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

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Client

Project: Greenvale LRD Dublin

Title: Proposed Site Layout

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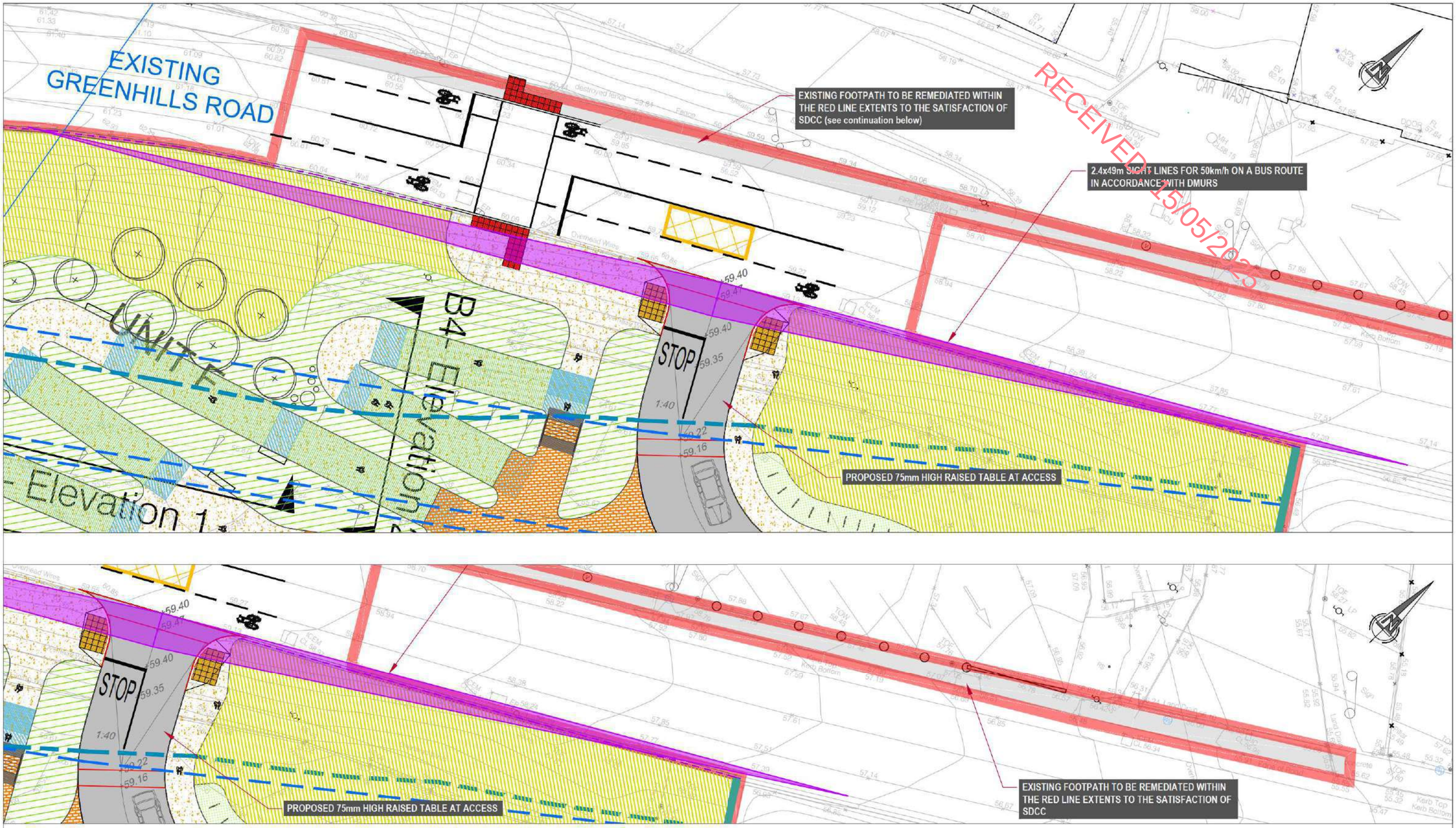
Project No.	Drawing No.
22-087	NRB-TA-001

Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:1000	D

Purpose of Issue: ☐ Draft ☐ As Built ☐ Information ☐ Tender ☐ Approval ☐ Construction



RECEIVED 15/05/2025

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Client

Project: Greenvale LRD
Dublin

Title: Proposed Greenhills Road
Access Sightlines

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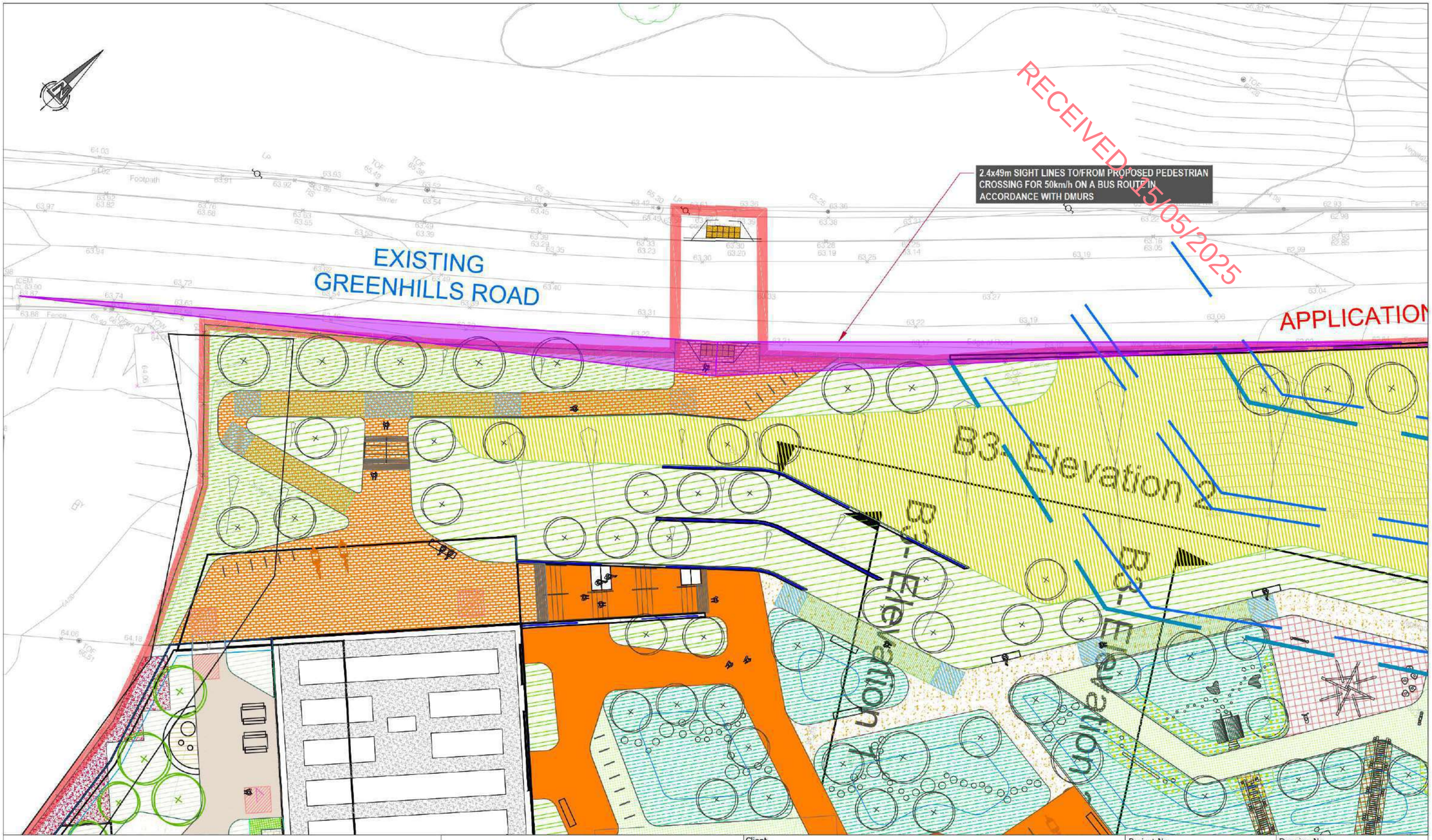
Project No.	Drawing No.
22-087	NRB-TA-002

Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:250	D

Purpose of Issue: ☐ Draft ☐ As Built ☐ Information ☐ Tender ☐ Approval ☐ Construction



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Client

Project: Greenvale LRD
Dublin

Title: Proposed Greenhills Road
Pedestrian Crossing Sightlines

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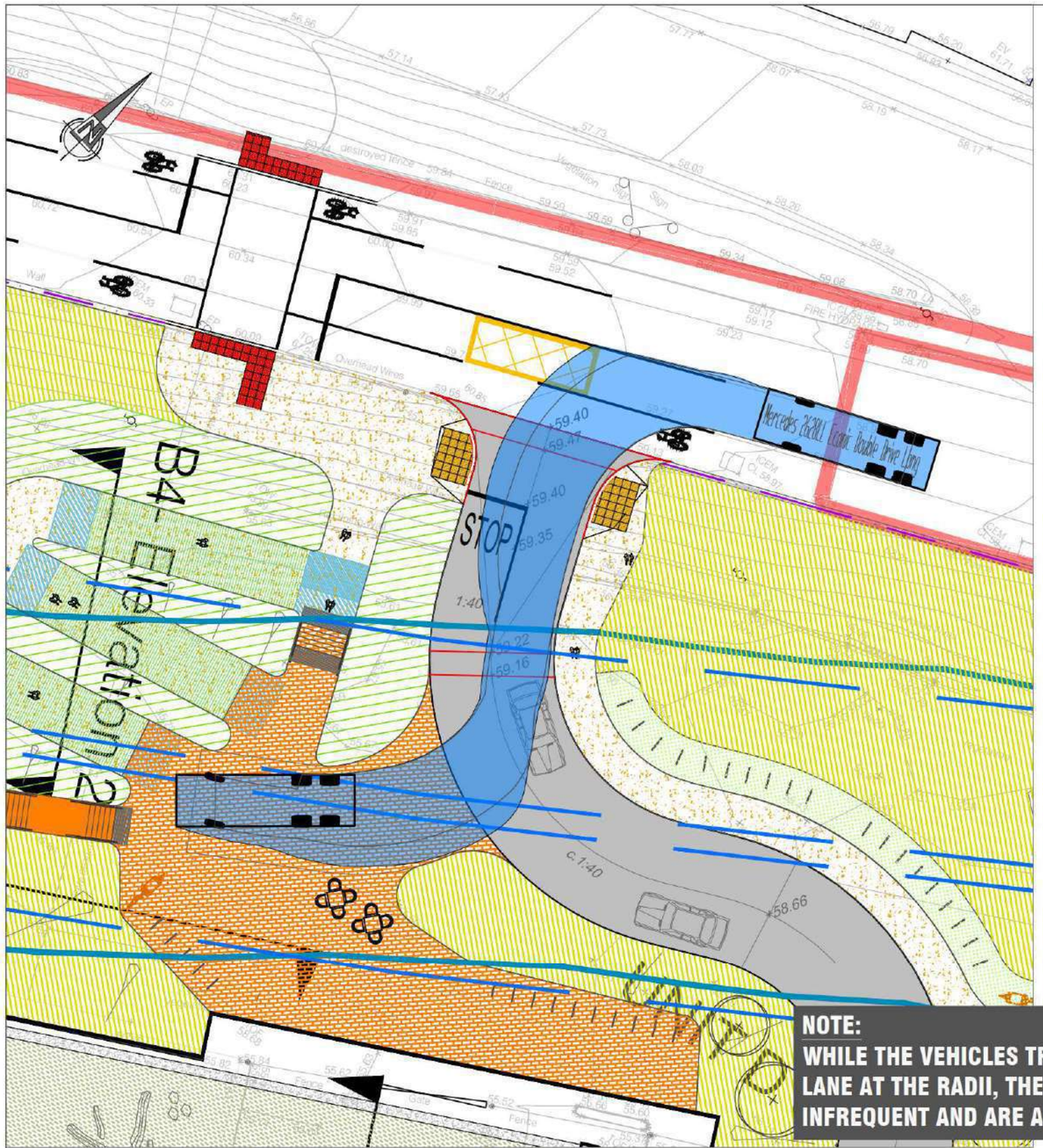
Project No.	Drawing No.
22-087	NRB-TA-003

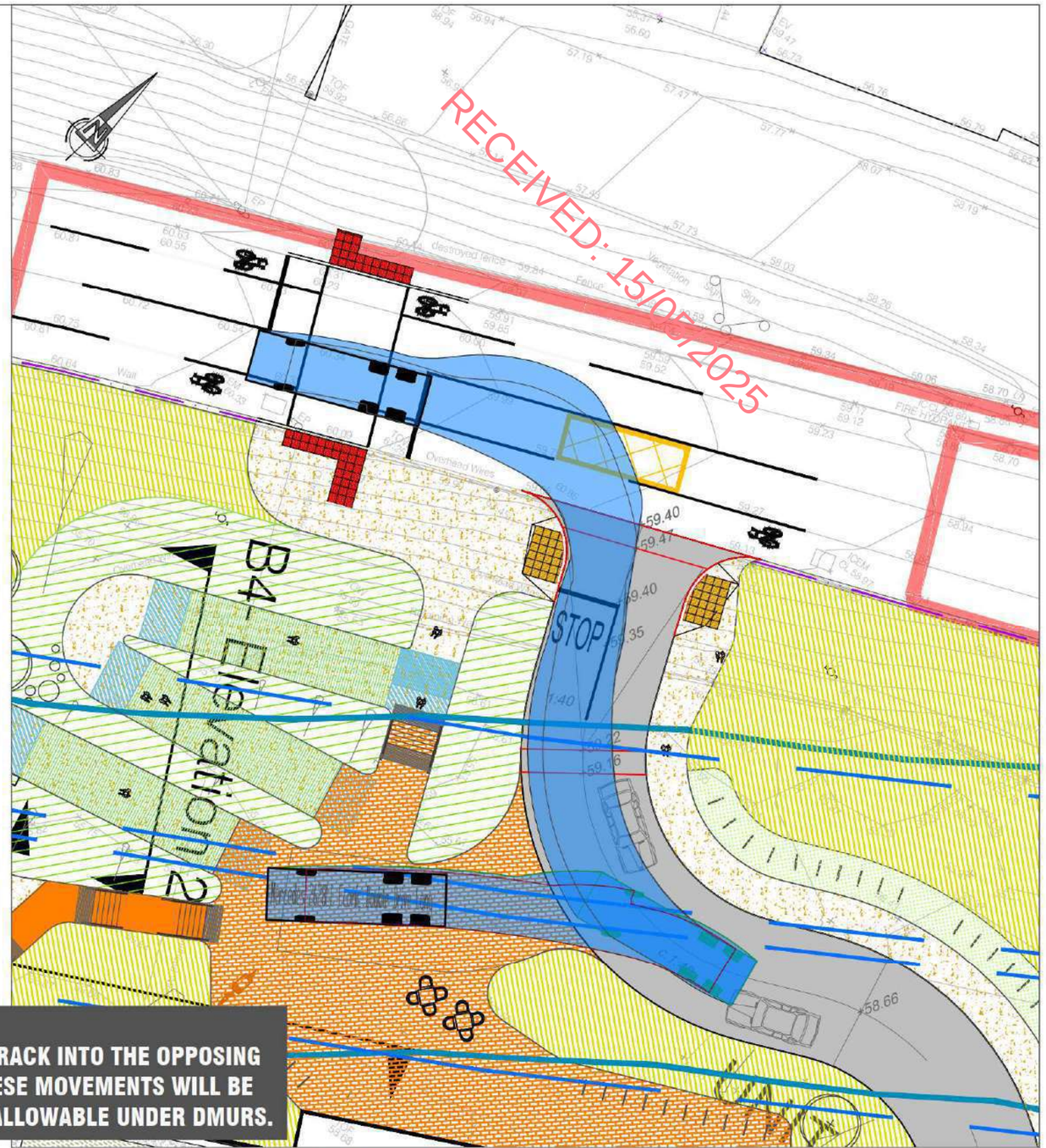
Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:250	D

Purpose of Issue: ☐ Draft ☐ As Built ☐ Information ☐ Tender ☐ Approval ☐ Construction



AUTOTRACK OF A REFUSE VEHICLE ENTERING OFF GREENHILLS ROAD



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

AUTOTRACK OF A REFUSE VEHICLE ENTERING OFF GREENHILLS ROAD

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Client

Project: Greenvale LRD, Dublin

Title: AutoTRACKs of a Refuse Vehicle At Proposed Greenhills Road Access

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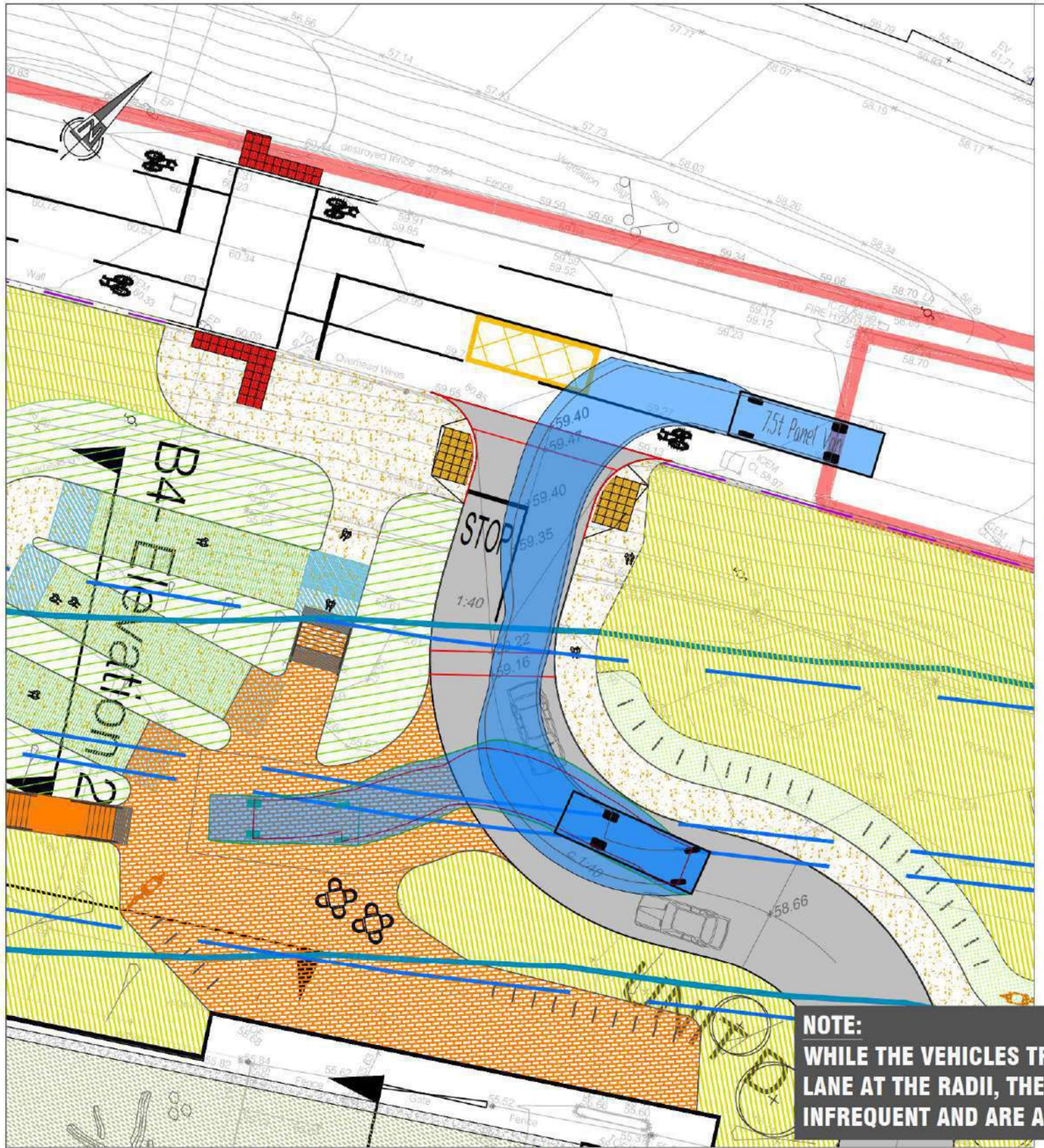
Project No.	Drawing No.
22-087	NRB-TA-004

Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:250	D

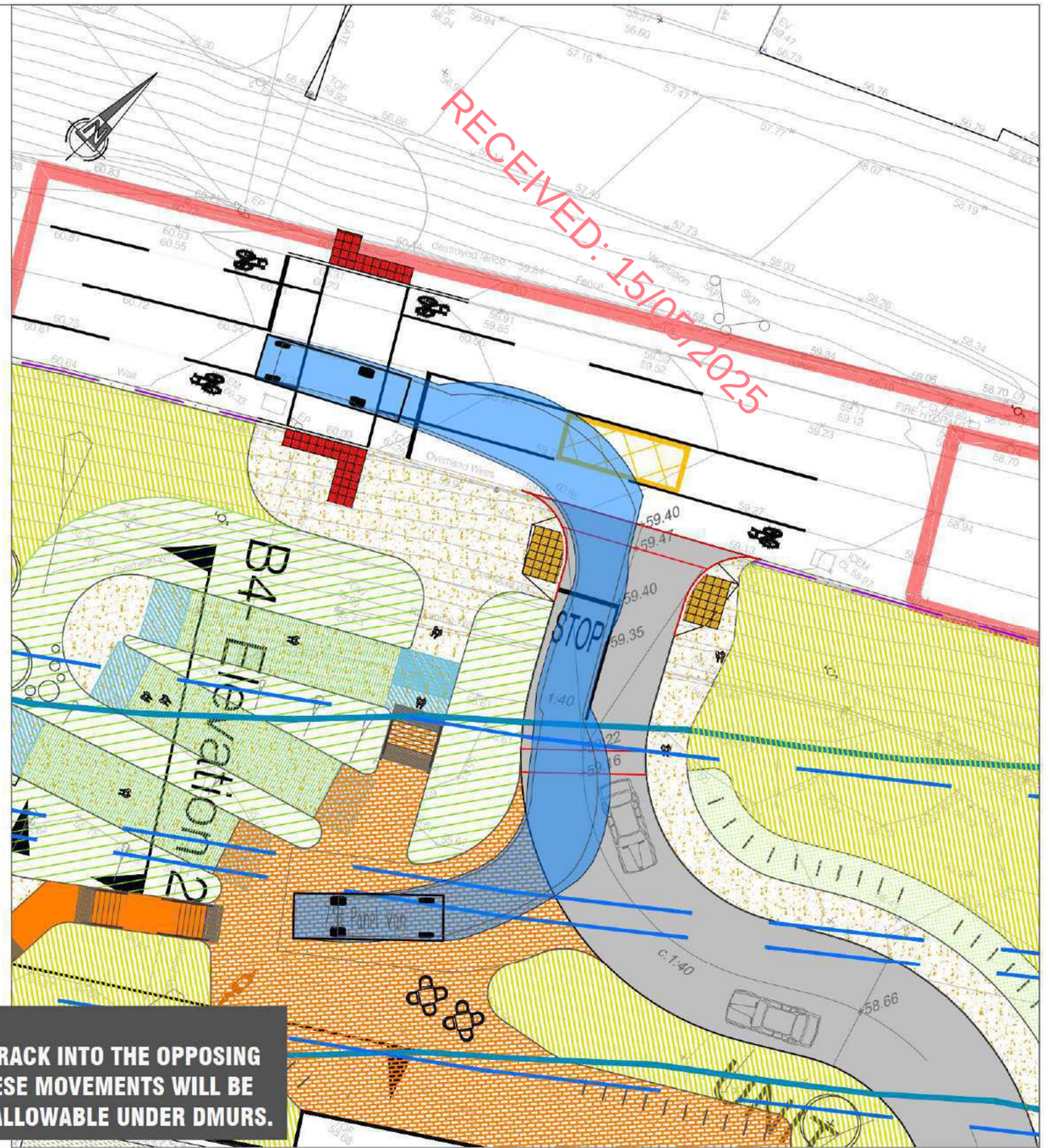
Purpose of Issue: ☐ Draft ☐ As Built ☐ Information ☐ Tender ☐ Approval ☐ Construction

RECEIVED: 15/07/2025



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

AUTOTRACK OF A DELIVERY VAN ENTERING OFF GREENHILLS ROAD



AUTOTRACK OF A DELIVERY VAN ENTERING OFF GREENHILLS ROAD

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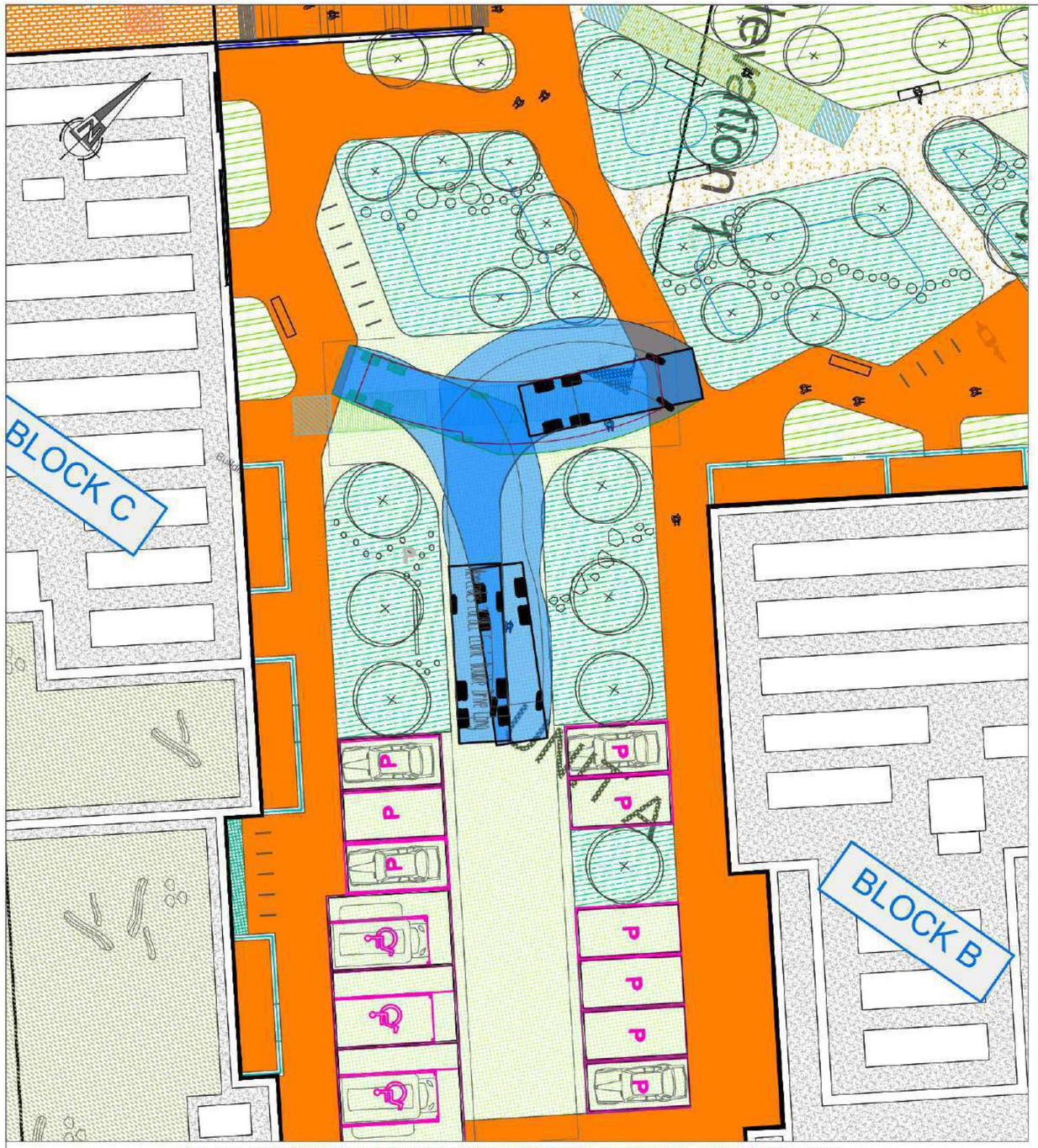
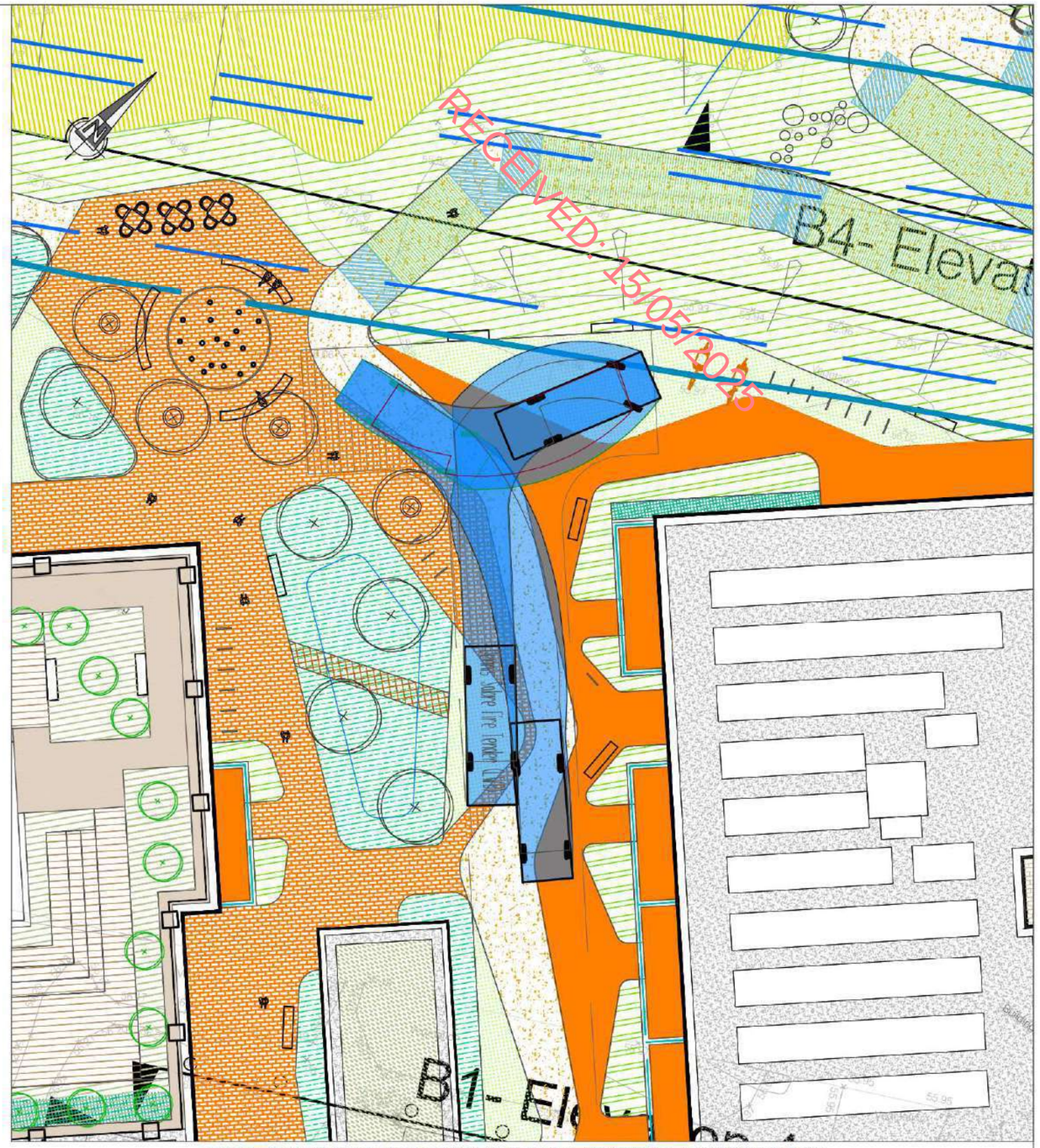
Client		Project No. 22-087		Drawing No. NRB-TA-005
Project	Greenvale LRD Dublin	Drawn PB	Checked BMcM 05/05/25	Approved BMcM 05/05/25
Title	AutoTRACKs of a Delivery Van At Proposed Greenhills Road Access	Date 5-May-25	Scale @ A3 1:250	Rev D
	NRB Consulting Engineers Ltd accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions to be worked to.	Purpose of Issue ☐ Draft ☐ As Built	☐ Information ☐ Tender	☐ Approval ☐ Construction



AUTOTRACK OF A REFUSE VEHICLE AT WESTERNMOST TURNING BAY



AUTOTRACK OF A FIRE TENDER AT EASTERNMOST TURNING BAY

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Client

Project: Greenvale LRD
Dublin

Title: AutoTRACKs at Internal Turning Heads

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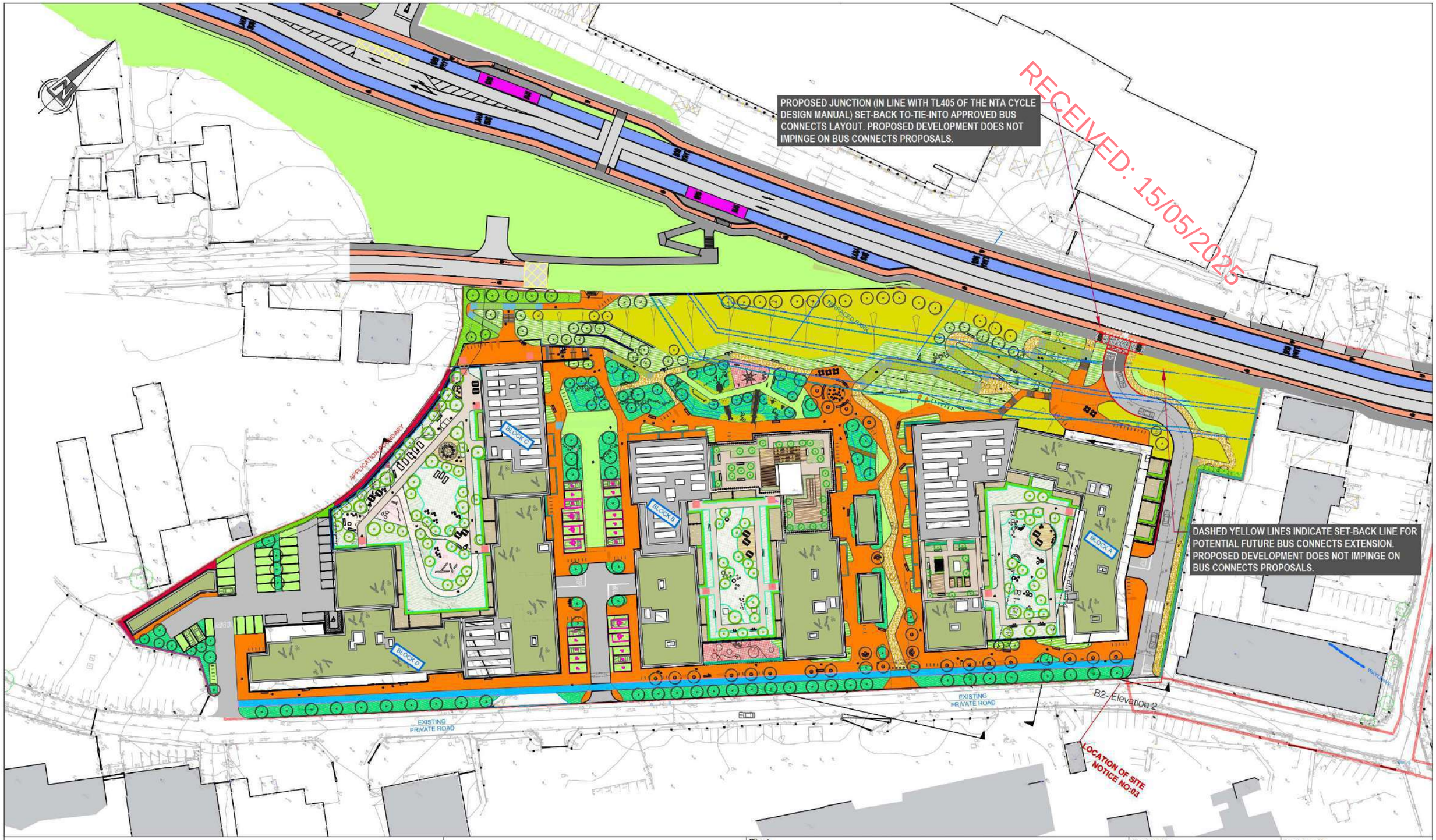
Project No.	Drawing No.
22-087	NRB-TA-006

Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:250	D

Purpose of Issue: ☐ Draft ☐ Information ☐ Approval ☐ As Built ☐ Tender ☐ Construction



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Client

Project: Greenvale LRD
Dublin

Title: Illustration of Proposed Site Layout
With Approved BusConnects Layout Overlaid

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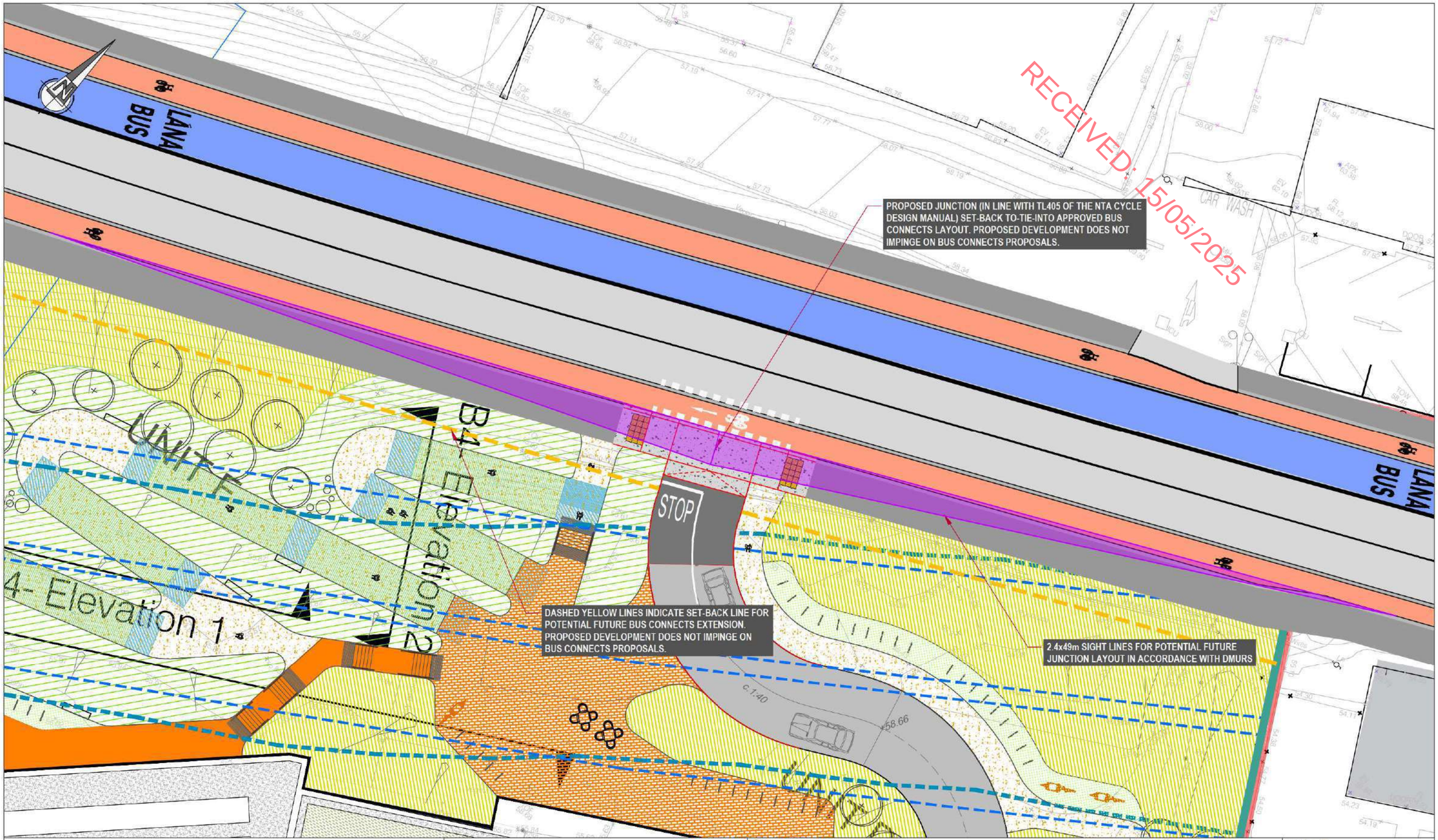
Project No.	Drawing No.
22-087	NRB-TA-007

Drawn	Checked	Approved
PB	BMcM 05/05/25	BMcM 05/05/25

Date	Scale @ A3	Rev
5-May-25	1:1000	D

Purpose of Issue: ☐ Draft ☐ Information ☐ Approval ☐ As Built ☐ Tender ☐ Construction



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Client		Project No. 22-087		Drawing No. NRB-TA-008
Project	Greenvale LRD Dublin	Drawn PB	Checked BMcM 05/05/25	Approved BMcM 05/05/25
Title	Illustration of Greenhills Road Junction With Approved BusConnects Layout Overlaid	Date 5-May-25	Scale @ A3 1:250	Rev D

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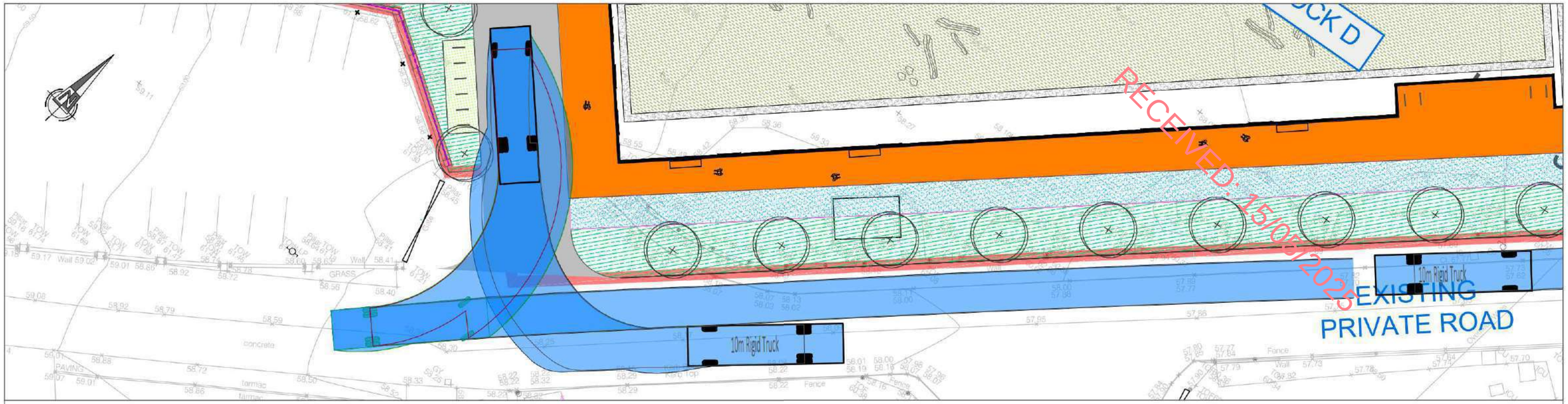
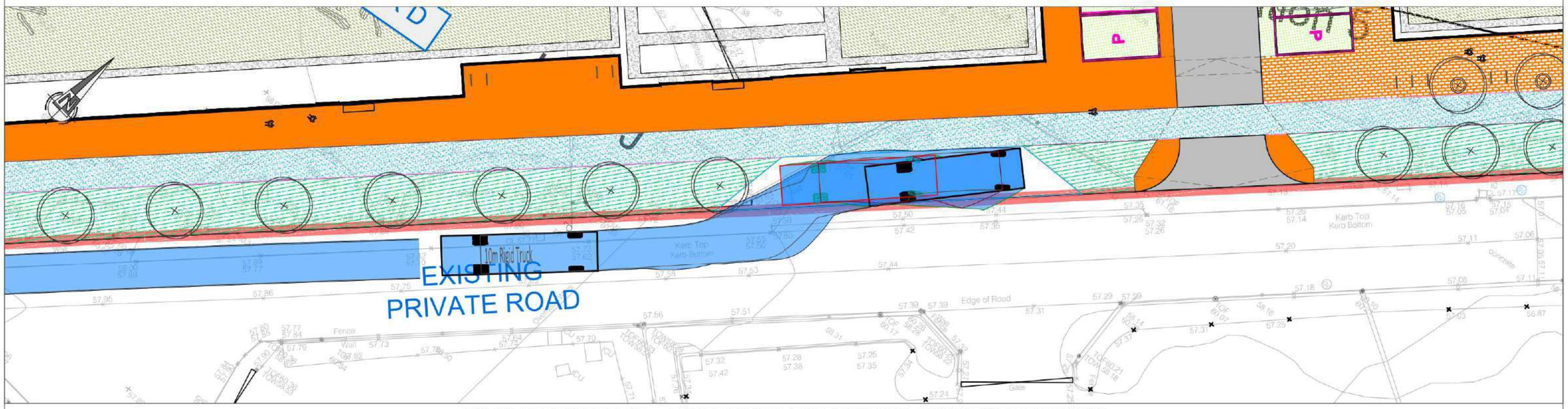
Purpose of Issue: ☐ Draft ☐ Information ☐ Approval ☐ As Built ☐ Tender ☐ Construction



RECEIVED: 15/05/2025

AUTOTRACK OF A 10m RIGID DELIVERY TRUCK TURNING



AUTOTRACK OF A 10m RIGID DELIVERY TRUCK LOADING/OFF-LOADING

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Client		Project No. 22-087		Drawing No. NRB-TA-009
Project	Greenvale LRD Dublin	Drawn PB	Checked BMcM 05/05/25	Approved BMcM 05/05/25
Title	AutoTRACK of a Delivery Truck At Proposed Access/Layby	Date 5-May-25	Scale @ A3 1:250	Rev D
NRB Consulting Engineers Ltd accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions to be worked to.		Purpose of Issue ☐ Draft ☐ As Built	☐ Information ☐ Tender	☐ Approval ☐ Construction

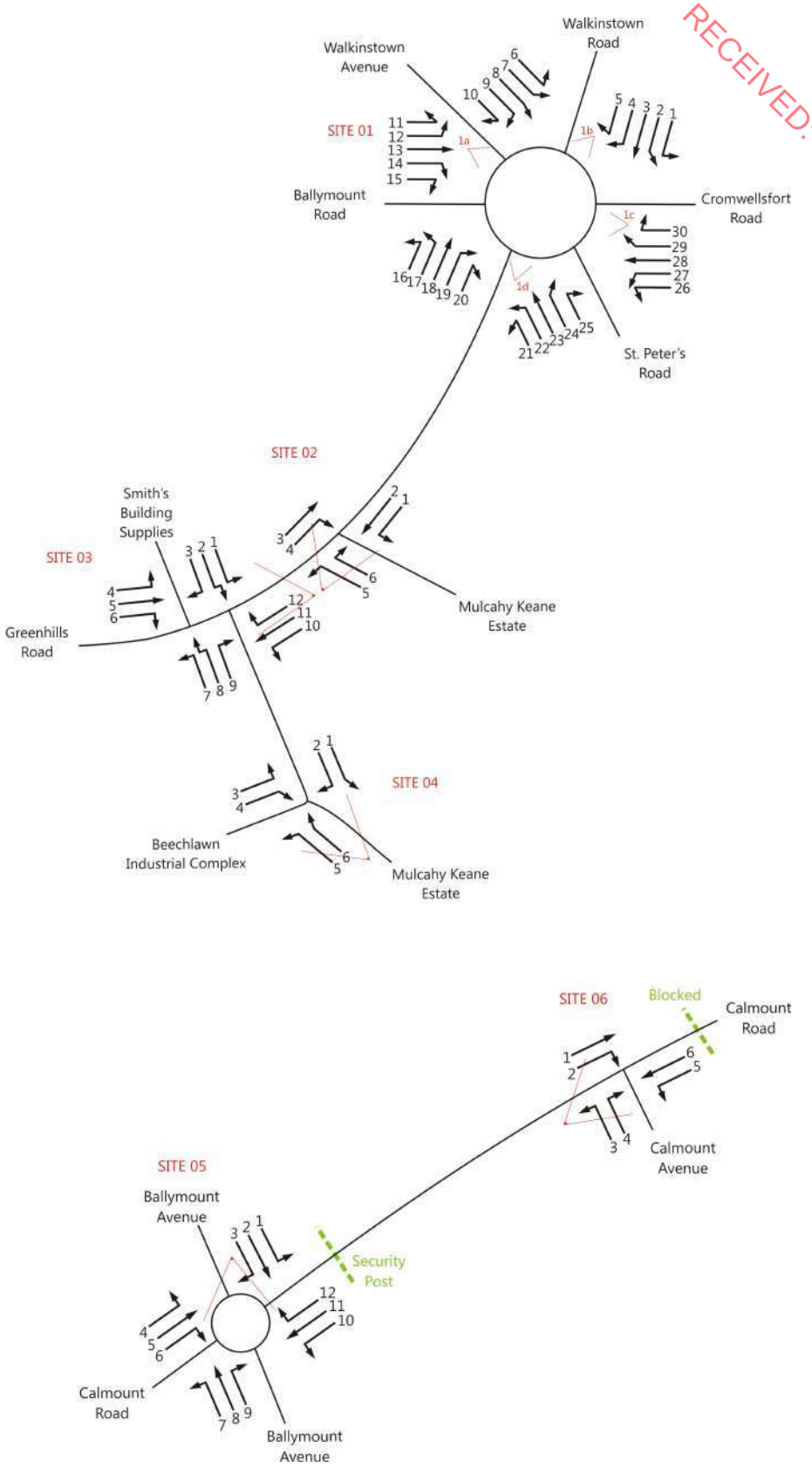
APPENDIX B

RECEIVED: 15/05/2025

Traffic Survey Data Output

Site Locations/Movement Numbering

RECEIVED: 15/05/2025



	Job number: TRA/22/226	Job Date: 21st September 2022	Drawing No: TRA/22/226-02	traffinomics.ie
	Client: NRB	Job Day: Wednesday	Author: SPW	

