

Aval Consulting Group.



Transport Technical Note

Land Rear Of 687 Green Lanes London N21 3RX

Paragon Glass Services Ltd

22nd January 2024

Transport Technical Note
Land Rear Of 687 Green Lanes London N21 3RX
Paragon Glass Services Ltd

93056

Project Information

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1 Introduction

1.1 Background

AVAL Consulting Group Limited (ACGL) has been commissioned by Simply Planning on behalf of Paragon Glass Services Ltd to provide the Transport Technical Note to support the Planning Application 23/01967/FUL for the change of use of outbuilding on land to the rear of 687 Green Lanes London N21 3RX. This is to accompany the Planning Application to the Local Authority (London Borough of Enfield) for consent to undertake the proposed work at the site.

It should be noted that the planning application has been refused and this Technical Note responds to the transport items for refusal. It responds to the following points:

1. The use of part of the site as storage area, due to the potentially frequent customer and delivery vehicle trips and by virtue of the general noise, activity and visual impact created by the proposed use would adversely affect the residential amenities of adjoining and nearby occupiers, contrary to policies CP30 and CP32 of the Core Strategy (2010), DMD68 of the Development Management Document (2014), D4 and D14 of the London Plan (2021), as well as the objectives of the National Planning Policy Framework.
2. The proposed change of use due to lack of adequate servicing arrangements, tracking details, car parking and cycle parking layout and site layout details commensurate with the more intensive use proposed, fails to provide sufficient information to demonstrate that the use would not give rise to conditions prejudicial to the free flow and safety of vehicular traffic and pedestrians. The proposed development would therefore be contrary to Policies T5 and T6 of the London Plan (2021), Policies CP24 and CP25 of the Core Strategy (2010), Policies DMD45, and DMD47 of the Enfield Development Management Document (2014)."

This Transport Technical Note (TTN) will appraise the effects of the proposed changes at the site on the on-site servicing arrangements, vehicle movements, car parking and cycle parking layouts. It will also assess the proposed trip generation.

This TTN has been carried out in accordance with good practice guidelines and has been prepared in accordance with the National Planning Policy Framework (NPPF) (2023) and current Planning Guidance documents for London and Enfield (local area).

1.2 Site Location

Figure 1.1 shows the site location. The site for is bounded by Back Lane to the east and fields to the west, north, and south.

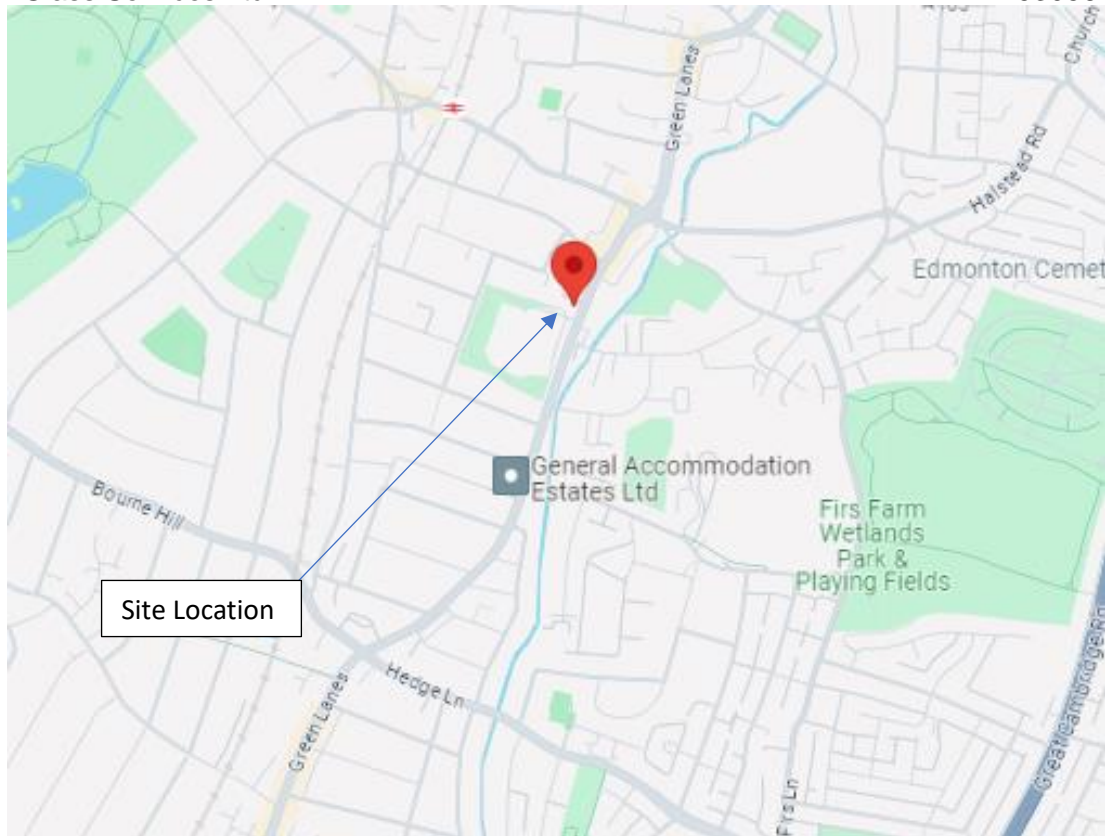


Figure 1.1: Site Location (image source: Google Maps)

1.3 Report Structure

The remainder of this TS is presented in the following order:

- Chapter 1: Introduction
- Chapter 2: Relevant national and regional applicable policies;
- Chapter 3: Forecast Trip Generation and Transport Impacts; and
- Chapter 4: Forecast Vehicle Swept Paths, Car Parking and Cycle Parking
- Chapter 5: Conclusion.

2 Policy and Guidance

This section lists all the latest regional and local policies, and statutory and non-statutory guidelines relevant to the proposed development.

2.1 National Guidance

2.1.1 National Planning Policy Framework (2023)

The principal national planning policy guidance with respect to the proposed development is the National Planning Policy Framework (NPPF). The most recent update of the NPPF was published on 5th September 2023, which replaces the 20 July 2021 version by the Ministry of Levelling Up, Housing and Communities. The NPPF sets out the government's planning policies for England and how these are expected to be applied.

This revised Framework replaces the previous National Planning Policy Framework published in July 2021 and previous versions to that.

Three dimensions of sustainable development have been identified in the NPPF: economic, social, and environmental.

The proposed development complies with the guidance and requirements set out in this Revised NPPF.

The NPPF still has a "presumption in favour of sustainable development" and includes the following principles of relevance to this site:

- To drive and support economic development;
- To seek to secure high-quality design; and
- Manage growth by making full use of public transport, walking and cycling and focusing development in locations which are or can be made sustainable.

The policy suggests that plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable modes can be maximised. Development should be located and designed where practical to achieve the following:

- Give priority to pedestrian and cycle movements, and have access to high-quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians; and
- Consider the needs of disabled people by all modes of transport.

2.1.2 National Planning Practice Guidance (NPPG, 2014)

Lessening the Traffic Generation NPPG is a web-based resource that brings together planning guidance on various topics in one place. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.

The guidance note on 'Travel Plans, Transport Assessments and Statements' provides advice on when Transport Assessments and Transport Statements (TS) are required, and what they should contain. This has been referred to when preparing this report.

The above web-based NPPG replaces The Guidance on Transport Assessments (GTA) which was withdrawn in 2014. In it, the overarching principles in the preparation of Transport Assessments, Transport Statements, and Travel Plans (TPs) are laid out.

