

consulting
engineers

NRB

**Transportation
Assessment
Report**

For

**Proposed Self-Storage
Warehousing**

At

**Liffey Valley, Lucan,
Dublin 22.**

SUBMISSION ISSUE

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EXECUTIVE SUMMARY

NRB Consulting Engineers Ltd were appointed to address the Traffic/Transportation issues associated with a planning application for a stand-alone self-storage warehouse facility at Liffey Valley, Lucan, Dublin 22.

This Transportation Assessment (TA) has been prepared to address any Traffic Impact issues associated with the proposal, and specifically the capacity of the existing road network and the ability of the site access to accommodate the worst case traffic flows.

The Report has been prepared in accordance with TII's Traffic & Transportation Assessment Guidelines and addresses the worst-case traffic impact of the proposal. This TA addresses the adequacy of the existing and improved local road network to safely and appropriately accommodate the worst-case vehicular demands with the development fully operational, taking account of the existing transportation demands locally.

We commissioned and undertook new traffic surveys of the adjacent road network during September 2021 when schools were fully opened and then applied a 'Summertime/Covid factor' utilising adjacent N4 TII Traffic Counter Data, to adjust the data to reflect non-pandemic times. This represents industry-standard procedure, being a pragmatic approach in the context of the statutory timeframes applied to planning applications during a pandemic. This traffic survey data formed the basis of the study.

The Transportation Assessment confirms that the established existing road network, and the access junction, are more than adequate to accommodate the worst-case traffic associated with the development. The assessment also confirms that the construction and full occupation of the scheme will have a negligible impact upon the operation of the adjacent road network.

Direct and high-quality pedestrian linkages are provided between the site and the existing pedestrian/cycling facilities on the surrounding road network. The Car and Cycle Parking Quantum has been assessed and is in line with the requirement of the SDCC Development Plan.

We conclude that there are no adverse traffic/transportation capacity or operational safety issues associated with the construction and operation of the proposed development which would prevent planning permission being granted by South Dublin County Council.

1.0 INTRODUCTION

- 1.1 This Transportation Assessment (TA) has been prepared by NRB Consulting Engineers Ltd and addresses the Traffic/Transportation issues associated with a planning application for a stand-alone self-storage warehouse facility at Liffey Valley, Lucan, Dublin 22.
- 1.2 The proposed development is to be located on appropriately zoned undeveloped land within the confines of the overall Liffey Valley Complex, immediately north of the Shopping Centre. A site location plan is included below as *Figure 1.1*.



Figure 1.1 - Site Location within Liffey Valley

- 1.3 In describing the Receiving Environment and the Proposed Future Environment, this report addresses the following aspects of the proposed development:
- Relatively Small Scale of the development in **Traffic terms** (as reflected in the detailed assessment in this report),
 - Location of the development within the confines of an established busy District Centre in close proximity to high quality Public Transport Links,

- Traffic & Transportation impact,
- Capacity of the proposed vehicular accesses to accommodate the worst-case development traffic flows,
- Capacity of & Impact Upon the Existing Road Network & Junctions.
- Adequacy and safety of the existing roads and junctions locally, within the area of influence.

1.4 Recommendations contained within this Transportation Assessment are based on the following sources of information and industry-standard practices:

- The TII Traffic & Transport Assessment Guidelines,
- Design Manual for Urban Roads and Streets,
- Recent Weekday AM and PM Peak Classified Turning Movements Traffic Survey Data commissioned,
- TII Assessment Guidance,
- TII Permanent Traffic Counter Data from the adjacent N4,
- Our experience in assessing the impact of Developments of this Nature, and
- Site Visits and Observations.

1.5 The Report has been prepared in accordance with the requirements of the TII's Traffic & Transport Assessment Guidelines. These are the professional Guidelines used to assess the impact of developments on public roads.

2.0 EXISTING CONDITIONS, DEVELOPMENT PROPOSALS & PARKING

- 2.1 The subject development site is located on the northern boundary of the overall Liffey Valley District Centre. It is bound immediately to the north by the embankments and footprint of the N4 National Road. It bound to the east by the existing Abbott Office Block (“Liffey Valley Office Park”), and to the east by the existing Giraffe Childcare facility.

- 2.2 The site fronts onto the local distributor road known as ‘Liffey Valley Motor Hall Road’, which serves the motor dealerships located to the west of the road. The local road is a wide high capacity single carriageway road, provided with footpaths and some cycle paths along either side.

- 2.3 Images showing the existing site and context are included below as *Figure 2.1* and *Figure 2.2*.



Figure 2.1 – View of Site Looking Eastwards



Figure 2.2 – View of Site Looking Westwards

- 2.4 Whilst of course it is acknowledged that the local roads serving Liffey Valley to the south of the site are heavily trafficked, the Traffic survey & assessment (within **Appendix D**) confirms that the Liffey Valley Motor Hall Road is actually in itself very lightly trafficked. It carries a weekday AM Peak Hour 2-Way traffic flow of approximately 86 Passenger Car Units (PCUs) and a 2-way flow of 140 PCUs in the PM Peak Hour, measured immediately west of the adjacent office block. In these terms, the road is considered very trafficked in terms of its link carrying capacity.
- 2.5 To set the above existing flow in context, roads of this nature have a traffic carrying or link capacity of between 1,000 and 1,200 PCUs per-direction per-hour. This link capacity of a typical street provides a context for the existing conditions pertaining on the road serving the site. Of course, it should be remembered and it is acknowledged that the capacity or through-put of any road in an urban environment of this nature is generally determined by the capacity of the terminal junctions.
- 2.6 We would also highlight that the proposed development is located within a 5 minute walk of the Liffey Valley Bus terminus AND also the Bus Services on the N4 National Road. These together provide for very high frequency services, and ensure that the site is accessible by bus, on foot or by bicycle for the small number of staff that will be employed. An image showing the proximity of the site, within a 5 minute walk, to the Liffey Valley Bus Terminus is included below as **Figure 2.3**

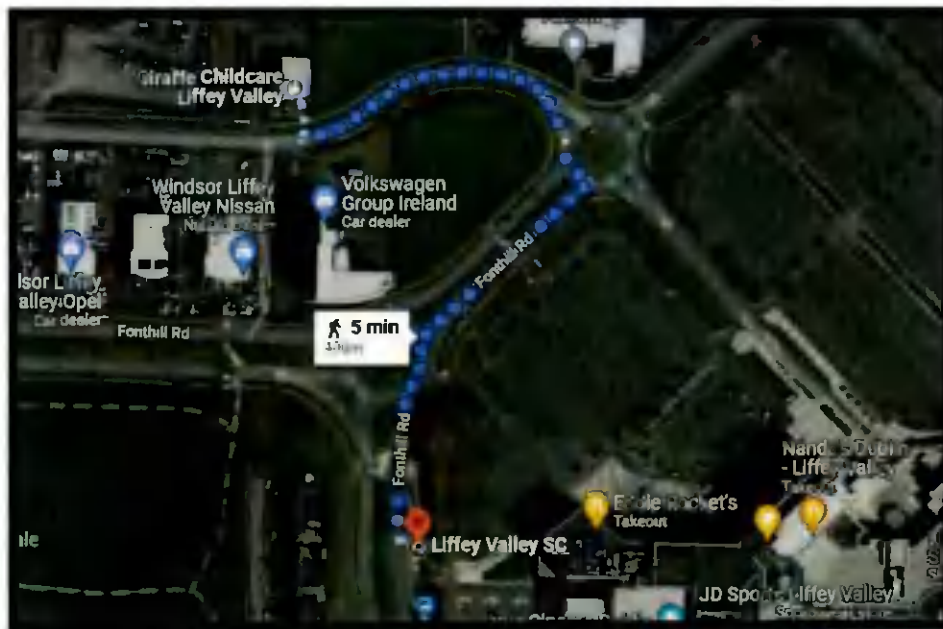


Figure 2.3 – Less than 5 Min Walk to LV Bus Terminus

Proposed Development

2.7 An examination of the Road Safety Authority (RSA) on-line database of reported road traffic accidents confirms that there have been no relevant accidents on the adjacent affected roads during the reported period 2005 to date, which would be exacerbated by the proposed development. An extract from the RSA Database is included below as **Figure 2.4** below



Figure 2.4 – RSA Accident Database Extract

Proposed Development

- 2.8 The proposed development consists of the following elements: -
- A proprietary self-storage warehouse facility of 8,620m² GFA, including a small ancillary Coffee Shop space for customers & staff.
 - 2 separate vehicular accesses from the adjacent road (one shared with the existing Liffey Valley Office Park access), with 2 provided for operational and best practice safety reasons,
 - The western most access is intended to serve the smaller customer car park and provide for vehicles accessing the ground floor loading bays,
 - The shared existing eastern most access is intended to serve the customer / staff car park and provide for vehicles accessing the basement area and lift cores.
 - A total of 50 car parking spaces are provided (excluding car storage spaces), and
 - A total of 22 dedicated staff bicycle parking spaces (11 stands) are provided.
- 2.9 Annotated drawings showing the proposed Scheme Layout are included herein as **Appendix A**. This includes autotracks of the largest anticipate vehicles on the site.

Car & Bicycle Parking Assessment

- 2.10 In terms of the SDCC Development Plan and **Car Parking**, being clearly within 400m of very high frequency bus services, the site is located within Zone 2 for parking assessment purposes. Therefore, with 8,620m² of GFA, it requires the provision of 43 car parking spaces (at a required ratio of 1 space per 200m² for warehousing facilities within Zone 2, 1 per 100 in Zone 1). 50 car parking spaces (2 disabled, 5 EV's and 43 standard) are being provided broadly in line with the development plan standards.
- 2.11 Notwithstanding the adherence to the SDCC Development Plan, it should be noted that a 'U-Store-It' development of this nature generally has a total of 4-5 staff present and based on established trends, we are advised by operators that there are ordinarily no more than 10 people visiting at any one time. In this regard the provision of 50 car parking spaces, in line with the SDCC Development Plan, would appear adequate.
- 2.12 In terms of **Bicycle Parking** there is a requirement to provide 1 space per 200m² GFA. This translates to a requirement for 43 bicycle long stay (i.e. staff) parking spaces. 22 space (11 stands) are being provided. It should however be noted that the provision will by-far outweigh the potential demand by 4-5 staff for a U-Store-it facility based on the information contained within the foregoing paragraph.

3.0 TRIP GENERATION, ASSIGNMENT & DISTRIBUTION

3.1 In terms of assessing Car Traffic and the impact of same on the local road network, the Trip Rate Information Computer System (TRICS V7.8.3) database is ordinarily used to ascertain vehicular trip generation associated with the use of any particular site. This represents industry standard practice for Transportation Assessments in Ireland. We have included as **Appendix C** the TRICS output for traditional Self Storage Warehousing, and this provides a robust estimation of traffic as illustrated in **Table 3.1**.

3.2 The Table summarise the Output from the TRICS database, which is included herein as **Appendix C** for comparison purposes.

Table 3.1: TRICS Data Summary, 8620m² Self-Storage Warehouse

8620 m ² S-S Warehouse	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated
	Per 100m ²	Dev	Per 100m ²	Dev	
Weekday AM Peak Hr 8-9	0.121	10	0.083	7	17
Weekday PM Peak Hr 5-6	0.060	5	0.143	12	17

3.3 The application of TRICS in this case specifically excludes the effect of Shared Visits to other elements within the Liffey Valley Area and quantifies the volumes of traffic on an individual basis with the traffic assigned as 100% primary trips - in these terms the assessment can be considered further robust. The small ancillary Coffee Shop space for customers & staff is associated with the self-storage use and is not anticipated to generate any traffic in its own right.

3.4 Therefore, the use of TRICS and the methodology adopted is Robust and Onerous and the Trip Rates applied & used provide for a robust reflection of the expected worst-case traffic generated by the proposed development.

3.5 Notwithstanding, in light of observation of existing capacity conditions, the use of higher Trip Rates, if required would have no impact upon the conclusions of the study. This is particularly the case given the low traffic impact associated with the development.

Assessment Methodology

- 3.6 We have used hand assignment techniques based on the observed movements, with the worst-case traffic assigned to the roads based on the observed established traffic patterns, being the industry standard methodology. The standard methodology applied was to firstly ascertain the base background traffic conditions for both the weekday AM and weekday PM Commuter Peak periods.

- 3.7 To this end we commissioned and undertook a 2021 Traffic Survey of the existing affected roads and junctions in order to establish base background traffic conditions. The Traffic Survey commissioned included the junctions as set out in *Figure 3.1* below

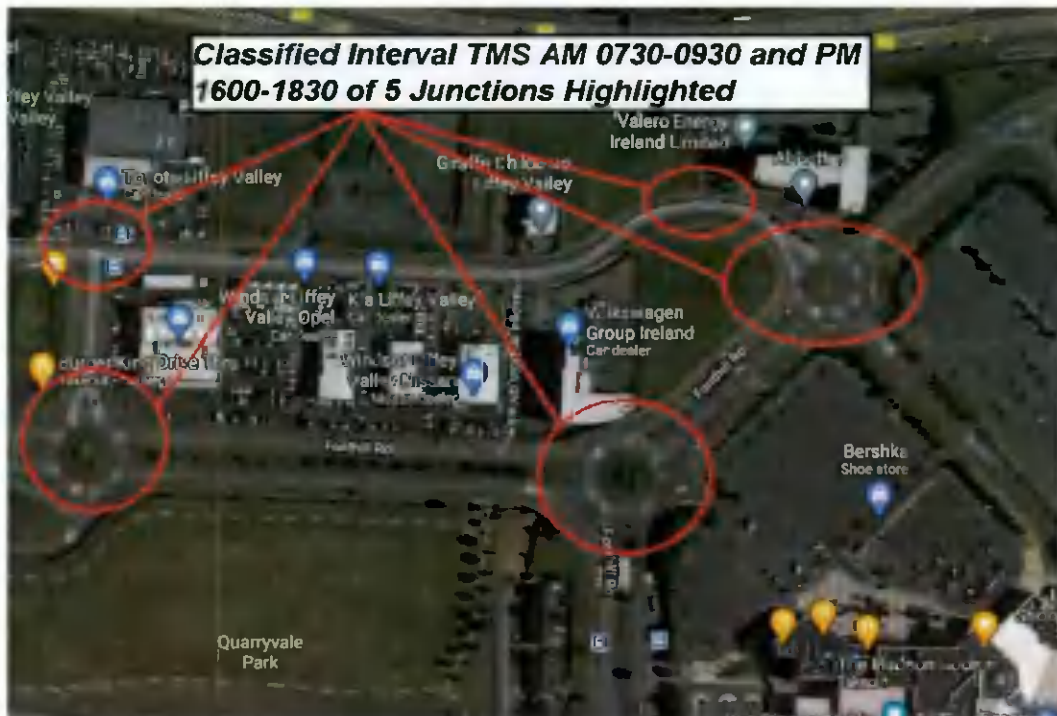


Figure 3.1 – Traffic Surveys Commissioned

- 3.8 Using this data, we then applied a calculated Covid Factor based on accurate data extracted from the TII Permanent Traffic Counter data on the N4 nearest the site. This represents a pragmatic industry-standard approach in these times when Planning Applications have statutory timeframes during a Pandemic. Details of the traffic surveys are included as *Appendix B* and are reproduced as commuter peak hour Stick Diagrams as *Appendix D*.

3.9 We then used the TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 (Travel Demand Projections 2019, Table 6.1: Central Growth Rates: Annual Growth Factors, Metropolitan Dublin), to establish projected occupation/opening year 2023 and design year 2038 traffic conditions 15 years following opening on the local road network. The worst-case traffic based on the content of **Table 3.1** above was then applied in order to establish Opening Year and Design Year Traffic Conditions with the proposed development in place and fully occupied. This is all included in the calculations included herein as **Appendix D**.

3.10 It should be noted that we have selected an opening year of 2023 as being reasonable and appropriate. However, in our experience, varying the opening year and design year by 1-3 years, if required for whatever reason, would have no significant impact upon the conclusions of the study. In addition, given the favourable results reported in this study, if required to apply higher background traffic conditions for any reason we would not anticipate any changes to the conclusions. Traffic growth factors for future year assessments were calculated from data obtained in the TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 which provides the recommended method of predicting future year traffic growth on Roads.

3.11 Calculations of the relevant growth factors are included in **Table 3.2** below (based on tabulated 'Central Growth' for Metropolitan Dublin). It should be noted that any requirement to use different or higher growth factors will also have no implications for the conclusions of the study.

Table 3.2: Traffic Growth Rates, TII Travel Demand Projections Unit 5.3

Year	to Year	Table 6.1:
Surveyed	2023	1.032
2023	2038	1.165

4.0 TRAFFIC IMPACT - TRAFFIC CAPACITY RESULTS

- 4.1 The TII Traffic and Transport Assessment Guidelines set out a strict mechanism for assessment of developments of this nature and determining whether further assessment is indeed required. This Guideline requires a **Threshold Assessment** of the impact on the local roads to be provided in order to determine whether additional more detailed modelling and assessment of particular critical junctions is necessary.
- 4.2 We have assessed the impact of the proposed development with a wide area of influence included, as set out in **Figure 3.1** above. The professional guidance referenced above sets out specific increases in traffic volume associated with new development, which, when breached, requires further detailed analysis to be undertaken. The recommendation is that, if the expected increase is **5%** for networks that are considered heavily trafficked or congested, then further analysis is warranted. In this case, given the location within the Liffey Valley Area, for robustness, the 5% threshold has been applied.
- 4.3 In this regard, it is demonstrated herein that the proposed operation of the facility, with very low volumes of vehicular traffic added to a busy network, will not result in any significant or noticeable level of new trips on the local roads, with all anticipated traffic increases beyond the Proposed Access junction expected to be **well below** the Industry-Standard level of 5% above which further assessment is required. This underlines the low levels of traffic in comparison with the established road network traffic volumes.
- 4.4 Our assessment confirms that the absolute worst case traffic increases on the adjacent road network junctions, with the entire development operational, undertaken in accordance with Guidelines, is as summarised below as **Table 4.1**.

Table 4.1: All of the Proposed Development Operational - Threshold Assessment, Worst-Case Impact - AM & PM Peak Hours 2023

Assessed Road or Junction	Traffic Increase %		COMMENT
	AM Pk Hr	PM Pk Hr	
LV Office Campus 'Abbott' Access Jnct	3.2%	2.0%	<5% No Further Assessment Required
LV SC/LV Spine Rd R'Abt to the East	0.7%	0.2%	<5% No Further Assessment Required
LV SC Exit/Fontill Rd R'Abt to South	0.2%	0.1%	<5% No Further Assessment Required
LV Motor Hall Rd/T Jnct to West	2.6%	2.2%	<5% No Further Assessment Required
Fonhill Rd/LV Spine Rd R'Abt to SW	0.9%	0.6%	<5% No Further Assessment Required

- 4.5 Apart from the Site Access, these worst-case traffic increases are all well below the Guideline & industry-standard level above which further assessment is required, in accordance with the Guidelines.
- 4.6 To set these increased levels of traffic in context, the day-to-day variation in traffic volume (due to day-of-week or weather conditions, for example) is accepted as 10%, so, in this context alone, increases of less than 5% will go entirely unnoticed and this underscores the negligible impact of the proposed development traffic.
- 4.7 We have undertaken traffic modelling of the site access T-Junction for the weekday AM and PM Periods (2023 Opening Year and 2038 Design Year +15) purely to confirm & demonstrate adequate capacity exists to accommodate the increased traffic associated with the development.

Access T-Junction - Capacity Modelling

- 4.8 We have used the TII-approved software package 'Junctions 9' PiCADY' (Priority Intersection Capacity And Delay) software package (as part of the TRL Package 'Junction 9') to assess the capacity of the junction. PiCADY produces results based on a ratio of flow to capacity (RFC) and queue length. An RFC greater than 1.00 indicates that a junction is operating at or above capacity, with 0.85 considered to be the optimum RFC value. We have appended the detailed computer simulation model results for the proposed site access as **Appendix E**.
- 4.9 We have undertaken a detailed assessment of the capacity of the eastern most site access junction (shared with Liffey Valley Office Park) for robustness, assuming all of the traffic associated with proposed development uses this access only. This is a robust approach given there are two accesses to the development. The detailed output of the models is summarised below as **Table 4.2**

Table 4.2: Site Access/Adjacent Office Campus Accesses Combined - Robust PiCADY Results. Weekday AM & PM Commuter Pk Hours - 2023 & 2038

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2023 AM Peak Hr	<1	0.02
Opening Year 2023 PM Peak Hr	<1	0.07
Design Year 2038 AM Peak Hr	<1	0.02
Design Year 2038 PM Peak Hr	<1	0.08

- 4.10 The results of the modelling clearly show that the site access junction will have way more than adequate capacity to accommodate the worst-case traffic associated with the fully complete and occupied scheme, in opening and design years, conscious of the very small increases in traffic associated with the subject development. The worst case, with all of the traffic to the site combined with the adjacent Office Campus Traffic has been modelled.
- 4.11 The analysis undertaken confirms that there is adequate capacity in the proposed access to accommodate the worst-case traffic projections without any concerns arising in terms of increased Traffic Congestion or indeed adverse Traffic Safety.