TRAFFINOMICS LIMITED

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3								MOVEMENT 4								MOVEMENT 5							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	1	0	3	0	0	0	4	3	1	0	12	1	1	0	15	15	4	1	51	6	2	3	67	68	0	0	15	5	2	0	22	24	0	0	3	1	0	0	4	4
07:45	0	0	3	1	0	0	4	4	1	0	24	3	0	1	29	29	5	0	58	6	0	3	72	71	0	1	11	4	0	0	16	15	0	0	8	0	0	0	8	8
H/TOT	1	0	6	1	0	0	8	7	2	0	36	4	1	1	44	44	9	1	109	12	2	6	139	139	0	1	26	9	2	0	38	39	0	0	11	1	0	0	12	12
08:00	3	0	3	0	0	0	6	4	3	0	45	5	0	1	54	53	8	2	58	6	1	3	78	74	0	0	17	6	1	0	24	25	0	0	1	3	0	0	4	4
08:15	0	0	4	0	0	0	4	4	2	0	31	5	2	1	41	42	3	2	63	5	3	3	79	81	0	0	16	3	1	0	20	21	0	0	9	1	0	0	10	10
08:30	0	0	17	2	0	0	19	19	0	0	32	3	1	0	36	37	3	0	60	5	2	0	70	70	0	0	17	4	2	0	23	25	0	0	5	0	2	0	7	9
08:45	0	1	9	0	0	0	10	9	0	0	29	4	0	1	34	35	2	2	44	6	1	2	57	57	3	2	20	8	3	0	36	35	0	1	8	0	0	1	10	10
H/TOT	3	1	33	2	0	0	39	36	5	0	137	17	3	3	165	167	16	6	225	22	7	8	284	283	3	2	70	21	7	0	103	106	0	1	23	4	2	1	31	33
09:00	2	0	14	1	2	0	19	19	0	0	23	6	1	0	30	31	2	2	76	13	3	2	98	100	1	0	16	7	0	0	24	23	0	0	4	2	1	0	7	8
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09:45	0	0	12	2	0	0	14	14	0	0	23	3	0	0	26	26	0	3	58	12	3	3	79	83	0	0	16	1	0	0	17	17	0	0	2	1	0	0	3	3
H/TOT	3	0	36	4	3	1	47	49	0	0	75	14	1	0	90	91	8	6	251	42	11	7	325	333	1	0	57	14	1	1	74	75	0	0	15	4	1	0	20	21
P/TOT	7	1	75	7	3	1	94	92	7	0	248	35	5	4	299	302	33	13	585	76	20	21	748	755	4	3	153	44	10	1	215	221	0	1	49	9	3	1	63	66

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3								MOVEMENT 4								MOVEMENT 5							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**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	0	9	3	0	0	13	12	1	0	27	4	14	0	46	59	3	0	70	6	4	3	86	91	0	0	31	5	2	0	38	40	0	0	7	1	0	0	8	8
16:15	1	0	12	0	0	0	13	12	0	0	26	4	0	1	31	32	1	0	75	10	1	3	90	93	1	1	26	10	1	0	39	39	0	0	3	4	0	1	8	9
16:30	3	0	13	1	0	0	17	15	0	0	14	3	0	0	17	17	2	0	43	8	0	1	54	53	0	1	20	3	1	0	25	25	0	0	4	1	1	0	6	7
16:45	1	0	10	1	0	0	12	11	3	0	28	5	0	0	36	34	2	2	54	9	0	4	71	72	0	0	26	3	2	0	31	33	0	0	3	1	0	0	4	4
H/TOT	6	0	44	5	0	0	55	50	4	0	95	16	14	1	130	142	8	2	242	33	5	11	301	309	1	2	103	21	6	0	133	137	0	0	17	7	1	1	26	28
17:00	3	1	5	0	0	0	9	6	1	1	21	1	1	0	25	25	4	5	59	8	3	1	80	78	0	1	16	6	0	0	23	22	0	0	1	0	0	0	1	1
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17:45	1	0	17	6	0	0	24	23	0	0	41	5	0	0	46	46	4	0	62	6	0	0	72	69	1	1	15	1	0	0	18	17	0	0	7	2	0	0	9	9
H/TOT	4	1	49	7	1	0	62	59	4	3	112	13	1	0	133	129	12	8	246	28	3	4	301	294	1	3	63	13	1	1	82	81	0	0	17	3	1	0	21	22
18:00	0	0	13	1	0	0	14	14	0	0	21	1	1	0	23	24	2	2	66	7	1	4	82	84	2	0	15	3	0	0	20	18	0	0	5	1	0	0	6	6
18:15	0	0	18	3	0	0	21	21	0	0	27	4	0	0	31	31	3	0	64	8	0	3	78	79	0	0	16	5	0	0	21	21	0	0	6	0	0	0	6	6
H/TOT	0	0	31	4	0	0	35	35	0	0	48	5	1	0	54	55	5	2	130	15	1	7	160	163	2	0	31	8	0	0	41	39	0	0	11	1	0	0	12	12
P/TOT	10	1	124	16	1	0	152	144	8	3	255	34	16	1	317	326	25	12	618	76	9	22	762	766	4	5	197	42	7	1	256	258	0	0	45	11	2	1	59	62

TRAFFINOMICS LIMITED

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 6								MOVEMENT 7								MOVEMENT 8								MOVEMENT 9								MOVEMENT 10							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	4	2	0	0	6	6	1	0	38	19	2	0	60	61	1	0	45	14	0	1	61	61	0	0	17	5	3	1	26	30	0	0	7	1	0	0	8	8
07:45	1	0	4	1	2	0	8	9	6	2	37	18	3	0	66	63	0	0	63	8	1	1	73	75	2	0	16	5	0	0	23	21	0	0	10	4	0	1	15	16
H/TOT	1	0	8	3	2	0	14	15	7	2	75	37	5	0	126	124	1	0	108	22	1	2	134	136	2	0	33	10	3	1	49	51	0	0	17	5	0	1	23	24
08:00	0	0	3	3	0	0	6	6	1	0	66	13	3	1	84	87	1	1	60	17	2	1	82	84	0	1	19	9	4	0	33	36	0	0	12	1	0	0	13	13
08:15	0	0	3	0	0	0	3	3	4	0	59	15	4	1	83	85	0	1	73	6	4	1	85	89	0	0	11	8	0	0	0	19	0	0	4	5	1	0	10	11
08:30	0	0	4	1	0	0	5	5	2	3	55	13	3	0	76	76	3	0	37	8	3	0	51	52	1	0	19	2	2	0	24	25	0	0	8	3	4	0	15	19
08:45	0	0	6	1	0	0	7	7	0	1	64	14	5	0	84	88	2	0	46	5	3	1	57	59	0	0	21	10	1	2	34	37	0	0	9	3	4	0	16	20
H/TOT	0	0	16	5	0	0	21	21	7	4	244	55	15	2	327	336	6	2	216	36	12	3	275	284	1	1	70	29	7	2	110	118	0	0	33	12	9	0	54	63
09:00	1	0	11	4	0	0	16	15	1	1	59	19	5	0	85	89	0	0	43	5	3	0	51	54	2	0	21	3	2	0	28	28	0	0	8	7	0	0	15	15
09:15	0	0	3	1	0	0	4	4	1	0	50	19	2	2	74	77	1	0	30	1	2	0	34	35	0	1	24	3	4	0	32	35	0	0	5	2	1	1	9	11
09:30	0	0	2	0	0	0	2	2	1	0	40	20	2	1	64	66	0	0	34	6	4	0	44	48	0	0	13	8	1	0	22	23	0	0	9	1	1	0	11	12
09:45	0	0	3	0	0	0	3	3	1	0	35	16	4	0	56	59	0	0	32	9	2	2	45	49	0	0	16	3	2	0	21	23	0	0	9	1	0	0	10	10
H/TOT	1	0	19	5	0	0	25	24	4	1	184	74	13	3	279	291	1	0	139	21	11	2	174	186	2	1	74	17	9	0	103	110	0	0	31	11	2	1	45	48
P/TOT	2	0	43	13	2	0	60	60	18	7	503	166	33	5	732	751	8	2	463	79	24	7	583	606	5	2	177	56	19	3	262	279	0	0	81	28	11	2	122	135

	MOVEMENT 6								MOVEMENT 7								MOVEMENT 8								MOVEMENT 9								MOVEMENT 10							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**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	0	0	1	8	9	4	0	69	14	1	1	89	88	0	4	53	14	2	0	73	73	0	0	20	5	3	1	29	33	0	0	5	4	1	0	10	11
16:15	0	0	3	0	0	0	3	3	2	1	66	14	2	0	85	85	0	0	60	2	1	0	63	64	1	1	15	3	2	0	22	23	0	0	4	4	2	0	10	12
16:30	0	0	3	2	0	0	5	5	5	3	43	10	0	0	61	55	1	0	71	18	0	0	90	89	0	0	12	4	1	0	17	18	0	0	6	1	0	0	7	7
16:45	0	0	10	0	0	0	10	10	7	1	60	8	0	0	76	70	1	0	70	2	0	1	74	74	0	0	9	1	2	0	12	14	0	0	5	4	1	0	10	11
H/TOT	0	0	23	2	0	1	26	27	18	5	238	46	3	1	311	298	2	4	254	36	3	1	300	300	1	1	56	13	8	1	80	88	0	0	20	13	4	0	37	41
17:00	0	2	1	0	0	0	3	2	14	1	48	12	1	0	76	65	1	1	73	6	0	0	81	80	0	3	22	3	0	0	28	26	0	1	3	1	0	0	5	4
17:15	0	0	3	2	0	0	5	5	1	2	73	8	1	0	85	84	6	1	68	9	0	0	84	79	0	0	25	9	2	0	36	38	0	0	6	0	3	0	9	12
17:30	0	0	5	0	0	0	5	5	6	3	69	8	0	0	86	79	4	0	56	18	0	0	78	75	0	0	38	3	2	0	43	45	0	2	12	2	1	0	17	17
17:45	0	0	5	1	0	0	6	6	5	1	68	9	0	0	83	78	6	1	59	4	1	0	71	67	0	2	29	7	3	0	41	43	1	0	4	1	0	0	6	5
H/TOT	0	2	14	3	0	0	19	18	26	7	258	37	2	0	330	307	17	3	256	37	1	0	314	300	0	5	114	22	7	0	148	152	1	3	25	4	4	0	37	38
18:00	0	0	7	1	0	0	8	8	4	1	80	9	1	0	95	92	5	1	60	7	2	1	76	74	0	0	19	3	1	0	23	24	0	0	9	1	0	1	11	12
18:15	0	0	1	0	0	0	1	1	6	1	74	11	0	0	92	87	7	0	49	5	1	0	62	57	1	0	19	2	0	0	22	21	0	0	4	0	0	0	4	4
H/TOT	0	0	8	1	0	0	9	9	10	2	154	20	1	0	187	179	12	1	109	12	3	1	138	132	1	0	38	5	1	0	45	45	0	0	13	1	0	1	15	16
P/TOT	0	2	45	6	0	1	54	54	54	14	650	103	6	1	828	783	31	8	619	85	7	2	752	731	2	6	208	40	16	1	273	285	1	3	58	18	8	1	89	95

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 11								MOVEMENT 12								MOVEMENT 13								MOVEMENT 14								MOVEMENT 15							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	2	4	0	0	6	6	1	0	24	5	3	1	34	37	0	0	23	16	2	2	43	47	0	0	9	4	2	1	16	19	0	0	4	2	5	0	11	16
07:45	0	0	2	1	3	2	8	13	2	0	17	12	2	3	36	39	3	0	36	10	3	0	52	53	0	0	10	2	2	1	15	18	0	0	3	1	2	0	6	8
H/TOT	0	0	4	5	3	2	14	19	3	0	41	17	5	4	70	77	3	0	59	26	5	2	95	100	0	0	19	6	4	2	31	37	0	0	7	3	7	0	17	24
08:00	0	0	3	1	2	0	6	8	1	0	38	9	2	1	51	53	1	0	36	14	2	0	53	54	0	0	7	9	1	0	17	18	0	0	4	4	0	0	8	8
08:15	0	0	14	2	0	0	16	16	0	0	19	7	0	0	26	26	1	0	35	13	2	0	51	52	0	0	7	8	1	0	16	17	0	0	8	5	1	0	14	15
08:30	0	0	3	6	1	1	11	13	1	1	21	6	0	1	30	30	1	1	33	18	3	2	58	62	0	0	4	7	0	0	11	11	0	0	7	5	2	0	14	16
08:45	0	0	5	3	2	0	10	12	0	0	22	5	1	0	28	29	0	0	38	15	1	0	54	55	0	0	10	4	1	0	15	16	0	0	7	3	1	0	11	12
H/TOT	0	0	25	12	5	1	43	49	2	1	100	27	3	2	135	138	3	1	142	60	8	2	216	223	0	0	28	28	3	0	59	62	0	0	26	17	4	0	47	51
09:00	0	0	3	4	2	1	10	13	0	1	19	2	1	0	23	23	0	1	32	15	3	1	52	55	0	0	10	2	3	0	15	18	0	0	13	5	1	0	19	20
09:15	1	0	6	4	0	0	11	10	0	0	21	5	4	0	30	34	1	1	20	17	5	0	44	48	0	0	15	8	1	0	24	25	0	0	15	2	3	0	20	23
09:30	0	0	4	6	2	0	12	14	0	1	19	11	1	0	32	32	3	1	24	13	0	0	41	38	0	0	10	5	3	0	18	21	0	0	7	6	2	0	15	17
09:45	0	0	11	3	4	0	18	22	1	0	20	9	3	0	33	35	1	0	27	14	3	1	46	49	0	0	16	9	1	0	26	27	0	0	14	3	1	0	18	19
H/TOT	1	0	24	17	8	1	51	59	1	2	79	27	9	0	118	125	5	3	103	59	11	2	183	190	0	0	51	24	8	0	83	91	0	0	49	16	7	0	72	79
P/TOT	1	0	53	34	16	4	108	127	6	3	220	71	17	6	323	339	11	4	304	145	24	6	494	513	0	0	98	58	15	2	173	190	0	0	82	36	18	0	136	154

	MOVEMENT 11								MOVEMENT 12								MOVEMENT 13								MOVEMENT 14								MOVEMENT 15							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**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	6	7	1	0	14	15	1	0	15	5	2	0	23	24	0	0	45	10	1	1	57	59	1	0	19	6	1	0	27	27	0	1	11	5	3	0	20	22
16:15	0	0	11	3	1	1	16	18	0	1	17	6	0	0	24	23	2	0	36	10	0	0	48	46	3	0	22	8	0	0	33	31	0	0	8	5	2	0	15	17
16:30	0	0	14	4	2	0	20	22	1	1	19	8	0	0	29	28	4	1	41	8	0	0	54	50	2	0	19	5	2	0	28	28	0	0	10	3	3	0	16	19
16:45	0	0	4	0	0	0	4	4	3	1	22	6	0	0	32	29	3	2	44	10	0	0	59	55	3	0	18	3	2	0	26	26	0	0	12	5	1	0	18	19
H/TOT	0	0	35	14	4	1	54	59	5	3	73	25	2	0	108	104	9	3	166	38	1	1	218	211	9	0	78	22	5	0	114	112	0	1	41	18	9	0	69	77
17:00	0	0	7	1	0	0	8	8	2	0	23	4	0	0	29	27	8	1	45	7	0	1	62	56	1	0	25	5	1	0	32	32	0	0	10	2	0	0	12	12
17:15	0	0	16	5	0	0	21	21	3	1	23	6	0	0	33	30	1	0	38	4	0	0	43	42	1	0	20	2	0	0	23	22	0	0	12	2	2	0	16	18
17:30	1	1	59	11	0	0	72	71	6	0	3	1	0	0	10	5	1	0	5	1	0	0	7	6	4	0	12	2	0	0	18	15	0	1	13	4	1	0	19	19
17:45	2	2	37	6	0	0	47	44	2	0	4	0	0	0	6	4	1	0	6	1	0	0	8	7	4	0	12	2	0	0	18	15	0	0	20	2	0	0	22	22
H/TOT	3	3	119	23	0	0	148	144	13	1	53	11	0	0	78	67	11	1	94	13	0	1	120	112	10	0	69	11	1	0	91	84	0	1	55	10	3	0	69	71
18:00	2	0	25	1	1	0	29	28	2	0	15	2	1	0	20	19	3	0	25	3	0	0	31	29	0	0	12	1	0	0	13	13	0	0	14	1	1	0	16	17
18:15	2	0	9	0	0	0	11	9	0	0	20	1	0	0	21	21	3	0	42	10	1	0	56	55	0	0	8	2	1	0	11	12	0	0	4	0	0	0	4	4
H/TOT	4	0	34	1	1	0	40	38	2	0	35	3	1	0	41	40	6	0	67	13	1	0	87	83	0	0	20	3	1	0	24	25	0	0	18	1	1	0	20	21
P/TOT	7	3	188	38	5	1	242	241	20	4	161	39	3	0	227	212	26	4	327	64	2	2	425	406	19	0	167	36	7	0	229	221	0	2	114	29	13	0	158	170

TRAFFINOMICS LIMITED

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 16								MOVEMENT 17								MOVEMENT 18								MOVEMENT 19								MOVEMENT 20							
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:30	0	0	4	2	1	0	7	8	3	0	29	7	2	0	41	41	2	2	74	21	5	4	108	114	0	0	19	4	1	0	24	25	0	0	5	8	2	2	17	21
07:45	2	0	7	3	3	1	16	18	1	0	19	6	3	0	29	31	4	0	54	9	2	2	71	72	1	0	20	8	0	0	29	28	0	0	8	5	0	0	13	13
H/TOT	2	0	11	5	4	1	23	26	4	0	48	13	5	0	70	72	6	2	128	30	7	6	179	186	1	0	39	12	1	0	53	53	0	0	13	13	2	2	30	34
08:00	1	0	5	4	1	0	11	11	0	0	25	6	1	0	32	33	1	0	64	5	8	1	79	87	0	2	20	8	2	1	33	35	0	0	5	3	2	1	11	14
08:15	3	0	9	8	2	0	22	22	1	0	26	4	1	0	32	32	1	0	52	12	1	2	68	70	0	0	29	5	0	0	34	34	0	1	7	7	0	0	15	14
08:30	2	0	6	3	2	0	13	13	2	0	20	5	2	1	30	31	1	0	55	14	1	4	75	79	0	1	29	7	2	0	39	40	0	0	6	5	1	0	12	13
08:45	0	1	8	2	1	0	12	12	2	0	17	4	2	0	25	25	0	1	49	14	1	4	69	73	0	0	16	9	2	1	28	31	0	0	14	3	0	1	18	19
H/TOT	6	1	28	17	6	0	58	59	5	0	88	19	6	1	119	122	3	1	220	45	11	11	291	310	0	3	94	29	6	2	134	140	0	1	32	18	3	2	56	60
09:00	1	0	12	8	1	0	22	22	1	0	21	9	2	0	33	34	0	2	73	12	0	2	89	90	0	0	22	2	1	0	25	26	0	0	8	0	2	1	11	14
09:15	0	0	4	4	2	1	11	14	1	0	22	7	1	1	32	33	1	0	46	7	0	6	60	65	0	0	18	8	7	0	33	40	0	0	7	3	0	0	10	10
09:30	1	0	11	9	2	0	23	24	0	1	19	7	3	0	30	32	1	0	44	10	1	3	59	62	0	1	13	10	2	0	26	27	0	0	15	5	0	0	20	20
09:45	0	0	15	6	2	0	23	25	0	0	12	6	5	0	23	28	1	0	42	10	4	2	59	64	0	0	17	9	2	0	28	30	0	0	8	2	1	0	11	12
H/TOT	2	0	42	27	7	1	79	85	2	1	74	29	11	1	118	128	3	2	205	39	5	13	267	281	0	1	70	29	12	0	112	123	0	0	38	10	3	1	52	56
P/TOT	10	1	81	49	17	2	160	170	11	1	210	61	22	2	307	322	12	5	553	114	23	30	737	777	1	4	203	70	19	2	299	317	0	1	83	41	8	5	138	150

	MOVEMENT 16								MOVEMENT 17								MOVEMENT 18								MOVEMENT 19								MOVEMENT 20							
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	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	0	18	3	1	0	23	23	1	0	26	9	0	0	36	35	3	0	53	3	1	2	62	63	0	2	25	5	0	0	32	31	0	0	19	2	0	0	21	21
16:15	0	0	12	5	1	0	18	19	3	0	21	3	0	1	28	27	6	1	83	6	1	3	100	99	0	0	20	2	1	0	23	24	0	0	12	4	0	0	16	16
16:30	0	0	23	7	1	0	31	32	1	0	26	2	2	0	31	32	5	1	74	9	1	2	92	90	0	3	23	7	0	0	33	31	0	2	9	4	0	0	15	14
16:45	0	0	8	2	1	0	11	12	0	0	20	7	0	0	27	27	3	0	68	12	2	3	88	91	0	0	23	2	0	0	25	25	0	1	10	3	0	0	14	13
H/TOT	1	0	61	17	4	0	83	86	5	0	93	21	2	1	122	121	17	2	278	30	5	10	342	342	0	5	91	16	1	0	113	111	0	3	50	13	0	0	66	64
17:00	1	0	15	1	2	1	20	22	2	0	32	1	0	0	35	33	4	0	60	4	3	2	73	75	3	1	52	9	0	0	65	62	1	0	17	4	0	0	22	21
17:15	1	0	10	1	0	0	12	11	0	0	18	0	2	0	20	22	3	1	61	9	0	3	77	77	0	0	26	1	2	0	29	31	0	0	15	0	0	0	15	15
17:30	1	1	10	2	0	0	14	13	6	0	29	3	2	0	40	37	3	1	83	3	0	2	92	91	1	1	37	6	3	0	48	50	0	0	19	1	0	0	20	20
17:45	0	0	5	0	0	0	5	5	0	0	12	0	0	0	12	12	5	1	46	3	1	1	57	54	1	1	35	5	0	0	42	41	0	0	12	3	0	0	15	15
H/TOT	3	1	40	4	2	1	51	51	8	0	91	4	4	0	107	105	15	3	250	19	4	8	299	297	5	3	150	21	5	0	184	183	1	0	63	8	0	0	72	71
18:00	2	0	7	0	0	0	9	7	4	0	23	3	0	0	30	27	2	0	33	2	0	3	40	41	0	0	66	5	0	0	71	71	0	0	35	8	0	0	43	43
18:15	0	0	5	1	0	0	6	6	5	0	21	4	0	0	30	26	6	0	24	3	0	3	36	34	0	0	55	9	1	0	65	66	0	0	22	4	0	0	26	26
H/TOT	2	0	12	1	0	0	15	13	9	0	44	7	0	0	60	53	8	0	57	5	0	6	76	76	0	0	121	14	1	0	136	137	0	0	57	12	0	0	69	69
P/TOT	6	1	113	22	6	1	149	151	22	0	228	32	6	1	289	278	40	5	585	54	9	24	717	715	5	8	362	51	7	0	433	431	1	3	170	33	0	0	207	204

TRAFFINOMICS LIMITED

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 21								MOVEMENT 22								MOVEMENT 23								MOVEMENT 24								MOVEMENT 25							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	1	7	0	0	0	8	7	2	0	41	10	0	0	53	51	6	0	39	5	0	1	51	47	0	0	10	1	1	1	13	15	0	0	7	2	0	2	11	13
07:45	0	0	2	0	1	1	4	6	2	0	43	9	1	0	55	54	12	2	67	14	0	1	96	86	0	0	14	2	0	0	16	16	0	0	7	1	0	1	9	10
H/TOT	0	1	9	0	1	1	12	13	4	0	84	19	1	0	108	106	18	2	106	19	0	2	147	133	0	0	24	3	1	1	29	31	0	0	14	3	0	3	20	23
08:00	0	0	11	0	0	0	11	11	5	0	41	16	0	0	62	58	8	1	56	5	1	2	73	69	0	0	11	3	2	2	18	22	0	0	11	2	0	1	14	15
08:15	0	0	8	0	0	0	8	8	2	0	40	8	2	0	52	52	7	0	71	7	2	2	89	87	2	1	12	1	0	0	16	14	0	0	13	1	1	1	16	18
08:30	0	0	7	0	0	0	7	7	2	0	34	3	0	0	39	37	6	1	66	9	3	1	86	85	0	0	13	0	0	0	13	13	0	0	11	3	0	2	16	18
08:45	0	0	4	1	2	0	7	9	1	0	62	13	1	0	77	77	8	1	63	6	1	1	80	75	1	0	14	0	0	0	15	14	0	0	13	0	0	3	16	19
H/TOT	0	0	30	1	2	0	33	35	10	0	177	40	3	0	230	225	29	3	256	27	7	6	328	316	3	1	50	4	2	2	62	63	0	0	48	6	1	7	62	70
09:00	0	0	4	0	0	0	4	4	0	0	52	6	1	0	59	60	3	0	68	8	0	1	80	79	0	0	34	0	0	0	34	34	0	0	20	2	0	1	23	24
09:15	0	0	7	1	0	0	8	8	2	0	39	11	1	0	53	52	0	2	70	3	1	0	76	76	0	0	22	1	1	1	25	27	0	0	15	1	0	3	19	22
09:30	0	0	8	2	0	0	10	10	0	1	26	5	1	2	35	37	4	0	42	6	2	2	56	57	0	0	8	0	0	1	9	10	0	0	11	0	0	1	12	13
09:45	0	2	14	5	1	0	22	22	0	0	15	9	0	0	24	24	2	0	32	7	0	1	42	41	0	0	17	0	1	0	18	19	0	0	6	3	1	1	11	13
H/TOT	0	2	33	8	1	0	44	44	2	1	132	31	3	2	171	174	9	2	212	24	3	4	254	253	0	0	81	1	2	2	86	90	0	0	52	6	1	6	65	72
P/TOT	0	3	72	9	4	1	89	92	16	1	393	90	7	2	509	505	56	7	574	70	10	12	729	702	3	1	155	8	5	5	177	184	0	0	114	15	2	16	147	165

	MOVEMENT 21								MOVEMENT 22								MOVEMENT 23								MOVEMENT 24								MOVEMENT 25							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**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	2	0	23	10	0	0	35	33	2	1	47	6	0	1	57	56	0	0	16	0	0	0	16	16	0	0	15	0	0	1	16	17
16:15	0	0	12	4	1	0	17	18	1	1	23	7	3	0	35	37	4	1	43	17	1	0	66	63	0	0	18	1	0	0	19	19	0	0	12	3	0	2	17	19
16:30	0	0	3	0	0	0	3	3	0	0	40	12	0	0	52	52	8	1	51	17	1	0	78	72	0	0	9	1	0	0	10	10	0	0	5	0	0	1	6	7
16:45	0	0	11	2	0	0	13	13	0	0	19	8	5	1	33	39	3	0	47	6	1	0	57	56	1	0	10	2	0	0	13	12	0	0	8	2	0	2	12	14
H/TOT	0	0	33	7	1	0	41	42	3	1	105	37	8	1	155	161	17	3	188	46	3	1	258	247	1	0	53	4	0	0	58	57	0	0	40	5	0	6	51	57
17:00	0	0	6	0	1	0	7	8	0	0	27	9	0	0	36	36	0	0	39	11	1	0	51	52	0	0	12	2	0	0	14	14	0	0	9	2	1	1	13	15
17:15	0	1	11	1	0	0	13	12	0	0	14	6	0	0	20	20	2	0	40	3	4	0	49	51	0	0	12	6	0	0	18	18	0	0	16	1	1	1	19	21
17:30	0	0	12	1	0	0	13	13	0	0	33	5	1	0	39	40	7	0	40	2	0	0	49	43	2	0	19	3	0	0	24	22	0	1	5	3	0	1	10	10
17:45	0	0	17	3	0	0	20	20	0	0	14	3	0	0	17	17	2	0	63	5	1	0	71	70	0	0	12	0	1	0	13	14	0	0	13	1	0	1	15	16
H/TOT	0	1	46	5	1	0	53	53	0	0	88	23	1	0	112	113	11	0	182	21	6	0	220	217	2	0	55	11	1	0	69	68	0	1	43	7	2	4	57	62
18:00	0	0	8	1	0	0	9	9	0	1	20	4	0	0	25	24	8	1	37	3	0	0	49	42	0	0	15	2	0	0	17	17	0	0	13	3	0	1	17	18
18:15	0	0	10	1	0	0	11	11	0	0	10	7	0	0	17	17	10	1	28	3	0	0	42	33	0	0	10	1	0	0	11	11	1	0	11	3	0	1	16	16
H/TOT	0	0	18	2	0	0	20	20	0	1	30	11	0	0	42	41	18	2	65	6	0	0	91	75	0	0	25	3	0	0	28	28	1	0	24	6	0	2	33	34
P/TOT	0	1	97	14	2	0	114	115	3	2	223	71	9	1	309	315	46	5	435	73	9	1	569	539	3	0	133	18	1	0	155	154	1	1	107	18	2	12	141	154

TRAFFINOMICS LIMITED

RECEIVED: 15/05/2025

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**
MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

SITE: 01 DATE: 121st September 2022

LOCATION: Walkinstown Roundabout DAY: Wednesday

	MOVEMENT 26								MOVEMENT 27								MOVEMENT 28								MOVEMENT 29								MOVEMENT 30							
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:30	0	0	12	0	1	2	15	18	1	0	19	2	1	0	23	23	3	0	48	14	1	1	67	67	0	0	21	2	3	1	27	31	0	0	6	0	0	1	7	8
07:45	4	0	10	2	0	1	17	15	5	0	35	4	0	0	44	40	10	0	59	14	1	1	85	79	1	0	27	4	0	0	32	31	0	0	6	0	0	0	6	6
H/TOT	4	0	22	2	1	3	32	33	6	0	54	6	1	0	67	63	13	0	107	28	2	2	152	146	1	0	48	6	3	1	59	62	0	0	12	0	0	1	13	14
08:00	10	0	15	3	0	1	29	22	3	0	25	3	1	0	32	31	0	1	52	12	0	0	65	64	0	1	31	6	0	1	39	39	0	0	6	0	0	0	6	6
08:15	6	1	19	2	0	0	28	23	1	0	27	1	0	0	29	28	5	2	79	12	1	0	99	95	0	0	26	6	1	1	34	36	1	0	9	2	0	0	12	11
08:30	4	0	14	4	0	1	23	21	0	0	21	4	0	0	25	25	4	0	75	9	5	0	93	95	1	0	26	7	2	0	36	37	0	0	11	0	0	0	11	11
08:45	0	0	13	3	0	1	17	18	8	0	26	6	1	0	41	36	5	0	47	11	1	0	64	61	0	1	35	9	2	0	47	48	0	1	7	0	0	0	8	7
H/TOT	20	1	61	12	0	3	97	83	12	0	99	14	2	0	127	119	14	3	253	44	7	0	321	315	1	2	118	28	5	2	156	161	1	1	33	2	0	0	37	36
09:00	1	0	9	0	1	1	12	13	0	1	29	9	1	1	41	42	1	2	52	10	6	0	71	75	0	0	20	9	0	0	29	29	0	0	10	2	0	0	12	12
09:15	2	0	7	1	1	1	12	12	1	1	32	3	1	0	38	38	0	0	50	15	4	1	70	75	0	1	31	4	2	1	39	41	0	0	10	3	0	0	13	13
09:30	4	0	16	1	1	3	25	26	1	1	26	3	0	1	32	32	1	0	43	9	3	1	57	60	1	0	15	2	1	0	19	19	0	0	3	1	1	0	5	6
09:45	0	0	14	2	0	1	17	18	0	0	24	6	3	0	33	36	1	0	47	6	3	0	57	59	0	1	11	2	0	0	14	13	0	0	11	2	0	0	13	13
H/TOT	7	0	46	4	3	6	66	69	2	3	111	21	5	2	144	148	3	2	192	40	16	2	255	269	1	2	77	17	3	1	101	103	0	0	34	8	1	0	43	44
P/TOT	31	1	129	18	4	12	195	186	20	3	264	41	8	2	338	330	30	5	552	112	25	4	728	730	3	4	243	51	11	4	316	326	1	1	79	10	1	1	93	94

	MOVEMENT 26								MOVEMENT 27								MOVEMENT 28								MOVEMENT 29								MOVEMENT 30							
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	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	8	0	8	4	0	1	21	16	0	0	24	4	0	0	28	28	0	0	45	23	1	0	69	70	0	0	34	12	0	0	46	46	0	0	8	1	0	0	9	9
16:15	1	0	8	4	0	2	15	16	4	0	29	7	1	0	41	39	0	0	49	19	3	0	71	74	0	0	18	6	0	0	24	24	0	0	7	2	0	0	9	9
16:30	3	0	20	5	0	1	29	28	1	0	22	5	1	0	29	29	1	1	38	14	2	0	56	57	0	1	25	13	1	0	40	40	0	0	8	1	0	0	9	9
16:45	3	0	16	2	0	1	22	21	2	0	22	3	0	0	27	25	0	1	52	15	0	1	69	69	0	1	19	7	0	0	27	26	0	0	4	3	0	0	7	7
H/TOT	15	0	52	15	0	5	87	80	7	0	97	19	2	0	125	121	1	2	184	71	6	1	265	270	0	2	96	38	1	0	137	137	0	0	27	7	0	0	34	34
17:00	3	0	13	2	0	2	20	20	3	1	22	8	1	0	35	33	0	0	32	5	3	0	40	43	1	0	20	7	1	0	29	29	0	0	6	1	0	0	7	7
17:15	1	0	12	0	0	0	13	12	1	0	22	3	0	0	26	25	1	2	63	11	0	1	78	77	1	1	18	4	0	0	24	23	0	0	5	1	0	0	6	6
17:30	1	0	8	1	0	1	11	11	2	0	17	4	0	0	23	21	1	1	35	6	1	1	45	46	2	0	19	6	1	0	28	27	0	0	7	1	0	0	8	8
17:45	1	0	21	2	0	2	26	27	1	1	19	1	0	0	22	21	4	0	45	6	0	0	55	52	0	0	25	5	0	0	30	30	0	0	3	1	0	0	4	4
H/TOT	6	0	54	5	0	5	70	70	7	2	80	16	1	0	106	100	6	3	175	28	4	2	218	217	4	1	82	22	2	0	111	109	0	0	21	4	0	0	25	25
18:00	3	0	16	3	0	1	23	22	2	0	25	9	1	0	37	36	3	0	42	10	0	1	56	55	1	0	27	0	0	0	28	27	0	0	5	0	0	0	5	5
18:15	6	0	19	0	0	1	26	22	1	1	24	3	0	0	29	28	3	0	56	9	0	0	68	66	1	1	24	1	0	0	27	26	0	0	4	0	0	0	4	4
H/TOT	9	0	35	3	0	2	49	44	3	1	49	12	1	0	66	64	6	0	98	19	0	1	124	120	2	1	51	1	0	0	55	53	0	0	9	0	0	0	9	9
P/TOT	30	0	141	23	0	12	206	194	17	3	226	47	4	0	297	286	13	5	457	118	10	4	607	608	6	4	229	61	3	0	303	299	0	0	57	11	0	0	68	68

RECEIVED: 15/05/2025

PCU's Through Junction
896
949
1845
1045
1037
993
1009
4084
1071
953
830
858
3712
9642

PCU's Through Junction
1043
1009
945
917
3914
915
945
908
853
3621
908
821
1729
9264

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 02 DATE: 21st September 2022

LOCATION: Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU
07:30	0	0	2	0	0	0	2	2	5	2	93	15	7	4	126	132	4	2	127	36	10	5	184	195
07:45	0	0	3	3	0	0	6	6	13	0	123	13	3	3	155	151	7	0	111	30	8	4	160	166
H/TOT	0	0	5	3	0	0	8	8	18	2	216	28	10	7	281	282	11	2	238	66	18	9	344	361
08:00	0	0	4	0	0	0	4	4	6	2	116	23	3	2	152	151	1	2	118	23	14	2	160	174
08:15	0	0	4	2	0	0	6	6	5	1	136	16	4	2	164	165	4	1	120	40	5	3	173	177
08:30	0	0	6	3	1	0	10	11	4	1	107	14	6	0	132	134	8	2	114	29	5	5	163	165
08:45	0	0	7	2	0	0	9	9	11	2	118	24	7	6	168	171	5	2	101	28	8	6	150	159
H/TOT	0	0	21	7	1	0	29	30	26	6	477	77	20	10	616	622	18	7	453	120	32	16	646	675
09:00	0	0	8	2	0	0	10	10	5	3	113	25	8	3	157	162	2	1	116	32	4	5	160	167
09:15	0	0	8	1	1	0	10	11	3	3	121	21	10	1	159	166	1	0	95	25	8	6	135	148
09:30	0	0	5	2	0	0	7	7	4	1	98	22	9	3	137	145	2	0	97	37	10	3	149	160
09:45	0	0	5	2	0	0	7	7	1	4	105	24	8	2	144	151	1	1	84	30	14	2	132	147
H/TOT	0	0	26	7	1	0	34	35	13	11	437	92	35	9	597	624	6	2	392	124	36	16	576	622
P/TOT	0	0	52	17	2	0	71	73	57	19	1130	197	65	26	1494	1528	35	11	1083	310	86	41	1566	1658

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	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	8	1	1	0	10	11	3	1	119	18	9	5	155	166	5	3	137	23	0	2	170	166
16:15	0	0	9	3	0	0	12	12	4	1	115	28	8	2	158	164	8	1	127	18	4	3	161	161
16:30	0	0	2	0	0	0	2	2	5	1	92	20	7	3	128	133	6	3	146	28	4	3	190	190
16:45	0	0	4	0	0	0	4	4	5	1	107	20	4	4	141	144	6	1	138	22	3	3	173	174
H/TOT	0	0	23	4	1	0	28	29	17	4	433	86	28	14	582	608	25	8	548	91	11	11	694	691
17:00	1	0	1	5	0	0	7	6	7	7	116	20	3	1	154	148	8	2	163	16	5	2	196	195
17:15	0	0	4	1	0	0	5	5	1	6	156	16	4	1	184	185	7	3	125	10	5	4	154	156
17:30	0	0	2	1	1	0	4	5	5	2	138	22	2	2	171	170	11	0	156	13	3	2	185	181
17:45	1	0	4	0	0	0	5	4	4	2	165	18	3	0	192	191	9	1	109	13	1	1	134	128
H/TOT	2	0	11	7	1	0	21	20	17	17	575	76	12	4	701	693	35	6	553	52	14	9	669	660
18:00	0	0	1	0	0	0	1	1	4	2	137	21	0	3	167	166	12	0	142	18	0	3	175	168
18:15	0	0	1	0	0	0	1	1	6	1	123	12	1	4	147	147	9	0	114	22	1	3	149	146
H/TOT	0	0	2	0	0	0	2	2	10	3	260	33	1	7	314	312	21	0	256	40	1	6	324	314
P/TOT	2	0	36	11	2	0	51	51	44	24	1268	195	41	25	1597	1613	81	14	1357	183	26	26	1687	1666

TRAFFINOMICS LIMITED

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2026

SITE: 02 DATE: 21st September 2022

LOCATION: Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	
07:30	0	0	5	1	0	0	6	6	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	335
07:45	0	0	1	1	0	0	2	2	0	0	0	2	0	0	2	2	0	0	2	1	0	0	3	3	330
H/TOT	0	0	6	2	0	0	8	8	0	0	1	2	0	0	3	3	0	0	2	1	0	0	3	3	665
07:30	0	0	2	2	0	0	4	4	0	0	0	2	0	0	2	2	0	0	1	2	0	0	3	3	338
07:45	0	0	2	1	0	0	3	3	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	353
08:00	0	0	7	0	0	0	7	7	0	0	1	1	0	0	2	2	0	0	3	1	0	0	4	4	324
08:15	0	0	5	1	0	0	6	6	0	0	0	1	0	0	1	1	0	0	4	3	0	0	7	7	353
H/TOT	0	0	16	4	0	0	20	20	0	0	1	5	0	0	6	6	0	0	8	6	0	0	14	14	1367
08:30	0	0	5	1	0	0	6	6	0	0	1	2	0	0	3	3	0	0	1	2	1	0	4	5	353
08:45	0	0	5	1	0	0	6	6	0	0	2	0	1	0	3	4	0	0	1	1	0	0	2	2	337
09:00	0	0	6	1	0	0	7	7	0	0	0	1	0	0	1	1	0	0	4	4	0	0	8	8	329
09:15	0	0	2	1	0	0	3	3	0	0	3	1	0	0	4	4	0	0	5	2	0	0	7	7	318
H/TOT	0	0	18	4	0	0	22	22	0	0	6	4	1	0	11	12	0	0	11	9	1	0	21	22	1337
P/TOT	0	0	40	10	0	0	50	50	0	0	8	11	1	0	20	21	0	0	21	16	1	0	38	39	3369

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	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	1	1	0	0	2	2	0	0	8	2	1	0	11	12	0	0	9	0	0	0	9	9	366
16:15	0	0	1	0	0	0	1	1	0	0	1	2	0	0	3	3	0	0	5	0	0	0	5	5	346
16:30	0	0	4	2	0	0	6	6	0	0	3	1	0	0	4	4	0	0	4	2	0	0	6	6	342
16:45	0	0	1	1	0	0	2	2	0	0	4	1	0	0	5	5	0	0	4	0	0	0	4	4	333
H/TOT	0	0	7	4	0	0	11	11	0	0	16	6	1	0	23	24	0	0	22	2	0	0	24	24	1387
17:00	0	0	2	0	0	0	2	2	0	0	4	1	0	0	5	5	0	0	9	1	0	0	10	10	367
17:15	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	0	0	3	0	0	0	3	3	353
17:30	0	0	1	0	0	0	1	1	0	0	5	1	0	0	6	6	0	0	22	3	0	0	25	25	388
17:45	0	0	1	0	0	0	1	1	0	0	2	1	0	0	3	3	0	0	9	1	0	0	10	10	337
H/TOT	0	0	4	0	0	0	4	4	0	0	16	3	0	0	19	19	0	0	43	5	0	0	48	48	1445
18:00	0	0	1	1	0	0	2	2	0	0	4	0	0	0	4	4	1	0	3	0	0	0	4	3	344
18:15	0	0	1	0	0	0	1	1	0	0	4	1	0	0	5	5	0	0	1	0	0	0	1	1	300
H/TOT	0	0	2	1	0	0	3	3	0	0	8	1	0	0	9	9	1	0	4	0	0	0	5	4	645
P/TOT	0	0	13	5	0	0	18	18	0	0	40	10	1	0	51	52	1	0	69	7	0	0	77	76	3477

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 03 DATE: 21st September 2022

LOCATION: Smith's Building Supplies/Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	0	2	0	0	2	2	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
07:45	0	0	0	4	2	0	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	6	2	0	8	10	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
08:00	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
08:45	0	0	1	4	1	0	6	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
H/TOT	0	0	3	5	1	0	9	10	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	4
09:00	0	0	2	2	1	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	3	3
09:30	0	0	2	2	0	0	4	4	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
09:45	0	0	2	2	1	0	5	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
H/TOT	0	0	6	6	2	0	14	16	0	0	1	1	0	0	2	2	0	0	2	4	0	0	6	6
P/TOT	0	0	9	17	5	0	31	36	0	0	1	2	0	0	3	3	0	0	2	6	1	0	9	10

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**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	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
16:15	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
16:30	0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	0	0	6	1	0	0	7	7	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	4
17:00	0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	12	1	0	0	13	13	0	0	0	0	0	0	0	0	0	0	3	1	1	0	5	6

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 03 DATE: 21st September 2022

LOCATION: Smith's Building Supplies/Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	1	3	1	0	5	6	4	2	128	30	9	5	178	188	0	0	19	7	0	0	26	26
07:45	0	0	0	0	0	0	0	0	7	0	106	21	6	4	144	148	0	0	19	5	0	0	24	24
H/TOT	0	0	1	3	1	0	5	6	11	2	234	51	15	9	322	336	0	0	38	12	0	0	50	50
07:30	0	0	2	0	0	0	2	2	1	2	112	22	13	2	152	165	1	0	11	5	2	0	19	20
07:45	0	0	0	0	0	0	0	0	4	1	111	36	2	3	157	158	0	0	4	6	2	0	12	14
08:00	0	0	0	1	0	0	1	1	8	2	119	24	4	5	162	163	0	0	6	4	1	0	11	12
08:15	0	0	0	2	0	0	2	2	5	2	103	23	7	6	146	154	0	0	15	4	0	0	19	19
H/TOT	0	0	2	3	0	0	5	5	18	7	445	105	26	16	617	640	1	0	36	19	5	0	61	65
08:30	0	0	0	1	0	0	1	1	2	1	114	29	2	5	153	158	0	0	18	5	0	0	23	23
08:45	0	0	0	2	0	0	2	2	1	0	94	22	7	6	130	142	0	0	16	5	0	0	21	21
09:00	0	0	1	0	0	0	1	1	2	0	94	31	6	3	136	143	0	0	7	6	4	0	17	21
09:15	0	0	0	1	0	0	1	1	1	1	78	20	11	2	113	125	0	0	10	2	1	0	13	14
H/TOT	0	0	1	4	0	0	5	5	6	2	380	102	26	16	532	568	0	0	51	18	5	0	74	79
P/TOT	0	0	4	10	1	0	15	16	35	11	1059	258	67	41	1471	1544	1	0	125	49	10	0	185	194

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
TIME	**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	1	0	1	2	5	3	113	21	0	2	144	140	0	0	6	1	2	0	9	11
16:15	0	0	0	1	0	0	1	1	8	0	111	11	4	3	137	138	0	0	5	2	1	0	8	9
16:30	0	0	2	0	0	0	2	2	5	3	117	24	3	3	155	155	0	0	4	1	0	0	5	5
16:45	0	0	0	0	0	0	0	0	6	1	127	20	2	3	159	159	0	0	4	1	0	0	5	5
H/TOT	0	0	2	1	1	0	4	5	24	7	468	76	9	11	595	592	0	0	19	5	3	0	27	30
17:00	0	0	0	0	0	0	0	0	5	2	142	13	4	2	168	169	0	0	2	0	0	0	2	2
17:15	0	0	0	0	0	0	0	0	7	3	113	10	5	4	142	144	0	0	2	0	0	0	2	2
17:30	0	0	0	0	0	0	0	0	8	0	137	13	3	2	163	162	0	0	5	0	1	0	6	7
17:45	0	0	0	0	0	0	0	0	9	1	94	11	1	1	117	111	0	0	4	3	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	29	6	486	47	13	9	590	585	0	0	13	3	1	0	17	18
18:00	0	0	0	0	0	0	0	0	12	0	123	18	0	3	156	149	1	0	2	0	0	0	3	2
18:15	0	0	0	0	0	0	0	0	8	0	107	21	1	3	140	138	0	0	3	0	1	0	4	5
H/TOT	0	0	0	0	0	0	0	0	20	0	230	39	1	6	296	287	1	0	5	0	1	0	7	7
P/TOT	0	0	2	1	1	0	4	5	73	13	1184	162	23	26	1481	1464	1	0	37	8	5	0	51	55

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 03 DATE: 21st September 2022

LOCATION: Smith's Building Supplies/Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	0	1	2	0	3	5	0	0	0	0	0	0	0	0	0	0	4	5	1	0	10	11
07:45	0	0	5	3	0	0	8	8	0	0	0	0	0	0	0	0	0	0	6	6	0	0	12	12
H/TOT	0	0	5	4	2	0	11	13	0	0	0	0	0	0	0	0	0	0	10	11	1	0	22	23
07:30	0	0	4	2	1	0	7	8	0	0	0	1	0	0	1	1	0	0	7	3	1	0	11	12
07:45	0	0	3	2	0	0	5	5	0	0	0	0	0	0	0	0	0	0	10	5	3	0	18	21
08:00	0	0	0	3	0	0	3	3	0	0	0	0	1	0	1	2	0	0	2	4	1	0	7	8
08:15	0	0	2	1	1	0	4	5	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	4
H/TOT	0	0	9	8	2	0	19	21	0	0	0	1	1	0	2	3	0	0	21	14	5	0	40	45
08:30	0	0	6	4	0	0	10	10	0	0	0	0	0	0	0	0	0	0	5	2	1	0	8	9
08:45	0	0	4	6	1	0	11	12	0	0	0	1	0	0	1	1	0	0	6	4	1	0	11	12
09:00	0	0	3	4	2	0	9	11	0	0	0	1	0	0	1	1	0	0	7	5	4	0	16	20
09:15	0	0	3	4	1	0	8	9	0	0	0	0	0	0	0	0	0	0	6	9	2	0	17	19
H/TOT	0	0	16	18	4	0	38	42	0	0	0	2	0	0	2	2	0	0	24	20	8	0	52	60
P/TOT	0	0	30	30	8	0	68	76	0	0	0	3	1	0	4	5	0	0	55	45	14	0	114	128

	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
TIME	**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	13	4	1	0	19	19	0	0	0	0	0	0	0	0	0	0	23	3	0	0	26	26
16:15	0	0	20	3	2	0	25	27	0	0	0	0	0	0	0	0	0	1	16	7	0	0	24	23
16:30	0	0	16	4	0	0	20	20	0	0	0	0	0	0	0	0	1	0	30	6	1	0	38	38
16:45	0	0	9	2	0	0	11	11	0	0	0	0	0	0	0	0	0	0	12	2	1	0	15	16
H/TOT	0	1	58	13	3	0	75	77	0	0	0	0	0	0	0	0	1	1	81	18	2	0	103	104
17:00	0	0	21	2	0	0	23	23	0	0	0	0	0	0	0	0	3	0	17	3	1	0	24	23
17:15	0	0	12	2	0	0	14	14	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	12
17:30	0	0	9	0	0	0	9	9	0	0	0	0	0	0	0	0	3	0	20	0	0	0	23	21
17:45	0	0	12	1	1	0	14	15	0	0	0	0	0	0	0	0	0	0	16	2	0	0	18	18
H/TOT	0	0	54	5	1	0	60	61	0	0	0	0	0	0	0	0	6	0	65	5	1	0	77	73
18:00	0	0	26	1	0	0	27	27	0	0	0	0	0	0	0	0	0	0	20	1	0	0	21	21
18:15	0	0	6	1	0	0	7	7	0	0	0	0	0	0	0	0	1	0	8	1	0	0	10	9
H/TOT	0	0	32	2	0	0	34	34	0	0	0	0	0	0	0	0	1	0	28	2	0	0	31	30
P/TOT	0	1	144	20	4	0	169	172	0	0	0	0	0	0	0	0	8	1	174	25	3	0	211	207

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 03 DATE: 21st September 2022

LOCATION: Smith's Building Supplies/Greenhills Road/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	1	19	7	4	0	31	34	5	1	74	7	3	4	94	96	0	0	1	1	0	0	2	2
07:45	7	0	21	5	1	0	34	29	6	0	102	10	1	3	122	121	0	0	0	0	1	0	1	2
H/TOT	7	1	40	12	5	0	65	63.8	11	1	176	17	4	7	216	218	0	0	1	1	1	0	3	4
07:30	4	0	14	7	2	0	27	26	2	2	102	18	1	2	127	127	0	0	0	0	0	0	0	0
07:45	1	0	10	2	1	0	14	14	4	1	125	14	2	2	148	148	0	0	1	1	1	0	3	4
08:00	1	0	7	7	2	0	17	18	3	1	101	5	4	0	114	115	0	0	0	3	0	0	3	3
08:15	1	0	13	3	0	0	17	16	10	2	103	22	6	6	149	152	0	0	2	0	1	0	3	4
H/TOT	7	0	44	19	5	0	75	74	19	6	431	59	13	10	538	542	0	0	3	4	2	0	9	11
08:30	2	0	12	3	2	0	19	19	3	3	101	23	6	3	139	144	0	0	1	1	0	0	2	2
08:45	0	0	12	6	2	0	20	22	3	3	106	15	8	1	136	141	0	0	5	0	1	0	6	7
09:00	0	0	6	5	1	0	12	13	4	1	91	17	8	3	124	131	0	0	1	1	0	0	2	2
09:15	1	0	15	9	1	0	26	26	0	4	89	14	7	2	116	123	0	0	4	2	0	0	6	6
H/TOT	3	0	45	23	6	0	77	81	10	11	387	69	29	9	515	538	0	0	11	4	1	0	16	17
P/TOT	17	1	129	54	16	0	217	219	40	18	994	145	46	26	1269	1298	0	0	15	9	4	0	28	32