It advises that a TS is a 'lighter touch' assessment, whereas a TA is a more thorough assessment. A TS can be used in the case of developments with anticipated limited transport impacts (and limited vehicle impacts) and where fewer than 80 units are proposed.

The guidance highlights that TAs, TSs, and TPs are important because they can positively contribute to:

- Encouraging sustainable travel;
- and its detrimental impacts;
- Reducing carbon emissions and climate impacts;
- Creating accessible, connected, inclusive communities;
- Improving health outcomes and quality of life;
- Improving road safety; and
- Reducing the need for new developments to increase existing road capacity or provide new roads.

2.2 Local Guidance

2.2.1 Development Management Document (DMD) November 2014

The Enfield core strategy use the Development Management Document (DMD) November 2014 as a guide on certain policies such as transport, parking and other major infrastructure within Enfield.

DMD 45 Parking Standards and Layout states that:

"1. Car Parking

Car parking proposals will be considered against the standards set out in the London Plan and:

- a. The scale and nature of the development;*
- b. The public transport accessibility (PTAL) of the site;*
- c. Existing parking pressures in the locality; and*

d. Accessibility to local amenities, and the needs of the future occupants of the developments.

For developments where no standards exist, parking should be provided to ensure that:

e. Operational needs are adequately met, having regard to the need to maximise use of sustainable modes of transport.

2. Cycle and Powered Two Wheelers Parking

New development should make provision for active and passive electrical charging points, cyclists and Powered Two Wheelers in accordance with the standards set out in the London Plan. For developments where no standards exist, required provision will be assessed on a case by case basis. Development must provide secure parking in safe, convenient and accessible locations with good natural surveillance.

3. Parking Design

All new development must be designed to be fully accessible for all mobility requirements and should maximise walkability through the provision of attractive and safe layouts with pedestrian permeability. Major development proposals should include off-carriageway links for cyclists.

Car park surfaces requiring sustainable drainage systems (SUDS) must be designed to provide HGV access to allow for the maintenance of the attenuation areas or soakaways.

Parking layouts must provide adequate sight lines and meet all manoeuvring requirements, including those for emergency and servicing vehicles. The need for turning facilities should generally be avoided by designing layouts with through routes. Vehicle turn-tables and car stackers will not generally be permitted.

4. Limited Parking or Car Free Housing Development

Applicants may be required to contribute towards the implementation of parking controls to prevent on-street parking where development would otherwise affect traffic flow. For sites within existing or proposed controlled parking zones, residents of the new development may be prohibited from obtaining a parking permit, where demand for on street space is already high and would be worsened by the development proposal. This will be secured by a legal agreement.

Residential developments below London Plan Standards will be considered if the site:

a. Has good access to public transport services or will have good access as a result of proposed or planned improvements; and

b. Is located within or in close proximity to a local or town centre.

Development involving limited or car free housing developments must demonstrate that any increase in on-street parking would not adversely affect traffic flows, bus movement, road safety or the amenity of local residents or the local environment. Development will only be permitted if:

There is an adequate number of suitably located disabled parking spaces for residents/visitors and, where appropriate, for operational/servicing needs. A drop off point for older people, the disabled and emergency services may also be required;

Public transport infrastructure has sufficient capacity to accommodate increased demand as a consequence of the development.

5. Car Clubs

The Council will encourage proposals for car clubs especially those that would support lower levels of off-street parking in new developments, be available to the wider public and where new car club bays would support or develop the existing car club network.

This policy should be read in conjunction with Core Strategy Policy 24.”

DMD 47 Access, New Roads and Servicing states that:

“1. Non- vehicular Access

a) Provisions for pedestrians

All developments should make provision for attractive, safe, clearly defined and convenient routes and accesses for pedestrians, including those with disabilities. New pedestrian accesses, routes and footpaths are encouraged and should link with the surrounding street and Public Right of Way networks where appropriate. Development will not be permitted where it compromises existing rights of way unless alternatives of equivalent or greater attractiveness and convenience are provided. Gated developments will be resisted.

b) Provision for cyclists

Cycle access to new developments should be designed to ensure cycling is a realistic alternative travel choice to that of the private car. The Council will protect existing off-road routes and the alignment of proposed routes from development unless alternatives of equivalent or greater attractiveness and convenience are proposed. Where appropriate the Council will seek the provision of segregated cycle routes to adoptable standards as part of a new development.

c) Public Transport

Applications for development should give consideration to the impact of development on public transport services. Major applications will be expected to demonstrate that existing or proposed public transport capacity can accommodate development proposals, and where necessary, identify opportunities for public transport improvements.

2) Vehicular access and servicing

New development will only be permitted if the access and road junction which serves the development is appropriately sited and is of an appropriate scale and configuration and there is no adverse impact on highway safety and the free flow of traffic.

New access onto roads with a speed limit above 40mph must comply with design standards within DMRB (The Design Manual for Roads and Bridges)(7) .

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New access onto other roads must have regard to the Manual for Streets and Manual for Streets 2 or replacement publications. New access and servicing arrangements must ensure vehicles can reach the necessary loading, servicing, and parking areas. Layouts must achieve a safe, convenient and fully accessible environment for pedestrians and cyclists.

New development will only be permitted where adequate, safe and functional provision is made for:

- 1. Refuse collection (using 11.0m freighters) and any other service, and delivery vehicles required to serve part of the normal functioning of the development; and*
- 2. Emergency services vehicles, (following guidance issued by the London Fire Brigade & Building Regulations); and*
- 3. Operational needs for existing residents, visitor and user “drop-off” and “pick-up” areas (e.g. for parents at nurseries and schools) as appropriate to the functioning of the development and the safety and free-flow of traffic.*

New highways should be built to adoptable design, construction, and safety standards. Should developers wish to have new roads adopted under Section 38 of The Highways Act 1980, then specific guidance is available separately. However the Council will not necessarily adopt all highway layouts and early advice should be sought.

This policy should be read in conjunction with Core Strategy policies 24, 25, 26 and 27.”

DMD 48 Transport Assessments states that:

“All major development proposals should be accompanied by a Transport Assessment. For minor developments a Transport Statement may be required.

In exceptional circumstances, where minor development would place pressure on the existing transport network, the Council will request a Transport Assessment in order to establish the transport implications of the development.

Travel Plans

A Travel Plan will be required where the Transport Assessment or Transport Statement identifies the need to improve modal choice, pedestrian accessibility, minimise congestion or reduce pollution.

Servicing and Delivery Plans and Construction Logistics Plan

The development of Servicing and Delivery Plans and Construction Logistic Plans (CLP) will be encouraged for all major developments. The Council may stipulate the production of such plans to ensure that developments provide for safe and legal delivery, collection, construction and servicing including minimising the risk of collision with cyclists and pedestrians and set appropriate obligations to ensure compliance. The Plans may be requested alongside and in coordination with the documents outlined in this policy. The minimum safety requirements may be secured by legal agreements.

This policy should be read in conjunction with Core Strategy Policy 24 and London Plan Policy 6.3.”

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2.2.2 The Enfield Plan Core Strategy 2010-2025 (Adopted November 2010)

It should be noted that there are new policies in place for the Enfield area within the Enfield's New Local Plan 2019-2041 but they have not been adopted by the local council yet.

The Enfield Plan Core Strategy 2010-2025 (Adopted November 2010).¹

Section 1.2 states:

"Enfield's Sustainable Community Strategy was revised by the Enfield Strategic Partnership in 2009. The Partnership is made up of a wide spectrum of local public, private, voluntary and community organisations including the Council, police and health providers. The Partnership is committed to making Enfield a healthy, prosperous and cohesive community living in a borough that is safe, clean and green, through social progress that recognises everyone's needs, effective protection of the environment, prudent use of natural resources, and promoting economic growth and employment opportunities for Enfield residents."

