeting space at fourth floor.

2.3 The building is a multi-tenanted office building, with a shared central reception and core facilities accessed from the primary pedestrian entrance from Lower Mortlake Road.

2.4 The Site benefits from access to a shared internal vehicular road, which also provides access to the residential properties to the south, known as Tersha Street accessed from a driveway to Lower Mortlake Road. This road provides access to two car parks with a combined 33 spaces to the rear of the building, with a larger 23 space car park directly adjacent to the south of the building, and a smaller 10 space car park to the west of Tersha Street. A small area with capacity for three visitor car parking spaces is also provided to the west of Tersha Street closer to the vehicular entrance point.

2.5 There are currently some external cycle lockers located to the rear of the building which can accommodate ten bicycles. There is one shower within the core space, with no dedicated end of journey facilities. An external substation is located within the eastern boundary of the Site.

2.6 The redline boundary for the Site is provided in Figure 2-1 below. Avalon House is an office building located to the south of Lower Mortlake Road accessed via Tersha Street.

Figure 2-1 Red Line Boundary

Surrounding Area

2.7 The Site fronts onto Lower Mortlake Road which runs in an east / west direction across the front of the Site. The site is located to the northeast of Richmond town centre and is therefore close to public transport links and an abundance of amenities.

Walking and Cycling

Walking

2.8 The primary pedestrian access points to the Site are from Lower Mortlake Road, although there are access points for employees to the rear of the building via Tersha Street. Lower Mortlake Road has wide footways with raised crossing points over side streets that indicate a higher priority for pedestrians. There is also a dropped kerb crossing with pedestrian refuge island outside the site allowing pedestrians to cross Lower Mortlake Road.

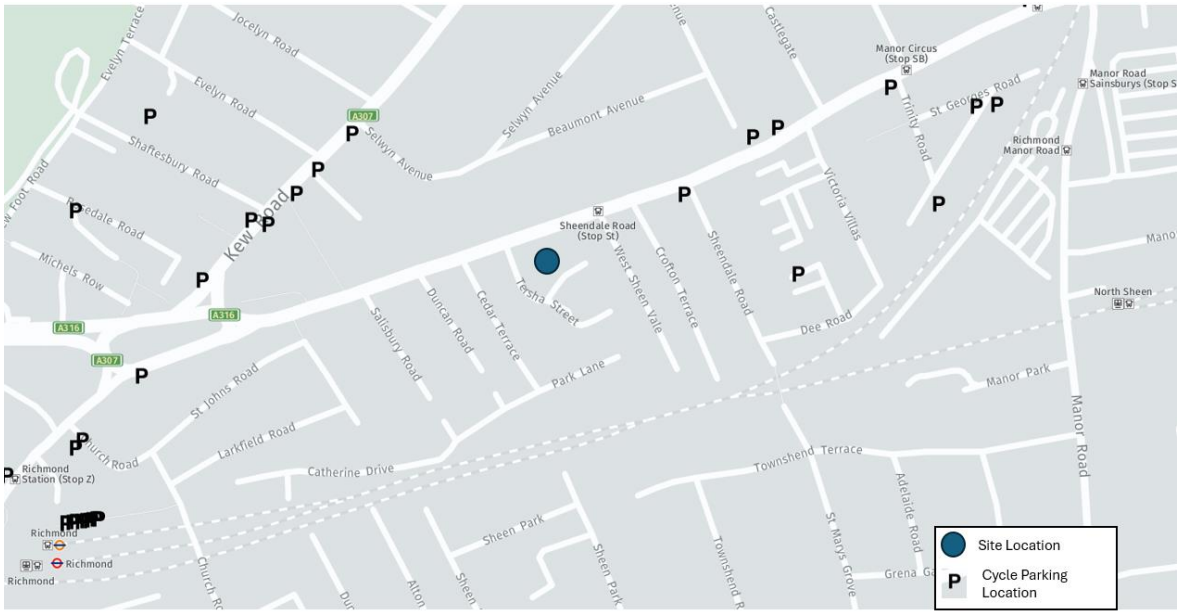
2.9 The route along Lower Mortlake Road provides a route south west into Richmond Town Centre, including towards the railway station, bus stops, the river and all the town centre amenities. To the north east it then provides a route towards North Sheen and further retail and leisure amenities. The route itself is well lit and separated from traffic flows by the cycle lane and a landscape buffer. This landscape buffer has several mature trees and therefore also provides an element of protection from extreme weather such as heat and rain.

Cycling

2.10 A segregated cycle route runs along the length of Lower Mortlake Road. This connects Richmond in the southwest with Mortlake and Chiswick Bridge in the northeast. The route is off road and separated from traffic by the landscape buffer mentioned in the previous paragraph. This route then connects with other routes both north and south of the river and provides a high-quality link to and from the Site.

2.11 Cycle parking is provided on site, but the plan below also demonstrates the level of cycle parking in the area. The presence of a large number of spaces in the area and the provision of a segregated route away from the road indicates there should be a high propensity to cycle in the area.

Figure 2-2 - Cycle Parking near to the Site (Source: Stolenride.co.uk)



Local Amenities

2.12 Table 2.1 sets out details of approximate distances between the Site and local amenities and public transport facilities, for both future visitors and staff at the development. This illustrates that there are a number of facilities within walking distance with average walking speeds assumed to be 80m per minute. Cycle times have also been included with an average cycle speed assumed to be 4.2m per second as stated in Planning Policy Guidance 13 PPG13, which has now been superseded by the NPPF albeit the statement is still a reasonable estimate.

2.13 Whilst there is not a need for local amenities to the extent of a residential development it still indicates a high level of accessibility and that there are numerous supplementary uses nearby for employees to make use of before or after work or during breaks without needing to drive to them.

Table 2.1 - Local Amenities and Public Transport Facilities

Local Amenity / Public Transport Facility	Distance	Walking Time	Cycling Time
Public Transport Facility			
Sheendale Road Bus Stops	Eastbound 70m Westbound 165m	<1 minute 2 minutes	<1 minute 1 minute
Richmond Circus Bus Stops	Eastbound 140m Westbound 190m	2 minutes 3 minutes	2 minutes 1 minute
Richmond Station	550m	8 minutes	2 minutes
North Sheen Station	850m	12 minutes	6 minutes
Local Amenity			
Heisenberg Breakfast Co.	230m	4 minutes	2 minutes
Richmond Pharmacy	230m	4 minutes	2 minutes
Richmond Local (Convenience Store)	230m	4 minutes	2 minutes
Premier Inn	350m	5 minutes	3 minutes
The Shaftesbury Pub	400m	5 minutes	2 minutes
Tesco Express	400m	5 minutes	2 minutes
Richmond Town Centre	550m	8 minutes	2 minutes
Open Space			
Pools in the Park and other leisure facilities	800m	11 minutes	2 minutes
River Thames	1.3km	17 minutes	4 minutes
Richmond Park (Richmond Gate)	2.2km	32 minutes	11 minutes

Public Transport Accessibility

2.14 Public transport accessibility can be measured using WebCATs PTAL (Public Transport Accessibility Level) tool. The tool gives a score between 0 and 6b with 0 being the worst and 6b being the best. The score is based on walking times from a given point to the TfL network including buses, underground / overground and national rail.

2.15 Figure 2-3 shows the PTAL for the Site is a 6a which indicates an “excellent” level of access to public transport. From a BREEAM perspective the Accessibility Index as calculated by PTAL is 28.99 which significantly exceeds the required amounts (18) for full BREEAM credits. The full PTAL report is provided in **Appendix A1.**

Figure 2-3 - PTAL (Source WebCAT)

2.16 The score of 6a is predominantly driven by the presence of Richmond station and a number of local high frequency bus services accessible from the site.

Rail and Underground Services

2.17 The closest station to the Site is Richmond station, which is approximately 550m walk from the Site. Walking routes to the station include roads with footways and pedestrian crossings.

2.18 Richmond Station is served by South Western Railway, London Overground and District Line Services. **Table 2.2** shows the journey times towards each of the rail, overground and underground destinations for the services outlined above. In addition to these locations there are interchange points along these routes including the following:

- South Western Railway: Putney (District Line (East Putney), Clapham Junction (Other London Overground Branches, other rail services) and Vauxhall (Victoria Line).
- London Overground: Willesdon Junction (Other London Overground Branches, Bakerloo Line), Gospel Oak (Other London Overground Branches), Highbury and Islington (Other London Overground Branches, Victoria Line), Canonbury (Other London Overground Branches) and Hackney Central (Other London Overground Branches).
- District Line: Turnham Green (other District Line Branches), Hammersmith (Hammersmith and City Line, Circle Line, Piccadilly Line), Earls Court (other District

Line Branches), South Kensington (Circle Line, Piccadilly Line), Victoria (National Rail, Victoria Line, Circle Line), Westminster (Jubilee Line, Circle Line), Embankment (Northern Line, Bakerloo Line), Blackfriars (Thameslink), Monument (Circle Line, Northern Line (Bank)), Aldgate East (Hammersmith and City Line), Whitechapel (Elizabeth Line, Hammersmith and City Line, London Overground), Mile End (Central Line), West Ham (DLR, Jubillee Line)

Table 2.2 - Rail and Tram Journey Times

Destination	AM Peak Hour Journey Time	Destination	AM Peak Hour Journey Time
Rail			
London Waterloo	25 minutes	London Waterloo via Hounslow	58 minutes
Windsor & Eton Riverside	33 minutes	Reading	1 hour 10 minutes
London Waterloo via Kingston	53 minutes		
District Line			
Barking	1 hour 12 minutes	Upminster	1 hour 32 minutes
London Overground			
Stratford	1 hour 1 minute		

Buses

2.19 There are a number of bus services that serve stops within close proximity of the Site on Lower Mortlake Road. A summary of the bus services available from the stops immediately outside the Site (Sheendale Road), are provided in Table 2.3.

