Dudley House, The Grove, Isleworth, TW7

Transport Statement

PCD-1193-EN-RP-02

Revision 02

June 2017

Contents

1 Introduction

1.1 Transport Dynamics are retained by STS Group Investments to provide traffic and transport advice in relation to their proposal to redevelop the former 40 bedroom Dudley House Private Residential Care Home into 17 residential units, plus associated car parking.

1.2 The site, which is situated approximately 450 metres from Isleworth National Rail Station, lies along The Grove and within proximity of London Road.

1.3 This Transport Statement has been prepared to support the amendment of Condition 13 of planning permission P/2017/0496. P/2017/0496 refers to an earlier planning consent for Dudley House to provide 17 residential units, plus associated car parking. Condition 13 states;

"The development shall not be occupied until arrangements have been agreed in writing with the local planning authority and put in place to ensure that, with the exception of disabled persons, no resident of the development shall obtain a resident's parking permit within any controlled parking zone which may be in force in the area at any time".

1.4 This Transport Statement contains refined data from a new parking survey, taking account of changes to on-street parking provision in the immediate area. Other than changes to the internal cycle parking layout, there are no further changes to the development proposal and 17 residential units, plus associated car parking is proposed as before.

1.5 In preparing this report, we have liaised with the project team and developed a scheme, which, we believe, satisfactorily addresses the original and new issues raised by LB Hounslow.

1.6 This report concludes that the proposed development is reasonable and appropriate in traffic and transport terms, and that the site location is well suited in transport terms to accommodate the proposed change in land use. Further where reliance is placed on on-street parking spaces, sufficient capacity exists to accommodate vehicles on-street.

1.7 The remainder of this report is set out as follows:

Section 2 – discusses the existing use of the site and the local highway network

Section 3 – identifies the relevant transport policy

Section 4 – sets out the development proposal

Section 5 – considers the effects of the proposed development in traffic and transport terms

Section 6 – summarises and concludes

2 Existing Situation & Site Accessibility

2.1 The application site is situated along The Grove in Isleworth, Hounslow.

2.2 The site falls within the boundary of Osterley and Spring Grove ward, within the London Borough of Hounslow (LB Hounslow). The surrounding area is urban in character with good public transport options and access to the strategic highway network. The A4 Great West Road is strategic route lying immediately to the north of the site providing access to West and Central London to the East and Heathrow Airport and the M25 and M3 motorways to the West. The A315 London Road lies to the south of the site and provides access to both Brentford and Hounslow Town Centre High Streets.

2.3 The application site, known as Dudley House Private Residential Care Home, consists of a large three storey property comprising 40 bedrooms for residential care, with associated parking spaces.

Local Highway Network

The Grove

2.4 The Grove is a predominately residential road, which is subject to a 30mph speed limit.

2.5 Dudley House immediately fronts The Grove to the south. The Grove forms a crescent off the A315 London Road.

2.6 It carries two-way traffic and has generous footways on either side of the road.

London Road (A315)

2.7 London Road is oriented in a broadly west – east direction. It becomes known as 'High Street' in Kew to the east and Hanworth Road near High Street, Hounslow in the west. It is a single carriageway road benefitting from good footways and street lighting on both sides of the carriageway. London Road facilitates access to both Brentford and Hounslow town centres.

On-Street Car Parking Opportunities

2.8 The application site know sites within a recently extended, but established Controlled Parking Zone (CPZ), known as Spring Grove.

2.9 The Grove itself consists of Residents Parking Permit Bays. Spring Grove Controlled Parking Zone is operation Monday to Friday from 09:30 – 17:30. Streets to the east such as Ravenswood Gardens, Naseby Close and Grove Road are all outside of the Controlled Parking Zone.

Sustainable Transport Modes

Walking Accessibility

2.10 The site is situated in close proximity to a variety of day-to-day services and facilities that can be easily accessed on foot as set out below

Table 2.1: Local Services and Facilities

Description	Approx. Distance from Site for Walking/Cycling	Approx. Distance from Site by car	Local Service
Convenience Store	300m (0.2 miles)	300m (0.2 miles)	Sainsbury's Local, TW7 4DA
	300m (0.2 miles)	300m (0.2 miles)	Nisa Local, TW7 4DE
Supermarket	2.0km (1.2 miles)	2.1km (1.3 miles)	Asda Hounslow Superstore, TW3 1JT
	2.8km (1.7 miles)	2.8km (1.8 miles)	Morrisons, TW8 0JG
Bank	350m (0.2 miles)	350m (0.2 miles)	NatWest, TW7 4DD
Post Office	450m (0.3 miles)	450m (0.3 miles)	Isleworth Branch Post Office, TW7 4BX
Public House	400m (0.3 miles)	400m (0.3 miles)	The Red Lion, TW7 6QJ
Dentist	350m (0.2 miles)	350m (0.2 miles)	Highest Mountain, TW7 4DA
Doctors/GP	650m (0.4 miles)	650m (0.4 miles)	Spring Grove Medical Practice, TW7 4HQ
Primary School	1100m (0.7 miles)	1100m (0.7 miles)	Spring Grove Primary School, TW7 4HB
Secondary School	750m (0.5 miles)	750m (0.5 miles)	Isleworth & Syon School, TW7 5LJ
Further Education	450m (0.3 miles)	450m (0.3 miles)	West Thames College, TW7 4HS

2.11 **Table 2.1** identifies that the site is situated in close proximity to a vast range of day-to-day services and facilities including convenience stores, primary schools, supermarkets and medical facilities.

2.12 With regards pedestrian facilities both The Grove and London Road have comprehensive and good footway provision along both sides of each carriageway facilitating convenient and safe pedestrian movement in the local area.

Cycling

2.13 With regard to cycling accessibility while there are no official cycle routes in the immediate area the Great West Road provides a cycle route that is not part of the National Cycle Network. However road junctions in the vicinity of the site do host Advanced Stop Lines (ASTs).

Public Transport

TfL Bus Services

2.14 The nearest bus stop to the site are known as the West Thames College stops (Stop G and Stop L) and are located on London Road approximately 450m south of the site. Six bus routes stop at the site including routes 117, 235, 237, E8, H37 and N9. Between these routes a total of 34 buses operate per hour to destinations across west London and Greater London.

National Rail Services

2.15 The nearest National Rail station to the application site is Isleworth. Isleworth is a local station located in Travelcard Zone 4 and situated on the Hounslow Loop Line. South West Trains operate 8 services an hour from Isleworth. Rail passengers can reach London Waterloo, Hounslow, Richmond and Weybridge from Isleworth. TfL bus routes 110, 235, 237, 635 and N9 serve the station.

London Underground Services

2.16 Osterley London Underground station is equally accessible on foot from the application site. Osterley is served by the Heathrow branch of the Piccadilly line providing access to all terminals of Heathrow Airport and Central London. The station is located in Travelcard Zone 4 and is served by TfL bus route H91.

Public Transport Accessibility Level Rating

2.17 PTALS can give a quick and simple guide to the accessibility of a site by public transport, they need to be treated with some caution since the methodology used to determine the accessibility index does not take into account several major factors.

2.18 For example, the methodology does not take account of the catchment population serviced by each but route passing the site. In fact it only takes into account the walk distance from the site to the bus stops and the frequency of services on each of the routes servicing the stops. Furthermore, if a bus route is greater than 640 metres or 8 minutes' walk from the site it is ineligible for inclusion in the accessibility index calculation.

2.19 It is acknowledged that according to the PTAL methodology the site is not highly accessible by public transport, with the site scoring a Level '3' representing 'satisfactory' accessibility to public transport. However, since the identified bus routes cover a wide catchment population, it is our view that the potential for trips to the site by bus, as well as National Rail and London Underground services, is good irrespective of the PTAL level.

3 Planning Policy

National Planning Policy

National Planning Policy Framework

3.1 National Planning Policy Framework (March 2012) Section 4 of the National Planning Policy Framework (NPPF), Promoting Sustainable Transport, outlines the important role that transport policies have to play in facilitating sustainable development. It states that:

"The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel".

3.2 The document emphasises the need for developments to offer a choice of sustainable modes of transport which "support reductions in greenhouse gas emissions and reduce congestion" and provide "safe and suitable" access for all.

3.3 Paragraph 35 of the NPPF states that plans for new developments should:

"...protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- *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, avoiding street clutter and where appropriate establishing home zones; and*
- *consider the needs of people with disabilities by all modes of transport."*

3.4 The NPPF calls for a "balance of land uses" which will encourage people to minimise their journey lengths for employment, shopping, leisure, education and other activities. It can be considered that the development proposals support and conform to the sustainable transport policies of the NPPF. As set out the site is located close to local public transport, walking, and cycling networks, which offer alternatives to private car use.

Manual for Streets

3.5 The Department for Transport's 'Manual for Streets' replaced their general road and street design guidance manual 'DB32' in 2007 and specifically focuses on lightly trafficked residential streets and highways.

3.6 'A key consideration for achieving sustainable development is how the design can influence how people choose to travel. Designers and engineers need to respond to a wide range of policies

aimed at making car use a matter of choice rather than habit or dependence. Local transport plans and movement strategies can directly inform the design process as part of the policy implementation process.'

Regional Planning Policy

GLA London Plan (2016)

3.7 The spatial Development Strategy for London, The Consolidated London Plan (2016) provides policies and advice on matters that are of strategic importance to Greater London.

3.8 The plan contains the following objectives:

"Meet the challenge of growth within London's boundaries"

"Support a competitive economy"

"Improve London's environment" and

"Improve London's access/transport"

3.9 Key policy directions for achieving this objective are to;

"Integrate development with public transport therefore reducing the reliance on the private car usage and maximising the proportion of development taking place on previous developed land."