CORE POLICY 24 The Road Network states that:

"The Council working with partners will seek to deliver improvements to the road network to contribute to Enfield's economic regeneration and development, support businesses, improve safety and environmental quality, reduce congestion, and provide additional capacity where needed. In particular the following key improvements have been identified:

Priorities for improvements to the main road network will be:

- *A406 North Circular Road;*
- *A1055 Bullsmoor Lane / Mollison Road / Meridian Way;*
- *A110 Southbury Road including the one-way system in Enfield Town;*
- *A10 Great Cambridge Road;*
- *A1010 Hertford Road; and*
- *To improve accessibility to the Upper Lee Valley, particularly east-west connections, linking areas on either side of the West Anglia rail line.*

The Council will also work with the Department for Transport, Transport for London and Network Rail to ensure adequate alternative arrangements are provided in association with any closure of level crossings on the West Anglia Main Line in association with increased rail service frequencies;

The Council will identify and safeguard land required for the construction of major transport projects in the relevant area action plan or Site Schedule Document;

The Council will encourage sustainable travel choices and reduce growing congestion levels through the promotion of Travel Demand Management Programmes, and will support the use of low carbon vehicles, including electric vehicles. Standards for the provision of off-street parking in new developments and

¹Selby District Core Strategy Local Plan (Adoption Version 22 October 2013). Available at: https://www.enfield.gov.uk/_data/assets/pdf_file/0015/4623/planning-policy-information-the-enfield-plan-core-strategy-november-2010.pdf

requirements for transport assessments, travel plans, car clubs and car share schemes will be set out in the Development Management Document; and

The Council will work with partners to continue to consider the potential merits, benefits and impacts of a Northern Gateway Access Package to improve accessibility and movements within north east Enfield and to support existing and new businesses in the Upper Lee Valley.”

CORE POLICY 25 Pedestrians and Cyclists states that:

“The Council, working with its partners, will seek to provide safe, convenient, and accessible routes for pedestrians, cyclists and other non-motorised modes by:

Developing and implementing improvements to strategic and local walking and cycle routes in the Borough;

Improving the quality and safety of the public realm, implementing streetscape improvements to be outlined in the Enfield Design Guide and relevant area action plans, fostering road safety, and implementing ‘Streets for People’ initiatives; and

Working with Department for Transport, Network Rail and Transport for London to ensure that West Anglia rail line improvements address the barrier to east-west movements for pedestrians and cyclists caused by the line in the east of the Borough, including the identification of alternative crossing points.

Priority will be given to schemes that overcome community severance, particularly those linking communities on either side of the West Anglia Main Line, routes to schools, town centres and recreational resources including greenways and the Lee Valley Regional Park”.

CORE POLICY 26 Public Transport states that:

“The Council, working with its partners, will seek to secure a comprehensive, safe, accessible, welcoming and efficient public transport network, capable of supporting the development proposals for the Borough and providing attractive alternative travel options by:

Supporting proposals to upgrade the West Anglia Rail line in the Lee Valley to enable a four trains per hour service at local stations in Enfield;

Working with Network Rail and other rail operators to strongly promote increasing the frequency of off peak rail services between Enfield Town and Seven Sisters in association with planned growth around Enfield Town station;

Improving access to and safety of railway and underground stations, as well as associated environmental works to make these more attractive and welcoming. Accessibility improvements to Angel Road, Edmonton Green, Ponders End and Silver Street stations will be sought in conjunction with development at Central Leaside, North East Enfield and upgrades to the West Anglia rail line in the Lee Valley;

Improving public transport interchanges to facilitate better wayfinding, integration between modes including provision for taxis, water based transportation and cycle parking and storage, particularly at Enfield Town, Edmonton Green, Ponders End, New Southgate and Southgate Circus;

Working with Transport for London to enhance bus provision to offer a realistic alternative to the private car, focusing on areas with poor public transport accessibility, particularly in the Upper Lee Valley and orbital bus services. This will include new and diverted services, improving bus stop accessibility, reducing walk access time and improving safety;

Ensuring new developments demonstrate that existing or proposed public transport levels can accommodate development proposals, and where necessary, identify opportunities for public transport improvements; and

Promoting and providing accessible transport options for persons with reduced mobility including community transport vehicles, Dial-a-ride and Taxicard.

.”

Policy T7 states that:

“The District Council will seek to promote the objectives of the national cycling strategy by: 1) Encouraging the development of a quality cycle route network primarily in the main larger centres of Selby, Tadcaster and Sherburn in Elmet as well as having regard to the appropriateness of promoting safe routes to outlying villages and smaller hamlets. 2) Having particular regard to the creation/improvement of safe cycle routes to schools. 3) Ensuring that developers make fair and reasonable contributions towards the cost of providing cycle parking facilities and cycle routes on new developments which link to nearby existing or proposed routes or facilities. 4) Ensuring that new development proposals do not sever points used by cyclists/pedestrians unless satisfactory alternative routes are made available. 5) In assessing all development proposals, special regard will be given to the opportunity of improving/creating cycle routes and providing cycle parking.”

Policy T8 states that:

“Development which would have a significant adverse effect on any route in the district’s public rights of way network will not be permitted unless the following can be achieved: 1) Satisfactory and attractive alternative routes are provided; and 2) Adequate sign posting is provided; and 3) As far as is reasonable, the new route can make provision for walkers, horse riders, cyclists and people with sight or mobility problems; and 4) In the case of new reasonable development, such development must replace extinguished rights of way with attractive highway infrastructure which is equally capable of accommodating appropriate users of the original right of way. The District Council will work with the highway authority and other interested parties to extend and improve the public rights of way network for amenity as well as highway reasons.”

Policy VP1 states that:

“The District Council will support the provision of parking spaces/facilities in new developments up to the maximum car parking standards as set out in Appendix 4.”

Policy VP2 states that:

“Proposals which would result in the loss of off-street car parking spaces as defined on the proposals map will not be permitted unless alternative provision, for at least the same number of spaces, can be made at an appropriate location, or it can be

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demonstrated that there is no longer a requirement for the existing level of car parking.”

Policy VP4 states that:

“Proposals for development that necessitate the provision of onsite car parking will be required to provide car parking spaces for motorists with disabilities on the following basis: 1) For shopping, recreational, health and educational development and places open to the general public, where up to 200 car parking spaces are required, 6% capacity with a minimum of 3 spaces, should be set aside. 2) For employment development, where up to 200 combined car parking spaces are required for employees and visitors, 5% of capacity with a minimum of 2 spaces, should be set aside. For schemes requiring 200 or more car parking spaces, 4% of capacity, plus 4 spaces, should be set aside.”

3 Forecast Trip Generation and Transport Impacts

3.1 Introduction

This chapter considers the vehicle trip generation of the proposed change of use application so that the transport impact of the development on the roads and at the site can be considered.

The proposed office will be 50sqm ground floor only. There will be no additional floors. It will be occupied by a maximum of two staff and there will be no visitors or public access. The trip generation for staff to this office is assessed below.

The storage area adjoined will be used to store material and finished goods for a factory (also in Enfield).

The storage area adjoined will be accessed once per day only and this will be controlled. It is predicted that a 7.5t panel van will serve the storage area (once per day). No further assessment of trip generation has been made to the storage facility as it is known that only one vehicle will access it per day.

The access to the office and storage area is gated and will be controlled, therefore it will be known how many vehicles arrive and leave per day. Access will be restricted as per above.

A Site Plan is provided in Appendix A.