Table 2.3 - Local Bus Services from Sheendale Road Stops

Service	From	To	Frequency
110	School Road, Hounslow	Hammersmith	Every 15 minutes
190	West Brompton	Richmond	Every 15 minutes
371	Kingston	North Sheen	Every 9-12 minutes
419	Roehampton	Richmond	Every 9 – 13 minutes
H37	Hounslow	North Sheen	Every 6-8 minutes
N22	Oxford Circus	Fulwell	Every 30 mins (Night time only)
R68	Kew	Hampton Court	Every 15 minutes
R70	North Sheen	Hampton	Every 8-12 minutes

Highway Network

2.20 The Site is located immediately south of the A316 Lower Mortlake Road and accessed via Tersha Street. The A316 is part of the strategic road network in south west London and connects to the south west at Richmond Circus with the A307 whilst also continuing south west past Richmond and Twickenham before eventually becoming the M3 at Sunbury on Thames.

2.21 To the northeast the A316 connects with the A205 South Circular Road at Chalkers Corner as well as continuing over Chiswick Bridge towards Hogarth Roundabout and the A4 / M4.

Summary

2.22 In summary, the site is located close to numerous local facilities and public transport infrastructure with good access to active and sustainable travel networks.

2.23 The Site has an excellent PTAL of 6a as a result of the proximity to several high frequency bus routes and Richmond station. The Site is also well connected by road and with a high quality walking and cycling route immediately outside the Site. This all indicates that the Site is highly sustainable in transport terms.

3. TRANSPORT POLICY

3.1 The proposed development is subject to both national and local planning policy guidance with respect to transportation and its impact upon the local environment and surrounding infrastructure. A review of these policies has therefore been undertaken in this section.

3.2 The following policy documents have been reviewed:

- The National Planning Policy Framework (NPPF)
- The National Planning Policy Guidance (NPPG)
- The London Plan (2021)
- The London Borough of Richmond upon Thames (LBRuT) Local Plan (2018)

National Planning Policy Framework

3.3 The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. 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.

3.4 The NPPF was adopted in March 2012, however revised documents were published in July 2018, February 2019, July 2021 and most recently, December 2023 - each replacing the previous iteration.

3.5 With regard to transport policy, the revised NPPF includes a section on 'Promoting sustainable transport' which includes the following text relevant to this proposal:

Paragraph 108

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) *the potential impacts of development on transport networks can be addressed;*

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

c) *opportunities to promote walking, cycling and public transport use are identified and pursued;*

d) *the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*

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

Paragraph 114

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

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

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

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 National Model Design Code; and*

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

Paragraph 115

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Paragraph 116

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.*

3.6 The NPPF is therefore clear that development should only be refused on transport grounds where the residual cumulative impact of the development can be considered "severe", and that there should be a focus on sustainable modes of travel as opposed to a reliance on the private car.

3.7 The site is in a sustainable location, with a good level of opportunity to travel by bus, cycle and walking. The development proposals ensure that this is encouraged through local improvements, parking restrictions and good connectivity, all detailed throughout this report. The proposals therefore follow the advice provided within the NPPF in regard to transport.

3.8 As a result of the NPPF being adopted, all Planning Policy Guidance and Planning Policy Statements have been superseded, including PPG13 (Transport), which was formerly used as a basis for national transport policy.

3.9 Whilst no longer policy, there are two key aspects within PPG13 which are still of relevance when determining a site's level of sustainable travel access, as stated below.

> *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.*

> *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.*

3.10 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.

National Planning Practice Guidance (NPPG)

3.11 Information contained as part of the NPPG provides advice for travel plans, transport assessments and statements in decision taking.

> 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.

3.12 This TS follows the advice provided within the NPPG and accords with providing the information which should be included as part of an assessment. A FTP has also been produced which accompanies the planning submission documents.

The London Plan

3.13 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.

3.14 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.

3.15 The policies contained within London Plan 2021 have been reviewed as part of the development of the proposed development, and they are referred to at specific points within the TS as necessary.

London Borough of Richmond Upon Thames Local Plan – July 2018

3.16 The LBRuT Local Plan was adopted in July 2018 and sets out policies and guidance for the development of the borough over the next 15 years. It looks ahead to 2033 and identifies where the main developments will take place, and how places within the borough will change, or be protected from change, over that period.

3.17 The role of the development plan is to guide decision making on planning applications and inform investment in social and physical infrastructure. When planning applications are received, they are assessed against the development plan to see whether planning permission should be granted or not.

3.18 The pertinent Transport Polices contained within the Local Plan are set out below.

Policy LP 44 Sustainable Travel Choices

The Council will work in partnership to promote safe, sustainable and accessible transport solutions, which minimise the impacts of development including in relation to congestion, air pollution and carbon dioxide emissions, and maximise opportunities including for health benefits and providing access to services, facilities and employment. The Council will:

A. Location of development
Encourage high trip generating development to be located in areas with good public transport with sufficient capacity, or which are capable of supporting improvements to provide good public transport accessibility and capacity, taking account of local character and context.

B. Walking and cycling
Ensure that new development is designed to maximise permeability within and to the immediate vicinity of the development site through the provision of safe and convenient walking and cycling routes, and to provide opportunities for walking and cycling, including through the provision of links and enhancements to existing networks.

C. Public transport
Ensure that major new developments maximise opportunities to provide safe and convenient access to public transport services. Proposals will be expected to support improvements to existing services and infrastructure where no capacity currently exists or is planned to be provided. Protect existing public transport interchange facilities unless suitable alternative facilities can be provided which ensure the maintenance of the existing public transport operations. Applications will need to include details setting out how such re-provision will be secured and provided in a timely manner.

D. The road network
Ensure that new development does not have a severe impact on the operation, safety or accessibility to the local or strategic highway networks. Any impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, including in relation to on-street parking, should be mitigated through the provision of, or contributions towards, necessary and relevant transport improvements. In assessing planning applications the cumulative impacts of development on the transport network will be taken into account. Planning applications will need to be supported by the provision of a Transport Assessment if it is a major development, and a Transport Statement if it is a minor development.

3.19 It has been demonstrated within **Section 2** of this report that the site is located in an area with excellent public transport accessibility providing opportunities for all users of the site to use modes other than the car. The site is also well connected to the pedestrian and cycle networks available.

3.20 With regards to the local highway network, **Section 5** demonstrates that the expected trip generation of the proposed development will be low and the impact on the local highway network will be negligible. It is important to note that the trip rates used within the trip generation assessment were presented to LBRuT who agreed in principle to them being suitable.

LP 45 Parking Standards and Servicing

The Council will require new development to make provision for the accommodation of vehicles in order to provide for the needs of the development while minimising the impact of car based travel including on the operation of the road network and local environment, and ensuring making the best use of land. It will achieve this by:

1. Requiring new development to provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3. Opportunities to minimise car parking through its shared use will be encouraged.

2. Resisting the provision of front garden car parking unless it can be demonstrated that:

a) a) there would be no material impact on road or pedestrian safety;
b) b. there would be no harmful impact on the character of the area, including the streetscape or setting of the property, in line with the policies on Local Character and Design; and
c) c. the existing on-street demand is less than available capacity.

3. Car free housing developments may be appropriate in locations with high public transport accessibility, such as areas with a PTAL of 5 or 6, subject to:

d) the provision of disabled parking;
e) appropriate servicing arrangements; and
f) demonstrating that proper controls can be put in place to ensure that the proposal will not contribute to on-street parking stress in the locality. All proposals for car free housing will need to be supported by the submission of a Travel Plan.

4. Managing the level of publicly available car parking to support the vitality and viability of town and local centres within the borough whilst limiting its impacts on the road network.

3.21 It is proposed to provide car and cycle parking to meet the standards set out within the document and therefore complies with Policy LP 45. Further details are provided within the following section.

LP 47 Sustainable Travel Choices (Strategic Policy)

A. The Council will work with others to bring about safe, sustainable, accessible transport solutions to reduce the proportion of trips taken by private car, reduce traffic congestion, reduce air pollution, including carbon dioxide emissions, improve public health, and improve access to services and employment in accordance with the policies set out in the London Plan, Mayor's Transport Strategy, and the Council's own Active Travel Strategy. Planning applicants will therefore be expected to:

Location of development

B. Propose major developments (see Table 23.1 for a definition) in areas that either already have a Public Transport Accessibility Level of 4-6 or if not mitigate the impact of their development on the existing passenger transport network in accordance with Para. 110d of the National Planning Policy Framework (NPPF). Depending on the impact of the development relative to the capacity of the bus and rail network in its final assessment year, this may include applicants making financial contributions to increase capacity and/or improve infrastructure on the passenger transport network.

Active travel

C. Ensure that their proposed developments provide a high-quality walking and cycling environment both within the curtilage of the development and in its near vicinity so that occupants can make short journeys to local town centres, services, and work, by sustainable modes of travel and can benefit from high quality, safe access to public transport services. This may include paying for and completing off-site works on the adopted highway under S278 of the Highways Act 1980 to mitigate the impact of their development. All proposed pedestrian and cycle improvement works must have regard to the National Design Guide, the London Cycling Design Standards, Local Transport Note 1/20: Cycle Infrastructure Design, and Manual for Streets. All off-site highway works must meet technical standards set out by the Council's Traffic and Engineering team.