3.10 Policy 6.13 of the recently modified London Plan emphasises the need to ensure that there is an "*appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport*".

3.11 The development site is located immediately adjacent to numerous public transport services in accordance with London Plan cycle parking standards. Taking into account local circumstances, and in an effort to avoid undermining sustainable modes of walking, cycling and public transport; the proposed development is not providing any standard car parking spaces.

Local Planning Policy

London Borough of Hounslow Local Plan 2015 – 2030 (Adopted 15th September 2015)

3.12 Hounslow have been developing a new Local Plan to replace the saved policies of the Unitary Development Plan which has been in place since 2007. The Local Plan will fully replace these policies with a new spatial vision for the development of the borough over the next 15 years.

3.13 The Local Plan was approved for adoption by the Borough Council on 15th September 2015.

3.14 Policy EC1 – Strategic Transport Connections sets out the transport strategy in the borough in order to meet the Council's aspirations for regeneration, growth and environmental objectives.

3.15 Policy EC2 – Developing a Sustainable Local Transport Network aims to maximise opportunities for walking, cycling and using public transport. The policy states that 'car free' or 'low car' development will be sought where appropriate. It also states that London Plan standards for all forms of vehicle and cycle parking will be used by the borough to assess parking provision. The policy also emphasises the importance of not under-providing car parking in less accessible locations.

Policy Overview

3.16 A key element of national, regional and local policy is the siting of new developments in locations with public transport connectivity in order to aid the shift from the reliance on the private car for transport.

3.17 A common thread in the national and local policies to discourage the use of private cars where appropriate through the restriction of car parking spaces by introducing maximum car parking standards which create an upper limit on parking spaces that developments are permitted to provide.

4 Proposed Development

4.1 The planning application to which this Transport Statement relates envisages the following;

- 17 residential units
- Provision of 9 car parking spaces off-street (including a suitable space for disabled drivers/passengers)
- Provision of 30 secure cycle parking spaces
- The implementation of a residential travel plan

4.2 The architects proposed plan is included at **Appendix A**.

Access

4.3 The proposed access, as now, would be from two retained crossovers, at the northern west and south west boundary of the site on The Grove. The northern crossover would provide access to spaces 1 -4 and the provided disabled space, while the southern crossover would provide access to spaces 5 – 8, as well as the refuse and recycling store.

Car Parking

4.4 The proposal seeks to provide one parking space for each unit. A total of nine spaces are provided on site, including a disabled space. Eight of the parking spaces are provided at the forecourt in front of the proposed building off The Grove. The disabled space is provided adjacent the north eastern corner of the building.

4.5 It is proposed that eight on-street parking permits should be provided for the residential units who do not have a dedicated off-street parking space. Parking surveys have been undertaken to assess the availability of kerbside space and this subject is dealt with in more detail in Section 5.

Cycle Parking

4.6 The planning application proposal includes 30 secure cycle parking spaces. These will be provided at the ground floor in dedicated cycle parking stores.

Refuse Collection

4.7 It is envisaged that the waste generated by the proposal will be collected by LBH Hounslow's own refuse collection services from an on-street location, as would have been the case with regards the previous nursing home.

5 Trip Generation & Car Parking

Existing Site Trip Generation & Parking Demand

5.1 We have interrogated the TRICS database in order to predict the level of traffic that may have been generated by the former residential care home. Dudley House provided in the region of 40 bedrooms and while the forecourt spaces were unmarked, it is understood that up to eight parking cars could be accommodated, whilst allowing for emergency vehicle and service vehicle access.

5.2 Three suitable comparison sites were identified. Each of the three sites were located in Outer London Boroughs and broadly speaking had a similar number of bedrooms to the former use at Dudley House. It should be noted that the same site details have been used for a proposed residential development at 1A – 5 St. John's Road, Isleworth (P/2016/1314) located in proximity to the site. No query has been raised at this site and therefore usage is entirely acceptable.

5.3 The average vehicular trip rates (per bed) from these three sites were applied to footprint of Dudley House to produce the likely traffic generation as detailed in **Table 5.1**. The full output is included at **Appendix B**.

Table 5.1: Trip Generation of the Former Residential Care Home

Time Period	In	Out	2-Way
Weekday AM Peak (08:00-09:00)	3	1	4
Weekday PM Peak (17:00-18:00)	2	3	4*
Daily (07:00-18:00)	26	21	47

*error due to rounding

5.4 It can be seen that the former use generated relatively low levels of traffic, due in part to occupants being static residents, with most traffic generated being that from visitors.

Former Residential Home Parking Demand

5.5 To understand the former residential home's likely parking demand an exercise to predict peak parking demand at the site throughout the day has been undertaken, based on the above traffic generation data.

5.6 An arrivals/departure profile for the former residential home was derived from the trip generation information. From this, the predicted parking accumulation at the facility was calculated throughout the day. The calculations are provided at **Appendix B**.

5.7 It can be seen that the predicted maximum parking accumulation is ten cars which would have occurred at 15:00hrs. On this basis and with eight spaces provided in the forecourt of the former Residential Home, it is understood that at least four vehicles would have parked in an on-street location. Of course this number, on non-average days such as weekends, could have been a lot

higher resulting in more parking on-street.

5.8 While it cannot be proven conclusively it is also likely that a greater number of visitors would prefer to park on-street, as doing so presents less hassle when arriving and departing, than entering the site's forecourt only to find no parking spaces were available. Therefore it can be said that the former residential home generated traffic, which without doubt did park on-street.

Proposed Residential Development Traffic Generation

5.9 Trip rates from similar located and sized residential sites have been extracted from the TRICS database to estimate the likely trip generation of the proposed development. Full details of the sites used and the filtering process are provided at **Appendix B**.

Table 5.2: Estimated Weekday Trip Rates

Land Use	AM (08:00 – 09:00) Trip Rates		PM (17:00 – 18:00) Trip Rates	
	Arrival	Departure	Arrival	Departure
Proposed Residential Flats	0.036	0.138	0.085	0.022

5.10 **Table 5.2** indicates the trip rate parameters for the proposed residential units which are combined with the total number of dwellings to given the estimate traffic flows as indicated in **Table 5.3** below.

Table 5.3: Estimated Weekday Traffic Generation (17 Units)

Land Use	AM (08:00 – 09:00) Trip Rates		PM (17:00 – 18:00) Trip Rates	
	Arrival	Departure	Arrival	Departure
Proposed Residential Flats	0.612 (1)	2.346 (3)	1.445 (2)	0.374 (1)

5.11 As set out above, the proposed residential units are expected to generate one arrival and three departures during the network AM peak and two arrivals and one departure during the PM peak. When compared against the former residential care home profile, which generated 4 trips in the AM peak and 2 in the PM peak, the proposed development represents a reduction vehicular traffic.

Car Ownership

5.12 Car ownership levels for accommodation type by car or van availability by number of usual residents aged 17 or over in a household (from data source DC4415EWla) in the whole of Hounslow has also been obtained from the 2011 Census utilising data obtained from www.nomisweb.co.uk. The accommodation type data is summarised in **Table 5.4 below** and full

data can be found within **Appendix B**.

Table 5.4: Census Data Car Availability – Local Authority District

Cars or Vans	All Categories: Accommodation Type	Flat, maisonette or apartment	Ratio of car/van availability per accommodation type
All categories: Car or van availability	94,902	40,406	43%
No cars or vans in household	29,985	19,023	63%
1 car or van in household	42,744	17,841	42%
2 or more cars or vans in household	22,173	3,542	16%

5.13 The data in **Table 5.4** demonstrates that within the Hounslow Local Authority District area 43% of the households are flats, maisonettes or apartments and 63% of residents in the household have no cars, 42% have one car and 16% have two cars or more.

5.14 Of the total 40,406 residents, 19,023 (47%) have no vehicles, 17,841 (44%) have one vehicle and 3,542 (9%) have two or more vehicles in the household, it is therefore assumed that this would be a likely case for the proposed development. Considering a 44% car ownership for the proposed residential flats, it is assumed that 8 (44% of 17) residents will own one car and 2 (9% of 17) will own two or more cars. In total the census data predicts 10 car parking spaces for 17 units.

5.15 As detailed previously the proposed development will provide eight off-street parking spaces, resulting in a potential requirement derived from the census data for two vehicles to be parked in an on-street position.

On-Street Kerbside Parking Surveys

5.16 As mentioned a refined parking survey has been undertaken taking account of changes to the on-street parking provision and an extension of the existing Controlled Parking Zone. Such changes were not reflected in the previous Transport Statement because they had not been undertaken on street.

5.17 Independent on-street parking surveys of the revised area were undertaken by Footmark Surveys to assess the availability of kerbside parking space. Standard parking space lengths were measured in 5m lengths, full details and calculations are provided at **Appendix C**.

5.18 These surveys were undertaken during a neutral period over two weekdays and one weekend day in line with the Lambeth Parking Methodology, with parking beats undertaken between 00:30 – 05:30, 10:00 and 17:00. Parking survey data was collected for 200m surrounding the site.

5.19 Full parking survey data is provided at **Appendix C**, while **Table 5.5** below provides a summary of the 200m parking survey data for each day.