3.2 Forecast Office Trip Generation

The national TRICS trip generation database version 7.10.3 was used to select suitable/similar office sites, based on location, sustainable accessibility and parking numbers. The TRICS database provides vehicle trip rates per 100sqm of the gross floor area (GFA) and forecasts/predicts the total number of vehicle trips to the proposed office.

The vehicle trips are shown in Table 5.1 for the office (50sqm GFA) in the peak hours of 8-9 am and 5-6 pm, which are the highest (worst case) peak hours for the AM and PM peaks. A summary of vehicle trips is also provided for the whole day. The hourly trip generation data can be found in Appendix B.

Table 5.1: Forecast Vehicle and Person Trip Generation

Based on 50SQM	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Total Vehicles Trip Rate	2.209	0.273	2.482	0.259	1.836	2.105
No. of Vehicles (in total incl. car, van, servicing vehicle)	1	0	1	0	1	1
Car Trip Rate	2.052	0.164	2.216	0.178	1.237	1.405
No. of cars	1	0	1	0	1	1
LGV Trip Rate	0.082	0.041	0.123	0	0.014	0.014
No. of LGVs	0	0	0	0	0	0
OGV Trip Rate	0	0	0	0	0	0
No. of OGVs	0	0	0	0	0	0
Cycle Trip Rate	0.177	0	0.177	0	0.15	0.15

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No. of cyclists	0	0	0	0	0	0
Pedestrian Trip Rate	0.437	0.014	0.451	0.096	0.328	0.424
No. of Pedestrians	0	0	0	0	0	0
Public Transport Rate	0.224	0	0.225	0.014	0.41	0.424
No. of Public Transport Users	0	0	0	0	0	0
Daily Vehicles Total	4			4		

Based on the TRICS results, the office anticipates generating 1 vehicle trip during the AM peak and 1 vehicle trip in the PM peak. Throughout the day (7 a.m.–7 p.m.), it is projected that four vehicles will arrive. According to the forecasted trip generation, the maximum number of cars parked on site simultaneously will not exceed four.

According to the Client/Applicant, however, all staff will arrive to work by public transport. As there are only two staff expected on site at the office, the Applicant knows these employees will arrive by public transport. The above vehicle trip generation is therefore a worst case.

As per Section 3.1 above, the storage area adjoined will be accessed once per day by a 7.5t panel van only and this will be controlled. No further assessment of trip generation has been made to the storage facility as it is known that only one vehicle will access it per day.

Overall, due to the negligible number of predicted vehicular trips, no adverse impact on the existing road network or the site is anticipated.

4 Forecast Vehicle Swept Path, Car Parking and Cycle Parking Layout

4.1 Deliveries and Servicing

The site benefits from an existing point of vehicular access which is shared by the residential development located to the front of the site and the remaining yard and outbuilding to the rear.

The access has good visibility to the north and south along Green Lanes/A105.

There is ample space within the site for employee and any potential customer/visitor parking, although this is not anticipated for the latter.

Delivery vehicles and servicing vehicles can serve the site car park, as shown on the vehicle swept path drawings in Appendix C. The largest vehicle expected on site is a 7.5tonne panel van, which can turn on site. This will serve the storage facility.

As assessed in Chapter 3, vehicular trips will be minimal.

4.2 Car Parking

Car parking for this development is provided in line with the London Plan, Table 6.2 Car Parking Standards.

It states that parking for commercial vehicles (delivery vehicles) should be provided at a maximum standard of one space per 500sqm of gross B2 or B8 floorspace.

An appropriate proportion of car parking spaces in commercial developments should be marked out for motor-cycle use.

Standards for B2 and B8 employment uses should have regard to the B1 standards although a degree of flexibility maybe required to reflect different trip-generating characteristics.

The maximum parking standard for B1 Office use in outer London is one space per 100-600 sqm. Therefore, for this office, one space should be provided. It is proposed that at least one car parking space will be provided for the office and storage unit, as per the existing parking spaces on site.

4.3 Cycle Parking

Cycle parking is being provided at the development in line with the B1 office cycle parking standards in the London Plan. Cycle parking provided for staff should be suitable for long stay parking, particularly in terms of location, security and protection from the elements.

For B1 offices in outer London, a minimum of one space needs to be provided per 150sqm for staff and one space per 1000sqm for visitors. Up to two cycle parking spaces will be provided in an undercover cycle store adjacent to the building.

The cycle store/room will contain up to two bicycles.

5 Conclusion

The proposals will utilise a sustainably located brownfield site and will support the growth, expansion, and adaptation of a local business.

The proposed office space will bring a vacant and underutilised building back into meaningful use.

The site benefits from an existing point of vehicular access which is shared by the residential development located to the front of the site and the remaining yard and outbuilding to the rear.

The access has good visibility to the north and south along Green Lanes/A105.

There is ample space within the site for employee and any potential customer/visitor parking, although this is not anticipated.

Delivery vehicles and servicing vehicles can serve the site car park. The largest vehicle expected on site is a 7.5tonne panel van, which can turn on site. This will serve the storage facility.

Vehicular trips will be minimal.

Paragraph 111 of the NPPF states that: 'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'. This cannot be said to be the case in this instance.

Given the scale of the use, the proposed scheme is not considered to have an adverse impact on the local road network and, therefore, complies with the requirements of Policy DMD 24 which relates to new employment development and small businesses.