5.0 CONCLUSIONS

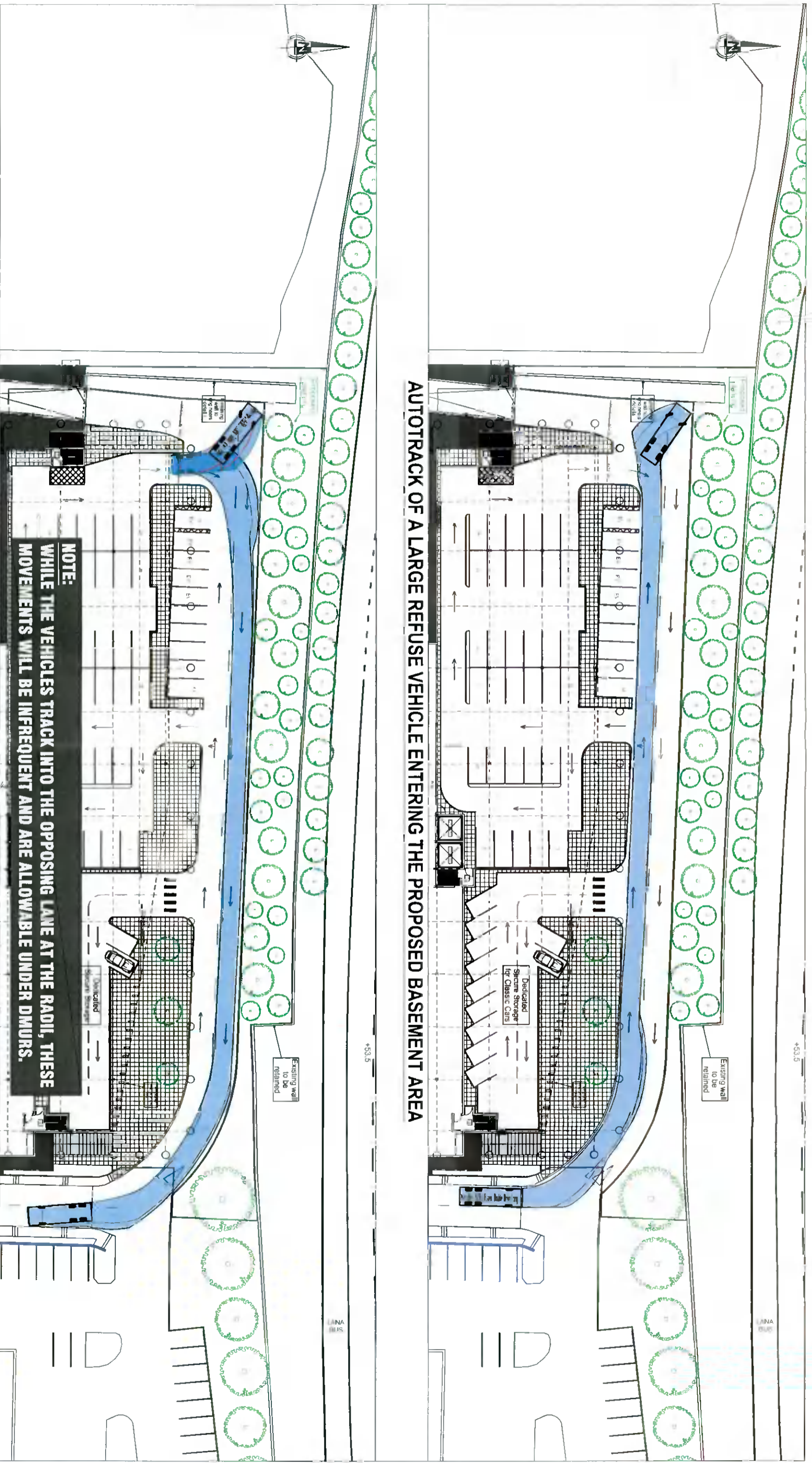
- 5.1 This Transportation Assessment Report assesses the Traffic/Transportation issues associated with a planning application for a stand-alone self-storage warehouse facility at Liffey Valley, Lucan, Dublin 22.
- 5.2 This Report has been prepared in accordance with the TII Traffic & Transport Assessment Guidelines and is based on industry-standard Trip Generation Rates established using the most up to date version of the TRICS Database. The impact of the development traffic on the local roads has been modelled and assessed, based on a traffic survey/vehicle turning movement survey during normal school period, with industry standard covid factors applied based on TII Traffic Counter Data. Appropriate traffic growth factors have been applied to establish selected opening year and design year traffic conditions.
- 5.3 An assessment of Car Parking and Bicycle Parking quantum and design provided has been undertaken, and the provision is consistent with the requirements of the SDCC Development Plan.
- 5.4 This report demonstrates that the proposed Development will have an absolutely negligible impact upon the established local traffic conditions and can easily be accommodated on the road network without any capacity concerns arising.
- 5.5 The assessment confirms that the proposed access junction is of more than adequate capacity to accommodate the worst-case traffic associated with the proposed development during the selected year of opening and the design year 15 years following opening.
- 5.6 It is considered that there are no significant Operational Traffic Safety or Road Capacity issues, affecting the established road network, that prevent a positive determination of the application by South Dublin County Council.

APPENDICES - CONTENT

A	Proposed Development – Site Layout/Plans
B	Weekday Classified Turning Movement Traffic Survey Output Data
C	TRICS Output Data – Self Storage Warehousing
D	Traffic Calculations, Trip Distribution, Network Traffic Flow Diagrams & Projections Based on Traffic Surveys
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APPENDIX A

**Proposed Development
Site Layout/Plans**



AUTOTRACK OF A LARGE REFUSE VEHICLE ENTERING THE PROPOSED BASEMENT AREA

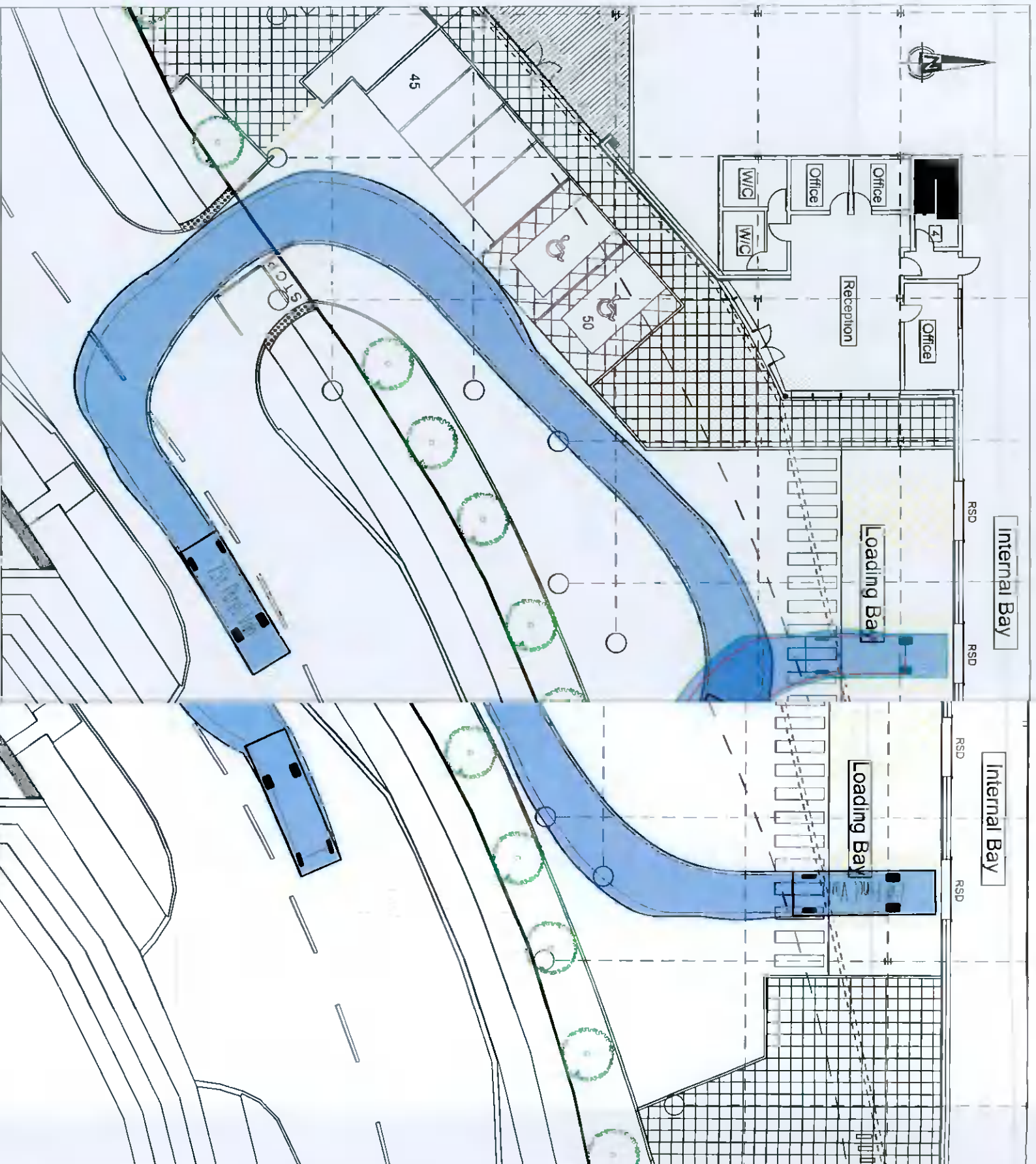
AUTOTRACK OF A LARGE REFUSE VEHICLE ENTERING THE PROPOSED BASEMENT AREA

NOTE:
WHILE THE VEHICLES TRACK INTO THE OPPOSING LANE AT THE RADII, THESE MOVEMENTS WILL BE INFREQUENT AND ARE ALLOWABLE UNDER DMURS.

NRB Consulting Engineers Ltd recommend that road and land ownership boundaries are verified through Legal & Land searches by the Client.
 This drawing is based upon Architects drawing U Store It, Ground Floor Plan, received 14/10/21. NRB Consulting Engineers Ltd shall not be liable for any inaccuracies or deficiencies

REV	DATE	AMENDMENTS	DRAWN	CHK	APP
<p>NRB Consulting Engineers Ltd 1st Floor, Apollo Building Dundrum Road Dundrum Dublin 14</p> <p>Phone/Fax: +353 1 292 1941 Email: info@nrbe.ie Web: www.nrbe.ie Registered in Ireland No. 491679</p> <p>NRB consulting engineers</p>					
Client		NRB Consulting Engineers Ltd			
Project		U-Store It Liffey Valley			
Title		Autotracks of a Large Refuse Vehicle Entering and Exiting the Basement Area			
Project No.		21-086		Drawing No. NRB-TA-004	
Drawn		Checked		Approved	
PB		14/10/21		SN 14/10/21	
Date		14-Oct-21		Scale @ A3 1:500	
Purpose of Issue		<input type="checkbox"/> Draft <input type="checkbox"/> As Built		<input type="checkbox"/> Information <input type="checkbox"/> Tender <input type="checkbox"/> Approval <input type="checkbox"/> Construction	



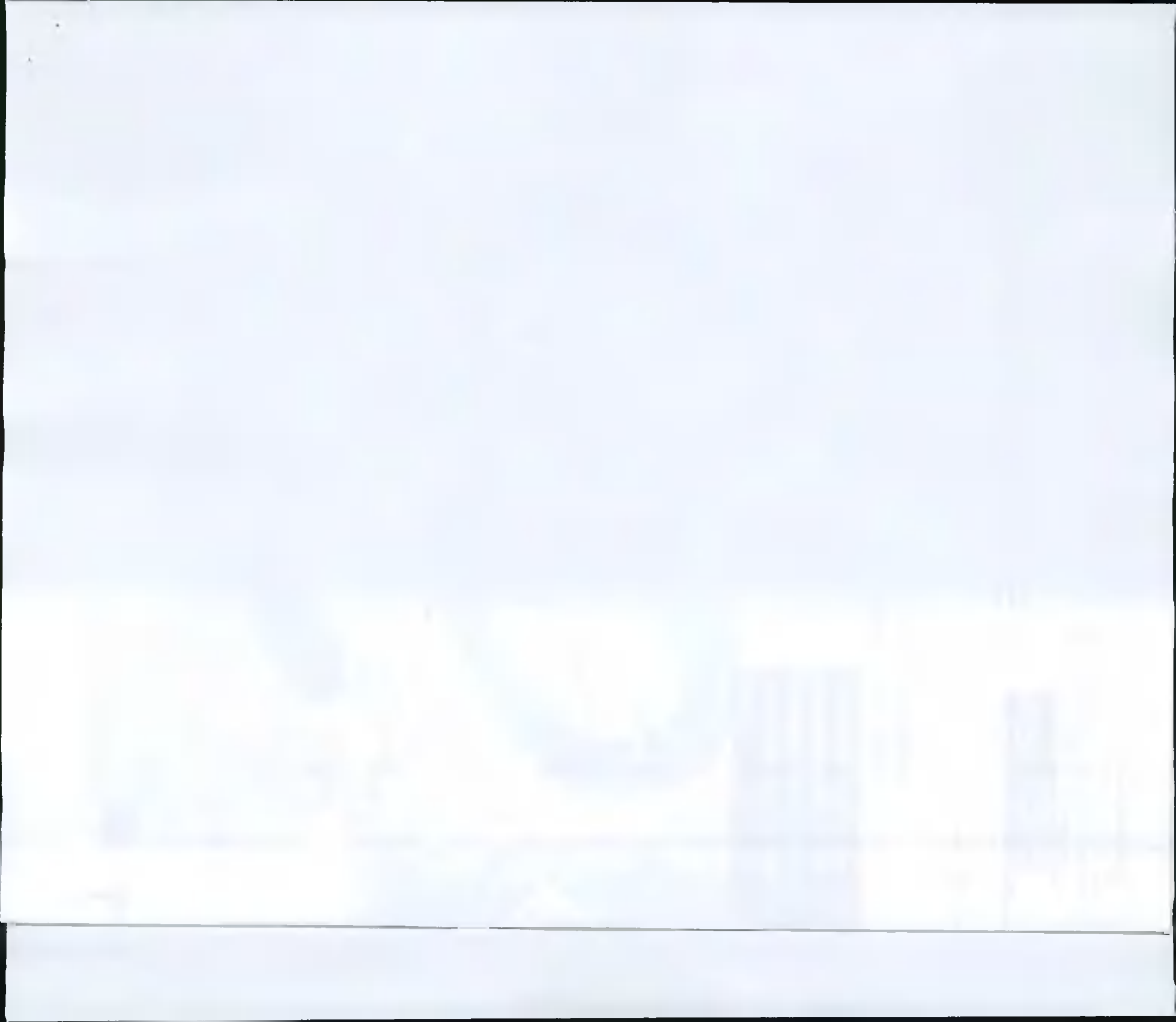


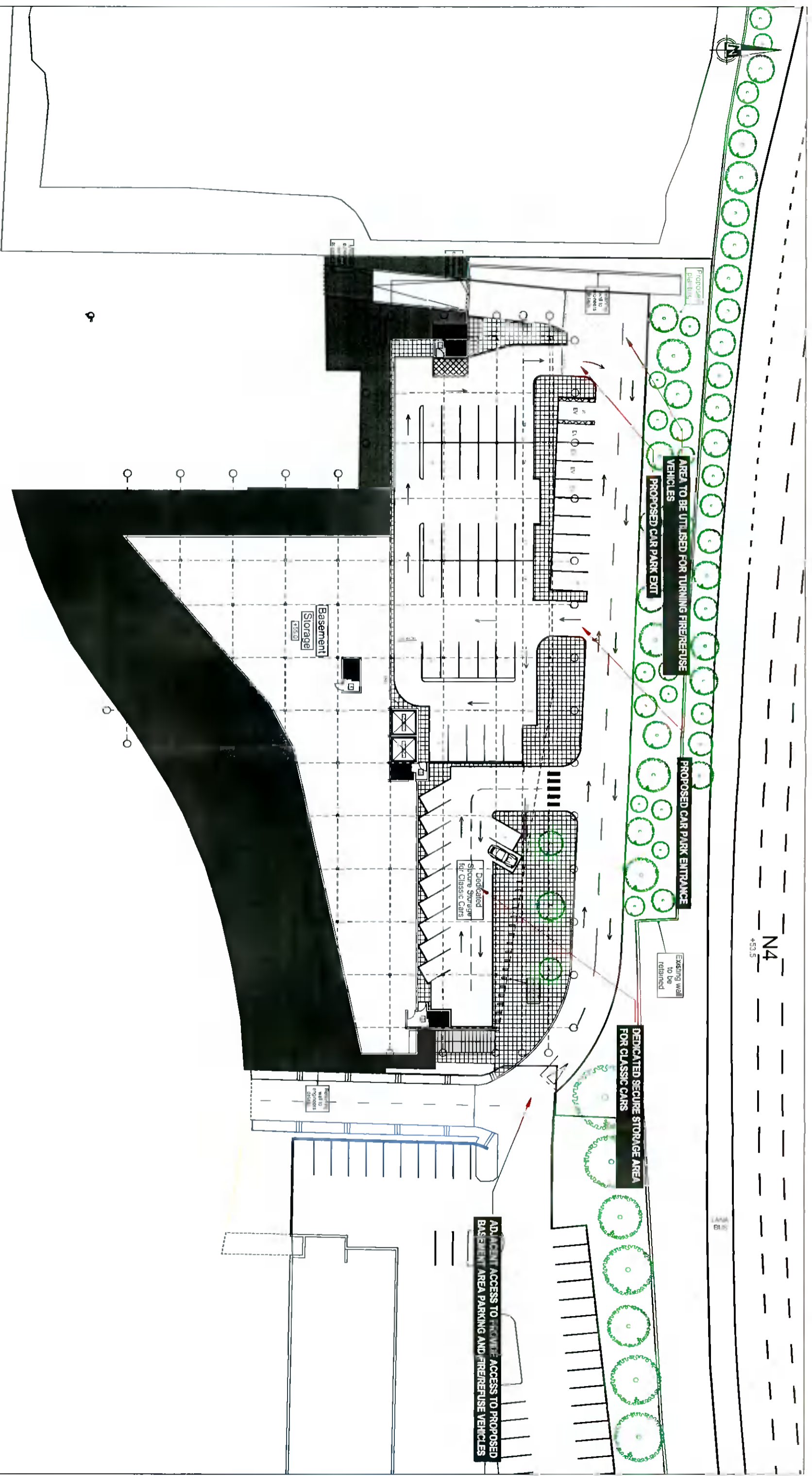
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PROPOSED LOADING BY AREA
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Legal & Land searches by the Client.

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Consulting Engineers Ltd shall not be liable for any inaccuracies or deficiencies.

REV	DATE	AMENDMENTS	DRAWN	CHK	APP
<p>NRB Consulting 1st Floor, Apo Dundrum Road Dublin 14</p> <p>Project No. 21-086 Drawing No. NRB-TA-003</p> <p>Drawn PB Checked SN Date 14-Oct-21 Scale @ A3 1:250</p> <p>Approved SN Approved SN Date 14/10/21 Rev -</p> <p>Purpose of Issue <input type="checkbox"/> Draft <input type="checkbox"/> As Built <input type="checkbox"/> Information <input type="checkbox"/> Tender <input type="checkbox"/> Approval <input type="checkbox"/> Construction</p>					





N4
+53.5

AREA TO BE UTILISED FOR TURNING FIRE/REFUSE VEHICLES

PROPOSED CAR PARK EXT

PROPOSED CAR PARK ENTRANCE

Existing wall to be retained

DEDICATED SECURE STORAGE AREA FOR CLASSIC CARS

ADJACENT ACCESS TO PROVIDE ACCESS TO PROPOSED BASEMENT AREA PARKING AND FIRE/REFUSE VEHICLES

Dedicated Storage for Classic Cars

Basement Storage (155.0)

NRB Consulting Engineers Ltd recommend that Road and land ownership boundaries are verified through Legal & Land searches by the Client.

