

# **PROPOSED OUTDOOR PAINTBALL RECREATIONAL/SPORTING FACILITY**

***312 Londonderry Road, Londonderry***

## **Traffic & Parking Impact Report – Supplementary Report**

Prepared for: Delta Force Properties (Pty) Ltd

A1414025N

December 2015

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## 1. INTRODUCTION

ML Traffic Engineers was commissioned by Delta Force Properties (Pty) Ltd to undertake a car-parking & traffic impact assessment for a proposed outdoor paintball recreational/sporting facility at 312 Londonderry Road, Londonderry.

Council has asked for supplementary report (in a letter dated 11<sup>th</sup> February) with regards to the following general areas:

- Access and egress driveway
- The traffic generation of the proposed paintball facility and trip distribution
- Potential expected traffic growth of the greyhound racecourse

The proposed infrastructure changes are as follows:

- The northern driveway will be an entry only driveway with a right turn bay for entry into the site. The BAR (basic right turn treatment) will be in accordance with Austroads Part 4A Unsignalised and Signalised Intersections (Figure 7.17 of this document)
  - It is expected that the BAR will be conditioned as part of a Development Application
- The southern driveway will be exit only

The traffic volumes for the weekday AM and PM peak hour and Saturday have been revised with respect to the following information:

- The Richmond Greyhound Racing Club have collected turning volumes to and from the site as presented in Appendix A for February 2015
- The Applicant has provided observed data at their Appin Paintball Business as presented in Appendix B

It is not expected that there will be increase in traffic at the Richmond Greyhound racing Club.

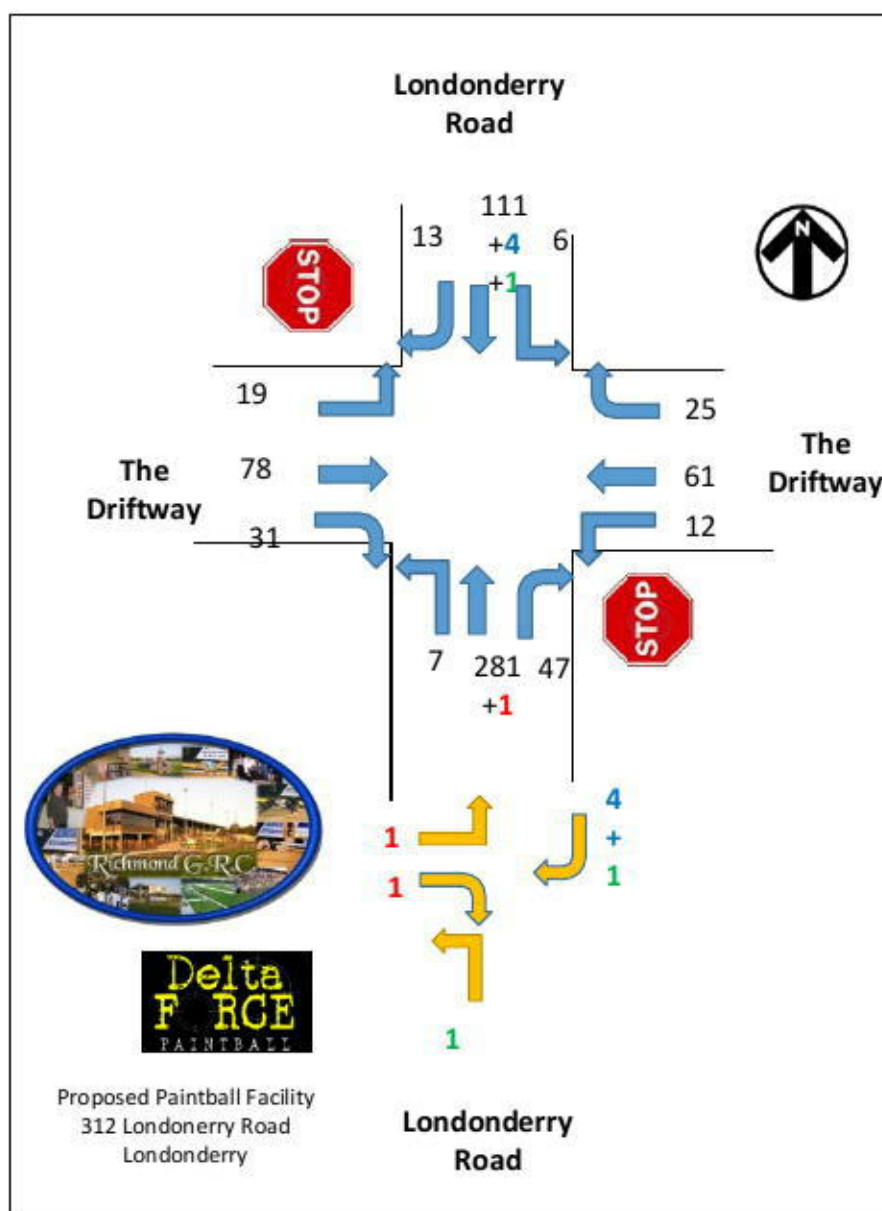
### 1.1 Traffic volumes with Richmond Greyhound Racing Club Traffic