Table 5.5: 200m Parking Survey Data

Parking Type	Monday 8th May								
	00:30 - 05:30			10:00			17:00		
Type & Total	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress
Pay (5)	1	4	20%	3	2	60%	0	5	0%
Permit or Pay (51)	15	36	29%	21	30	41%	7	44	14%
Residents Permit (134)	58	76	43%	23	111	17%	27	107	20%
Single Yellow (86)	8	78	9%	1	85	1%	1	85	1%
Unrestricted (2)	2	0	100%	2	0	100%	2	0	100%
Parking Type	Tuesday 9th May								
	00:30 - 05:30			10:00			17:00		
Type & Total	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress
Pay (5)	2	3	40%	2	3	40%	0	5	0%
Permit or Pay (51)	17	34	33%	20	31	39%	9	42	18%
Residents Permit (134)	53	81	40%	29	105	22%	34	100	25%
Single Yellow (86)	2	84	2%	4	82	5%	2	84	2%
Unrestricted (2)	2	0	100%	2	0	100%	2	0	100%
Parking Type	Saturday 13th May								
	00:30 - 05:30			10:00			17:00		
Type & Total	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress
Pay (5)	1	4	20%	3	2	60%	2	3	40%
Permit or Pay (51)	18	33	35%	21	30	41%	16	35	31%
Residents Permit (134)	55	79	41%	45	89	34%	54	80	40%
Single Yellow (86)	7	79	8%	7	79	8%	2	84	2%
Unrestricted (2)	2	0	100%	2	0	100%	2	0	100%

5.20 'Parking Stress' is considered to occur when occupancy percentages are higher than 80%. As can be seen other than the unrestricted spaces, which total just two spaces, no other on-street occupancy rates within 200m of the application site are above 80%. In fact the highest rate is 60%, achieved where there are just five parking spaces.

5.21 It should be noted that at weekends the CPZ is not operational, but there is no significant change in parking demand characteristics.

5.22 The above data collected over a number of days clearly shows that additional vehicles, such as the census forecast additional two vehicles which would require on-street parking, could easily be parked on-street as significant surplus kerbside capacity exists, even when the CPZ is not operational. Further even if all eight units required to park a vehicle on-street, sufficient capacity exists as identified by the detailed survey data.

5.23 As noted previously when the care home was operational, vehicles historically parked on-street. This did not result in 'parking stress'.

6 Conclusion

6.1 Transport Dynamics are retained by STS Group Investments to provide traffic and transport advice in relation to their proposal to redevelop the former 40 bedroom Dudley House Private Residential Care Home. It is proposed to provide 17 residential with the provision of nine off street car parking spaces and the provision of 30 secure cycle parking spaces. It is proposed that up to eight vehicles could park on-street, but census car ownership data states that it is likely only two vehicles would be parked on street.

6.2 A traffic generation exercise has occurred comparing the former residential care home's likely traffic generation, against that of the proposed residential use. The exercise found that less traffic would be generated as a result of the proposed change of use.

6.3 To quantify the availability of on-street parking capacity and surplus kerbside space, parking beat surveys were undertaken by an independent survey company on two weekdays and one weekend day.

6.4 It was found that demand could be accommodated on-street without materially impacting on the existing availability of space. An additional requirement for up to eight vehicles to park on street within 200m of the application site can easily be accommodated. Further future utilisation rates do not therefore exceed a point were 'serious deficiency' would occur.

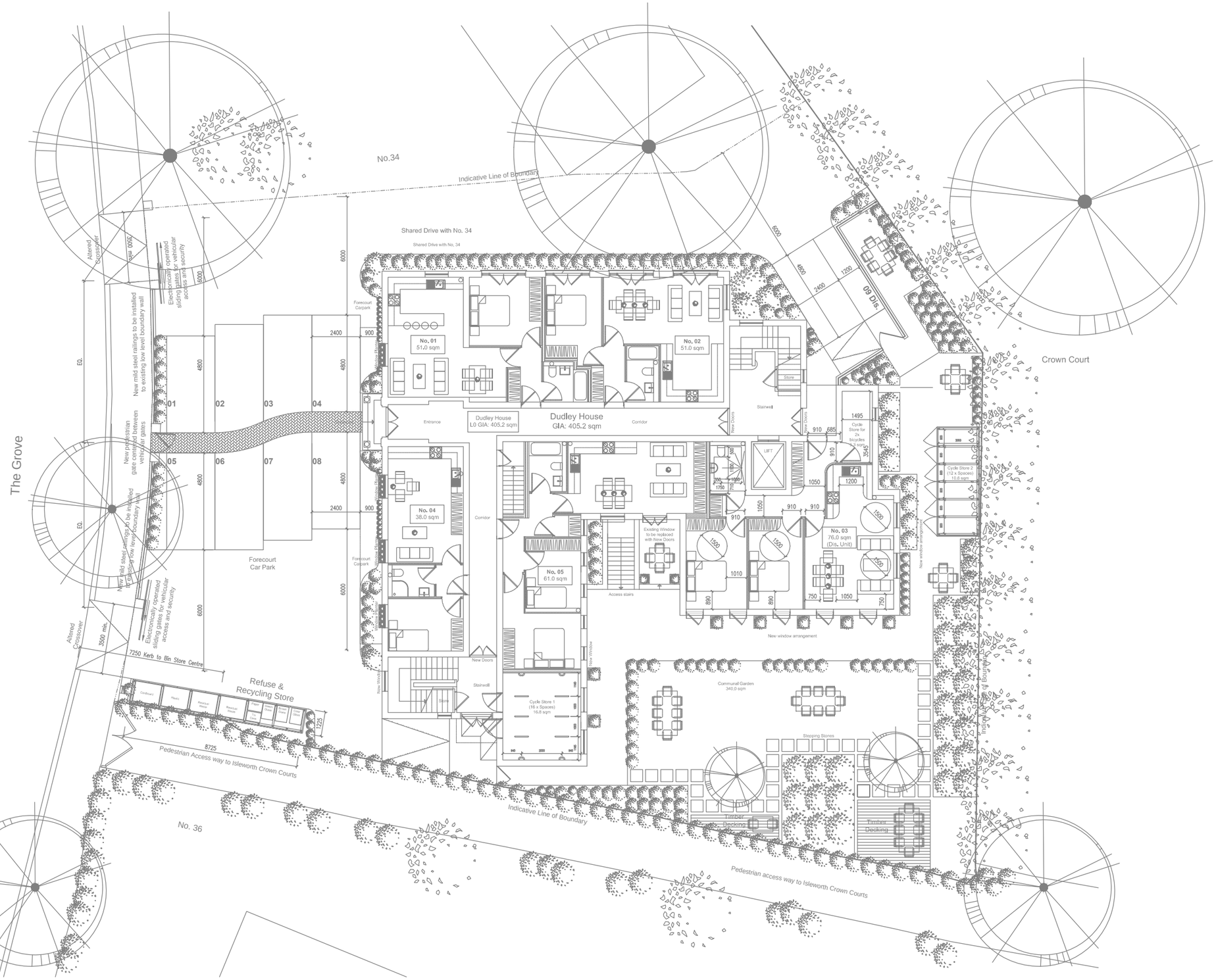
6.5 Further as noted previously when the care home was operational, vehicles also parked on-street. This did not result in 'parking stress'.

6.6 The site is accessible to pedestrians from the local highway network. Public transport accessibility within the vicinity of the site is good with regular buses, London Underground and national rail services within a reasonable walking distance of the site. The scheme should be considered favourably, as it encourages daily movements to make use of existing good public transport facilities, and excellent access to walking and cycling opportunities.

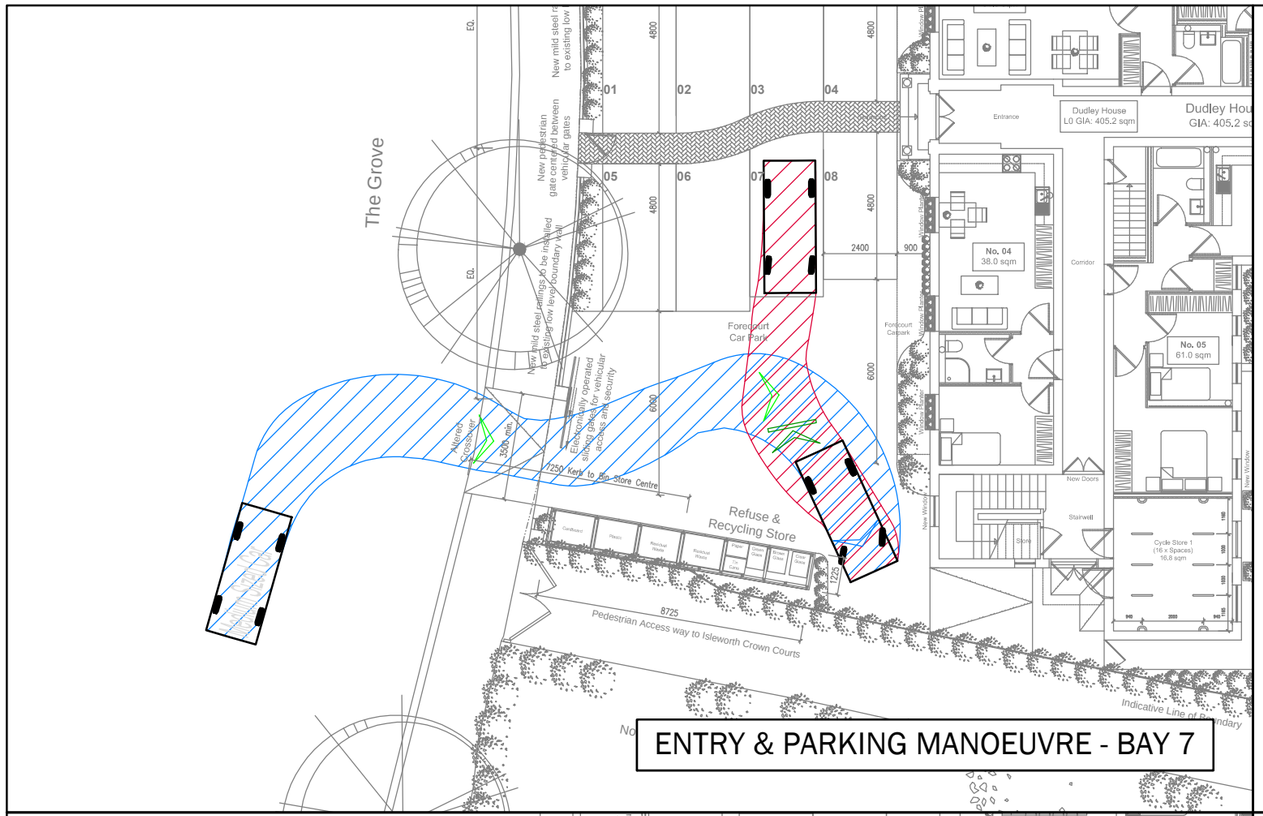
6.7 The proposals are considered to be appropriate and in accordance with transportation policy and guidance, and as such there are no traffic or transportation reasons why the proposal should not be supported.