This drawing is based upon Architects drawing U-Store It, Ground Floor Plan, received 14/10/21. NRB Consulting Engineers Ltd shall not be liable for any inaccuracies or deficiencies.

REV	DATE	AMENDMENTS	DRAWN	CHK	APP

NRB Consulting Engineers Ltd
1st Floor, Apollo Building
Dundrum Road
Dundrum
Dublin 14

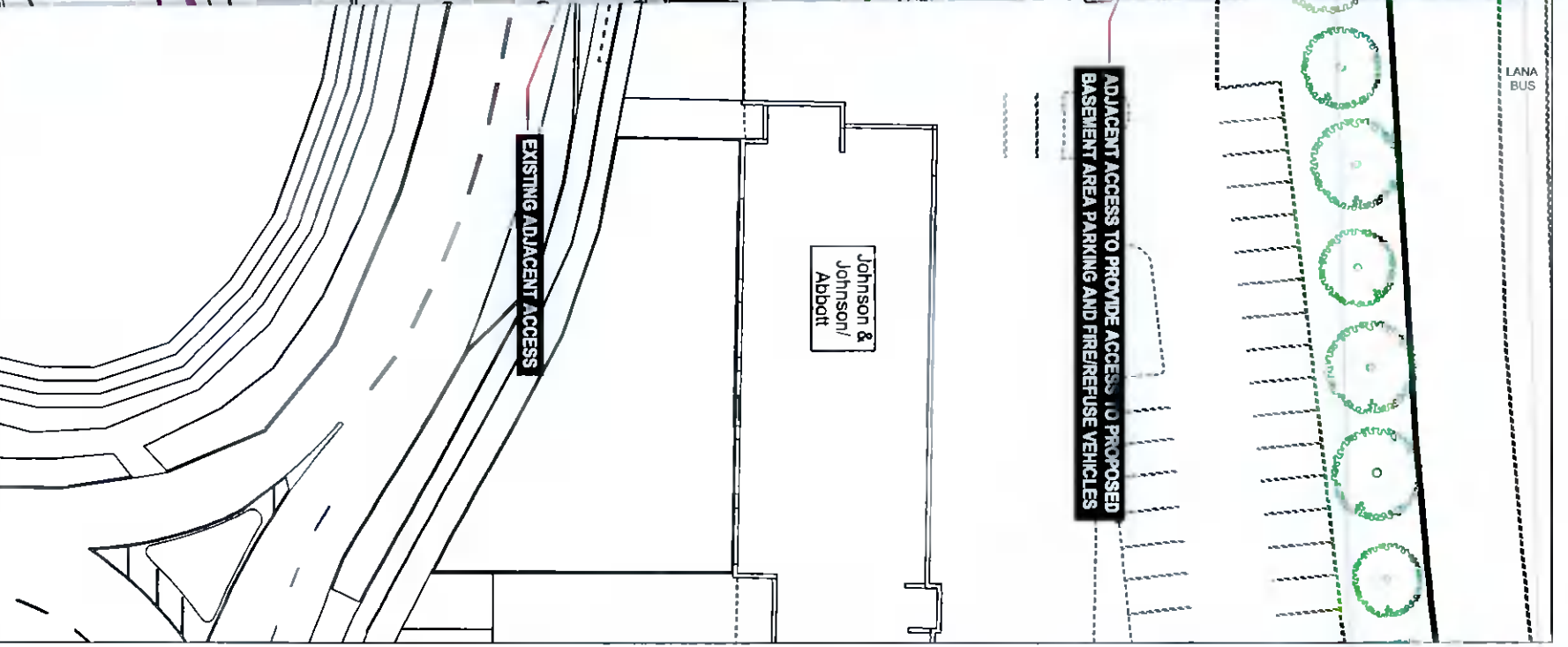
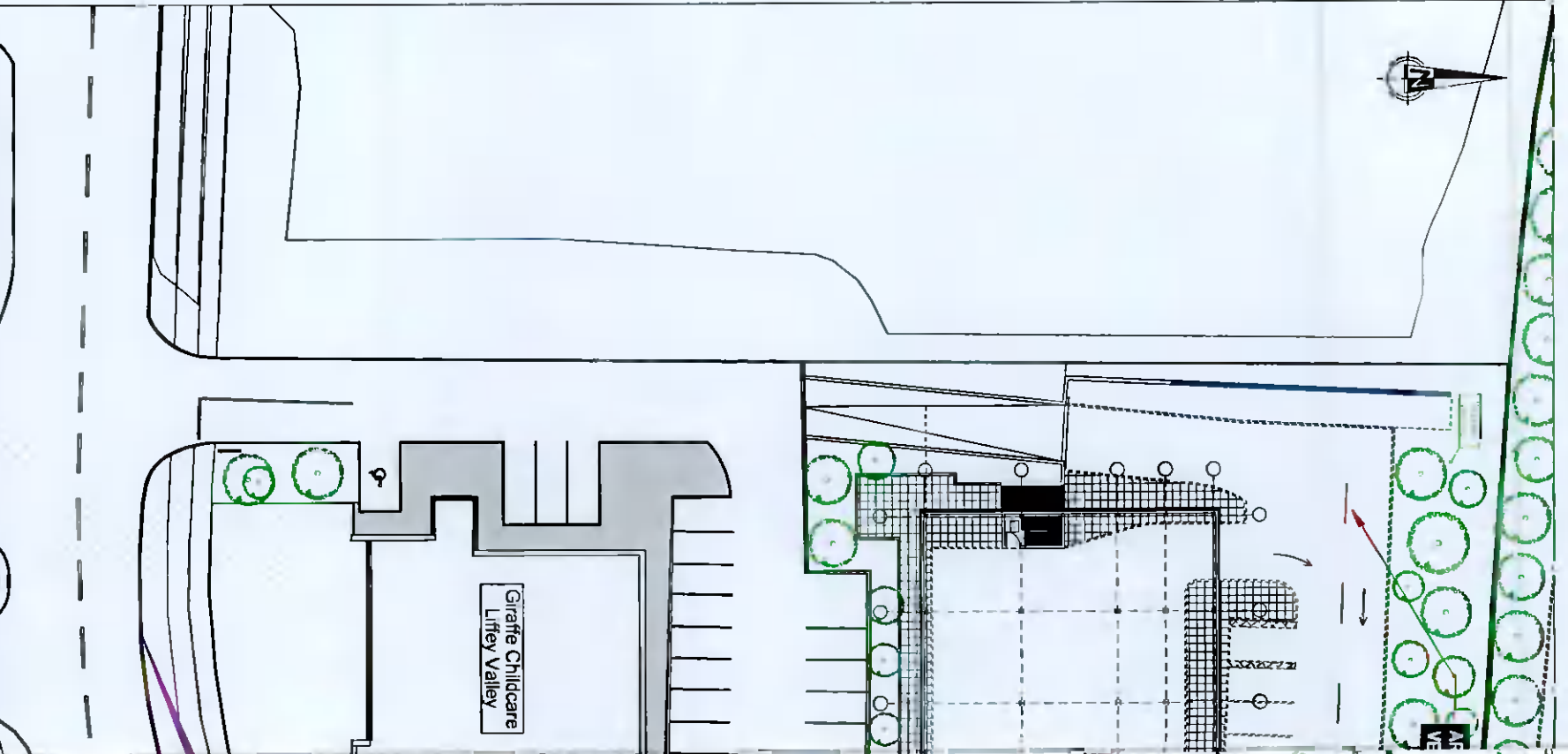
Phone/Fax: +353 1 292 1941
Email: info@nrbl.ie
Web: www.nrbl.ie
Registered in Ireland No. 491679



Client	NRB Consulting Engineers Ltd	
Project	U-Store It Liffey Valley	
Title	Proposed Site Basement Layout	
Project No.	21-086	Drawing No. NRB-TA-002
Drawn	PB	Checked
Date	14-Oct-21	14/10/21
Purpose of Issue	14-Oct-21	1:500
Scale @ A3	1:500	Rev -
As Built	<input type="checkbox"/>	Information
Approval	<input type="checkbox"/>	Approval
Approval	<input type="checkbox"/>	Construction

NRB Consulting Engineers Ltd accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions to be worked to





NRB Consulting Engineers Ltd recommend that Road and land ownership boundaries are verified through Legal & Land searches by the Client.

This drawing is based upon Architects drawing U Store It, Ground Floor Plan, received 14/10/21. NRB Consulting Engineers Ltd shall not be liable for any inaccuracies or deficiencies.

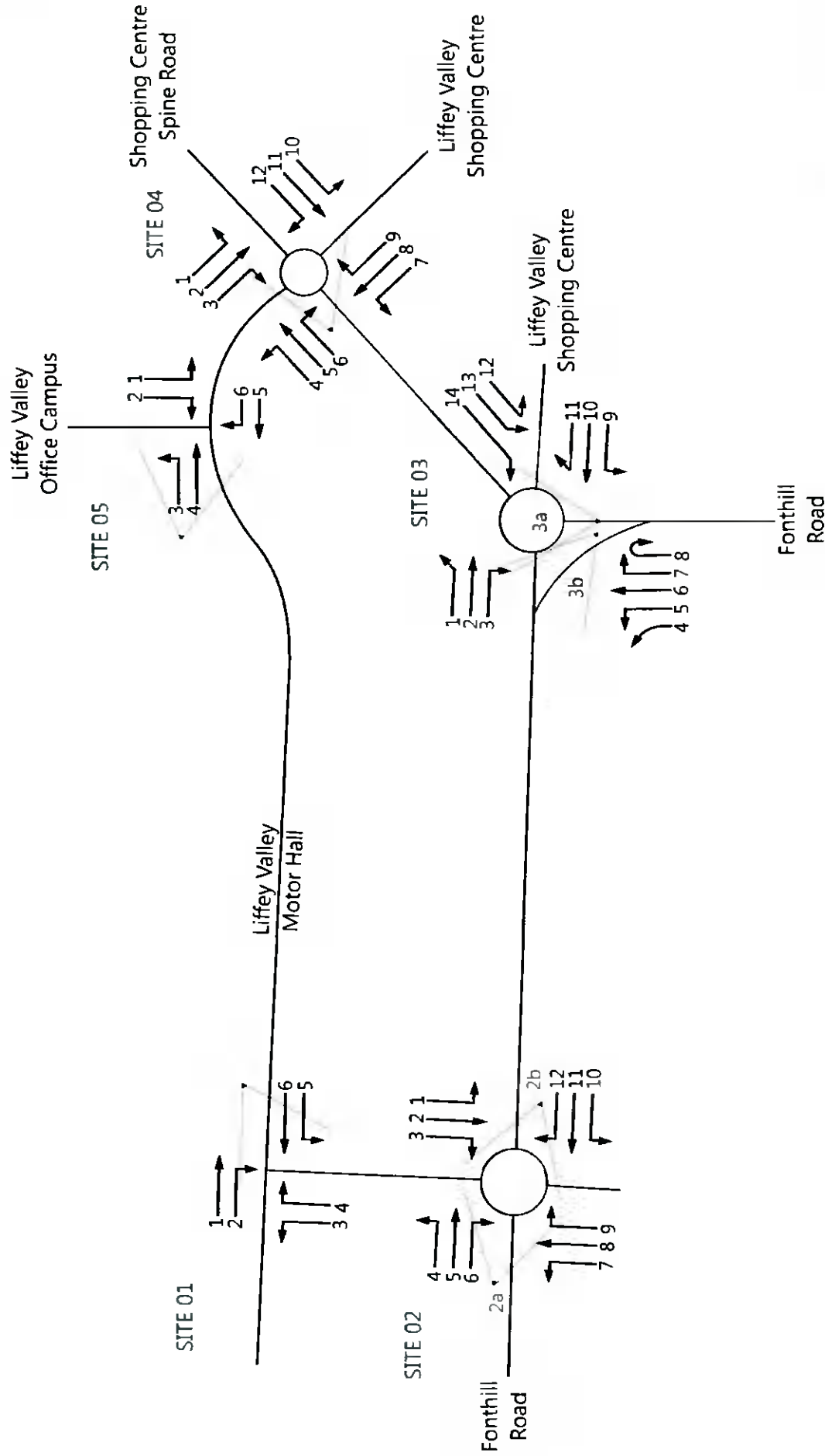
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APPENDIX B

**Weekday - Classified
Turning Movement Traffic Survey Output Data**

Site/Movement Numbering



	Job number: TRA/21/148	Job date: 9 th September 2021	Drawing No: TRA/21/148-02	traffinomics 
	Client: NRB Consulting Engineers	Job day: Thursday	Cover Sheet...	

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 01

DATE: 9th September 2021

LOCATION: Liffey Valley Motor Hall Junction

DAY: Thursday

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	2	2	0	0	4	4	0	0	28	3	0	0	31	31	0	0	19	2	0	0	21	21
07:15	0	0	0	0	0	0	0	0	0	0	34	6	2	0	42	44	0	0	43	3	2	0	48	50
07:30	0	0	1	0	0	0	1	1	1	0	44	5	1	0	51	51	0	0	33	1	0	0	34	34
07:45	1	0	0	0	0	0	1	0	0	0	35	1	1	0	37	38	0	0	25	5	0	0	30	30
H/TOT	1	0	3	2	0	0	6	5	1	0	141	15	4	0	161	164	0	0	120	11	2	0	133	135
08:00	0	0	3	1	0	0	4	4	0	0	41	4	0	0	45	45	0	0	41	4	0	0	45	45
08:15	0	0	6	1	0	0	7	7	0	1	24	2	0	0	27	26	0	0	32	0	0	0	32	32
08:30	0	0	6	0	1	0	7	8	0	0	35	3	0	0	38	38	0	0	24	0	1	0	25	26
08:45	0	0	5	1	0	0	6	6	0	0	31	4	0	0	35	35	0	0	29	3	0	0	32	32
H/TOT	0	0	20	3	1	0	24	25	0	1	131	13	0	0	145	144	0	0	126	7	1	0	134	135
09:00	0	0	5	2	0	0	7	7	0	0	31	1	0	0	32	32	0	0	40	3	0	0	43	43
09:15	0	0	2	0	0	0	2	2	0	0	34	1	0	0	35	35	0	0	40	2	0	0	42	42
09:30	0	0	1	0	0	0	1	1	0	0	29	3	0	0	32	32	0	0	34	1	0	0	35	35
09:45	0	0	3	0	0	0	3	3	0	0	32	2	0	0	34	34	0	0	32	0	0	0	32	32
H/TOT	0	0	11	2	0	0	13	13	0	0	126	7	0	0	133	133	0	0	146	6	0	0	152	152
P/TOT	1	0	34	7	1	0	43	43	1	1	398	35	4	0	439	442	0	0	392	24	3	0	419	422

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	5	1	0	0	6	6	0	0	36	10	0	0	46	46	0	1	45	0	0	0	46	45
16:15	0	0	6	0	0	0	6	6	0	0	40	3	0	0	43	43	0	0	30	3	0	0	33	33
16:30	0	0	6	0	0	0	6	6	0	0	53	4	0	0	57	57	0	0	32	1	0	0	33	33
16:45	0	0	8	0	0	0	8	8	0	0	38	0	0	0	38	38	0	0	53	2	0	0	55	55
H/TOT	0	0	25	1	0	0	26	26	0	0	167	17	0	0	184	184	0	1	160	6	0	0	167	166
17:00	0	0	8	0	0	0	8	8	0	0	40	2	0	0	42	42	0	0	43	2	0	0	45	45
17:15	0	0	4	1	0	0	5	5	0	0	44	6	0	0	50	50	0	0	41	5	0	0	46	46
17:30	0	0	5	0	0	0	5	5	0	0	32	5	0	0	37	37	0	0	39	6	0	0	45	45
17:45	0	0	7	0	0	0	7	7	0	0	46	0	0	0	46	46	0	0	52	2	0	0	54	54
H/TOT	0	0	24	1	0	0	25	25	0	0	162	13	0	0	175	175	0	0	175	15	0	0	190	190
18:00	0	0	6	1	0	0	7	7	0	0	25	4	0	0	29	29	0	0	52	4	0	0	56	56
18:15	0	0	5	0	0	0	5	5	0	1	48	5	1	0	55	55	0	0	59	4	0	0	63	63
18:30	0	0	4	1	0	0	5	5	0	0	57	4	0	0	61	61	0	0	60	5	0	0	65	65
18:45	0	0	6	0	0	0	6	6	0	0	62	3	0	0	65	65	0	0	52	2	0	0	54	54
H/TOT	0	0	21	2	0	0	23	23	0	1	192	16	1	0	210	210	0	0	223	15	0	0	238	238
P/TOT	0	0	70	4	0	0	74	74	0	1	521	46	1	0	569	569	0	1	558	36	0	0	595	594

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 01 DATE: 9th September 2021
LOCATION: Liffey Valley Motor Hall Junction DAY: Thursday

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
07:15	0	0	3	1	0	0	4	4	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2
07:30	0	0	10	0	0	0	10	10	0	0	3	0	0	0	3	3	1	0	1	1	0	0	3	2
07:45	0	0	25	0	0	0	25	25	0	0	4	0	0	0	4	4	0	0	1	0	0	0	1	1
H/TOT	0	0	38	1	0	0	39	39	0	0	9	0	0	0	9	9	1	0	4	1	0	0	6	5
08:00	1	0	25	1	1	0	28	28	0	0	7	2	1	0	10	11	0	0	1	0	0	0	1	1
08:15	0	0	42	4	0	0	46	46	0	0	14	0	0	0	14	14	0	0	2	0	0	0	2	2
08:30	0	0	35	0	0	0	35	35	0	0	12	1	0	0	13	13	0	0	4	0	0	0	4	4
08:45	0	1	36	1	0	0	38	37	0	0	12	0	0	0	12	12	0	0	2	0	0	0	2	2
H/TOT	1	1	138	6	1	0	147	147	0	0	45	3	1	0	49	50	0	0	9	0	0	0	9	9
09:00	0	1	22	1	0	0	24	23	0	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0
09:15	0	0	21	5	1	0	27	28	0	0	16	1	0	0	17	17	0	0	2	0	0	0	2	2
09:30	0	0	11	3	0	0	14	14	0	0	6	4	1	0	11	12	1	0	0	0	0	0	1	0
09:45	0	0	10	6	0	0	16	16	1	0	7	4	0	0	12	11	0	0	1	0	0	0	1	1
H/TOT	0	1	64	15	1	0	81	81	1	0	34	9	1	0	45	45	1	0	3	0	0	0	4	3
P/TOT	1	2	240	22	2	0	267	267	1	0	88	12	2	0	103	104	2	0	16	1	0	0	19	17

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	15	0	1	0	16	17	0	0	17	0	0	0	17	17	0	0	10	1	0	0	11	11
16:15	0	0	8	2	0	0	10	10	0	0	27	2	0	1	30	31	0	0	3	0	0	0	3	3
16:30	0	0	16	0	0	0	16	16	0	0	26	2	0	0	28	28	0	0	1	0	0	0	1	1
16:45	0	0	17	0	0	0	17	17	1	0	21	1	1	0	24	24	0	0	4	0	0	0	4	4
H/TOT	0	0	56	2	1	0	59	60	1	0	91	5	1	1	99	100	0	0	18	1	0	0	19	19
17:00	0	0	14	2	0	0	16	16	0	0	43	1	0	0	44	44	0	0	8	0	0	0	8	8
17:15	0	0	12	0	0	0	12	12	0	0	23	1	0	0	24	24	0	0	4	0	0	0	4	4
17:30	0	0	7	0	0	0	7	7	0	0	30	1	0	0	31	31	0	0	8	0	0	0	8	8
17:45	0	0	7	1	0	0	8	8	0	0	40	5	0	0	45	45	0	0	5	0	0	0	5	5
H/TOT	0	0	40	3	0	0	43	43	0	0	136	8	0	0	144	144	0	0	25	0	0	0	25	25
18:00	0	0	3	0	0	0	3	3	0	2	48	0	0	0	50	49	0	0	3	2	0	0	5	5
18:15	0	0	3	1	0	0	4	4	0	0	8	0	0	0	8	8	0	0	7	0	0	0	7	7
18:30	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6	0	0	2	0	0	0	2	2
18:45	0	0	1	1	0	0	2	2	0	0	5	0	0	0	5	5	0	0	6	1	0	0	7	7
H/TOT	0	0	7	2	0	0	9	9	0	2	67	0	0	0	69	68	0	0	18	3	0	0	21	21
P/TOT	0	0	103	7	1	0	111	112	1	2	294	13	1	1	312	312	0	0	61	4	0	0	65	65