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Appendix A : Site Plan

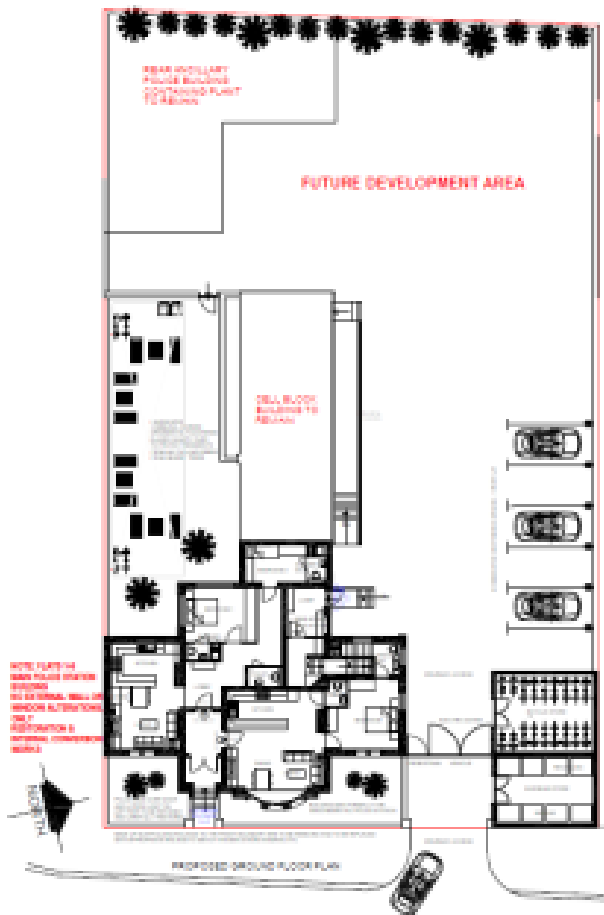


Figure 2 – Consent Plan for 17/03314/FUL

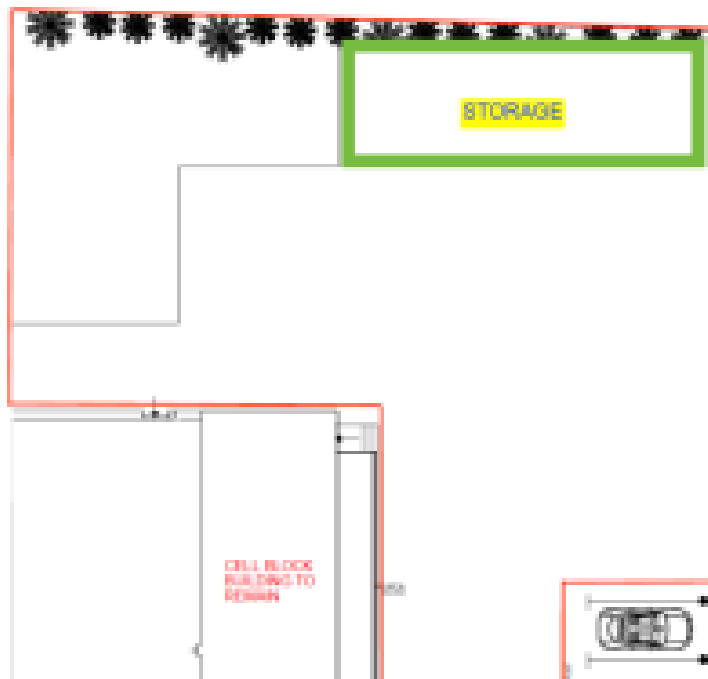


Figure 3 – Proposed storage area

Appendix B : Trip Generation

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BT BRENT	1 days
02	SOUTH EAST	
	BH BRIGHTON & HOVE	1 days
	ES EAST SUSSEX	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	DY DERBY	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	CU CUMBERLAND	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	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: Gross floor area
Actual Range: 170 to 925 (units: sqm)
Range Selected by User: 170 to 2000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 23/11/22

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	3 days
Tuesday	3 days
Wednesday	4 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	8
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	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	2
Commercial Zone	2
Development Zone	1
Residential Zone	5
Built-Up Zone	2
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	14 days - Selected
Servicing vehicles Excluded	5 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	13 days
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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

Secondary Filtering selection (Cont.):

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	3 days
25,001 to 50,000	5 days
50,001 to 100,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	3 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days
500,001 or More	1 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	9 days
1.1 to 1.5	4 days

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

Travel Plan:

Yes	2 days
No	11 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:

No PTAL Present	12 days
6a Excellent	1 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	BH-02-A-05 ROMAN ROAD HOVE	OFFICES		BRIGHTON & HOVE
	Edge of Town Centre Residential Zone Total Gross floor area:		280 sqm	
	<i>Survey date: WEDNESDAY</i>		<i>04/07/18</i>	<i>Survey Type: MANUAL</i>
2	BT-02-A-03 EMPIRE WAY WEMBLEY	OFFICES		BRENT
	Suburban Area (PPS6 Out of Centre) Development Zone Total Gross floor area:		920 sqm	
	<i>Survey date: WEDNESDAY</i>		<i>03/06/15</i>	<i>Survey Type: MANUAL</i>
3	CU-02-A-02 PORT ROAD CARLISLE	OFFICE		CUMBERLAND
	Edge of Town Centre Industrial Zone Total Gross floor area:		925 sqm	
	<i>Survey date: FRIDAY</i>		<i>24/06/16</i>	<i>Survey Type: MANUAL</i>
4	CV-02-A-02 GRANARD STREET BALLYJAMESDUFF	SOLICITORS		CAVAN
	Edge of Town Centre Residential Zone Total Gross floor area:		170 sqm	
	<i>Survey date: TUESDAY</i>		<i>25/10/22</i>	<i>Survey Type: MANUAL</i>
5	DY-02-A-02 PRIME PARKWAY DERBY	REAL ESTATE DEVELOPERS		DERBY
	Edge of Town Centre No Sub Category Total Gross floor area:		594 sqm	
	<i>Survey date: THURSDAY</i>		<i>21/10/21</i>	<i>Survey Type: MANUAL</i>
6	ES-02-A-11 THE SIDINGS HASTINGS ORE VALLEY	HOUSING COMPANY		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:		186 sqm	
	<i>Survey date: TUESDAY</i>		<i>17/11/15</i>	<i>Survey Type: MANUAL</i>
7	GM-02-A-10 CHORLEY NEW ROAD BOLTON HEATON	ACCOUNTANTS		GREATER MANCHESTER
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:		500 sqm	
	<i>Survey date: MONDAY</i>		<i>19/04/21</i>	<i>Survey Type: MANUAL</i>
8	NF-02-A-02 NORTH QUAY GREAT YARMOUTH	FINANCIAL PLANNERS		NORFOLK
	Edge of Town Centre Commercial Zone Total Gross floor area:		894 sqm	
	<i>Survey date: MONDAY</i>		<i>11/09/17</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	NF-02-A-04 WHITING ROAD NORWICH	BUILDING CONSULTANT	NORFOLK
	Edge of Town Commercial Zone Total Gross floor area: 500 sqm <i>Survey date: WEDNESDAY 13/11/19</i>		<i>Survey Type: MANUAL</i>
10	NY-02-A-01 NORTH PARK ROAD HARROGATE	SOLICITORS	NORTH YORKSHIRE
	Edge of Town Centre Built-Up Zone Total Gross floor area: 178 sqm <i>Survey date: THURSDAY 04/10/18</i>		<i>Survey Type: MANUAL</i>
11	WK-02-A-02 WHITEHALL ROAD RUGBY	OFFICES	WARWICKSHIRE
	Edge of Town Centre Residential Zone Total Gross floor area: 540 sqm <i>Survey date: MONDAY 14/11/22</i>		<i>Survey Type: MANUAL</i>
12	WK-02-A-03 BUDBROOKE ROAD WARWICK	ENGINEERING CONSULTANTS	WARWICKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 796 sqm <i>Survey date: WEDNESDAY 23/11/22</i>		<i>Survey Type: MANUAL</i>
13	WS-02-A-05 NORTH STREET WORTHING	SOCIAL HOUSING COMPANY	WEST SUSSEX
	Edge of Town Centre Built-Up Zone Total Gross floor area: 830 sqm <i>Survey date: TUESDAY 17/05/22</i>		<i>Survey Type: MANUAL</i>

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
AK-02-A-01	unusable
BN-02-A-01	unusable
CP-02-A-02	unusable
NY-02-A-03	unusable

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): 1.81

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.070	12	595	0.000	12	595	0.070
07:30 - 08:00	12	595	0.701	12	595	0.014	12	595	0.715
08:00 - 08:30	13	563	1.135	13	563	0.109	13	563	1.244
08:30 - 09:00	13	563	1.094	13	563	0.164	13	563	1.258
09:00 - 09:30	13	563	0.848	13	563	0.410	13	563	1.258
09:30 - 10:00	13	563	0.328	13	563	0.205	13	563	0.533
10:00 - 10:30	13	563	0.260	13	563	0.164	13	563	0.424
10:30 - 11:00	13	563	0.137	13	563	0.219	13	563	0.356
11:00 - 11:30	13	563	0.082	13	563	0.164	13	563	0.246
11:30 - 12:00	13	563	0.232	13	563	0.232	13	563	0.464
12:00 - 12:30	13	563	0.191	13	563	0.465	13	563	0.656
12:30 - 13:00	13	563	0.287	13	563	0.383	13	563	0.670
13:00 - 13:30	13	563	0.287	13	563	0.342	13	563	0.629
13:30 - 14:00	13	563	0.410	13	563	0.219	13	563	0.629
14:00 - 14:30	13	563	0.232	13	563	0.232	13	563	0.464
14:30 - 15:00	13	563	0.164	13	563	0.219	13	563	0.383
15:00 - 15:30	13	563	0.123	13	563	0.260	13	563	0.383
15:30 - 16:00	13	563	0.082	13	563	0.205	13	563	0.287
16:00 - 16:30	13	563	0.123	13	563	0.328	13	563	0.451
16:30 - 17:00	13	563	0.123	13	563	0.574	13	563	0.697
17:00 - 17:30	13	563	0.150	13	563	1.149	13	563	1.299
17:30 - 18:00	13	563	0.109	13	563	0.697	13	563	0.806
18:00 - 18:30	12	595	0.084	12	595	0.336	12	595	0.420
18:30 - 19:00	12	595	0.000	12	595	0.098	12	595	0.098
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			7.252			7.188			14.440