Inclusive mobility

D. Ensure that their development proposals provide safe and suitable access to and around their developments for disabled and other vulnerable road users in accordance with guidance set out in Manual for Streets and Inclusive Mobility: making transport accessible for passengers and pedestrians (Department for Transport, 2022).

Assessing the impact of developments

E. Demonstrate that their proposed developments do not a have a severe impact on the operation, safety, or accessibility of the local or strategic road network. Any impact on the local or strategic road network, including the impact of occupants parking vehicles on the carriageway, will need to be mitigated in accordance with para. 110d of the NPPF.

F. All planning applications for major developments will need to include a full transport assessment and travel plan which must be completed in accordance with Transport for London (TfL) guidance. Applications for smaller developments must include a transport statement and travel plan statement, also completed in accordance with TfL guidance (see Table 23.1). Applications under a certain size will be expected to include a chapter about transport and accessibility in their Design and Access Statement.

River transport

G. Where appropriate, enable the River Thames to be used for passenger and freight transport as well as servicing and construction of their development proposals, through the provision, improvement, or retaining of relevant infrastructure including wharves, slipways, and piers.

Safeguarding routes and facilities

H. Where appropriate, ensure that their development proposals safeguard land required for transport schemes and infrastructure set out in the London Plan and/or the Council's Local Implementation Plan.

Taxis, coaches and private hire vehicles

I. Where appropriate, ensure that taxis, minibuses, coaches, and private hire vehicles can safely pick up and drop off their passengers. Where they have to use the highway to do this, applicants will need to pay the Council to implement Traffic Management Orders under the Road Traffic Regulation Act 1984 and/or may need to complete other highway works. Applicants should only propose using the existing highway for this when no on-site provision is possible.

3.22 Access to the site by all sustainable travel modes is a key consideration of the proposed development. Further details are provided within the following section.

LP 48 Vehicular Parking Standards, Cycle Parking, Servicing and Construction Logistics Management

A. A. The Council will require new developments to make provision for the accommodation of vehicles to provide for the needs of the development while minimising the impact of car-based travel including on the operation of the road network and local environment and ensuring making the best use of land.

Vehicular and Cycle Parking Standards

B. Planning applicants will therefore be expected to provide off-street vehicular and cycle parking, including electric vehicle charging points, in accordance with standards set out in Policies T5 and T6.1 – T6.5 and Tables 10.2 – 10.6 of the London Plan. Electric vehicle charging points must be provided in a way that ensures the development is safe for other road users.

C. Planning applicants need to have regard to the London Cycle Design Standards when proposing off-street cycle parking for their developments, to deliver cycle parking that is fit for purpose, secure and well-located (preferably close to the pedestrian entrance of the main building), and easy to use by people of all ages.

Applications for Dropped Kerb and Crossover Accesses to allow Front Garden/Yard Parking

D. Front yard/garden perpendicular parking reduces the quality and safety of Richmond's footways for pedestrians and road users with disabilities and reduce on-street vehicular parking capacity. Applications for new vehicular crossover or dropped kerb accesses will be assessed strictly in accordance with the guidance set out in the London Borough of Richmond's Transport Supplementary Planning Document (adopted July 2020).

Car-Free Developments

F. Car-free developments may be appropriate where:

1. The public transport accessibility level (PTAL) is 3 or above
2. Off-street disabled vehicular parking can be provided in accordance with standards set out as per part A above.
3. Cycle parking can, at least, be provided in accordance with the minimum standards set out in the London Plan and designed in accordance with the London Cycle Design Standards.
4. The development is in a controlled parking zone and the applicant is prepared to enter into a legal agreement which excludes all occupants from vehicular parking permits within this, including season tickets in Council-managed car parks.
5. In cases where there is no CPZ that occupants can legitimately be excluded from or that operates for only a small number of hours per day, the applicant can demonstrate, through a parking stress survey, that their development will not increase on-street vehicular parking stress above 85% of total on-street vehicular parking capacity. In certain cases, where a development is forecast significant impact on on-street parking stress in an area, mitigation may be sought in the form of financial contributions towards the cost of reviewing and changing an existing CPZ or implementing a new one.
6. Household and commercial refuse and recycling collectors can service the development safely in accordance with the Council's Refuse and Recycling Storage Requirements Supplementary Planning Document (2022).
7. It can be demonstrated that other commercial and emergency service vehicles can service the development in accordance with standards set out in Manual for Streets (see part L of this policy).
8. The applicant is prepared to consider other forms of mitigation such as the provision of free membership of a local car club for occupants, or, in instances of major developments, can provide one or more car club spaces on the site.

The Provision of Vehicular and/or Cycle Parking Infrastructure on the Highway

G. The Council will not encourage the provision of disabled vehicular parking space on the highway to enable planning applicants to meet the standards for disabled vehicular parking set out above.

H. Planning applicants will be expected to provide all long and short stay cycle parking off-street. If this is not possible, they will need to contribute to the cost to the Council of installing bike hangars or other cycle stands, including TMOs or other highway works needed to facilitate this.

Car Club Bay and Membership Provision

I. Applicants proposing developments of 100 dwellings or above will be expected to provide one off-street car club space per 100 dwellings, and 1 space per 200 dwellings thereafter, and to secure an accredited car club operator to operate the car club from the spaces provided, subject to the operator considering it commercially viable, and will also be expected to fund the cost of membership of the car club scheme to which the car belongs to all the first occupants of the site for a minimum of three years.

J. Where applicants propose developments with fewer than 100 dwellings, planning applicants will be expected to fund the cost membership of a nearby car club scheme to all the first occupants of the site for a minimum of three years. This will be secured through an S106 legal agreement.

Freight and Servicing

K. Applicants proposing major developments (see Table 23.1 within Policy 47 'Sustainable Travel Choices (Strategic Policy)') will need to demonstrate that all servicing can take place off-street. If this is not possible, they may, depending on the number of servicing trips forecast and the potential impact on highway safety, need to pay for mitigation in the form of Traffic Management Orders and/or S278 highway works that will show their development will not have a severe impact on the safe use of the highway by other road users in accordance with Para. 110b and d of the NPPF.

L. All developments will need to demonstrate that refuse, recycling, commercial, and emergency service vehicles can service their development safely in accordance with guidance set out in Manual for Streets, Transport for London (TfL)'s guidance on delivery and servicing plans, and the Borough's Supplementary Planning Document Richmond Refuse and Recycling Storage Requirements. They will need to do this through a delivery and servicing management plan.

Construction Traffic/Logistics Management

M. Planning applicants proposing major developments will be expected to submit a Construction Logistics Plan (Construction Management Plan) with any planning application. This will need to be completed in accordance with TfL guidance and the Council's guidance.

N. Planning applications proposing developments that are below the size at which a transport statement and travel plan statement are needed (see Table 23.1 within Policy 47 'Sustainable Travel Choices (Strategic Policy)') will be dealt with on a case-by-case basis and may be asked to provide a Construction Logistics Plan. Where works may involve significant impact to the highway, neighbours, or the wider highway network, a Construction Logistics Plan (Construction Management Plan) will be required.

3.23 All aspects of Policy 48 are addressed as appropriate within this report.

Summary

3.24 In summary, the site is located within an area of excellent public transport accessibility and benefits from good pedestrian and cycle links with the surrounding area.

3.25 The proposed development will accord with the policies encouraging sustainable travel by providing appropriate cycle parking facilities, end of journey facilities, as well as a reduction in car parking spaces.

3.26 It is shown throughout the TS that the proposed development accords with national, regional and local planning policy.

4. PROPOSED DEVELOPMENT

4.1 As detailed within the Introduction, the Proposed Development relates to increasing the existing amount of floor space for increased office use.

4.2 For the purpose of this TS, the proposed floor areas are provided in **Table 4.1**.

Table 4.1 – Existing and Proposed Floor Areas

Land Use	Existing (sqm)	Proposed (sqm)	Net Change (sqm)
Commercial (Class E)	3,076	4,068	+992