	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
TIME	**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	0	9	3	1	0	14	14	2	1	118	17	9	5	152	164	0	0	0	0	0	0	0	0
16:15	0	0	12	4	0	0	16	16	4	1	103	26	7	2	143	148	0	0	1	0	1	0	2	3
16:30	1	0	12	0	0	0	13	12	4	1	82	21	7	3	118	124	0	0	1	0	0	0	1	1
16:45	0	0	12	5	1	0	18	19	5	1	99	15	3	4	127	129	0	0	0	1	0	0	1	1
H/TOT	2	0	45	12	2	0	61	61	15	4	402	79	26	14	540	566	0	0	2	1	1	0	4	5
17:00	0	0	4	1	0	0	5	5	7	7	116	20	3	1	154	148	0	0	0	0	0	0	0	0
17:15	0	0	7	0	0	0	7	7	1	6	154	16	4	1	182	183	0	0	0	0	0	0	0	0
17:30	0	0	2	1	0	0	3	3	5	2	141	22	2	2	174	173	0	0	0	0	0	0	0	0
17:45	0	0	18	2	0	0	20	20	4	2	149	17	3	0	175	174	0	0	0	0	0	0	0	0
H/TOT	0	0	31	4	0	0	35	35	17	17	560	75	12	4	685	677	0	0	0	0	0	0	0	0
18:00	0	0	10	1	0	0	11	11	4	2	131	20	0	3	160	159	0	0	0	0	0	0	0	0
18:15	0	0	4	1	1	0	6	7	6	1	123	12	0	4	146	145	0	0	0	0	0	0	0	0
H/TOT	0	0	14	2	1	0	17	18	10	3	254	32	0	7	306	303	0	0	0	0	0	0	0	0
P/TOT	2	0	90	18	3	0	113	114	42	24	1216	186	38	25	1531	1546	0	0	2	1	1	0	4	5

RECEIVED: 15/05/2025

PCU's Through Junction
371
353
724
363
366
329
364
1421
372
364
350
330
1416
3562

PCU's Through Junction
381
367
361
342
1451
378
361
374
345
1458
369
310
680
3588

TRAFFINOMICS LIMITED

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 04 DATE: 21st September 2022

LOCATION: Beechlawn Industrial Complex/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	1	1	3	2	0	0	7	6	1	0	33	6	3	0	43	45	1	0	4	0	1	0	6	6
07:45	2	0	7	3	0	0	12	10	6	0	35	4	2	0	47	44	0	0	11	3	0	0	14	14
H/TOT	3	1	10	5	0	0	19	16	7	0	68	10	5	0	90	89.4	1	0	15	3	1	0	20	20.2
08:00	0	0	5	1	1	0	7	8	3	0	15	3	1	0	22	21	0	0	13	1	1	0	15	16
08:15	0	0	4	6	1	0	11	12	1	0	11	2	1	0	15	15	0	0	7	3	2	0	12	14
08:30	0	0	2	2	2	0	6	8	0	0	10	4	2	0	16	18	0	0	2	1	1	0	4	5
08:45	1	0	5	0	0	0	6	5	1	0	25	6	0	0	32	31	0	0	3	3	0	0	6	6
H/TOT	1	0	16	9	4	0	30	33	5	0	61	15	4	0	85	85	0	0	25	8	4	0	37	41
09:00	0	0	8	2	1	0	11	12	3	0	24	4	1	0	32	31	0	0	8	3	0	0	11	11
09:15	0	0	5	0	2	0	7	9	0	0	15	7	3	0	25	28	0	0	6	7	2	0	15	17
09:30	0	0	2	1	0	0	3	3	0	0	9	6	3	0	18	21	0	0	10	5	4	0	19	23
09:45	0	0	3	4	0	0	7	7	2	0	24	6	2	0	34	34	0	0	5	5	3	0	13	16
H/TOT	0	0	18	7	3	0	28	31	5	0	72	23	9	0	109	114	0	0	29	20	9	0	58	67
P/TOT	4	1	44	21	7	0	77	80	17	0	201	48	18	0	284	288	1	0	69	31	14	0	115	128

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**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	1	0	2	0	3	5	0	0	12	3	0	0	15	15	0	0	24	6	1	0	31	32
16:15	0	0	0	1	0	0	1	1	1	0	17	4	1	0	23	23	0	0	27	5	1	0	33	34
16:30	0	0	1	0	0	0	1	1	0	0	15	2	0	0	17	17	4	0	33	3	0	0	40	37
16:45	0	0	0	1	0	0	1	1	0	0	17	4	1	0	22	23	2	0	14	5	0	0	21	19
H/TOT	0	0	2	2	2	0	6	8	1	0	61	13	2	0	77	78	6	0	98	19	2	0	125	122
17:00	0	0	0	1	0	0	1	1	0	0	5	0	0	0	5	5	2	0	30	3	1	0	36	35
17:15	0	0	1	0	0	0	1	1	0	0	9	0	0	0	9	9	0	0	24	1	0	0	25	25
17:30	0	0	0	0	0	0	0	0	0	0	6	1	0	0	7	7	5	0	25	1	0	0	31	27
17:45	0	0	0	0	0	0	0	0	1	0	22	5	0	0	28	27	0	0	28	4	1	0	33	34
H/TOT	0	0	1	1	0	0	2	2	1	0	42	6	0	0	49	48	7	0	107	9	2	0	125	121
18:00	0	0	0	0	0	0	0	0	1	0	13	1	0	0	15	14	0	0	37	4	0	0	41	41
18:15	0	0	1	1	2	0	4	6	0	0	5	0	0	0	5	5	2	0	13	2	0	0	17	15
H/TOT	0	0	1	1	2	0	4	6	1	0	18	1	0	0	20	19	2	0	50	6	0	0	58	56
P/TOT	0	0	4	4	4	0	12	16	3	0	121	20	2	0	146	146	15	0	255	34	4	0	308	300

TRAFFINOMICS LIMITED

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2026

SITE: 04 DATE: 21st September 2022

LOCATION: Beechlawn Industrial Complex/Mulcahy Keane Estate DAY: Wednesday

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	59
07:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	0	0	1	1	0	0	2	2	73
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	0	0	1	1	1	0	3	4	132
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	46
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	4	5	46
08:00	0	0	0	0	0	0	0	0	0	0	2	2	2	0	6	8	0	0	0	1	0	0	1	1	40
08:15	0	0	0	0	0	0	0	0	1	0	5	0	0	0	6	5	0	0	0	1	0	0	1	1	49
H/TOT	0	0	0	0	0	0	0	0	1	0	7	2	2	0	12	13	0	0	2	4	1	0	7	8	180
08:30	0	0	1	0	1	0	2	3	0	0	8	2	1	0	11	12	0	0	2	2	1	0	5	6	75
08:45	0	0	1	0	1	0	2	3	0	0	5	0	2	0	7	9	0	0	2	0	1	0	3	4	70
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	4	51
09:15	0	0	0	1	0	0	1	1	0	0	0	0	1	0	1	2	0	0	2	2	0	0	4	4	64
H/TOT	0	0	2	1	2	0	5	7	0	0	13	2	4	0	19	23	0	0	7	5	3	0	15	18	260
P/TOT	0	0	2	1	2	0	5	7	1	0	21	5	6	0	33	38	0	0	10	10	5	0	25	30	572

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	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	0	0	0	0	0	0	0	0	7	1	0	0	8	8	60
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2	1	8	4	1	0	16	15	75
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	3	1	0	12	13	68
16:45	0	0	1	0	0	0	1	1	0	0	2	0	0	0	2	2	0	0	5	0	1	0	6	7	53
H/TOT	0	0	1	0	0	0	1	1	0	0	2	0	1	0	3	4	2	1	28	8	3	0	42	43	256
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	6	6	47
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	37
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	1	35
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	62
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	8	2	0	0	11	10	182
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	59
18:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	1	1	28
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	4	1	0	0	5	5	88
P/TOT	0	0	1	0	0	0	1	1	0	0	2	1	1	0	4	5	3	1	40	11	3	0	58	58	526

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 05 DATE: 21st September 2022

LOCATION: Ballymount Avenue/Calmount Road DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	1	0	4	0	0	0	5	4	0	0	5	1	1	0	7	8	2	0	25	11	1	0	39	38
07:45	0	0	4	1	1	0	6	7	0	0	6	1	0	0	7	7	1	0	19	11	2	0	33	34
H/TOT	1	0	8	1	1	0	11	11.2	0	0	11	2	1	0	14	15	3	0	44	22	3	0	72	72.6
08:00	0	0	6	3	0	0	9	9	0	0	2	2	3	0	7	10	0	0	23	11	5	0	39	44
08:15	1	0	7	1	0	0	9	8	0	0	4	1	1	0	6	7	0	1	16	9	4	0	30	33
08:30	2	0	12	1	0	0	15	13	0	0	2	3	1	0	6	7	0	0	21	8	1	0	30	31
08:45	1	1	14	3	0	0	19	18	2	0	6	2	0	0	10	8	0	0	11	8	6	0	25	31
H/TOT	4	1	39	8	0	0	52	48	2	0	14	8	5	0	29	32	0	1	71	36	16	0	124	139
09:00	0	0	12	2	0	0	14	14	0	0	7	2	0	0	9	9	0	0	29	8	2	0	39	41
09:15	0	0	2	3	0	0	5	5	1	0	3	1	2	0	7	8	1	0	26	7	3	0	37	39
09:30	0	0	4	2	1	0	7	8	0	0	6	5	0	0	11	11	1	0	22	13	1	0	37	37
09:45	0	0	4	0	0	0	4	4	0	0	5	3	3	1	12	16	0	0	26	8	3	0	37	40
H/TOT	0	0	22	7	1	0	30	31	1	0	21	11	5	1	39	44	2	0	103	36	9	0	150	157
P/TOT	5	1	69	16	2	0	93	90	3	0	46	21	11	1	82	92	5	1	218	94	28	0	346	369

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**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	2	0	0	2	2	4	0	9	6	3	0	22	22	0	1	55	10	3	0	69	71
16:15	0	0	0	1	0	0	1	1	0	0	11	6	1	1	19	21	0	1	50	10	3	0	64	66
16:30	0	0	1	0	0	0	1	1	3	0	16	1	2	0	22	22	1	1	53	5	1	0	61	61
16:45	0	0	3	1	0	0	4	4	3	0	7	2	3	0	15	16	0	0	46	13	0	0	59	59
H/TOT	0	0	4	4	0	0	8	8	10	0	43	15	9	1	78	80	1	3	204	38	7	0	253	257
17:00	0	0	1	0	0	0	1	1	1	1	14	3	1	0	20	20	0	4	60	6	1	0	71	70
17:15	0	0	2	1	0	0	3	3	0	0	4	1	0	0	5	5	5	2	34	4	1	0	46	42
17:30	0	0	2	0	0	0	2	2	0	0	9	1	1	0	11	12	1	0	47	7	0	0	55	54
17:45	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6	0	5	47	3	0	0	55	52
H/TOT	0	0	5	1	0	0	6	6	1	1	33	5	2	0	42	43	6	11	188	20	2	0	227	218
18:00	0	0	1	1	0	0	2	2	2	0	4	1	1	0	8	7	3	3	33	7	2	0	48	46
18:15	0	0	2	0	1	0	3	4	0	0	3	0	0	0	3	3	1	2	25	2	0	0	30	28
H/TOT	0	0	3	1	1	0	5	6	2	0	7	1	1	0	11	10	4	5	58	9	2	0	78	74
P/TOT	0	0	12	6	1	0	19	20	13	1	83	21	12	1	131	133	11	19	450	67	11	0	558	549

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/09/2025

SITE: 05 DATE: 21st September 2022

LOCATION: Ballymount Avenue/Calmount Road DAY: Wednesday

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	3	69	22	6	0	100	104	0	0	13	2	0	0	15	15	0	0	4	1	0	0	5	5
07:45	6	1	79	22	3	0	111	109	0	0	25	7	1	0	33	34	0	0	2	1	0	0	3	3
H/TOT	6	4	148	44	9	0	211	213	0	0	38	9	1	0	48	49	0	0	6	2	0	0	8	8
07:30	1	0	84	19	4	0	108	111	0	0	35	3	0	0	38	38	0	0	3	1	1	0	5	6
07:45	1	4	81	27	7	0	120	124	0	1	42	9	1	0	53	53	0	0	2	0	0	0	2	2
08:00	0	1	73	14	8	0	96	103	0	0	45	3	1	0	49	50	0	0	2	0	1	0	3	4
08:15	1	1	78	14	3	0	97	99	0	1	31	4	0	0	36	35	0	0	1	1	0	0	2	2
H/TOT	3	6	316	74	22	0	421	437	0	2	153	19	2	0	176	177	0	0	8	2	2	0	12	14
08:30	0	1	73	23	5	0	102	106	0	0	31	6	0	0	37	37	0	0	4	2	0	0	6	6
08:45	0	0	89	19	9	0	117	126	0	0	32	6	0	0	38	38	0	0	5	0	1	0	6	7
09:00	1	0	61	17	10	0	89	98	0	1	20	4	0	0	25	24	0	0	7	1	3	0	11	14
09:15	0	1	70	10	8	2	91	100	0	0	24	3	1	0	28	29	0	0	7	2	2	0	11	13
H/TOT	1	2	293	69	32	2	399	431	0	1	107	19	1	0	128	128	0	0	23	5	6	0	34	40
P/TOT	10	12	757	187	63	2	1031	1081	0	3	298	47	4	0	352	354	0	0	37	9	8	0	54	62

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6							
TIME	**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	35	12	2	1	50	53	0	0	5	2	0	0	7	7	0	0	4	3	2	0	9	11
16:15	0	1	43	12	6	0	62	67	0	0	6	1	1	0	8	9	0	0	8	0	3	0	11	14
16:30	4	1	37	9	3	1	55	55	0	0	2	1	0	0	3	3	0	0	4	1	3	0	8	11
16:45	0	0	48	8	4	0	60	64	0	0	3	1	0	0	4	4	0	0	5	0	2	0	7	9
H/TOT	4	2	163	41	15	2	227	240	0	0	16	5	1	0	22	23	0	0	21	4	10	0	35	45
17:00	1	1	41	7	2	0	52	53	0	0	3	0	0	0	3	3	0	0	0	0	1	0	1	2
17:15	0	0	36	6	6	0	48	54	1	0	1	0	1	0	3	3	0	0	1	0	1	0	2	3
17:30	1	0	44	10	4	0	59	62	0	0	1	0	1	0	2	3	0	0	1	0	0	0	1	1
17:45	2	1	58	8	5	0	74	77	0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0
H/TOT	4	2	179	31	17	0	233	246	1	0	8	0	2	0	11	12	0	0	2	0	2	0	4	6
18:00	0	0	57	5	4	1	67	72	1	0	4	1	0	0	6	5	0	0	0	0	1	0	1	2
18:15	1	0	57	8	2	0	68	69	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	1	0	114	13	6	1	135	141	1	0	5	1	0	0	7	6	0	0	0	0	1	0	1	2
P/TOT	9	4	456	85	38	3	595	626	2	0	29	6	3	0	40	41	0	0	23	4	13	0	40	53

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/09/2025

SITE: 05 DATE: 21st September 2022

LOCATION: Ballymount Avenue/Calmount Road DAY: Wednesday

	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	1	0	0	0	1	1	2	0	22	6	2	0	32	32	0	0	1	0	0	0	1	1
07:45	0	0	1	0	0	0	1	1	2	0	18	3	2	0	25	25	0	1	4	1	0	0	6	5
H/TOT	0	0	2	0	0	0	2	2	4	0	40	9	4	0	57	57.8	0	1	5	1	0	0	7	6.4
07:30	0	0	3	1	1	0	5	6	0	0	27	10	3	0	40	43	0	0	5	1	1	0	7	8
07:45	0	0	1	0	1	0	2	3	1	0	28	7	6	0	42	47	0	0	10	0	0	0	10	10
08:00	0	0	4	1	3	0	8	11	0	0	31	11	3	0	45	48	0	0	6	1	0	0	7	7
08:15	0	0	1	1	1	0	3	4	1	0	28	12	2	0	43	44	2	0	12	1	0	0	15	13
H/TOT	0	0	9	3	6	0	18	24	2	0	114	40	14	0	170	182	2	0	33	3	1	0	39	38
08:30	0	0	4	2	0	0	6	6	0	0	16	5	3	0	24	27	0	0	8	2	0	0	10	10
08:45	0	0	2	1	0	0	3	3	0	0	14	6	0	0	20	20	0	0	5	0	0	0	5	5
09:00	0	0	5	0	0	0	5	5	0	0	12	13	9	0	34	43	0	0	3	1	2	0	6	8
09:15	0	0	5	1	0	0	6	6	0	0	16	7	10	0	33	43	0	0	3	1	1	0	5	6
H/TOT	0	0	16	4	0	0	20	20	0	0	58	31	22	0	111	133	0	0	19	4	3	0	26	29
P/TOT	0	0	27	7	6	0	40	46	6	0	212	80	40	0	338	373	2	1	57	8	4	0	72	74

	MOVEMENT 7								MOVEMENT 8								MOVEMENT 9							
TIME	**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	14	3	3	0	20	23	2	0	10	12	3	0	27	28	0	0	4	0	1	0	5	6
16:15	0	0	25	4	1	0	30	31	0	0	19	7	2	0	28	30	0	0	2	0	1	0	3	4
16:30	0	0	13	3	1	0	17	18	0	0	12	8	2	1	23	26	0	0	0	1	0	0	1	1
16:45	0	0	6	1	1	0	8	9	1	0	14	9	2	0	26	27	1	0	1	0	0	0	2	1
H/TOT	0	0	58	11	6	0	75	81	3	0	55	36	9	1	104	112	1	0	7	1	2	0	11	12
17:00	0	0	10	2	1	0	13	14	0	0	22	0	0	1	23	24	0	0	1	0	0	0	1	1
17:15	0	0	7	2	0	0	9	9	0	0	11	2	1	0	14	15	0	0	1	0	0	0	1	1
17:30	0	0	2	0	3	0	5	8	0	0	15	2	2	0	19	21	0	0	0	1	0	0	1	1
17:45	0	0	5	0	0	0	5	5	1	0	9	3	0	0	13	12	0	0	0	0	0	0	0	0
H/TOT	0	0	24	4	4	0	32	36	1	0	57	7	3	1	69	72	0	0	2	1	0	0	3	3
18:00	0	0	1	0	0	0	1	1	1	0	12	2	0	0	15	14	0	0	1	0	0	0	1	1
18:15	0	0	0	0	1	0	1	2	0	0	4	3	1	0	8	9	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	1	0	2	3	1	0	16	5	1	0	23	23	0	0	1	0	0	0	1	1
P/TOT	0	0	83	15	11	0	109	120	5	0	128	48	13	2	196	207	1	0	10	2	2	0	15	16

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/09/2025

SITE: 05 DATE: 21st September 2022

LOCATION: Ballymount Avenue/Calmount Road DAY: Wednesday

	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	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	0	0	1	0	1	2	0	0	0	2	0	0	2	2	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	1	0	1	2	0	0	1	2	0	0	3	3	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	3	2	0	0	5	5	0	0	1	1	1	0	3	4
07:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	0	0	2	2	1	0	5	6
08:00	0	0	0	0	0	0	0	0	0	0	9	6	0	0	15	15	0	0	3	6	0	0	9	9
08:15	0	0	1	0	0	0	1	1	0	0	3	2	0	0	5	5	0	0	1	3	2	0	6	8
H/TOT	0	0	1	0	0	0	1	1	0	0	15	13	0	0	28	28	0	0	7	12	4	0	23	27
08:30	0	0	2	0	0	0	2	2	0	0	3	7	1	0	11	12	0	0	2	3	0	0	5	5
08:45	1	0	0	3	0	0	4	3	0	0	2	4	0	0	6	6	0	0	3	7	0	0	10	10
09:00	0	0	1	0	1	0	2	3	0	0	5	1	0	0	6	6	0	0	4	4	0	0	8	8
09:15	0	0	2	0	0	0	2	2	0	0	5	2	0	0	7	7	0	0	3	3	2	0	8	10
H/TOT	1	0	5	3	1	0	10	10	0	0	15	14	1	0	30	31	0	0	12	17	2	0	31	33
P/TOT	1	0	6	3	2	0	12	13	0	0	31	29	1	0	61	62	0	0	19	29	6	0	54	60

	MOVEMENT 10								MOVEMENT 11								MOVEMENT 12							
TIME	**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	2	2	0	0	4	4	0	0	34	3	0	0	37	37	0	0	3	4	1	0	8	9
16:15	0	0	0	0	0	0	0	0	0	0	26	5	0	0	31	31	1	0	1	2	0	0	4	3
16:30	0	0	2	1	0	0	3	3	0	0	28	1	1	0	30	31	1	1	6	0	0	0	8	7
16:45	0	0	1	0	0	0	1	1	0	0	14	1	1	0	16	17	0	0	5	1	0	0	6	6
H/TOT	0	0	5	3	0	0	8	8	0	0	102	10	2	0	114	116	2	1	15	7	1	0	26	25
17:00	0	0	7	0	0	0	7	7	0	0	41	1	0	0	42	42	0	0	6	0	0	0	6	6
17:15	0	0	5	0	0	0	5	5	0	1	18	1	0	0	20	19	0	0	8	1	0	0	9	9
17:30	0	0	4	0	1	0	5	6	0	0	41	1	0	0	42	42	0	0	10	0	0	0	10	10
17:45	0	0	1	0	1	0	2	3	0	0	16	0	0	0	16	16	0	0	6	0	0	0	6	6
H/TOT	0	0	17	0	2	0	19	21	0	1	116	3	0	0	120	119	0	0	30	1	0	0	31	31
18:00	0	0	1	1	0	0	2	2	0	0	21	2	0	0	23	23	0	0	4	1	0	0	5	5
18:15	0	0	1	0	1	0	2	3	0	0	24	0	0	0	24	24	1	0	5	0	0	0	6	5
H/TOT	0	0	2	1	1	0	4	5	0	0	45	2	0	0	47	47	1	0	9	1	0	0	11	10
P/TOT	0	0	24	4	3	0	31	34	0	1	263	15	2	0	281	282	3	1	54	9	1	0	68	66

RECEIVED: 15/05/2025

PCU's Through Junction
210
230
440
284
297
299
269
1149
275
271
266
276
1088
2677

PCU's Through Junction
274
278
238
217
1007
242
168
222
180
813
181
148
329
2148

TRAFFINOMICS LIMITED

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2025

SITE: 06 DATE: 21st September 2022

LOCATION: Calmount Road/Calmount Avenue DAY: Wednesday

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**HGV**	**BUS**	**TOT**	**PCU**
07:30	0	0	0	0	0	0	0	0	1	0	17	2	0	0	20	19	0	0	1	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	1	31	9	2	0	43	44	0	0	1	2	1	0	4	5
H/TOT	0	0	0	0	0	0	0	0	1	1	48	11	2	0	63	63.6	0	0	2	2	1	0	5	6
08:00	0	0	0	0	0	0	0	0	0	0	45	6	1	0	52	53	0	0	2	4	1	0	7	8
08:15	0	0	0	0	0	0	0	0	0	1	59	9	1	0	70	70	0	0	3	4	1	0	8	9
08:30	0	0	0	0	0	0	0	0	0	0	61	6	1	0	68	69	0	0	9	12	0	0	21	21
08:45	0	0	0	0	0	0	0	0	0	2	57	8	0	0	67	66	0	0	5	5	2	0	12	14
H/TOT	0	0	0	0	0	0	0	0	0	3	222	29	3	0	257	258	0	0	19	25	4	0	48	52
09:00	0	0	0	0	0	0	0	0	0	0	51	10	0	0	61	61	0	0	7	10	1	0	18	19
09:15	0	0	0	0	0	0	0	0	0	0	37	9	0	0	46	46	0	0	4	14	0	0	18	18
09:30	0	0	0	0	0	0	0	0	0	1	26	6	2	0	35	36	0	0	7	6	1	0	14	15
09:45	0	0	0	0	0	0	0	0	0	0	29	4	1	0	34	35	0	0	8	4	2	0	14	16
H/TOT	0	0	0	0	0	0	0	0	0	1	143	29	3	0	176	178	0	0	26	34	4	0	64	68
P/TOT	0	0	0	0	0	0	0	0	1	5	413	69	8	0	496	500	0	0	47	61	9	0	117	126

	MOVEMENT 1								MOVEMENT 2								MOVEMENT 3							
TIME	**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	6	4	1	0	11	12	0	0	37	7	1	0	45	46
16:15	0	0	0	0	0	0	0	0	0	0	8	3	1	0	12	13	1	0	26	7	0	0	34	33
16:30	0	0	0	0	0	0	0	0	0	0	2	2	1	0	5	6	0	2	37	2	1	0	42	42
16:45	0	0	0	0	0	0	0	0	0	0	5	1	0	0	6	6	0	0	21	2	1	0	24	25
H/TOT	0	0	0	0	0	0	0	0	0	0	21	10	3	0	34	37	1	2	121	18	3	0	145	146
17:00	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	0	0	52	1	0	0	53	53
17:15	0	0	0	0	0	0	0	0	0	0	4	1	1	0	6	7	0	1	28	3	0	0	32	31
17:30	0	0	0	0	0	0	0	0	0	0	2	1	1	0	4	5	0	0	60	0	1	0	61	62
17:45	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	1	0	23	0	1	0	25	25
H/TOT	0	0	0	0	0	0	0	0	0	0	14	2	2	0	18	20	1	1	163	4	2	0	171	172
18:00	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5	4	0	0	23	2	0	0	25	25
18:15	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4	5	1	0	28	0	1	0	30	30
H/TOT	0	0	0	0	0	0	0	0	1	0	7	0	1	0	9	9	1	0	51	2	1	0	55	55
P/TOT	0	0	0	0	0	0	0	0	1	0	42	12	6	0	61	66	3	3	335	24	6	0	371	373

TRAFFINOMICS LIMITED

WALKINSTOWN TRAFFIC COUNTS **SEPTEMBER 2022**

MANUAL CLASSIFIED JUNCTION TURNING COUNTS **TRA/22/226**

RECEIVED: 15/05/2026

SITE: 06 DATE: 21st September 2022

LOCATION: Calmount Road/Calmount Avenue DAY: Wednesday

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	PCL	MCL	CAR	LGV	HGV	BUS	TOT	PCU	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	246
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	626

	MOVEMENT 4								MOVEMENT 5								MOVEMENT 6								PCU's Through Junction
TIME	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	67
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	192
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
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	35
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	439

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APPENDIX C

TRICS Trip Generation Output

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	116	0.043	10	116	0.145	10	116	0.188
08:00 - 09:00	10	116	0.069	10	116	0.210	10	116	0.279
09:00 - 10:00	10	116	0.081	10	116	0.078	10	116	0.159
10:00 - 11:00	10	116	0.064	10	116	0.075	10	116	0.139
11:00 - 12:00	10	116	0.059	10	116	0.076	10	116	0.135
12:00 - 13:00	10	116	0.082	10	116	0.090	10	116	0.172
13:00 - 14:00	10	116	0.081	10	116	0.093	10	116	0.174
14:00 - 15:00	10	116	0.099	10	116	0.090	10	116	0.189
15:00 - 16:00	10	116	0.117	10	116	0.081	10	116	0.198
16:00 - 17:00	10	116	0.131	10	116	0.083	10	116	0.214
17:00 - 18:00	10	116	0.168	10	116	0.091	10	116	0.259
18:00 - 19:00	10	116	0.127	10	116	0.104	10	116	0.231
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.121			1.216			2.337

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

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

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Parameter summary

Trip rate parameter range selected:	51 - 332 (units:)
Survey date date range:	01/01/14 - 23/06/21
Number of weekdays (Monday-Friday):	10
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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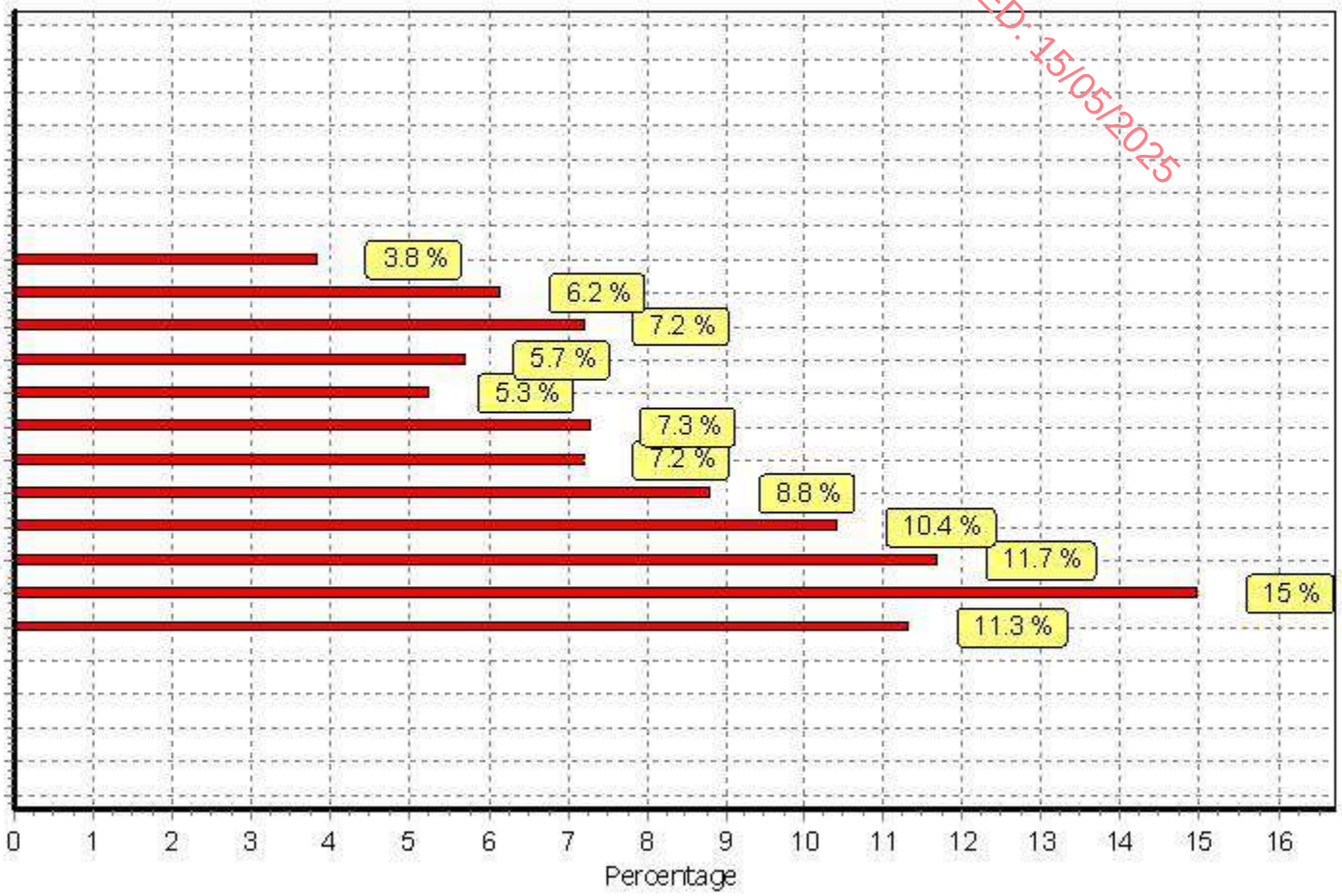
TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL C - FLATS PRIVATELY OWNED TOTAL VEHICLES

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.043	3.8
08:00-09:00	0.069	6.2
09:00-10:00	0.081	7.2
10:00-11:00	0.064	5.7
11:00-12:00	0.059	5.3
12:00-13:00	0.082	7.3
13:00-14:00	0.081	7.2
14:00-15:00	0.099	8.8
15:00-16:00	0.117	10.4
16:00-17:00	0.131	11.7
17:00-18:00	0.168	15.0
18:00-19:00	0.127	11.3
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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.

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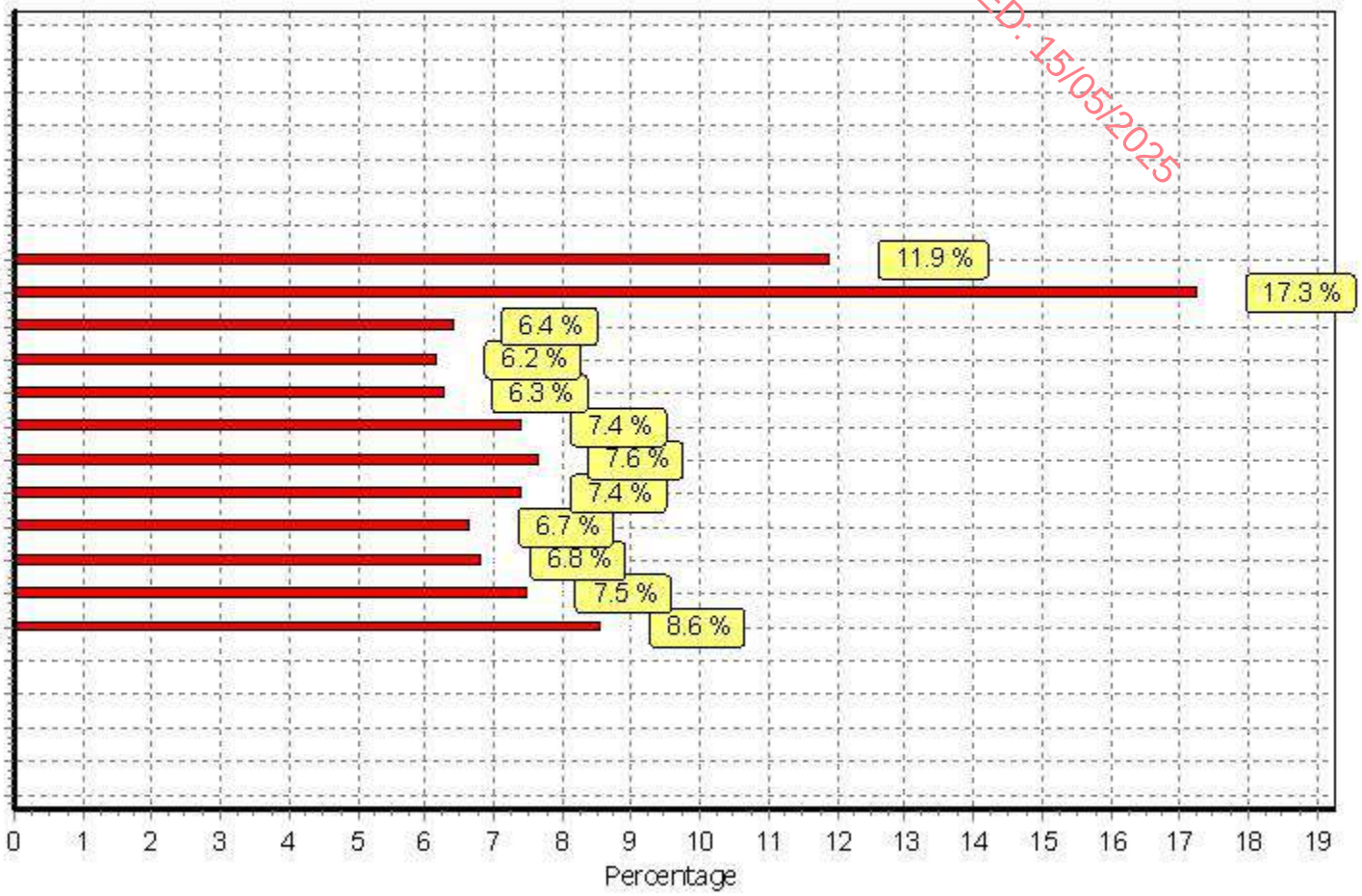
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.145	11.9
08:00-09:00	0.210	17.3
09:00-10:00	0.078	6.4
10:00-11:00	0.075	6.2
11:00-12:00	0.076	6.3
12:00-13:00	0.090	7.4
13:00-14:00	0.093	7.6
14:00-15:00	0.090	7.4
15:00-16:00	0.081	6.7
16:00-17:00	0.083	6.8
17:00-18:00	0.091	7.5
18:00-19:00	0.104	8.6
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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.

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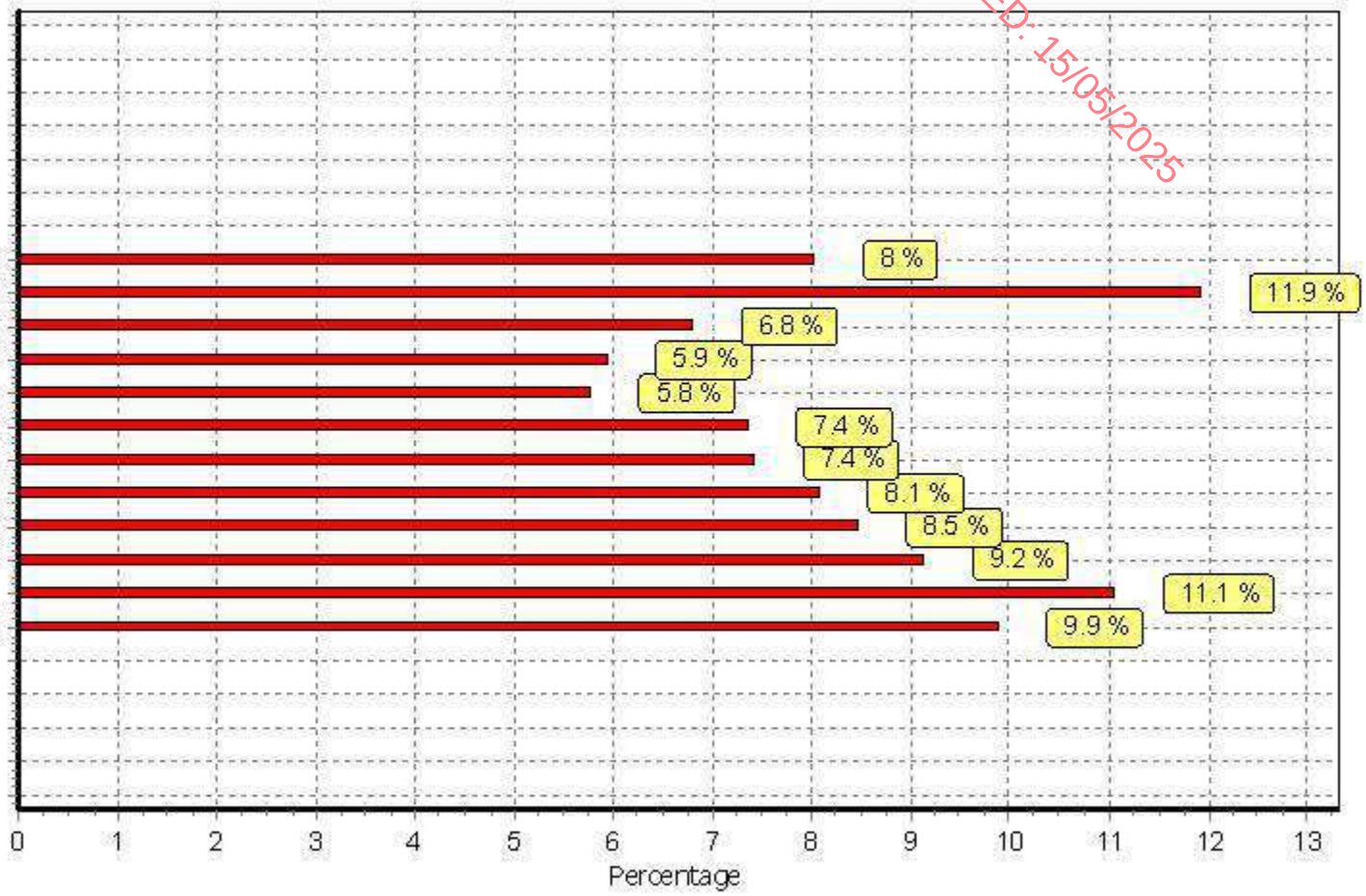
TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL C - FLATS PRIVATELY OWNED TOTAL VEHICLES

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.188	8.0
08:00-09:00	0.279	11.9
09:00-10:00	0.159	6.8
10:00-11:00	0.139	5.9
11:00-12:00	0.135	5.8
12:00-13:00	0.172	7.4
13:00-14:00	0.174	7.4
14:00-15:00	0.189	8.1
15:00-16:00	0.198	8.5
16:00-17:00	0.214	9.2
17:00-18:00	0.259	11.1
18:00-19:00	0.231	9.9
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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 for Land Use 02 - EMPLOYMENT/A - OFFICE
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

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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	21	1909	0.082	21	1909	0.007	21	1909	0.089
07:30 - 08:00	21	1909	0.244	21	1909	0.045	21	1909	0.289
08:00 - 08:30	23	1770	0.462	23	1770	0.069	23	1770	0.531
08:30 - 09:00	24	1944	0.544	24	1944	0.084	24	1944	0.628
09:00 - 09:30	24	1944	0.517	24	1944	0.103	24	1944	0.620
09:30 - 10:00	24	1944	0.234	24	1944	0.086	24	1944	0.320
10:00 - 10:30	24	1944	0.201	24	1944	0.111	24	1944	0.312
10:30 - 11:00	24	1944	0.122	24	1944	0.094	24	1944	0.216
11:00 - 11:30	24	1944	0.090	24	1944	0.084	24	1944	0.174
11:30 - 12:00	24	1944	0.099	24	1944	0.084	24	1944	0.183
12:00 - 12:30	24	1944	0.071	24	1944	0.204	24	1944	0.275
12:30 - 13:00	24	1944	0.141	24	1944	0.176	24	1944	0.317
13:00 - 13:30	24	1944	0.135	24	1944	0.180	24	1944	0.315
13:30 - 14:00	24	1944	0.197	24	1944	0.105	24	1944	0.302
14:00 - 14:30	24	1944	0.137	24	1944	0.120	24	1944	0.257
14:30 - 15:00	24	1944	0.090	24	1944	0.111	24	1944	0.201
15:00 - 15:30	24	1944	0.081	24	1944	0.120	24	1944	0.201
15:30 - 16:00	24	1944	0.075	24	1944	0.178	24	1944	0.253
16:00 - 16:30	24	1944	0.084	24	1944	0.264	24	1944	0.348
16:30 - 17:00	24	1944	0.079	24	1944	0.291	24	1944	0.370
17:00 - 17:30	24	1944	0.051	24	1944	0.521	24	1944	0.572
17:30 - 18:00	24	1944	0.051	24	1944	0.371	24	1944	0.422
18:00 - 18:30	22	2093	0.024	22	2093	0.256	22	2093	0.280
18:30 - 19:00	22	2093	0.024	22	2093	0.078	22	2093	0.102
19:00 - 19:30	1	2150	0.000	1	2150	0.000	1	2150	0.000
19:30 - 20:00	1	2150	0.000	1	2150	0.000	1	2150	0.000
20:00 - 20:30	1	2150	0.000	1	2150	0.047	1	2150	0.047
20:30 - 21:00	1	2150	0.000	1	2150	0.000	1	2150	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.835			3.789			7.624

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

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

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Parameter summary

Trip rate parameter range selected:	118 - 5945 (units: sqm)
Survey date date range:	01/01/14 - 06/05/22
Number of weekdays (Monday-Friday):	24
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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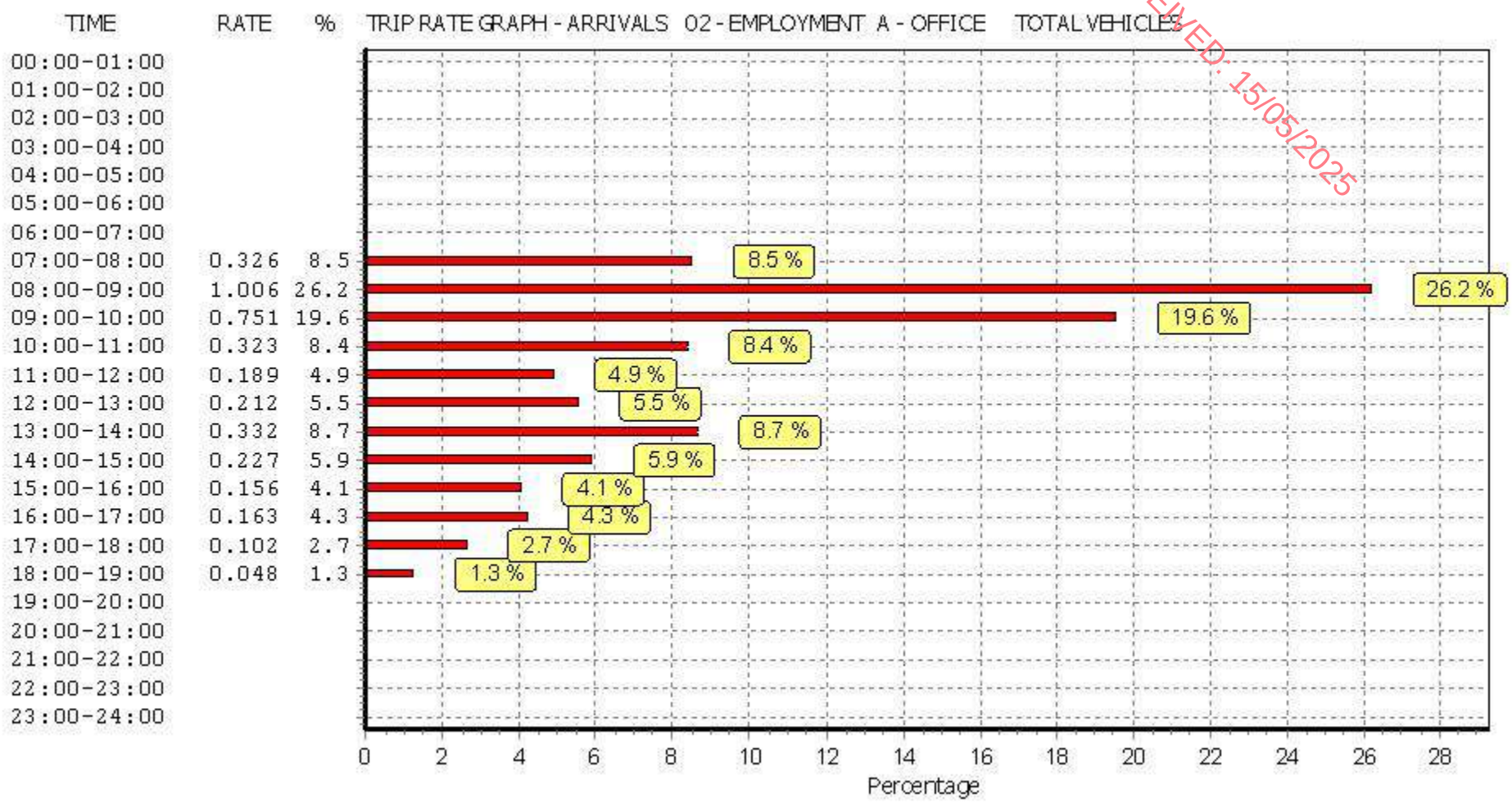

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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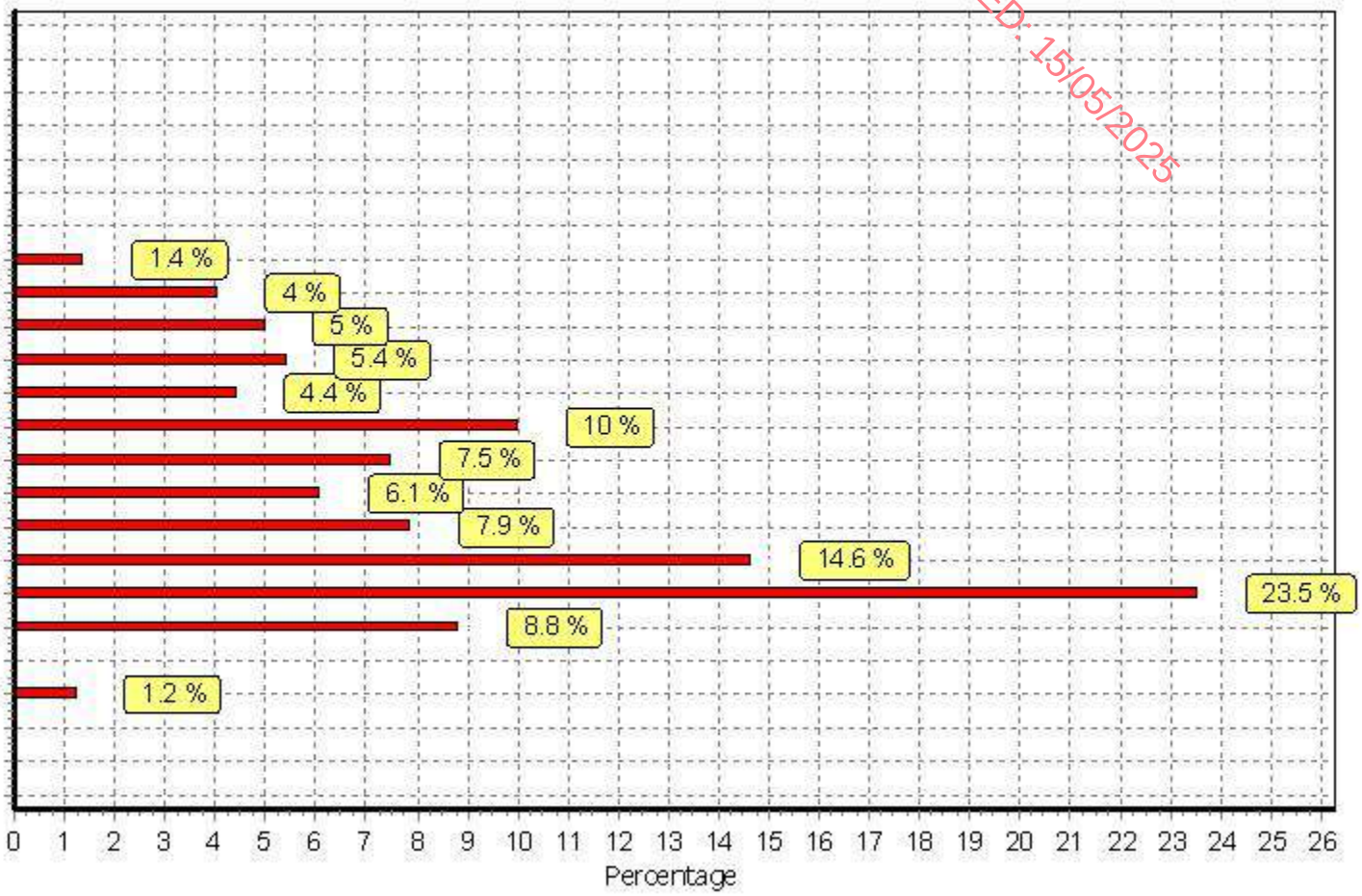
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.052	1.4
08:00-09:00	0.153	4.0
09:00-10:00	0.189	5.0
10:00-11:00	0.205	5.4
11:00-12:00	0.168	4.4
12:00-13:00	0.380	10.0
13:00-14:00	0.285	7.5
14:00-15:00	0.231	6.1
15:00-16:00	0.298	7.9
16:00-17:00	0.555	14.6
17:00-18:00	0.892	23.5
18:00-19:00	0.334	8.8
19:00-20:00		
20:00-21:00	0.047	1.2
21:00-22:00		
22:00-23:00		
23:00-24:00		



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.