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

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

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Parameter summary

Trip rate parameter range selected:	170 - 925 (units: sqm)
Survey date range:	01/01/15 - 23/11/22
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	4

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.000	12	595	0.000	12	595	0.000
07:30 - 08:00	12	595	0.000	12	595	0.000	12	595	0.000
08:00 - 08:30	13	563	0.000	13	563	0.000	13	563	0.000
08:30 - 09:00	13	563	0.000	13	563	0.000	13	563	0.000
09:00 - 09:30	13	563	0.000	13	563	0.000	13	563	0.000
09:30 - 10:00	13	563	0.000	13	563	0.000	13	563	0.000
10:00 - 10:30	13	563	0.000	13	563	0.000	13	563	0.000
10:30 - 11:00	13	563	0.000	13	563	0.000	13	563	0.000
11:00 - 11:30	13	563	0.000	13	563	0.000	13	563	0.000
11:30 - 12:00	13	563	0.014	13	563	0.014	13	563	0.028
12:00 - 12:30	13	563	0.014	13	563	0.014	13	563	0.028
12:30 - 13:00	13	563	0.014	13	563	0.014	13	563	0.028
13:00 - 13:30	13	563	0.000	13	563	0.000	13	563	0.000
13:30 - 14:00	13	563	0.000	13	563	0.000	13	563	0.000
14:00 - 14:30	13	563	0.000	13	563	0.000	13	563	0.000
14:30 - 15:00	13	563	0.000	13	563	0.000	13	563	0.000
15:00 - 15:30	13	563	0.000	13	563	0.000	13	563	0.000
15:30 - 16:00	13	563	0.000	13	563	0.000	13	563	0.000
16:00 - 16:30	13	563	0.000	13	563	0.000	13	563	0.000
16:30 - 17:00	13	563	0.000	13	563	0.000	13	563	0.000
17:00 - 17:30	13	563	0.000	13	563	0.000	13	563	0.000
17:30 - 18:00	13	563	0.000	13	563	0.000	13	563	0.000
18:00 - 18:30	12	595	0.000	12	595	0.000	12	595	0.000
18:30 - 19:00	12	595	0.000	12	595	0.000	12	595	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.042			0.042			0.084

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.000	12	595	0.000	12	595	0.000
07:30 - 08:00	12	595	0.028	12	595	0.000	12	595	0.028
08:00 - 08:30	13	563	0.068	13	563	0.000	13	563	0.068
08:30 - 09:00	13	563	0.109	13	563	0.000	13	563	0.109
09:00 - 09:30	13	563	0.014	13	563	0.000	13	563	0.014
09:30 - 10:00	13	563	0.014	13	563	0.000	13	563	0.014
10:00 - 10:30	13	563	0.000	13	563	0.000	13	563	0.000
10:30 - 11:00	13	563	0.014	13	563	0.014	13	563	0.028
11:00 - 11:30	13	563	0.014	13	563	0.000	13	563	0.014
11:30 - 12:00	13	563	0.000	13	563	0.014	13	563	0.014
12:00 - 12:30	13	563	0.000	13	563	0.000	13	563	0.000
12:30 - 13:00	13	563	0.000	13	563	0.027	13	563	0.027
13:00 - 13:30	13	563	0.027	13	563	0.041	13	563	0.068
13:30 - 14:00	13	563	0.027	13	563	0.000	13	563	0.027
14:00 - 14:30	13	563	0.027	13	563	0.000	13	563	0.027
14:30 - 15:00	13	563	0.014	13	563	0.041	13	563	0.055
15:00 - 15:30	13	563	0.000	13	563	0.027	13	563	0.027
15:30 - 16:00	13	563	0.000	13	563	0.014	13	563	0.014
16:00 - 16:30	13	563	0.000	13	563	0.000	13	563	0.000
16:30 - 17:00	13	563	0.000	13	563	0.014	13	563	0.014
17:00 - 17:30	13	563	0.000	13	563	0.082	13	563	0.082
17:30 - 18:00	13	563	0.000	13	563	0.068	13	563	0.068
18:00 - 18:30	12	595	0.000	12	595	0.000	12	595	0.000
18:30 - 19:00	12	595	0.000	12	595	0.000	12	595	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.356			0.342			0.698

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.014	12	595	0.000	12	595	0.014
07:30 - 08:00	12	595	0.000	12	595	0.000	12	595	0.000
08:00 - 08:30	13	563	0.109	13	563	0.000	13	563	0.109
08:30 - 09:00	13	563	0.328	13	563	0.014	13	563	0.342
09:00 - 09:30	13	563	0.205	13	563	0.082	13	563	0.287
09:30 - 10:00	13	563	0.109	13	563	0.109	13	563	0.218
10:00 - 10:30	13	563	0.205	13	563	0.219	13	563	0.424
10:30 - 11:00	13	563	0.109	13	563	0.287	13	563	0.396
11:00 - 11:30	13	563	0.273	13	563	0.082	13	563	0.355
11:30 - 12:00	13	563	0.137	13	563	0.164	13	563	0.301
12:00 - 12:30	13	563	0.232	13	563	0.451	13	563	0.683
12:30 - 13:00	13	563	0.356	13	563	0.424	13	563	0.780
13:00 - 13:30	13	563	0.328	13	563	0.451	13	563	0.779
13:30 - 14:00	13	563	0.424	13	563	0.191	13	563	0.615
14:00 - 14:30	13	563	0.191	13	563	0.068	13	563	0.259
14:30 - 15:00	13	563	0.055	13	563	0.137	13	563	0.192
15:00 - 15:30	13	563	0.068	13	563	0.068	13	563	0.136
15:30 - 16:00	13	563	0.164	13	563	0.232	13	563	0.396
16:00 - 16:30	13	563	0.137	13	563	0.191	13	563	0.328
16:30 - 17:00	13	563	0.096	13	563	0.246	13	563	0.342
17:00 - 17:30	13	563	0.082	13	563	0.178	13	563	0.260
17:30 - 18:00	13	563	0.014	13	563	0.150	13	563	0.164
18:00 - 18:30	12	595	0.014	12	595	0.028	12	595	0.042
18:30 - 19:00	12	595	0.000	12	595	0.014	12	595	0.014
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.650			3.786			7.436