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 02

DATE: 9th September 2021

LOCATION: Fonthill Road/Liffey Valley Motor Hall Roundabout

DAY: Thursday

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	27	3	0	0	30	30
07:15	0	0	8	2	0	0	10	10	0	0	3	0	0	0	3	3	0	0	24	4	2	0	30	32
07:30	0	0	14	2	0	0	16	16	0	0	1	0	0	0	1	1	1	0	32	3	1	0	37	37
07:45	0	0	8	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	31	1	1	0	33	34
H/TOT	0	0	32	4	0	0	36	36	0	0	4	0	0	0	4	4	1	0	114	11	4	0	130	133
08:00	0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0	0	43	5	1	0	49	50
08:15	0	0	6	0	0	0	6	6	0	0	2	0	0	0	2	2	0	1	30	2	0	0	33	32
08:30	0	0	6	0	0	0	6	6	0	0	4	0	0	0	4	4	0	0	37	4	0	0	41	41
08:45	0	0	9	0	0	0	9	9	0	0	3	1	0	0	4	4	0	0	31	3	0	0	34	34
H/TOT	0	0	26	1	0	0	27	27	0	0	9	1	0	0	10	10	0	1	141	14	1	0	157	157
09:00	0	0	6	0	0	0	6	6	0	0	0	1	0	0	1	1	0	0	30	0	0	0	30	30
09:15	0	0	15	0	0	0	15	15	0	0	3	0	0	0	3	3	0	0	32	2	0	0	34	34
09:30	0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0	0	30	6	1	0	37	38
09:45	0	0	11	1	0	0	12	12	0	0	0	0	0	0	0	0	1	0	28	5	0	0	34	33
H/TOT	0	0	37	2	0	0	39	39	0	0	3	1	0	0	4	4	1	0	120	13	1	0	135	135
P/TOT	0	0	95	7	0	0	102	102	0	0	16	2	0	0	18	18	2	1	375	38	6	0	422	426

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	7	1	0	0	8	8	0	0	6	0	0	0	6	6	0	0	40	9	0	0	49	49
16:15	0	0	15	0	0	0	15	15	0	0	4	0	0	0	4	4	0	0	48	5	0	1	54	55
16:30	0	0	13	2	0	0	15	15	0	0	6	1	0	0	7	7	0	0	60	3	0	0	63	63
16:45	0	0	8	0	0	0	8	8	0	0	3	0	0	0	3	3	1	0	48	1	1	0	51	51
H/TOT	0	0	43	3	0	0	46	46	0	0	19	1	0	0	20	20	1	0	196	18	1	1	217	218
17:00	0	0	8	2	0	0	10	10	0	0	6	0	0	0	6	6	0	0	69	1	0	0	70	70
17:15	0	0	11	1	0	0	12	12	0	0	3	0	0	0	3	3	0	0	53	6	0	0	59	59
17:30	0	0	15	2	0	0	17	17	0	0	3	0	0	0	3	3	0	0	44	4	0	0	48	48
17:45	0	0	12	0	0	0	12	12	0	0	7	0	0	0	7	7	0	0	67	5	0	0	72	72
H/TOT	0	0	46	5	0	0	51	51	0	0	19	0	0	0	19	19	0	0	233	16	0	0	249	249
18:00	0	1	13	0	0	0	14	13	0	0	6	0	0	0	6	6	0	1	54	4	0	0	59	58
18:15	0	0	15	1	0	0	16	16	0	0	3	2	0	0	5	5	0	1	38	2	1	0	42	42
18:30	0	0	10	0	0	0	10	10	0	0	5	1	0	0	6	6	0	0	48	3	0	0	51	51
18:45	0	0	12	0	0	0	12	12	0	0	2	1	0	0	3	3	0	0	53	2	0	0	55	55
H/TOT	0	1	50	1	0	0	52	51	0	0	16	4	0	0	20	20	0	2	193	11	1	0	207	207
P/TOT	0	1	139	9	0	0	149	148	0	0	54	5	0	0	59	59	1	2	622	45	2	1	673	674

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 02

DATE: 9th September 2021

LOCATION: Fonthill Road/Liffey Valley Motor Hall Roundabout

DAY: Thursday

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	18	2	0	0	20	20	1	0	64	14	1	5	85	90	0	0	1	1	0	0	2	2
07:15	0	0	38	4	1	0	43	44	2	0	80	20	5	1	108	112	0	0	1	1	0	0	2	2
07:30	0	0	41	1	0	0	42	42	0	0	123	15	6	2	146	154	0	0	4	0	0	0	4	4
07:45	0	0	42	4	0	0	46	46	1	1	155	20	3	4	184	190	0	0	2	0	1	0	3	4
H/TOT	0	0	139	11	1	0	151	152	4	1	422	69	15	12	523	546	0	0	8	2	1	0	11	12
08:00	0	0	56	5	1	0	62	63	1	3	125	25	7	1	162	167	0	0	10	2	0	0	12	12
08:15	0	0	67	4	0	0	71	71	0	0	155	14	3	4	176	183	0	0	12	1	0	0	13	13
08:30	0	0	51	0	1	0	52	53	1	0	166	17	3	3	190	195	0	0	25	1	1	2	29	32
08:45	0	1	59	3	0	0	63	62	0	1	189	17	8	3	218	228	0	0	19	1	0	0	20	20
H/TOT	0	1	233	12	2	0	248	249	2	4	635	73	21	11	746	774	0	0	66	5	1	2	74	77
09:00	0	1	47	4	0	0	52	51	0	0	184	12	4	1	201	206	0	0	9	0	0	0	9	9
09:15	0	0	55	5	0	0	60	60	0	0	252	18	6	3	279	288	0	0	10	1	0	0	11	11
09:30	0	0	37	4	0	0	41	41	0	0	225	15	4	3	247	254	0	0	5	1	0	0	6	6
09:45	0	0	35	5	0	0	40	40	0	0	257	12	5	4	278	287	0	0	2	0	0	0	2	2
H/TOT	0	1	174	18	0	0	193	192	0	0	918	57	19	11	1005	1035	0	0	26	2	0	0	28	28
P/TOT	0	2	546	41	3	0	592	594	6	5	1975	199	55	34	2274	2355	0	0	100	9	2	2	113	117

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	1	46	0	1	0	48	48	0	2	189	14	2	4	211	216	0	0	16	4	1	1	22	24
16:15	0	0	32	4	0	0	36	36	0	0	198	10	4	3	215	222	0	0	11	3	0	0	14	14
16:30	0	0	40	1	0	0	41	41	0	0	174	16	0	4	194	198	0	0	20	4	0	0	24	24
16:45	0	0	49	2	0	0	51	51	1	1	193	17	2	2	216	219	0	0	6	3	0	0	9	9
H/TOT	0	1	167	7	1	0	176	176	1	3	754	57	8	13	836	854	0	0	53	14	1	1	69	71
17:00	0	0	43	1	0	0	44	44	0	0	218	12	1	3	234	238	0	0	9	1	0	0	10	10
17:15	0	0	42	4	0	0	46	46	0	1	213	14	3	1	232	235	0	0	6	2	0	0	8	8
17:30	0	0	40	4	0	0	44	44	1	1	245	11	3	1	262	265	0	0	7	5	1	0	13	14
17:45	0	0	50	2	0	0	52	52	0	0	212	14	0	2	228	230	0	0	21	1	0	0	22	22
H/TOT	0	0	175	11	0	0	186	186	1	2	888	51	7	7	956	968	0	0	43	9	1	0	53	54
18:00	0	0	49	4	0	0	53	53	0	0	262	22	0	2	286	288	0	0	17	0	0	0	17	17
18:15	0	0	51	3	0	0	54	54	0	2	229	16	2	1	250	252	0	0	7	0	1	0	8	9
18:30	0	0	39	5	0	0	44	44	0	0	233	12	0	2	247	249	0	0	12	1	0	0	13	13
18:45	0	0	42	3	0	0	45	45	0	0	262	18	1	4	285	290	0	0	8	4	0	0	12	12
H/TOT	0	0	181	15	0	0	196	196	0	2	986	68	3	9	1068	1079	0	0	44	5	1	0	50	51
P/TOT	0	1	523	33	1	0	558	558	2	7	2628	176	18	29	2860	2901	0	0	140	28	3	1	172	176

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 02

DATE: 9th September 2021

LOCATION: Fonthill Road/Liffey Valley Motor Hall Roundabout

DAY: Thursday

TIME	MOVEMENT 7							TOT	PCU	MOVEMENT 8							TOT	PCU	MOVEMENT 9							TOT	PCU
	PCL	MCL	CAR	LGV	HGV	BUS	PCL			MCL	CAR	LGV	HGV	BUS	PCL	MCL			CAR	LGV	HGV	BUS					
07:00	0	0	5	7	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
07:15	0	0	6	1	0	1	8	9	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	
07:30	0	0	5	2	0	0	7	7	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	1	1	
07:45	0	0	6	2	0	0	8	8	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	1	1	
H/TOT	0	0	22	12	0	1	35	36	0	0	6	0	0	0	6	6	0	0	3	0	0	0	3	3	3		
08:00	0	0	11	3	0	0	14	14	1	0	4	0	0	0	5	4	0	0	4	0	0	0	4	4	4	4	
08:15	0	0	6	2	0	0	8	8	0	0	1	0	0	0	1	1	0	0	3	0	0	0	3	3	3	3	
08:30	0	0	15	1	1	0	17	18	0	0	1	0	0	0	1	1	0	0	6	1	0	0	7	7	7	7	
08:45	0	0	11	2	0	3	16	19	0	0	3	1	0	0	4	4	0	0	7	0	0	0	7	7	7	7	
H/TOT	0	0	43	8	1	3	55	59	1	0	9	1	0	0	11	10	0	0	20	1	0	0	21	21	21		
09:00	0	0	14	1	1	0	16	17	0	0	5	0	0	0	5	5	0	0	5	0	0	0	5	5	5	5	
09:15	0	0	4	2	0	0	6	6	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2	2	2	
09:30	0	0	4	0	0	0	4	4	0	0	2	0	0	0	2	2	0	0	2	1	0	0	3	3	3	3	
09:45	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	
H/TOT	0	0	24	4	1	0	29	30	0	0	8	0	0	0	8	8	0	0	10	1	0	0	11	11	11		
P/TOT	0	0	89	24	2	4	119	125	1	0	23	1	0	0	25	24	0	0	33	2	0	0	35	35	35		

TIME	MOVEMENT 7							TOT	PCU	MOVEMENT 8							TOT	PCU	MOVEMENT 9							TOT	PCU
	PCL	MCL	CAR	LGV	HGV	BUS	PCL			MCL	CAR	LGV	HGV	BUS	PCL	MCL			CAR	LGV	HGV	BUS					
16:00	0	0	5	1	0	0	6	6	0	0	4	0	0	0	4	4	0	0	3	0	0	0	3	3	3	3	
16:15	0	0	8	2	0	0	10	10	0	0	3	0	0	0	3	3	0	0	1	0	0	0	1	1	1	1	
16:30	0	0	8	2	0	1	11	12	0	0	4	0	0	0	4	4	0	0	2	0	0	0	2	2	2	2	
16:45	0	0	14	0	0	0	14	14	0	0	5	0	0	0	5	5	0	0	2	0	0	0	2	2	2	2	
H/TOT	0	0	35	5	0	1	41	42	0	0	16	0	0	0	16	16	0	0	8	0	0	0	8	8	8		
17:00	0	0	5	3	1	0	9	10	0	0	5	0	0	0	5	5	0	0	5	0	0	0	5	5	5	5	
17:15	0	0	12	3	0	0	15	15	0	0	5	0	0	0	5	5	0	0	2	0	0	0	2	2	2	2	
17:30	0	0	11	1	0	0	12	12	0	0	5	1	0	0	6	6	0	0	4	0	0	0	4	4	4	4	
17:45	0	0	7	1	0	0	8	8	0	0	6	0	0	0	6	6	0	0	2	0	0	0	2	2	2	2	
H/TOT	0	0	35	8	1	0	44	45	0	0	21	1	0	0	22	22	0	0	13	0	0	0	13	13	13		
18:00	0	0	6	2	1	0	9	10	0	0	4	0	0	0	4	4	0	0	5	0	0	0	5	5	5	5	
18:15	0	0	7	2	0	0	9	9	0	0	4	2	0	0	6	6	0	0	6	0	0	0	6	6	6	6	
18:30	0	0	5	1	1	0	7	8	0	0	5	0	0	0	5	5	0	0	5	0	0	0	5	5	5	5	
18:45	0	0	13	0	0	0	13	13	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2	2	2	
H/TOT	0	0	31	5	2	0	38	40	0	0	14	2	0	0	16	16	0	0	18	0	0	0	18	18	18		
P/TOT	0	0	101	18	3	1	123	127	0	0	51	3	0	0	54	54	0	0	39	0	0	0	39	39	39		

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 02

DATE: 9th September 2021

LOCATION: Fonthill Road/Liffey Valley Motor Hall Roundabout

DAY: Thursday

TIME	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	20	6	0	3	29	32	0	0	1	0	0	0	1	1
07:15	0	0	1	0	0	0	1	1	2	0	21	8	3	1	35	37	0	0	4	0	1	0	5	6
07:30	0	0	0	0	0	0	0	0	1	0	30	11	3	3	48	53	0	0	1	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	22	7	1	2	32	35	0	0	7	1	0	0	8	8
H/TOT	0	0	1	0	0	0	1	1	3	0	93	32	7	9	144	158	0	0	13	1	1	0	15	16
08:00	0	0	1	0	0	0	1	1	1	0	25	10	3	2	41	45	0	0	6	0	0	0	6	6
08:15	0	0	3	1	0	0	4	4	3	0	42	5	3	1	54	56	0	0	6	0	0	0	6	6
08:30	0	0	0	0	0	0	0	0	2	0	25	6	5	2	40	45	0	0	7	0	0	0	7	7
08:45	0	0	2	0	1	0	3	4	1	0	46	3	8	3	61	71	0	0	3	0	0	0	3	3
H/TOT	0	0	6	1	1	0	8	9	7	0	138	24	19	8	196	217	0	0	22	0	0	0	22	22
09:00	0	0	4	0	0	0	4	4	0	0	35	13	6	1	55	62	0	0	10	0	0	0	10	10
09:15	0	0	1	0	0	0	1	1	0	0	64	12	2	3	81	86	0	0	5	2	1	0	8	9
09:30	0	0	3	0	0	0	3	3	1	0	77	10	6	3	97	105	0	0	6	0	0	0	6	6
09:45	0	0	2	0	0	0	2	2	2	0	92	12	3	3	112	116	0	0	7	1	0	0	8	8
H/TOT	0	0	10	0	0	0	10	10	3	0	268	47	17	10	345	370	0	0	28	3	1	0	32	33
P/TOT	0	0	17	1	1	0	19	20	13	0	499	103	43	27	685	745	0	0	63	4	2	0	69	71

TIME	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	5	0	0	0	5	5	2	1	188	12	1	1	205	205	0	0	10	0	0	0	10	10
16:15	0	0	3	0	0	0	3	3	2	0	182	22	0	1	207	206	0	0	3	1	0	0	4	4
16:30	0	0	2	1	0	0	3	3	5	1	224	18	2	1	251	249	0	0	4	0	0	0	4	4
16:45	0	0	7	0	0	0	7	7	0	1	214	8	1	3	227	230	0	0	16	0	0	0	16	16
H/TOT	0	0	17	1	0	0	18	18	9	3	808	60	4	6	890	891	0	0	33	1	0	0	34	34
17:00	0	0	9	0	0	0	9	9	2	0	208	13	1	1	225	225	0	0	9	3	0	0	12	12
17:15	0	0	5	0	0	0	5	5	1	1	166	9	1	2	180	182	0	0	6	1	0	0	7	7
17:30	0	0	2	0	0	0	2	2	1	0	188	11	0	2	202	203	0	0	1	1	0	0	2	2
17:45	0	0	1	0	0	0	1	1	1	1	165	10	1	3	181	184	0	0	3	1	0	0	4	4
H/TOT	0	0	17	0	0	0	17	17	5	2	727	43	3	8	788	794	0	0	19	6	0	0	25	25
18:00	0	0	2	0	0	0	2	2	3	0	178	7	3	2	193	196	0	0	2	0	0	0	2	2
18:15	2	0	6	0	0	0	8	6	0	1	256	6	0	2	265	266	0	0	7	0	0	0	7	7
18:30	0	0	8	0	0	0	8	8	1	1	220	11	2	1	236	238	0	0	16	0	0	0	16	16
18:45	0	0	3	1	0	0	4	4	0	0	215	4	1	2	222	225	0	0	10	0	0	0	10	10
H/TOT	2	0	19	1	0	0	22	20	4	2	869	28	6	7	916	925	0	0	35	0	0	0	35	35
P/TOT	2	0	53	2	0	0	57	55	18	7	2404	131	13	21	2594	2609	0	0	87	7	0	0	94	94

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 03

DATE: 9th September 2021

LOCATION: Fonhill Road Roundabout

DAY: Thursday

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	10	3	0	0	13	13	0	0	0	0	0	0	0	0	1	0	57	11	1	5	75	80
07:15	2	0	19	6	0	0	27	25	0	0	0	0	0	0	0	0	0	0	69	16	5	1	91	97
07:30	0	0	16	6	1	0	23	24	0	0	0	0	0	0	0	0	0	0	122	11	5	2	140	147
07:45	0	0	18	1	1	0	20	21	0	0	0	0	0	0	0	0	1	1	146	19	2	4	173	178
H/TOT	2	0	63	16	2	0	83	83	0	0	0	0	0	0	0	0	2	1	394	57	13	12	479	502
08:00	1	0	24	6	1	0	32	32	0	0	0	0	0	0	0	0	0	3	110	20	6	1	140	145
08:15	0	0	38	5	0	1	44	45	0	0	0	0	0	0	0	0	0	0	126	9	3	3	141	147
08:30	1	0	55	6	0	0	62	61	0	0	0	0	0	0	0	0	0	0	123	12	3	3	141	147
08:45	0	1	82	2	1	0	86	86	0	0	0	0	0	0	0	0	0	0	123	15	7	3	148	158
H/TOT	2	1	199	19	2	1	224	225	0	0	0	0	0	0	0	0	0	3	482	56	19	10	570	597
09:00	0	0	86	3	0	1	90	91	0	0	0	0	0	0	0	0	0	0	109	9	4	0	122	126
09:15	0	0	121	8	2	0	131	133	0	0	0	0	0	0	0	0	0	0	148	10	4	3	165	172
09:30	0	0	133	7	0	0	140	140	0	0	0	0	0	0	0	0	0	0	99	10	4	3	116	123
09:45	0	0	148	6	2	1	157	160	0	0	0	0	0	0	0	0	0	0	121	7	3	3	134	140
H/TOT	0	0	488	24	4	2	518	524	0	0	0	0	0	0	0	0	0	0	477	36	15	9	537	561
P/TOT	4	1	750	59	8	3	825	832	0	0	0	0	0	0	0	0	2	4	1353	149	47	31	1586	1660

TIME	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3								
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	
16:00	0	0	103	7	0	0	110	110	0	0	0	0	0	0	0	0	0	2	96	8	2	4	112	117	
16:15	0	0	113	2	1	0	116	117	0	0	0	0	0	0	0	0	0	0	101	8	3	3	115	121	
16:30	0	0	103	6	0	0	109	109	0	0	0	0	0	0	0	0	0	0	86	12	0	4	102	106	
16:45	0	1	132	5	0	1	139	139	0	0	0	0	0	0	0	0	0	1	71	12	2	1	87	89	
H/TOT	0	1	451	20	1	1	474	475	0	0	0	0	0	0	0	0	0	1	2	354	40	7	12	416	433
17:00	0	0	129	5	0	0	134	134	0	0	0	0	0	0	0	0	0	0	102	9	1	3	115	119	
17:15	0	0	126	6	1	0	133	134	0	0	0	0	0	0	0	0	0	0	100	9	2	1	113	115	
17:30	0	0	129	7	1	0	137	138	0	0	0	0	0	0	0	0	0	1	135	6	2	1	146	148	
17:45	0	0	140	3	0	0	143	143	0	0	0	0	0	0	0	0	0	0	86	11	0	2	99	101	
H/TOT	0	0	524	21	2	0	547	549	0	0	0	0	0	0	0	0	0	1	2	423	35	5	7	473	483
18:00	0	0	167	6	0	0	173	173	0	0	0	0	0	0	0	0	0	0	113	16	0	2	132	133	
18:15	0	2	147	7	0	0	156	155	0	0	0	0	0	0	0	0	0	0	103	10	2	1	116	119	
18:30	0	0	162	6	0	0	168	168	0	0	0	0	0	0	0	0	0	0	86	6	0	2	94	96	
18:45	0	0	157	6	1	0	164	165	0	0	0	0	0	0	0	0	0	0	119	12	0	4	135	139	
H/TOT	0	2	633	25	1	0	661	661	0	0	0	0	0	0	0	0	0	1	421	44	2	9	477	487	
P/TOT	0	3	1608	66	4	1	1682	1685	0	0	0	0	0	0	0	0	2	5	1198	119	14	28	1366	1403	