6.8 In light of the above, we conclude that the development would be in accordance with relevant policy guidance and that the proposed residential land uses would be an appropriate use of this site, and could be successfully accommodated by the local transport network and existing public transport facilities.

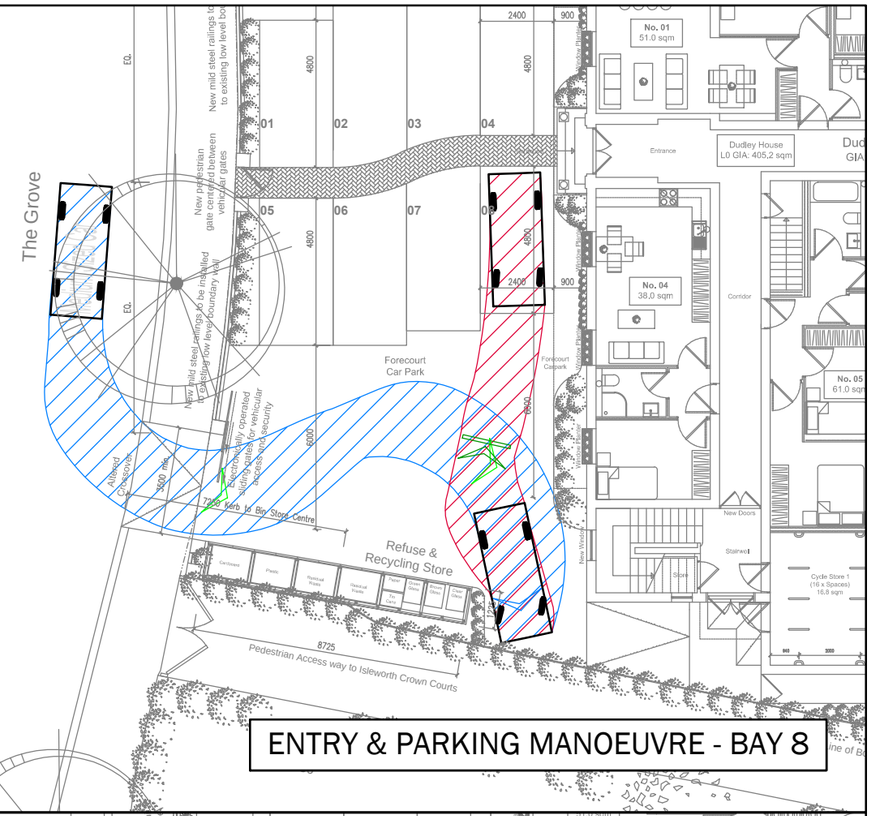
Appendix A



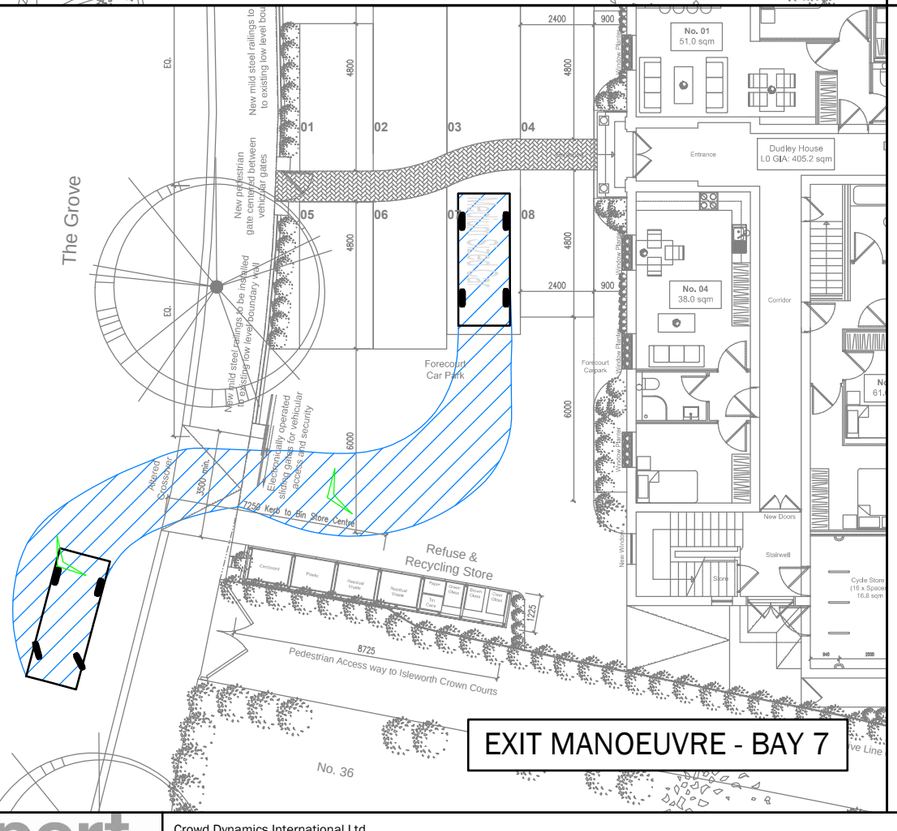
transport dynamics Crowd Dynamics International Ltd 3 Station Road West Oxted Surrey RH8 9EE Tel: +44 (0) 20 7922 8861	Project Title: Dudley House The Grove	Drawing Title: Architects Indicative Layout	Revision: -	Drawn by: DD	Checked by: TS
	Location: Isleworth, TW7 4JS	Scale: 1:200 @ A3	Date: 31.01.17	Drawing No. PCD1000/SK/004	



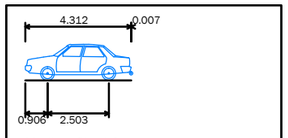
ENTRY & PARKING MANOEUVRE - BAY 7



ENTRY & PARKING MANOEUVRE - BAY 8

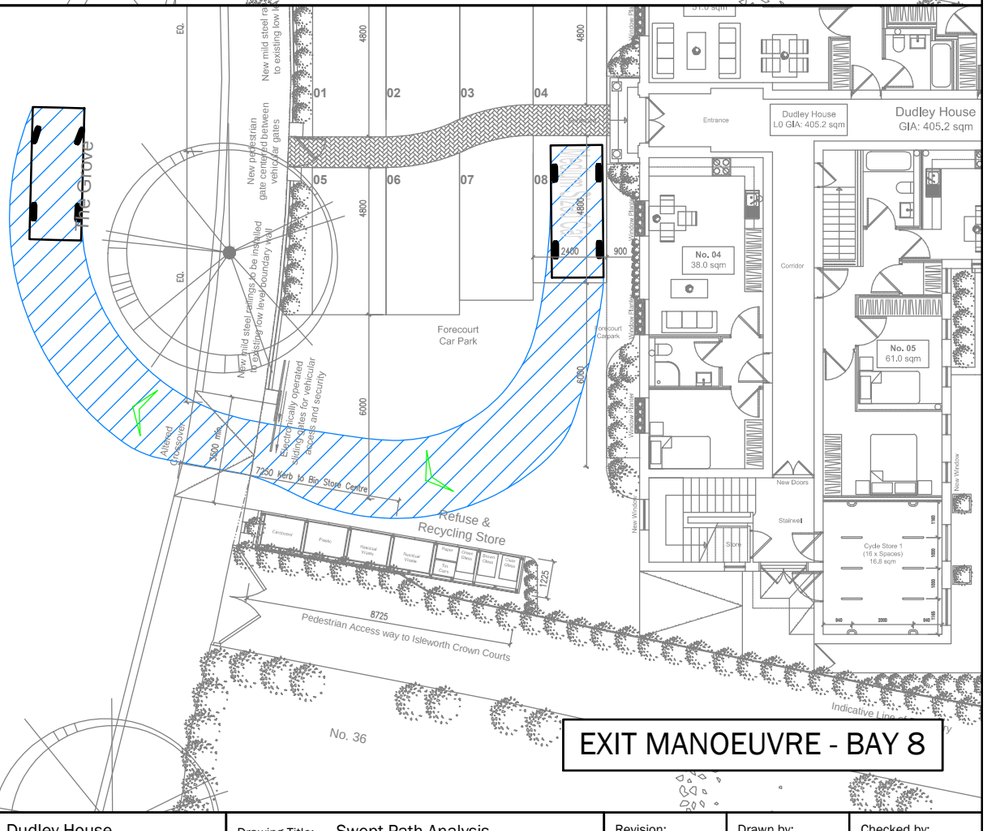


EXIT MANOEUVRE - BAY 7



Medium Sized Car

Overall Length	4.319m
Overall Width	1.686m
Overall Body Height	1.466m
Min Body Ground Clearance	0.228m
Max Track Width	1.591m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.042m