The following Figures present the existing with the paintball traffic with origin trips in green and destination trips in purple. The greyhound traffic in blue and red. The survey of the Appin paintball business showed no traffic in the weekday PM peak hour.

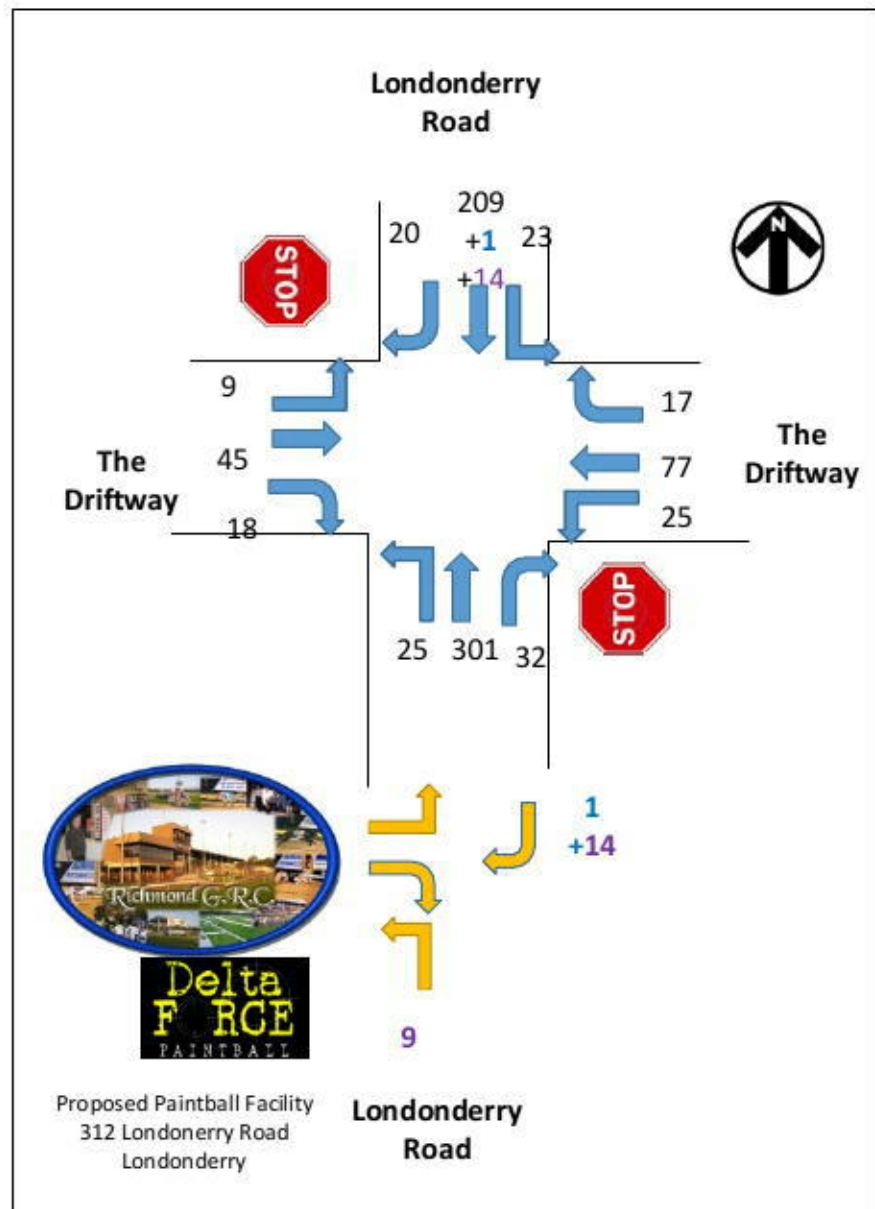
The following Figures show that the generated paintball and the existing traffic is low. The Figures show that there is an adequate assignment of right turn traffic (a Council concern in their letter).