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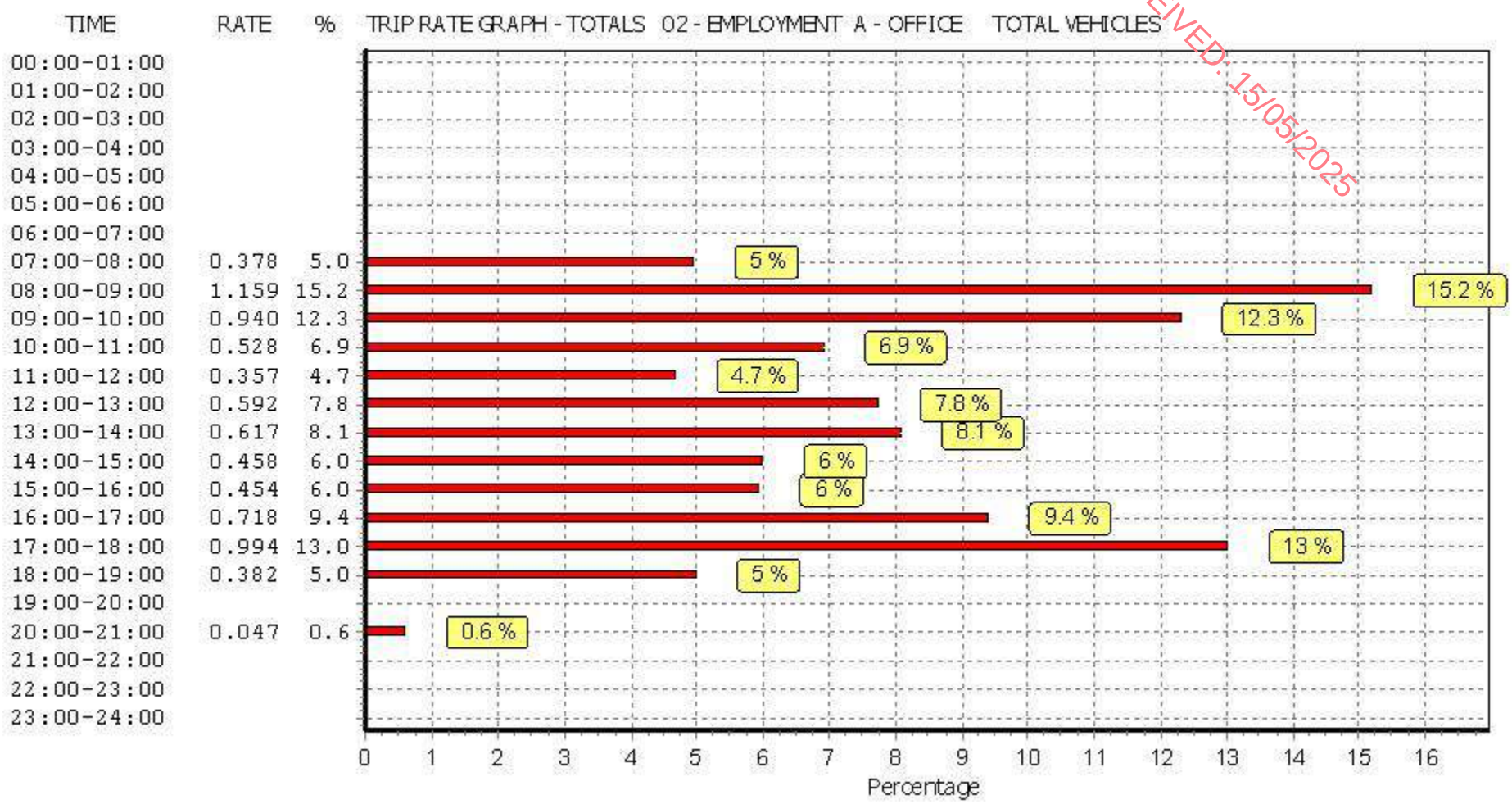
RECEIVED: 15/05/2025



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 for Land Use 04 - EDUCATION/D - NURSERY
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

RECEIVED: 15/05/2025

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	453	0.147	3	453	0.000	3	453	0.147
07:00 - 08:00	21	500	2.103	21	500	1.018	21	500	3.121
08:00 - 09:00	21	500	3.559	21	500	2.864	21	500	6.423
09:00 - 10:00	21	500	1.570	21	500	1.523	21	500	3.093
10:00 - 11:00	21	500	0.447	21	500	0.333	21	500	0.780
11:00 - 12:00	21	500	0.619	21	500	0.409	21	500	1.028
12:00 - 13:00	21	500	1.285	21	500	1.446	21	500	2.731
13:00 - 14:00	21	500	0.894	21	500	1.285	21	500	2.179
14:00 - 15:00	21	500	0.704	21	500	0.628	21	500	1.332
15:00 - 16:00	21	500	0.628	21	500	0.733	21	500	1.361
16:00 - 17:00	21	500	1.513	21	500	1.637	21	500	3.150
17:00 - 18:00	21	500	2.807	21	500	3.597	21	500	6.404
18:00 - 19:00	20	518	0.145	20	518	0.656	20	518	0.801
19:00 - 20:00	2	425	0.118	2	425	1.176	2	425	1.294
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			16.539			17.305			33.844

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

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

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Parameter summary

Trip rate parameter range selected:	150 - 860 (units: sqm)
Survey date date range:	01/01/14 - 07/06/22
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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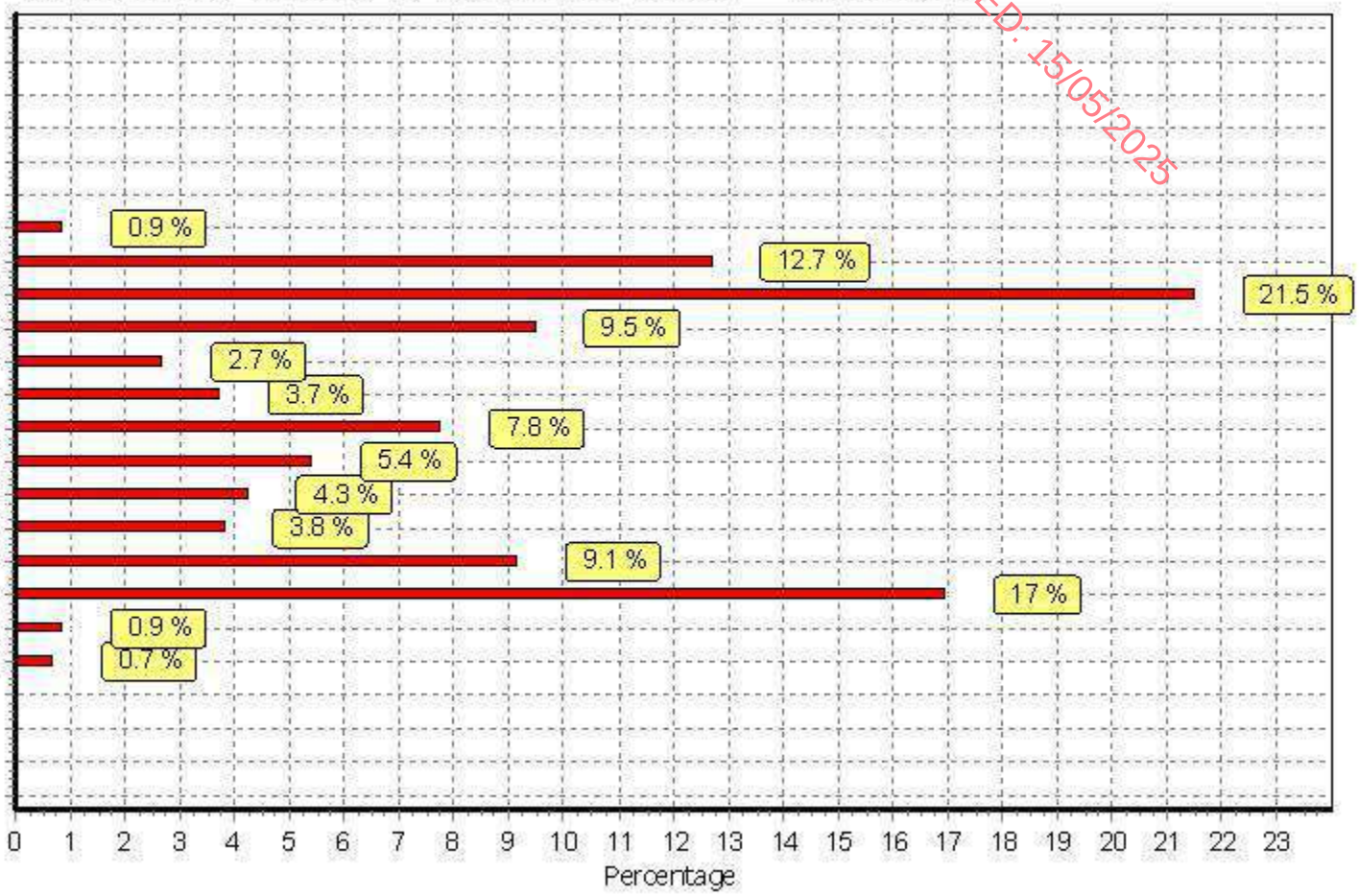
TRIP RATE GRAPH - ARRIVALS 04 - EDUCATION D - NURSERY TOTAL VEHICLES

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00	0.147	0.9
07:00-08:00	2.103	12.7
08:00-09:00	3.559	21.5
09:00-10:00	1.570	9.5
10:00-11:00	0.447	2.7
11:00-12:00	0.619	3.7
12:00-13:00	1.285	7.8
13:00-14:00	0.894	5.4
14:00-15:00	0.704	4.3
15:00-16:00	0.628	3.8
16:00-17:00	1.513	9.1
17:00-18:00	2.807	17.0
18:00-19:00	0.145	0.9
19:00-20:00	0.118	0.7
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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.

NRB Consulting Engineers Ltd 8 Leopardstown Business Centre, Ballyogan Avenue Dublin 18 Licence No: 160301

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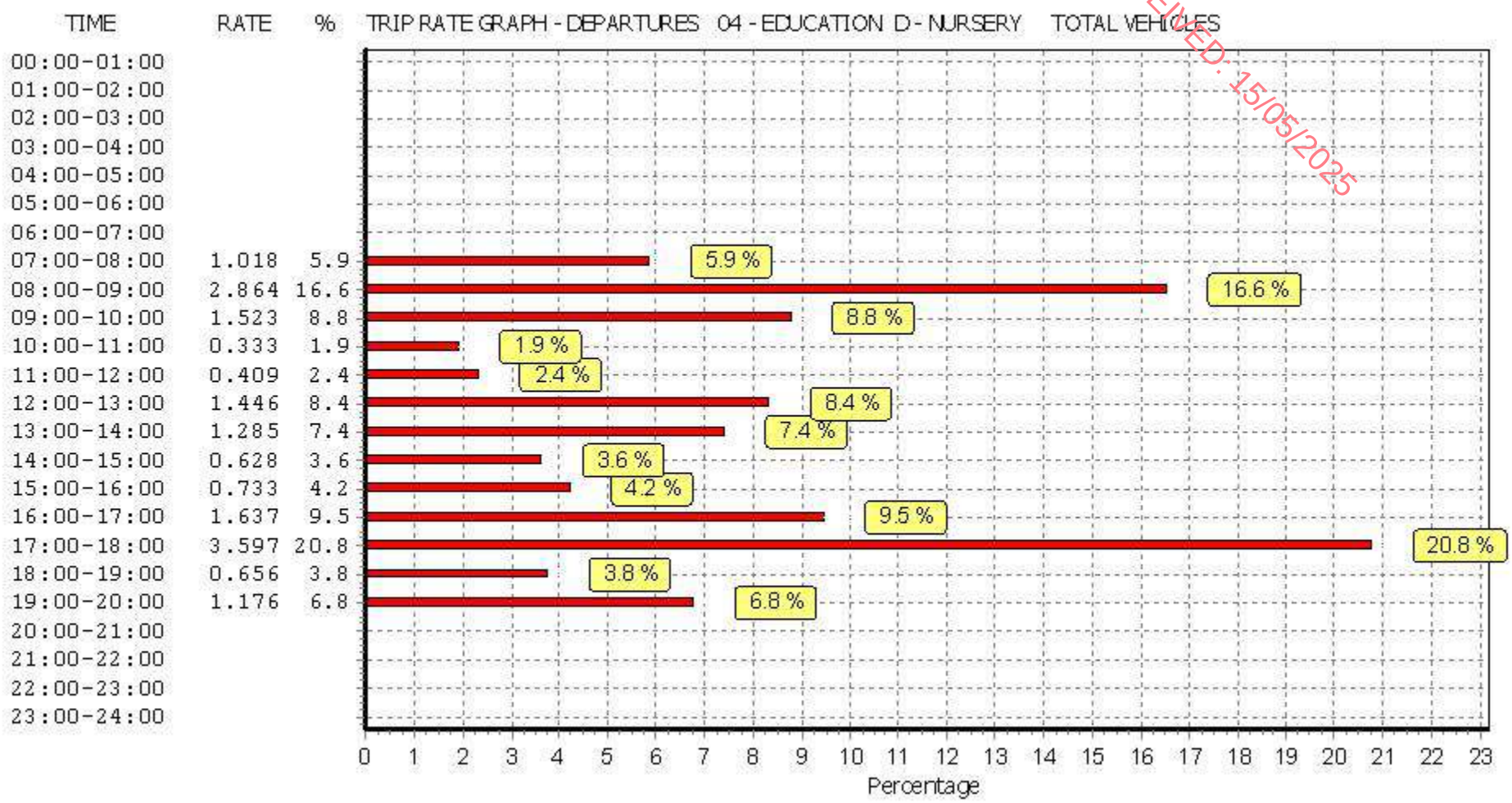

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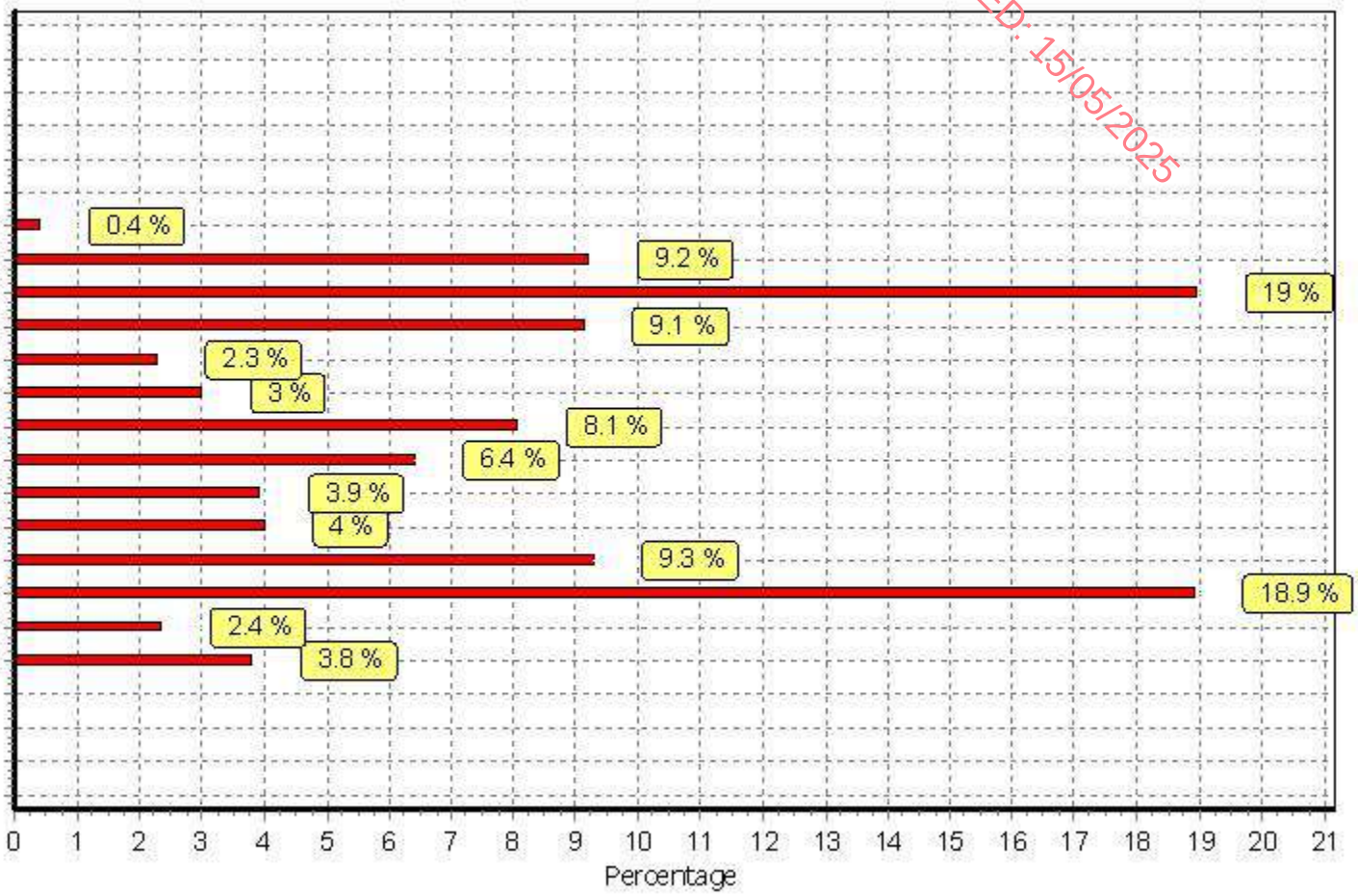
NRB Consulting Engineers Ltd 8 Leopardstown Business Centre, Ballyogan Avenue Dublin 18 Licence No: 160301

RECEIVED: 15/05/2025

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00	0.147	0.4
07:00-08:00	3.121	9.2
08:00-09:00	6.423	19.0
09:00-10:00	3.093	9.1
10:00-11:00	0.780	2.3
11:00-12:00	1.028	3.0
12:00-13:00	2.731	8.1
13:00-14:00	2.179	6.4
14:00-15:00	1.332	3.9
15:00-16:00	1.361	4.0
16:00-17:00	3.150	9.3
17:00-18:00	6.404	18.9
18:00-19:00	0.801	2.4
19:00-20:00	1.294	3.8
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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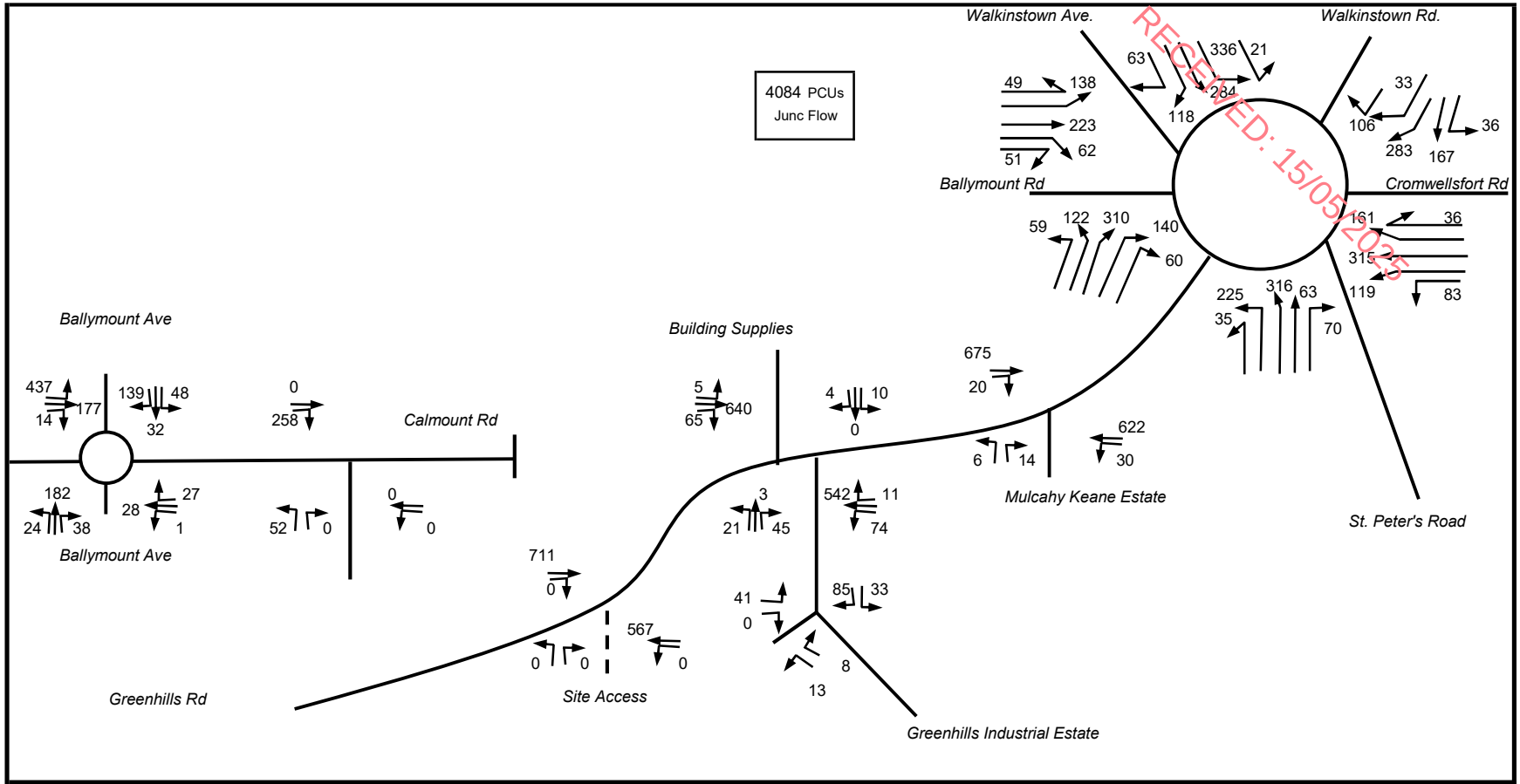
APPENDIX D

Existing Traffic Flows, Trip Distribution & Network Traffic Flow Diagrams

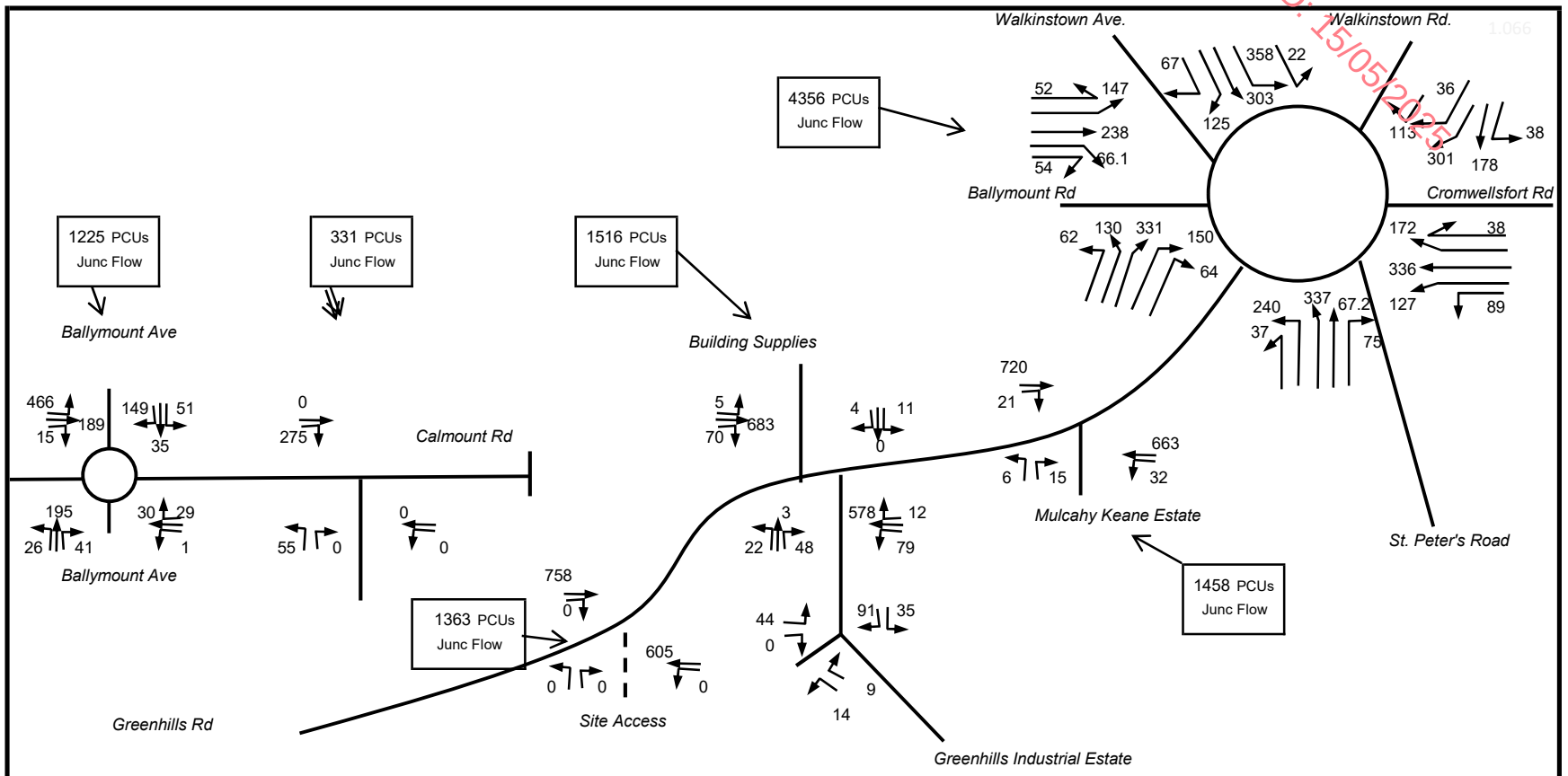


AM PEAK HR 8-9am

Existing As Surveyed 2022 Traffic (PCUs) - WITHOUT NEW DEVELOPMENT (Refer Appendix B).

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 (Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)	2022 to 2026 = 1.066

RECEIVED: 15/05/2025



AM PEAK HR 8-9am

Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs)

W/O ANY DEVELOPMENT

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 (Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)	2026 to 2041 = 1.128

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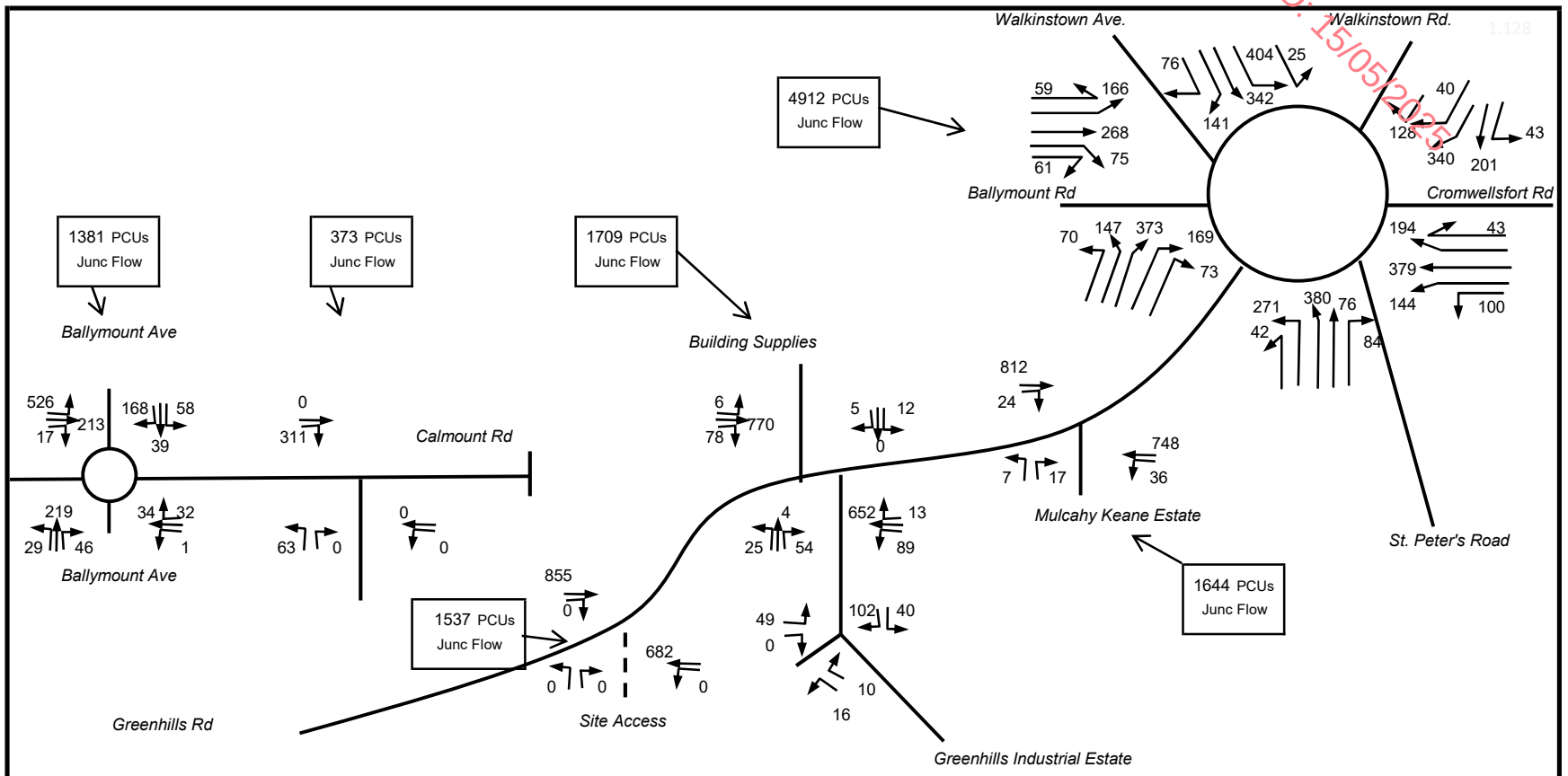


AM PEAK HR 8-9am

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs)

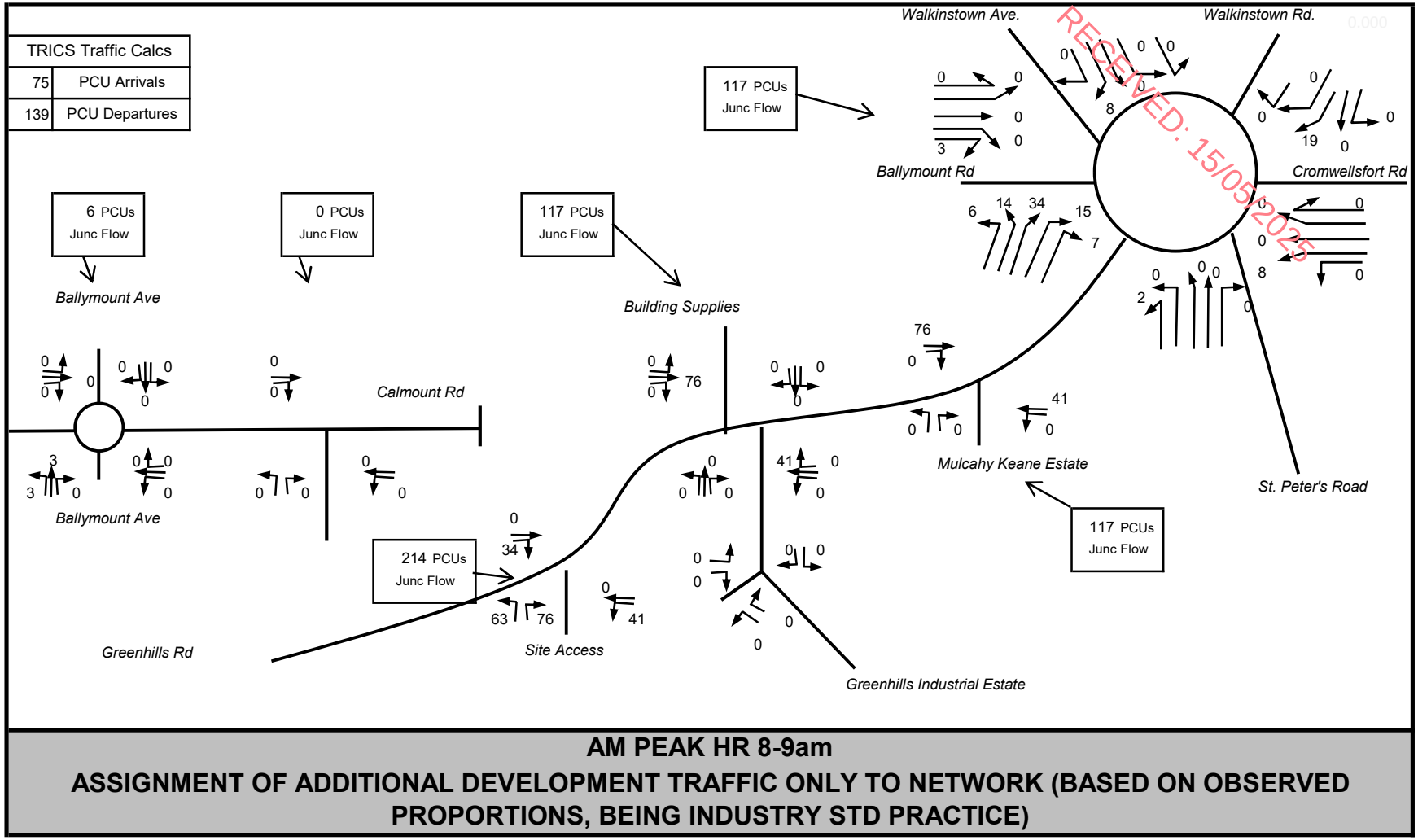
W/O ANY DEVELOPMENT

RECEIVED: 15/05/2025

TRICS ASSESSMENT OF WORST-CASE TRAFFIC GENERATED BY APPROX DEVELOPMENT (PCUs) (Refer Appendix C)

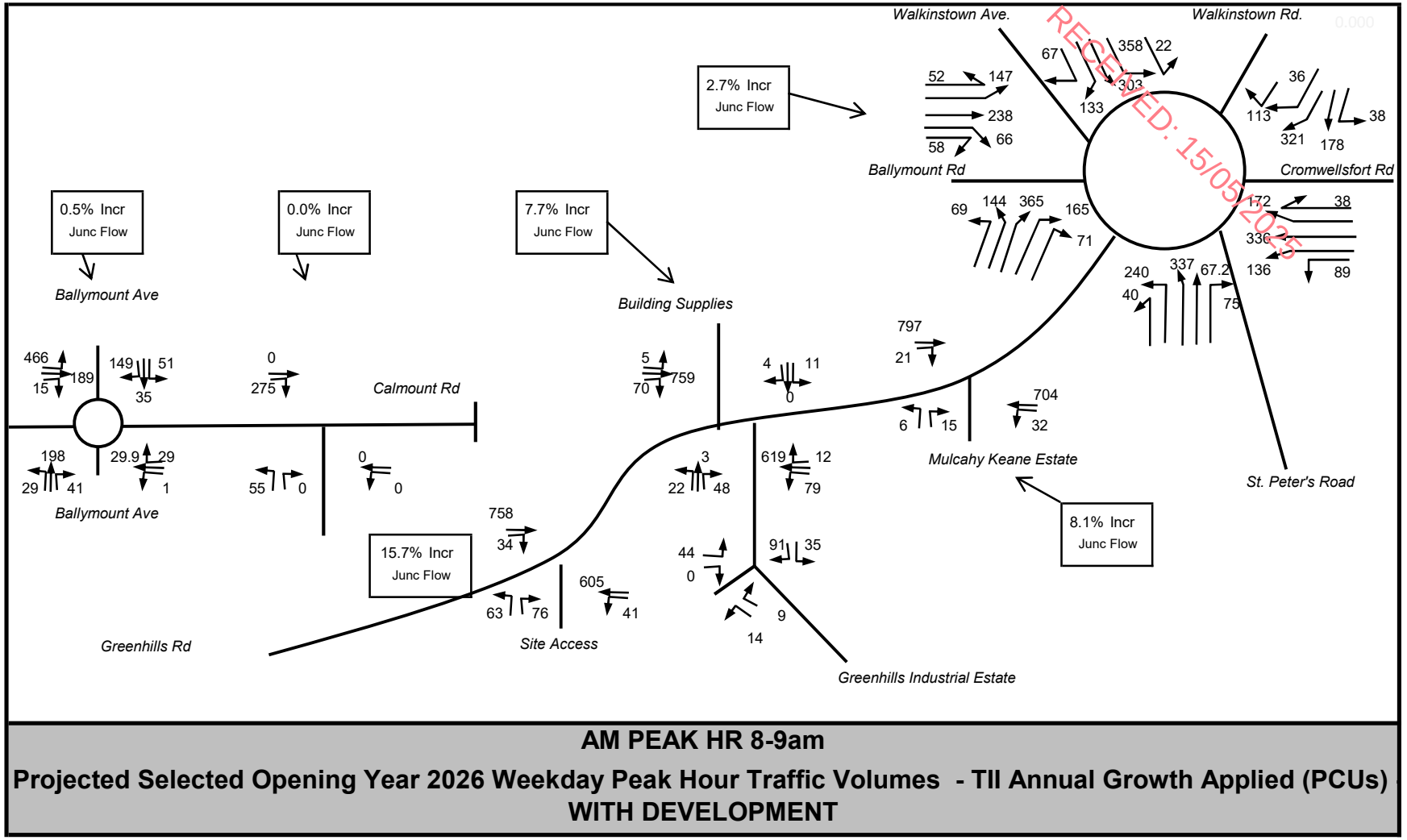
588 per unit	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated	
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	0.069	41	0.210	123	163	**588 Private Apartments**
Weekday PM Peak Hr 5-6	0.168	99	0.091	54	152	
24 Hours	1.121	659	1.216	715	1374	
1814 Commercial	**Arrivals (PCUs)**		**Departures (PCUs)**		**Total 2-Way Vehicular Traffic Generated**	
Network Hour	**per unit**	**Dev**	**per unit**	**Dev**		
Weekday AM Peak Hr 8-9	1.006	18	0.153	3	21	**1,815sqm Commerical**
Weekday PM Peak Hr 5-6	0.102	2	0.892	16	18	
24 Hours	3.825	69	3.789	69	138	
443 Creche	**Arrivals (PCUs)**		**Departures (PCUs)**		**Total 2-Way Vehicular Traffic Generated**	
Network Hour	**per unit**	**Dev**	**per unit**	**Dev**		
Weekday AM Peak Hr 8-9	3.559	16	2.864	13	28	**433sqm Creche**
Weekday PM Peak Hr 5-6	2.807	12	3.597	16	28	
24 Hours	16.539	73	17.305	77	150	

Total Scheme	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated	
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	75		139		214	**Total**
Weekday PM Peak Hr 5-6	113		86		199	
24 Hours	802		860		1662	



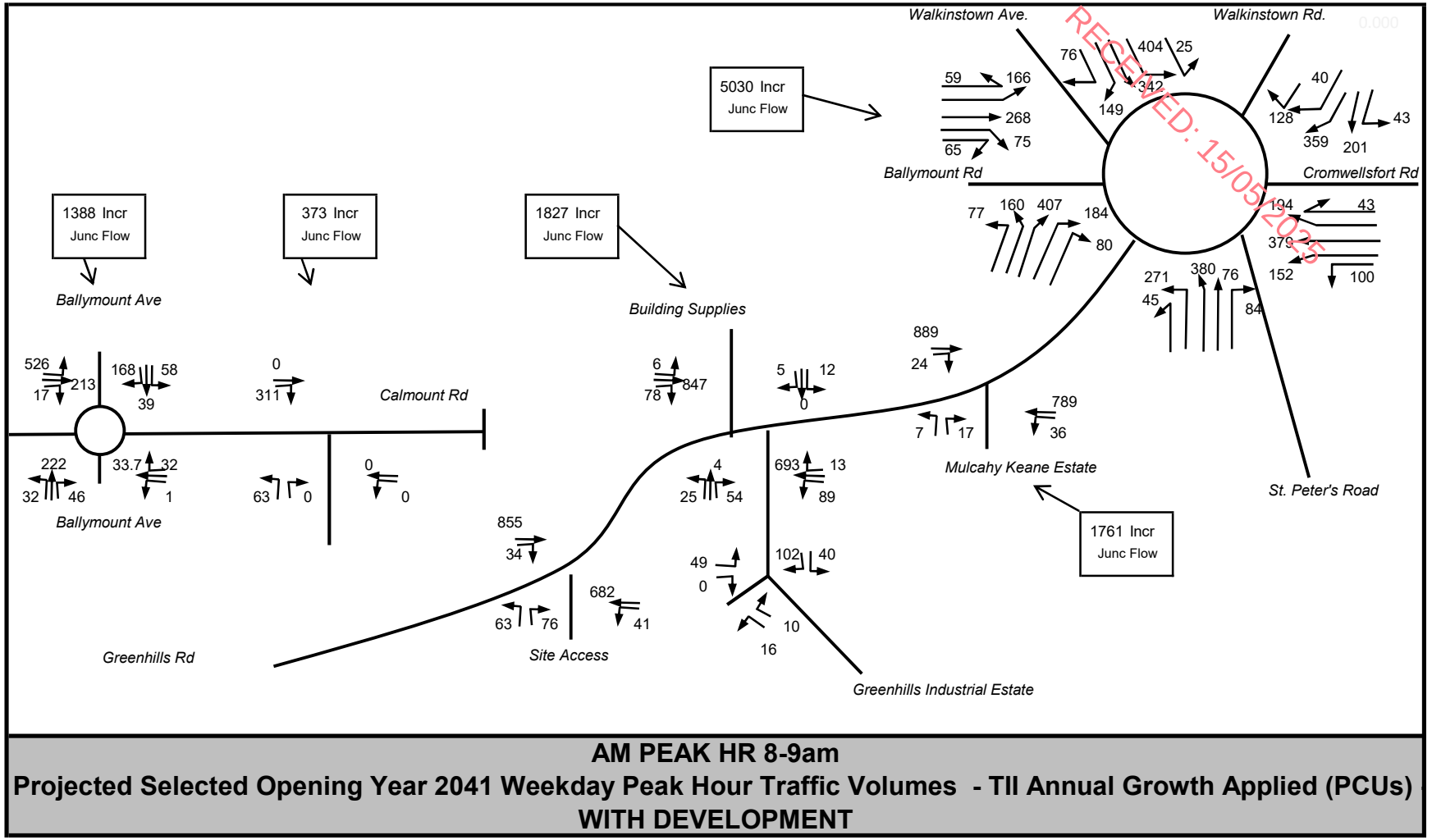
AM PEAK HR 8-9am

ASSIGNMENT OF ADDITIONAL DEVELOPMENT TRAFFIC ONLY TO NETWORK (BASED ON OBSERVED PROPORTIONS, BEING INDUSTRY STD PRACTICE)



AM PEAK HR 8-9am

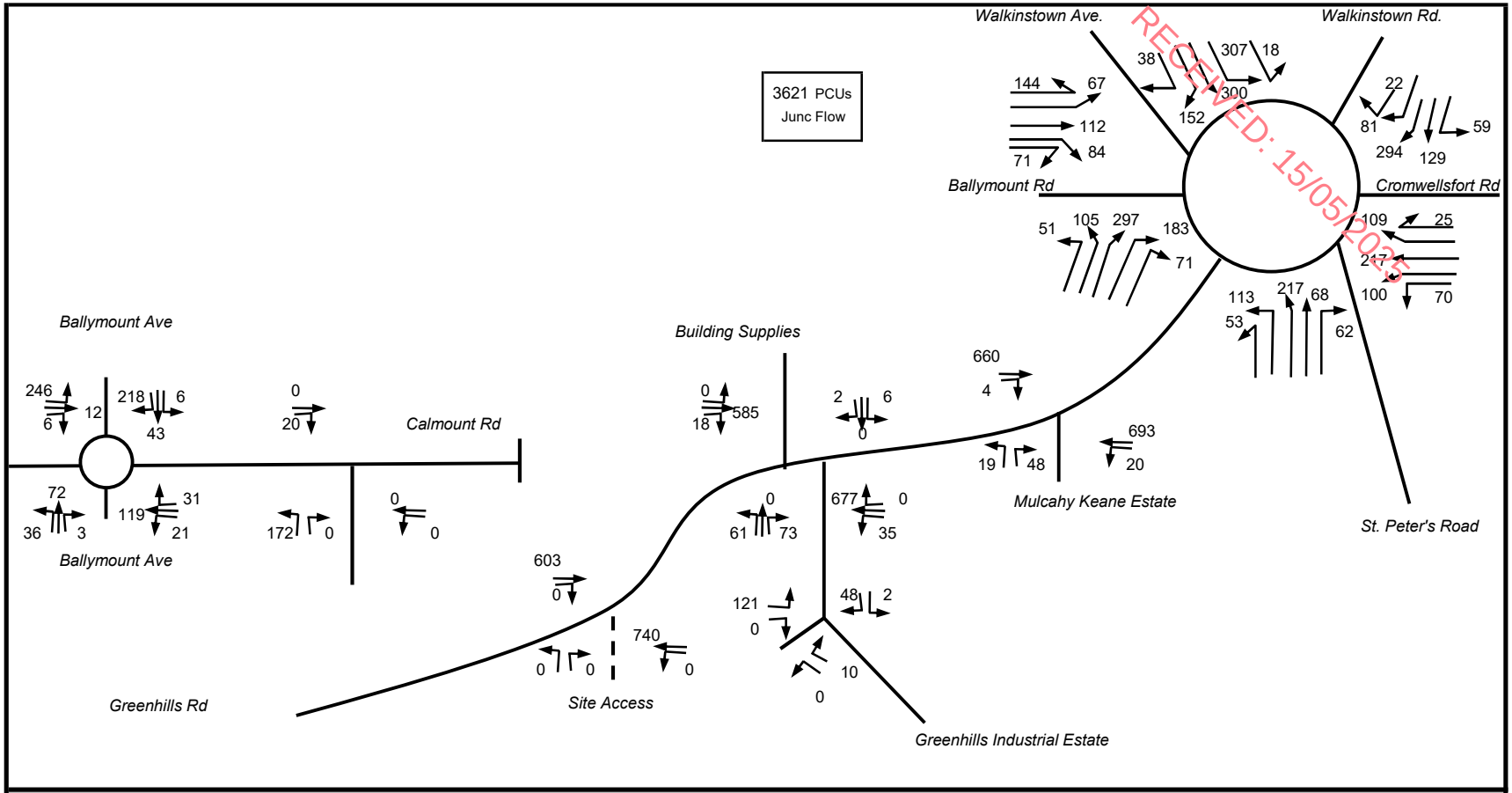
Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs)
WITH DEVELOPMENT



AM PEAK HR 8-9am

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs)

WITH DEVELOPMENT



PM PEAK HR 5-6pm

Existing As Surveyed 2022 Traffic (PCUs) - WITHOUT NEW DEVELOPMENT (Refer Appendix B).