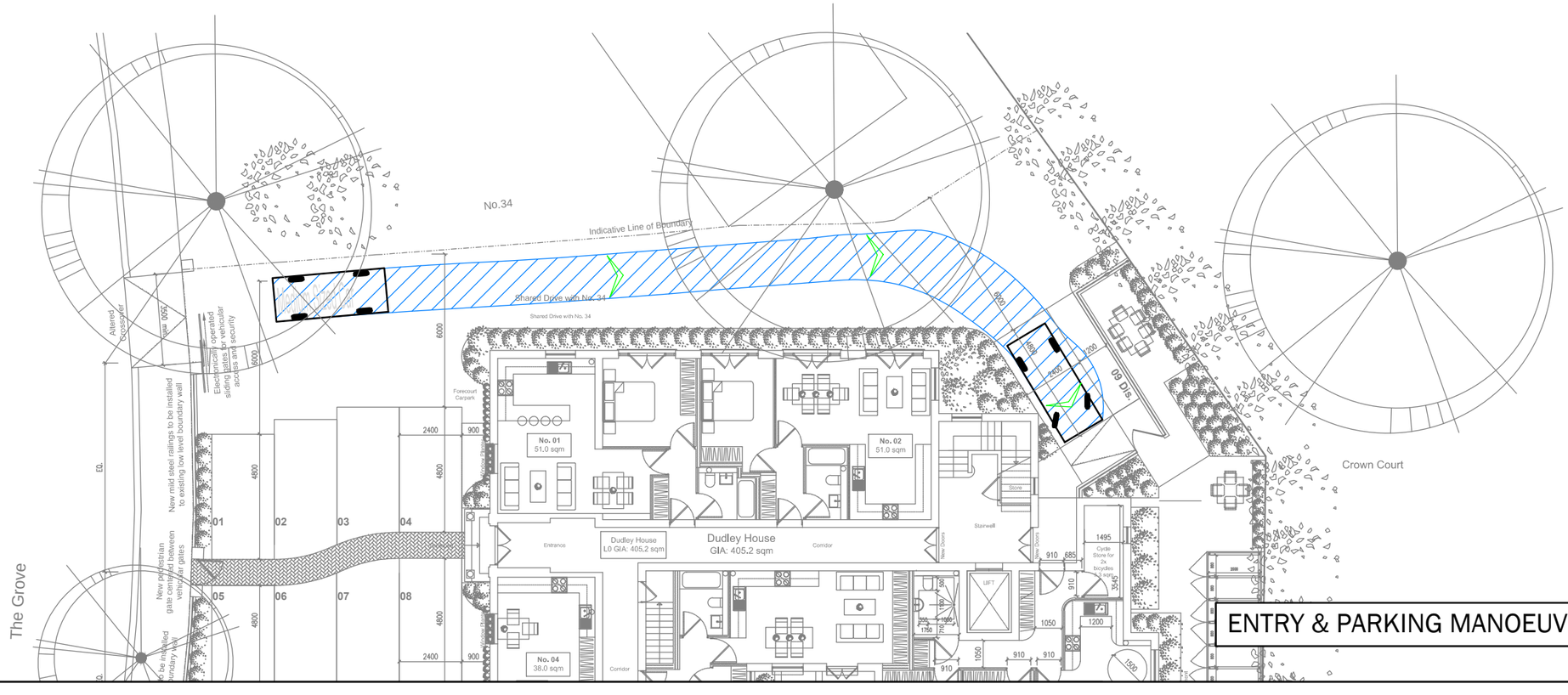
EXIT MANOEUVRE - BAY 8

transport dynamics

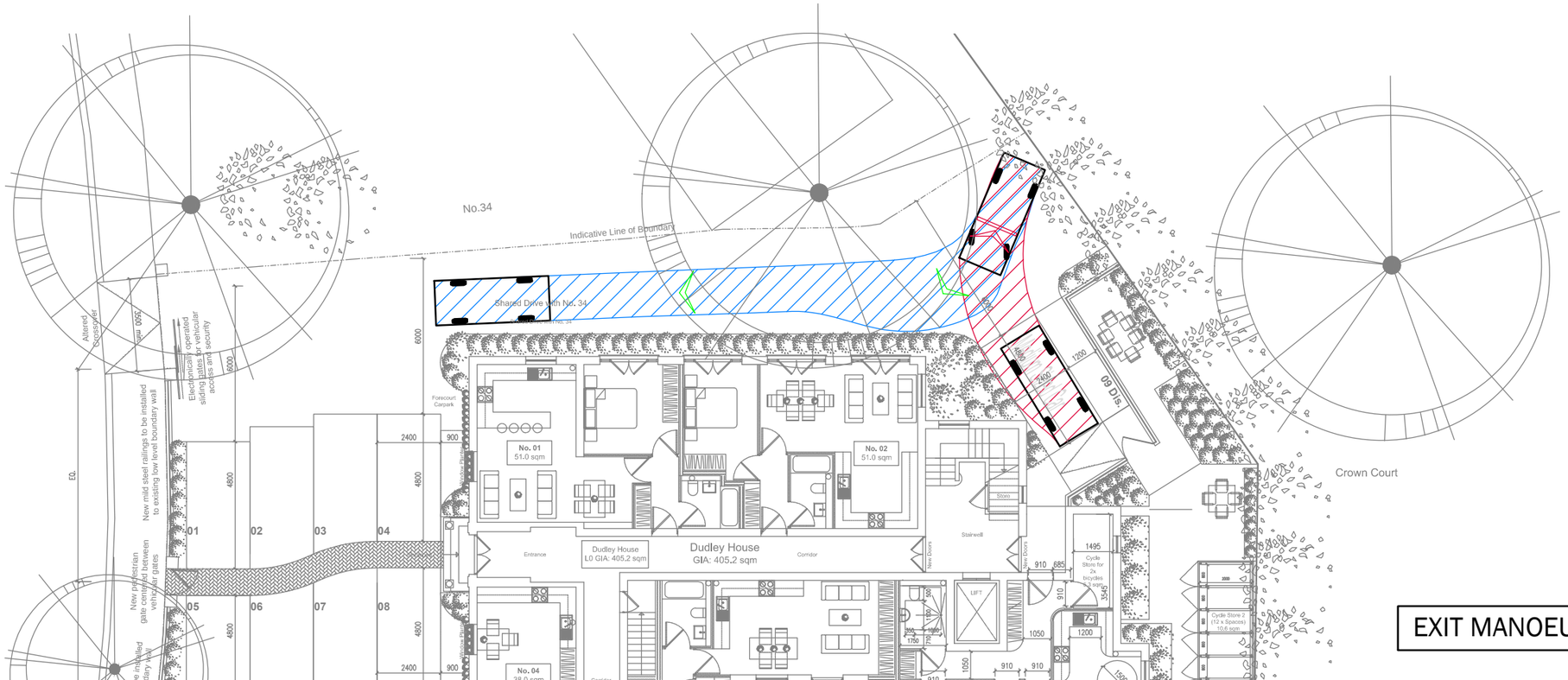
Crowd Dynamics International Ltd
3 Station Road West
Oxted
Surrey
RH8 9EE

Tel: +44 (0) 20 7922 8861

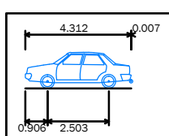
Project Title:	Dudley House The Grove	Drawing Title:	Swept Path Analysis 4.32m Medium Size Car	Revision:	-
				Drawn by:	DD
				Checked by:	TS
Location:	Isleworth, TW7 4JS	Scale:	1:200 @ A3	Date:	31.01.17
		Drawing No.	PCD1000/SPA/D04		



ENTRY & PARKING MANOEUVRE - BAY 9



EXIT MANOEUVRE - BAY 9



Medium Sized Car

Overall Length	4.319m
Overall Width	1.686m
Overall Body Height	1.466m
Min Body Ground Clearance	0.228m
Max Track Width	1.591m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.042m

transport dynamics

Crowd Dynamics International Ltd
3 Station Road West
Oxted
Surrey
RH8 9EE

Tel: +44 (0) 20 7922 8861

Project Title:	Dudley House The Grove	Drawing Title:	Swept Path Analysis 4.32m Medium Size Car	Revision: - Drawn by: DD Checked by: TS
Location:	Isleworth, TW7 4JS	Scale:	1:200 @ A3	Date: 31.01.17

Drawing No. PCD1000/SPA/D05

Appendix B

Calculation Reference: AUDIT-219602-160217-0225

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01 GREATER LONDON

HG	HARINGEY	2 days
KN	KENSINGTON AND CHELSEA	1 days
RD	RICHMOND	1 days
TH	TOWER HAMLETS	1 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
Actual Range: 25 to 72 (units:)
Range Selected by User: 10 to 100 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 23/04/15

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	4

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

Selected Location Sub Categories:

Residential Zone	5

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.

Filtering Stage 3 selection:

Use Class:

C3	5 days

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

Population within 1 mile:

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

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	3 days

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

Travel Plan:

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.