As discussed previously, it is very unlikely that under the current circumstances that the Greyhound Racing Industry will be smaller than what it was in February 2015.

The right turn into the site will have a maximum 25 vehicles. The BAR treatment will be able to cater for the right turning traffic as set out in Figure 4.9 of Austroads Part 4A Unsignalised and Signalised Intersections with the BAR treatment is adequate to cater for the expected turn volumes.

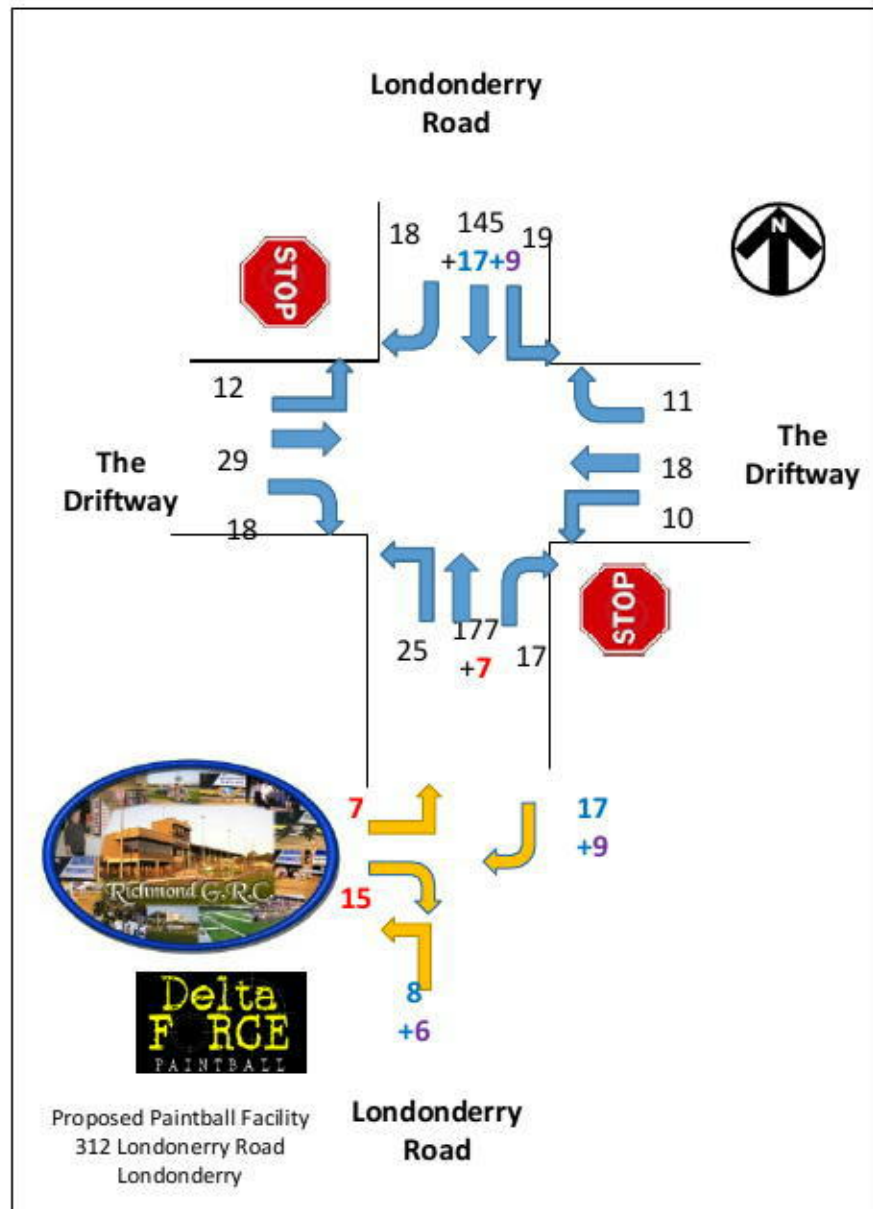


**Figure 1: Existing Weekday AM Peak Hour Traffic Volumes with Paintball Traffic**



**Figure 2: Existing Saturday AM Peak Hour Traffic Volumes with Paintball Traffic**





**Figure 3: Existing Sunday AM Peak Hour Traffic Volumes with Paintball Traffic**

## 1.2 Intersection Assessment with Additional Paintball Traffic Volumes

An intersection with the additional trips for the weekday AM and PM and Saturday peak hours has been undertaken. The results are summarised below:

### Londonderry Road with The Driftway

- All turn movements have a LoS A for the peak hours The additional trips do not change the LoS for any turn movement for either peak hour

### Londonderry Road with The Richmond Greyhound Racing Club Entrance

- All turn movements have a LoS A for the three peak hours
- All turn movements have a LoS A for the peak hours The additional trips do not change the LoS for any turn movement for either peak hour

### Londonderry Road with The Richmond Greyhound Racing Club Exit

- All turn movements have a LoS A for the three peak hours
- All turn movements have a LoS A for the peak hours The additional trips do not change the LoS for any turn movement for either peak hour

The full SIDRA outputs are presented in Appendix C for the existing and development traffic conditions.

## APPENDIX A

### ***Traffic Volumes for Vehicular Inbound and Outbound Movements at the Richmond Greyhound Racing Club***

Inbound Traffic Volumes			
Time	Saturday 21st February 2015	Sunday 22nd February 2015	Wednesday 25th February 2015
8.15am	1	10	2
8.30am		6	
8.45am		4	2
9.00am		5	
9.15am		4	2
9.30am	1	3	
9.45am	2	2	
10.00am		2	2
10.15am		2	
10.30am		1	
10.45am			2
11.00am	2		
11.15am			
11.30am			
11.45am			
12.00noon			

**Table A1: Weekday and Weekend AM Inbound Traffic Volumes at the Richmond Greyhound Racing Club**

Inbound Traffic Volumes			
Time	Saturday 21st February 2015	Sunday 22nd February 2015	Wednesday 25th February 2015
12.15pm	3		
12.30pm			
12.45pm			8
1.00pm			8
1.15pm			10
1.30pm			6
1.45pm			
2.00pm			
2.15pm	2		
2.30pm			4
2.45pm			
3.00pm			
3.15pm			
3.30pm			4
3.45pm	4		
4.00pm			
4.15pm			2
4.30pm	4		2
4.45pm			
5.00pm	12		4
5.15pm	10		
5.45pm	14		
6.00pm	15		
6.15pm	15		
6.30pm	18		
6.45pm	15		
7.00pm	10		
7.15pm	6		
7.30pm	6		
7.45pm	5		
8.00pm	2		
8.15pm	2		
8.30pm	3		
8.45pm	2		
9.00pm	2		
9.15pm	1		
9.30pm	1		
9.45pm	1		
10.00pm	1		
10.15pm	2		
10.45pm	2		
11.00pm	1		
11.15pm	1		

**Table A2: Weekday and Weekend PM Inbound Traffic Volumes at the Richmond Greyhound Racing Club**



Outbound Traffic Volumes			
Time	Saturday 21st February 2015	Sunday 22nd February 2015	Wednesday 25th February 2015
8.15am		6	
8.30am		6	
8.45am		5	2
9.00am		5	
9.15am		3	2
9.30am		2	
9.45am	2	2	
10.00am		2	2
10.15am		2	
10.30am		6	
10.45am			2
11.00am	1		
11.15am			
11.30am			
11.45am			
12.00noon			

**Table A3: Weekday and Weekend AM Outbound Traffic Volumes at the Richmond Greyhound Racing Club**

Outbound Traffic Volumes			
Time	Saturday 21st February 2015	Sunday 22nd February 2015	Wednesday 25th February 2015
12.15pm	3		
12.30pm			
12.45pm			2
1.00pm			2
1.15pm			2
1.30pm			2
1.45pm			
2.00pm			
2.15pm			
2.30pm			4
2.45pm			
3.00pm			
3.15pm			
3.30pm			6
3.45pm	1		
4.00pm			
4.15pm			10
4.30pm	1		6
4.45pm			
5.00pm	1		6
5.15pm	1		
5.45pm	6		3
6.00pm	4		1
6.15pm	6		
6.30pm	5		4
6.45pm	5		
7.00pm	4		2
7.15pm	4		
7.30pm	2		
7.45pm	10		
8.00pm	6		
8.15pm	8		
8.30pm	8		
8.45pm	6		
9.00pm	7		
9.15pm	8		
9.30pm	10		
9.45pm	9		
10.00pm	13		
10.15pm	9		
10.45pm	8		
11.00pm	9		
11.15pm	7		
11.30pm	2		