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 (Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)

2022 to 2026 = 1.066

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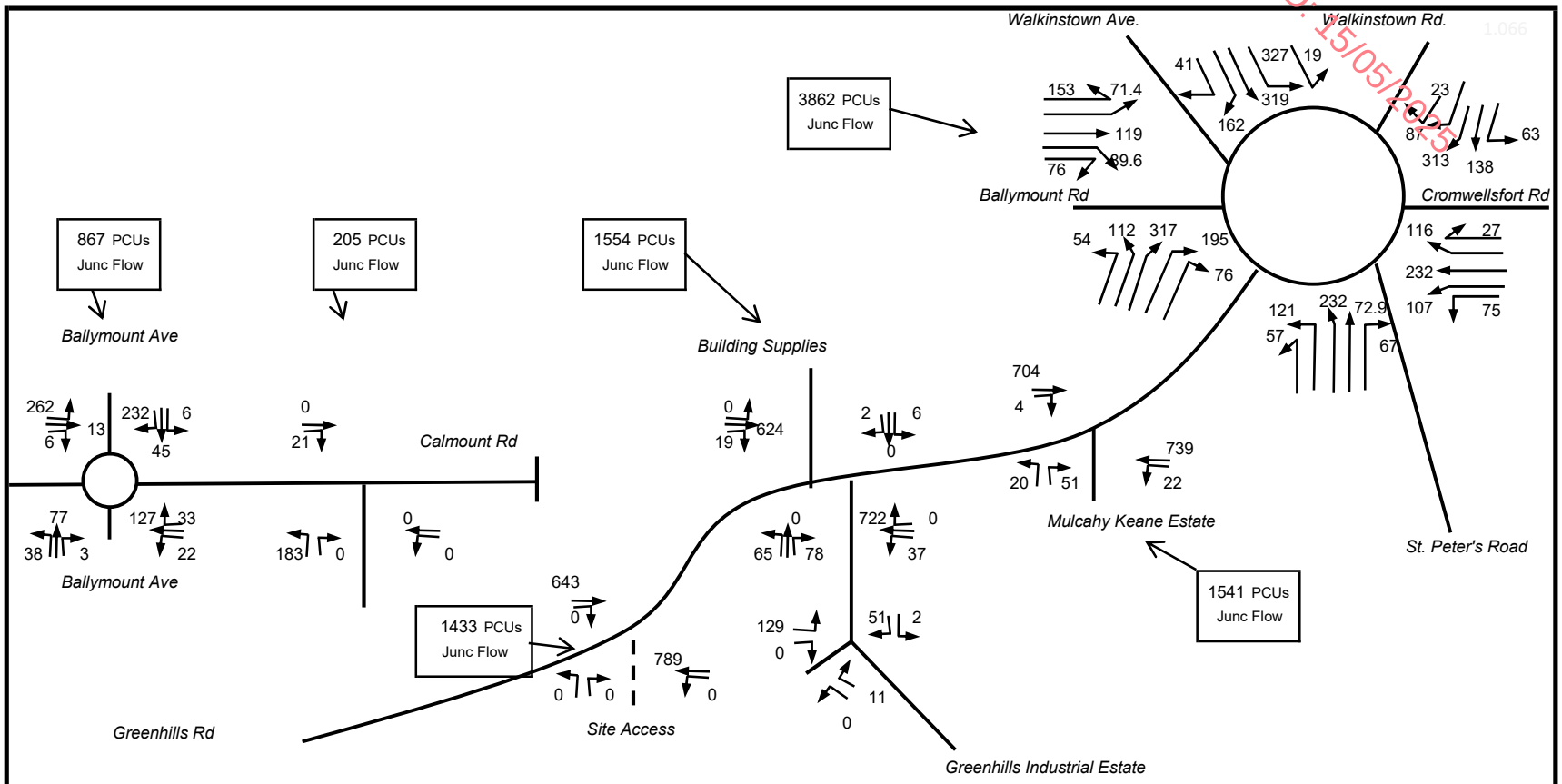

PM PEAK HR 5-6pm

Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3 (Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)	2026 to 2041 = 1.128

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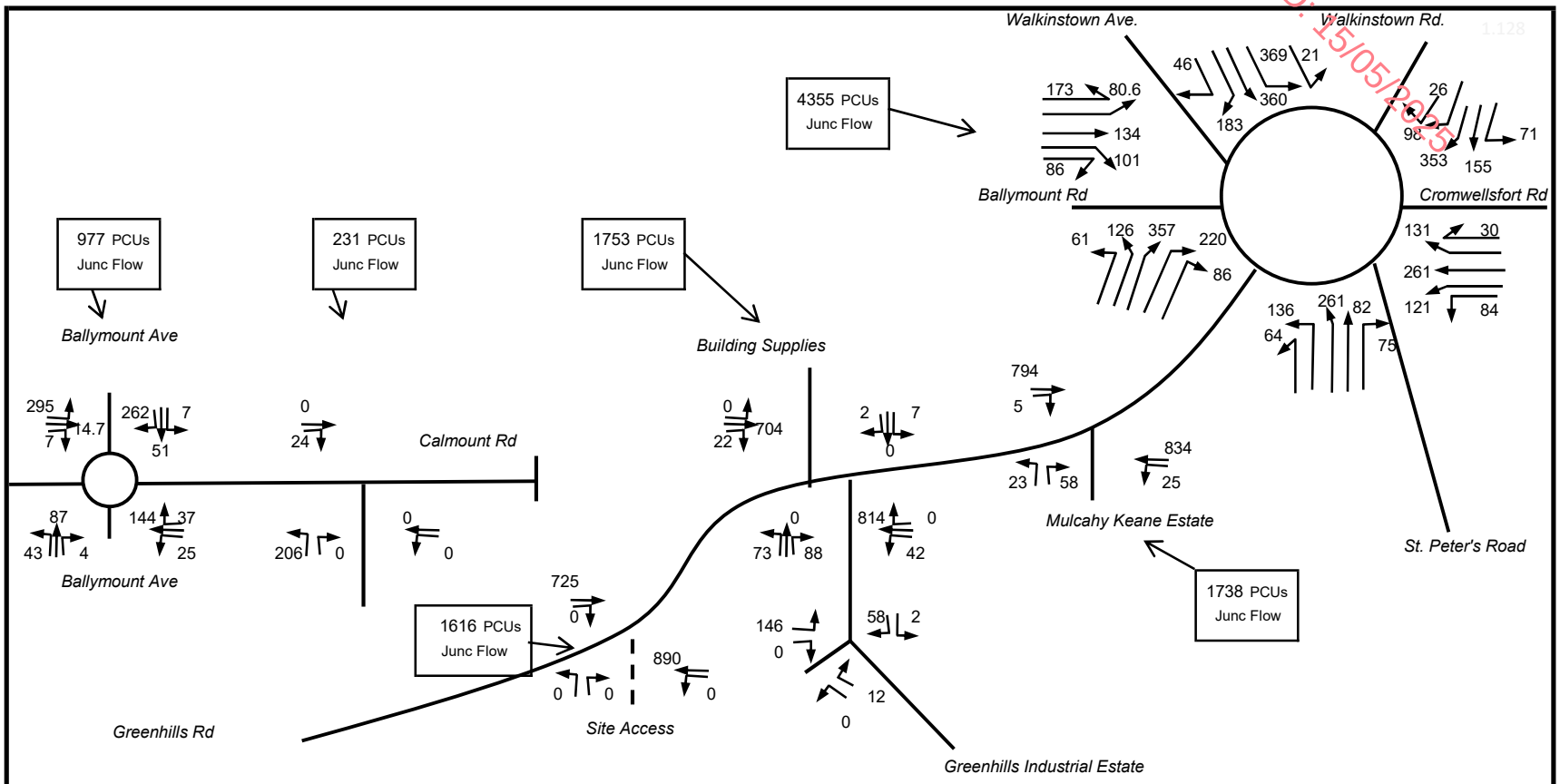

PM PEAK HR 5-6pm

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

RECEIVED: 15/05/2025

TRICS ASSESSMENT OF WORST-CASE TRAFFIC GENERATED BY APPROX DEVELOPMENT (PCUs) (Refer Appendix C)

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Network Hour	**per unit**	**Dev**	**per unit**	**Dev**		
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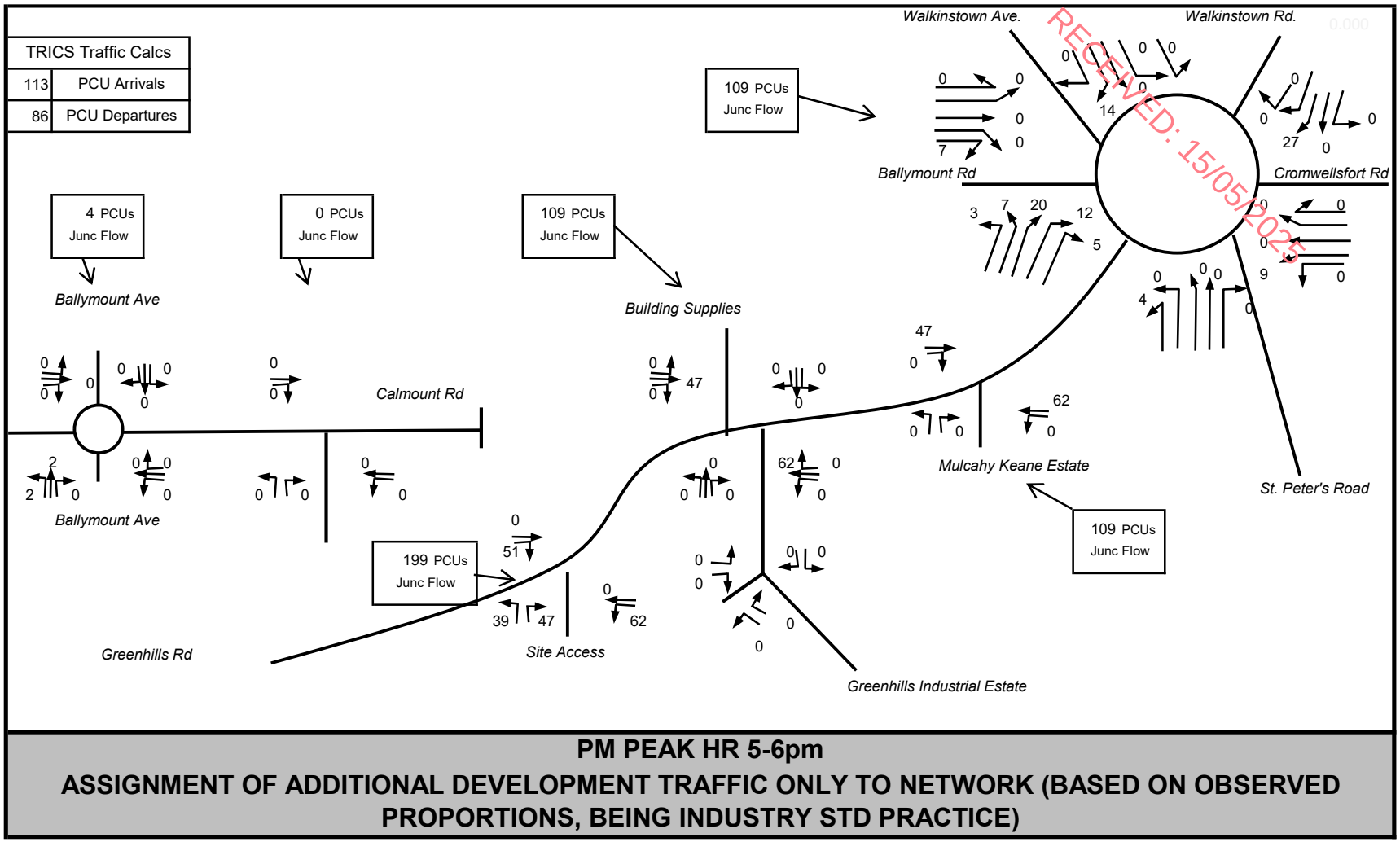
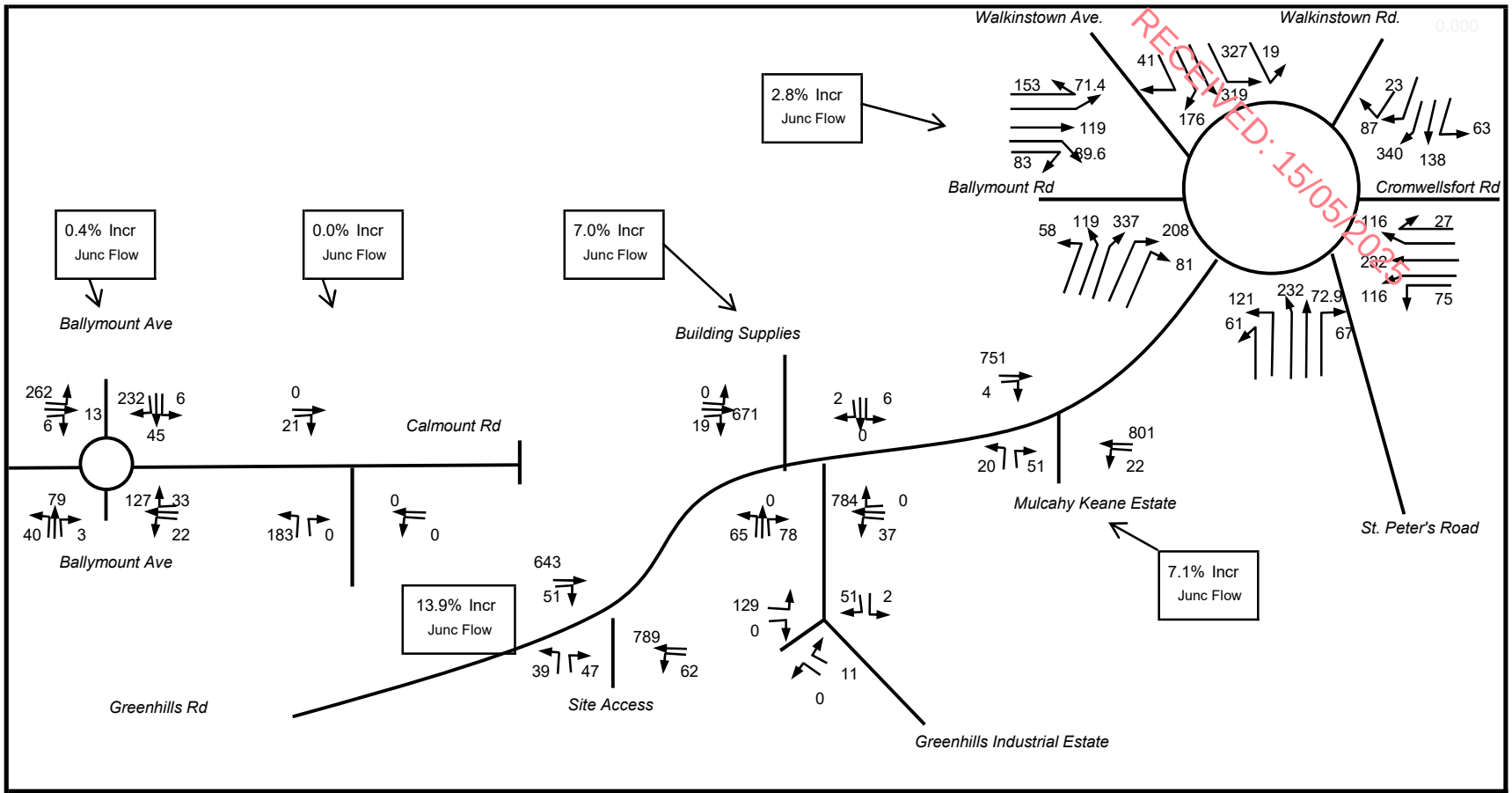
Weekday PM Peak Hr 5-6	2.807	12	3.597	16	28	
24 Hours	16.539	73	17.305	77	150	

Total Scheme	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated	
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	75		139		214	**Total**
Weekday PM Peak Hr 5-6	113		86		199	
24 Hours	802		860		1662	



PM PEAK HR 5-6pm

ASSIGNMENT OF ADDITIONAL DEVELOPMENT TRAFFIC ONLY TO NETWORK (BASED ON OBSERVED PROPORTIONS, BEING INDUSTRY STD PRACTICE)



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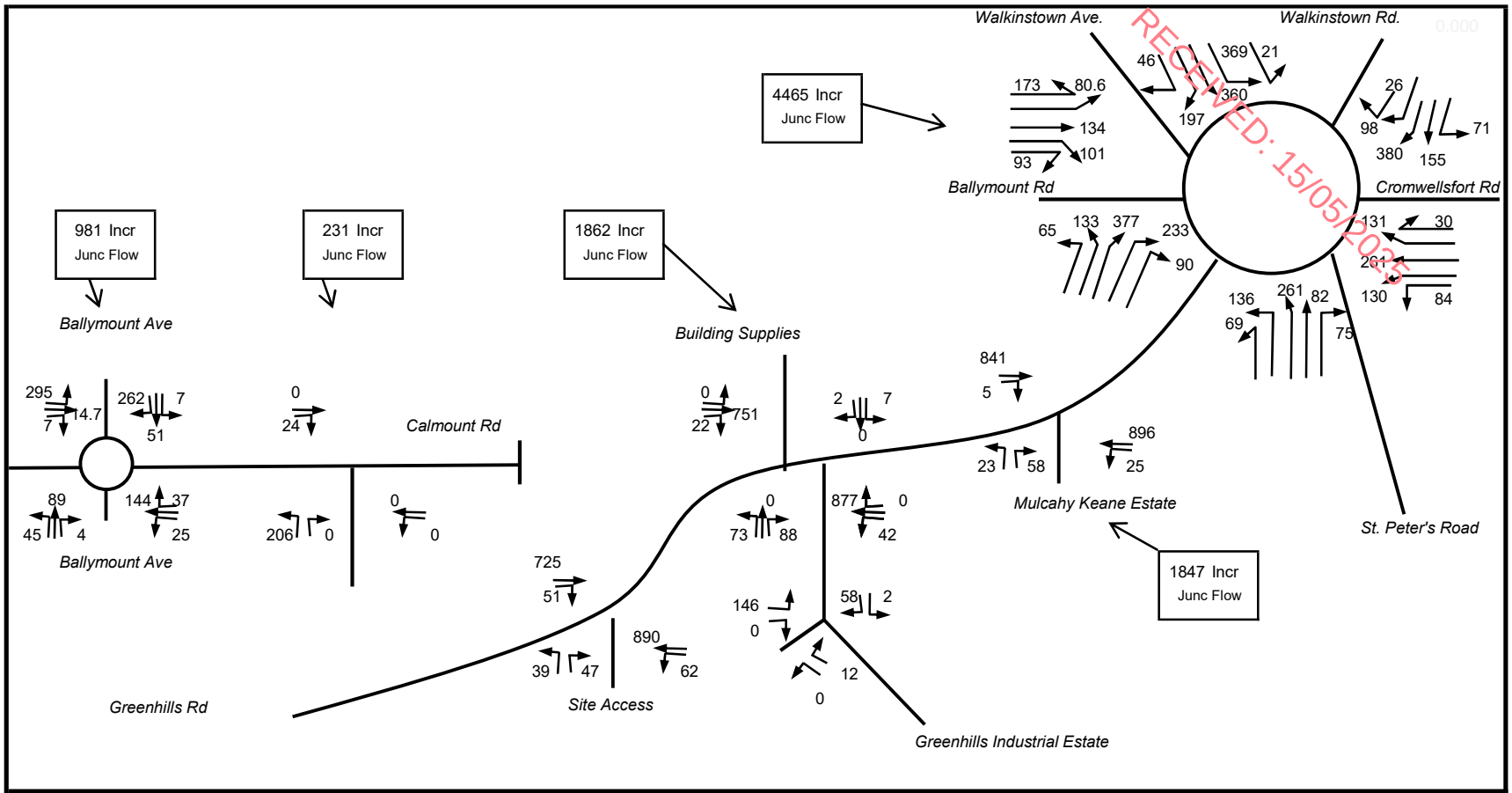


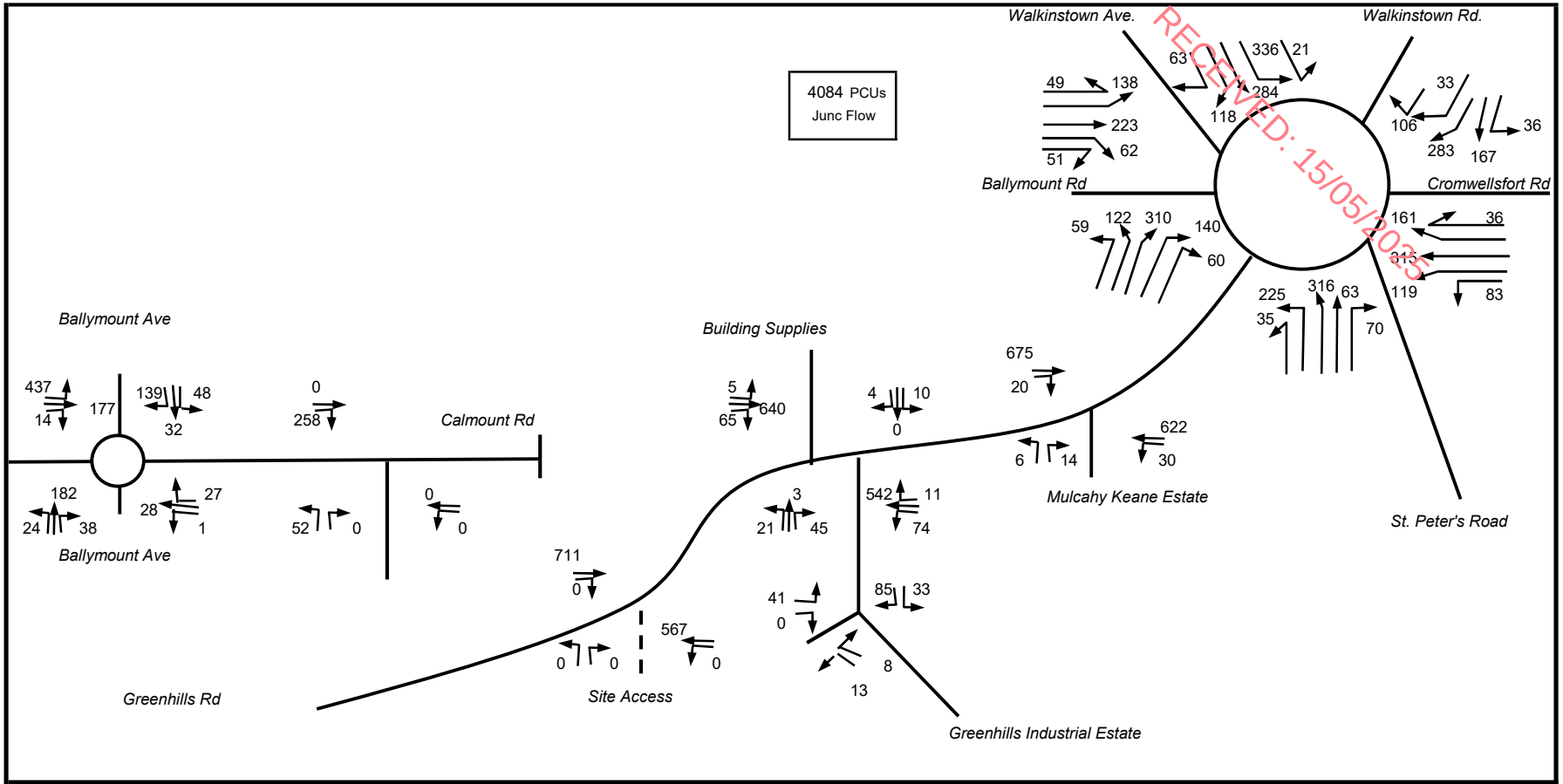
PM PEAK HR 5-6pm

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - WITH DEVELOPMENT

APPENDIX E

RECEIVED: 15/05/2025

Predicted Future Traffic Flows, Trip Distribution & Network Traffic Flow Diagrams

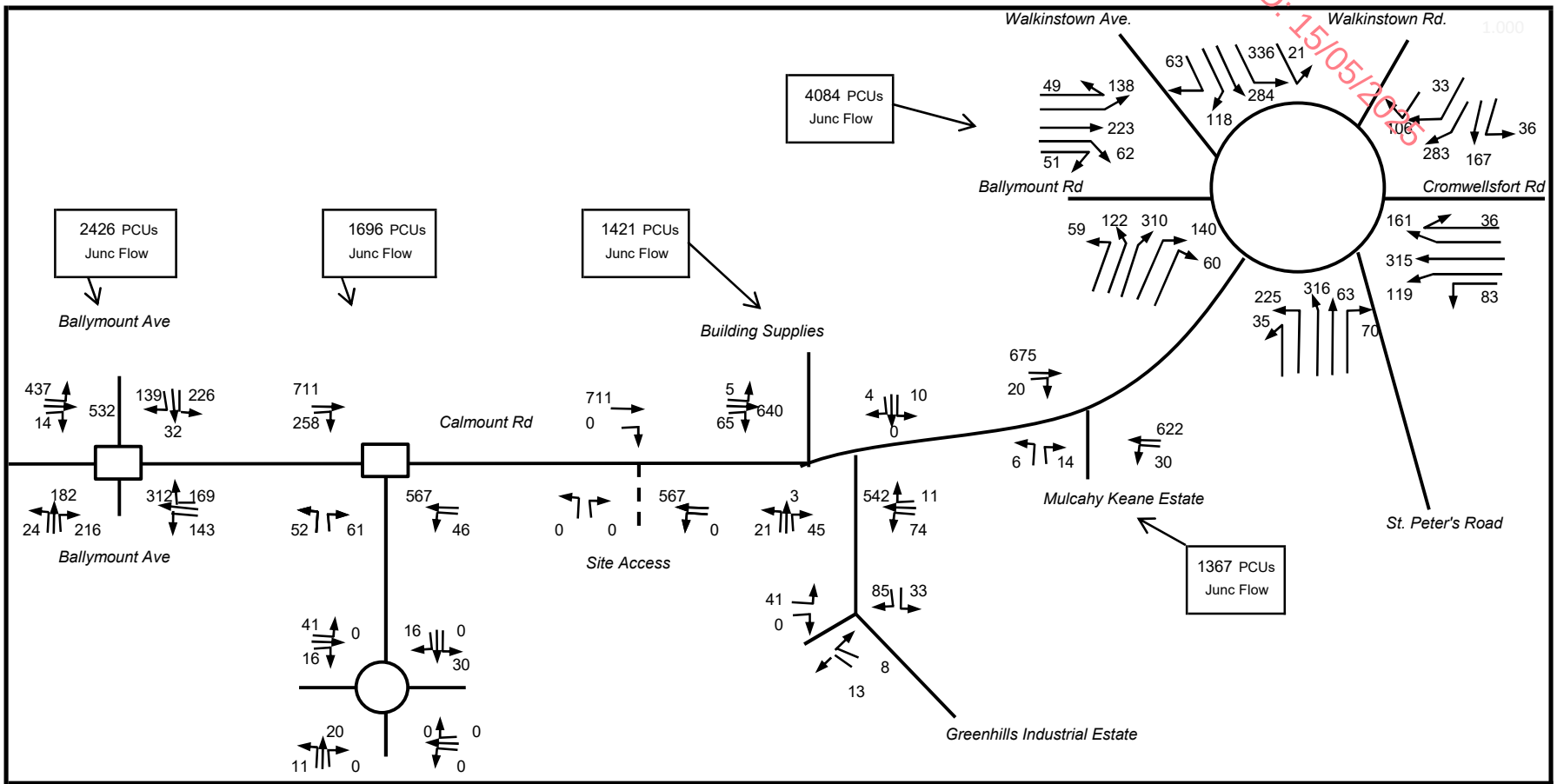


AM PEAK HR 8-9am

Existing As Surveyed 2022 Traffic (PCUs) - WITHOUT NEW DEVELOPMENT (Refer Appendix B).

With BusConnects - Redistribution of Traffic from Greenhill Roads to Calmount Road

RECEIVED: 15/05/2025



AM PEAK HR 8-9am

Redistribution of Traffic from Greenhill Roads to Calmount Road

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3
(Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)

2022 to 2026 = 1.066

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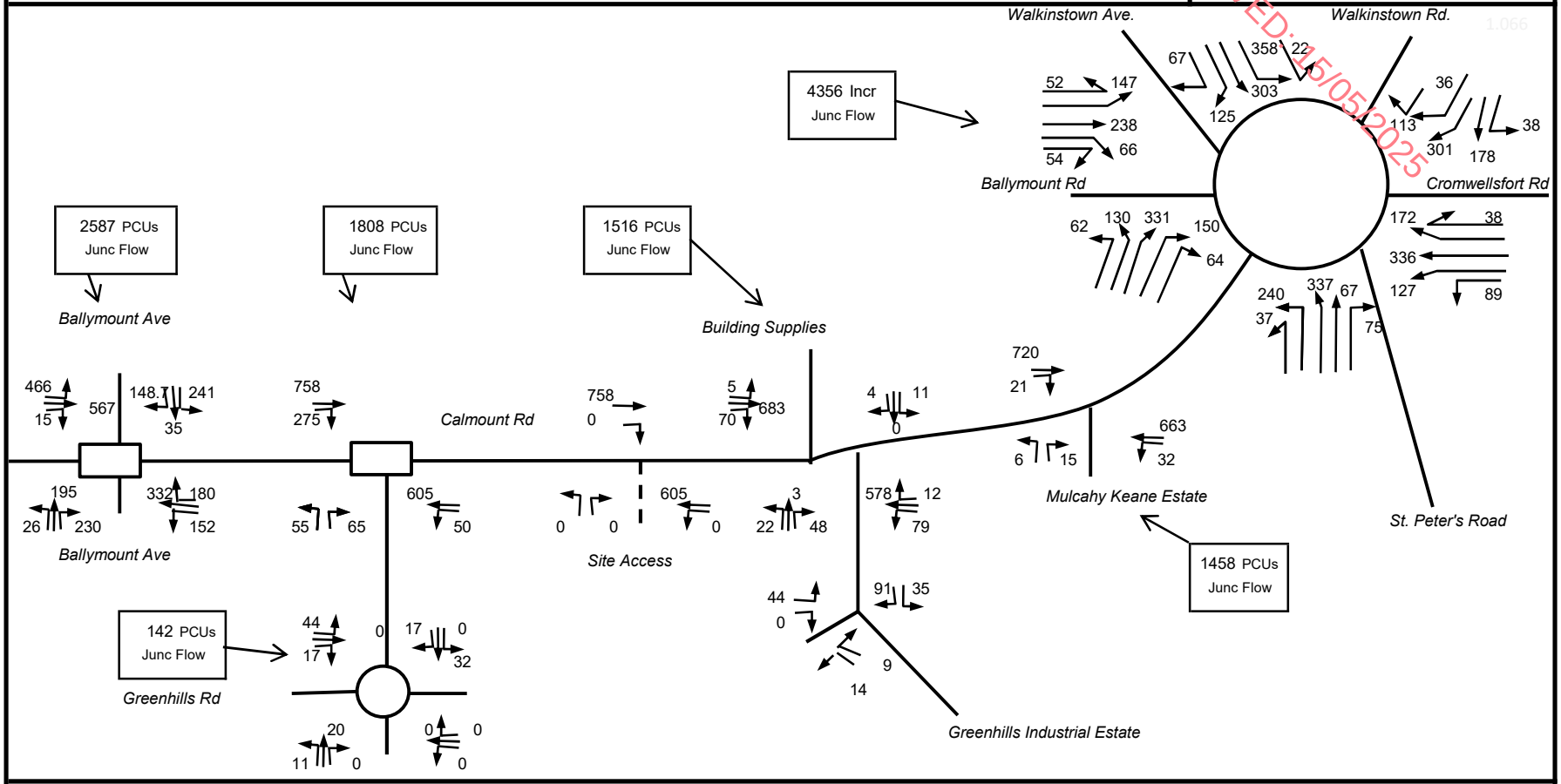

AM PEAK HR 8-9am

Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3
(Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors (Dublin Metropolitan Area)

2022 to 2041 = 1.128

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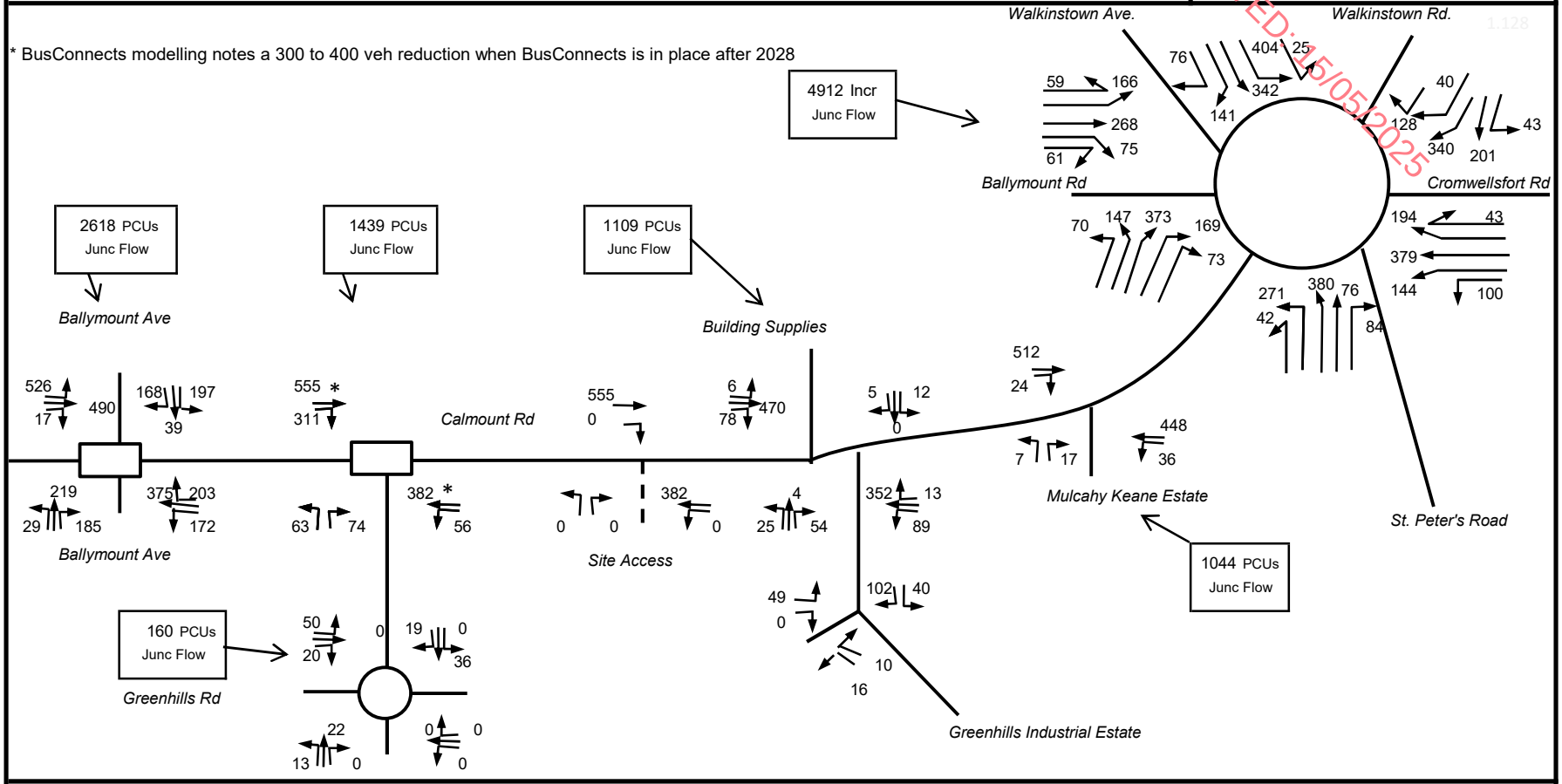

AM PEAK HR 8-9am

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

RECEIVED: 15/05/2025

TRICS ASSESSMENT OF WORST-CASE TRAFFIC GENERATED BY APPROX DEVELOPMENT (PCUs) (Refer Appendix C)

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1814 Commerical	**Arrivals (PCUs)**		**Departures (PCUs)**		**Total 2-Way Vehicular Traffic Generated**	
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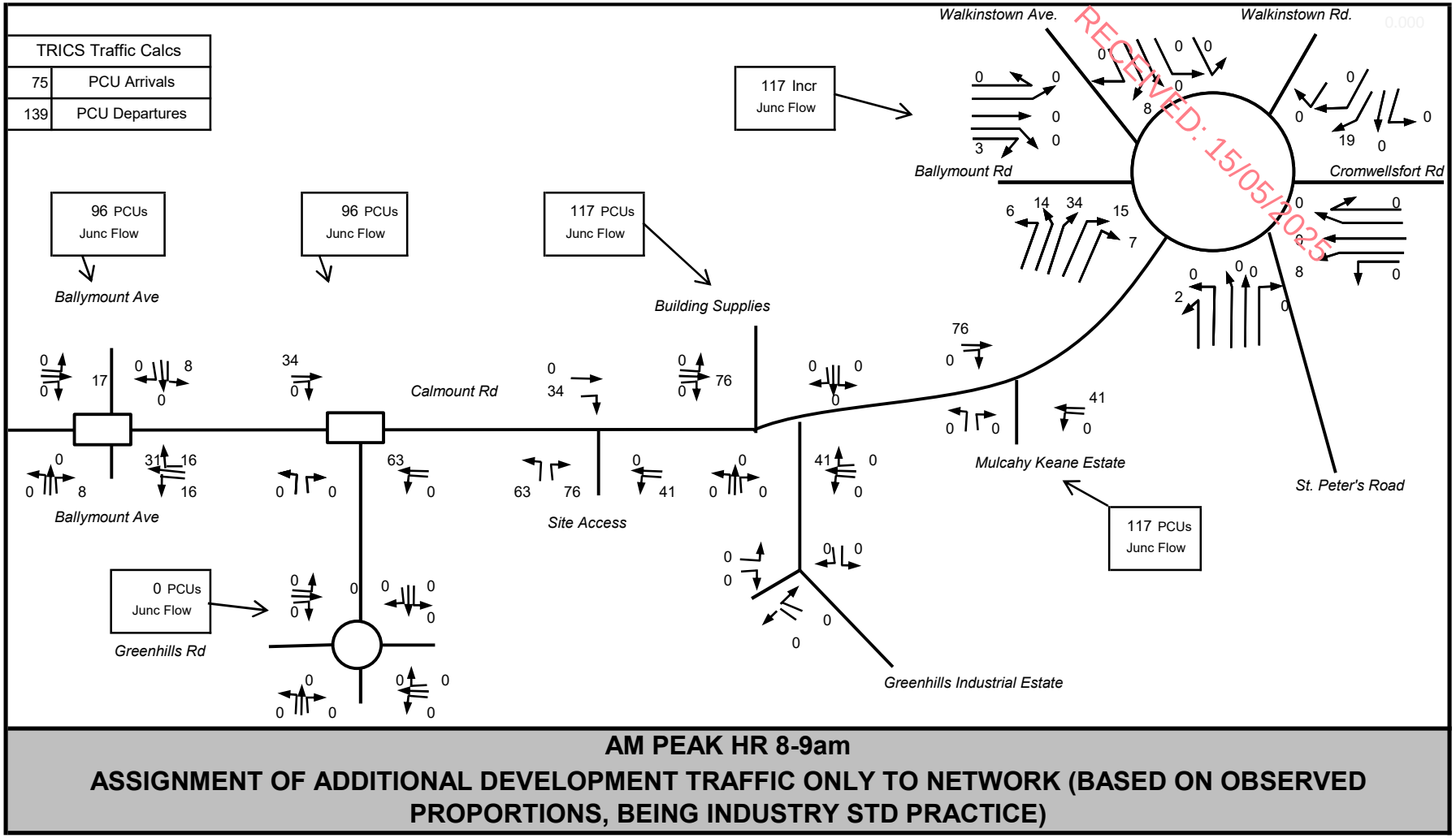
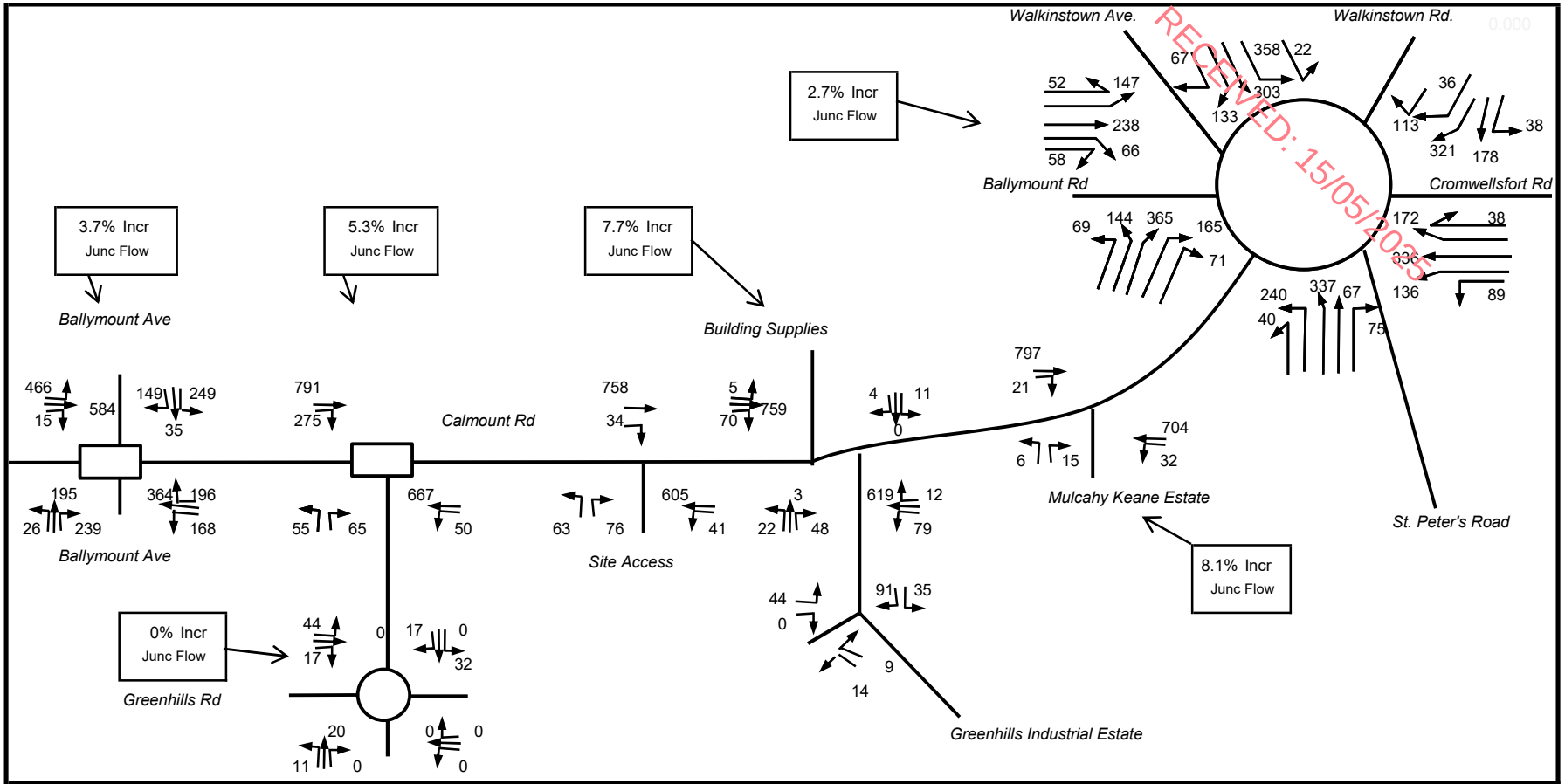
24 Hours	16.539	73	17.305	77	150	

Total Scheme	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated	
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	**75**		**139**		**214**	**Total**
Weekday PM Peak Hr 5-6	113		86		199	
24 Hours	802		860		1662	



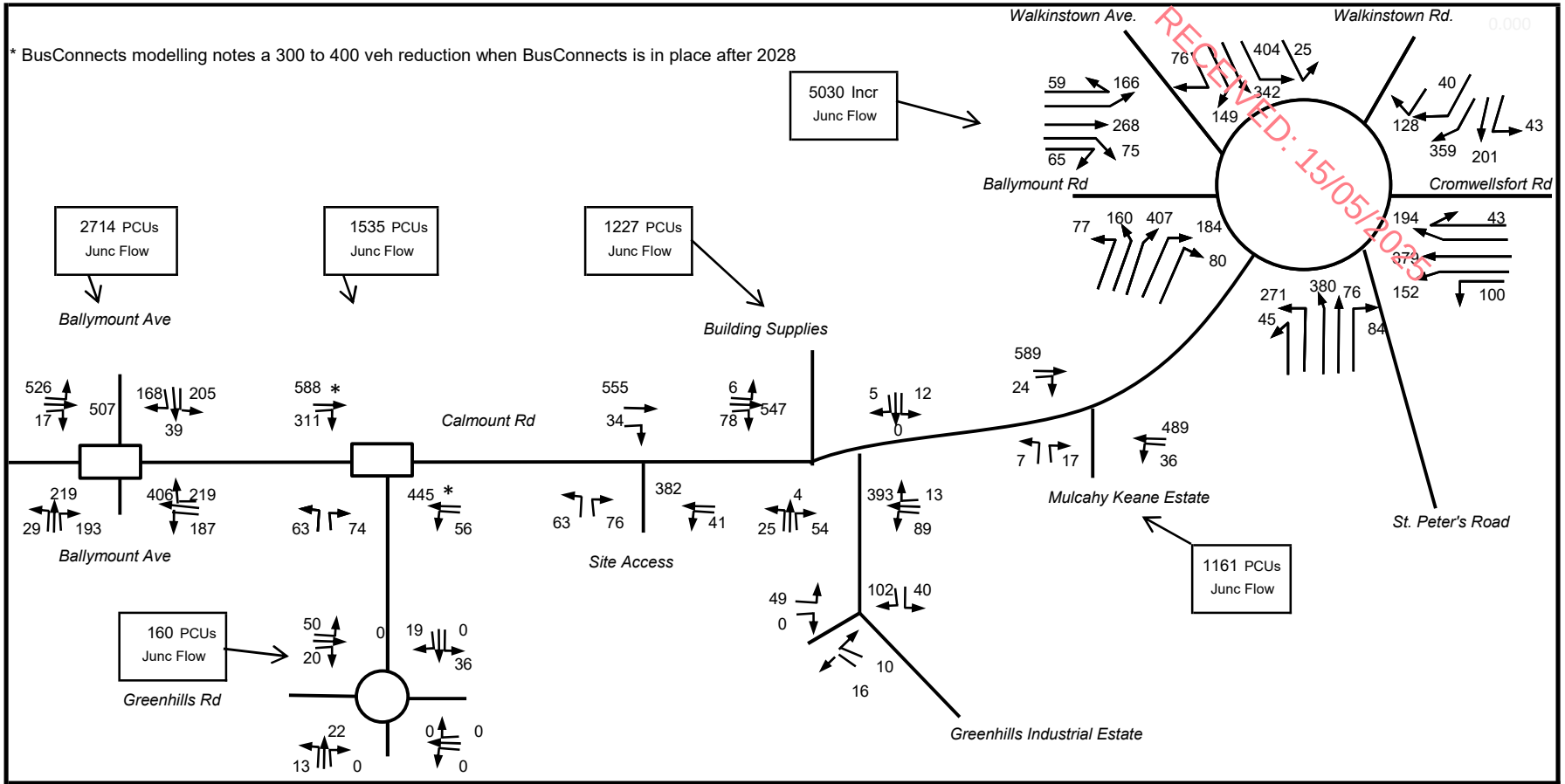
AM PEAK HR 8-9am

ASSIGNMENT OF ADDITIONAL DEVELOPMENT TRAFFIC ONLY TO NETWORK (BASED ON OBSERVED PROPORTIONS, BEING INDUSTRY STD PRACTICE)



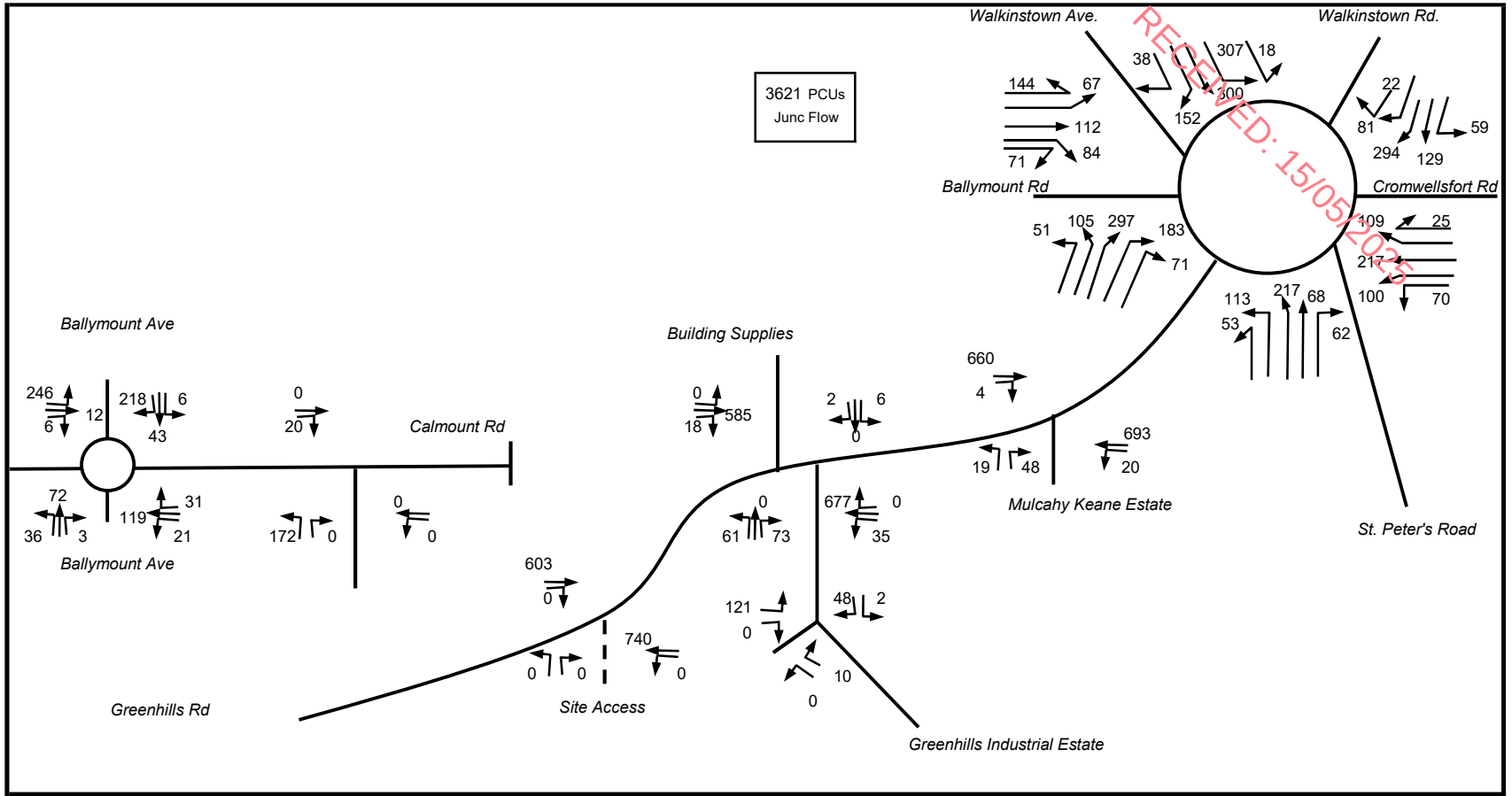
AM PEAK HR 8-9am

Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - WITH DEVELOPMENT



AM PEAK HR 8-9am

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - WITH DEVELOPMENT

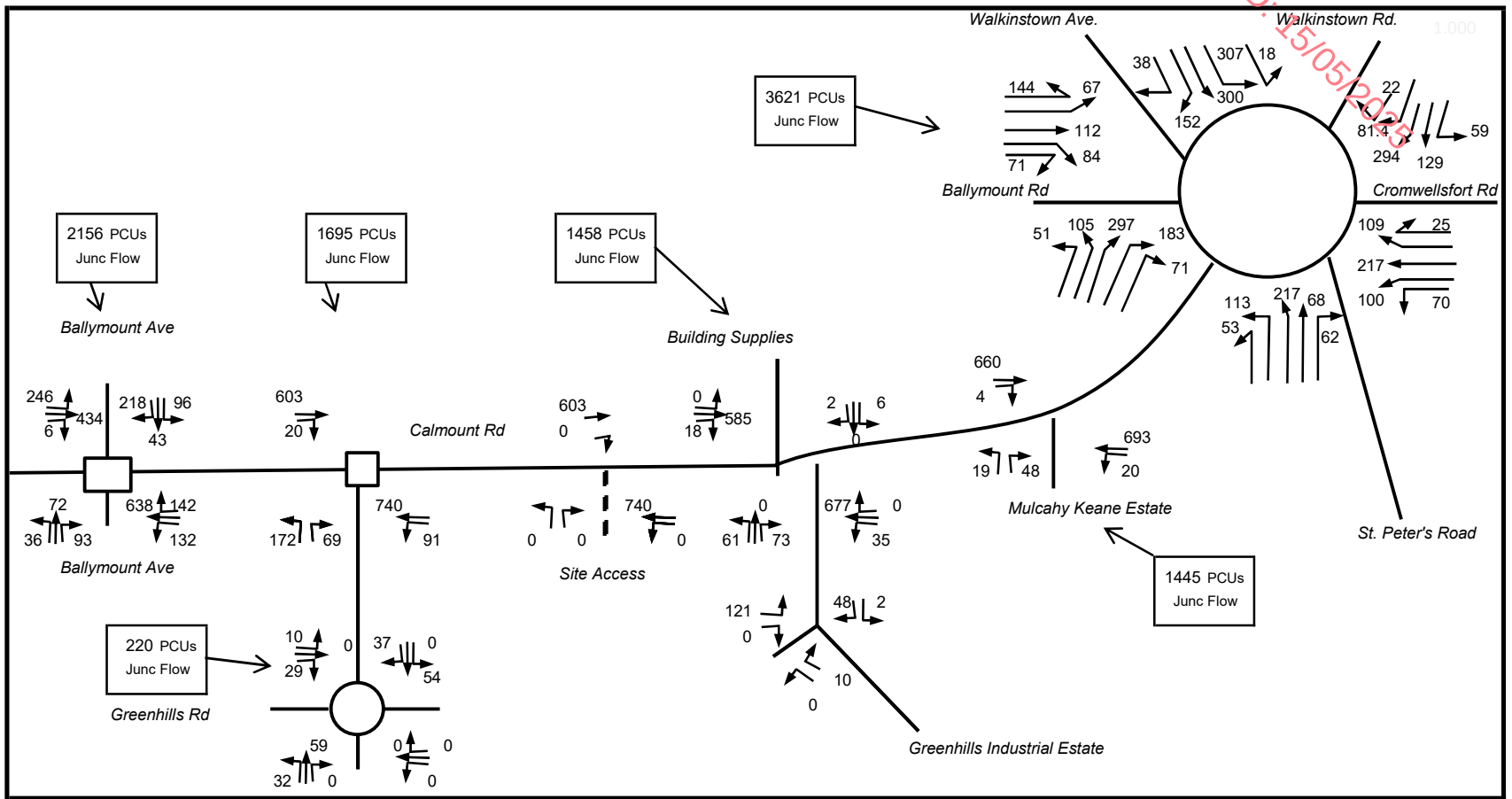


PM PEAK HR 5-6pm

Existing As Surveyed 2022 Traffic (PCUs) - WITHOUT NEW DEVELOPMENT (Refer Appendix B).