4.3 The proposed plans are included at **Appendix A2** for reference.

Access

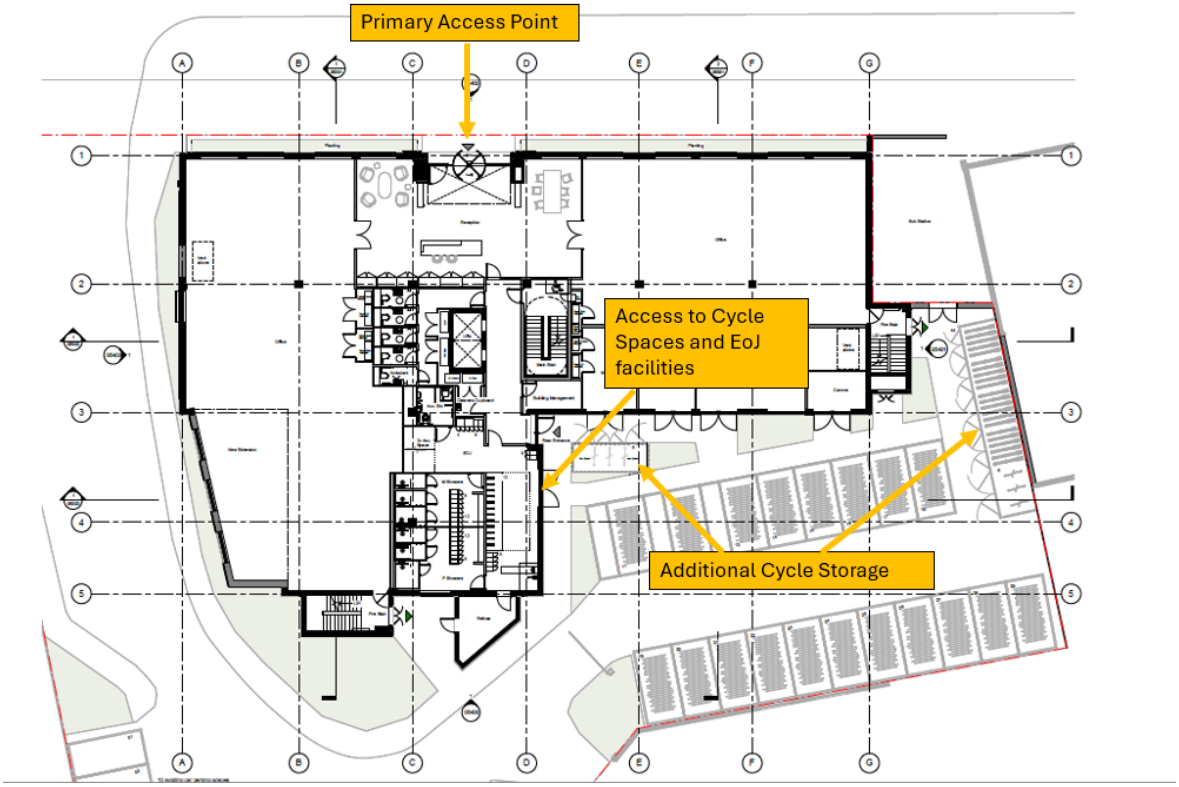
Walking & Cycling

4.4 Pedestrian access to the building will be retained from the main entrance on Lower Mortlake Road. Additional entrances are also available for employees to the rear of the building via Tersha Street, which will also be retained.

4.5 Access to long stay cycle parking at lower ground floor level will be via Tersha Street. A mixture of cycle parking spaces is provided either within the cycle store within the car park, or within the building itself. Doors are then provided from the car park towards the cycle parking and end of journey facilities located at ground floor level. The access routes, have been designed in line with the London Cycle Design Guidance (LCDS) with consideration of:

- reducing potential conflicts between vehicles, cyclists and pedestrians;
- having step free access for accessible spaces;
- minimising the number of entrance doors to the cycle parking; and
- providing sufficiently wide door and corridor widths (where applicable) for ease of access.

Figure 4-1 – Ground Floor Pedestrian and Cycle Access



Staff Car Parking

4.6 Vehicle parking is retained to the rear of the building, accessed via Tersha Street. The car park outside the barriers to the southwest of the Site is retained in its existing form with no changes still providing 10 spaces. The car park within the barriers immediately behind the building is then modified to cater for the correct spacing for disabled bays and to cater for additional cycle parking but retains the overall layout and dimensions meaning the aisle width is unchanged from the existing situation as a result of space constraints. A total of 19 spaces are now provided in this car park. Swept path analysis showing how the car park spaces can be used is shown in **Appendix A3**.

Delivery & Servicing Vehicle Access

4.7 Access for deliveries and servicing vehicles is proposed to be as per the current situation. Vehicles will serve the site from within the car park accessed from Tersha Street. Vehicles are able to enter the site in forward gear before reversing back onto Tersha Street where they can then exit back onto Lower Mortlake Road.

4.8 A swept path drawing of a typical delivery vehicle accessing the Site is provided at **Appendix A3**.

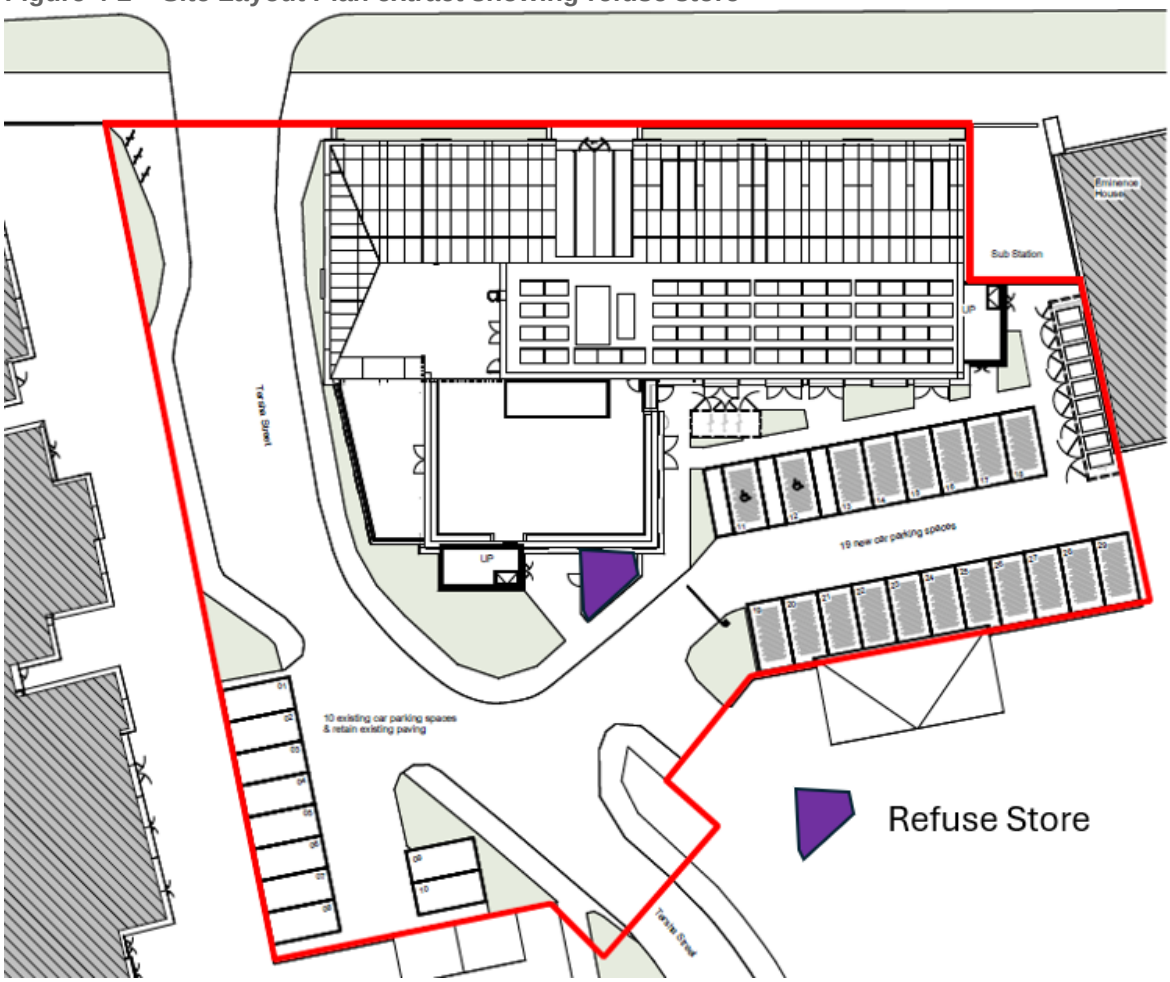
4.9 As per the existing arrangement off Tersha Street, delivery drivers will need to use the intercom at the access barrier to call reception to gain access. Deliveries into the buildings themselves from the car park will be managed by the offices or retail units. All deliveries and servicing are proposed to be

via the rear of the buildings, with limited deliveries through the office reception (post, small parcels etc).

Refuse Collection

4.10 The existing refuse store located adjacent to the car park outside of the existing barrier. Figure 4-2 below shows the location of the refuse store. It is envisaged that the same refuse vehicle will collect from the site as occurs now. Swept path analysis showing how a typical LBRuT refuse vehicle can collect in this area without issue is provided in **Appendix A3.**

Figure 4-2 – Site Layout Plan extract showing refuse store



Emergency Access

4.11 Access for a fire tender can also be accommodated within the car park via Tersha Street. Access would also be possible from Lower Mortlake Road if required. This is the same as the existing situation and also applies to smaller emergency service vehicles such as ambulances or police vehicles.

Parking

Cycle Parking

4.12 The existing cycle parking provision is limited, with cycle lockers located in the car park with capacity for ten bicycles. The proposals provide the opportunity for cycle provision to be increased to London Plan standards. It is proposed that cycle provision in accordance with London Plan standards is applied to the new and uplifted floor areas.

4.13 Richmond falls within the area where the London Plan requires higher parking standards for employees for office use, with the standards being 1 space per 75m^2 for long stay and 1 per 500m^2 for short stay. On this basis, the proposed development would require 54 long stay and 8 short stay spaces.