**Table A4: Weekday and Weekend PM Outbound Traffic Volumes at the Richmond Greyhound Racing Club**

## **APPENDIX B**

### ***Traffic Volumes for Vehicular Inbound and Outbound Movements the Appin Paintball Business***

# **PAINTBALL FACILITY TRAFFIC SURVEYS**

**DATE:** Friday 27<sup>th</sup> February 2015

**LOCATION:** DF Appin

**Total Number players:** 0

Period		Entering Car Park	Exiting Car Park	Total	Comments
8.15am	8.30am				
8.30am	8.45am	1		1	Manager Arrived
8.45am	9.00am	1		1	Marshal Arrived
9.00am	9.15am				
9.15am	9.30am				
9.30am	9.45am				
9.45am	10.00am				
10.00am	10.15am				
10.15am	10.30am				
10.30am	10.45am				
10.45am	11.00am				
11.00am	11.15am				
11.15am	11.30am				
11.30am	11.45am				
11.45am	12.00noon				
12.00noon	12.15pm				
12.15pm	12.30pm				
12.30pm	12.45pm				
12.45pm	1.00pm				
1.00pm	1.15pm		1	1	Marshal Left
1.15pm	1.30pm				
1.30pm	1.45pm				
1.45pm	2.00pm				
2.00pm	2.15pm				
2.15pm	2.30pm		1	1	Manager Left
2.30pm	2.45pm				
2.45pm	3.00pm				
3.00pm	3.15pm				
3.15pm	3.30pm				
3.30pm	3.45pm				
3.45pm	4.00pm				
4.00pm	4.15pm				
4.15pm	4.30pm				
4.30pm	4.45pm				
4.45pm	5.00pm				
5.00pm	5.15pm				

5.15pm	5.30pm				
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**Total Number Cars: 2**

**Table B1: Friday Arrival and Departures at the Appin Paintball Business**



# **PAINTBALL FACILITY TRAFFIC SURVEYS**

**DATE:** Saturday 28<sup>th</sup> February 2015

**Total Number players:**89

**LOCATION:** DF Appin

Period		Entering Car Park	Exiting Car Park	Total	Comments
8.15am	8.30am	6		6	
8.30am	8.45am	14		14	
8.45am	9.00am	3		3	
9.00am	9.15am				
9.15am	9.30am				
9.30am	9.45am				
9.45am	10.00am				
10.00am	10.15am				
10.15am	10.30am				
10.30am	10.45am				
10.45am	11.00am				
11.00am	11.15am	2		2	
11.15am	11.30am				
11.30am	11.45am				
11.45am	12.00noon				
12.00noon	12.15pm				
12.15pm	12.30pm				
12.30pm	12.45pm				
12.45pm	1.00pm	1	1	2	Pizza Delivery
1.00pm	1.15pm				
1.15pm	1.30pm		3	3	
1.30pm	1.45pm		1	1	
1.45pm	2.00pm				
2.00pm	2.15pm		3	3	
2.15pm	2.30pm		2	2	
2.30pm	2.45pm				
2.45pm	3.00pm		4	4	
3.00pm	3.15pm		3	3	
3.15pm	3.30pm		8	8	
3.30pm	3.45pm				
3.45pm	4.00pm		1	1	
4.00pm	4.15pm				
4.15pm	4.30pm				
4.30pm	4.45pm				
4.45pm	5.00pm				
5.00pm	5.15pm				
5.15pm	5.30pm				

