ADL Traffic and Highways Engineering Ltd
ADL House, Oaklands Business Park, Armstrong Way, Yate, Bristol, BS37 5NA
Tel: 01454 332 100 Email: cad@adltraffic.co.uk

Your ref: TR010022

Our ref: ADL/RG/ls/2680

19 December 2019

The Planning Inspectorate
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Via email: A38DerbyJunctions@planninginspectorate.gov.uk

Dear Sir/Madam

Re: A38 DERBY JUNCTIONS PROJECT: DEADLINE 3 SUBMISSION

1.0 Written Summary of Oral Representation

Our Oral Representation was in keeping with the items noted at Section 12 of the Issues and Questions document (reference TR010022-000671). We note updates below as follows:

a) Update the SoCGs between the Applicant and McDonald's and between the Applicant and Euro Garages

Discussions are ongoing with Euro Garages and a meeting will be held during the first two weeks of January between ADL and Highways England (hereafter "HE"). All parties are seeking to co-ordinate a joint meeting.

b) Would the traffic signals and routeing at the exit from the facilities onto the A52 result in queuing within the site?

…and…

c) Would the traffic signals and routeing at the exit from the facilities onto the A52 result in queuing on the A52?

Our client remains concerned that the modelling provided and resulting queue length outputs are unrepresentative and therefore unrealistically low. This is because of a combination of the limited green time within the traffic signal cycle and the lack of use of a detailed macro-simulation model, for example, LINSIG.

d) Would the proposed layout allow all vehicles, including refuse collection, to manoeuvre safely and conveniently into, out of and within the site?

Swept paths were included as Appendices 6.1 and 6.2 of our Written Representation. These show the full size articulated delivery vehicle entering and exiting the site. We note that the left turn into the site from the A52 is very tight and the inside track of the vehicle envelope touches the kerb face during the turn in.

The driver is then required to enter the north end of the McDonald's customer car park and travel south down the parking aisle before turning onto the Euro Garages forecourt. Changes will need to be made to the existing kerbing at the north and south ends of the car park to avoid the HGV overrunning these existing elements. From here the vehicle reverses back to the offload position, similar to the existing situation.

The exit manoeuvre was shown at Appendix 6.2 of our Written Representation and would be as per the existing situation.

e) Update on the need to reinforce the car park to allow for the proposed servicing arrangements.

McDonald's are seeking the construction details at the site from archive and we will report on this further.

f) How would the rights of access of McDonald's and Euro Garages be affected by the proposals?

McDonald's are continuing to investigate this matter.

g) How would entry to the site from the proposed A38 slip road impact on highway safety. How would the absence of such an access impact on the viability of the businesses?

We have requested details of the Departures from Standard from HE and hope to discuss this at the forthcoming meeting.

As noted at the hearing on 11th December, we look forward to receiving copies of the relevant Safety Audits undertaken by HE in relation to our Client's site.

Our client has requested that we review an alternative access option and we have already supplied a sketch option in our Written Representation at Appendix 4.0 for your consideration. Whilst this is subject to Road Safety Audit and discussion with HE, our client considers that it is important that as a long established roadside operator in this location, their position is maintained to allow customers to access the restaurant conveniently.

Presently, the full northbound flow of the A38 can "see" and access the restaurant as they approach the existing junction. If the proposals were implemented, this passing flow would be reduced considerably by virtue of the completed underpass allowing northbound traffic to avoid the junction entirely. Therefore, utilising data from both HE's Technical Note (Ref HE514503-ACM-GEN-Z2_JN_J2_ZZ-TN-TR-0001) and DfT count point 57767 (to the south on the A38), the peak hourly northbound flows approaching / passing the site and therefore able to make a decision to visit are set out in Table 1A.

Table 1A Peak Hour Traffic Comparison

Time	Current Scenario	With Project Completed
AM peak hour 07:00 – 08:00	2,549	335
PM peak hour 16:00 – 17:00	2,485	453

Sources attached at end of this letter

As shown, the traffic flows (and therefore available passing customers) would drop considerably, before the means of access is considered further.

Under the development proposals, customers originating from the A38 would also need to negotiate three traffic signal stop lines:

- From the A38 to the A52;
- The A52 pedestrian crossing;
- The A52/site access junction.

Whilst a modest distance to cover by car, if all three sets of traffic signals are red, the introduction of delay would inconvenience customers to a far greater extent than the existing stop-line-free situation.