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 03

DATE: 9th September 2021

LOCATION: Fonthill Road Roundabout

DAY: Thursday

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	19	6	0	3	28	31	0	0	0	0	0	0	0	0	0	0	2	1	0	1	4	5
07:15	2	0	23	7	4	1	37	40	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:30	1	0	28	8	2	3	42	46	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
07:45	0	0	21	5	1	2	29	32	0	0	2	0	0	0	2	2	0	0	5	0	0	0	5	5
H/TOT	3	0	91	26	7	9	136	150	0	0	2	0	0	0	2	2	0	0	11	1	0	1	13	14
08:00	0	0	26	10	2	2	40	44	0	0	0	0	0	0	0	0	0	0	9	1	0	0	10	10
08:15	3	0	44	4	1	1	53	53	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	10
08:30	2	0	23	5	5	2	37	42	0	0	0	0	0	0	0	0	0	0	14	1	0	0	15	15
08:45	1	0	34	1	6	3	45	53	0	0	0	0	0	0	0	0	1	0	15	1	0	0	17	16
H/TOT	6	0	127	20	14	8	175	192	0	0	0	0	0	0	0	0	1	0	48	3	0	0	52	51
09:00	0	0	34	9	6	1	50	57	0	0	0	0	0	0	0	0	0	0	16	1	0	0	17	17
09:15	0	0	36	6	3	3	48	54	0	0	0	0	0	0	0	0	0	0	27	0	0	0	27	27
09:30	1	0	42	7	2	3	55	59	0	0	0	0	0	0	0	0	0	0	36	1	0	0	37	37
09:45	2	0	48	10	2	3	65	68	0	0	1	0	0	0	1	1	0	0	31	4	1	0	36	37
H/TOT	3	0	160	32	13	10	218	239	0	0	1	0	0	0	1	1	0	0	110	6	1	0	117	118
P/TOT	12	0	378	78	34	27	529	580	0	0	3	0	0	0	3	3	1	0	169	10	1	1	182	183

TIME	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	1	1	88	6	1	1	98	99	0	0	1	1	0	0	2	2	0	0	41	2	0	0	43	43
16:15	2	0	83	12	0	1	98	97	0	0	4	0	0	0	4	4	0	0	36	1	0	0	37	37
16:30	5	0	107	12	0	1	125	122	0	0	1	0	0	0	1	1	0	0	49	0	0	0	49	49
16:45	0	0	102	7	1	3	113	117	0	0	0	0	0	0	0	0	0	0	44	2	0	0	46	46
H/TOT	8	1	380	37	2	6	434	435	0	0	6	1	0	0	7	7	0	0	170	5	0	0	175	175
17:00	2	0	67	8	1	1	79	79	0	0	3	0	0	0	3	3	0	1	37	2	0	0	40	39
17:15	0	1	49	4	1	1	56	57	1	0	0	0	0	0	1	0	0	0	42	2	0	0	44	44
17:30	1	0	55	0	0	1	57	57	0	0	5	2	0	0	7	7	0	0	32	5	0	0	37	37
17:45	1	1	49	8	1	3	63	66	0	0	5	2	0	0	7	7	0	0	41	3	0	0	44	44
H/TOT	4	2	220	20	3	6	255	260	1	0	13	4	0	0	18	17	0	1	152	12	0	0	165	164
18:00	3	0	64	6	1	0	74	73	0	0	6	0	1	2	9	12	0	0	40	2	1	0	43	44
18:15	2	0	112	3	0	2	119	119	0	0	4	0	0	0	4	4	0	0	37	2	0	0	39	39
18:30	0	1	110	8	1	1	121	122	0	0	2	0	0	0	2	2	0	0	27	3	0	0	30	30
18:45	0	0	73	0	1	2	76	79	0	0	1	0	0	0	1	1	0	0	41	1	0	0	42	42
H/TOT	5	1	359	17	3	5	390	393	0	0	13	0	1	2	16	19	0	0	145	8	1	0	154	155
P/TOT	17	4	959	74	8	17	1079	1088	1	0	32	5	1	2	41	43	0	1	467	25	1	0	494	494

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 03

DATE: 9th September 2021

LOCATION: Fonthill Road Roundabout

DAY: Thursday

TIME	MOVEMENT 7							PCU	MOVEMENT 8							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	14
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
09:45	0	0	0	0	0	0	0	0	0	0	1	0	0	3	4	7
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	8	9	17
P/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	21	22	43

TIME	MOVEMENT 7							PCU	MOVEMENT 8							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3	5
16:15	0	0	0	0	0	0	0	0	0	0	2	0	0	3	5	8
16:30	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	3
16:45	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3	4
H/TOT	0	0	0	0	0	0	0	0	0	0	5	1	0	7	13	20
17:00	0	0	0	0	0	0	0	0	0	0	1	1	0	3	5	8
17:15	0	0	0	0	0	0	0	0	0	0	3	0	0	2	5	7
17:30	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	4
17:45	0	0	0	0	0	0	0	0	0	0	3	1	0	3	7	10
H/TOT	0	0	0	0	0	0	0	0	0	0	9	4	0	8	21	29
18:00	0	0	0	0	0	0	0	0	0	0	5	0	0	2	7	9
18:15	0	0	0	0	0	0	0	0	0	0	2	0	0	4	6	10
18:30	0	0	0	0	0	0	0	0	0	0	5	0	0	1	6	7
18:45	0	0	0	0	0	0	0	0	0	0	2	0	0	3	5	8
H/TOT	0	0	0	0	0	0	0	0	0	0	14	0	0	10	24	34
P/TOT	0	0	0	0	0	0	0	0	0	0	28	5	0	25	58	83

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 03

DATE: 9th September 2021

LOCATION: Fonthill Road Roundabout

DAY: Thursday

TIME	MOVEMENT 9								MOVEMENT 10								MOVEMENT 11							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	2	0	0	0	2	2	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	1	1	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	3	3	0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
08:15	0	0	3	1	0	0	4	4	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0
08:30	0	0	4	0	0	0	4	4	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0
08:45	0	0	4	0	0	0	4	4	0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0
H/TOT	0	0	11	1	0	0	12	12	0	0	15	0	0	0	15	15	0	0	0	0	0	0	0	0
09:00	0	0	5	0	0	0	5	5	0	0	9	1	0	0	10	10	0	0	1	1	0	0	2	2
09:15	0	0	7	0	0	0	7	7	0	0	11	0	0	0	11	11	0	0	0	0	0	0	0	0
09:30	0	0	13	0	0	0	13	13	0	0	18	2	0	0	20	20	0	0	1	0	0	0	1	1
09:45	0	0	10	0	0	0	10	10	0	0	18	3	0	0	21	21	0	0	0	0	0	0	0	0
H/TOT	0	0	35	0	0	0	35	35	0	0	56	6	0	0	62	62	0	0	2	1	0	0	3	3
P/TOT	0	0	49	1	0	0	50	50	0	0	76	7	0	0	83	83	0	0	2	1	0	0	3	3

TIME	MOVEMENT 9								MOVEMENT 10								MOVEMENT 11							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	33	0	0	0	33	33	0	0	26	1	0	0	27	27	0	0	3	1	0	0	4	4
16:15	0	1	22	0	0	0	23	22	0	0	23	2	0	0	25	25	0	0	2	0	0	1	3	4
16:30	1	0	24	0	0	0	25	24	0	0	25	0	0	0	25	25	0	0	4	0	0	0	4	4
16:45	0	0	17	0	0	0	17	17	0	0	27	0	0	0	27	27	0	0	2	0	0	0	2	2
H/TOT	1	1	96	0	0	0	98	97	0	0	101	3	0	0	104	104	0	0	11	1	0	1	13	14
17:00	0	0	21	2	0	0	23	23	0	0	43	1	0	0	44	44	0	0	3	1	0	0	4	4
17:15	0	0	27	0	0	0	27	27	0	0	25	1	0	1	27	28	0	0	5	0	0	0	5	5
17:30	0	1	34	1	0	0	36	35	0	0	26	3	0	0	29	29	0	0	3	0	0	0	3	3
17:45	0	0	39	1	0	0	40	40	0	0	21	0	0	0	21	21	0	0	1	0	0	0	1	1
H/TOT	0	1	121	4	0	0	126	125	0	0	115	5	0	1	121	122	0	0	12	1	0	0	13	13
18:00	0	0	34	0	1	0	35	36	0	0	30	0	0	0	30	30	0	0	4	1	0	0	5	5
18:15	0	0	29	2	0	0	31	31	0	0	45	1	0	0	46	46	0	0	3	0	0	0	3	3
18:30	0	0	24	0	0	0	24	24	0	0	26	2	0	0	28	28	0	0	3	1	0	0	4	4
18:45	0	0	17	2	0	0	19	19	0	0	40	1	0	0	41	41	0	0	4	0	0	0	4	4
H/TOT	0	0	104	4	1	0	109	110	0	0	141	4	0	0	145	145	0	0	14	2	0	0	16	16
P/TOT	1	2	321	8	1	0	333	332	0	0	357	12	0	1	370	371	0	0	37	4	0	1	42	43

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 03

DATE: 9th September 2021

LOCATION: Fonthill Road Roundabout

DAY: Thursday

TIME	MOVEMENT 12								MOVEMENT 13								MOVEMENT 14							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3	0	0	2	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	0	0	1	1	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	2	3	1	0	6	7
07:45	0	0	0	0	0	0	0	0	0	0	4	1	0	0	5	5	0	0	4	2	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	12	3	0	0	15	15	0	0	9	6	1	0	16	17
08:00	0	0	0	0	0	0	0	0	0	0	10	2	0	0	12	12	1	0	5	0	1	0	7	7
08:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	2	2	0	7	9
08:30	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	0	0	5	1	0	0	6	6
08:45	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5	4	0	0	11	2	3	0	16	19
H/TOT	0	0	0	0	0	0	0	0	1	0	18	3	0	0	22	21	1	0	24	5	6	0	36	41
09:00	0	0	0	0	0	0	0	0	0	0	14	1	0	0	15	15	0	0	6	3	0	0	9	9
09:15	0	0	0	0	0	0	0	0	0	0	8	1	0	0	9	9	0	0	23	8	0	0	31	31
09:30	0	0	0	0	0	0	0	0	0	0	10	3	0	0	13	13	0	0	26	1	4	0	31	35
09:45	0	0	0	0	0	0	0	0	0	0	12	4	0	0	16	16	0	0	34	0	1	0	35	36
H/TOT	0	0	0	0	0	0	0	0	0	0	44	9	0	0	53	53	0	0	89	12	5	0	106	111
P/TOT	0	0	0	0	0	0	0	0	1	0	74	15	0	0	90	89	1	0	122	23	12	0	158	169

TIME	MOVEMENT 12								MOVEMENT 13								MOVEMENT 14							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	0	0	0	0	0	0	0	0	49	5	0	1	55	56	1	0	88	4	0	0	93	92
16:15	0	0	0	0	0	0	0	0	0	0	36	1	0	0	37	37	0	0	78	9	0	0	87	87
16:30	0	0	0	0	0	0	0	0	2	0	35	1	0	0	38	36	0	1	97	7	2	0	107	108
16:45	0	0	0	0	0	0	0	0	0	1	34	3	0	0	38	37	0	1	108	1	0	0	110	109
H/TOT	0	0	0	0	0	0	0	0	2	1	154	10	0	1	168	167	1	2	371	21	2	0	397	397
17:00	0	0	0	0	0	0	0	0	0	0	36	3	0	2	41	43	0	0	113	7	0	0	120	120
17:15	0	0	0	0	0	0	0	0	0	0	34	3	0	0	37	37	0	0	103	5	0	0	108	108
17:30	0	0	0	0	0	0	0	0	0	0	54	1	0	0	55	55	0	0	105	7	0	1	113	114
17:45	0	0	0	0	0	0	0	0	0	0	62	3	0	0	65	65	0	0	94	1	0	0	95	95
H/TOT	0	0	0	0	0	0	0	0	0	0	186	10	0	2	198	200	0	0	415	20	0	1	436	437
18:00	0	0	0	0	0	0	0	0	0	0	38	3	0	0	41	41	0	0	82	1	1	0	84	85
18:15	0	0	0	0	0	0	0	0	0	0	41	1	0	0	42	42	0	1	108	2	0	0	111	110
18:30	0	0	0	0	0	0	0	0	0	0	34	0	0	0	34	34	1	0	106	1	1	0	109	109
18:45	0	0	0	0	0	0	0	0	0	0	22	3	0	0	25	25	0	0	114	4	0	0	118	118
H/TOT	0	0	0	0	0	0	0	0	0	0	135	7	0	0	142	142	1	1	410	8	2	0	422	423
P/TOT	0	0	0	0	0	0	0	0	2	1	475	27	0	3	508	509	2	3	1196	49	4	1	1255	1257

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 04

DATE: 9th September 2021

LOCATION: Liffey Valley Shopping Centre Roundabout

DAY: Thursday

TIME	MOVEMENT 1							PCU	MOVEMENT 2							PCU	MOVEMENT 3							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
07:00	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:30	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:45	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
H/TOT	0	0	3	1	0	0	4	4	0	0	2	0	0	0	2	2	0	0	4	0	0	0	4	4
08:00	1	0	5	0	0	0	6	5	0	0	2	0	0	0	2	2	0	0	4	0	0	0	4	4
08:15	0	0	2	0	0	0	2	2	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
08:30	0	0	4	0	0	0	4	4	0	0	5	0	0	0	5	5	0	0	3	0	0	0	3	3
08:45	0	0	4	0	0	0	4	4	0	0	3	0	0	0	3	3	0	0	1	0	1	0	2	3
H/TOT	1	0	15	0	0	0	16	15	0	0	12	0	0	0	12	12	0	0	9	0	1	0	10	11
09:00	0	0	4	2	0	0	6	6	0	0	6	1	0	0	7	7	0	0	1	0	0	0	1	1
09:15	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0	0	1	0	0	1	1
09:30	0	0	3	0	0	0	3	3	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
09:45	0	0	7	0	0	0	7	7	0	0	3	0	0	0	3	3	0	0	0	1	0	0	1	1
H/TOT	0	0	15	2	0	0	17	17	0	0	12	1	0	0	13	13	0	0	2	2	0	0	4	4
P/TOT	1	0	33	3	0	0	37	36	0	0	26	1	0	0	27	27	0	0	15	2	1	0	18	19

TIME	MOVEMENT 1							PCU	MOVEMENT 2							PCU	MOVEMENT 3							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
16:00	0	0	8	0	0	0	8	8	0	0	2	0	0	0	2	2	0	0	2	0	0	0	2	2
16:15	0	0	4	0	0	0	4	4	0	0	5	0	0	0	5	5	0	0	2	1	0	0	3	3
16:30	0	0	4	0	0	0	4	4	0	0	3	0	0	0	3	3	0	0	2	0	0	0	2	2
16:45	0	0	5	0	0	0	5	5	0	0	3	0	0	0	3	3	0	1	1	0	0	0	2	1
H/TOT	0	0	21	0	0	0	21	21	0	0	13	0	0	0	13	13	0	1	7	1	0	0	9	8
17:00	0	0	11	1	0	0	12	12	0	0	2	0	0	0	2	2	0	0	6	0	0	0	6	6
17:15	0	0	3	0	0	0	3	3	0	0	4	0	0	0	4	4	0	0	4	0	0	0	4	4
17:30	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3	0	0	4	1	0	0	5	5
17:45	0	0	3	0	0	0	3	3	0	0	3	0	0	0	3	3	0	0	3	0	0	0	3	3
H/TOT	0	0	19	1	0	0	20	20	0	0	12	0	0	0	12	12	0	0	17	1	0	0	18	18
18:00	0	0	2	0	0	0	2	2	0	0	6	0	0	0	6	6	0	0	1	0	0	0	1	1
18:15	0	0	3	0	0	0	3	3	0	0	3	0	0	0	3	3	0	0	2	0	0	0	2	2
18:30	0	0	2	1	0	0	3	3	0	0	3	0	0	0	3	3	0	0	2	0	0	0	2	2
18:45	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2
H/TOT	0	0	9	1	0	0	10	10	0	0	13	0	0	0	13	13	0	0	7	0	0	0	7	7
P/TOT	0	0	49	2	0	0	51	51	0	0	38	0	0	0	38	38	0	1	31	2	0	0	34	33

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 04

DATE: 9th September 2021

LOCATION: Liffey Valley Shopping Centre Roundabout

DAY: Thursday

TIME	MOVEMENT 4							PCU	MOVEMENT 5							PCU	MOVEMENT 6							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
07:00	0	0	1	0	0	0	1	1	0	0	5	2	0	0	7	7	0	0	6	2	0	1	9	10
07:15	0	0	5	0	0	0	5	5	2	0	10	4	0	0	16	14	0	0	5	2	0	0	7	7
07:30	0	0	1	1	0	0	2	2	0	0	7	2	0	0	9	9	0	0	11	3	1	0	15	16
07:45	0	0	0	0	0	0	0	0	0	0	10	1	1	0	12	13	0	0	13	0	0	0	13	13
H/TOT	0	0	7	1	0	0	8	8	2	0	32	9	1	0	44	43	0	0	35	7	1	1	44	46
08:00	0	0	6	0	0	0	6	6	1	0	8	2	1	0	12	12	0	0	19	5	0	0	24	24
08:15	0	0	8	0	0	0	8	8	0	0	8	2	0	1	11	12	0	0	32	3	0	0	35	35
08:30	0	0	4	1	0	0	5	5	1	0	18	2	0	0	21	20	0	0	47	4	0	0	51	51
08:45	1	0	5	0	0	0	6	5	0	0	15	0	1	0	16	17	0	1	77	3	0	0	81	80
H/TOT	1	0	23	1	0	0	25	24	2	0	49	6	2	1	60	61	0	1	175	15	0	0	191	190
09:00	0	0	0	1	0	0	1	1	0	0	18	2	0	0	20	20	0	0	85	2	0	1	88	89
09:15	0	0	3	2	0	0	5	5	0	0	49	2	1	0	52	53	0	0	96	4	1	0	101	102
09:30	0	0	2	0	0	0	2	2	0	0	45	1	0	0	46	46	0	0	123	7	0	0	130	130
09:45	0	0	1	1	0	0	2	2	0	0	60	5	1	0	66	67	0	0	118	4	2	1	125	128
H/TOT	0	0	6	4	0	0	10	10	0	0	172	10	2	0	184	186	0	0	422	17	3	2	444	449
P/TOT	1	0	36	6	0	0	43	42	4	0	253	25	5	1	288	291	0	1	632	39	4	3	679	685

TIME	MOVEMENT 4							PCU	MOVEMENT 5							PCU	MOVEMENT 6							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
16:00	0	0	11	0	0	0	11	11	0	0	31	0	0	0	31	31	0	0	105	10	0	0	115	115
16:15	0	0	11	1	0	1	13	14	0	0	35	0	1	0	36	37	0	0	105	2	0	0	107	107
16:30	0	0	3	0	0	0	3	3	0	0	32	1	0	0	33	33	0	0	121	5	0	0	126	126
16:45	0	0	3	0	0	0	3	3	0	0	40	2	0	0	42	42	0	1	135	5	0	1	142	142
H/TOT	0	0	28	1	0	1	30	31	0	0	138	3	1	0	142	143	0	1	466	22	0	1	490	490
17:00	0	0	7	1	0	0	8	8	0	0	42	2	0	0	44	44	0	1	120	5	0	0	126	125
17:15	0	0	6	0	0	0	6	6	0	0	57	0	0	0	57	57	0	0	110	8	1	0	119	120
17:30	0	0	8	1	0	0	9	9	0	0	49	2	0	0	51	51	0	0	107	9	1	0	117	118
17:45	0	0	18	3	0	0	21	21	0	0	41	0	0	0	41	41	0	0	123	3	0	0	126	126
H/TOT	0	0	39	5	0	0	44	44	0	0	189	4	0	0	193	193	0	1	460	25	2	0	488	489
18:00	0	0	13	0	0	0	13	13	0	0	43	1	0	0	44	44	0	0	155	8	1	0	164	165
18:15	0	0	6	0	0	0	6	6	0	2	54	2	0	0	58	57	0	0	127	7	0	0	134	134
18:30	0	0	1	0	0	0	1	1	0	0	41	0	0	0	41	41	0	0	150	10	0	0	160	160
18:45	0	0	3	0	0	0	3	3	0	0	52	0	1	0	53	54	0	0	147	7	0	0	154	154
H/TOT	0	0	23	0	0	0	23	23	0	2	190	3	1	0	196	196	0	0	579	32	1	0	612	613
P/TOT	0	0	90	6	0	1	97	98	0	2	517	10	2	0	531	532	0	2	1505	79	3	1	1590	1593