4.14

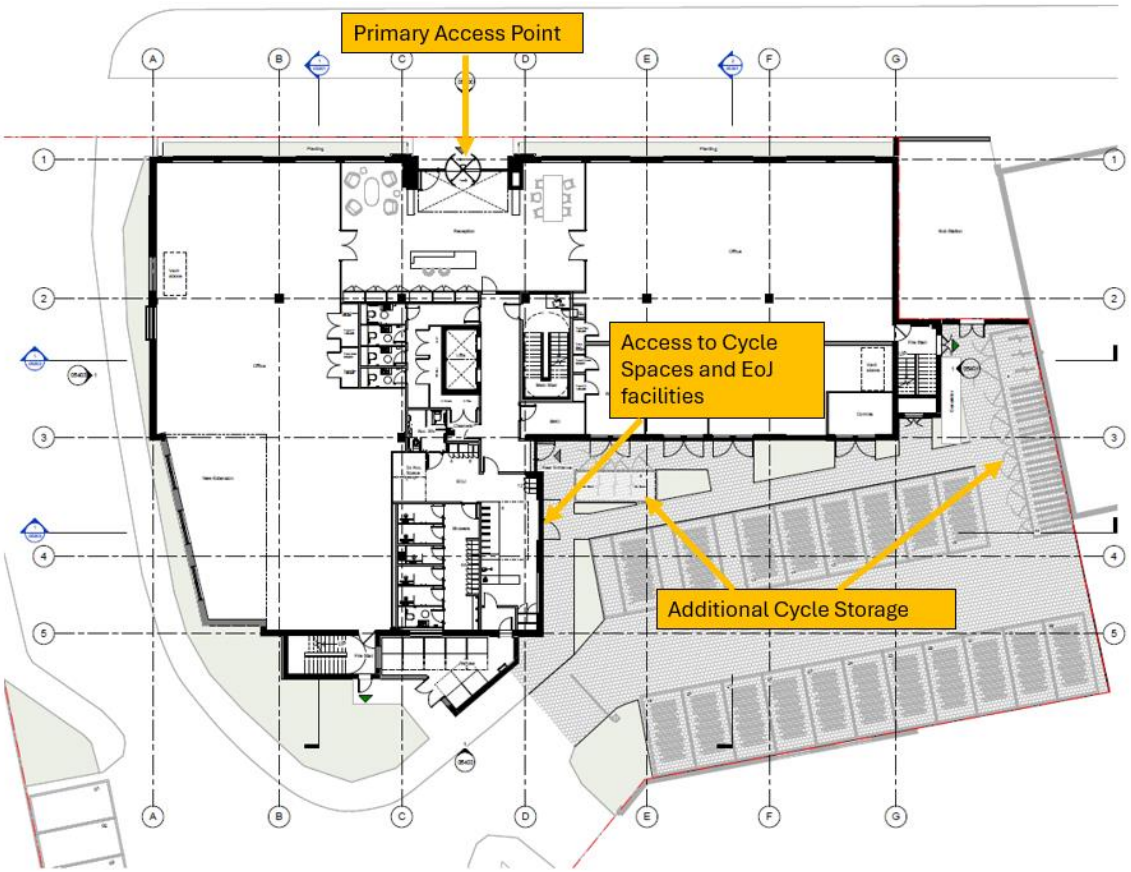
4.15 **Table** 4.2 shows the proposed cycle parking spaces and end of journey facilities.

Table 4.2 - Proposed Office Cycle Parking Provision

Unit	Cycle Parking		End of Journey Facilities	
	Long Stay	Short Stay	Lockers	Showers
4,068 sqm (GEA)	64	6	68	6

4.16 In total the Proposed Development would offer up to 64 long stay and 6 short stay cycle parking spaces, which is a significant improvement compared to the existing 10 long stay spaces and in excess of the number required based on London Plan standards. While there are 6 spaces designated as visitor parking, there are a further 6 accessible spaces that can be used by visitors and employees. Even if all 12 spaces were used by visitors there would still be 58 spaces for staff meaning the minimum provision for both is available, with the 6 accessible spaces being used flexibly for all users of the site The key is that the proposed total cycle parking provision exceeds the London Plan requirement A plan showing the location of the cycle stores is provided below.

Figure 4-3 – Site Layout Plan extract showing Cycle Parking Locations



4.17 A mix of long stay cycle parking will be provided for the office with two-tier stands, Sheffield stands, wall mounted stands and spaces for larger or adapted cycles in accordance with the London Plan, a small number of wall hung spaces will also be provided. A minimum of 20% of the cycle parking will be Sheffield stands at ground floor level with an additional 11% of the total suitable for large or adapted cycles.

4.18 The breakdown of the proposed office cycle parking spaces is provided in **Table 4.3.**

Table 4.3 - Proposed Office Cycle Parking Breakdown

Type	Number
Sheffield	6
Large Bays	8
Two-Tier	44
Wall Hung	12
Total	**70**

4.19 All short stay cycle parking spaces for visitors will be provided in the form of Sheffield stands at the front of the building, as close to the building entrances as possible. A total of 6 short stay spaces are proposed, with 6 of the accessible spaces also being shared with employees and visitors to provide flexibility for all users.

Car Parking

4.20 As mentioned above, the site has existing car parking accessed via Tersha Street. The proposals seek to retain some aspects of car parking but reducing the overall level. This means that any uplift in floor area is provided as car free in line with London Plan standards for a site with a PTAL of 6a, but that the provision for the existing is also reduced, in this case to make way for cycle parking.

4.21 It is proposed to retain 29 spaces out of the existing 33 spaces resulting in a 12% reduction in car parking spaces, while also significantly improving the cycle parking and end of journey facilities provision to encourage more staff to cycle to work.

4.22 Due to the increase in floorspace and reduction in parking the parking ratio will reduce from 1 space per 93m^2 to 1 per 140m^2. Given that London Plan standards permit up to 1 space per 100m^2 the proposed provision accords with this as up to 40 spaces could be provided.

4.23 The proposed reduction in car parking aligns with current strategic and development management policies set out in LBRuT's Local Plan. Given the development includes refurbishment and provision of new Class E use, retention of some car parking at the site is considered to be justified. In the future, the Applicant will explore ways in which the parking levels on site can be reduced further should demand decrease. The improvements to cycle parking and end of journey facilities within the reconfigured car park areas offer a significant betterment compared to the existing provision and will encourage a higher uptake in cycle mode share for journeys to work.

4.24 Of the car parking spaces that are being retained, a minimum of 5% (2 spaces) will be disabled spaces and 20% will have access to active electric vehicle charging facilities with the remainder having passive provision to allow these spaces to be converted in future.

5. TRIP GENERATION

Overview

5.1 The trip generation assessment for this report has been based on the uplift in floor area from the existing office building to include the proposed development. TRICS data has been used to determine trip rates based on office trip rates for similar sites in London. The trip rates used in this assessment are provided in **Appendix A4**.

5.2 The trip generation has been based on trip rates for an office as the office trip rates represent the land use most likely to generate trips in the AM and PM peak periods. As such, for the purpose of the trip generation, the whole proposed development is assumed to be office.

Existing Trip Generation

5.3 The existing office space is calculated to be 3,076m^2 GIA. As the Site is currently vacant and surveys cannot be undertaken to understand existing trip patterns, trip rates were obtained from the TRICS database for offices in London (Town Centre or Edge of Town Centre locations). These have been applied to the existing floor area to determine an existing level of total person trips to and from the site in the AM and PM peak hours. Two sites were removed from the selection due to the fact they were too centrally located to be representative. These sites were located in Fitzrovia and Farringdon.

5.4 The table below shows the trip rates and existing number of trips based on this methodology.

Table 5.1 Existing Trip Rates and Trip Generation (3,076m^2)

Trip Rate / Generation	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr	Dep	Total	Arr	Dep	Total
Trip Rates (per 100sqm)	1.173	0.091	1.264	0.111	1.299	1.41
Person Trips	36	3	39	3	40	43

5.5 2011 Census Method of Travel to work data, for those working in Richmond upon Thames 004 (the MSOA containing the Site, has then been used to estimate the way in which people will travel to and from the Site. 2011 has been used as opposed to 2021 as the 2021 census is heavily impacted by Covid-19 and therefore does not accurately the way people travel to and from work. The table below shows the relevant mode share and the anticipated number of trips by each mode to have been made from the existing land use.

Table 5.2 Existing Trips by Mode (3,076m^2)

Mode	Mode Share	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
		Arr	Dep	Total	Arr	Dep	Total
Underground, metro, light rail or tram	13%	5	0	5	0	5	6
Train	18%	6	0	7	1	7	8
Bus, minibus or coach	12%	4	0	5	0	5	5
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	1%	0	0	1	0	1	1
Driving a car or van	38%	14	1	15	1	15	17
Passenger in a car or van	1%	0	0	1	0	1	1
Bicycle	5%	2	0	2	0	2	2
On foot	9%	3	0	4	0	4	4
Other method of travel to work	1%	0	0	0	0	0	0
Total	100%	36	3	39	3	40	43

N.B any discrepancies with totals caused by rounding.

Proposed Trip Generation

5.6 The proposed trip generation has then been calculated using the same office trip rates but based on the total proposed floor area of 4,068m^2. The table below then shows the anticipated number of trips based on the total floor area.

Table 5.3 Proposed Trip Generation (4,053m^2)

Trip Rate / Generation	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr	Dep	Total	Arr	Dep	Total
Trip Rates (per 100sqm)	1.173	0.091	1.264	0.111	1.299	1.41
Person Trips	48	4	51	5	53	57

5.7 The proposed mode shares then use an adjusted mode share based on the reduction in car parking proposed. As the number of car parking spaces available is to be reduced by 12% it is anticipated that the car driver mode share will also reduce by this much to reflect the change. This 12% has then been proportionately added to the remaining modes. The resultant mode shares and anticipated trips by mode are then provided in the table below.

Table 5.4 Proposed Trips by Mode – Adjusted Mode Share (4,068m^2)

Mode	Mode Share	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
		Arr	Dep	Total	Arr	Dep	Total
Underground, metro, light rail or tram	14%	7	1	7	1	8	8
Train	19%	9	1	10	1	10	11
Bus, minibus or coach	13%	6	0	7	1	7	8
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	1%	1	0	1	0	1	1
Driving a car or van	33%	16	1	17	2	18	19
Passenger in a car or van	1%	1	0	1	0	1	1
Bicycle	6%	3	0	3	0	3	3
On foot	10%	5	0	5	0	5	6
Other method of travel to work	1%	1	0	1	0	1	1
Total	100%	48	4	51	5	53	57

N.B any discrepancies with totals caused by rounding.