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.014	12	595	0.000	12	595	0.014
07:30 - 08:00	12	595	0.014	12	595	0.000	12	595	0.014
08:00 - 08:30	13	563	0.041	13	563	0.000	13	563	0.041
08:30 - 09:00	13	563	0.205	13	563	0.000	13	563	0.205
09:00 - 09:30	13	563	0.137	13	563	0.000	13	563	0.137
09:30 - 10:00	13	563	0.068	13	563	0.041	13	563	0.109
10:00 - 10:30	13	563	0.041	13	563	0.000	13	563	0.041
10:30 - 11:00	13	563	0.055	13	563	0.000	13	563	0.055
11:00 - 11:30	13	563	0.000	13	563	0.000	13	563	0.000
11:30 - 12:00	13	563	0.055	13	563	0.014	13	563	0.069
12:00 - 12:30	13	563	0.096	13	563	0.068	13	563	0.164
12:30 - 13:00	13	563	0.027	13	563	0.082	13	563	0.109
13:00 - 13:30	13	563	0.082	13	563	0.041	13	563	0.123
13:30 - 14:00	13	563	0.041	13	563	0.014	13	563	0.055
14:00 - 14:30	13	563	0.000	13	563	0.041	13	563	0.041
14:30 - 15:00	13	563	0.055	13	563	0.014	13	563	0.069
15:00 - 15:30	13	563	0.000	13	563	0.014	13	563	0.014
15:30 - 16:00	13	563	0.000	13	563	0.027	13	563	0.027
16:00 - 16:30	13	563	0.000	13	563	0.014	13	563	0.014
16:30 - 17:00	13	563	0.000	13	563	0.014	13	563	0.014
17:00 - 17:30	13	563	0.014	13	563	0.232	13	563	0.246
17:30 - 18:00	13	563	0.000	13	563	0.178	13	563	0.178
18:00 - 18:30	12	595	0.000	12	595	0.084	12	595	0.084
18:30 - 19:00	12	595	0.000	12	595	0.014	12	595	0.014
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.945			0.892			1.837

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.070	12	595	0.000	12	595	0.070
07:30 - 08:00	12	595	0.645	12	595	0.000	12	595	0.645
08:00 - 08:30	13	563	1.026	13	563	0.027	13	563	1.053
08:30 - 09:00	13	563	1.026	13	563	0.137	13	563	1.163
09:00 - 09:30	13	563	0.766	13	563	0.246	13	563	1.012
09:30 - 10:00	13	563	0.273	13	563	0.164	13	563	0.437
10:00 - 10:30	13	563	0.191	13	563	0.096	13	563	0.287
10:30 - 11:00	13	563	0.137	13	563	0.191	13	563	0.328
11:00 - 11:30	13	563	0.041	13	563	0.150	13	563	0.191
11:30 - 12:00	13	563	0.150	13	563	0.164	13	563	0.314
12:00 - 12:30	13	563	0.150	13	563	0.383	13	563	0.533
12:30 - 13:00	13	563	0.246	13	563	0.356	13	563	0.602
13:00 - 13:30	13	563	0.260	13	563	0.315	13	563	0.575
13:30 - 14:00	13	563	0.369	13	563	0.178	13	563	0.547
14:00 - 14:30	13	563	0.219	13	563	0.205	13	563	0.424
14:30 - 15:00	13	563	0.109	13	563	0.178	13	563	0.287
15:00 - 15:30	13	563	0.096	13	563	0.219	13	563	0.315
15:30 - 16:00	13	563	0.041	13	563	0.164	13	563	0.205
16:00 - 16:30	13	563	0.082	13	563	0.287	13	563	0.369
16:30 - 17:00	13	563	0.096	13	563	0.547	13	563	0.643
17:00 - 17:30	13	563	0.082	13	563	1.067	13	563	1.149
17:30 - 18:00	13	563	0.096	13	563	0.670	13	563	0.766
18:00 - 18:30	12	595	0.056	12	595	0.308	12	595	0.364
18:30 - 19:00	12	595	0.000	12	595	0.098	12	595	0.098
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.227			6.150			12.377

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

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

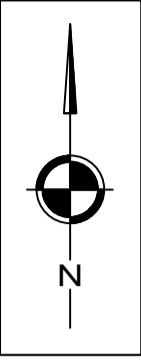
TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL LGVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	595	0.000	12	595	0.000	12	595	0.000
07:30 - 08:00	12	595	0.042	12	595	0.000	12	595	0.042
08:00 - 08:30	13	563	0.055	13	563	0.041	13	563	0.096
08:30 - 09:00	13	563	0.027	13	563	0.000	13	563	0.027
09:00 - 09:30	13	563	0.041	13	563	0.137	13	563	0.178
09:30 - 10:00	13	563	0.055	13	563	0.014	13	563	0.069
10:00 - 10:30	13	563	0.055	13	563	0.068	13	563	0.123
10:30 - 11:00	13	563	0.000	13	563	0.027	13	563	0.027
11:00 - 11:30	13	563	0.027	13	563	0.000	13	563	0.027
11:30 - 12:00	13	563	0.068	13	563	0.055	13	563	0.123
12:00 - 12:30	13	563	0.027	13	563	0.068	13	563	0.095
12:30 - 13:00	13	563	0.014	13	563	0.000	13	563	0.014
13:00 - 13:30	13	563	0.014	13	563	0.014	13	563	0.028
13:30 - 14:00	13	563	0.014	13	563	0.014	13	563	0.028
14:00 - 14:30	13	563	0.014	13	563	0.027	13	563	0.041
14:30 - 15:00	13	563	0.055	13	563	0.041	13	563	0.096
15:00 - 15:30	13	563	0.027	13	563	0.041	13	563	0.068
15:30 - 16:00	13	563	0.041	13	563	0.027	13	563	0.068
16:00 - 16:30	13	563	0.027	13	563	0.027	13	563	0.054
16:30 - 17:00	13	563	0.027	13	563	0.027	13	563	0.054
17:00 - 17:30	13	563	0.000	13	563	0.014	13	563	0.014
17:30 - 18:00	13	563	0.000	13	563	0.000	13	563	0.000
18:00 - 18:30	12	595	0.014	12	595	0.014	12	595	0.028
18:30 - 19:00	12	595	0.000	12	595	0.000	12	595	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.644			0.656			1.300

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

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

Appendix C : Vehicle Swept Paths



- NOTES**
- 1) ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE
 - 2) ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS AND LOCAL AUTHORITY GUIDANCE
 - 3) UNDERGROUND SERVICES ARE PRESENT IN THE AREA. CONTRACTOR IS TO CONFIRM THE PRECISE LINE AND DEPTH OF ANY SERVICES PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS
 - 4) IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT AND MAKE ALL THE NECESSARY ARRANGEMENTS WITH THE STATUTORY UNDERTAKERS FOR THE IDENTIFICATION OF EXISTING SERVICES AND AREAS OF DANGER WHEN EXCAVATING
 - 5) THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIALIST DETAILS AND SPECIFICATIONS. CONSTRUCTION DETAILS FOR THE USED MATERIALS CAN BE FOUND ON THE RELEVANT DRAWINGS.

KEY

7.5t Panel Van	7.210m
Overall Length	2.192m
Overall Width	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

REVISIONS

REV	DESCRIPTION	DATE	BY
-	FIRST ISSUE	22/01/24	LS

AVAL CONSULTING GROUP.
 CIVIL, ENVIRONMENT & STRUCTURAL ENGINEERS
 Transportation Planning : Environmental Consultants
 www.avalgroup.co.uk, Email: contact@avalgroup.co.uk
 Company Number: 11952039