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 04

DATE: 9th September 2021

LOCATION: Liffey Valley Shopping Centre Roundabout

DAY: Thursday

TIME	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	4	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:00	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	1	2	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	2	0	0	0	2	2	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
08:45	0	0	3	2	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	3	3	0	11	14	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
09:00	0	0	3	0	0	0	3	3	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
09:15	0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	9	0	2	0	11	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
09:45	0	0	15	1	1	0	17	18	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
H/TOT	0	0	32	2	3	0	37	40	0	0	2	0	0	0	2	2	0	0	2	0	0	0	2	2
P/TOT	0	0	40	9	6	0	55	61	0	0	4	0	0	0	4	4	0	0	3	1	0	0	4	4

TIME	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	30	2	0	1	33	34	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
16:15	0	0	29	1	0	0	30	30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:30	1	1	26	1	0	0	29	28	0	0	1	0	0	0	1	1	0	0	4	1	0	0	5	5
16:45	0	0	32	2	0	0	34	34	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
H/TOT	1	1	117	6	0	1	126	126	0	0	2	0	0	0	2	2	0	0	9	1	0	0	10	10
17:00	0	0	31	4	0	1	36	37	0	0	1	0	0	0	1	1	0	0	3	0	0	0	3	3
17:15	0	0	23	2	0	0	25	25	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
17:30	0	0	35	2	0	1	38	39	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3
17:45	0	0	39	2	0	0	41	41	0	0	3	0	0	0	3	3	0	0	2	0	0	0	2	2
H/TOT	0	0	128	10	0	2	140	142	0	0	7	0	0	0	7	7	0	0	9	0	0	0	9	9
18:00	0	0	27	0	1	0	28	29	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
18:15	0	0	31	1	0	0	32	32	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3
18:30	0	0	39	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5
18:45	0	0	25	1	0	0	26	26	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
H/TOT	0	0	122	2	1	0	125	126	0	0	2	0	0	0	2	2	0	0	13	0	0	0	13	13
P/TOT	1	1	367	18	1	3	391	394	0	0	11	0	0	0	11	11	0	0	31	1	0	0	32	32

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 04 DATE: 9th September 2021
LOCATION: Liffey Valley Shopping Centre Roundabout DAY: Thursday

TIME	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:00	1	0	0	0	0	0	1	0	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	4	1	1	0	6	7	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	5	2	0	0	7	7	0	0	2	0	0	0	2	2
H/TOT	1	0	0	0	0	0	1	0	0	0	14	5	1	0	20	21	0	0	2	0	0	0	2	2
08:00	0	0	0	1	0	0	1	1	1	0	11	2	0	0	14	13	0	0	1	0	0	0	1	1
08:15	0	0	1	0	0	0	1	1	0	0	3	1	0	0	4	4	0	0	1	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	3	2	0	0	5	5	0	0	1	0	0	0	1	1
08:45	0	0	1	0	0	0	1	1	1	0	11	0	2	0	14	15	0	0	1	0	0	0	1	1
H/TOT	0	0	2	1	0	0	3	3	2	0	28	5	2	0	37	37	0	0	4	0	0	0	4	4
09:00	0	0	2	0	0	0	2	2	0	0	16	4	0	0	20	20	0	0	2	0	0	0	2	2
09:15	0	0	4	0	0	0	4	4	0	0	26	7	0	0	33	33	0	0	0	0	0	0	0	0
09:30	0	0	2	0	1	0	3	4	0	0	26	4	2	0	32	34	0	0	0	1	0	0	1	1
09:45	0	0	7	0	0	0	7	7	0	0	31	2	0	0	33	33	0	0	3	0	0	0	3	3
H/TOT	0	0	15	0	1	0	16	17	0	0	99	17	2	0	118	120	0	0	5	1	0	0	6	6
P/TOT	1	0	17	1	1	0	20	20	2	0	141	27	5	0	175	178	0	0	11	1	0	0	12	12

TIME	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
16:00	0	0	5	1	0	0	6	6	1	0	105	7	0	0	113	112	0	0	7	0	0	0	7	7
16:15	0	0	9	1	0	0	10	10	0	0	83	8	0	0	91	91	0	0	6	0	0	0	6	6
16:30	0	0	16	3	0	0	19	19	1	0	104	7	2	0	114	115	0	0	3	0	0	0	3	3
16:45	0	0	11	0	0	0	11	11	0	1	109	2	0	0	112	111	0	0	5	0	0	0	5	5
H/TOT	0	0	41	5	0	0	46	46	2	1	401	24	2	0	430	430	0	0	21	0	0	0	21	21
17:00	1	0	35	0	0	0	36	35	0	0	112	6	0	1	119	120	0	0	9	0	0	0	9	9
17:15	0	0	7	0	0	0	7	7	0	0	110	6	0	0	116	116	0	0	5	0	0	0	5	5
17:30	0	0	13	0	0	0	13	13	0	0	120	5	0	0	125	125	0	0	9	0	0	0	9	9
17:45	0	0	14	1	0	0	15	15	0	0	114	2	0	0	116	116	0	0	6	0	0	0	6	6
H/TOT	1	0	69	1	0	0	71	70	0	0	456	19	0	1	476	477	0	0	29	0	0	0	29	29
18:00	0	0	10	0	0	0	10	10	0	0	92	4	0	0	96	96	0	0	8	2	0	0	10	10
18:15	0	0	8	0	0	0	8	8	0	1	116	2	0	0	119	118	0	0	4	0	0	0	4	4
18:30	0	0	7	2	0	0	9	9	1	0	99	1	1	0	102	102	0	0	1	0	0	0	1	1
18:45	0	0	10	1	0	0	11	11	0	0	109	6	0	0	115	115	0	0	5	1	0	0	6	6
H/TOT	0	0	35	3	0	0	38	38	1	1	416	13	1	0	432	432	0	0	18	3	0	0	21	21
P/TOT	1	0	145	9	0	0	155	154	3	2	1273	56	3	1	1338	1338	0	0	68	3	0	0	71	71

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 05 DATE: 9th September 2021
LOCATION: Liffey Valley Office Campus DAY: Thursday

TIME	MOVEMENT 1							PCU	MOVEMENT 2							PCU	MOVEMENT 3							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	
H/TOT	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	7	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	
08:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3	0	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	18	0	0	0	18	18		
09:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	3	0	0	0	4	3	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	
09:30	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	1	0	0	0	1	1	
09:45	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
H/TOT	0	0	1	1	0	0	2	2	0	0	2	0	0	0	2	2	1	0	8	0	0	9	8	
P/TOT	0	0	2	1	0	0	3	3	0	0	3	0	0	0	3	3	1	0	29	0	0	30	29	

TIME	MOVEMENT 1							PCU	MOVEMENT 2							PCU	MOVEMENT 3							PCU
	PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT		PCL	MCL	CAR	LGV	HGV	BUS	TOT	
16:00	0	0	1	0	0	0	1	1	0	0	4	0	0	0	4	4	0	0	1	0	0	0	1	1
16:15	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	1	1	0	0	13	0	0	0	13	13	0	0	1	0	0	0	1	1
17:00	0	0	2	0	0	0	2	2	0	0	4	0	0	0	4	4	0	0	1	0	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1
17:30	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	3	3	0	0	12	0	0	0	12	12	0	0	2	0	0	0	2	2
18:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0
P/TOT	0	0	6	0	0	0	6	6	0	0	28	0	0	0	28	28	0	0	3	0	0	0	3	3

TRAFFINOMICS LIMITED

**LIFFEY VALLEY TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**SEPTEMBER 2021
TRA/21/148**

SITE: 05

DATE: 9th September 2021

LOCATION: Liffey Valley Office Campus

DAY: Thursday

TIME	MOVEMENT 4							TOT	PCU	MOVEMENT 5							TOT	PCU	MOVEMENT 6							TOT	PCU
	PCL	MCL	CAR	LGV	HGV	BUS	PCL			MCL	CAR	LGV	HGV	BUS	PCL	MCL			CAR	LGV	HGV	BUS					
07:00	0	0	1	1	0	0	2	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
07:15	0	0	1	0	0	0	1	1	0	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	
07:30	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	2	2		
07:45	0	0	4	0	0	0	4	4	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	8	1	0	0	9	9	0	0	8	0	0	0	8	8	0	0	1	1	0	0	2	2			
08:00	1	0	11	0	0	0	12	11	0	0	6	0	0	0	6	6	0	0	1	0	0	0	1	1	1		
08:15	0	0	5	0	0	0	5	5	0	0	8	0	0	0	8	8	0	0	1	0	0	0	1	1	1		
08:30	0	0	12	0	0	0	12	12	0	0	7	1	0	0	8	8	0	0	0	0	0	0	0	0	0		
08:45	0	0	8	0	1	0	9	10	1	0	5	0	0	0	6	5	0	0	1	0	0	0	1	1	1		
H/TOT	1	0	36	0	1	0	38	38	1	0	26	1	0	0	28	27	0	0	3	0	0	0	3	3			
09:00	0	0	11	3	0	0	14	14	0	0	3	1	0	0	4	4	0	0	0	0	0	0	0	0	0		
09:15	0	0	2	1	0	0	3	3	0	0	1	0	0	0	1	1	0	0	2	2	0	0	4	4	4		
09:30	0	0	5	0	0	0	5	5	0	0	1	1	0	0	2	2	0	0	1	0	0	0	1	1	1		
09:45	0	0	10	0	0	0	10	10	0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	28	4	0	0	32	32	0	0	10	3	0	0	13	13	0	0	3	2	0	0	5	5			
P/TOT	1	0	72	5	1	0	79	79	1	0	44	4	0	0	49	48	0	0	7	3	0	0	10	10			

TIME	MOVEMENT 4							TOT	PCU	MOVEMENT 5							TOT	PCU	MOVEMENT 6							TOT	PCU
	PCL	MCL	CAR	LGV	HGV	BUS	PCL			MCL	CAR	LGV	HGV	BUS	PCL	MCL			CAR	LGV	HGV	BUS					
16:00	0	0	11	0	0	0	11	11	0	0	18	0	0	0	18	18	0	0	0	0	0	0	0	0	0		
16:15	0	0	11	1	0	0	12	12	0	0	16	1	0	1	18	19	0	0	1	0	0	0	1	1	1		
16:30	0	0	9	0	0	0	9	9	0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0		
16:45	0	1	9	0	0	0	10	9	0	0	8	0	0	0	8	8	0	0	0	0	0	0	0	0	0		
H/TOT	0	1	40	1	0	0	42	41	0	0	48	1	0	1	50	51	0	0	1	0	0	0	1	1			
17:00	0	0	17	1	0	0	18	18	0	0	16	1	0	0	17	17	0	0	0	0	0	0	0	0	0		
17:15	0	0	11	0	0	0	11	11	0	0	11	0	0	0	11	11	0	0	0	0	0	0	0	0	0		
17:30	0	0	8	1	0	0	9	9	0	0	19	1	0	0	20	20	0	0	0	0	0	0	0	0	0		
17:45	0	0	9	0	0	0	9	9	0	0	24	3	0	0	27	27	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	45	2	0	0	47	47	0	0	70	5	0	0	75	75	0	0	0	0	0	0	0	0			
18:00	0	0	9	0	0	0	9	9	0	0	22	2	0	0	24	24	0	0	0	0	0	0	0	0	0		
18:15	0	0	8	0	0	0	8	8	0	0	10	0	0	0	10	10	0	0	0	0	0	0	0	0	0		
18:30	0	0	6	1	0	0	7	7	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0		
18:45	0	0	4	0	0	0	4	4	0	0	9	1	0	0	10	10	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	27	1	0	0	28	28	0	0	43	3	0	0	46	46	0	0	0	0	0	0	0	0			
P/TOT	0	1	112	4	0	0	117	116	0	0	161	9	0	1	171	172	0	0	1	0	0	0	1	1			

APPENDIX C

**TRICS Output Data
Self-Storage Warehousing (V7.8.3)**

Calculation Reference: AUDIT-160301-211013-1043

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : E - WAREHOUSING (SELF STORAGE)

TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

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

TRIP RATE for Land Use 02 - EMPLOYMENT/E - WAREHOUSING (SELF STORAGE)

TOTAL VEHICLES

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	3	4428	0.000	3	4428	0.008	3	4428	0.008
07:30 - 08:00	3	4428	0.060	3	4428	0.015	3	4428	0.075
08:00 - 08:30	3	4428	0.053	3	4428	0.030	3	4428	0.083
08:30 - 09:00	3	4428	0.068	3	4428	0.053	3	4428	0.121
09:00 - 09:30	3	4428	0.075	3	4428	0.060	3	4428	0.135
09:30 - 10:00	3	4428	0.098	3	4428	0.098	3	4428	0.196
10:00 - 10:30	3	4428	0.105	3	4428	0.083	3	4428	0.188
10:30 - 11:00	3	4428	0.075	3	4428	0.068	3	4428	0.143
11:00 - 11:30	3	4428	0.053	3	4428	0.060	3	4428	0.113
11:30 - 12:00	3	4428	0.075	3	4428	0.038	3	4428	0.113
12:00 - 12:30	3	4428	0.135	3	4428	0.128	3	4428	0.263
12:30 - 13:00	3	4428	0.083	3	4428	0.120	3	4428	0.203
13:00 - 13:30	3	4428	0.083	3	4428	0.068	3	4428	0.151
13:30 - 14:00	3	4428	0.075	3	4428	0.075	3	4428	0.150
14:00 - 14:30	3	4428	0.060	3	4428	0.075	3	4428	0.135
14:30 - 15:00	3	4428	0.060	3	4428	0.068	3	4428	0.128
15:00 - 15:30	3	4428	0.060	3	4428	0.060	3	4428	0.120
15:30 - 16:00	3	4428	0.090	3	4428	0.083	3	4428	0.173
16:00 - 16:30	3	4428	0.068	3	4428	0.068	3	4428	0.136
16:30 - 17:00	3	4428	0.045	3	4428	0.068	3	4428	0.113
17:00 - 17:30	3	4428	0.045	3	4428	0.083	3	4428	0.128
17:30 - 18:00	3	4428	0.015	3	4428	0.060	3	4428	0.075
18:00 - 18:30	3	4428	0.000	3	4428	0.015	3	4428	0.015
18:30 - 19:00	3	4428	0.008	3	4428	0.008	3	4428	0.016
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:			1.489			1.492			2.981

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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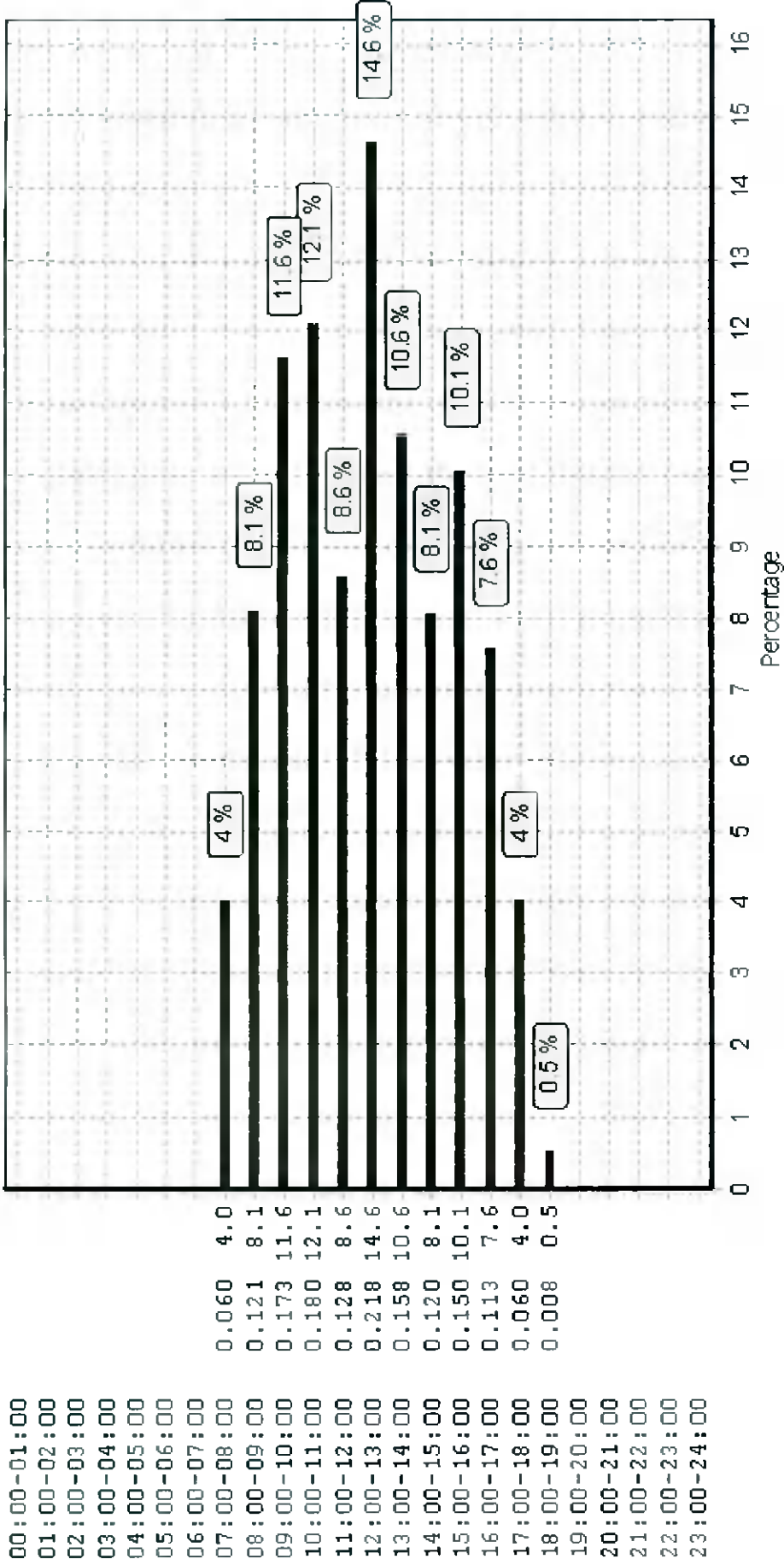
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	2860 - 5500 (units: sqm)
Survey date date range:	01/01/13 - 17/11/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are 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 GRAPH - ARRIVALS 02 - EMPLOYMENT E - WAREHOUSING (SELF STORAGE) TOTAL VEHICLES