Net Trip Generation

5.8 The following table then shows the increase in trips by mode anticipated to be made as a result of the additional floor space but taking into account the reduced number of car parking spaces.

5.9 As is shown in the table, there is anticipated to be a marginal increase of 12 person trips in the AM peak and 14 in the PM peak. These trips are spread across many different modes as shown above with an additional 5 train and underground trips in the AM peak and 5 in the PM peak. There is also anticipated to be an additional 2 vehicle trips in the AM peak and 3 in the PM peak.

5.10 As the increase in trips across each mode is so small, it is anticipated that any impact would be negligible with sufficient capacity on all networks to cater with at most an additional 2 – 3 trips by each mode. Deliveries and servicing trips are also not anticipated to increase significantly. As a result it is deemed that the uplift in floor area is unlikely to generate significant impacts.

Table 5.5 Net Trip Generation

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr	Dep	Total	Arr	Dep	Total
Underground, metro, light rail or tram	2	0	2	0	2	2
Train	3	0	3	0	3	3
Bus, minibus or coach	2	0	2	0	2	2
Taxi	0	0	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0	0	0
Driving a car or van	2	0	2	0	2	3
Passenger in a car or van	0	0	0	0	0	0
Bicycle	1	0	1	0	1	1
On foot	1	0	1	0	2	2
Other method of travel to work	0	0	0	0	0	0
Total	11	1	12	1	13	14

Summary

5.11 In summary, the uplift in trips, as a result of the additional Class E space is expected to be negligible and is not anticipated to result in any negative impacts.

6. SUMMARY & CONCLUSION

6.1 Iceni Projects has been instructed by Barings Real Estate ('the Applicant') to provide a Transport Statement (TS) for the proposed redevelopment of the existing Avalon House, 72 Lower Mortlake Rd, Richmond TW9 2JY ('the Site'). The Site falls within the jurisdiction of the London Borough of Richmond upon Thames (LBRuT).

6.2 This TS supports a planning application for the development proposals, which include an increase in the amount of office floor space provided within the Site.

6.3 The site is located close to numerous local facilities and public transport infrastructure with good access to active and sustainable travel networks.

6.4 The Site has an excellent PTAL of 6a as a result of the proximity to several high frequency bus routes and Richmond railway station.

6.5 It is shown throughout the TS that the proposed development accords with national, regional and local planning policy.

6.6 In summary, the uplift in trips, as a result of the additional Class E space is expected to be negligible and is not anticipated to result in any negative impacts. Overall, the provision of cycle parking and end of journey facilities combined with a reduction in car parking provides significant benefit compared to the current use in encouraging sustainable travel to the site.

A1. PTAL REPORT

WebCAT PTAL Report

==========

Site Details

Grid Cell: 55568

Easting: 518545

Northing: 175452

Report Date: 21/05/2024

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	KEW ROAD RICHMOND CIRCUS	65	477.54	9	5.97	5.33	11.3	2.65	0.5	1.33
Bus	SHEENDALE ROAD	371	134.07	7	1.68	6.29	7.96	3.77	0.5	1.88
Bus	SHEENDALE ROAD	493	134.07	5	1.68	8	9.68	3.1	0.5	1.55
Bus	SHEENDALE ROAD	190	134.07	4	1.68	9.5	11.18	2.68	0.5	1.34
Bus	SHEENDALE ROAD	419	134.07	4	1.68	9.5	11.18	2.68	0.5	1.34
Bus	SHEENDALE ROAD	H37	134.07	10	1.68	5	6.68	4.49	1	4.49
Bus	SHEENDALE ROAD	R68	134.07	4	1.68	9.5	11.18	2.68	0.5	1.34
Bus	SHEENDALE ROAD	R70	134.07	6	1.68	7	8.68	3.46	0.5	1.73
Bus	SHEENDALE ROAD	391	134.07	6	1.68	7	8.68	3.46	0.5	1.73
Bus	SHEENDALE ROAD	H22	134.07	5	1.68	8	9.68	3.1	0.5	1.55
Bus	RICHMOND STATION	490	554.39	5	6.93	8	14.93	2.01	0.5	1

Rail	Richmond	'RICHMND-GUILDFD 2N13'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'ALDRSHT-WATRLMN 1N90'	603.87	1	7.55	30.75	38.3	0.78	0.5	0.39
Rail	Richmond	'RDNG4AB-WATRLMN 2C10'	603.87	0.67	7.55	45.53	53.07	0.57	0.5	0.28
Rail	Richmond	'WATRLMN-RDNG4AB 2C13'	603.87	0.67	7.55	45.53	53.07	0.57	0.5	0.28
Rail	Richmond	'RDNG4AB-WATRLMN 2C14'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'RDNG4AB-WATRLMN 2C16'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'WATRLMN-RDNG4AB 2C17'	603.87	1.33	7.55	23.31	30.85	0.97	0.5	0.49
Rail	Richmond	'RDNG4AB-WATRLMN 2C18'	603.87	0.67	7.55	45.53	53.07	0.57	0.5	0.28
Rail	Richmond	'WATRLMN-RDNG4AB 2C85'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'WATRLMN-RDNG4AB 2C87'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'RDNG4AB-WATRLMN 2C90'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15

Rail	Richmond	'SHEPRTN-WATRLMN 2H92'	603.87	1	7.55	30.75	38.3	0.78	0.5	0.39
Rail	Richmond	'WDON-WATRLMN 2K03 '	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
Rail	Richmond	'WATRLMN-WATRLMN 2K09'	603.87	2	7.55	15.75	23.3	1.29	1	1.29
Rail	Richmond	'WATRLMN-WATRLMN 2O09'	603.87	2	7.55	15.75	23.3	1.29	0.5	0.64
Rail	Richmond	'WATRLMN-WATRLMN 2R09'	603.87	2	7.55	15.75	23.3	1.29	0.5	0.64
Rail	Richmond	'WSORAER-WATRLMN 2U10'	603.87	2	7.55	15.75	23.3	1.29	0.5	0.64
Rail	Richmond	'WATRLMN-WSORAER 2U13'	603.87	2	7.55	15.75	23.3	1.29	0.5	0.64
Rail	Richmond	'HOUNSLW-WATRLMN 2V05'	603.87	0.33	7.55	91.66	99.21	0.3	0.5	0.15
LUL	Richmond	'Upminster-Richmond '	603.87	6	7.55	5.75	13.3	2.26	1	2.26
LUL	Richmond	'Richmond-DagEast '	603.87	0.67	7.55	45.53	53.07	0.57	0.5	0.28

Total Grid Cell AI: 28.99

PTAL: 6a

A2. PROPOSED SITE PLANS

ANOMALY

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Key plan

Drawing key

- Site Boundary
- Entrance
- Fire Escape Route
- Existing Wall
- Proposed Wall
- Planting
- Resurfaced Carpark Area

Project Status	A	22.05.24	Draft Planning Submission
Status	Revision	Date	Description