**Total Number Cars: 25**

**Table B2: Saturday Arrival and Departures at the Appin Paintball Business**

# **PAINTBALL FACILITY TRAFFIC SURVEYS**

**DATE:** Sunday 1<sup>st</sup> March 2015  
**LOCATION:** DF Appin

**Total Number players: 47**

Period		Entering Car Park	Exiting Car Park	Total	Comments
8.15am	8.30am	7		7	
8.30am	8.45am	5		5	
8.45am	9.00am	3		3	
9.00am	9.15am				
9.15am	9.30am				
9.30am	9.45am				
9.45am	10.00am				
10.00am	10.15am				
10.15am	10.30am				
10.30am	10.45am				
10.45am	11.00am	2		2	
11.00am	11.15am				
11.15am	11.30am				
11.30am	11.45am				
11.45am	12.00noon				
12.00noon	12.15pm				
12.15pm	12.30pm				
12.30pm	12.45pm				
12.45pm	1.00pm	1	1	2	<b>Pizza Delivery</b>
1.00pm	1.15pm				
1.15pm	1.30pm				
1.30pm	1.45pm		4	4	
1.45pm	2.00pm				
2.00pm	2.15pm		2	2	
2.15pm	2.30pm		5	5	
2.30pm	2.45pm				
2.45pm	3.00pm		6	6	
3.00pm	3.15pm				
3.15pm	3.30pm				
3.30pm	3.45pm				
3.45pm	4.00pm				
4.00pm	4.15pm				
4.15pm	4.30pm				
4.30pm	4.45pm				
4.45pm	5.00pm				
5.00pm	5.15pm				
5.15pm	5.30pm				

**Total Number Cars: 17**

**Table B3: Sunday Arrival and Departures at the Appin Paintball Business**

## APPENDIX C

### ***SIDRA Intersection Results for Existing Traffic Conditions with Paintball Traffic***

Movement Performance - Vehicles											
Mov ID	ODMo v	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
1	L2	7	0.0	0.178	7.4	LOS A	1.1	7.5	0.26	0.10	63.9
2	T1	282	0.0	0.178	0.4	LOS A	1.1	7.5	0.26	0.10	76.2
3	R2	47	0.0	0.178	7.0	LOS A	1.1	7.5	0.26	0.10	63.1
Approach		336	0.0	0.178	1.5	NA	1.1	7.5	0.26	0.10	73.7
East: The Driftway east											
4	L2	12	0.0	0.144	11.1	LOS A	0.5	3.6	0.43	0.98	54.9
5	T1	61	0.0	0.144	10.8	LOS A	0.5	3.6	0.43	0.98	50.2
6	R2	25	0.0	0.144	10.6	LOS A	0.5	3.6	0.43	0.98	54.6
Approach		98	0.0	0.144	10.8	LOS A	0.5	3.6	0.43	0.98	51.8
North: Londonderry Road north											
7	L2	6	0.0	0.072	7.9	LOS A	0.4	3.1	0.39	0.08	63.3
8	T1	116	0.0	0.072	1.0	LOS A	0.4	3.1	0.39	0.08	75.4
9	R2	13	0.0	0.072	7.6	LOS A	0.4	3.1	0.39	0.08	62.6
Approach		135	0.0	0.072	1.9	NA	0.4	3.1	0.39	0.08	73.3
West: The Driftway west											
10	L2	19	0.0	0.186	11.2	LOS A	0.7	4.8	0.50	0.99	55.0
11	T1	78	0.0	0.186	10.9	LOS A	0.7	4.8	0.50	0.99	50.2
12	R2	31	0.0	0.186	10.7	LOS A	0.7	4.8	0.50	0.99	54.6
Approach		128	0.0	0.186	10.9	LOS A	0.7	4.8	0.50	0.99	51.9
All Vehicles		697	0.0	0.186	4.6	NA	1.1	7.5	0.35	0.38	64.8

**Table B1: Intersection Performance of Londonderry Road with The Driftway  
Weekday AM Peak Hour Existing Conditions with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo v	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total	HV				Vehicles	Distance			
		veh/h	%				veh	m			
South: Londonderry Road south											
1	L2	25	0.0	0.191	7.9	LOS A	1.3	8.9	0.39	0.09	63.2
2	T1	301	0.0	0.191	1.0	LOS A	1.3	8.9	0.39	0.09	75.2
3	R2	32	0.0	0.191	7.6	LOS A	1.3	8.9	0.39	0.09	62.4
Approach		358	0.0	0.191	2.1	NA	1.3	8.9	0.39	0.09	72.9
East: The Driftway east											
4	L2	25	0.0	0.190	12.0	LOS A	0.7	4.9	0.51	0.99	54.3
5	T1	77	0.0	0.190	11.7	LOS A	0.7	4.9	0.51	0.99	49.7
6	R2	17	0.0	0.190	11.4	LOS A	0.7	4.9	0.51	0.99	54.0
Approach		119	0.0	0.190	11.7	LOS A	0.7	4.9	0.51	0.99	51.2
North: Londonderry Road north											
7	L2	23	0.0	0.143	8.2	LOS A	1.0	6.7	0.44	0.08	62.9