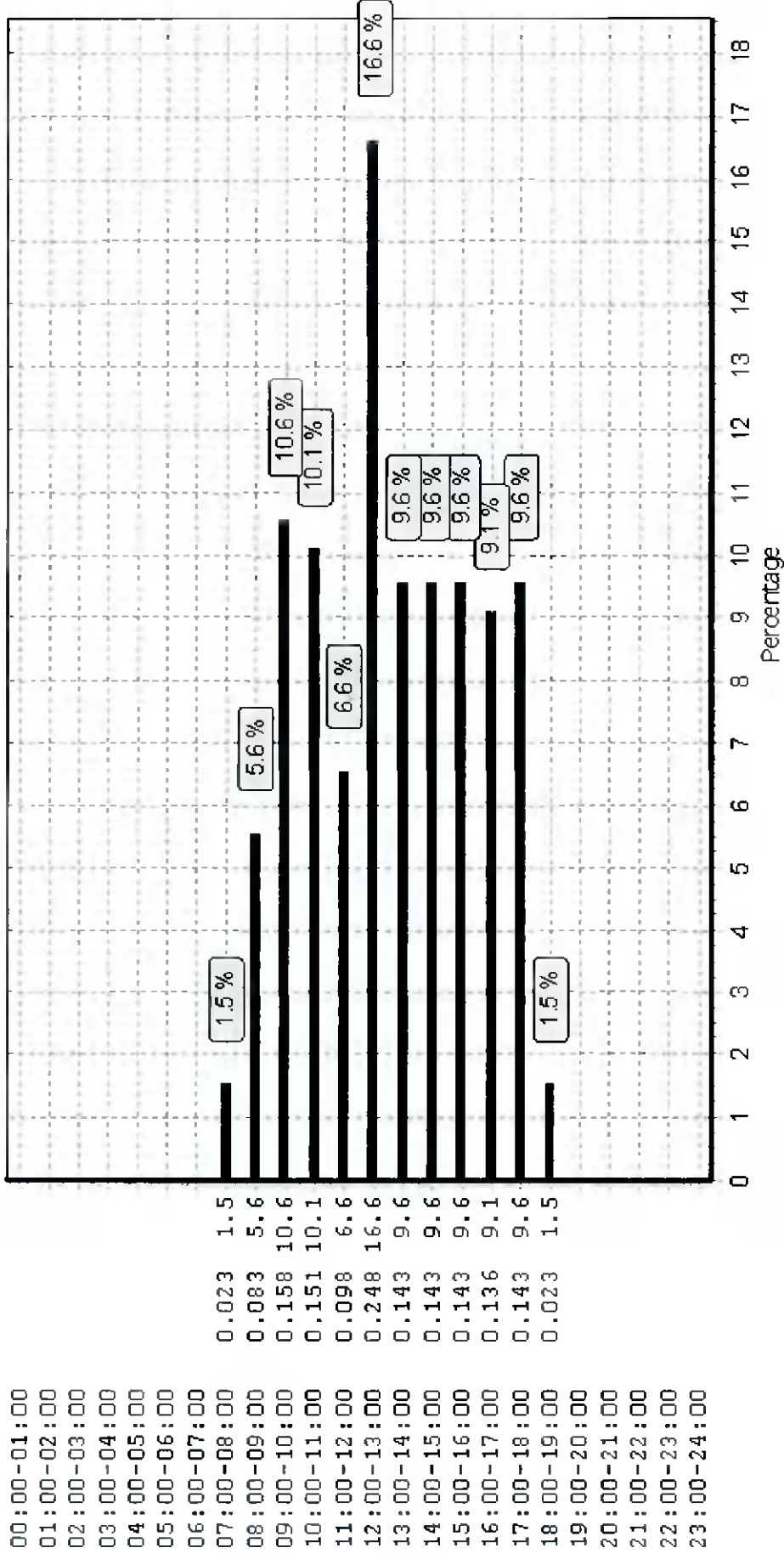


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 02 - EMPLOYMENT E - WAREHOUSING (SELF STORAGE) TOTAL VEHICLES

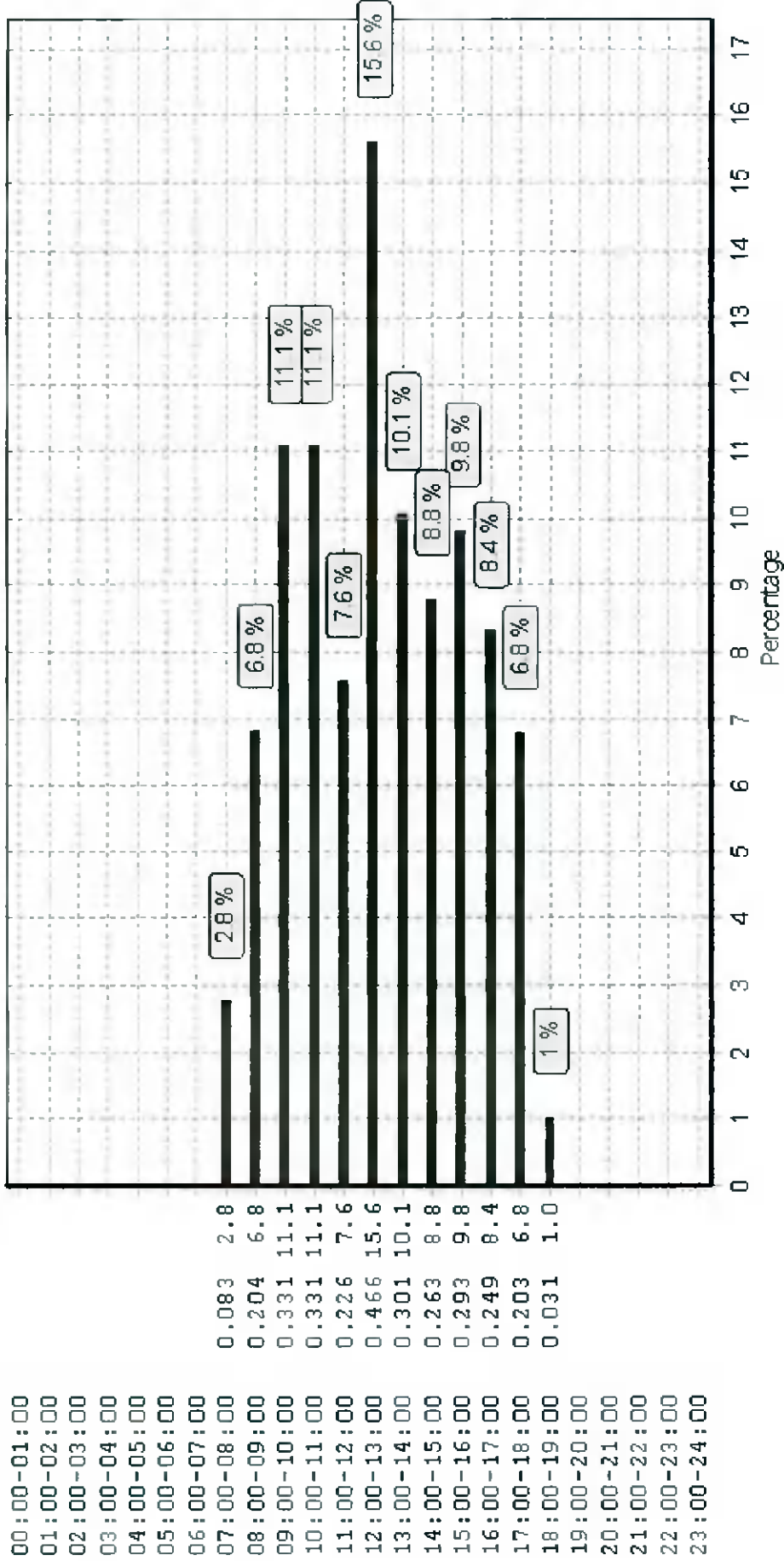
RATE %

TIME



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

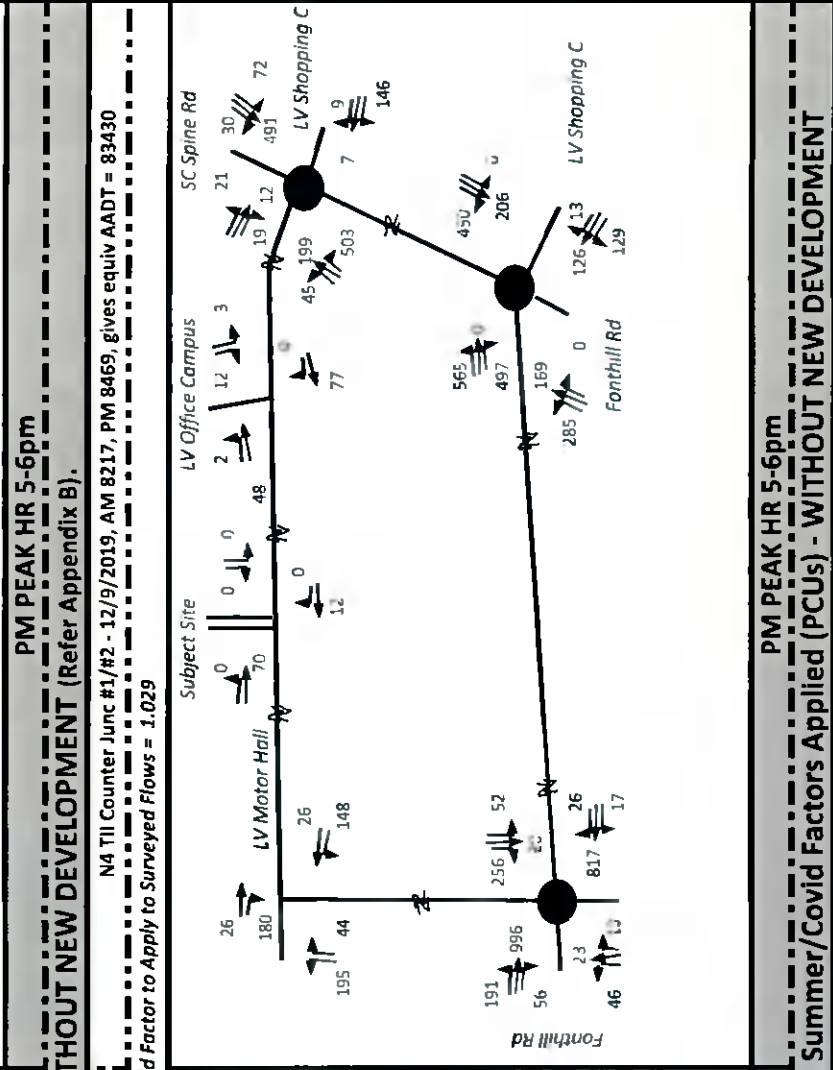
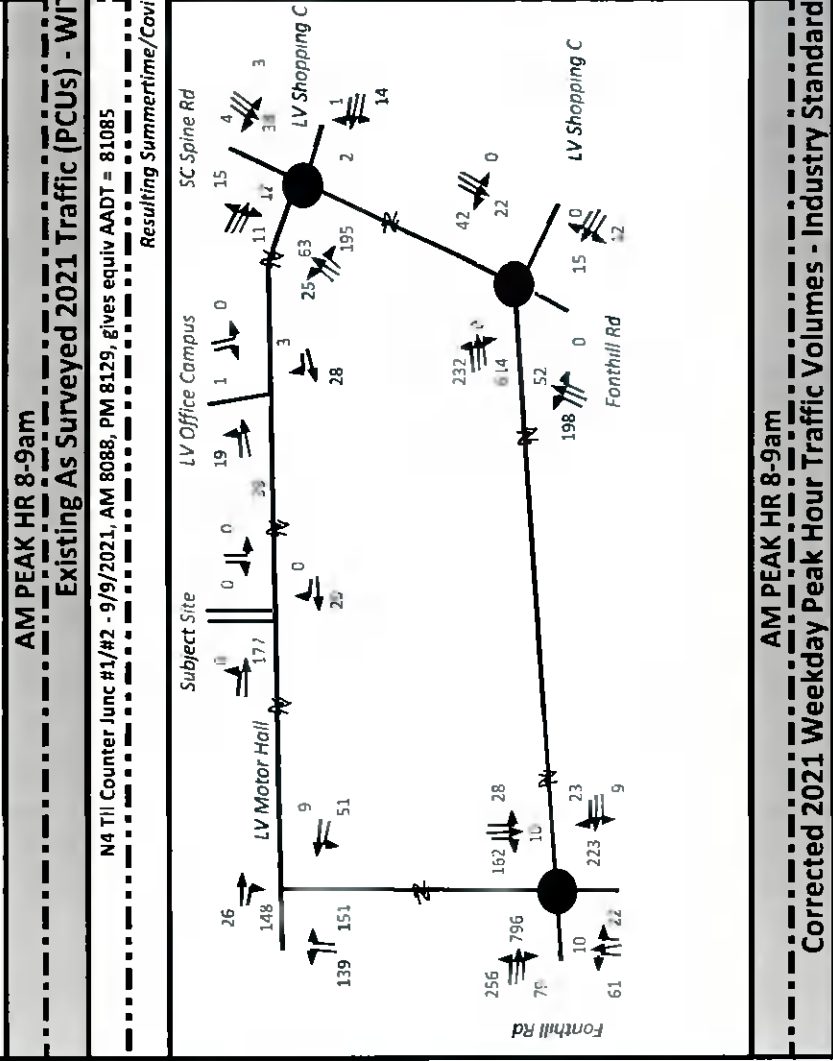
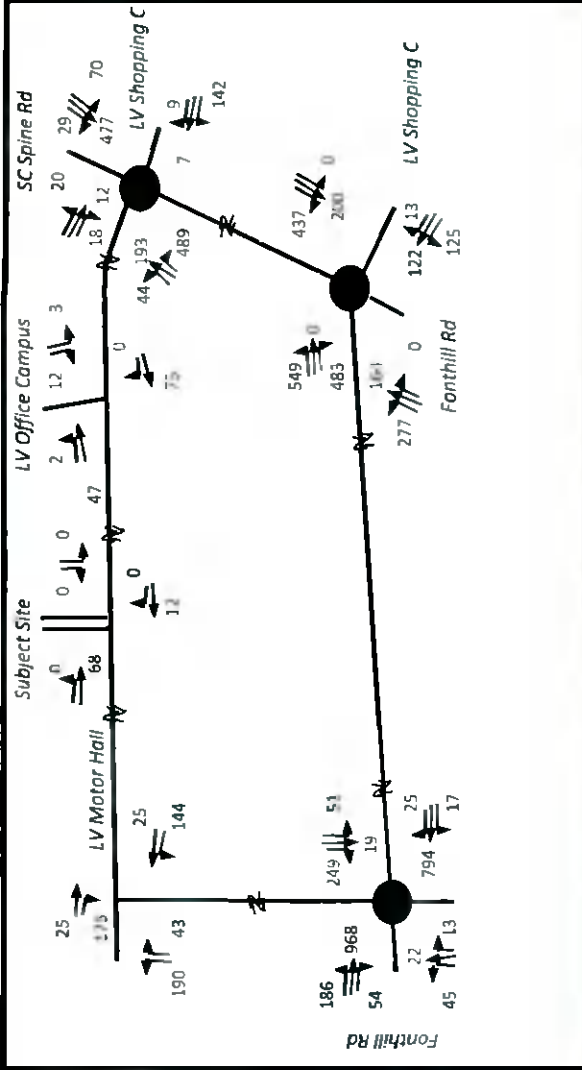
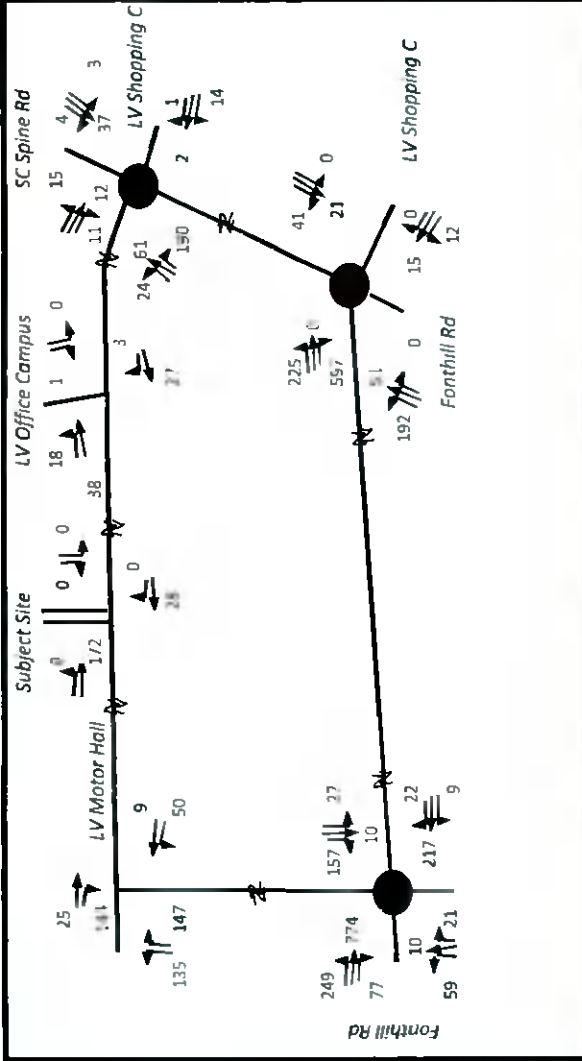
TRIP RATE GRAPH - TOTALS 02 - EMPLOYMENT E - WAREHOUSING (SELF STORAGE) TOTAL VEHICLES



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

APPENDIX D

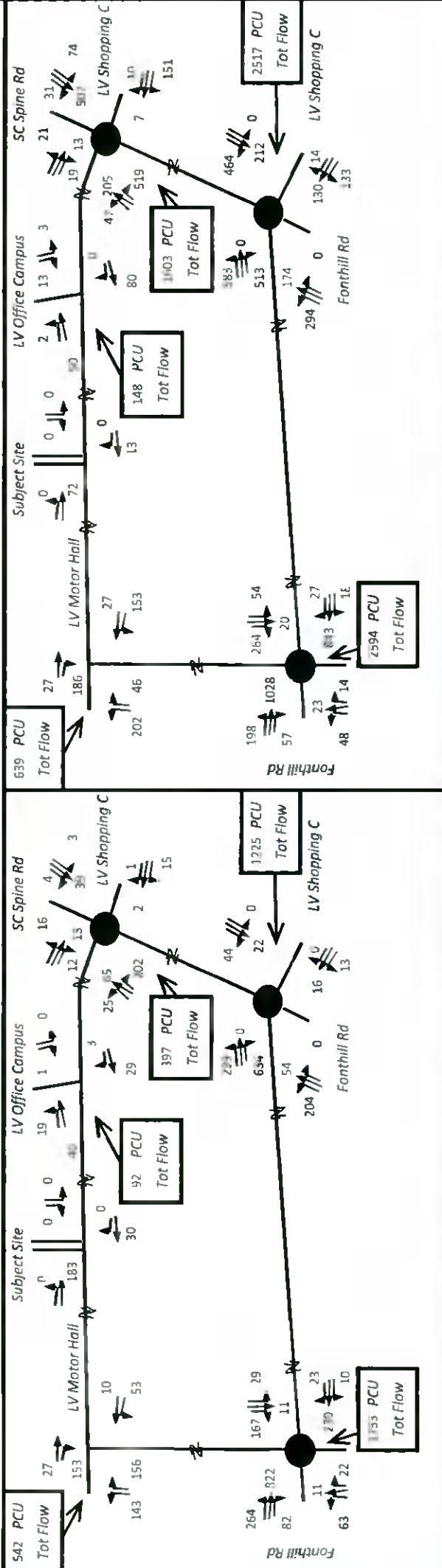
**Traffic Calculations, Trip Distribution,
Network Traffic Flow Diagrams & Projections
Based on Traffic Surveys/TRICS**



TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3

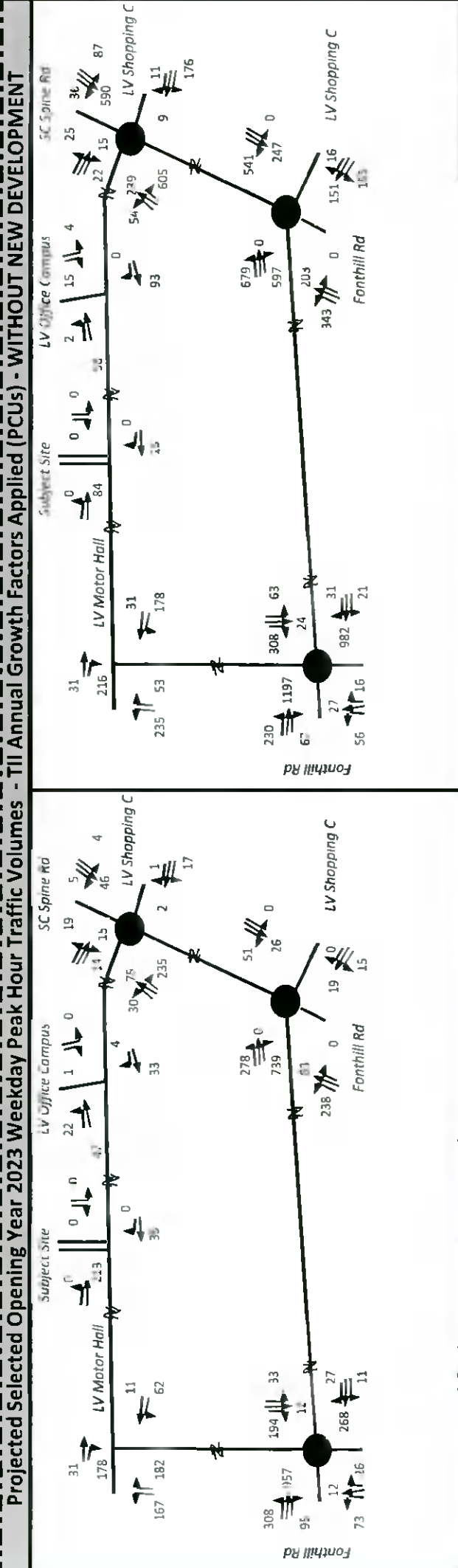
(Travel Demand Projections 2019, Table 6.1: Central Growth Rates: Annual Growth Factors Metropolitan Dublin)