NG / LH	NG	NG / LH	PE
Designed by	Drawn by	Checked by	Approved by

Architect

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Client

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London EC4M 7AN

Project

Avalon House
72 Lower Mortlake Rd,
Richmond, TW9 2JY

Drawing title

Proposed Plan - Level 00

Job number	Sheet size	Scale @ A1	Scale @ A3
143	A1	1 : 100	NTS

Project stage

PLANNING

Drawing number

143-ANO-P0-00-DR-A-05101

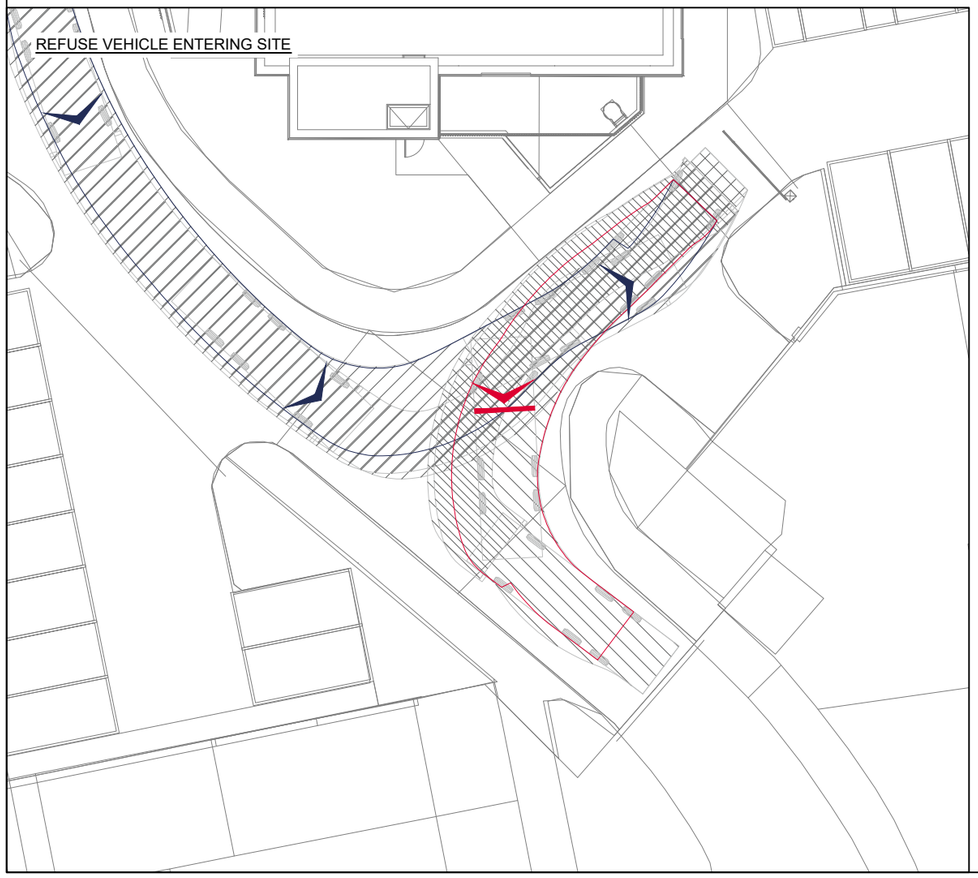
A1 sheet size

A3. SWEPT PATH ANALYSIS

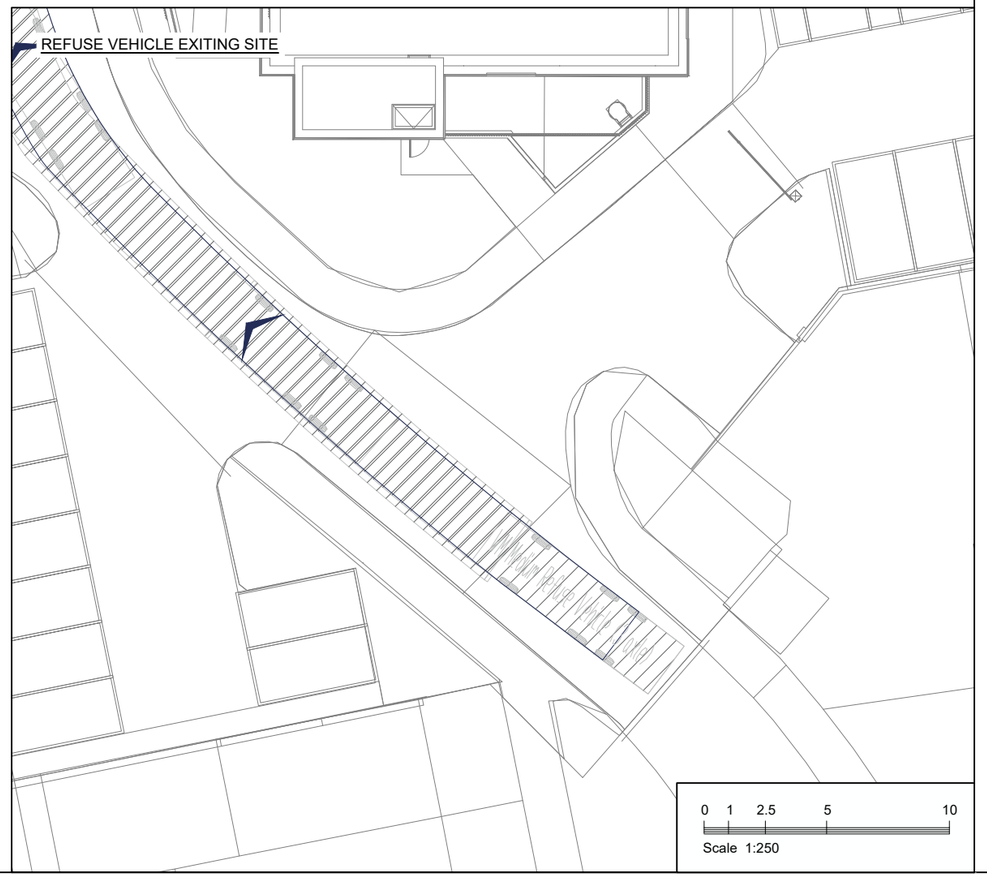
STANDARD CAR ENTERING SITE

STANDARD CAR EXITING SITE

REFUSE VEHICLE ENTERING SITE



REFUSE VEHICLE EXITING SITE



0 1 2.5 5 10

Scale 1:250

NOTES:

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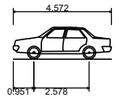
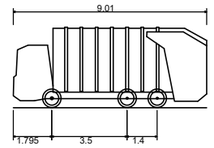
VEHICLE PROFILE:



Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.100m



WM Medium Refuse Vehicle (3 axle)	
Overall Length	9.010m
Overall Width	2.450m
Overall Body Height	3.742m
Min Body Ground Clearance	0.295m
Track Width	2.450m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	8.200m

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CLIENT

BARINGS

PROJECT

AVALON HOUSE, RICHMOND

TITLE

SWEPT PATH ANALYSIS

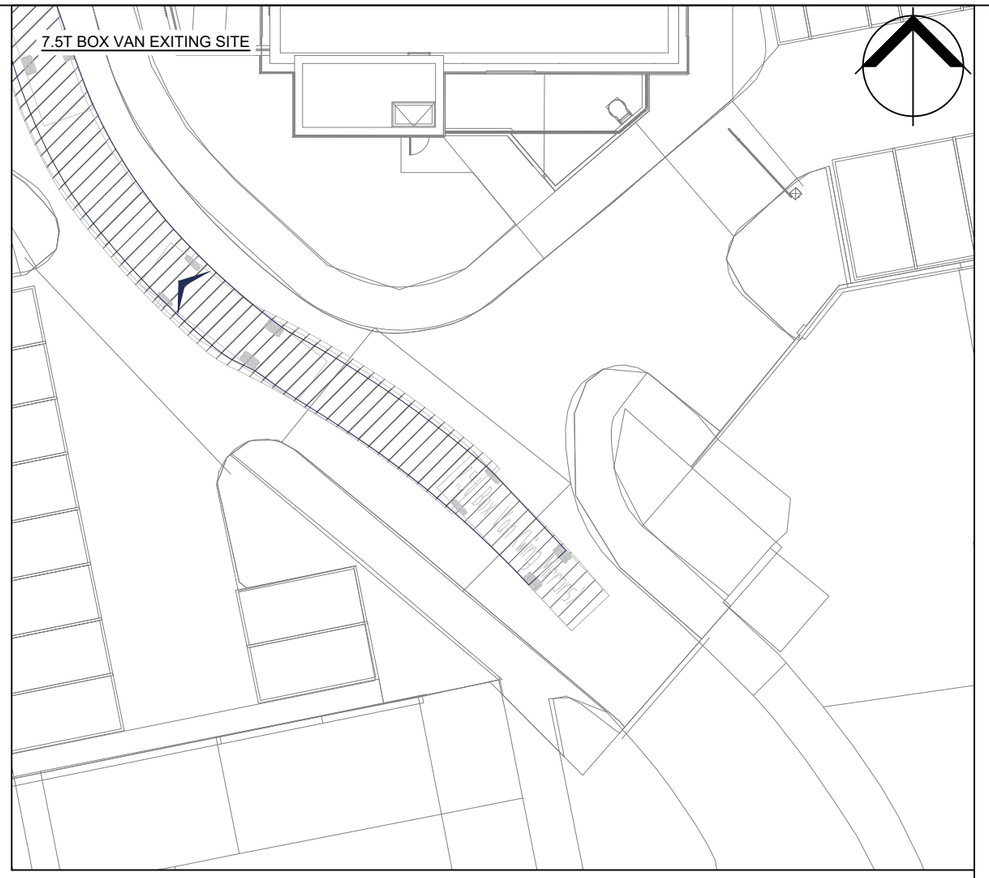
(STANDARD CAR AND REFUSE VEHICLE)

DRAWN BY	CHECKED BY	APPROVED BY
AKC	MB 23.05.2024	SP 23.05.2024

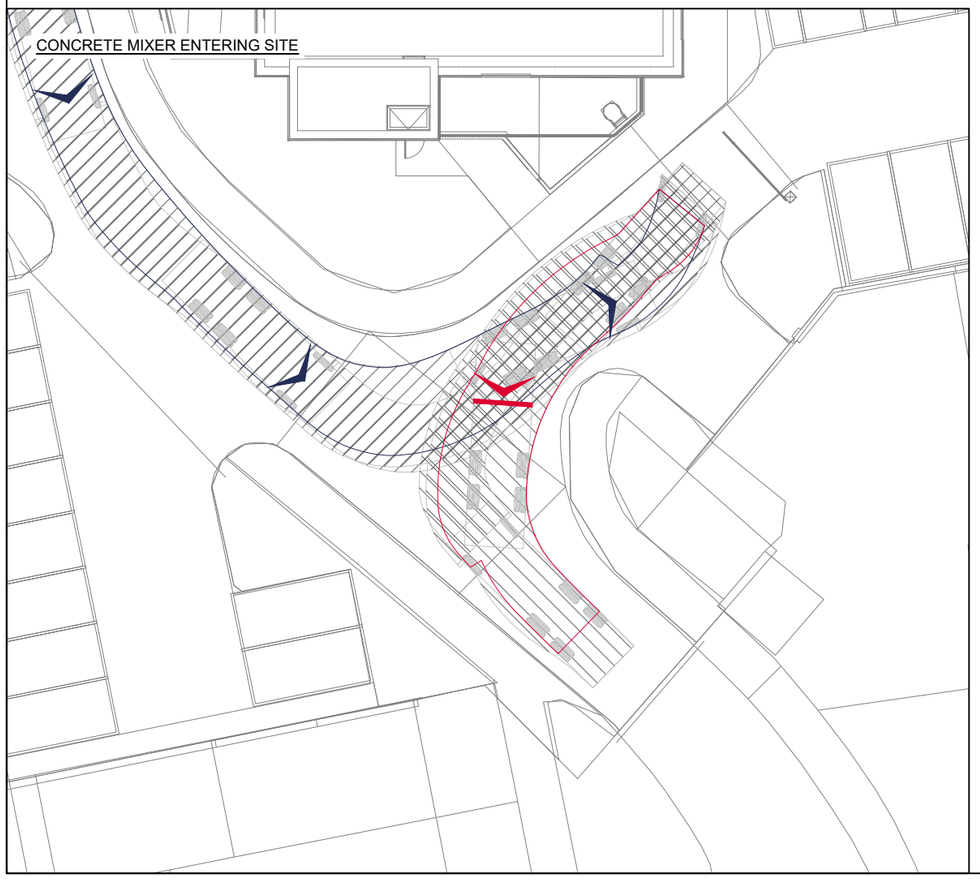
SCALE @ A3	DATE	
1:250	23.05.2024	
PROJECT NO.	DRAWING NO.	REV.
24-T024	01.1	-