With BusConnects - Redistribution of Traffic from Greenhill Roads to Calmount Road

RECEIVED: 15/05/2025



PM PEAK HR 5-6pm

Redistribution of Traffic from Greenhill Roads to Calmount Road

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3
(Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors
(Dublin Metropolitan Area)

2022 to 2026 = 1.066

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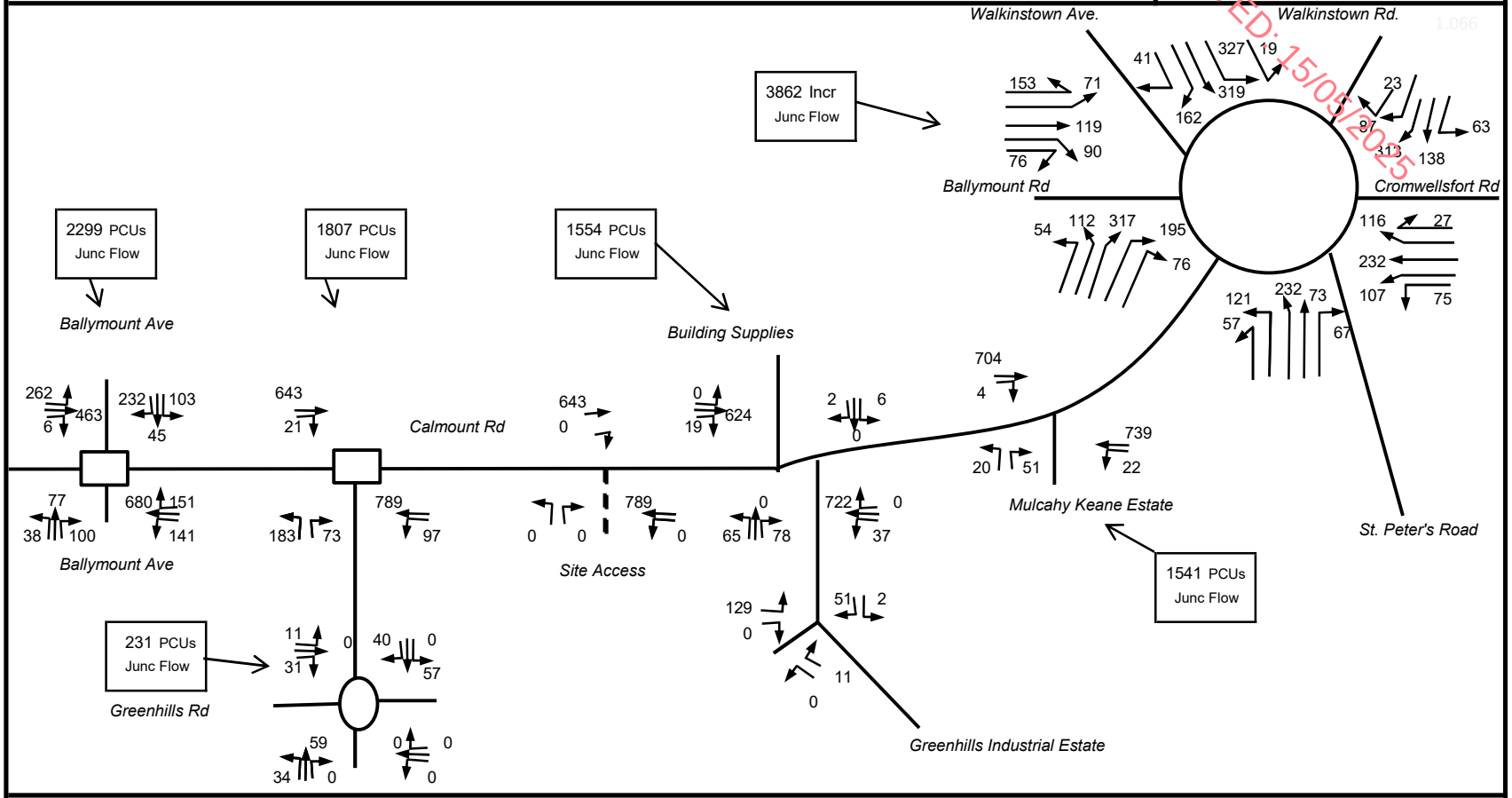

PM PEAK HR 5-6pm
Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3
(Travel Demand Projections 2021, Table 6.1: Central Growth Rates: Link-Based Growth Factors
(Dublin Metropolitan Area)

2026 to 2041 = 1.128

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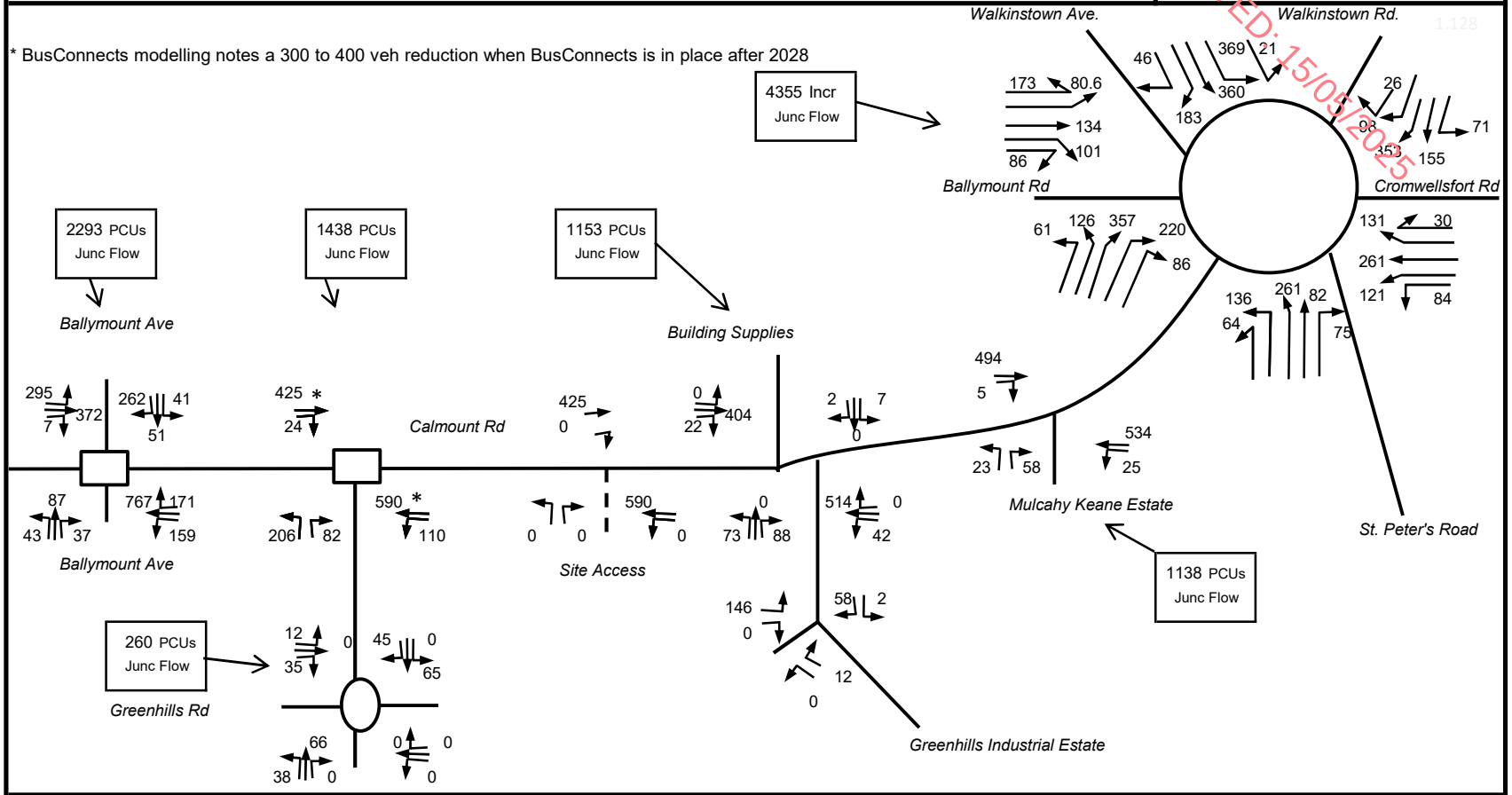

PM PEAK HR 5-6pm
Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - W/O ANY DEVELOPMENT

RECEIVED: 15/05/2025

TRICS ASSESSMENT OF WORST-CASE TRAFFIC GENERATED BY APPROX DEVELOPMENT (PCUs) (Refer Appendix C)

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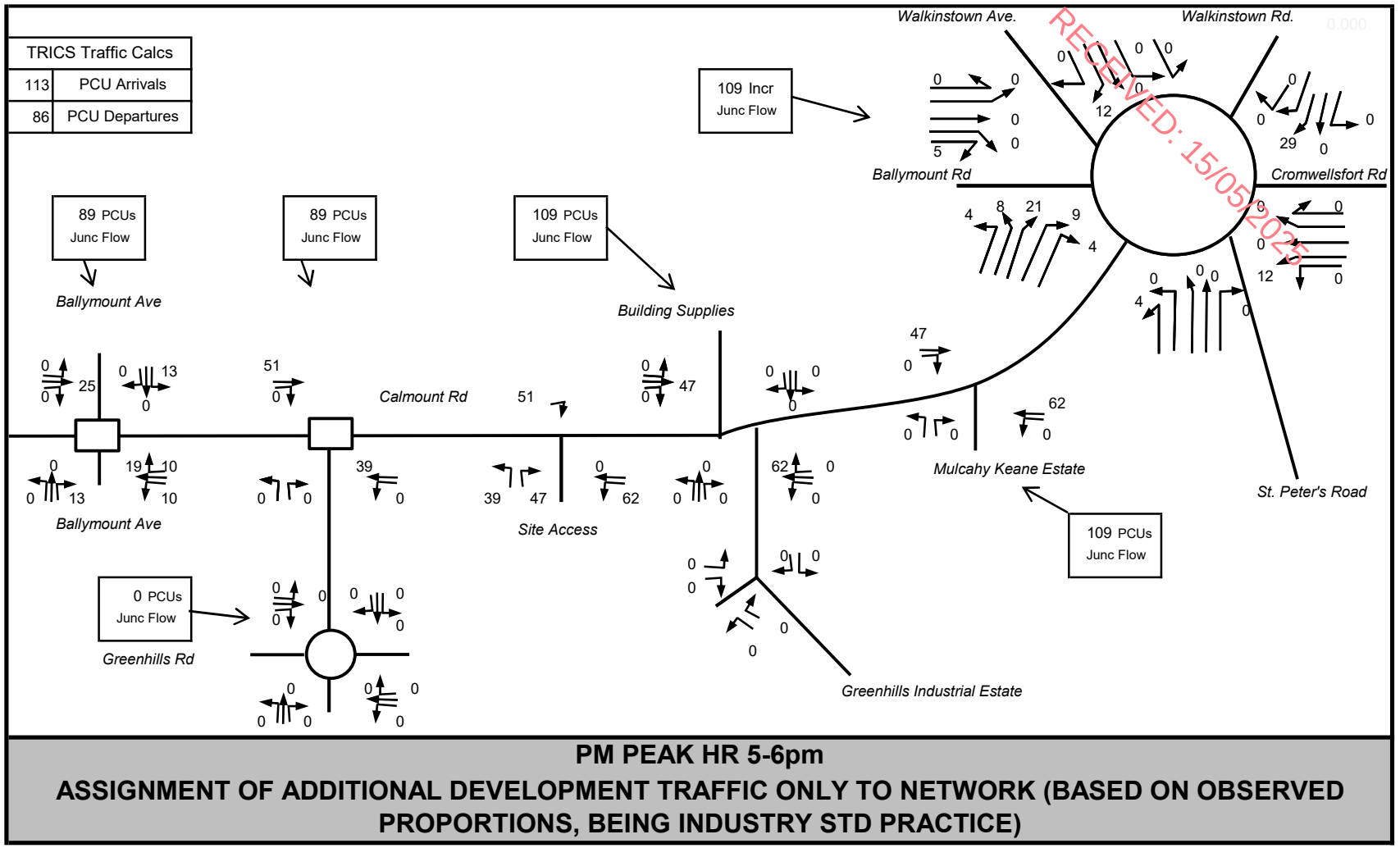
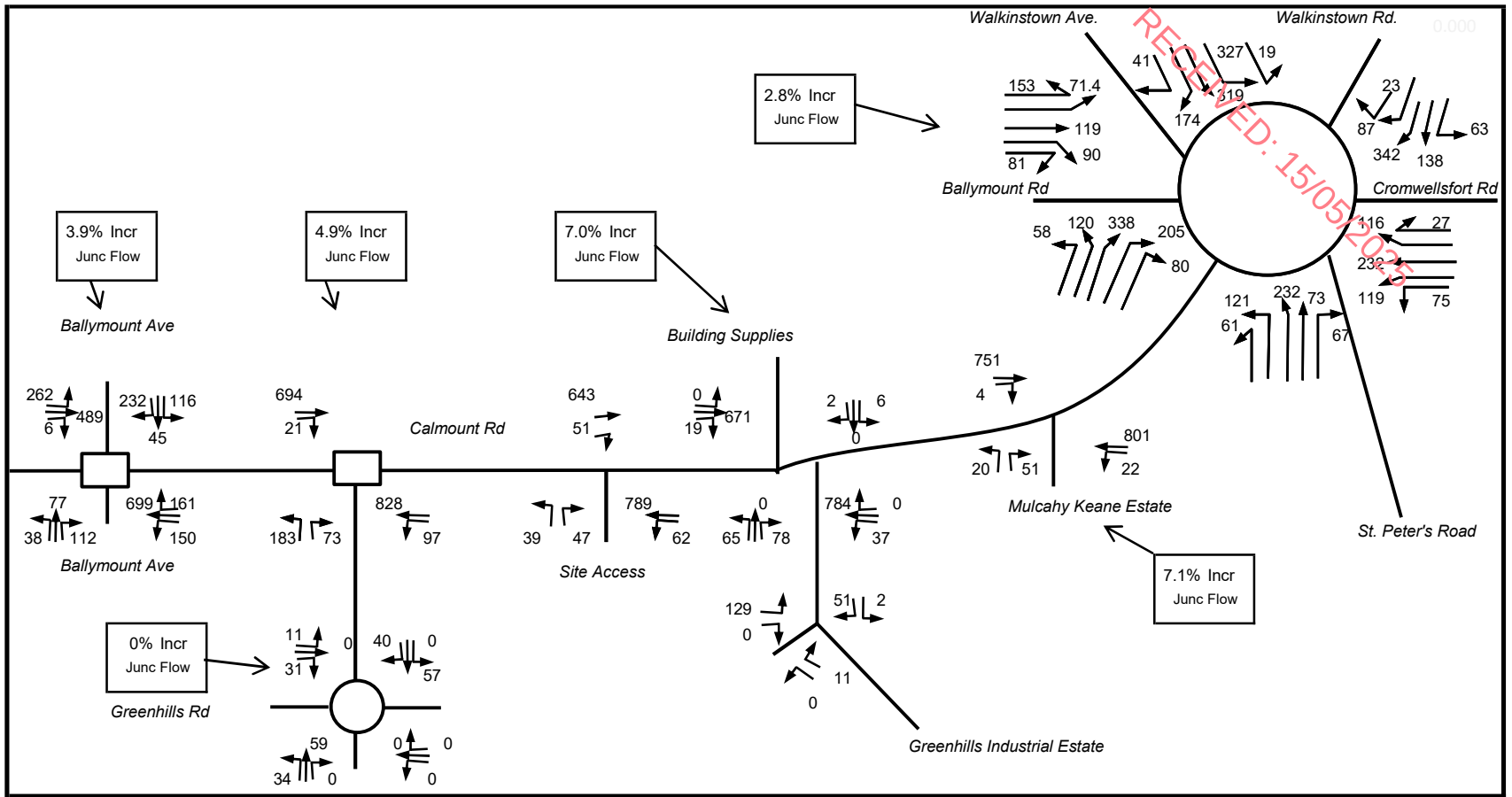
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	0.069	41	0.210	123	163	588 Private Apartments
Weekday PM Peak Hr 5-6	**0.168**	**99**	**0.091**	**54**	**152**	
24 Hours	1.121	659	1.216	715	1374	
1814 Commerical	**Arrivals (PCUs)**		**Departures (PCUs)**		**Total 2-Way Vehicular Traffic Generated**	
Network Hour	**per unit**	**Dev**	**per unit**	**Dev**		
Weekday AM Peak Hr 8-9	1.006	18	0.153	3	21	1,815sqm Commerical
Weekday PM Peak Hr 5-6	**0.102**	**2**	**0.892**	**16**	**18**	
24 Hours	3.825	69	3.789	69	138	
443 Creche	**Arrivals (PCUs)**		**Departures (PCUs)**		**Total 2-Way Vehicular Traffic Generated**	
Network Hour	**per unit**	**Dev**	**per unit**	**Dev**		
Weekday AM Peak Hr 8-9	3.559	16	2.864	13	28	433sqm Creche
Weekday PM Peak Hr 5-6	**2.807**	**12**	**3.597**	**16**	**28**	
24 Hours	16.539	73	17.305	77	150	

Total Scheme	Arrivals (PCUs)		Departures (PCUs)		Total 2-Way Vehicular Traffic Generated	
Network Hour	per unit	Dev	per unit	Dev		
Weekday AM Peak Hr 8-9	75		139		214	Total
Weekday PM Peak Hr 5-6	**113**		**86**		**199**	
24 Hours	802		860		1662	



PM PEAK HR 5-6pm

ASSIGNMENT OF ADDITIONAL DEVELOPMENT TRAFFIC ONLY TO NETWORK (BASED ON OBSERVED PROPORTIONS, BEING INDUSTRY STD PRACTICE)



PM PEAK HR 5-6pm

Projected Selected Opening Year 2026 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - WITH DEVELOPMENT

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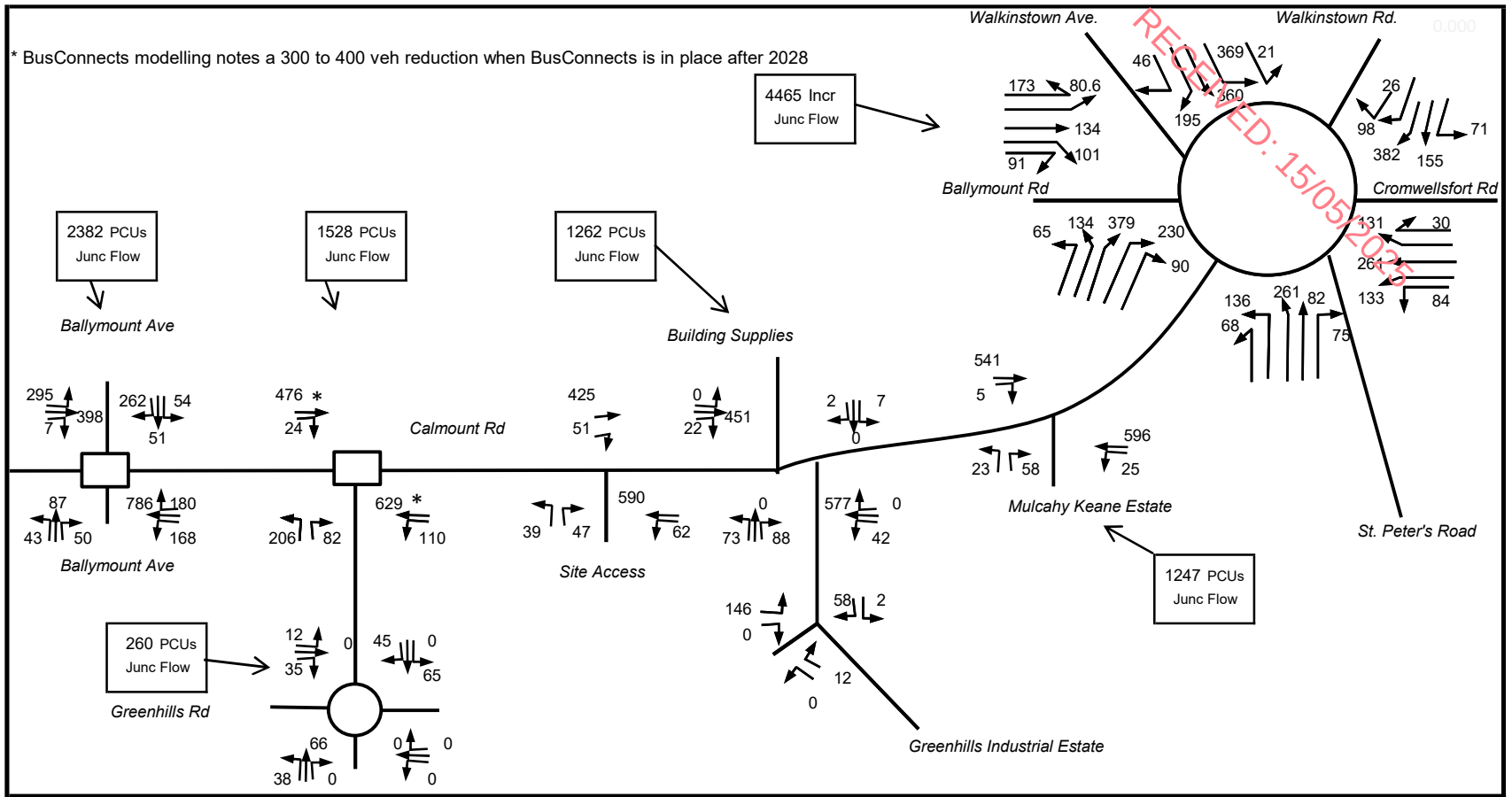

PM PEAK HR 5-6pm

Projected Selected Opening Year 2041 Weekday Peak Hour Traffic Volumes - TII Annual Growth Applied (PCUs) - WITH DEVELOPMENT

APPENDIX F

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JUNCTION10 - PICADY
Simulation Capacity Model Output
PROPOSED SITE ACCESS T-JUNCTION

Summary PICADY Results in Order as included herein

Existing Scenario (Without BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.50	1.0
Opening Year 2026 PM Peak Hr	0.36	0.5
Design Year 2041 AM Peak Hr	0.56	1.2
Design Year 2041 PM Peak Hr	0.42	0.7

Future Scenario (With BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.53	1.1
Opening Year 2026 PM Peak Hr	0.39	0.6
Design Year 2041 AM Peak Hr	0.39	0.6
Design Year 2041 PM Peak Hr	0.27	0.4

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.

NB - Any Small Changes to Selected Opening Year 2026 or Design Year 2041, or indeed significantly higher traffic volumes experienced, as clearly deductable from the positive results presented, will clearly have no significant implications in terms of the conclusions of the Study.

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Site Access 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Site Access
Report generation date: 05/11/2024 15:23:22

»2026, AM
»2026, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-AC	D1	1.0	23.03	0.50	C	12 %	D2	0.5	20.93	0.36	C	16 %
Stream C-AB		0.5	4.44	0.15	A	[Stream B-AC]		0.8	5.07	0.23	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	12	Stream B-AC	2.37	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			70.0	✓	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	3.00	49	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.088	0.223	0.140	0.318
B-C	655	0.094	0.237	-	-
C-B	615	0.223	0.223	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	646	100.000
B		✓	139	100.000
C		✓	792	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	605
	B	76	0	63
	C	758	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	8
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.50	23.03	1.0	C
C-AB	0.15	4.44	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	398	0.263	103	0.4	12.166	B
C-AB	68	916	0.074	67	0.1	4.421	A
C-A	528			528			
A-B	31			31			
A-C	455			455			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	361	0.346	124	0.5	15.135	C
C-AB	100	983	0.102	100	0.2	4.263	A
C-A	612			612			
A-B	37			37			
A-C	544			544			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	309	0.495	151	0.9	22.570	C
C-AB	166	1080	0.154	165	0.4	4.141	A
C-A	706			706			
A-B	45			45			
A-C	666			666			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	309	0.495	153	1.0	23.029	C
C-AB	167	1080	0.154	167	0.5	4.161	A
C-A	705			705			
A-B	45			45			
A-C	666			666			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	361	0.346	127	0.5	15.448	C
C-AB	101	984	0.102	102	0.2	4.298	A
C-A	611			611			
A-B	37			37			
A-C	544			544			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	398	0.263	105	0.4	12.348	B
C-AB	68	917	0.075	69	0.1	4.443	A
C-A	528			528			
A-B	31			31			
A-C	455			455			

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2026, PM

RECEIVED: 15/05/2025

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	16	Stream B-AC	1.61	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	851	100.000
B		✓	86	100.000
C		✓	694	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	62	789
	B	47	0	39
	C	643	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	20.93	0.5	C
C-AB	0.23	5.07	0.8	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)	Unsignalised level of service
B-AC	65	370	0.175	64	0.2	11.740	B
C-AB	92	829	0.111	91	0.3	4.991	A
C-A	430			430			
A-B	47			47			
A-C	594			594			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	328	0.236	77	0.3	14.341	B
C-AB	135	880	0.153	134	0.4	4.950	A
C-A	489			489			
A-B	56			56			
A-C	709			709			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	267	0.355	94	0.5	20.695	C
C-AB	219	955	0.230	218	0.8	5.035	A
C-A	545			545			
A-B	68			68			
A-C	869			869			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	267	0.355	95	0.5	20.931	C
C-AB	220	956	0.230	220	0.8	5.066	A
C-A	544			544			
A-B	68			68			
A-C	869			869			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	327	0.236	78	0.3	14.510	B
C-AB	136	882	0.154	137	0.5	4.998	A
C-A	488			488			
A-B	56			56			
A-C	709			709			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	369	0.175	65	0.2	11.847	B
C-AB	93	830	0.112	94	0.3	5.025	A
C-A	429			429			
A-B	47			47			
A-C	594			594			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Site Access 2041.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Site Access
Report generation date: 05/11/2024 15:27:10

»2041, AM
»2041, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2041											
Stream B-AC	D1	1.2	29.88	0.56	D	4 %	D2	0.7	27.59	0.42	D	6 %
Stream C-AB		0.6	4.29	0.18	A	[Stream B-AC]		1.1	5.05	0.27	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2041	AM	ONE HOUR	07:45	09:15	15
D2	2041	PM	ONE HOUR	07:45	09:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2041, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.73	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	Stream B-AC	2.73	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			70.0	✓	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	3.00	49	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.088	0.223	0.140	0.318
B-C	655	0.094	0.237	-	-
C-B	615	0.223	0.223	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	723	100.000
B		✓	139	100.000
C		✓	889	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	682
	B	76	0	63
	C	855	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	8
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.56	29.88	1.2	D
C-AB	0.18	4.29	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	375	0.279	103	0.4	13.154	B
C-AB	78	961	0.081	77	0.2	4.260	A
C-A	592			592			
A-B	31			31			
A-C	513			513			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	334	0.374	124	0.6	17.109	C
C-AB	118	1038	0.114	118	0.3	4.105	A
C-A	681			681			
A-B	37			37			
A-C	613			613			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	273	0.560	151	1.2	28.813	D
C-AB	208	1151	0.181	206	0.6	4.026	A
C-A	771			771			
A-B	45			45			
A-C	751			751			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	273	0.561	153	1.2	29.878	D
C-AB	209	1151	0.181	209	0.6	4.046	A
C-A	770			770			
A-B	45			45			
A-C	751			751			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	333	0.375	127	0.6	17.671	C
C-AB	119	1039	0.115	121	0.3	4.146	A
C-A	680			680			
A-B	37			37			
A-C	613			613			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	375	0.279	106	0.4	13.396	B
C-AB	78	961	0.081	79	0.2	4.286	A
C-A	591			591			
A-B	31			31			
A-C	513			513			

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2041, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.85	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Stream B-AC	1.85	A

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	2041	PM	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	952	100.000
B		✓	86	100.000
C		✓	776	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	62	890
	B	47	0	39
	C	725	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.42	27.59	0.7	D
C-AB	0.27	5.05	1.1	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)	Unsignalised level of service
B-AC	65	344	0.188	64	0.2	12.803	B
C-AB	105	863	0.121	103	0.3	4.859	A
C-A	480			480			
A-B	47			47			
A-C	670			670			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	296	0.261	77	0.3	16.398	C
C-AB	157	923	0.171	156	0.5	4.833	A
C-A	540			540			
A-B	56			56			
A-C	800			800			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	225	0.420	93	0.7	26.992	D
C-AB	270	1012	0.267	268	1.1	5.006	A
C-A	584			584			
A-B	68			68			
A-C	980			980			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	225	0.421	95	0.7	27.591	D
C-AB	272	1013	0.268	272	1.1	5.046	A
C-A	583			583			
A-B	68			68			
A-C	980			980			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	295	0.262	79	0.4	16.714	C
C-AB	159	925	0.172	161	0.6	4.889	A
C-A	539			539			
A-B	56			56			
A-C	800			800			

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09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	344	0.188	65	0.2	12.950	B
C-AB	106	864	0.122	107	0.3	4.896	A
C-A	479			479			
A-B	47			47			
A-C	670			670			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Future BusConnects Site Access 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Site Access
Report generation date: 05/11/2024 15:29:54

»2026, AM
»2026, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-AC	D1	1.1	26.52	0.53	D	7 %	D2	0.6	24.35	0.39	C	9 %
Stream C-AB		0.5	4.48	0.16	A	[Stream B-AC]		0.9	5.17	0.24	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.69	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	7	Stream B-AC	2.69	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			70.0	✓	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	3.00	49	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.094	0.238	0.150	0.340
B-C	655	0.100	0.254	-	-
C-B	615	0.238	0.238	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	646	100.000
B		✓	139	100.000
C		✓	792	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	605
	B	76	0	63
	C	758	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	8
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	26.52	1.1	D
C-AB	0.16	4.48	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	385	0.272	103	0.4	12.711	B
C-AB	68	911	0.075	68	0.1	4.449	A
C-A	528			528			
A-B	31			31			
A-C	455			455			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	346	0.362	124	0.6	16.213	C
C-AB	101	978	0.104	101	0.2	4.296	A
C-A	611			611			
A-B	37			37			
A-C	544			544			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	289	0.530	151	1.1	25.789	D
C-AB	169	1074	0.158	168	0.5	4.186	A
C-A	703			703			
A-B	45			45			
A-C	666			666			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	288	0.531	153	1.1	26.516	D
C-AB	170	1074	0.158	170	0.5	4.205	A
C-A	702			702			
A-B	45			45			
A-C	666			666			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	345	0.362	127	0.6	16.643	C
C-AB	102	978	0.104	103	0.2	4.336	A
C-A	610			610			
A-B	37			37			
A-C	544			544			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	385	0.272	105	0.4	12.929	B
C-AB	69	912	0.076	69	0.1	4.476	A
C-A	527			527			
A-B	31			31			
A-C	455			455			

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2026, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.81	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	9	Stream B-AC	1.81	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	851	100.000
B		✓	86	100.000
C		✓	694	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	62	789
	B	47	0	39
	C	643	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	24.35	0.6	C
C-AB	0.24	5.17	0.9	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)	Unsignalised level of service
B-AC	65	355	0.182	64	0.2	12.338	B
C-AB	93	822	0.114	92	0.3	5.050	A
C-A	429			429			
A-B	47			47			
A-C	594			594			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	309	0.250	77	0.3	15.474	C
C-AB	137	872	0.157	136	0.5	5.024	A
C-A	487			487			
A-B	56			56			
A-C	709			709			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	243	0.390	94	0.6	23.958	C
C-AB	226	946	0.238	224	0.9	5.143	A
C-A	539			539			
A-B	68			68			
A-C	869			869			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	242	0.391	95	0.6	24.353	C
C-AB	227	948	0.239	227	0.9	5.173	A
C-A	537			537			
A-B	68			68			
A-C	869			869			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	309	0.250	78	0.3	15.713	C
C-AB	138	874	0.158	140	0.5	5.076	A
C-A	486			486			
A-B	56			56			
A-C	709			709			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	354	0.183	65	0.2	12.465	B
C-AB	94	823	0.115	95	0.3	5.088	A
C-A	428			428			
A-B	47			47			
A-C	594			594			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Future BusConnects Site Access 2041.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Site Access
Report generation date: 05/11/2024 15:34:03

»2041, AM
»2041, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2041											
Stream B-AC	D1	0.6	14.76	0.39	B	41 %	D2	0.4	14.03	0.27	B	46 %
Stream C-AB		0.3	4.77	0.11	A	[Stream B-AC]		0.4	5.51	0.17	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2041	AM	ONE HOUR	07:45	09:15	15
D2	2041	PM	ONE HOUR	07:45	09:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2041, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.12	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	41	Stream B-AC	2.12	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	Site Access		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			70.0	✓	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	3.00	49	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.088	0.223	0.140	0.318
B-C	655	0.094	0.237	-	-
C-B	615	0.223	0.223	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	423	100.000
B		✓	139	100.000
C		✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	382
	B	76	0	63
	C	555	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	8
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	14.76	0.6	B
C-AB	0.11	4.77	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	455	0.230	103	0.3	10.219	B
C-AB	51	835	0.061	51	0.1	4.744	A
C-A	392			392			
A-B	31			31			
A-C	288			288			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	431	0.290	125	0.4	11.741	B
C-AB	71	882	0.080	70	0.2	4.600	A
C-A	459			459			
A-B	37			37			
A-C	343			343			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	397	0.386	152	0.6	14.657	B
C-AB	106	949	0.111	105	0.3	4.448	A
C-A	543			543			
A-B	45			45			
A-C	421			421			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	153	397	0.386	153	0.6	14.756	B
C-AB	106	949	0.112	106	0.3	4.463	A
C-A	543			543			
A-B	45			45			
A-C	421			421			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	125	431	0.290	126	0.4	11.842	B
C-AB	71	882	0.080	71	0.2	4.632	A
C-A	459			459			
A-B	37			37			
A-C	343			343			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	455	0.230	105	0.3	10.318	B
C-AB	51	836	0.062	52	0.1	4.766	A
C-A	392			392			
A-B	31			31			
A-C	288			288			

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2041, PM

RECEIVED: 15/05/2025

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.48	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	46	Stream B-AC	1.48	A

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	2041	PM	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	652	100.000
B		✓	86	100.000
C		✓	476	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	62	590
	B	47	0	39
	C	425	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	14.03	0.4	B
C-AB	0.17	5.51	0.4	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)	Unsignalised level of service
B-AC	65	424	0.153	64	0.2	9.995	A
C-AB	68	735	0.092	67	0.2	5.478	A
C-A	290			290			
A-B	47			47			
A-C	444			444			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	394	0.196	77	0.2	11.364	B
C-AB	92	764	0.121	92	0.3	5.465	A
C-A	336			336			
A-B	56			56			
A-C	530			530			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	351	0.270	94	0.4	13.977	B
C-AB	135	805	0.168	134	0.4	5.493	A
C-A	389			389			
A-B	68			68			
A-C	650			650			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	351	0.270	95	0.4	14.032	B
C-AB	135	805	0.168	135	0.4	5.513	A
C-A	389			389			
A-B	68			68			
A-C	650			650			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	393	0.197	78	0.2	11.421	B
C-AB	93	764	0.121	93	0.3	5.496	A
C-A	335			335			
A-B	56			56			
A-C	530			530			

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09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	423	0.153	65	0.2	10.050	B
C-AB	68	736	0.093	69	0.2	5.508	A
C-A	290			290			
A-B	47			47			
A-C	444			444			

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APPENDIX G

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JUNCTION10 - PICADY
Simulation Capacity Model Output
Greenhills Road / Greenhill Industrial Estate

Summary PICADY Results in Order as included herein

Existing Scenario (Without BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.33	1.3
Opening Year 2026 PM Peak Hr	0.51	1.0
Design Year 2041 AM Peak Hr	0.42	2.1
Design Year 2041 PM Peak Hr	0.66	1.8

Future Scenario (With BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.33	1.3
Opening Year 2026 PM Peak Hr	0.51	1.0
Design Year 2041 AM Peak Hr	0.26	0.8
Design Year 2041 PM Peak Hr	0.46	0.8

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.

NB - Any Small Changes to Selected Opening Year 2026 or Design Year 2041, or indeed significantly higher traffic volumes experienced, as clearly deductable from the positive results presented, will clearly have no significant implications in terms of the conclusions of the Study.

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Greenhill Industrial Estate 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Greenhills Industrial Estate
Report generation date: 05/11/2024 15:43:53

»2026, AM
»2026, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-ACD	D1	0.4	17.12	0.28	C	27 % [Stream B-ACD]	D2	1.0	24.11	0.51	C	10 % [Stream B-ACD]
Stream AB-CD		0.1	4.63	0.06	A			0.0	0.00	0.00	A	
Stream D-ABC		0.0	10.25	0.04	B			0.0	9.35	0.02	A	
Stream CD-AB		1.3	5.20	0.33	A			0.2	4.49	0.08	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		0.95	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-ACD	0.95	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Industrial Estate		Major
B	untitled		Minor
C	Greenhills Road		Major
D	Building Supplies		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.00			70.0	✓	0.00
C	9.00			70.0	✓	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	3.00	65	65
D	One lane	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	615	-	-	-	-	-	0.207	0.207	0.207	-	-
B-A	531	0.084	0.213	0.213	-	-	0.134	0.304	-	0.134	0.304
B-CD	665	0.089	0.224	0.224	-	-	-	-	-	-	-
CD-B	615	0.207	0.207	0.207	-	-	-	-	-	-	-
D-AB	665	-	-	-	-	-	0.224	0.224	0.089	-	-
D-C	531	-	0.134	0.304	0.134	0.304	0.213	0.213	0.084	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	710	100.000
B		✓	73	100.000
C		✓	834	100.000
D		✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	79	619	12
	B	48	0	22	3
	C	759	70	0	5
	D	11	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

Results

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Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.28	17.12	0.4	C
A-B				
A-C				
A-D				
AB-CD	0.06	4.63	0.1	A
AB-C				
D-ABC	0.04	10.25	0.0	B
C-D				
C-A				
C-B				
CD-AB	0.33	5.20	1.3	A
CD-A				

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)	Unsignalised level of service
B-ACD	55	384	0.143	54	0.2	10.889	B
A-B	59			59			
A-C	466			466			
A-D	9			9			
AB-CD	27	837	0.032	26	0.0	4.609	A
AB-C	467			467			
D-ABC	11	453	0.025	11	0.0	8.138	A
C-D	4			4			
C-A	571			571			
C-B	53			53			
CD-AB	142	921	0.154	140	0.4	4.808	A
CD-A	490			490			

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08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	66	346	0.190	65	0.2	12.830	B
A-B	71			71			
A-C	556			556			
A-D	11			11			
AB-CD	38	889	0.043	38	0.1	4.406	A
AB-C	551			551			
D-ABC	13	418	0.032	13	0.0	8.891	A
C-D	4			4			
C-A	682			682			
C-B	63			63			
CD-AB	211	990	0.213	210	0.7	4.840	A
CD-A	544			544			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	291	0.276	80	0.4	17.004	C
A-B	87			87			
A-C	682			682			
A-D	13			13			
AB-CD	62	964	0.064	62	0.1	4.175	A
AB-C	660			660			
D-ABC	17	368	0.045	16	0.0	10.247	B
C-D	6			6			
C-A	836			836			
C-B	77			77			
CD-AB	353	1089	0.325	351	1.3	5.152	A
CD-A	571			571			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	291	0.277	80	0.4	17.121	C
A-B	87			87			
A-C	682			682			
A-D	13			13			
AB-CD	62	964	0.064	62	0.1	4.186	A
AB-C	660			660			
D-ABC	17	368	0.045	17	0.0	10.250	B
C-D	6			6			
C-A	836			836			
C-B	77			77			
CD-AB	355	1090	0.326	355	1.3	5.200	A
CD-A	570			570			

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08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	66	345	0.190	66	0.2	12.931	B
A-B	71			71			
A-C	556			556			
A-D	11			11			
AB-CD	39	889	0.043	39	0.1	4.433	A
AB-C	551			551			
D-ABC	13	418	0.032	14	0.0	8.894	A
C-D	4			4			
C-A	682			682			
C-B	63			63			
CD-AB	213	992	0.215	215	0.7	4.911	A
CD-A	542			542			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	55	384	0.143	55	0.2	10.969	B
A-B	59			59			
A-C	466			466			
A-D	9			9			
AB-CD	27	837	0.032	27	0.0	4.625	A
AB-C	467			467			
D-ABC	11	453	0.025	11	0.0	8.144	A
C-D	4			4			
C-A	571			571			
C-B	53			53			
CD-AB	144	923	0.156	145	0.5	4.860	A
CD-A	489			489			

2026, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.18	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Stream B-ACD	1.18	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	821	100.000
B		✓	143	100.000
C		✓	690	100.000
D		✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	37	784	0
	B	78	0	65	0
	C	671	19	0	0
	D	6	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.51	24.11	1.0	C
A-B				
A-C				
A-D				
AB-CD	0.00	0.00	0.0	A
AB-C				
D-ABC	0.02	9.35	0.0	A
C-D				
C-A				
C-B				
CD-AB	0.08	4.49	0.2	A
CD-A				

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)	Unsignalised level of service
B-ACD	108	399	0.270	106	0.4	12.240	B
A-B	28			28			
A-C	590			590			
A-D	0			0			
AB-CD	0	507	0.000	0	0.0	0.000	A
AB-C	639			639			
D-ABC	6	473	0.013	6	0.0	7.704	A
C-D	0			0			
C-A	505			505			
C-B	14			14			
CD-AB	35	858	0.041	35	0.1	4.472	A
CD-A	489			489			

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17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	129	361	0.356	128	0.5	15.401	C
A-B	33			33			
A-C	705			705			
A-D	0			0			
AB-CD	0	486	0.000	0	0.0	0.000	A
AB-C	763			763			
D-ABC	7	441	0.016	7	0.0	8.299	A
C-D	0			0			
C-A	603			603			
C-B	17			17			
CD-AB	51	914	0.056	51	0.1	4.274	A
CD-A	574			574			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	306	0.514	156	1.0	23.570	C
A-B	41			41			
A-C	863			863			
A-D	0			0			
AB-CD	0	457	0.000	0	0.0	0.000	A
AB-C	934			934			
D-ABC	9	394	0.022	9	0.0	9.349	A
C-D	0			0			
C-A	739			739			
C-B	21			21			
CD-AB	84	996	0.084	83	0.2	4.056	A
CD-A	683			683			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	306	0.514	157	1.0	24.108	C
A-B	41			41			
A-C	863			863			
A-D	0			0			
AB-CD	0	457	0.000	0	0.0	0.000	A
AB-C	935			935			
D-ABC	9	394	0.022	9	0.0	9.350	A
C-D	0			0			
C-A	739			739			
C-B	21			21			
CD-AB	84	996	0.084	84	0.2	4.063	A
CD-A	683			683			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	129	361	0.356	130	0.6	15.745	C
A-B	33			33			
A-C	705			705			
A-D	0			0			
AB-CD	0	486	0.000	0	0.0	0.000	A
AB-C	764			764			
D-ABC	7	441	0.016	7	0.0	8.301	A
C-D	0			0			
C-A	603			603			
C-B	17			17			
CD-AB	51	915	0.056	52	0.1	4.292	A
CD-A	574			574			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	108	399	0.270	108	0.4	12.426	B
A-B	28			28			
A-C	590			590			
A-D	0			0			
AB-CD	0	507	0.000	0	0.0	0.000	A
AB-C	640			640			
D-ABC	6	473	0.013	6	0.0	7.709	A
C-D	0			0			
C-A	505			505			
C-B	14			14			
CD-AB	35	859	0.041	36	0.1	4.485	A
CD-A	489			489			

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Junctions 10

PICADY 10 - Priority Intersection Module

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»2041, AM
»2041, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2041											
Stream B-ACD	D1	0.5	21.96	0.36	C	13 % [Stream B-ACD]	D2	1.8	38.67	0.66	E	-2 % [Stream B-ACD]
Stream AB-CD		0.2	4.50	0.08	A			0.0	0.00	0.00	A	
Stream D-ABC		0.1	11.73	0.06	B			0.0	9.98	0.03	A	
Stream CD-AB		2.1	5.80	0.42	A			0.3	4.37	0.11	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2041	AM	ONE HOUR	07:45	09:15	15
D2	2041	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2041, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.23	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	Stream B-ACD	1.23	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Industrial Estate		Major
B	untitled		Minor
C	Greenhills Road		Major
D	Building Supplies		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.00			70.0	✓	0.00
C	9.00			70.0	✓	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	3.00	65	65
D	One lane	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	615	-	-	-	-	-	0.207	0.207	0.207	-	-
B-A	531	0.084	0.213	0.213	-	-	0.134	0.304	-	0.134	0.304
B-CD	665	0.089	0.224	0.224	-	-	-	-	-	-	-
CD-B	615	0.207	0.207	0.207	-	-	-	-	-	-	-
D-AB	665	-	-	-	-	-	0.224	0.224	0.089	-	-
D-C	531	-	0.134	0.304	0.134	0.304	0.213	0.213	0.084	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
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.