Also relevant to this point (and items 12b and 12c, previously) is the scale and popularity of the restaurant. The Markeaton Park restaurant has 87 parking spaces (80 standard, 5 accessible and 2 operational grill bays for the drive thru lane). Inside there are 200 covers, compared to most new stores with covers ranging from 100-140. There is also an internal "soft-play" facility.

h) Update on the provision of 'roadside facilities' signage.

Highways England have noted that a departure from standard would be required to provide signage alerting drivers to the wider site from the A38. Given that services signage exists in other locations with caveats such as "no HGVs" or "not 24h", we consider that a pragmatic approach can and should be undertaken, given that the departure appears to be on a matter of principal.

It could be reasonably considered that signage would constitute a matter of improving driver understanding of how to access the site. This positive information would reduce driver confusion and could contribute positively to highway safety by clearly identifying the restaurant (and PFS) to motorists.

General

As noted at the hearing, ADL have been asked to ensure McDonald's interests are pursued. It is requested that HE are held to the same high standards as any developer adjacent to the SRN would be.

In particular, we look forward to the provision of a Safety Audit and will continue to discuss the use of the appropriate modelling methodology.

As noted at the hearing, however; despite their concerns, McDonald's instructions are to meet with HE in order to work towards resolving as many matters as possible.

2.0 Post Hearing Documents

No further documents are offered at this stage, however, we will provide an update to the inspector following our meeting with HE.

Yours sincerely
for **ADL TRAFFIC AND HIGHWAYS ENGINEERING LIMITED**

ROB GREEN
ASSOCIATE DIRECTOR

Enc: Extracts of Technical Note: HE514503-ACM-GEN-Z2_JN_J2_ZZ-TN-TR-0001
DfT Count Point 57767 raw data extract

TECHNICAL NOTE

Project:	**A38 Derby Junctions**				
Title:	**Markeaton Traffic Signals Operation**				
Doc ID:	**HE514503-ACM-GEN-Z2_JN_J2_ZZ-TN-TR-0001**				
Date:	**September 2019**	Version:	**P03**	Status:	**S4**

Revision	Date	Prepared by	Reviewed by	Approved by
P01	24/11/17	CM	DJE	
P02	02/07/18	LK	DJE	AW
P03	9/09/2019	DJE / LK / AL refine design. Address HE/TPG(RSt) comment	BC	AW

1. Introduction

1.1. The A38 Derby Junctions project (the Scheme) would improve the capacity of three junctions along the A38 strategic road network to the north and west of Derby. The middle of these three junctions is the A38 / A52 Markeaton Junction.

Background to this Technical Note

1.2. From October 2016 to May 2017, a Technical Note was produced that assessed the capacity of Markeaton Junction using the traffic model forecasts of the 2039 peak hours' flow turning movement data plus an additional 10% of demand added onto these 2039. This 10% extra demand was added to all of the hourly design reference turning-movement flows to provide a degree of robustness within the analyses against a potential lock-up of the gyratory under short-period intense arrival flows. These design reference traffic forecasts were prepared as part of the PCF Stage 2 scheme assessments and used the traffic forecasting models available at that time. The Markeaton Junction's traffic signal design was appraised for capacity using the software TRANSYT. This TN was numbered: 47071319-URS-06-TN-RD-023-6F and was issued 8th May 2017.

1.3. Further to this technical note, in September 2017 the Highways England project manager asked AECOM to review the capacity analysis and check that the proposed design at Markeaton would be robust. The aim of this request was to ensure that the Red Line Plan identified sufficient land for the purpose of developing the junction design during the Scheme's detailed design stages.

Stage 3 update

1.4. Following the earlier analysis, the Scheme has further progressed to PCF Stage 3, and a refined base year traffic model was calibrated and successfully validated. New traffic forecasts were prepared using updated planning decisions and a review of the likelihood that specific development sites would come forward. These new traffic forecasts included some of the new development sites that were identified in the updated Amber Valley District Local Plan. The new traffic forecasts also incorporated the Department for Transport (DfT)'s updated national growth forecasts (NTEM v7.2).

ANNEX B: Design Reference Flows at the A38/A52 Markeaton Junction

The Design Reference Flows (in vehicles per hour) were calculated from:

- Modelled Turning Movements at A38/A52 Markeaton Junction (as Annex A),
- Plus, flows to and from the new Markeaton Park access
- Plus, flows to and from the McDonalds / Euro Garages accesses on A38 Kingsway and A52 Ashbourne Road,
- Plus, an additional 10% demand applied to all movements.