LIST OF SITES relevant to selection parameters

1 **HG-03-C-01** **BLOCK OF FLATS** **HARINGEY**
CHADWELL LANE
NEW RIVER VILLAGE
HORNSEY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 25
Survey date: TUESDAY *27/10/09* *Survey Type: MANUAL*

2 **HG-03-C-02** **BLOCK OF FLATS** **HARINGEY**
HIGH ROAD
WOODSIDE PARK
WOOD GREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 30
Survey date: WEDNESDAY *01/10/14* *Survey Type: MANUAL*

3 **KN-03-C-03** **BLOCK OF FLATS** **KENSINGTON AND CHELSEA**
ALLEN STREET

KENSINGTON
Edge of Town Centre
Residential Zone
Total Number of dwellings: 72
Survey date: FRIDAY *11/05/12* *Survey Type: MANUAL*

4 **RD-03-C-02** **BLOCK OF FLATS** **RICHMOND**
B306 QUEENS RIDE

BARNES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *29/01/07* *Survey Type: MANUAL*

5 **TH-03-C-03** **FLATS** **TOWER HAMLETS**
PALMERS ROAD

BETHNAL GREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 69
Survey date: WEDNESDAY *12/11/08* *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-03-C-01	Site not comparable
HG-03-C-03	Site not comparable
IS-03-C-01	Site not comparable
SK-03-C-01	Site not comparable
SK-03-C-02	Site not comparable
TH-03-C-02	Site not comparable
WH-03-C-01	Site not comparable

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

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	5	45	0.018	0.018	5	45	0.063	0.063	5	45	0.080	0.080
08:00 - 09:00	5	45	0.036	0.036	**5**	**45**	**0.138**	**0.138**	**5**	**45**	**0.174**	**0.174**
09:00 - 10:00	5	45	0.045	0.045	5	45	0.085	0.085	5	45	0.130	0.130
10:00 - 11:00	5	45	0.036	0.036	5	45	0.045	0.045	5	45	0.081	0.081
11:00 - 12:00	5	45	0.040	0.040	5	45	0.036	0.036	5	45	0.076	0.076
12:00 - 13:00	**5**	**45**	**0.094**	**0.094**	5	45	0.080	0.080	5	45	0.174	0.174
13:00 - 14:00	5	45	0.036	0.036	5	45	0.054	0.054	5	45	0.090	0.090
14:00 - 15:00	5	45	0.040	0.040	5	45	0.031	0.031	5	45	0.071	0.071
15:00 - 16:00	5	45	0.054	0.054	5	45	0.040	0.040	5	45	0.094	0.094
16:00 - 17:00	5	45	0.036	0.036	5	45	0.013	0.013	5	45	0.049	0.049
17:00 - 18:00	5	45	0.085	0.085	5	45	0.022	0.022	5	45	0.107	0.107
18:00 - 19:00	5	45	0.071	0.071	5	45	0.018	0.018	5	45	0.089	0.089
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.591	0.591			0.624	0.624			1.215	1.215

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:	25 - 72 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

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

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	5	45	0.000	0.000	5	45	0.013	0.013	5	45	0.013	0.013
08:00 - 09:00	**5**	**45**	**0.009**	**0.009**	**5**	**45**	**0.022**	**0.022**	**5**	**45**	**0.031**	**0.031**
09:00 - 10:00	5	45	0.004	0.004	5	45	0.013	0.013	5	45	0.017	0.017
10:00 - 11:00	5	45	0.000	0.000	5	45	0.004	0.004	5	45	0.004	0.004
11:00 - 12:00	5	45	0.000	0.000	5	45	0.004	0.004	5	45	0.004	0.004
12:00 - 13:00	5	45	0.004	0.004	5	45	0.000	0.000	5	45	0.004	0.004
13:00 - 14:00	5	45	0.000	0.000	5	45	0.000	0.000	5	45	0.000	0.000
14:00 - 15:00	5	45	0.004	0.004	5	45	0.000	0.000	5	45	0.004	0.004
15:00 - 16:00	5	45	0.000	0.000	5	45	0.000	0.000	5	45	0.000	0.000
16:00 - 17:00	5	45	0.004	0.004	5	45	0.009	0.009	5	45	0.013	0.013
17:00 - 18:00	5	45	0.004	0.004	5	45	0.000	0.000	5	45	0.004	0.004
18:00 - 19:00	5	45	0.004	0.004	5	45	0.000	0.000	5	45	0.004	0.004
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.033	0.033			0.065	0.065			0.098	0.098

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:	25 - 72 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	5	45	0.018	0.018	5	45	0.076	0.076	5	45	0.094	0.094
08:00 - 09:00	5	45	0.018	0.018	**5**	**45**	**0.098**	**0.098**	5	45	0.116	0.116
09:00 - 10:00	5	45	0.018	0.018	5	45	0.063	0.063	5	45	0.080	0.080
10:00 - 11:00	5	45	0.022	0.022	5	45	0.036	0.036	5	45	0.058	0.058
11:00 - 12:00	5	45	0.049	0.049	5	45	0.040	0.040	5	45	0.089	0.089
12:00 - 13:00	5	45	0.063	0.063	5	45	0.054	0.054	5	45	0.116	0.116
13:00 - 14:00	5	45	0.040	0.040	5	45	0.054	0.054	5	45	0.094	0.094
14:00 - 15:00	5	45	0.045	0.045	5	45	0.045	0.045	5	45	0.090	0.090
15:00 - 16:00	5	45	0.067	0.067	5	45	0.009	0.009	5	45	0.076	0.076
16:00 - 17:00	5	45	0.036	0.036	5	45	0.045	0.045	5	45	0.081	0.081
17:00 - 18:00	**5**	**45**	**0.125**	**0.125**	5	45	0.049	0.049	**5**	**45**	**0.174**	**0.174**
18:00 - 19:00	5	45	0.116	0.116	5	45	0.049	0.049	5	45	0.165	0.165
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.616	0.616			0.617	0.617			1.233	1.233

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:	25 - 72 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

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

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	5	45	0.013	0.013	**5**	**45**	**0.254**	**0.254**	**5**	**45**	**0.267**	**0.267**
08:00 - 09:00	5	45	0.027	0.027	5	45	0.237	0.237	5	45	0.264	0.264
09:00 - 10:00	5	45	0.027	0.027	5	45	0.125	0.125	5	45	0.152	0.152
10:00 - 11:00	5	45	0.004	0.004	5	45	0.040	0.040	5	45	0.044	0.044
11:00 - 12:00	5	45	0.009	0.009	5	45	0.013	0.013	5	45	0.022	0.022
12:00 - 13:00	5	45	0.022	0.022	5	45	0.013	0.013	5	45	0.035	0.035
13:00 - 14:00	5	45	0.031	0.031	5	45	0.054	0.054	5	45	0.085	0.085
14:00 - 15:00	5	45	0.045	0.045	5	45	0.027	0.027	5	45	0.072	0.072
15:00 - 16:00	5	45	0.076	0.076	5	45	0.022	0.022	5	45	0.098	0.098
16:00 - 17:00	5	45	0.036	0.036	5	45	0.049	0.049	5	45	0.085	0.085
17:00 - 18:00	5	45	0.179	0.179	5	45	0.027	0.027	5	45	0.206	0.206
18:00 - 19:00	**5**	**45**	**0.210**	**0.210**	5	45	0.031	0.031	5	45	0.241	0.241
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.679	0.679			0.892	0.892			1.571	1.571

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:	25 - 72 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	5	45	0.054	0.054	5	45	0.420	0.420	5	45	0.474	0.474
08:00 - 09:00	5	45	0.098	0.098	**5**	**45**	**0.616**	**0.616**	**5**	**45**	**0.714**	**0.714**
09:00 - 10:00	5	45	0.098	0.098	5	45	0.308	0.308	5	45	0.406	0.406
10:00 - 11:00	5	45	0.085	0.085	5	45	0.134	0.134	5	45	0.219	0.219
11:00 - 12:00	5	45	0.098	0.098	5	45	0.094	0.094	5	45	0.192	0.192
12:00 - 13:00	5	45	0.196	0.196	5	45	0.161	0.161	5	45	0.357	0.357
13:00 - 14:00	5	45	0.112	0.112	5	45	0.174	0.174	5	45	0.286	0.286
14:00 - 15:00	5	45	0.143	0.143	5	45	0.103	0.103	5	45	0.246	0.246
15:00 - 16:00	5	45	0.281	0.281	5	45	0.076	0.076	5	45	0.357	0.357
16:00 - 17:00	5	45	0.138	0.138	5	45	0.116	0.116	5	45	0.254	0.254
17:00 - 18:00	**5**	**45**	**0.415**	**0.415**	5	45	0.098	0.098	5	45	0.513	0.513
18:00 - 19:00	5	45	0.402	0.402	5	45	0.112	0.112	5	45	0.514	0.514
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.120	2.120			2.412	2.412			4.532	4.532

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:	25 - 72 (units:)
Survey date date range:	01/01/07 - 23/04/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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.

DC4415EWla - Accommodation type by car or van availability by number of usual residents aged 17 or over in household

population	All households
units	Household reference persons
date	2011
area type	2011 census merged local authority districts
area name	Hounslow
no of usual residents in househ	All categories: Number of usual residents aged 17 or over in household

Cars or Vans	All categories: Accommodation type	Whole house or bungalow	Flat, maisonette or apartment	Caravan or other mobile or temporary structure
All categories: Car or van availa	94,902	54,347	40,406	149
No cars or vans in household	29,985	10,906	19,023	56
1 car or van in household	42,744	24,835	17,841	68
2 or more cars or vans in house	22,173	18,606	3,542	25
	94,902		40,406	

In order to protect against disclosure of personal information, records have been swapped between different geographic areas.
Some counts will be affected, particularly small counts at the lowest geographies.