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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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	795	100.000
B		✓	83	100.000
C		✓	931	100.000
D		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	89	693	13
	B	54	0	25	4
	C	847	78	0	6
	D	12	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

Results

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Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.36	21.96	0.5	C
A-B				
A-C				
A-D				
AB-CD	0.08	4.50	0.2	A
AB-C				
D-ABC	0.06	11.73	0.1	B
C-D				
C-A				
C-B				
CD-AB	0.42	5.80	2.1	A
CD-A				

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)	Unsignalised level of service
B-ACD	62	362	0.172	62	0.2	11.936	B
A-B	67			67			
A-C	522			522			
A-D	10			10			
AB-CD	34	869	0.039	34	0.1	4.485	A
AB-C	519			519			
D-ABC	13	426	0.030	13	0.0	8.709	A
C-D	5			5			
C-A	638			638			
C-B	59			59			
CD-AB	180	961	0.187	177	0.6	4.804	A
CD-A	526			526			

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08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	75	319	0.234	74	0.3	14.706	B
A-B	80			80			
A-C	623			623			
A-D	12			12			
AB-CD	50	928	0.054	50	0.1	4.278	A
AB-C	610			610			
D-ABC	15	385	0.040	15	0.0	9.728	A
C-D	5			5			
C-A	761			761			
C-B	70			70			
CD-AB	276	1040	0.265	274	1.0	4.949	A
CD-A	566			566			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	256	0.357	90	0.5	21.643	C
A-B	98			98			
A-C	763			763			
A-D	14			14			
AB-CD	84	1016	0.083	84	0.2	4.054	A
AB-C	725			725			
D-ABC	19	326	0.057	19	0.1	11.725	B
C-D	7			7			
C-A	933			933			
C-B	86			86			
CD-AB	487	1153	0.422	482	2.0	5.696	A
CD-A	545			545			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	255	0.358	91	0.5	21.963	C
A-B	98			98			
A-C	763			763			
A-D	14			14			
AB-CD	85	1017	0.083	85	0.2	4.066	A
AB-C	725			725			
D-ABC	19	326	0.058	19	0.1	11.732	B
C-D	7			7			
C-A	933			933			
C-B	86			86			
CD-AB	491	1156	0.424	490	2.1	5.798	A
CD-A	541			541			

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08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	75	318	0.235	76	0.3	14.923	B
A-B	80			80			
A-C	623			623			
A-D	12			12			
AB-CD	51	929	0.054	51	0.1	4.307	A
AB-C	610			610			
D-ABC	15	385	0.040	15	0.0	9.738	A
C-D	5			5			
C-A	761			761			
C-B	70			70			
CD-AB	279	1044	0.267	283	1.0	5.060	A
CD-A	563			563			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	362	0.173	63	0.2	12.061	B
A-B	67			67			
A-C	522			522			
A-D	10			10			
AB-CD	34	869	0.039	34	0.1	4.502	A
AB-C	519			519			
D-ABC	13	426	0.030	13	0.0	8.717	A
C-D	5			5			
C-A	638			638			
C-B	59			59			
CD-AB	182	963	0.189	184	0.6	4.873	A
CD-A	523			523			

2041, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.86	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-2	Stream B-ACD	1.86	A

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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	919	100.000
B		✓	161	100.000
C		✓	773	100.000
D		✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	42	877	0
	B	88	0	73	0
	C	751	22	0	0
	D	7	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.66	38.67	1.8	E
A-B				
A-C				
A-D				
AB-CD	0.00	0.00	0.0	A
AB-C				
D-ABC	0.03	9.98	0.0	A
C-D				
C-A				
C-B				
CD-AB	0.11	4.37	0.3	A
CD-A				

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)	Unsignalised level of service
B-ACD	121	375	0.323	119	0.5	13.964	B
A-B	32			32			
A-C	660			660			
A-D	0			0			
AB-CD	0	494	0.000	0	0.0	0.000	A
AB-C	714			714			
D-ABC	7	461	0.015	7	0.0	7.919	A
C-D	0			0			
C-A	565			565			
C-B	17			17			
CD-AB	46	892	0.051	46	0.1	4.356	A
CD-A	541			541			

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17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	332	0.436	144	0.7	19.001	C
A-B	38			38			
A-C	788			788			
A-D	0			0			
AB-CD	0	471	0.000	0	0.0	0.000	A
AB-C	854			854			
D-ABC	8	425	0.019	8	0.0	8.636	A
C-D	0			0			
C-A	675			675			
C-B	20			20			
CD-AB	69	957	0.072	69	0.1	4.162	A
CD-A	632			632			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	177	269	0.659	173	1.7	36.155	E
A-B	46			46			
A-C	966			966			
A-D	0			0			
AB-CD	0	438	0.000	0	0.0	0.000	A
AB-C	1044			1044			
D-ABC	10	371	0.027	10	0.0	9.979	A
C-D	0			0			
C-A	827			827			
C-B	24			24			
CD-AB	118	1052	0.112	117	0.3	3.969	A
CD-A	741			741			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	177	269	0.659	177	1.8	38.667	E
A-B	46			46			
A-C	966			966			
A-D	0			0			
AB-CD	0	438	0.000	0	0.0	0.000	A
AB-C	1046			1046			
D-ABC	10	370	0.027	10	0.0	9.983	A
C-D	0			0			
C-A	827			827			
C-B	24			24			
CD-AB	118	1052	0.112	118	0.3	3.979	A
CD-A	741			741			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	332	0.436	149	0.8	20.075	C
A-B	38			38			
A-C	788			788			
A-D	0			0			
AB-CD	0	471	0.000	0	0.0	0.000	A
AB-C	856			856			
D-ABC	8	425	0.019	8	0.0	8.642	A
C-D	0			0			
C-A	675			675			
C-B	20			20			
CD-AB	69	958	0.072	70	0.1	4.182	A
CD-A	632			632			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	121	375	0.323	122	0.5	14.308	B
A-B	32			32			
A-C	660			660			
A-D	0			0			
AB-CD	0	494	0.000	0	0.0	0.000	A
AB-C	716			716			
D-ABC	7	461	0.015	7	0.0	7.925	A
C-D	0			0			
C-A	565			565			
C-B	17			17			
CD-AB	46	893	0.052	46	0.1	4.371	A
CD-A	541			541			

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Junctions 10

PICADY 10 - Priority Intersection Module

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Version: 10.0.4.1693
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Filename: Future BusConnects Greenhill Industrial Estate 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Greenhills Industrial Estate
Report generation date: 05/11/2024 15:50:19

»2026, AM
»2026, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-ACD	D1	0.4	17.12	0.28	C	27 % [Stream B-ACD]	D2	1.0	24.11	0.51	C	10 % [Stream B-ACD]
Stream AB-CD		0.1	4.63	0.06	A			0.0	0.00	0.00	A	
Stream D-ABC		0.0	10.25	0.04	B			0.0	9.35	0.02	A	
Stream CD-AB		1.3	5.20	0.33	A			0.2	4.49	0.08	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		0.95	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-ACD	0.95	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Industrial Estate		Major
B	untitled		Minor
C	Greenhills Road		Major
D	Building Supplies		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.00			70.0	✓	0.00
C	9.00			70.0	✓	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	3.00	65	65
D	One lane	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	615	-	-	-	-	-	0.207	0.207	0.207	-	-
B-A	531	0.084	0.213	0.213	-	-	0.134	0.304	-	0.134	0.304
B-CD	665	0.089	0.224	0.224	-	-	-	-	-	-	-
CD-B	615	0.207	0.207	0.207	-	-	-	-	-	-	-
D-AB	665	-	-	-	-	-	0.224	0.224	0.089	-	-
D-C	531	-	0.134	0.304	0.134	0.304	0.213	0.213	0.084	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	710	100.000
B		✓	73	100.000
C		✓	834	100.000
D		✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	79	619	12
	B	48	0	22	3
	C	759	70	0	5
	D	11	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

Results

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Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.28	17.12	0.4	C
A-B				
A-C				
A-D				
AB-CD	0.06	4.63	0.1	A
AB-C				
D-ABC	0.04	10.25	0.0	B
C-D				
C-A				
C-B				
CD-AB	0.33	5.20	1.3	A
CD-A				

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)	Unsignalised level of service
B-ACD	55	384	0.143	54	0.2	10.889	B
A-B	59			59			
A-C	466			466			
A-D	9			9			
AB-CD	27	837	0.032	26	0.0	4.609	A
AB-C	467			467			
D-ABC	11	453	0.025	11	0.0	8.138	A
C-D	4			4			
C-A	571			571			
C-B	53			53			
CD-AB	142	921	0.154	140	0.4	4.808	A
CD-A	490			490			

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08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	66	346	0.190	65	0.2	12.830	B
A-B	71			71			
A-C	556			556			
A-D	11			11			
AB-CD	38	889	0.043	38	0.1	4.406	A
AB-C	551			551			
D-ABC	13	418	0.032	13	0.0	8.891	A
C-D	4			4			
C-A	682			682			
C-B	63			63			
CD-AB	211	990	0.213	210	0.7	4.840	A
CD-A	544			544			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	291	0.276	80	0.4	17.004	C
A-B	87			87			
A-C	682			682			
A-D	13			13			
AB-CD	62	964	0.064	62	0.1	4.175	A
AB-C	660			660			
D-ABC	17	368	0.045	16	0.0	10.247	B
C-D	6			6			
C-A	836			836			
C-B	77			77			
CD-AB	353	1089	0.325	351	1.3	5.152	A
CD-A	571			571			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	291	0.277	80	0.4	17.121	C
A-B	87			87			
A-C	682			682			
A-D	13			13			
AB-CD	62	964	0.064	62	0.1	4.186	A
AB-C	660			660			
D-ABC	17	368	0.045	17	0.0	10.250	B
C-D	6			6			
C-A	836			836			
C-B	77			77			
CD-AB	355	1090	0.326	355	1.3	5.200	A
CD-A	570			570			

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08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	66	345	0.190	66	0.2	12.931	B
A-B	71			71			
A-C	556			556			
A-D	11			11			
AB-CD	39	889	0.043	39	0.1	4.433	A
AB-C	551			551			
D-ABC	13	418	0.032	14	0.0	8.894	A
C-D	4			4			
C-A	682			682			
C-B	63			63			
CD-AB	213	992	0.215	215	0.7	4.911	A
CD-A	542			542			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	55	384	0.143	55	0.2	10.969	B
A-B	59			59			
A-C	466			466			
A-D	9			9			
AB-CD	27	837	0.032	27	0.0	4.625	A
AB-C	467			467			
D-ABC	11	453	0.025	11	0.0	8.144	A
C-D	4			4			
C-A	571			571			
C-B	53			53			
CD-AB	144	923	0.156	145	0.5	4.860	A
CD-A	489			489			

2026, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.18	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Stream B-ACD	1.18	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	821	100.000
B		✓	143	100.000
C		✓	690	100.000
D		✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	37	784	0
	B	78	0	65	0
	C	671	19	0	0
	D	6	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.51	24.11	1.0	C
A-B				
A-C				
A-D				
AB-CD	0.00	0.00	0.0	A
AB-C				
D-ABC	0.02	9.35	0.0	A
C-D				
C-A				
C-B				
CD-AB	0.08	4.49	0.2	A
CD-A				

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)	Unsignalised level of service
B-ACD	108	399	0.270	106	0.4	12.240	B
A-B	28			28			
A-C	590			590			
A-D	0			0			
AB-CD	0	507	0.000	0	0.0	0.000	A
AB-C	639			639			
D-ABC	6	473	0.013	6	0.0	7.704	A
C-D	0			0			
C-A	505			505			
C-B	14			14			
CD-AB	35	858	0.041	35	0.1	4.472	A
CD-A	489			489			

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17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	129	361	0.356	128	0.5	15.401	C
A-B	33			33			
A-C	705			705			
A-D	0			0			
AB-CD	0	486	0.000	0	0.0	0.000	A
AB-C	763			763			
D-ABC	7	441	0.016	7	0.0	8.299	A
C-D	0			0			
C-A	603			603			
C-B	17			17			
CD-AB	51	914	0.056	51	0.1	4.274	A
CD-A	574			574			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	306	0.514	156	1.0	23.570	C
A-B	41			41			
A-C	863			863			
A-D	0			0			
AB-CD	0	457	0.000	0	0.0	0.000	A
AB-C	934			934			
D-ABC	9	394	0.022	9	0.0	9.349	A
C-D	0			0			
C-A	739			739			
C-B	21			21			
CD-AB	84	996	0.084	83	0.2	4.056	A
CD-A	683			683			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	306	0.514	157	1.0	24.108	C
A-B	41			41			
A-C	863			863			
A-D	0			0			
AB-CD	0	457	0.000	0	0.0	0.000	A
AB-C	935			935			
D-ABC	9	394	0.022	9	0.0	9.350	A
C-D	0			0			
C-A	739			739			
C-B	21			21			
CD-AB	84	996	0.084	84	0.2	4.063	A
CD-A	683			683			

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17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	129	361	0.356	130	0.6	15.745	C
A-B	33			33			
A-C	705			705			
A-D	0			0			
AB-CD	0	486	0.000	0	0.0	0.000	A
AB-C	764			764			
D-ABC	7	441	0.016	7	0.0	8.301	A
C-D	0			0			
C-A	603			603			
C-B	17			17			
CD-AB	51	915	0.056	52	0.1	4.292	A
CD-A	574			574			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	108	399	0.270	108	0.4	12.426	B
A-B	28			28			
A-C	590			590			
A-D	0			0			
AB-CD	0	507	0.000	0	0.0	0.000	A
AB-C	640			640			
D-ABC	6	473	0.013	6	0.0	7.709	A
C-D	0			0			
C-A	505			505			
C-B	14			14			
CD-AB	35	859	0.041	36	0.1	4.485	A
CD-A	489			489			

Junctions 10

PICADY 10 - Priority Intersection Module

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Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Greenhills Industrial Estate
Report generation date: 05/11/2024 15:52:38

»2026, AM
»2026, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-ACD	D1	0.3	12.71	0.24	B	58 % [Stream B-ACD]	D2	0.8	17.32	0.46	C	27 % [Stream B-ACD]
Stream AB-CD		0.1	5.25	0.06	A			0.0	0.00	0.00	A	
Stream D-ABC		0.0	9.37	0.05	A			0.0	8.18	0.02	A	
Stream CD-AB		0.8	5.40	0.26	A			0.1	5.01	0.07	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.06	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	58	Stream B-ACD	1.06	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Industrial Estate		Major
B	untitled		Minor
C	Greenhills Road		Major
D	Building Supplies		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00			70.0	✓	0.00
C	9.00			70.0	✓	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	3.00	65	65
D	One lane	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	615	-	-	-	-	-	0.238	0.238	0.238	-	-
B-A	531	0.084	0.213	0.213	-	-	0.134	0.304	-	0.134	0.304
B-CD	665	0.089	0.224	0.224	-	-	-	-	-	-	-
CD-B	615	0.207	0.207	0.207	-	-	-	-	-	-	-
D-AB	665	-	-	-	-	-	0.258	0.258	0.102	-	-
D-C	531	-	0.154	0.349	0.154	0.349	0.244	0.244	0.097	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	495	100.000
B		✓	83	100.000
C		✓	631	100.000
D		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	89	393	13
	B	54	0	25	4
	C	547	78	0	6
	D	12	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

Results

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Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.24	12.71	0.3	B
A-B				
A-C				
A-D				
AB-CD	0.06	5.25	0.1	A
AB-C				
D-ABC	0.05	9.37	0.0	A
C-D				
C-A				
C-B				
CD-AB	0.26	5.40	0.8	A
CD-A				

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)	Unsignalised level of service
B-ACD	62	439	0.142	62	0.2	9.519	A
A-B	67			67			
A-C	296			296			
A-D	10			10			
AB-CD	22	728	0.031	22	0.0	5.239	A
AB-C	305			305			
D-ABC	13	474	0.027	13	0.0	7.805	A
C-D	5			5			
C-A	412			412			
C-B	59			59			
CD-AB	119	833	0.143	117	0.3	5.203	A
CD-A	361			361			

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08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	75	412	0.181	74	0.2	10.641	B
A-B	80			80			
A-C	353			353			
A-D	12			12			
AB-CD	30	755	0.040	30	0.1	5.115	A
AB-C	361			361			
D-ABC	15	444	0.034	15	0.0	8.388	A
C-D	5			5			
C-A	492			492			
C-B	70			70			
CD-AB	165	880	0.187	164	0.5	5.221	A
CD-A	408			408			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	375	0.244	91	0.3	12.666	B
A-B	98			98			
A-C	433			433			
A-D	14			14			
AB-CD	45	794	0.056	44	0.1	4.966	A
AB-C	434			434			
D-ABC	19	403	0.046	19	0.0	9.371	A
C-D	7			7			
C-A	602			602			
C-B	86			86			
CD-AB	248	946	0.262	246	0.8	5.367	A
CD-A	454			454			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	375	0.244	91	0.3	12.709	B
A-B	98			98			
A-C	433			433			
A-D	14			14			
AB-CD	45	795	0.056	45	0.1	4.978	A
AB-C	434			434			
D-ABC	19	403	0.046	19	0.0	9.373	A
C-D	7			7			
C-A	602			602			
C-B	86			86			
CD-AB	248	947	0.262	248	0.8	5.400	A
CD-A	453			453			

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08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	75	412	0.181	75	0.2	10.689	B
A-B	80			80			
A-C	353			353			
A-D	12			12			
AB-CD	31	755	0.040	31	0.1	5.143	A
AB-C	361			361			
D-ABC	15	444	0.034	15	0.0	8.391	A
C-D	5			5			
C-A	492			492			
C-B	70			70			
CD-AB	165	881	0.188	166	0.5	5.277	A
CD-A	407			407			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	439	0.142	63	0.2	9.571	A
A-B	67			67			
A-C	296			296			
A-D	10			10			
AB-CD	23	729	0.031	23	0.0	5.255	A
AB-C	305			305			
D-ABC	13	474	0.027	13	0.0	7.811	A
C-D	5			5			
C-A	412			412			
C-B	59			59			
CD-AB	120	833	0.144	120	0.3	5.249	A
CD-A	360			360			

2026, PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.30	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-ACD	1.30	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	619	100.000
B		✓	161	100.000
C		✓	473	100.000
D		✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	42	577	0
	B	88	0	73	0
	C	451	22	0	0
	D	7	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.46	17.32	0.8	C
A-B				
A-C				
A-D				
AB-CD	0.00	0.00	0.0	A
AB-C				
D-ABC	0.02	8.18	0.0	A
C-D				
C-A				
C-B				
CD-AB	0.07	5.01	0.1	A
CD-A				

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)	Unsignalised level of service
B-ACD	121	450	0.269	120	0.4	10.859	B
A-B	32			32			
A-C	434			434			
A-D	0			0			
AB-CD	0	530	0.000	0	0.0	0.000	A
AB-C	489			489			
D-ABC	7	510	0.013	7	0.0	7.149	A
C-D	0			0			
C-A	340			340			
C-B	17			17			
CD-AB	30	764	0.040	30	0.1	4.991	A
CD-A	331			331			

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17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	423	0.342	144	0.5	12.887	B
A-B	38			38			
A-C	519			519			
A-D	0			0			
AB-CD	0	513	0.000	0	0.0	0.000	A
AB-C	584			584			
D-ABC	8	485	0.017	8	0.0	7.540	A
C-D	0			0			
C-A	405			405			
C-B	20			20			
CD-AB	41	797	0.052	41	0.1	4.854	A
CD-A	390			390			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	177	385	0.460	176	0.8	17.119	C
A-B	46			46			
A-C	635			635			
A-D	0			0			
AB-CD	0	491	0.000	0	0.0	0.000	A
AB-C	715			715			
D-ABC	10	450	0.022	10	0.0	8.181	A
C-D	0			0			
C-A	497			497			
C-B	24			24			
CD-AB	60	845	0.071	60	0.1	4.686	A
CD-A	468			468			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	177	385	0.460	177	0.8	17.316	C
A-B	46			46			
A-C	635			635			
A-D	0			0			
AB-CD	0	491	0.000	0	0.0	0.000	A
AB-C	716			716			
D-ABC	10	450	0.022	10	0.0	8.182	A
C-D	0			0			
C-A	497			497			
C-B	24			24			
CD-AB	60	845	0.071	60	0.1	4.694	A
CD-A	468			468			

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17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	423	0.342	146	0.5	13.061	B
A-B	38			38			
A-C	519			519			
A-D	0			0			
AB-CD	0	513	0.000	0	0.0	0.000	A
AB-C	585			585			
D-ABC	8	485	0.017	8	0.0	7.541	A
C-D	0			0			
C-A	405			405			
C-B	20			20			
CD-AB	41	797	0.052	41	0.1	4.870	A
CD-A	390			390			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	121	450	0.269	122	0.4	10.999	B
A-B	32			32			
A-C	434			434			
A-D	0			0			
AB-CD	0	530	0.000	0	0.0	0.000	A
AB-C	490			490			
D-ABC	7	510	0.013	7	0.0	7.153	A
C-D	0			0			
C-A	340			340			
C-B	17			17			
CD-AB	30	764	0.040	30	0.1	5.005	A
CD-A	331			331			

APPENDIX H

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JUNCTION10 - PICADY
Simulation Capacity Model Output
Greenhills Road / Mulcahy Keane Estate

Summary PICADY Results in Order as included herein

Existing Scenario (Without BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.08	0.1
Opening Year 2026 PM Peak Hr	0.28	0.4
Design Year 2041 AM Peak Hr	0.10	0.1
Design Year 2041 PM Peak Hr	0.36	0.6

Future Scenario (With BusConnects)

Modelled Scenario	Period Mean Max Q (PCUs)	Period Max RFC
Opening Year 2026 AM Peak Hr	0.10	0.1
Opening Year 2026 PM Peak Hr	0.36	0.5
Design Year 2041 AM Peak Hr	0.08	0.1
Design Year 2041 PM Peak Hr	0.28	0.4

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.

NB - Any Small Changes to Selected Opening Year 2026 or Design Year 2041, or indeed significantly higher traffic volumes experienced, as clearly deductable from the positive results presented, will clearly have no significant implications in terms of the conclusions of the Study.

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Mulcahy Keane Estate 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Mulcahy Keane Estate
Report generation date: 05/11/2024 16:31:40

»2026, AM
»2026 , PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-AC	D1	0.1	13.25	0.08	B	52 %	D2	0.4	17.54	0.28	C	27 %
Stream C-B		0.1	8.33	0.05	A	[Stream B-AC]		0.0	8.33	0.01	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.29	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	52	Stream B-AC	0.29	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Road		Major
B	Mulcahy Keane Estate		Minor
C	Greenhills Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.00		✓	2.20	70.0		-

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	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	531	0.080	0.202	0.127	0.288
B-C	665	0.084	0.213	-	-
C-B	615	0.197	0.197	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	736	100.000
B		✓	21	100.000
C		✓	818	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	704
	B	15	0	6
	C	797	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	13.25	0.1	B
C-A				
C-B	0.05	8.33	0.1	A
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	383	0.041	16	0.0	9.801	A
C-A	600			600			
C-B	16	506	0.031	16	0.0	7.347	A
A-B	24			24			
A-C	530			530			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	346	0.055	19	0.1	10.992	B
C-A	716			716			
C-B	19	484	0.039	19	0.0	7.733	A
A-B	29			29			
A-C	633			633			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	295	0.078	23	0.1	13.241	B
C-A	878			878			
C-B	23	455	0.051	23	0.1	8.331	A
A-B	35			35			
A-C	775			775			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	295	0.078	23	0.1	13.253	B
C-A	878			878			
C-B	23	455	0.051	23	0.1	8.332	A
A-B	35			35			
A-C	775			775			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	346	0.055	19	0.1	11.004	B
C-A	716			716			
C-B	19	484	0.039	19	0.0	7.736	A
A-B	29			29			
A-C	633			633			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	383	0.041	16	0.0	9.815	A
C-A	600			600			
C-B	16	506	0.031	16	0.0	7.351	A
A-B	24			24			
A-C	530			530			

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2026 , PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.78	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-AC	0.78	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	823	100.000
B		✓	71	100.000
C		✓	755	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	801
	B	51	0	20
	C	751	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.28	17.54	0.4	C
C-A				
C-B	0.01	8.33	0.0	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)	Unsignalised level of service
B-AC	53	375	0.143	53	0.2	11.163	B
C-A	565			565			
C-B	3	493	0.006	3	0.0	7.351	A
A-B	17			17			
A-C	603			603			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	337	0.190	64	0.2	13.160	B
C-A	675			675			
C-B	4	469	0.008	4	0.0	7.734	A
A-B	20			20			
A-C	720			720			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	283	0.276	78	0.4	17.444	C
C-A	827			827			
C-B	4	436	0.010	4	0.0	8.334	A
A-B	24			24			
A-C	882			882			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	283	0.276	78	0.4	17.535	C
C-A	827			827			
C-B	4	436	0.010	4	0.0	8.334	A
A-B	24			24			
A-C	882			882			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	337	0.190	64	0.2	13.243	B
C-A	675			675			
C-B	4	469	0.008	4	0.0	7.736	A
A-B	20			20			
A-C	720			720			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	375	0.143	54	0.2	11.229	B
C-A	565			565			
C-B	3	493	0.006	3	0.0	7.354	A
A-B	17			17			
A-C	603			603			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Mulcahy Keane Estate 2041.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Mulcahy Keane Estate
Report generation date: 05/11/2024 16:33:18

»2041, AM
»2041 , PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2041											
Stream B-AC	D1	0.1	15.32	0.10	C	36 %	D2	0.6	22.63	0.36	C	13 %
Stream C-B		0.1	8.79	0.06	A	[Stream B-AC]		0.0	8.79	0.01	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2041	AM	ONE HOUR	07:45	09:15	15
D2	2041	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2041, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.33	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Stream B-AC	0.33	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Road		Major
B	Mulcahy Keane Estate		Minor
C	Greenhills Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.00		✓	2.20	70.0		-

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	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	531	0.080	0.202	0.127	0.288
B-C	665	0.084	0.213	-	-
C-B	615	0.197	0.197	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	825	100.000
B		✓	24	100.000
C		✓	913	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	789
	B	17	0	7
	C	889	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	15.32	0.1	C
C-A				
C-B	0.06	8.79	0.1	A
A-B				
A-C				

Main Results for each time segment

RECEIVED: 15/05/2025

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	361	0.050	18	0.1	10.471	B
C-A	669			669			
C-B	18	492	0.037	18	0.0	7.586	A
A-B	27			27			
A-C	594			594			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	320	0.067	21	0.1	12.053	B
C-A	799			799			
C-B	22	469	0.046	22	0.0	8.052	A
A-B	32			32			
A-C	709			709			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	261	0.101	26	0.1	15.301	C
C-A	979			979			
C-B	26	436	0.061	26	0.1	8.790	A
A-B	40			40			
A-C	869			869			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	261	0.101	26	0.1	15.320	C
C-A	979			979			
C-B	26	436	0.061	26	0.1	8.792	A
A-B	40			40			
A-C	869			869			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	320	0.067	22	0.1	12.073	B
C-A	799			799			
C-B	22	469	0.046	22	0.0	8.054	A
A-B	32			32			
A-C	709			709			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	361	0.050	18	0.1	10.490	B
C-A	669			669			
C-B	18	492	0.037	18	0.0	7.590	A
A-B	27			27			
A-C	594			594			

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2041 , PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	Stream B-AC	1.02	A

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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	921	100.000
B		✓	81	100.000
C		✓	846	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	896
	B	58	0	23
	C	841	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	22.63	0.6	C
C-A				
C-B	0.01	8.79	0.0	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)	Unsignalised level of service
B-AC	61	352	0.173	60	0.2	12.312	B
C-A	633			633			
C-B	4	478	0.008	4	0.0	7.587	A
A-B	19			19			
A-C	675			675			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	309	0.236	72	0.3	15.200	C
C-A	756			756			
C-B	4	452	0.010	4	0.0	8.050	A
A-B	22			22			
A-C	805			805			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	248	0.359	88	0.5	22.383	C
C-A	926			926			
C-B	6	415	0.013	5	0.0	8.789	A
A-B	28			28			
A-C	987			987			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	248	0.359	89	0.6	22.634	C
C-A	926			926			
C-B	6	415	0.013	6	0.0	8.789	A
A-B	28			28			
A-C	987			987			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	309	0.236	74	0.3	15.371	C
C-A	756			756			
C-B	4	452	0.010	5	0.0	8.052	A
A-B	22			22			
A-C	805			805			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	352	0.173	61	0.2	12.415	B
C-A	633			633			
C-B	4	478	0.008	4	0.0	7.591	A
A-B	19			19			
A-C	675			675			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Future BusConnects Mulcahy Keane Estate 2026.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Mulcahy Keane Estate
Report generation date: 05/11/2024 16:25:45

»2026, AM
»2026 , PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026											
Stream B-AC	D1	0.1	17.11	0.10	C	27 %	D2	0.5	25.34	0.36	D	9 %
Stream C-B		0.1	9.03	0.05	A	[Stream B-AC]		0.0	9.13	0.01	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2026	AM	ONE HOUR	07:45	09:15	15
D2	2026	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026, AM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-AC	0.35	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Road		Major
B	Mulcahy Keane Estate		Minor
C	Greenhills Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00		✓	2.20	70.0		-

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	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	531	0.097	0.244	0.154	0.349
B-C	665	0.102	0.258	-	-
C-B	615	0.238	0.238	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	736	100.000
B		✓	21	100.000
C		✓	818	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	704
	B	15	0	6
	C	797	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	17.11	0.1	C
C-A				
C-B	0.05	9.03	0.1	A
A-B				
A-C				

Main Results for each time segment

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07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	343	0.046	16	0.0	10.985	B
C-A	600			600			
C-B	16	483	0.033	16	0.0	7.709	A
A-B	24			24			
A-C	530			530			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	298	0.063	19	0.1	12.890	B
C-A	716			716			
C-B	19	457	0.041	19	0.0	8.217	A
A-B	29			29			
A-C	633			633			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	234	0.099	23	0.1	17.067	C
C-A	878			878			
C-B	23	422	0.055	23	0.1	9.033	A
A-B	35			35			
A-C	775			775			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	234	0.099	23	0.1	17.108	C
C-A	878			878			
C-B	23	422	0.055	23	0.1	9.034	A
A-B	35			35			
A-C	775			775			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	298	0.063	19	0.1	12.912	B
C-A	716			716			
C-B	19	457	0.041	19	0.0	8.219	A
A-B	29			29			
A-C	633			633			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	343	0.046	16	0.0	11.003	B
C-A	600			600			
C-B	16	483	0.033	16	0.0	7.715	A
A-B	24			24			
A-C	530			530			

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2026 , PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.11	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	9	Stream B-AC	1.11	A

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	2026	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	823	100.000
B		✓	71	100.000
C		✓	755	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	801
	B	51	0	20
	C	751	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	25.34	0.5	D
C-A				
C-B	0.01	9.13	0.0	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)	Unsignalised level of service
B-AC	53	334	0.160	53	0.2	12.786	B
C-A	565			565			
C-B	3	467	0.006	3	0.0	7.758	A
A-B	17			17			
A-C	603			603			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	287	0.223	63	0.3	16.092	C
C-A	675			675			
C-B	4	438	0.008	4	0.0	8.280	A
A-B	20			20			
A-C	720			720			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	220	0.355	77	0.5	25.017	D
C-A	827			827			
C-B	4	399	0.011	4	0.0	9.128	A
A-B	24			24			
A-C	882			882			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	220	0.355	78	0.5	25.339	D
C-A	827			827			
C-B	4	399	0.011	4	0.0	9.128	A
A-B	24			24			
A-C	882			882			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	287	0.223	65	0.3	16.287	C
C-A	675			675			
C-B	4	438	0.008	4	0.0	8.280	A
A-B	20			20			
A-C	720			720			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	334	0.160	54	0.2	12.891	B
C-A	565			565			
C-B	3	467	0.006	3	0.0	7.759	A
A-B	17			17			
A-C	603			603			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: Future BusConnects Mulcahy Keane Estate 2041.j10
Path: C:\Users\BrianMc\OneDrive\OneDrive - NRB Consulting Engineers Ltd\Documents\2022\22-087 Chadwicks Greenhills\Calculations\03 November 2024 Calcs\Junction Analysis\Mulcahy Keane Estate
Report generation date: 05/11/2024 16:27:49

»2041, AM
»2041 , PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2041											
Stream B-AC	D1	0.1	11.86	0.08	B	70 %	D2	0.4	16.01	0.28	C	35 %
Stream C-B		0.1	7.99	0.06	A	[Stream B-AC]		0.0	8.07	0.01	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Office-LT\BrianMc
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

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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	2041	AM	ONE HOUR	07:45	09:15	15
D2	2041	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2041, AM

RECEIVED: 15/05/2025

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.41	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	70	Stream B-AC	0.41	A

Arms

Arms

Arm	Name	Description	Arm type
A	Greenhills Road		Major
B	Mulcahy Keane Estate		Minor
C	Greenhills Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00		✓	2.20	70.0		-

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	3.00	65	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	531	0.097	0.244	0.154	0.349
B-C	665	0.102	0.258	-	-
C-B	615	0.238	0.238	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

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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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	525	100.000
B		✓	24	100.000
C		✓	613	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	489
	B	17	0	7
	C	589	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	11.86	0.1	B
C-A				
C-B	0.06	7.99	0.1	A
A-B				
A-C				

Main Results for each time segment

RECEIVED: 15/05/2025

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	406	0.044	18	0.0	9.263	A
C-A	443			443			
C-B	18	520	0.035	18	0.0	7.162	A
A-B	27			27			
A-C	368			368			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	375	0.058	22	0.1	10.194	B
C-A	529			529			
C-B	22	502	0.043	22	0.0	7.490	A
A-B	32			32			
A-C	440			440			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	330	0.080	26	0.1	11.852	B
C-A	649			649			
C-B	26	477	0.055	26	0.1	7.990	A
A-B	40			40			
A-C	538			538			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	330	0.080	26	0.1	11.860	B
C-A	649			649			
C-B	26	477	0.055	26	0.1	7.991	A
A-B	40			40			
A-C	538			538			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	375	0.058	22	0.1	10.204	B
C-A	529			529			
C-B	22	502	0.043	22	0.0	7.494	A
A-B	32			32			
A-C	440			440			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	406	0.044	18	0.0	9.276	A
C-A	443			443			
C-B	18	520	0.035	18	0.0	7.169	A
A-B	27			27			
A-C	368			368			

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2041 , PM

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.07	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	35	Stream B-AC	1.07	A

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	2041	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	621	100.000
B		✓	81	100.000
C		✓	546	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	596
	B	58	0	23
	C	541	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

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Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.28	16.01	0.4	C
C-A				
C-B	0.01	8.07	0.0	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)	Unsignalised level of service
B-AC	61	395	0.154	60	0.2	10.738	B
C-A	407			407			
C-B	4	503	0.007	4	0.0	7.207	A
A-B	19			19			
A-C	449			449			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	361	0.202	73	0.2	12.462	B
C-A	486			486			
C-B	4	482	0.009	4	0.0	7.544	A
A-B	22			22			
A-C	536			536			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	314	0.284	89	0.4	15.938	C
C-A	596			596			
C-B	6	452	0.012	5	0.0	8.067	A
A-B	28			28			
A-C	656			656			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	314	0.284	89	0.4	16.014	C
C-A	596			596			
C-B	6	452	0.012	6	0.0	8.067	A
A-B	28			28			
A-C	656			656			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	361	0.202	73	0.3	12.533	B
C-A	486			486			
C-B	4	482	0.009	5	0.0	7.548	A
A-B	22			22			
A-C	536			536			

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18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	395	0.154	61	0.2	10.801	B
C-A	407			407			
C-B	4	503	0.007	4	0.0	7.210	A
A-B	19			19			
A-C	449			449			

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APPENDIX I

LinSig
Simulation Capacity Model Output
Calmount Road / Calmount Avenue Signal Controlled Junction

Summary LinSig Results in Order as included herein

Future Scenario (With BusConnects)

Modelled Scenario	*Period Max DoS*	*Period Mean Max Q (PCUs)*
Opening Year 2026 AM Peak Hr	77.4%	22.6
Opening Year 2026 PM Peak Hr	78.2%	24.2
Design Year 2041 AM Peak Hr	66.4%	15.0
Design Year 2041 PM Peak Hr	67.7%	17.6

All Results Above are below the recommended DoS of 90% Capacity and therefore no problems are anticipated at the Junction in terms of Capacity or excessive vehicle Queues.

NB - Any Small Changes to Selected Opening Year 2026 or Design Year 2041, or indeed significantly higher traffic volumes experienced, as clearly deductable from the positive results presented, will clearly have no significant implications in terms of the conclusions of the Study.

Basic Results Summary

User and Project Details

File name:	Calmount Rd - Calmount Ave Junction.lsg3x

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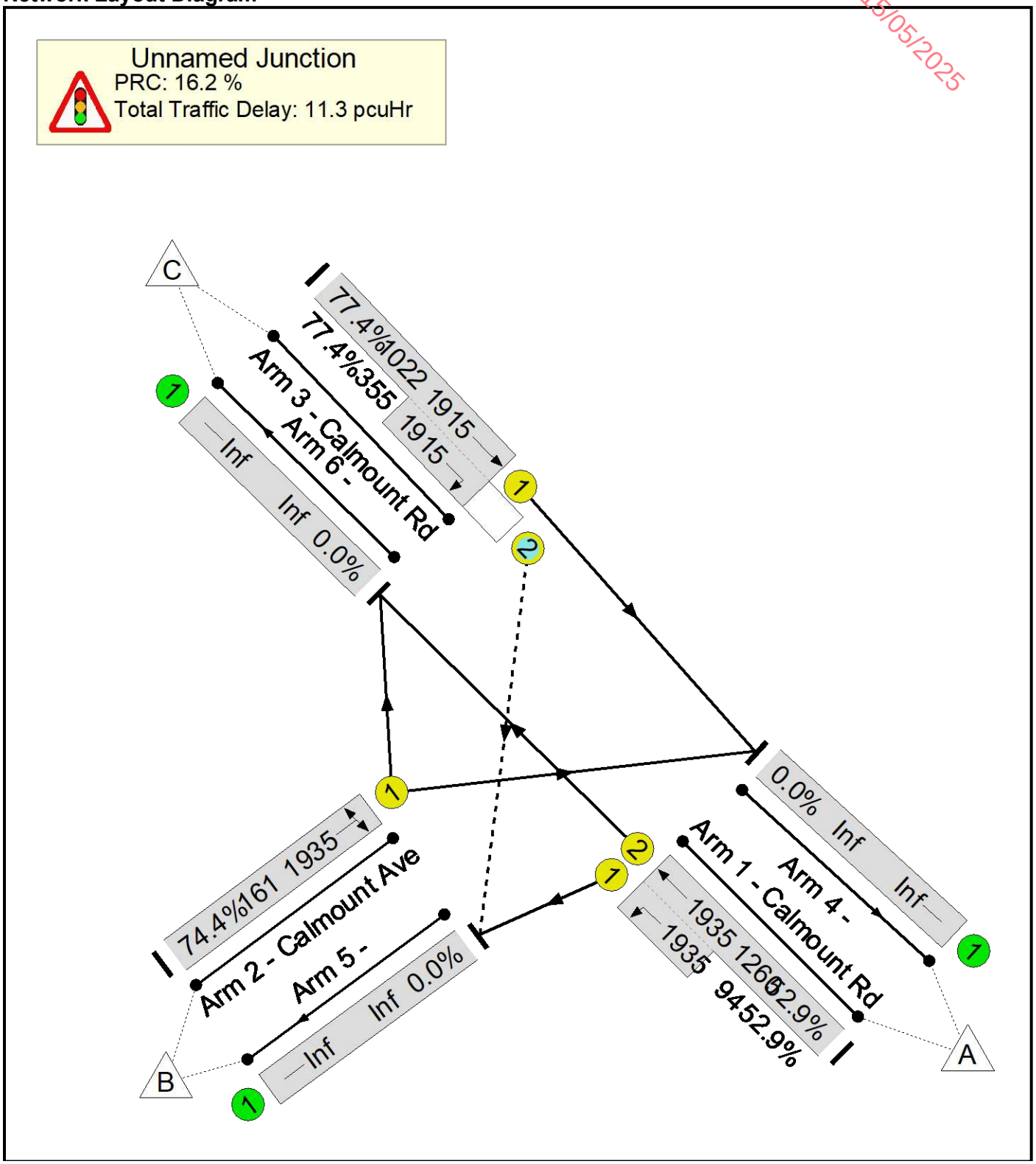
Scenario 1: '2026 AM' (FG1: '2026 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**77.4%**	**275**	**0**	**0**	**11.3**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**77.4%**	**275**	**0**	**0**	**11.3**	-	-
1/2+1/1	Calmount Rd Left Ahead	U	A B		1	82	-	717	1935:1935	1260+94	52.9 : 52.9%	-	-	-	2.3	11.5	11.6
2/1	Calmount Ave Right Left	U	C		1	9	-	120	1935	161	74.4%	-	-	-	3.2	94.7	5.3
3/1+3/2	Calmount Rd Ahead Right	U+O	E D		1	82	-	1066	1915:1915	1022+355	77.4 : 77.4%	275	0	0	5.8	19.7	22.6

C1 PRC for Signalled Lanes (%): 16.2 Total Delay for Signalled Lanes (pcuHr): 11.27 Cycle Time (s): 120
PRC Over All Lanes (%): 16.2 Total Delay Over All Lanes(pcuHr): 11.27

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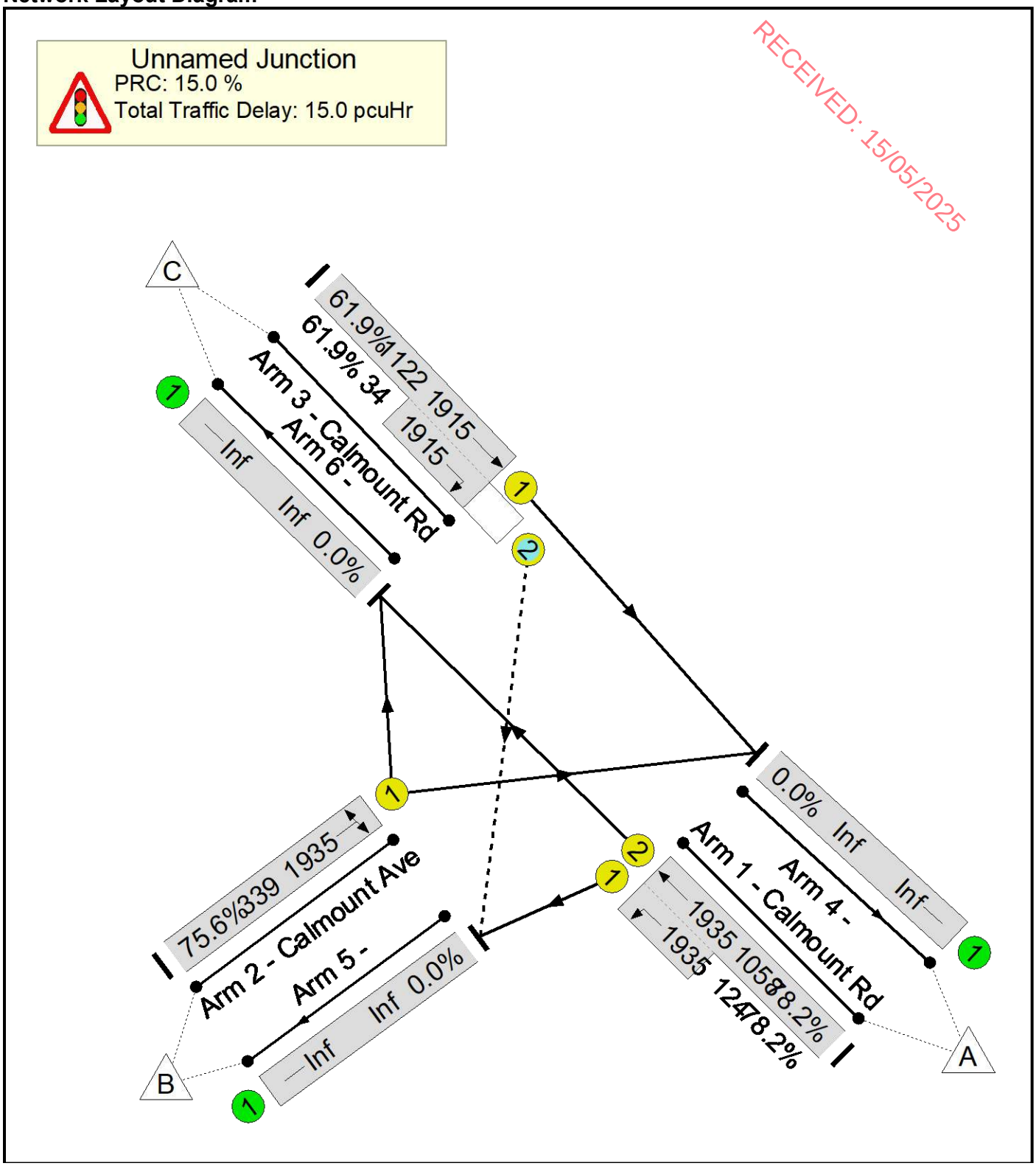
Basic Results Summary
Scenario 2: '2026 PM' (FG2: '2026 PM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**78.2%**	**21**	**0**	**0**	**15.0**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**78.2%**	**21**	**0**	**0**	**15.0**	-	-
1/2+1/1	Calmount Rd Left Ahead	U	A B		1	71	-	925	1935:1935	1058+124	78.2 : 78.2%	-	-	-	6.3	24.4	24.2
2/1	Calmount Ave Right Left	U	C		1	20	-	256	1935	339	75.6%	-	-	-	4.8	68.1	9.6
3/1+3/2	Calmount Rd Ahead Right	U+O	E D		1	71	-	715	1915:1915	1122+34	61.9 : 61.9%	21	0	0	3.9	19.8	15.6

C1

PRC for Signalled Lanes (%): 15.0
PRC Over All Lanes (%): 15.0

Total Delay for Signalled Lanes (pcuHr): 15.04
Total Delay Over All Lanes(pcuHr): 15.04

Cycle Time (s): 120

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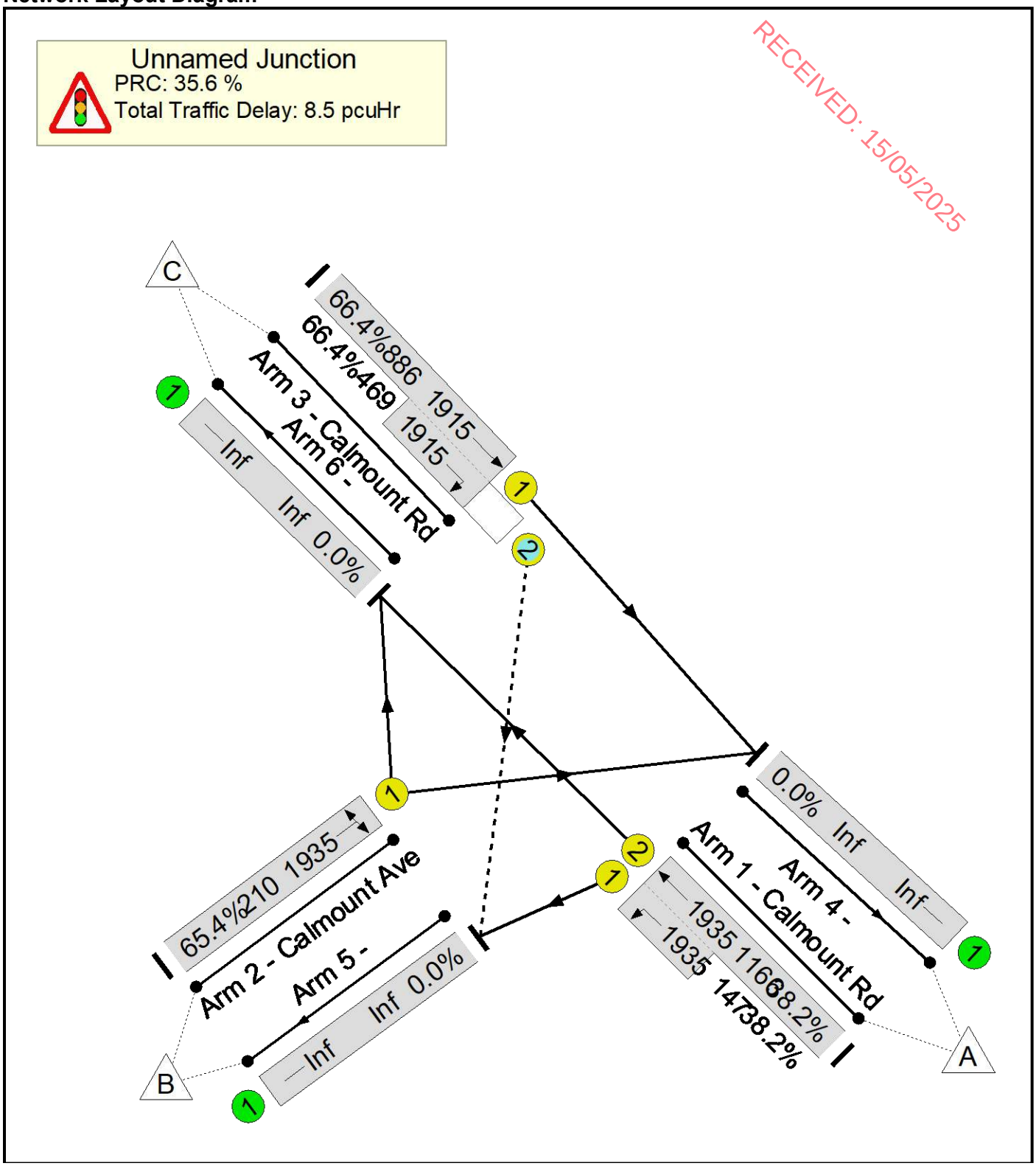
Basic Results Summary
Scenario 3: '2041 AM' (FG3: '2041 AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**66.4%**	**311**	**0**	**0**	**8.5**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**66.4%**	**311**	**0**	**0**	**8.5**	-	-
1/2+1/1	Calmount Rd Left Ahead	U	A B		1	79	-	501	1935:1935	1166+147	38.2 : 38.2%	-	-	-	1.5	10.8	7.0
2/1	Calmount Ave Right Left	U	C		1	12	-	137	1935	210	65.4%	-	-	-	2.9	75.5	5.3
3/1+3/2	Calmount Rd Ahead Right	U+O	E D		1	79	-	899	1915:1915	886+469	66.4 : 66.4%	311	0	0	4.1	16.5	15.0

C1 PRC for Signalled Lanes (%): 35.6 Total Delay for Signalled Lanes (pcuHr): 8.49 Cycle Time (s): 120
PRC Over All Lanes (%): 35.6 Total Delay Over All Lanes(pcuHr): 8.49

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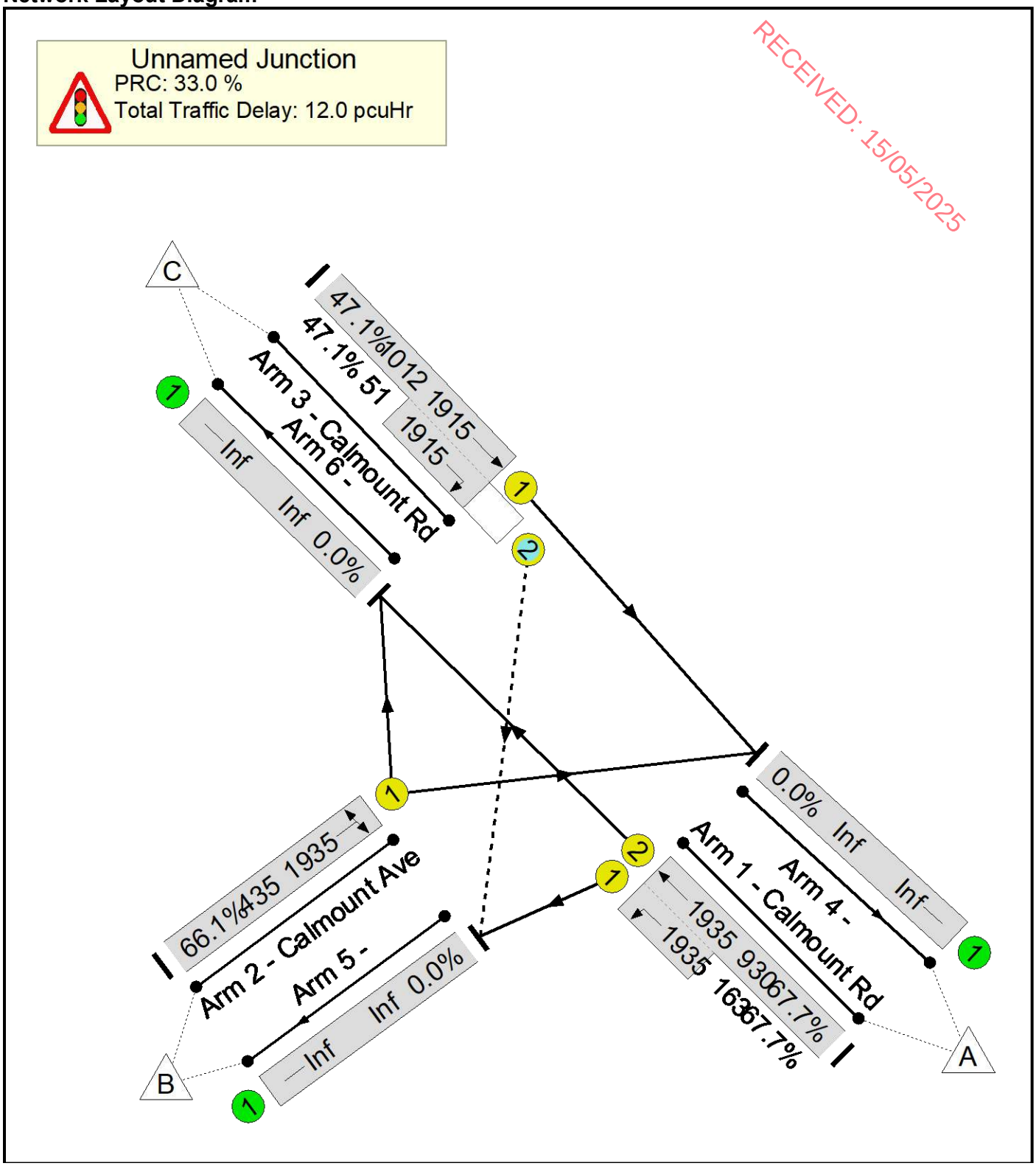
Basic Results Summary
Scenario 4: '2041 PM' (FG4: '2041 PM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**67.7%**	**24**	**0**	**0**	**12.0**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**67.7%**	**24**	**0**	**0**	**12.0**	-	-
1/2+1/1	Calmount Rd Left Ahead	U	A B		1	65	-	739	1935:1935	930+163	67.7 : 67.7%	-	-	-	4.8	23.6	17.6
2/1	Calmount Ave Right Left	U	C		1	26	-	288	1935	435	66.1%	-	-	-	4.4	54.4	9.7
3/1+3/2	Calmount Rd Ahead Right	U+O	E D		1	65	-	500	1915:1915	1012+51	47.1 : 47.1%	24	0	0	2.8	20.1	10.2

C1 PRC for Signalled Lanes (%): 33.0 Total Delay for Signalled Lanes (pcuHr): 11.99 Cycle Time (s): 120
PRC Over All Lanes (%): 33.0 Total Delay Over All Lanes(pcuHr): 11.99

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APPENDIX J

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Preliminary Mobility Management Plan (aka Travel Plan)

consulting engineers

NRB

Preliminary Mobility Management Plan / Travel Plan

(Appendix J)

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For

Proposed Green Vale Large Scale Residential Development

at

Former Chadwicks Builders Merchant Development, Greenhills Road, Walkinstown, Dublin 12.

FINAL ISSUE

5th Floor, 40 Mespil Road, Dublin 4
Tel: +353 1 292 1941, E-mail: info@nrb.ie, Web: www.nrb.ie

Registered in Ireland No. 491679

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Contents

Page	Section	Description
2	1.0	Introduction
5	2.0	Access to the Site - By Mode
15	3.0	Baseline Information
16	4.0	The Mobility Management Plan
22	5.0	Implementing the Plan
24	6.0	Conclusions

1.0 INTRODUCTION

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1.1 NRB Consulting Engineers have been commissioned to prepare a Preliminary Mobility Management Plan / Travel Plan for a Large Scale Residential Development, on lands at Greenhills Road, Walkinstown, Dublin 12. This report is prepared in order to explain the applicants commitment to the promotion of more sustainable and cost effective travel habits among the end occupiers/residents of the scheme.

1.2 This report is solely for proposed apartment residential development, providing a total of 588 no. residential apartments (comprising 291 one-beds, 238 two-beds and 59 three-beds) units, 1 childcare facility and 6 commercial units in 4 blocks.

1.3 There are 1,269 no. bicycle spaces (962 no. resident spaces spread over the 4 blocks); and undercroft and surface carpark providing a total of 270 parking spaces (including 13 no. mobility impaired user parking spaces).