7.5T BOX VAN ENTERING SITE

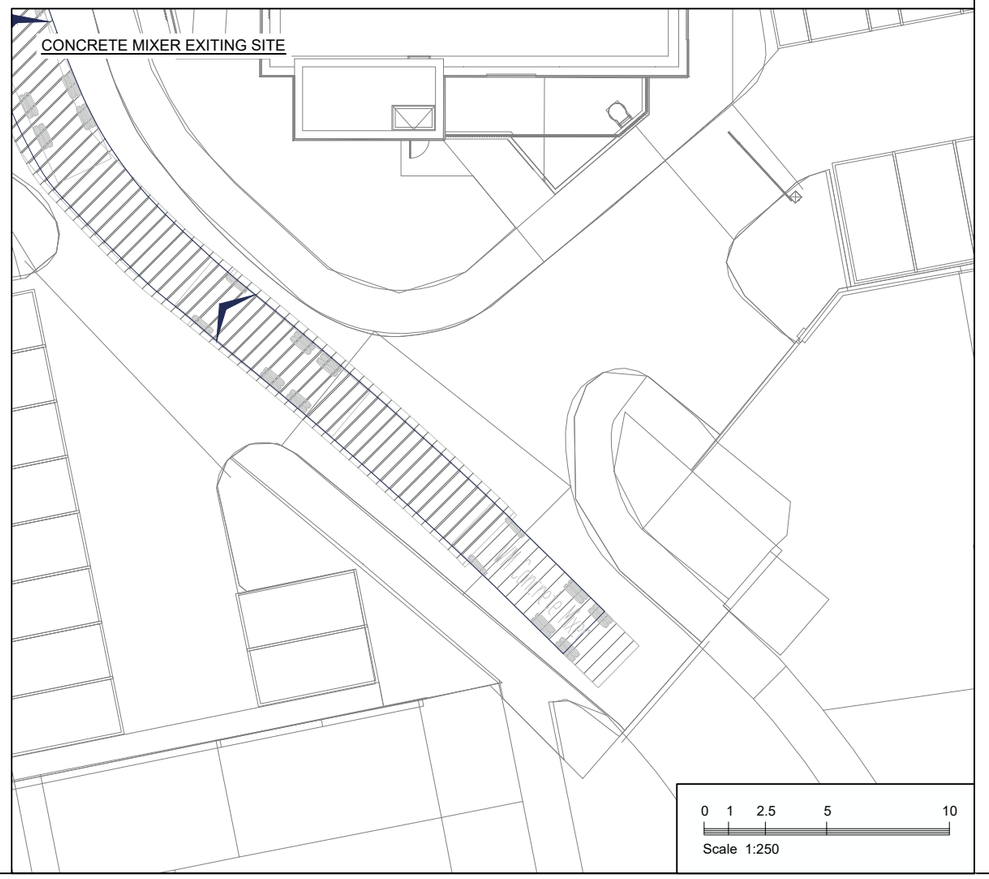
7.5T BOX VAN EXITING SITE



CONCRETE MIXER ENTERING SITE



CONCRETE MIXER EXITING SITE

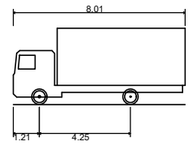


Scale 1:250

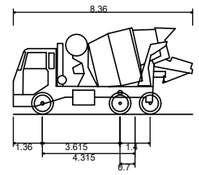
NOTES:

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 DRAWING NUMBER 143_AVALON HOUSE-SHEET - 05001 - PROPOSED SITE PLAN SUPPLIED BY ANOMALY. ICENI PROJECTS LTD SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.

VEHICLE PROFILE:



7.5t Box Van (Wing Mirrors)	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m



WM Concrete Mixer	
Overall Length	8.360m
Overall Width	2.390m
Overall Body Height	4.027m
Min Body Ground Clearance	0.358m
Max Track Width	2.413m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	8.210m

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PROJECT

AVALON HOUSE, RICHMOND

TITLE

SWEPT PATH ANALYSIS

(7.5T BOX VAN AND CONCRETE MIXER)

DRAWN BY	CHECKED BY	APPROVED BY
AKC	MB 23.05.2024	SP 23.05.2024

SCALE @ A3	DATE	
1:250	23.05.2024	
PROJECT NO.	DRAWING NO.	REV.
24-T024	01.1	-

A4. TRICS OUTPUTS

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

Calculation Reference: AUDIT-751001-240521-0502

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

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

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	1366 to 16350 (units: sqm)
Range Selected by User:	408 to 120000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 28/06/22

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

Selected survey days:

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

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	3
Edge of Town Centre	3

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

Selected Location Sub Categories:

Commercial Zone	1
Built-Up Zone	3
High Street	1
No Sub Category	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	9 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	6 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	3 days
50,001 to 100,000	2 days
100,001 or More	1 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	5 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	2 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

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

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

LIST OF SITES relevant to selection parameters

1 BN-02-A-01 OFFICES BARNET
MOON LANE
HIGH BARNET

Edge of Town Centre
No Sub Category
Total Gross floor area: 1366 sqm
Survey date: THURSDAY *11/11/21* *Survey Type: MANUAL*

2 EN-02-A-01 MICROSOFT OFFICES ENFIELD
GENOTIN ROAD
ENFIELD

Town Centre
Built-Up Zone
Total Gross floor area: 6552 sqm
Survey date: TUESDAY *07/06/22* *Survey Type: MANUAL*

3 HD-02-A-10 DATA CENTRE HILLINGDON
MILLINGTON ROAD
HAYES

Edge of Town Centre
Commercial Zone
Total Gross floor area: 16350 sqm
Survey date: WEDNESDAY *02/03/22* *Survey Type: MANUAL*

4 HM-02-A-01 REGUS OFFICES HAMMERSMITH AND FULHAM
QUEEN CAROLINE STREET
HAMMERSMITH

Town Centre
Built-Up Zone
Total Gross floor area: 2036 sqm
Survey date: MONDAY *13/11/17* *Survey Type: MANUAL*

5 LB-02-A-01 START UP OFFICES & STUDIOS LAMBETH
DURHAM STREET
VAUXHALL

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 10200 sqm
Survey date: MONDAY *19/11/18* *Survey Type: MANUAL*

6 LB-02-A-02 MUSIC COMPANY LAMBETH
STREATHAM HIGH ROAD
STREATHAM

Town Centre
High Street
Total Gross floor area: 3054 sqm
Survey date: TUESDAY *05/11/19* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CN-02-A-03	Too central
CN-02-A-04	Too central

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 7.55

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	6593	0.081	6	6593	0.013	6	6593	0.094
08:00 - 09:00	6	6593	0.167	6	6593	0.030	6	6593	0.197
09:00 - 10:00	6	6593	0.159	6	6593	0.056	6	6593	0.215
10:00 - 11:00	6	6593	0.119	6	6593	0.063	6	6593	0.182
11:00 - 12:00	6	6593	0.048	6	6593	0.061	6	6593	0.109
12:00 - 13:00	6	6593	0.068	6	6593	0.073	6	6593	0.141
13:00 - 14:00	6	6593	0.040	6	6593	0.053	6	6593	0.093
14:00 - 15:00	6	6593	0.051	6	6593	0.073	6	6593	0.124
15:00 - 16:00	6	6593	0.033	6	6593	0.071	6	6593	0.104
16:00 - 17:00	6	6593	0.043	6	6593	0.081	6	6593	0.124
17:00 - 18:00	6	6593	0.023	6	6593	0.142	6	6593	0.165
18:00 - 19:00	6	6593	0.010	6	6593	0.121	6	6593	0.131
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.842			0.837			1.679

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:	1366 - 16350 (units: sqm)
Survey date date range:	01/01/16 - 28/06/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	2

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 7.55

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	6593	0.382	6	6593	0.035	6	6593	0.417
08:00 - 09:00	6	6593	1.173	6	6593	0.091	6	6593	1.264
09:00 - 10:00	6	6593	1.347	6	6593	0.162	6	6593	1.509
10:00 - 11:00	6	6593	0.465	6	6593	0.174	6	6593	0.639
11:00 - 12:00	6	6593	0.364	6	6593	0.286	6	6593	0.650
12:00 - 13:00	6	6593	0.650	6	6593	0.768	6	6593	1.418
13:00 - 14:00	6	6593	0.928	6	6593	0.832	6	6593	1.760
14:00 - 15:00	6	6593	0.609	6	6593	0.531	6	6593	1.140
15:00 - 16:00	6	6593	0.263	6	6593	0.425	6	6593	0.688
16:00 - 17:00	6	6593	0.159	6	6593	0.642	6	6593	0.801
17:00 - 18:00	6	6593	0.111	6	6593	1.299	6	6593	1.410
18:00 - 19:00	6	6593	0.028	6	6593	0.948	6	6593	0.976
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.479			6.193			12.672

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.*