Data for Residential Care Homes

Sites selected:

	Location	No. of beds	Occupancy	No .of spaces	Off-site parking	PTAL rating
Plumstead Lodge, 82 Plumstead Common Road, SE18	Outer	62	80%	0	uncontrolled	2
Seabrooke Manor, Lavender Place, IG1	Outer	120	75%	32	uncontrolled	1
Birchwood Grange, 187 Preston Hill, HA3	Outer	150	100%	34	uncontrolled	2

Time range	No. of sites	Trip Rates (per bed) In	Out	2-way
07:00-07:30	1	0	0	0
07:30-08:00	2	0.04	0.02	0.06
08:00-08:30	2	0.04	0.02	0.06
08:30-09:00	2	0.03	0	0.03
09:00-09:30	2	0.02	0	0.02
09:30-10:00	3	0.03	0.03	0.06
10:00-10:30	3	0.03	0.02	0.05
10:30-11:00	3	0.03	0	0.03
11:00-11:30	3	0.02	0	0.02
11:30-12:00	3	0.02	0.02	0.04
12:00-12:30	3	0.02	0.02	0.04
12:30-13:00	3	0.03	0.03	0.06
13:00-13:30	3	0.05	0.03	0.08
13:30-14:00	3	0.04	0.04	0.08
14:00-14:30	3	0.04	0.05	0.09
14:30-15:00	3	0.03	0.02	0.05
15:00-15:30	3	0.05	0.02	0.07
15:30-16:00	3	0.02	0.02	0.04
16:00-16:30	3	0.01	0.02	0.03
16:30-17:00	3	0.03	0.04	0.07
17:00-17:30	3	0.03	0.05	0.08
17:30-18:00	3	0.01	0.02	0.03
18:00-18:30	3	0.02	0.03	0.05
18:30-19:00	3	0.01	0.02	0.03
19:00-19:30	2	0.02	0.04	0.06
19:30-20:00	2	0	0.02	0.02
Total		0.67	0.58	

Time	Trip Rates (per bed) In	Out	2-way
07:00	0.04	0.02	0.06
08:00	0.07	0.02	0.09
09:00	0.05	0.03	0.08
10:00	0.06	0.02	0.08
11:00	0.04	0.02	0.06
12:00	0.05	0.05	0.10
13:00	0.09	0.07	0.16
14:00	0.07	0.07	0.14
15:00	0.07	0.04	0.11
16:00	0.04	0.06	0.10
17:00	0.04	0.07	0.11
18:00	0.03	0.05	0.08
19:00	0.02	0.06	0.08
Total	0.67	0.58	1.25

TRIP GENERATION FOR FORMER RESIDENTIAL CARE HOME, DUDLEY HOUSE, ISLEWORTH

No. of Beds = 40 **No. of parking spaces = 8**

Hour Commencing	Trip Rates			Vehicles			Parking Accumulation	
	In	Out	Total	In	Out	Total	Minimum	%total
							2	
7	0.04	0.02	0.06	2	1	2	3	35.0%
8	0.07	0.02	0.09	3	1	4	5	60.0%
9	0.05	0.03	0.08	2	1	3	6	70.0%
10	0.06	0.02	0.08	2	1	3	7	90.0%
11	0.04	0.02	0.06	2	1	2	8	100.0%
12	0.05	0.05	0.10	2	2	4	8	100.0%
13	0.09	0.07	0.16	4	3	6	9	110.0%
14	0.07	0.07	0.14	3	3	6	9	110.0%
15	0.07	0.04	0.11	3	2	4	10	125.0%
16	0.04	0.06	0.10	2	2	4	9	115.0%
17	0.04	0.07	0.11	2	3	4	8	100.0%
18	0.03	0.05	0.08	1	2	3	7	90.0%
19	0.02	0.06	0.08	1	2	3	6	70.0%
24hrs	0.67	0.58	1.25	27	23	50		

*errors due to roundings

Appendix C

Isleworth Parking Survey

May 2017

200m Walking Distance Survey Area

Isleworth Parking Survey

May 2017

200m Walking Distance Parking Inventory

Standard Junction Protection in metres 5

Standard Parking Space Length in metres 5

Angled Parking Space Length in metres 2.5

Parking Inventory						Monday 8th May 2017									Tuesday 9th May 2017									Saturday 13th May 2017								
						00:30 - 05:30			10:00:00			17:00:00			00:30 - 05:30			10:00:00			17:00:00			00:30 - 05:30			10:00:00			17:00:00		
Road Name	Side	Section	Parking Type	Length (m)	Bays	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress	Parked	Spaces	Stress
Grove Road	North	The Grove to Avenue Road	Crossover/Access	37.5	-	0	-	-	0	-	-	0	-	-	0	-	-	1	-	-	0	-	-	1	-	-	0	-	-	0	-	-
			Double Yellow	14	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	51.6	10	6	4	60%	1	9	10%	2	8	20%	4	6	40%	3	7	30%	3	7	30%	6	4	60%	5	5	50%	4	6	40%
			Single Yellow	17.4	1	0	1	0%	0	1	0%	0	1	0%	0	1	0%	0	1	0%	0	1	0%	0	1	0%	0	1	0%	0	1	0%
	South	The Grove to Avenue Road	Crossover/Access	31.7	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	18.5	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	66.5	12	8	4	67%	1	11	8%	1	11	8%	6	6	50%	2	10	17%	2	10	17%	7	5	58%	5	7	42%	7	5	58%
			Single Yellow	2	0	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
Harvard Road	East	London Road to The Grove	Crossover/Access	160.6	-	0	-	-	0	-	-	0	-	-	0	-	-	1	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	126.4	23	10	13	43%	7	16	30%	9	14	39%	12	11	52%	11	12	48%	12	11	52%	12	11	52%	7	16	30%	10	13	43%
			Single Yellow	56.4	8	4	4	50%	0	8	0%	0	8	0%	0	8	0%	0	8	0%	0	8	0%	3	5	38%	2	6	25%	0	8	0%
	West	London Road to The Grove	Crossover/Access	34.7	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	1	-	-	0	-	-	0	-	-	0	-	-
			Keep Clear	37.7	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Permit or Pay	243.6	41	11	30	27%	17	24	41%	5	36	12%	12	29	29%	15	26	37%	7	34	17%	13	28	32%	16	25	39%	10	31	24%
			Single Yellow	22.6	3	0	3	0%	0	3	0%	0	3	0%	0	3	0%	0	3	0%	0	3	0%	0	3	0%	1	2	33%	0	3	0%
Naseby Close	North	The Grove to Eastern Extent	Crossover/Access	37	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	34.5	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	77.3	13	5	8	38%	3	10	23%	4	9	31%	5	8	38%	2	11	15%	2	11	15%	5	8	38%	6	7	46%	6	7	46%
	South	The Grove to Eastern Extent	Crossover/Access	43.4	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	39	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	79.2	12	5	7	42%	1	11	8%	0	12	0%	5	7	42%	2	10	17%	2	10	17%	4	8	33%	2	10	17%	2	10	17%
Osterley Road	East	The Grove to Meadowbank Close	Crossover/Access	11.2	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	0	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Single Yellow	131	24	3	21	13%	1	23	4%	0	24	0%	2	22	8%	0	24	0%	0	24	0%	3	21	13%	2	22	8%	2	22	8%
			Unrestricted	10	2	2	0	100%	2	0	100%	2	0	100%	2	0	100%	2	0	100%	2	0	100%	2	0	100%	2	0	100%	2	0	100%
	Central Reservation		Single Yellow	79.3	13	0	13	0%	0	13	0%	0	13	0%	0	13	0%	0	13	0%	0	13	0%	0	13	0%	0	13	0%	0	13	0%
	West	The Grove to Aplin Way	Crossover/Access	21.3	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Single Yellow	80.8	13	0	13	0%	0	13	0%	1	12	8%	0	13	0%	2	11	15%	2	11	15%	1	12	8%	2	11	15%	0	13	0%
Ravenswood Gardens	North	The Grove to Eastern Extent	Crossover/Access	11.3	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	17.6	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	88	17	7	10	41%	4	13	24%	5	12	29%	7	10	41%	3	14	18%	2	15	12%	5	12	29%	4	13	24%	4	13	24%
	Central Reservation		Double Yellow	78.6	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
	South	The Grove to Eastern Extent	Crossover/Access	26.8	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	30.9	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	51.5	7	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%	1	6	14%	2	5	29%	0	7	0%	0	7	0%
The Grove	East	London Road to Grove Road	Crossover/Access	54.4	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	4.4	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Permit or Pay	34	6	4	2	67%	3	3	50%	2	4	33%	5	1	83%	4	2	67%	2	4	33%	5	1	83%	5	1	83%	6	0	100%
			Resident Permit	5.5	1	0	1	0%	0	1	0%	0	1	0%	0	1	0%	1	0	100%	0	1	0%	0	1	0%	1	0	100%	1	0	100%
			Single Yellow	47.2	5	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%
		Grove Road to Naseby Close	Crossover/Access	8	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	10.1	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	34.4	6	3	3	50%	0	6	0%	0	6	0%	3	3	50%	0	6	0%	1	5	17%	2	4	33%	0	6	0%	2	4	33%
			Single Yellow	12.8	2	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%
		Naseby Close to Ravenswood Gardens	Crossover/Access	16.4	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Double Yellow	9.2	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-
			Resident Permit	42.3	7	2	5	29%	1	6	14%	2	5	29%	2	5	29%	2	5	29%	2	5	29%	2	5	29%	4	3	57%	4	3	57%
			Single Yellow	4.3	0	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
		Ravenswood Gardens to Osterley Road	Crossover/Access	20.2	2	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%	0	2	0%
			Permit or Pay	24	4	0	4	0%	1	3	25%	0	4	0%	0	4	0%	1	3	25%	0	4	0%	0	4	0%	0	4	0%	0	4	0%
			Single Yellow	42.3	5	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%	0	5	0%
		Osterley Road to Osterley Road	Single Yellow	37	7	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%	0	7	0%
	West	London Road to Harvard Road	Crossover/Access	143.3	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	1	-	-	0	-	-	0	-	-	0	-	-
			Pay	28	5	1	4	20%	3	2	60%	0	5	0%	2	3	40%	2	3	40%	0	5	0%	1	4	20%	3	2	60%	2	3	40%
			Resident Permit	143.5	26	12	14	46%	5	21	19%	4	22	15%	9	17	35%	3	23	12%	7	19	27%	10	16	38%	11	15	42%	14	12	54%
			Single Yellow	95	5	1	4	20%	0	5	0%	0	5	0%	0	5	0%	2	3	40%	0	5	0%	0	5	0%	0	5	0%	0	5	0%
			Crossover/Access	**657.8**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**2**	**-**	**-**	**2**	**-**	**-**	**1**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**
			Double Yellow	**256.8**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**
			Keep Clear	**37.7**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**
			Pay	**28**	**5**	**1**	**4**	**20%**	**3**	**2**	**60%**	**0**	**5**	**0%**	**2**	**3**	**40%**	**2**	**3**	**40%**	**0**	**5**	**0%**	**1**	**4**	**20%**	**3**	**2**	**60%**	**2**	**3**	**40%**
			Permit or Pay	**301.6**	**51**	**15**	**36**	**29%**	**21**	**30**	**41%**	**7**	**44**	**14%**	**17**	**34**	**33%**	**20**	**31**	**39%**	**9**	**42**	**18%**	**18**	**33**	**35%**	**21**	**30**	**41%**	**16**	**35**	**31%**
			Resident Permit	**766.2**	**134**	**58**	**76**	**43%**	**23**	**111**	**17%**	**27**	**107**	**20%**	**53**	**81**	**40%**	**29**	**105**	**22%**	**34**	**100**	**25%**	**55**	**79**	**41%**	**45**	**89**	**34%**	**54**	**80**	**40%**
			Single Yellow	**628.1**	**86**	**8**	**78**	**9%**	**1**	**85**	**1%**	**1**	**85**	**1%**	**2**	**84**	**2%**	**4**	**82**	**5%**	**2**	**84**	**2%**	**7**	**79**	**8%**	**7**	**79**	**8%**	**2**	**84**	**2%**
			Unrestricted	**10**	**2**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**	**2**	**0**	**100%**