8	T1	224	0.0	0.143	1.3	LOS A	1.0	6.7	0.44	0.08	74.8
9	R2	20	0.0	0.143	7.9	LOS A	1.0	6.7	0.44	0.08	62.2
Approach		267	0.0	0.143	2.4	NA	1.0	6.7	0.44	0.08	72.5
West: The Driftway west											
10	L2	9	0.0	0.127	12.4	LOS A	0.4	3.1	0.54	1.00	54.1
11	T1	45	0.0	0.127	12.1	LOS A	0.4	3.1	0.54	1.00	49.5
12	R2	18	0.0	0.127	11.8	LOS A	0.4	3.1	0.54	1.00	53.8
Approach		72	0.0	0.127	12.1	LOS A	0.4	3.1	0.54	1.00	51.0
All Vehicles		816	0.0	0.191	4.4	NA	1.3	8.9	0.44	0.30	66.2

**Table B2: Intersection Performance of Londonderry Road with The Driftway  
Saturday Peak Hour Existing Conditions with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	v	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
1	L2	25	0.0	0.119	7.6	LOS A	0.7	5.0	0.32	0.10	63.4
2	T1	184	0.0	0.119	0.7	LOS A	0.7	5.0	0.32	0.10	75.4
3	R2	17	0.0	0.119	7.3	LOS A	0.7	5.0	0.32	0.10	62.6
Approach		226	0.0	0.119	1.9	NA	0.7	5.0	0.32	0.10	72.8
East: The Driftway east											
4	L2	10	0.0	0.050	10.1	LOS A	0.2	1.2	0.38	0.92	55.6
5	T1	18	0.0	0.050	9.8	LOS A	0.2	1.2	0.38	0.92	50.8
6	R2	11	0.0	0.050	9.6	LOS A	0.2	1.2	0.38	0.92	55.3
Approach		39	0.0	0.050	9.8	LOS A	0.2	1.2	0.38	0.92	53.2
North: Londonderry Road north											
7	L2	19	0.0	0.110	7.7	LOS A	0.7	4.6	0.33	0.09	63.3
8	T1	171	0.0	0.110	0.7	LOS A	0.7	4.6	0.33	0.09	75.4
9	R2	18	0.0	0.110	7.3	LOS A	0.7	4.6	0.33	0.09	62.6
Approach		208	0.0	0.110	1.9	NA	0.7	4.6	0.33	0.09	72.9
West: The Driftway west											
10	L2	12	0.0	0.077	10.3	LOS A	0.3	1.9	0.41	0.94	55.6
11	T1	29	0.0	0.077	9.9	LOS A	0.3	1.9	0.41	0.94	50.7
12	R2	18	0.0	0.077	9.7	LOS A	0.3	1.9	0.41	0.94	55.2
Approach		59	0.0	0.077	9.9	LOS A	0.3	1.9	0.41	0.94	53.0
All Vehicles		532	0.0	0.119	3.4	NA	0.7	5.0	0.34	0.25	68.1

**Table B3: Intersection Performance of Londonderry Road with The Driftway  
Sunday Peak Hour Existing Conditions with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	v	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
1	L2	1	0.0	0.172	7.0	LOS A	0.0	0.0	0.00	0.00	74.5
2	T1	335	0.0	0.172	0.0	LOS A	0.0	0.0	0.00	0.00	79.8
Approach		336	0.0	0.172	0.0	NA	0.0	0.0	0.00	0.00	79.8
North: Londonderry Road north											
8	T1	154	0.0	0.083	1.2	LOS A	0.5	3.8	0.42	0.02	75.8
9	R2	5	0.0	0.083	8.0	LOS A	0.5	3.8	0.42	0.02	57.6
Approach		159	0.0	0.083	1.4	NA	0.5	3.8	0.42	0.02	75.0
All Vehicles		495	0.0	0.172	0.5	NA	0.5	3.8	0.14	0.01	78.2