1.4 Of course, an MMP prepared before the development is occupied can only **outline the current and future proposed alternative transport services** and set out **strategies that will be deployed** to encourage residents and staff to use alternative modes of travel. Working MMPs contain details of the current travel modes used, based on actual surveys, which then allow target setting to measure and quantify improvements.

What is a Travel Plan / MMP?

1.5 Originally and elsewhere called Mobility Management Plans (MMPs), they originated in the United States and the Netherlands in the late 1980s. In the US, employers over a certain size (generally over 100 employees) were required to implement 'Trip Reduction Plans' in order to reduce single-occupancy car commuting trips, and to increase car occupancy.

1.6 A MMP or Travel Plan (TP) consists of a package of measures put in place by an organisation to encourage and support more sustainable travel patterns among staff and other visitors. Such a plan usually concentrates on staff commuting patterns. In essence, a TP is useful not only to reduce the attractiveness of private car use, but also for the ability to promote and support the use of more sustainable transport modes such as walking, cycling, shared transport and mass transit such as buses and trains.

Aims and Objectives of this Travel Plan

1.7 The package generally includes measures to promote and improve the attractiveness of using public transport, cycling, walking, car sharing, flexible working or a combination of these as alternatives to single-occupancy car journeys to work. A TP can consider all travel associated with the residential or work site, including business travel, fleet management, customer access and deliveries. It should be considered as a dynamic process where a package of measures and

campaigns are identified, piloted and monitored on an on-going basis. This MMP recognises the fact that, for some people, car use is often essential as part of the home to work commute, as the work commute is often combined with other important trips, for example having to drop children to school or crèche on the way.

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1.8 The changes which are being sought as part of any plan may be as simple as car sharing one-day per week, or walking on Wednesdays, or taking the bus on days which do not conflict with other commitments, leisure or work activities.

1.9 It is envisaged that once in place, the Travel Plan will enable the following benefits to be realised for the Development:

- Reduced residential car parking demand and reduced congestion on the local road network due to lower demand for private transport and/or more efficient use of private motor vehicles,
- Improved safety for cyclists and pedestrians with lower numbers of vehicular traffic,
- Direct financial savings for those taking part in the developed initiatives, through higher than average vehicle occupancy rates,
- A reduction in car parking and car set-down demand, resulting in improved operational efficiency and safety for all,
- Improved social networking between all those participating in the shared initiatives,
- Improved environmental consideration and performance,
- Improved public image for the development, which sets an example to the broader community and may lead to residents making better travel decisions in the future,
- Improved health and well-being for those using active non-car transport modes,
- On-going liaison with the Local Authority and public transport providers to maintain, improve, and support transportation services to and from the site,
- Improved attractiveness of the development to prospective residents,
- Optimal levels of safety for all staff and visitors.

Methodology

1.10 As part of this Travel Plan, reference has been made to the following documents:

- Your Step By Step Guide To Travel Plans (NTA 2012);
- Achieving Effective Workplace Travel Plans (NTA 2011);
- Traffic and Transport Assessment Guidelines (TII);
- Traffic Management Guidelines (DoELG, 2003);
- Mobility Management Plans – DTO Advice Note (DTO, 2002);
- The Route to Sustainable Commuting (DTO 2001);
- Smarter Travel: A Sustainable Transport Future (DOT)

1.11 Consultation with key stakeholders is an essential part of any MMP. As discussed below, as part of the operational phase of this development, a Mobility Management Coordinator Role will be appointed from with the Management Company. Following on, once occupied, residents will be asked to complete detailed questionnaires on essential data in relation to their existing travel patterns. This information will be used to inform the ongoing implementation, monitoring and review of the plan for this development.

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1.12 This information has been used herein as the basis for the assessment, conclusions and recommendations.

2.0 ACCESS TO THE SITE - BY MODE

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2.1 The development consists of 588 apartments, together with a mix of commercial and communal units over 4 blocks within the site development area on lands at Greenhills Road, Walkinstown, Dublin 12. A location plan is shown below as Figure 2.1.

Figure 2.1 – Site Location Map

2.2 The proposed Residential Development is of the highest quality with attractive living and leisure spaces incorporated into the Masterplan. The use and viability of the local services will be enhanced through the encouragement of the use of bicycles and through the demand measurement control of car parking provision.

2.3 It is essential for the successful Travel Planning to concentrate on journeys associated with work and school commuting patterns. These are the groups which can most practically be encouraged to use modes of transport other than the car.

2.4 Notwithstanding this, the development is located in a highly sustainable location, for primarily residential development of the nature proposed, given its proximity to Walkinstown and local services.

Pedestrian and Cycling Facilities

2.5 The National Transport Authority (NTA) has surveyed the cycle facilities for the Greater Dublin Area (GDA) as part of the GDA Cycle Network Plan. The existing Cycle Infrastructure, which is being continually improved is identified in ***Figure 2.2*** below:

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Figure 2.2 Existing Cycle Infrastructure

2.6 The key to cycle accessibility is convenient safe links, with secure and carefully sited cycle parking. Cycling is ideal for shorter journeys. South Dublin County Council (SDCC) have developed their Cycle South Dublin Policy in their latest Development Plan 2022-2028. A significant amount of work has been carried out in the provision of facilities for Cyclists in SDCC (more that 200km of cycle facilities have been provided to date).

2.7 The GDA Cycle Network Plan sets out the proposals for improvements to the existing Cycle Network Plan locally. These are highlighted in ***Figure 2.3*** below

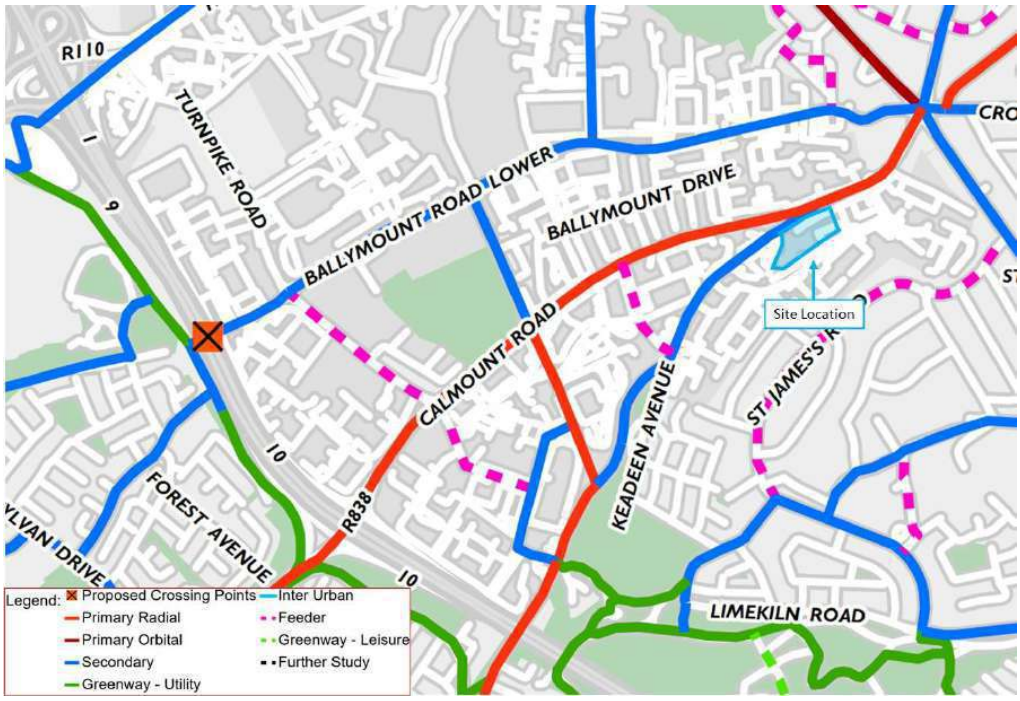

Figure 2.3 - Future Cycle Network

2.8 It is clear that it is proposed that the site will be bounded by primary and secondary routes bordering the development site directly, thereby creating a high quality network of cycle routes throughout the local area, which will in turn connect to a comprehensive plan for the GDA outside Greenhills.

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2.9 The SDCC vision, as set out in their *Cycle South Dublin* Programme of works is an ambitious programme of work that reflects the increasing importance of making cycling a realistic and integral part of how people move around the County. It proposes a set of 41 projects that would deliver nearly 210km of new and improved cycle lanes over the next ten years. The programme has been prepared against the backdrop of the Council's commitments to Sustainable Travel; Climate Change; Building Stronger Local Economies and Improving Personal Health and Wellbeing. There are proposals to upgrade many of the cycle facilities close to the site, including those on the Tymon to Greenhills Park project, Limekiln, Whitehall Road West, and Templeville Road as shown in ***Figure 2.4***.

Figure 2.4 – Cycle South Dublin Programme

2.10 At present, pedestrian/cycle traffic at/to the existing site is served by an extensive network of high quality footpaths and cycle lanes. The development includes sensible and simple at grade links to these facilities which are immediately adjacent the development.

2.11 The location of the proposed development is ideal in terms of encouraging walking. An example of the walking distance from the residential development is illustrated below as ***Figure 2.5.*** The proximity to the numerous shops and amenities close at the Walkinstown Roundabout means that walking will be an attractive alternative option for the vast majority of residents. Being a short distance from every day services reduces the need to travel and will assist in encouraging walking.

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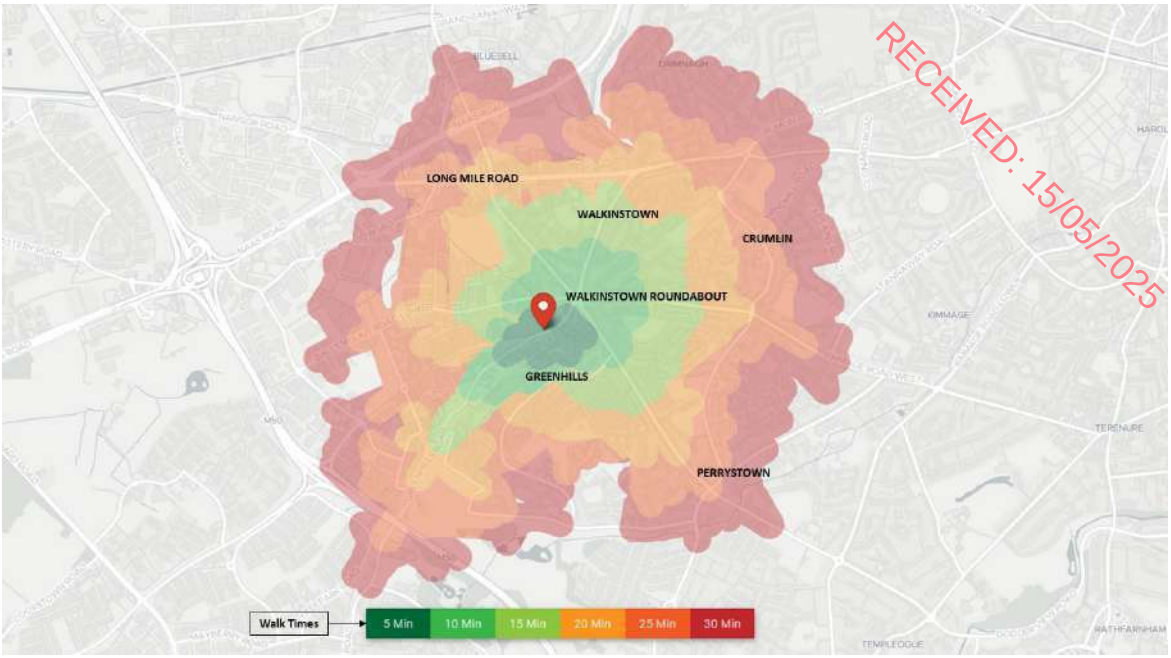

Figure 2.5 – Walk Distance From Residential Development (30 Mins)

2.12 A similar illustration showing the typical cycle distance from the residential development is included as ***Figure 2.6*** below. From this figure is it shown that the residential development is a short cycle distance of Walkinstown, but also includes other further destinations such as Terenure, Tallaght and Rialto.

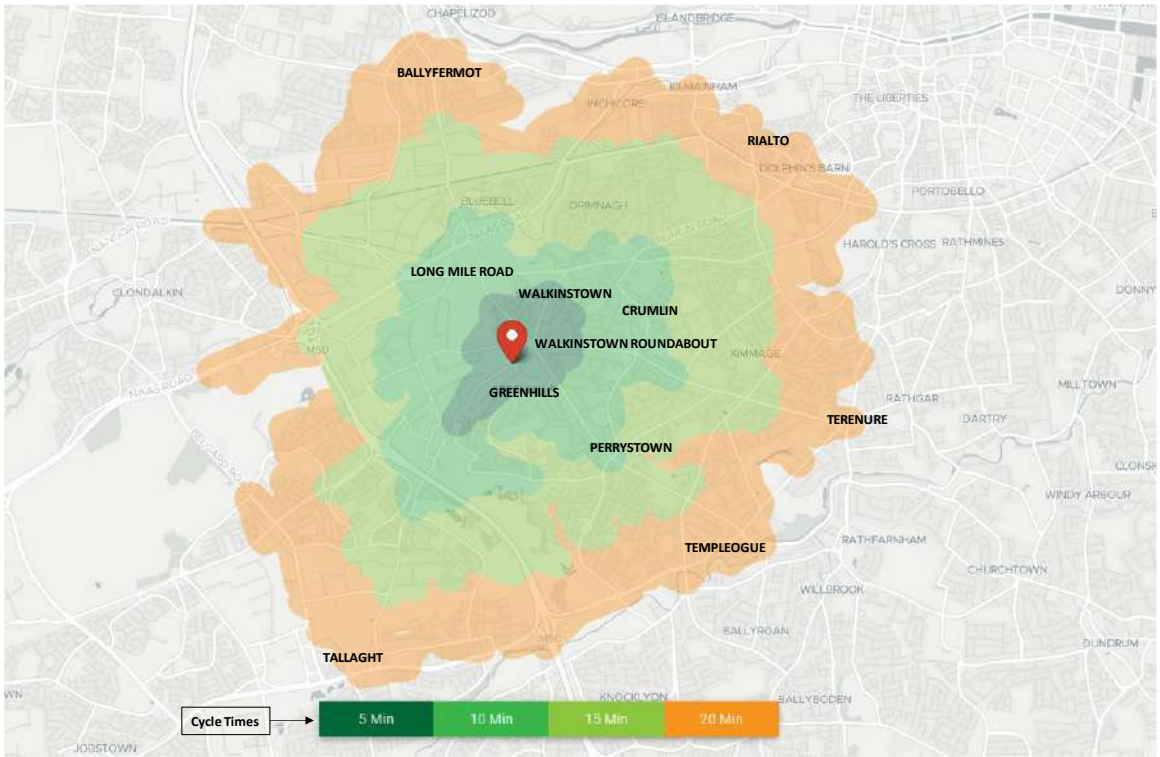

Figure 2.6 – Cycle Distance From Residential Development (20 Mins)

2.13 These illustrations are provided in order to demonstrate the residentials accessibility by bicycle and

on foot to a very large area of the surrounding amenities.

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2.14 The SDCC and national objective is to cultivate a walking and cycling culture, through the implementation of appropriate infrastructure and promotional measures, which positively encourages all members of the community to walk or cycle at all life stages and abilities, as modes of sustainable transport that delivers environmental, health and economic benefits to both the individual and the community.

2.15 To help meet the target set in Ireland's first National Cycle Policy Framework launched in April 2009 (that 10% of all journeys will be by bike by 2020), the following will assist:

- Improve cycling conditions on primary cycle routes in the area as per the enclosed details,
- Develop new cycle route/ greenways through parks and open spaces,
- Improve connectivity/permeability from cycle routes to key destinations,
- Provide 30kph zones within residential areas and other suitable locations,
- Provide new secure cycle parking,
- Continue cycle training in schools,
- Ensure that cycling is a key element of all development, and,
- Monitor trends in cycle numbers using cycle counter data.

2.16 The local infrastructure plans support the 19 specific objectives in the National Cycle Policy Framework. The extant approved residential development on the subject site, through good design, will assist in the promotion of cycling as a primary mode of travel.

2.17 For journeys greater than 8km, it is recognised that a modal shift to cycling could be achievable for some, but not all, and options such as public transport and car sharing should be considered. Journeys up to 8km could be undertaken by bicycle and journeys up to 3-4km could be undertaken by walking or cycling.

Cycle Parking

2.18 The South Dublin County Development Plan (2022-2028) sets out the cycle parking requirements for developments, based on both long term and short-term requirements. The SDCDP notes that "*long term spaces are to be designed for use by residents and employees*", and that "*such spaces should be located in a secure area that is not freely accessible to the general public*". Furthermore, short term spaces should be "*designed for ease of use by the general public*" and that "*such spaces should be located in highly visible areas that are easy to access and allow for cargo bikes*".

2.19 The SDCDP recommend 1 cycle parking stand per Bed-Space and Visitor cycle parking shall also be provided at a standard of 1 space per 2 residential units, and therefore it is proposed to provide

a total of 962 cycle spaces located in secure bike storage within the buildings or in secure external bicycle stores. A further 310 no. visitor cycle spaces are located throughout the landscaped areas including 16 no. larger non-standard cycle spaces (i.e. cargo spaces etc.).

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2.20 It is expected that a very significant number of residents will be willing to cycle to work or school, if safe links and secure parking are in place, and that is reflected in the provision of large number of dedicated cycle parking spaces in line with the SDCDP and the new national Design Standards for Apartments. Once occupied, advice can be provided on routes by the appointed Mobility Management Coordinator, possibly with the help of a bicycle user group. This can be further facilitated in consultation with SDCC, as the ongoing provision of cycle facilities as set out above is fully implemented.

2.21 It is acknowledged that cyclists need to be confident that their cycles will not be tampered with while they are in storage. With this in mind, it is proposed to install the cycle parking in prominent and visible locations with racks which allow both frame and wheels to be secured. These cycle racks are located in an active, well lit & security monitored place or where they can be seen by a security guard, either directly, or by closed circuit television.

Bus Provision

2.22 There are a number of Dublin Bus Stops operating locally, with the closest main stops being located on the Greenhills Road. There are several main routes within a 10 minute walk distance of the site and these are detailed in ***Figure 2.7*** below.

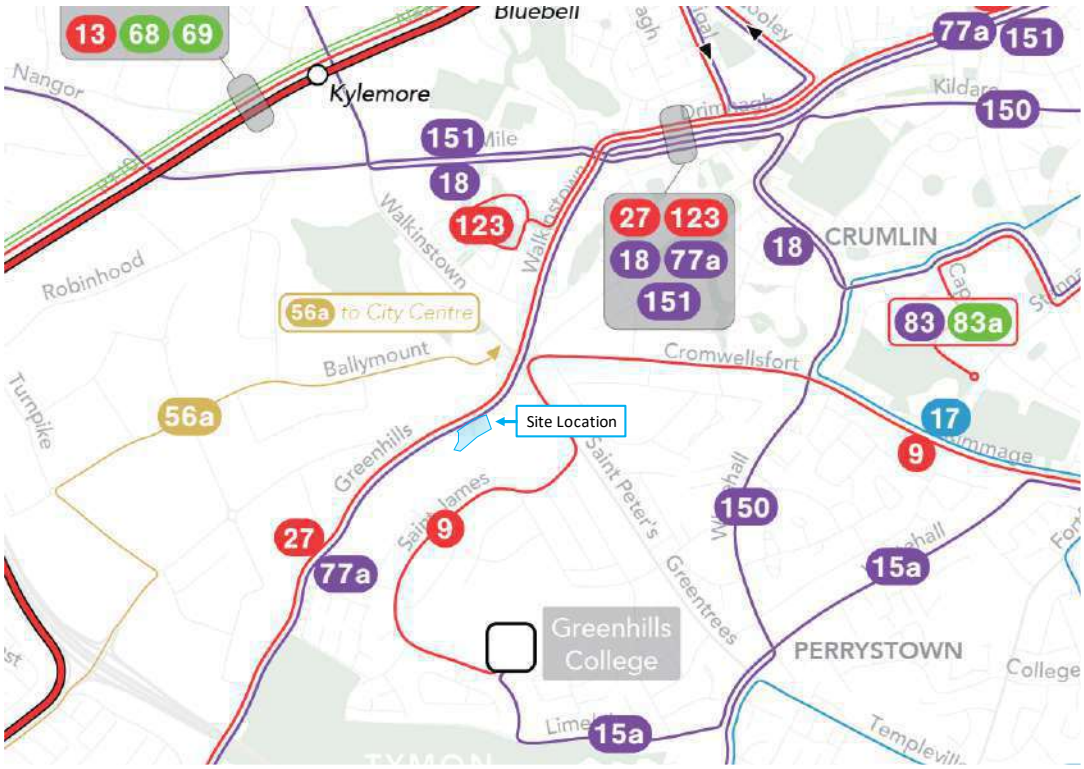

Figure 2.7 - Bus Services

2.23 The Bus Stops adjacent the existing centre are currently served by Dublin Bus Services 9, 27, 56a, and 77a. Real time information is available through the use of Bus Passenger Apps for Mobile Phones.

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2.24 All of the Dublin Bus routes currently passing the development are operated using new low-floor wheelchair accessible city buses. Detail of routes, timetables and fares are provided on www.dublinbus.ie, on the Dublin Bus App, and on the Transport for Ireland National Journey Planner App.

2.25 In addition, in terms of Future Planned Services, the NTA have recently published details of the overall bus network for the GDA, the 'New Dublin Area Network' - showing Spine Routes, Feeder and Orbital Routes, an extract from this plan showing the site in context is included below as ***Figure 2.8.*** There are a number of Spine Routes (D2, D4, D5) with high frequency services a very short walk from the residential development. Furthermore, Spine Route F3 and Radial Routes 71 (Purple) are close to this site.

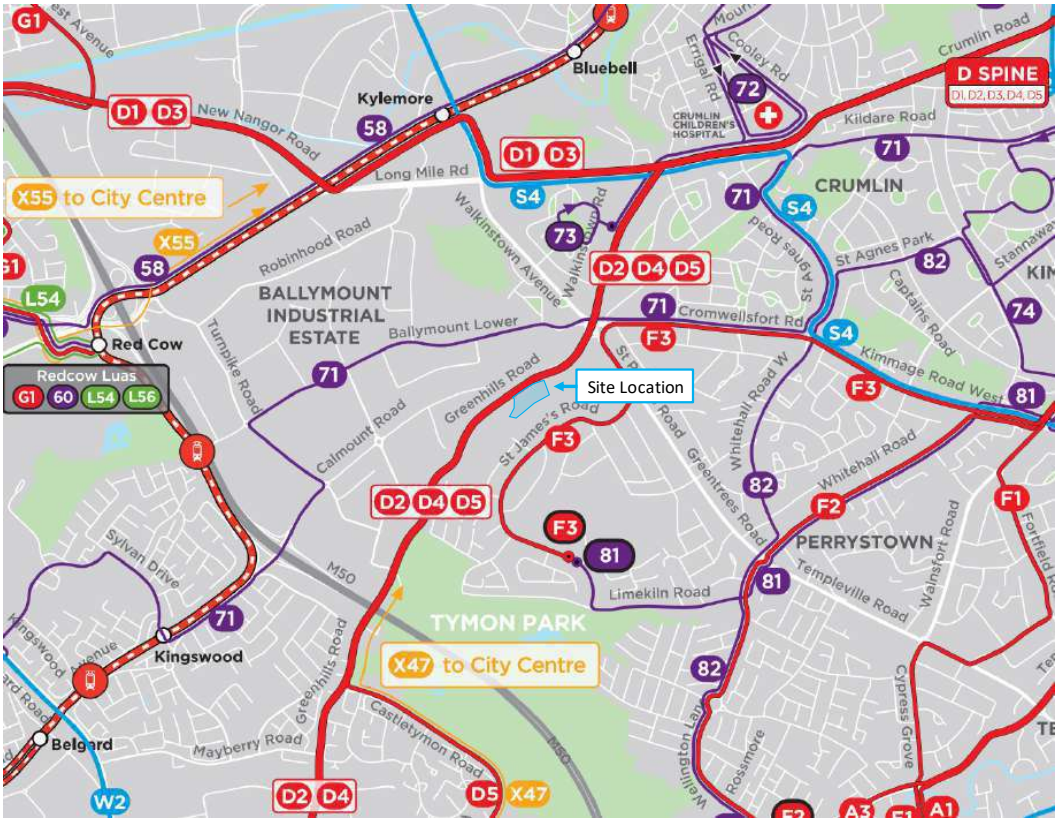

Figure 2.8 – NTA Bus Connects Network

2.26 In terms of number of transport alternatives easily available to Residents, it is considered that the proposed development is very highly sustainable in terms of public and alternative transport accessibility. The proximity of the development to existing public transport services means that all residents will have viable alternatives to the private car for accessing the site and will not be reliant upon the car as a primary mode of travel.

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2.27 Direct and high quality pedestrian linkages are provided between the site and the existing pedestrian facilities on the surrounding road network. The entrances to the site will be well lit, so that people can feel secure in using the facilities.

2.28 Public transport maps and timetables can be provided in prominent locations on site and the information will be kept up to date by the appointed Mobility Management Coordinator, a role for the Management Company.

2.29 Working Residents are generally now offered the opportunity to purchase public transport commuter tickets under the current ‘Employer Pass’ and ‘TaxSaver’ programmes, by individual Employers. Under these schemes the employer applies to Iarnród Éireann / Bus Éireann for tax free public transport tickets for their employees as an incentive for them to use public transport to travel to work.

2.30 With this in mind, the main focus of this Mobility Management Plan will be to promote and support the use of alternative modes to the private car.

Car Parking

2.31 There are a total of 270 no. private car parking spaces provided within the scheme, including shared, residential spaces, commerical and mobility impaired parking. This is considered appropriate in light of the location of the proposed development immediately adjacent high quality public transport, and in consideration of the provisions of the SDC Development Plan being "Maximum" standards. Given the lower number of spaces provided, the entire scheme will be actively marketed and promoted as a "Reduced Car Dependency" scheme and this will be communicated from the outset as part of sales and marketing. The development will also be managed on an on-going basis to ensure that the reduced car dependency nature of the development is continually promoted and enhanced.

2.32 It is clear that the lower provision of car parking will act as a demand management measure, ensuring that the development is occupied in the most sustainable manner being also reliant on non-car modes of travel.

2.33 If considered appropriate, as part of a working MMP, priority spaces could in future be allocated to car-sharing workers when they travel together or for 'Go-Car' use. These are some of the most

accessible spaces and are clearly visible to other car park users. It is acknowledged that this may require some level of 'policing'.

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Electric Vehicle Charging

2.34 20% of the car parking spaces have been provided as EV spaces, while the remaining have been ducted to accept cabling to serve a charging point in the future. In the undercroft parking, conduits are run on the walls where charging points can also be mounted. Where residents request a charging point to be installed, the relevant charging point will be pre-wired back to their home electricity meter in the designated meter location. The socket point will have a lockable cover on it so that only that resident may use the power point. This provision around the parking area allows future charging points to be installed at any of the car parking spaces with minimum works as and when required.

Go Car

2.35 Go Car is a pay as you go car rental scheme which is easy to join with multiple locations around the city with free parking at Dublin on-street pay and display spaces. This is another option available to residents. 6 no. car parking spaces have been designated as car sharing spaces within the car park.

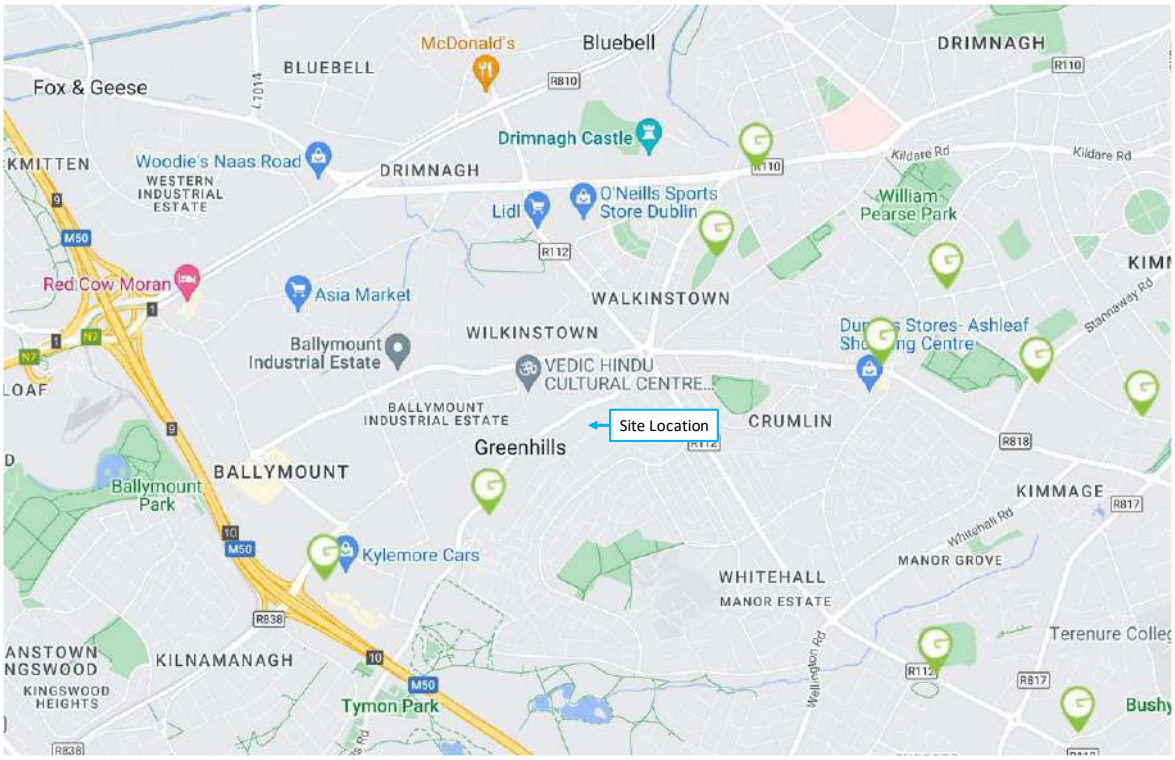

Figure 2.9 – Go Car Accessibility (On Line Locator Extract)

Accessibility By Taxi

2.36 In terms of taxis, modern communication devices (e.g. 'FreeNow' and 'Lynk') now allow taxis to be ordered on a demand-basis, without any requirement for formal taxi ranks or dedicated taxi holding areas.

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3.0 COLLECTION OF BASELINE INFORMATION

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Possible Travel Pattern Questionnaires

3.1 Once occupied, and when the Mobility Management Plan Coordinator is appointed, the occupiers of the proposed development will be encouraged to continually monitor the Mobility Management Plan initiatives in order to maximise on their success.

3.2 Shortly after occupation of the new development, a detailed travel-questionnaire will likely be complied and distributed to Residents for completion. The aim of the travel questionnaire will be to establish travel patterns between work and home and school travel demand. The information gathered from this survey will be used to inform the further development of the Mobility Management Plan.

3.3 The Baseline Survey information will also allow the Mobility Management Plan Coordinator for the development to set realistic modal-split targets for the development.

3.4 It is anticipated that, given the location and good transport links at this development, combined with reduced car parking on site, there will be a high percentage of use via public and alternative transport. The Mobility Management Plan will need to maintain this positive modal split and improve it, where possible. It is informative to note that the "Smarter Travel: A Sustainable Transport Future" (DOT) Objective for 2020 is to achieve a reduced work related commuting by car modal share of 65% to 45%.

3.5 The MMP is not seeking a radical change in terms of a modal shift; it is recognised that the use of the car is often essential for many users. Instead, the Plan seeks small but consistent increments of change in our approach to, and the use of, alternatives to the car.

4.0 THE MOBILITY MANAGEMENT PLAN

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4.1 The successful implementation of a Mobility Management Plan / Travel Plan will ensure that, in-so-far-as-possible, the impacts of this traffic are reduced and minimised where practical, while providing a number of environmental and economic advantages detailed below.

4.2 The following sub-sections detail the available initiatives which will serve to better manage travel demand, and therefore the traffic impact of work-related journeys, focused on the movement of residents during peak times.

Walking

Walking - Key Information	
Approx Zone of Influence	3.5km
Percentage of Residents working in area of influence	TBC in each survey when occupied
Percentage of Residents interested in Walking	TBC in each survey when occupied

Table 4.1 – Key Information: Walking

4.3 There are many local, global, and personal benefits to walking to work, a few of which are listed following:

- **W** - Wake Up! - Studies have shown that people who walk to work are more awake and find it easier to concentrate.
- **A** - Always one step ahead - Walking makes people more aware of road safety issues and helps them develop stronger personal safety skills.
- **L** - Less congestion - If you leave the car at home and walk, there are fewer cars on the road which makes it safer for those who walk and cycle.
- **K** - Kinder to the environment - By leaving the car at home you are reducing the amount of CO 2 produced and helping to reduce the effects of climate change and air pollution.
- **I** - Interpersonal skills - Walking to work or school can be a great way to meet other walkers, share the experience, and develop personal skills.
- **N** - New adventures - Walking to work or school is a great way to learn about your local environment and community. It's also a fun way to learn about the weather, landscape, and local ecosystems.
- **G** - Get fit and stay active - Walking to and from work or school helps people incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind.

4.4 Most adults will consider walking a maximum of 3.5 km (Approx 30/40 minutes) to work. Residents working within a 3.5 km radius of the site will be encouraged to walk to work as often as their schedule permits. Similarly school trips can be encouraged on foot.

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4.5 The following initiatives and incentives can be used to encourage walking to work or school:

- Take part in a 'Pedometer Challenge' which is organised through the Irish Heart Foundation or Smarter Travel Workplaces;
- Organise special events such as a 'Walk to work/school on Wednesdays' where participants are rewarded for their participation;;
- Keep umbrellas in public areas on a deposit system for use when raining;
- Display Smarter Travel Workplaces Accessibility Walking maps on notice boards areas so Residents can plan journeys;
- Organise lunch time or afternoon walks as part of a health and well-being programme;
- Highlight the direct savings gained due to reduced use of private vehicles.

Cycling

Cycling – Key Information	
Approx. zone of influence	10km
Percentage of Residents Surveyed known to Work within the area of influence	TBC in each survey when occupied
Percentage of Residents interested in cycling	TBC in each survey when occupied

Table 4.2 : Key Information - Cycling

4.6 Research suggests that cycling is a viable mode of transport for people who live up to 10 km from work or school.

4.7 Cycling is a great way to travel. It helps foster independence, raises awareness of road safety, and helps the environment.

4.8 Some positive aspects of cycling to work or school are listed following:

- **C** - Cycling is fun! - Cycling is a great form of transport but it's also a great recreational activity. Cycling is a skill that stays with you for life and it's a fantastic way to explore your local community.
- **Y** - You save time & money - cycling to work reduces the need to travel by car thus reducing fuel costs and freeing up road space for more cyclists;
- **C** - Confidence building - travelling to work as an independent cyclist can give people

increased confidence proving beneficial in all aspects of life;

- **L** - Less congestion - If you leave the car at home and cycle to work there are fewer cars on the road which makes it safer for those who cycle and walk to work or school;
- **I** - Interpersonal skills - Cycling to work or to school can be a great way to meet other cyclists and share the experience;
- **N** - New adventures - Cycling to work or school is a great way to learn about your local environment and community. It helps people to understand where they live and how their actions affect their local environment;
- **G** - Get fit and stay active - cycling to and from work or school helps people incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind.

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4.9 The provision of enhanced and attractive cycle parking facilities at the site will clearly play a critical role in promoting journeys by bicycle.

4.10 The following initiatives and incentives can be used to encourage cycling to work and school:

- New cycle parking installed within the development, secure and well lit;
- It will publicise cycle parking availability by way of signage and on notice boards;
- It will display maps on notice boards areas so people can plan journeys;
- The development can provide free cycle accessories (panniers, lights, visi-vests, helmets) in periodic draws for cyclists,
- The Mobility Management Coordinator can organise cycle training sessions on site on the rules of the road and the specific risks associated with the locality;
- The Mobility Management Coordinator can invite bike suppliers on site for a 'Green Day' or 'Green Week' so that people can try bikes before buying;
- The Mobility Management Coordinator can set up a Bicycle User Group (BUG) to promote cycling;
- The Mobility Management Coordinator can highlight the direct savings gained due to reduced use of private vehicles;
- The Mobility Management Coordinator can encourage residents to take part in National Bike Week, see www.bikeweek.ie.

Public Transport

Public Transport – Key Information	
Approx. zone of influence	All Residents
Percentage of Residents in area of influence	100%
Percentage of Residents using Public Transport	TBC in each survey when occupied

Table 4.3: Key Information: Public Transport

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4.11 There are many benefits to taking public transport, some of which include:

- Personal Opportunities – Public transportation provides personal mobility and freedom;
- Saving fuel – Every full standard bus can take more than 50 cars off the road, resulting in fuel savings from reduced congestion;
- Reducing congestion – The more people who travel to work or to school on public transport, especially during peak periods, the less people travelling by private car;
- Saving money – Taking public transport to and from work or school is a lot cheaper than travelling by car and saves the cost of buying, maintaining and running a vehicle;
- Reducing fuel consumption – A full standard bus uses significantly less fuel per passenger than the average car;
- Reducing carbon footprint – Public transport is at least twice as energy efficient as private cars. Buses produce less than half the CO2 emissions per passenger kilometre compared to cars and a full bus produces 377 times less carbon monoxide than a full car;
- Get fit and stay active - Walking to and from work or school to public transport helps people incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind.
- Less stress – Using public transport can be less stressful than driving yourself, allowing you to relax, read, or listen to music.

4.12 The following initiatives and incentives can be used to encourage people to take public transport:

- Publicise Employee Tax Saver Commuter tickets, which offer savings to employers in PSRI per ticket sold and significant savings to employees in marginal tax rate and levies on the price of their ticket;
- Encourage public transport use for travel by promoting smart cards, advertising the availability of these tickets to Residents;
- Publicise the availability of Real Time Information. Real Time Information shows when your bus is due to arrive at your bus stop so you can plan your journey more accurately;
- Provide maps of local bus routes and the nearest bus stops, LUAS Timetables and Frequencies, and the length of time it takes to walk to them;
- Contact local providers about issues such as location of existing and new bus stops, timing of routes, or where you have market information about a potential new route.

Go-Car/Car Sharing

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Car Sharing – Key Information	
Approx. zone of influence	All Residents
Percentage of Residents in area of influence	100%
Percentage of Residents Car Sharing	TBC in each survey when occupied

Table 4.4: Key Information - Go-Car/Car Sharing

4.14 Every day thousands of commuters drive to work or to school on the same routes to the same destinations, at the same time as their colleagues. By car sharing just once a week, a commuter's fuel costs can be reduced by 20%, and in a similar fashion, the demand for work place parking can be reduced by 20%. If every single-occupancy driver carried another driver, there would be 50% less cars on the road at peak times.

4.15 Although use of the car to get to work or to school is essential for a large proportion of people, car sharing schemes such as Go-Car have the potential to deliver a significant reduction in private vehicle trips by promoting higher than average occupancy rates for each vehicle.

4.16 A locally run car sharing scheme relies on a database containing workplace information, working hours, and peoples preferences such as gender/driver/passenger and their preferred route to and from work.

4.17 The car-sharing database can be a map showing where Residents work, a database of car-sharers' details hosted on an organisations intranet site, or an on map-based matching website.

4.18 Car sharing often happens informally, however some participants often prefer a formal scheme such as a go Car facility which will normally generate a higher take-up for car sharing, and more efficiency in terms of increased occupancy rates. Car sharing is much easier promoted within a community such as is proposed here.

4.19 Encouraging more Residents to share car journeys to work rather than driving alone as well as encouraging more to set up and take part in car sharing/pooling would prove a very effective means of reducing daily car trips to and from the site.

4.20 The following initiatives and incentives can be used to encourage car sharing:

- Provide incentives to sign up to a car sharing scheme with preferential parking spaces in the most convenient location;
- Draw up a car-sharing policy for how the scheme will operate, and issue car-

sharing permits to those qualifying to use the car-sharing spaces;

- Highlight to drivers that they do not have to share with a person that doesn't suit them – allow choice based on gender, route, smoking or non-smoking;
- Clarify the financial implications of the scheme – those accepting a lift could contribute towards fuel costs.
- Use existing online databases for car sharing. For example, the development could set up its own private car sharing site using www.carsharing.ie.
- Allocate parking spaces for use solely by car sharers, for example near to building entrances.

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Action Plan Summary Table

4.25 The Summary Action Plan is described in the Table below. Modal Split Targets will be determined following on from the first Residential survey shortly after full occupation, typically within the first six months. This will be part of the role of the Mobility Management Coordinator. This will show existing travel patterns with realistic targets set to improve the modal split of Residents.

	Initiative	Impact on Delivery	Difficulty Delivering	Current Modal Split	Target MS
Residents Initiatives	Walking	Medium	Low	TBC	TBC
	Cycling	Medium	Medium	TBC	TBC
	Public Transport	High	Low	TBC	TBC
	Other	Medium	Medium	TBC	TBC
	Car - Sharing	Medium	Medium	TBC	TBC
	Cars - 1 Passenger Only	High - Negative	High	TBC	TBC
Promoting the MMP	Marketing the Plan	High	Low	Driven By MMP Coordinator	
	Measuring Success	High	Medium	Annual Surveys	

Action Plan Summary Table

5.0 IMPLEMENTING THE PLAN

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Background

5.1 Setting realistic targets and a sustained approach to the promotion of the Mobility Management is important if the measures are to be successful. The objectives and benefits of the Plan will be made clear and broadcast during the full lifecycle of the Plan.

5.2 The implementation of a successful Mobility Management will require the upfront investment of resources. As well as reviewing objectives and initiatives regularly, it is equally important to measure results. This provides an indication of any Plan's success, and ensures that the targets remain realistic.

The Mobility Management / Travel Plan Coordinator

5.3 The key objective of this MMP is to ensure that the traffic impacts and car usage associated with the operation of Redevelopment are minimised. Achieving this objective will result in a wide array of benefits for the development and its stakeholders.

5.4 To ensure the plan is effective it is essential for a Mobility Management Coordinator to be appointed for the Development upon 100% occupation.

5.5 It is envisaged that the Coordinator will work closely with residents to enthusiastically promote and market the Mobility Management. As Residents will be the focus of the plan; their involvement must be sought from the outset.

5.6 To support the Mobility Management Coordinator's efforts, the Management Company must ensure that they have sufficient time to carry out their duties. In addition, it is essential that the powers of decision making are bestowed upon him/her, along with a suitable budget and programme for implementation.

Promoting the Mobility Management Plan

5.7 Active promotion and marketing is needed if the Mobility Management is to have a positive impact on stakeholder travel patterns to and from the site.

5.8 All marketing initiatives should be focused on areas where there is willingness to change. Such information has been extracted from the questionnaires and has been described in Section 3 of this Plan.

- **Identify the Aim** – e.g. to reduce low occupancy car commuting, school, and business travel & to promote active travel, public transport & alternatives to travelling by car.

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- **Brand the Plan** – as part of communicating the Mobility Management, visually brand all work relating to it with a consistent look, slogan, identity or logo.

- **Identify the Target Audience** – 'segment the audience' (e.g. shift workers, school travel, sedentary workers, people travelling long/ short distances, mode used, members of a walking club or green team) so you can target the message and events towards these different groups.

5.9 As part of the marketing process, the Mobility Management coordinator can personalise a plan for the Development, drawing attention to the benefits of participation and support for its implementation.

5.10 The Coordinator can identify communication tools and networks used by the different audiences in the Residences, and use these to communicate about travel.

5.11 Promotional material regardless of its quality is only as good as its distribution network; material incentives assist greatly in introducing people to alternative modes of commuting.

5.12 The plan should not be anti-car - it should be about promoting equity among modes and offering choice and accessibility.

5.13 The Coordinator can promote positive messages associated with a plan, for example, reduced tax/PRSI payments, getting fit and active, reducing congestion, reducing CO2 emissions and so on, and encourage people to start small – changing one day per week for example, to explore their options.

5.14 Marketing drives which feature individual Residents who have reduced their car use can carry a strong message. This will serve to raise not only the profile of the Plan, but also send a clear message in relation to the Residents commitment to the Plan.

6.0 CONCLUSIONS

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6.1 The proposed development, accords with the principles of sustainable development, being located close to a neighbourhood centre, with clear and easy access to alternative modes of travel, and with reduced car parking provided as a demand management measure. The Management Company, once the development is occupied, will utilise pragmatic measures that encourage safe and viable alternatives to the private car for accessing the development.

6.2 Good Travel Planning is not a one-off event, it is instead an on-going iterative process requiring continued effort. This Preliminary report assists these efforts by forming an outline framework and providing guidance for its success. Monitoring and reviewing the initiatives set out within the plan will form a far greater part of the Final Mobility Management itself.

6.3 The key to the Plans success will be the appointment of a ***Mobility Management Coordinator*** for the development, once occupied. They will be vested with total responsibility for implementing the plan. They should be granted the authority and time to execute the Plan, and be provided with sufficient resources to realise the Plans success.

6.4 As Residents are the focus of the plan; their involvement should be sought from the outset following occupation. To this end, the Plan Coordinator should be assisted and supported by the Management Company and Residents. This will serve to spread the work load, and also give the Residents a valuable input into the operation of the Plan.

6.5 Successful Mobility Management Plans require extensive marketing **and** regular review. The measures set out in the Action Plan Summary Table (Chapter 4) should form the basis of a sound, realistic plan and should be clearly set out and be fully transparent to all users.

6.6 Residents also have an essential responsibility in terms of co-operating with, and taking an active part in the plan. They are, after all, the plan's primary focus.

6.7 It is recommended that the Final Mobility Management Plan be set be set in motion in 6 months of opening. The plan should evolve and develop with the development, taking into account changing Residents and their travel preferences and needs.

6.8 Annual reviews of the Plan should include a full stakeholder survey, providing valuable information for target setting and marketing target groups. It is emphasised that failing to meet initial targets should not be seen as failure, as the preliminary 12 to 18 months of the plan should be viewed as a calibration exercise for target setting.

APPENDIX K

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DMURS Statement of Consistency

consulting engineers

NRB

DMURS Design Compliance Statement Technical Note

Appendix K

RECEIVED: 15/05/2025

For

Proposed Green Vale Large Scale Residential Development

At

Former Chadwicks Builders Merchants Site, Greenhills Rd, Walkinstown, Dublin 12.

FINAL ISSUE

5th Floor, 40 Mespil Road, Dublin 4
Tel/fax: +353 1 292 1941, E-mail: info@nrb.ie, Web: www.nrb.ie

Registered in Ireland No. 491679

1.0 INTRODUCTION

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1.1 It is NRB's opinion that the proposed residential development is consistent with both the principles and guidance outlined within the *Design Manual for Urban Roads and Streets* (DMURS) 2013 as amended in 2019. The scheme proposals are the outcome of an integrated design approach by the entire Design Team, to address the integration of mixed-use development into this area. This approach sought to implement a sustainable community connected by well-designed links, layout and accesses - which combined deliver attractive, convenient and safe access in addition to promoting modal shift and viable alternatives to car based journeys.

1.2 The following section discusses design features which are incorporated within the proposed residential scheme with the objective of delivering a design that is consistent with the principles of DMURS.

2.0 DESIGN ATTRIBUTES

2.1 The proposed layout strategy seeks to maximise connectivity between key local destinations through the provision of a high level of **permeability and legibility** for all journeys, particularly for sustainable forms of travel (cycling and walking). The proposed mixed-use apartment development delivers greater mode & route choices along direct, attractive and safe linkages.

2.2 High Quality Connections link the development and the local roads and public transport services as set out in the preliminary Mobility Management Plan. The external perimeter setting itself been designed to deliver a hierarchy which provides safe access within / across the proposed new residential community, with separate main route for vehicles and one for pedestrians and cyclists, thereby separating cars at the earliest opportunity. The external perimeter design serves to link the site & community with the established and proposed local network. Safe well -designed routes are provided for pedestrians and for cyclists, with easy access to Greenhills Road.

2.3 As part of the development, the movement function is designed to respect the different levels of motorised traffic whilst optimising access to/from alternative transport and catering for higher number of pedestrians & cyclists. In parallel, the adopted design philosophy has sought to consider the context / place status of the scheme in terms of level of connectivity provided, the quality of the proposed design, the level of pedestrian / cyclists activity and vulnerable users requirements.

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2.4 The layout of the proposed development seeks to maximise permeability and enhances legibility, and the design of appropriately sized blocks actively contributes to a highly permeable and accessible community for both pedestrians and cyclists.

2.5 The proposed layout seeks to successfully create an appropriate balance between the functional requirements of different network users whilst enhancing the 'sense of place'. Design attributes of the proposed layout which contribute to achieving this ***DMURS objective*** include:

a) The main vehicular access from Greenhill Road is raised, and will be in a different material to clearly define the changed environment for car drivers. With the objective of encouraging low vehicle speeds the site access corner radii are 3.0m.

b) The total carriageway width on the main access road is 5.5m wide, in accordance with DMURS, as it is noted that narrow carriageways are one of the most effective design measures that calm traffic.

c) There is a separate main route for vehicles and one for pedestrians and cyclists, thereby separating cars at the earliest opportunity. The main route for pedestrians and cyclists is a shared 3.0m wide path in line with the National Cycle Manual.

d) Appropriate clear unobstructed visibility splays, as per DMURS requirements, are provided at the site access junction to the external road network, and internally within the site.

e) With the landscaped plans for the site it offers a well-connected and permeable network to link to Greenhill Road and the Greenhill Industrial Estate Road.

f) The design deliberately seeks to specify minimal signage and line markings on the internal layout, with such treatments used sensitively throughout and predominately at key nodes and 'transition' areas.

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g) Footpaths no less than 1.8m (generally 2.0m or wider) will be provided throughout the scheme with connections and tie-ins to existing external pedestrian networks.

h) A wide shared spaces provided is provided between Blocks A & B for pedestrians, cyclists, refuse and emergency vehicles, with distinctive surface materials and colours to help to emphasise the difference between the shared surfaces and a typical road surface.

i) A wide pedestrian footpath (>2.0m) and 2.0m cycle lane are provided along the Greenhill Industrial Road. The Cycle lane will link to other future developments.

j) Well designed and frequent pedestrian crossing facilities will be provided along key travel desire lines throughout the scheme in addition to at Greenhills Road where a raised access to provide for pedestrian priority is provided, consistent with DMURS, with flush kerbing provided throughout.

k) At the Greenhills Road Junction, lining and alignment improvements are proposed with reduced kerb radii consistent with DMURS to enhance safety and traffic progression.

l) With the objective of encouraging low vehicle speeds and maximising pedestrian safety and convenience, corner radii will be 3.0m where swept path analysis permits and will be of further reduced radii where feasible in line with DMURS guidance.

m) In the event of any upstand kerbs are required, heights will be typically 60mm in accordance with the objectives of DMURS.

n) Within the development, as required, cyclists will share the carriageway with other street users as per the National Cycle Manual guidance for such situations and best practice for residential streets of this nature.

o) Any required street signage and road markings will be in accordance with the Department of Transport Traffic Signs Manual, and the location and form will be agreed in advance with South Dublin County Council.

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