Isleworth Parking Survey

May 2017

200m Walking Distance Parking Inventory

Standard Junction Protection in metres 5

Standard Parking Space Length in metres 5

Angled Parking Space Length in metres 2.5

Parking Inventory

Road Name	Side	Section	Parking Type	Length (m)	Bays	Individual Measured Lengths (m)
Grove Road	North	The Grove to Avenue Road	Crossover/Access	37.5	-	3.0, 3.0, 4.0, 5.5, 5.0, 6.5, 5.0, 5.5
			Double Yellow	14	-	13.0, 1.0
			Resident Permit	51.6	10	16.0, 15.6, 15.0, 5.0
			Single Yellow	17.4	1	2.0, 6.0, 3.0, 3.2, 1.2, 1.0, 1.0
	South	The Grove to Avenue Road	Crossover/Access	31.7	-	5.0, 5.0, 5.0, 4.5, 12.2
			Double Yellow	18.5	-	13.0, 5.5
			Resident Permit	66.5	12	10.0, 5.0, 5.0, 5.5, 8.5, 32.5
			Single Yellow	2	0	1.0, 1.0
Harvard Road	East	London Road to The Grove	Crossover/Access	160.6	-	5.8, 4.4, 25.2, 10.1, 9.5, 8.2, 11.7, 5.3, 10.3, 20.4, 10.7, 10.7, 9.1, 5.5, 10.9, 2.8
			Resident Permit	126.4	23	10.0, 6.0, 5.5, 11.0, 5.5, 10.0, 6.0, 10.0, 5.5, 5.6, 10.0, 12.0, 6.0, 5.1, 18.2
			Single Yellow	56.4	8	21.3, 4.2, 2.0, 7.7, 10.5, 10.7
	West	London Road to The Grove	Crossover/Access	34.7	-	5.2, 16.3, 9.5, 3.7
			Keep Clear	37.7	-	21.4, 8.4, 7.9
			Permit or Pay	243.6	41	113.6, 40.0, 90.0
			Single Yellow	22.6	3	13.8, 8.8
Naseby Close	North	The Grove to Eastern Extent	Crossover/Access	37	-	7.2, 4.0, 7.2, 4.6, 7.4, 1.0, 5.6
			Double Yellow	34.5	-	15.0, 19.5
			Resident Permit	77.3	13	20.7, 7.7, 15.6, 11.0, 13.7, 6.1, 2.5
	South	The Grove to Eastern Extent	Crossover/Access	43.4	-	7.7, 7.4, 7.5, 4.6, 8.9, 4.0, 3.3
			Double Yellow	39	-	39.0
			Resident Permit	79.2	12	15.0, 21.7, 7.0, 10.0, 10.0, 10.2, 5.3
Osterley Road	East	The Grove to Meadowbank Close	Crossover/Access	11.2	-	3.6, 4.0, 3.6
			Double Yellow	0	-	
			Single Yellow	131	24	93.0, 3.0, 20.0, 10.0, 5.0
			Unrestricted	10	2	10.0
	Central Reservation		Single Yellow	79.3	13	42.0, 37.3
	West	The Grove to Aplin Way	Crossover/Access	21.3	-	5.4, 10.9, 5.0
			Single Yellow	80.8	13	24.5, 22.3, 34.0
Ravenswood Gardens	North	The Grove to Eastern Extent	Crossover/Access	11.3	-	3.3, 8.0
			Double Yellow	17.6	-	8.8, 2.0, 2.8, 4.0
			Resident Permit	88	17	38.0, 50.0
	Central Reservation		Double Yellow	78.6	-	78.6
	South	The Grove to Eastern Extent	Crossover/Access	26.8	-	15.0, 7.3, 4.5
			Double Yellow	30.9	-	23.0, 4.4, 3.5
			Resident Permit	51.5	7	9.3, 35.5, 6.7
The Grove	East	London Road to Grove Road	Crossover/Access	54.4	-	5.5, 5.7, 7.7, 5.0, 7.7, 7.3, 6.5, 4.4, 4.6
			Double Yellow	4.4	-	4.4
			Permit or Pay	34	6	10.0, 6.0, 12.0, 6.0
			Resident Permit	5.5	1	5.5
			Single Yellow	47.2	5	11.6, 7.0, 3.5, 1.0, 2.5, 2.7, 2.6, 1.1, 1.4, 3.8, 10.0
		Grove Road to Naseby Close	Crossover/Access	8	-	8.0
			Double Yellow	10.1	-	3.6, 6.5
			Resident Permit	34.4	6	10.0, 24.4
			Single Yellow	12.8	2	5.9, 6.9
		Naseby Close to Ravenswood Gardens	Crossover/Access	16.4	-	10.8, 5.6
			Double Yellow	9.2	-	3.0, 6.2
			Resident Permit	42.3	7	12.1, 18.2, 12.0
			Single Yellow	4.3	0	1.7, 1.0, 1.6
		Ravenswood gardens to Osterley Road	Crossover/Access	20.2	2	4.1, 6.5, 5.0, 4.6
			Permit or Pay	24	4	6.0, 18.0
			Single Yellow	42.3	5	19.3, 5.4, 2.6, 5.3, 1.5, 8.2
		Osterley Road to Osterley Road	Single Yellow	37	7	37.0
	West	London Road to Harvard Road	Crossover/Access	143.3	-	2.7, 16.0, 7.6, 5.0, 8.0, 10.5, 4.0, 5.0, 3.8, 7.0, 9.0, 8.0, 6.7, 7.3, 10.0, 9.0, 5.2, 10.3, 8.2
			Pay	28	5	22.0, 6.0
			Resident Permit	143.5	26	12.5, 6.0, 12.0, 5.0, 12.0, 10.0, 10.3, 6.0, 10.0, 10.0, 6.0, 10.0, 18.2, 5.5, 10.0
			Single Yellow	95	5	2.5, 5.2, 2.6, 1.0, 2.3, 3.0, 4.5, 3.0, 1.5, 6.0, 1.5, 2.0, 2.2, 2.8, 2.0, 2.0, 2.1, 2.3, 1.2, 1.5, 1.3, 3.2, 2.0, 2.0, 3.2, 3.7, 2.0, 2.5, 5.4, 12.5, 4.0, 2.0

Bus Stop	**0**	**0**
Crossover/Access	**657.8**	**2**
Double Yellow	**256.8**	**0**
Keep Clear	**37.7**	**0**
Loading	**0**	**0**
Pay	**28**	**5**
Permit or Pay	**301.6**	**51**
Resident Permit	**766.2**	**134**
Single Yellow	**628.1**	**86**
Unrestricted	**10**	**2**
White Zig-Zag	**0**	**0**