**Table B4: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Entrance Weekday AM Peak Hour with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	v	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
2	T1	335	0.0	0.172	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		335	0.0	0.172	0.0	NA	0.0	0.0	0.00	0.00	79.9
North: Londonderry Road north											
8	T1	158	0.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approach		158	0.0	0.081	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: Entrance											
10	L2	1	0.0	0.002	6.0	LOS A	0.0	0.0	0.39	0.55	45.6
12	R2	1	0.0	0.002	6.4	LOS A	0.0	0.0	0.39	0.55	45.1
Approach		2	0.0	0.002	6.2	LOS A	0.0	0.0	0.39	0.55	45.3
All Vehicles		495	0.0	0.172	0.0	NA	0.0	0.0	0.00	0.00	79.7

**Table B5: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Exit Weekday AM Peak Hour with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo v	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total	HV				Vehicles	Distance			
		veh/h	%				veh	m			
South: Londonderry Road south											
1	L2	9	0.0	0.188	6.9	LOS A	0.0	0.0	0.00	0.02	73.8
2	T1	358	0.0	0.188	0.0	LOS A	0.0	0.0	0.00	0.02	78.9
Approach		367	0.0	0.188	0.2	NA	0.0	0.0	0.00	0.02	78.8
North: Londonderry Road north											
8	T1	252	0.0	0.141	1.5	LOS A	1.0	7.0	0.47	0.04	74.8
9	R2	15	0.0	0.141	8.2	LOS A	1.0	7.0	0.47	0.04	57.0
Approach		267	0.0	0.141	1.9	NA	1.0	7.0	0.47	0.04	73.6
All Vehicles		634	0.0	0.188	0.9	NA	1.0	7.0	0.20	0.03	76.5

**Table B6: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Entrance Saturday Peak Hour with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	v	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
2	T1	358	0.0	0.184	0.0	LOS A	0.0	0.0	0.00	0.00	79.9
Approach		358	0.0	0.184	0.0	NA	0.0	0.0	0.00	0.00	79.9
North: Londonderry Road north											
8	T1	262	0.0	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approach		262	0.0	0.134	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: Entrance											
10	L2	2	0.0	0.005	6.5	LOS A	0.0	0.1	0.42	0.58	45.4

12	R2	2	0.0	0.005	6.8	LOS A	0.0	0.1	0.42	0.58	44.9
Approach		4	0.0	0.005	6.6	LOS A	0.0	0.1	0.42	0.58	45.2
All Vehicles		624	0.0	0.184	0.1	NA	0.0	0.1	0.00	0.00	79.5

**Table B7: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Exit Saturday Peak Hour with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	V	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
1	L2	14	0.0	0.120	6.9	LOS A	0.0	0.0	0.00	0.04	72.6
2	T1	219	0.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.04	77.5
Approach		233	0.0	0.120	0.4	NA	0.0	0.0	0.00	0.04	77.2
North: Londonderry Road north											
8	T1	173	0.0	0.105	1.3	LOS A	0.6	4.4	0.35	0.14	73.9
9	R2	23	0.0	0.105	7.4	LOS A	0.6	4.4	0.35	0.14	56.5
Approach		196	0.0	0.105	2.1	NA	0.6	4.4	0.35	0.14	71.3
All Vehicles		429	0.0	0.120	1.2	NA	0.6	4.4	0.16	0.09	74.4

**Table B8: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Entrance Sunday Peak Hour with Paintball Traffic**

Movement Performance - Vehicles											
Mov ID	ODMo	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
	V	Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Londonderry Road south											
2	T1	219	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approach		219	0.0	0.112	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: Londonderry Road north											
8	T1	197	0.0	0.101	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approach		197	0.0	0.101	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: Entrance											
10	L2	7	0.0	0.022	5.9	LOS A	0.1	0.5	0.34	0.60	45.7
12	R2	15	0.0	0.022	6.2	LOS A	0.1	0.5	0.34	0.60	45.2
Approach		22	0.0	0.022	6.1	LOS A	0.1	0.5	0.34	0.60	45.3
All Vehicles		438	0.0	0.112	0.3	NA	0.1	0.5	0.02	0.03	77.0

**Table B9: Intersection Performance of Londonderry Road with The Richmond Greyhound Race Course Exit Sunday Peak Hour with Paintball Traffic**