2021 to 2023 = 1.032
2023 to 2038 = 1.165



AM PEAK HR 8-9am

Projected Selected Opening Year 2023 Weekday Peak Hour Traffic Volumes - TII Annual Growth Factors Applied (PCUs) - WITHOUT NEW DEVELOPMENT



PM PEAK HR 5-6pm

Projected Selected Opening Year 2038 Weekday Peak Hour Traffic Volumes - TII Annual Growth Factors Applied (PCUs) - WITHOUT NEW DEVELOPMENT

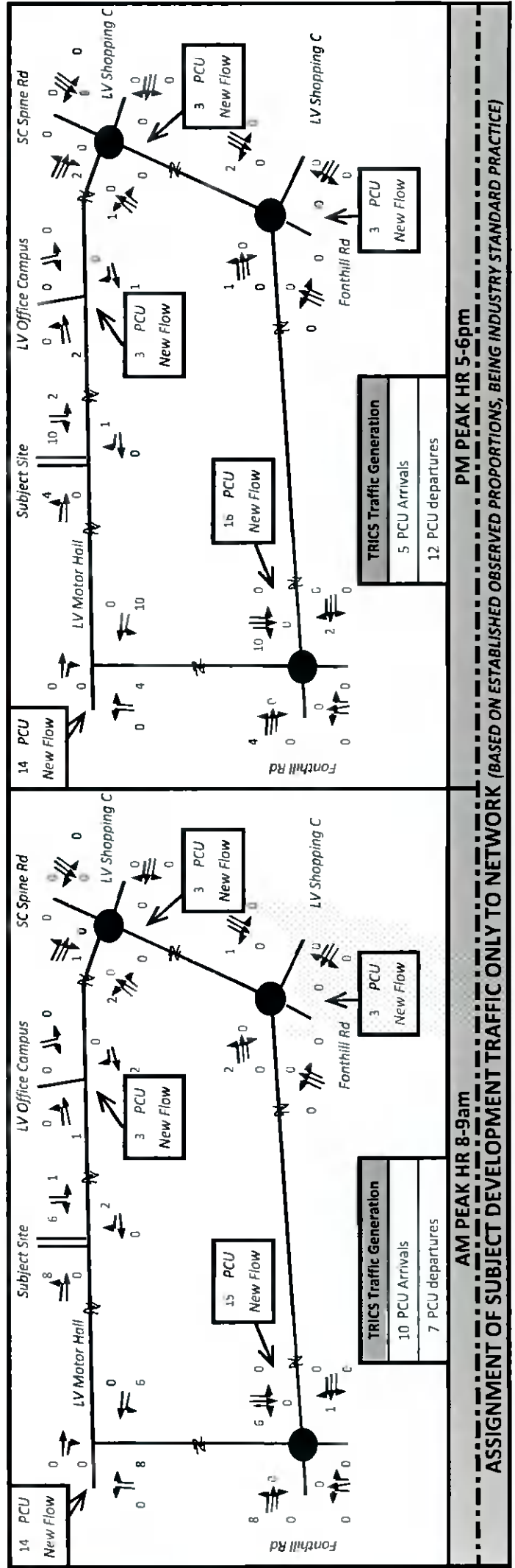
AM PEAK HR 8-9am

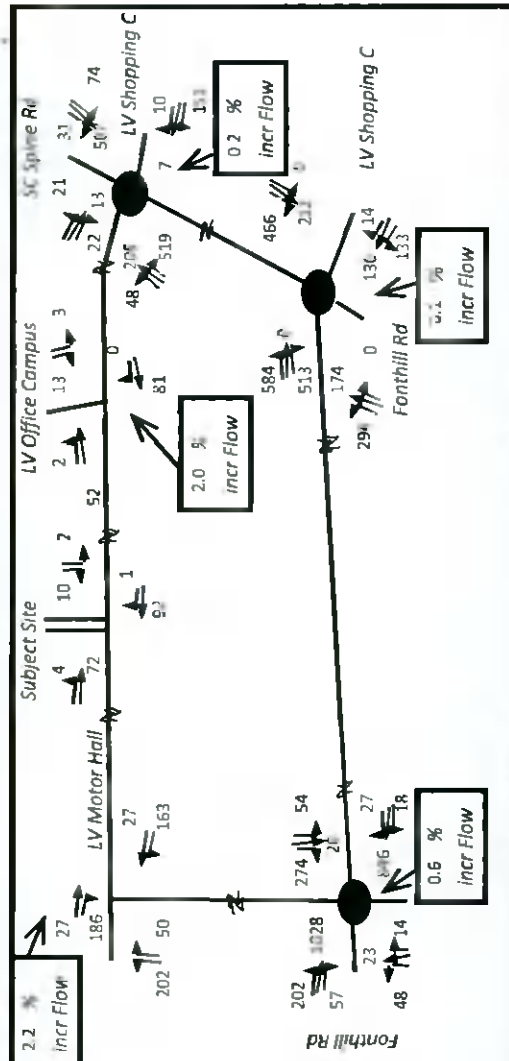
Associated Design Year 2038 Weekday Peak Hour Traffic Volumes - TII Annual Growth Factors Applied (PCUs) - WITHOUT NEW DEVELOPMENT

TRAFFIC GENERATION CALCULATIONS - BASED ON TRICS

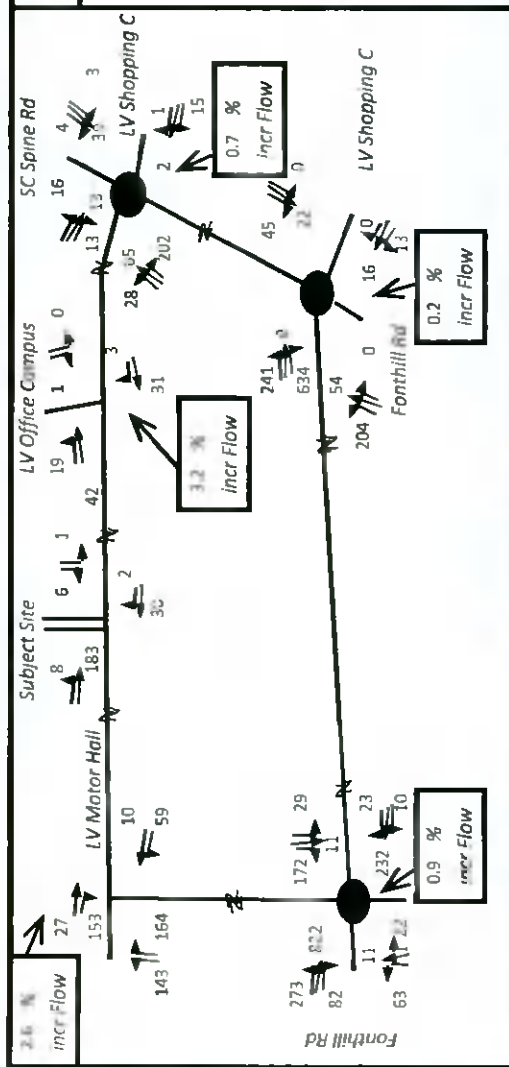
8620 m2 Facility	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated
	Per 100m2	Dev	Per 100m2	Dev	
Network Hour					
Weekday AM Peak Hr 8-9	0.121	10	0.083	7	18
Weekday PM Peak Hr 5-6	0.060	5	0.143	12	17

Self Storage Warehouse
TRICS V7.8.3

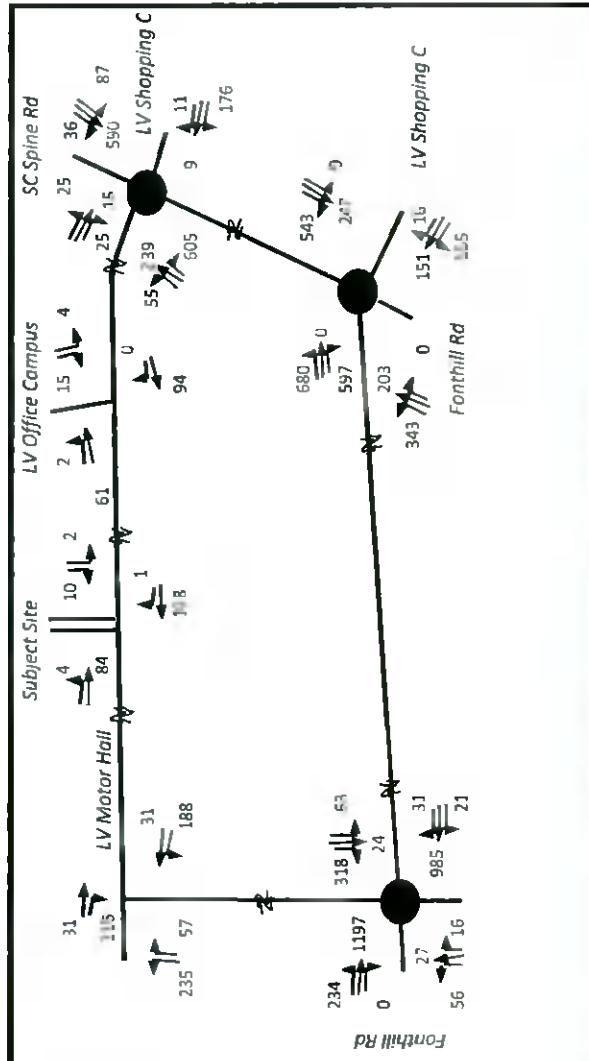




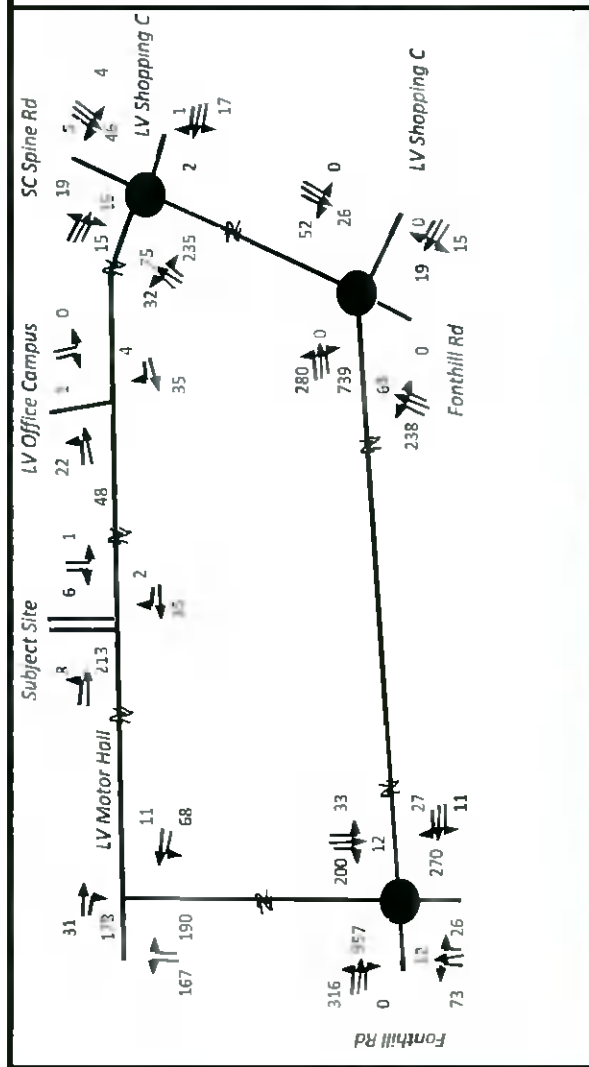
AM PEAK HR 8-9am
 Projected Selected Opening Year 2023 Weekday Peak Hour Traffic Volumes - WITH SUBJECT DEVELOPMENT OPEN & OCCUPIED



PM PEAK HR 5-6pm
 Projected Selected Opening Year 2023 Weekday Peak Hour Traffic Volumes - WITH SUBJECT DEVELOPMENT OPEN & OCCUPIED



AM PEAK HR 8-9am
 Associated Design Year 2038 (Open +15) Weekday Peak Hour Traffic Volumes - WITH SUBJECT DEVELOPMENT OPEN & OCCUPIED



PM PEAK HR 5-6pm
 Associated Design Year 2038 (Open +15) Weekday Peak Hour Traffic Volumes - WITH SUBJECT DEVELOPMENT OPEN & OCCUPIED

APPENDIX E

Junction9 PiCADY Output
(Site Access T-Junction, Combined with Adjacent Office Campus)

**Capacity Assessment With Subject Development Open and Occupied
Priority Controlled Site Access Junction/LV Office Campus Access Combined**

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
2023 Opening Year AM Peak Hr	<1	0.02
2023 Opening Year PM Peak Hr	<1	0.07
2038 Design Year AM Peak Hr	<1	0.02
2038 Design Year PM Peak Hr	<1	0.08

All Results Above are WAY below the recommended RFC of 0.85 (85% Capacity) and therefore no problems whatsoever are anticipated at the Junction in terms of Capacity or excessive vehicle Queues. The Model output demonstrates very low RFCs, signifying high reserve capacity available.

NB - Any Small Changes to Selected Opening Year 2023 or Design Year 2038, or indeed significantly higher traffic volumes experienced, as clearly deductible from the positive results presented, will clearly have no significant implications in terms of the conclusions of the Study. The Excess Capacity in the Junction is such that the modelled RFCs are practically immeasurable.

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL. Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 2023 AM PM.j9

Path: C:\Users\Eoin\NRB Consulting Engineers Ltd\NRB Server - Documents\2021\21-086 U-Store It LV\Calculations\Access Picady

Report generation date: 14/10/2021 12:18:50

»2023, AM

»2023, PM

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	LOS	Q (PCU)	Delay (s)	RFC	LOS
2023								
Stream B-AC	0.0	9.30	0.02	A	0.1	9.20	0.07	A
Stream C-AB	0.0	6.80	0.01	A	0.0	6.04	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	13/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NRB-004\Eoin
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	Min	perMin

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Public Rd West		Major
B	Site Access		Minor
C	Public Rd East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	440	0.080	0.202	0.127	0.289
1	B-C	574	0.088	0.222	-	-
1	C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments

Streams may be combined, in which case capacity will be adjusted

Values are shown for the first time segment only, they may differ for subsequent time segments

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	210	100.000
B		✓	8	100.000
C		✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	183
	B	7	0	1
	C	30	5	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	2
	B	2	0	2
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS
B-AC	0.02	9.30	0.0	A
C-AB	0.01	6.80	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	6	419	0.014	6	0.0	8.884	A
C-AB	4	555	0.007	4	0.0	6.667	A
C-A	22			22			
A-B	20			20			
A-C	138			138			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7	413	0.017	7	0.0	9.055	A
C-AB	5	551	0.009	5	0.0	6.721	A
C-A	27			27			
A-B	24			24			
A-C	165			165			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9	404	0.022	9	0.0	9.299	A
C-AB	6	546	0.011	6	0.0	6.797	A
C-A	33			33			
A-B	30			30			
A-C	201			201			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9	404	0.022	9	0.0	9.299	A
C-AB	6	546	0.011	6	0.0	6.800	A
C-A	33			33			
A-B	30			30			
A-C	201			201			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7	413	0.017	7	0.0	9.056	A
C-AB	5	551	0.009	5	0.0	6.724	A
C-A	27			27			
A-B	24			24			
A-C	165			165			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	6	419	0.014	6	0.0	8.889	A
C-AB	4	555	0.007	4	0.0	6.667	A
C-A	22			22			
A-B	20			20			
A-C	138			138			

2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	1.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	78	100.000
B		✓	28	100.000
C		✓	93	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	72
	B	23	0	5
	C	92	1	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	2
	B	2	0	2
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS
B-AC	0.07	9.20	0.1	A
C-AB	0.00	6.04	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	21	439	0.048	21	0.1	8.777	A
C-AB	0.85	609	0.001	0.84	0.0	6.041	A
C-A	69			69			
A-B	5			5			
A-C	54			54			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	25	435	0.058	25	0.1	8.952	A
C-AB	1	615	0.002	1	0.0	5.976	A
C-A	83			83			
A-B	5			5			
A-C	65			65			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	430	0.072	31	0.1	9.197	A
C-AB	1	625	0.002	1	0.0	5.887	A
C-A	101			101			
A-B	7			7			
A-C	79			79			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	430	0.072	31	0.1	9.199	A
C-AB	1	625	0.002	1	0.0	5.889	A
C-A	101			101			
A-B	7			7			
A-C	79			79			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	25	435	0.058	25	0.1	8.956	A
C-AB	1	615	0.002	1	0.0	5.978	A
C-A	83			83			
AB	5			5			
AC	65			65			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	21	439	0.048	21	0.1	6.787	A
C-AB	0.85	609	0.001	0.85	0.0	6.041	A
C-A	69			69			
AB	5			5			
AC	54			54			

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.1.4646 [] Copyright TRL Limited, 2021
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Filename: 2038 AM PM.j9

Path: C:\Users\Eoin\NRB Consulting Engineers Ltd\NRB Server - Documents\2021\21-086 U-Store It LV\Calculations\Access Picady

Report generation date: 14/10/2021 12:20:46

»2038, AM

»2038, PM

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	LOS	Q (PCU)	Delay (s)	RFC	LOS
2038								
Stream B-AC	0.0	9.49	0.02	A	0.1	9.35	0.08	A
Stream C-AB	0.0	6.87	0.01	A	0.0	5.98	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	13/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NRB-004\Eoin
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	Min	perMin

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2038	AM	ONE HOUR	07:45	09:15	15
D2	2038	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2038, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	0.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Public Rd West		Major
B	Site Access		Minor
C	Public Rd East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	440	0.080	0.202	0.127	0.269
1	B-C	574	0.088	0.222	-	-
1	C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments

Streams may be combined, in which case capacity will be adjusted

Values are shown for the first time segment only; they may differ for subsequent time segments

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2038	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	243	100.000
B		✓	8	100.000
C		✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	30	213
	B	7	0	1
	C	35	6	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	2
	B	2	0	2
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS
B-AC	0.02	9.49	0.0	A
C-AB	0.01	6.87	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	6	414	0.015	6	0.0	9.004	A
C-AB	5	552	0.009	5	0.0	6.711	A
C-A	26			26			
A-B	23			23			
A-C	160			160			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7	406	0.018	7	0.0	9 203	A
C-AB	6	548	0.010	6	0.0	6 774	A
C-A	31			31			
A-B	27			27			
A-C	191			191			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9	396	0.022	9	0.0	9 492	A
C-AB	7	542	0.013	7	0.0	6 864	A
C-A	38			38			
A-B	33			33			
A-C	235			235			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9	396	0.022	9	0.0	9.492	A
C-AB	7	542	0.013	7	0.0	6.867	A
C-A	38			38			
A-B	33			33			
A-C	235			235			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7	406	0.018	7	0.0	9.204	A
C-AB	6	548	0.010	6	0.0	6.777	A
C-A	31			31			
A-B	27			27			
A-C	191			191			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	6	414	0.015	6	0.0	9 006	A
C-AB	5	552	0.009	5	0.0	6 711	A
C-A	26			26			
A-B	23			23			
A-C	160			160			

2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Site Access	T-Junction	Two-way	1.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2038	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	90	100.000
B		✓	31	100.000
C		✓	109	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	84
	B	25	0	6
	C	108	1	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	2	2
	B	2	0	2
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS
B-AC	0.08	9.35	0.1	A
C-AB	0.00	5.98	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	23	438	0.053	23	0.1	8.855	A
C-AB	0.87	615	0.001	0.86	0.0	5.978	A
C-A	81			81			
A-B	5			5			
A-C	63			63			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	433	0.064	28	0.1	9.058	A
C-AB	1	623	0.002	1	0.0	5.902	A
C-A	97			97			
A-B	5			5			
A-C	76			76			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	427	0.080	34	0.1	9.345	A
C-AB	1	634	0.002	1	0.0	5.800	A
C-A	119			119			
A-B	7			7			
A-C	92			92			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	427	0.080	34	0.1	9.346	A
C-AB	1	634	0.002	1	0.0	5.800	A
C-A	119			119			
A-B	7			7			
A-C	92			92			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	433	0.064	28	0.1	9.064	A
C-AB	1	623	0.002	1	0.0	5.905	A
C-A	97			97			
A-B	5			5			
A-C	76			76			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	23	438	0.053	23	0.1	8.865	A
C-AB	0.87	615	0.001	0.87	0.0	5.981	A
C-A	81			81			
A-B	5			5			
A-C	63			63			