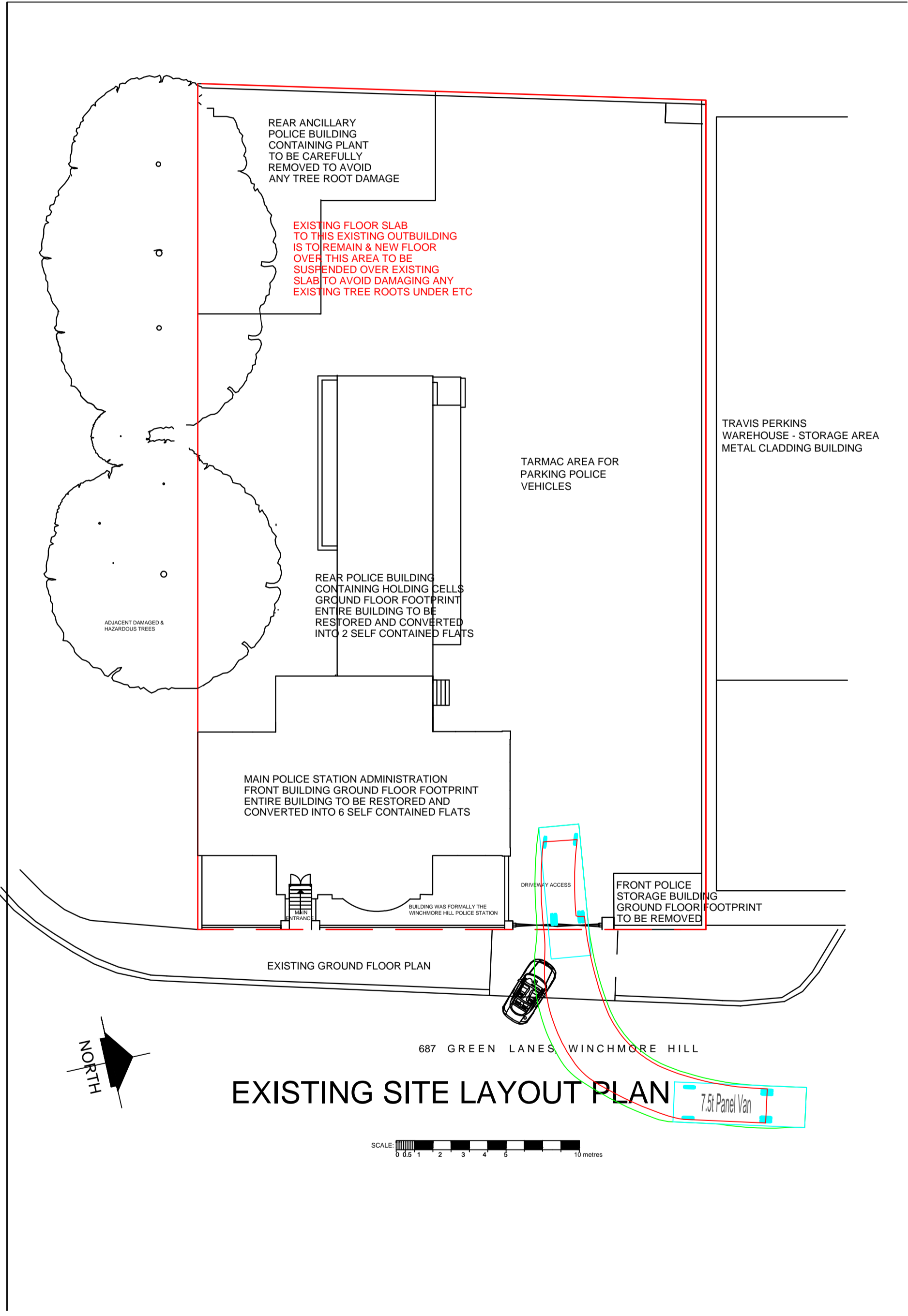
Client Name:
PARAGON GLASS SERVICES LTD

Project Title:
LAND REAR OF 687 GREEN LANES, LONDON, N21 3RX

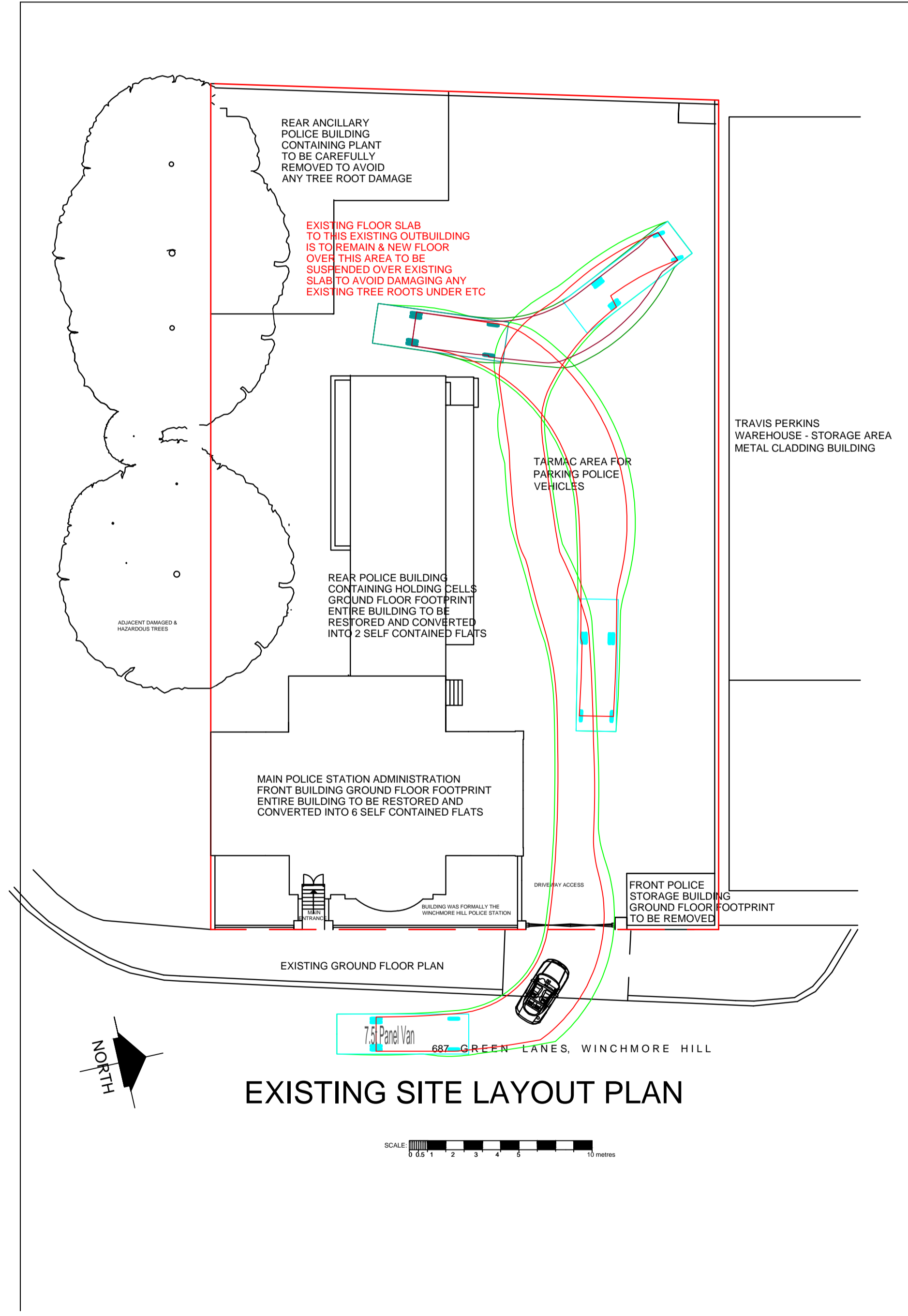
Drawing Title:
SWEPT PATH ANALYSIS - 7.5 TONNE PANEL VAN

Date:	22.01.2024	Drawn By:	LS
Scale:	1:200 @ A1 1:400 @ A3	Checked:	WR
Status:	PLANNING	Approved:	AC

Drawing No. **AVAL/93056/0000/001** Rev. **A**



Scale 1:200 @ A1 - 1:400 @ A3
 4m 0 4m 8m 12m 16m 20m



Scale 1:200 @ A1 - 1:400 @ A3
 4m 0 4m 8m 12m 16m 20m