AM1 in Vehicle/hour plus 10%

From: \ To:	A38 (south)	A52 (west)	A38 (north)	A52 (east)	Markeaton Park	McDonalds/ Ashbourne	McDonalds/ Kingsway	TOTAL
A38 (south)		36		197	2		100	335
A52 (west)	122		50	739	10	54		975
A38 (north)		375		219	6	35		635
A52 (east)	51	530	46		7	37		671
Markeaton Park	0	2	0	3				5
McDonalds/Ashbourne Rd	10	56	6	69				141
McDonalds/Kingsway	4	23	2	28				57
TOTAL	187	1,022	104	1,255	25	126	100	2,819

PM1 in vehicles/hour, plus 10%

From: \ To:	A38 (south)	A52 (west)	A38 (north)	A52 (east)	Markeaton Park	McDonalds /Ashbourne	McDonalds /Kingsway	TOTAL
A38 (south)		66		287	1		99	453
A52 (west)	208		283	388	4	53		936
A38 (north)		133		122	1	16		272
A52 (east)	152	843	168		5	71		1,239
Markeaton Park	7	20	9	15				51
McDonalds/Ashbourne Rd/	24	68	30	52				174
McDonalds/Kingsway	7	22	9	17				55
TOTAL	398	1,152	499	881	11	140	99	3,180

Notes:

1. The turning movement from "A38 (south)" to "McDonalds/Kingsway", which is 100 vehicles per hour in AM1 peak and 99 vehicles per hour in PM1 peak (these values include a 10% increase on the observed flows), would be routed to the "McDonalds/Ashbourne" access with the Scheme.
2. The left turning movement from the "McDonalds/Kingsway" egress to all destinations would be permitted with the Scheme.

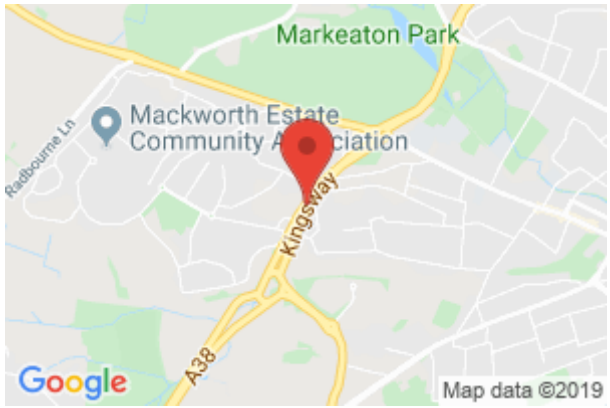
Manual count points

Site number: 57767

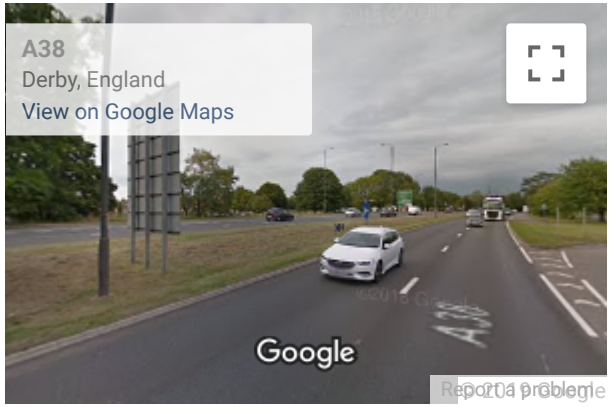
Site details

Region	East Midlands
Local authority	Derby
Road name	A38
Road classification	'A' road
Managed by	Highways England
Road type	Major
Start junction	A5111
End junction	A52
Link length	1.20km (0.75 miles)

Location



Easting, northing	433000, 336550
Latitude, longitude	52.92535449, -1.51057774



Annual Average daily flow

Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2018	Automatic counter	5	286	46947	84	9031	5145	61494
2017	Manual count	5	246	42495	78	7784	4583	55187
2016	Estimated using previous year's AADF on this link	8	303	45893	57	6819	4373	57446
2015	Manual count	7	291	44560	56	6314	4244	55466
2014	Estimated using previous year's AADF on this link	6	297	42321	91	6476	3914	53099

Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2013	Estimated using previous year's AADF on this link	6	279	42764	86	5688	3670	52487
2012	Manual count	6	279	43008	91	5623	3787	52789
2011	Estimated using previous year's AADF on this link	1	230	40845	106	7763	4185	53129
2010	Manual count	1	217	41051	106	7530	4190	53094
2009	Estimated using previous year's AADF on this link	4	279	41119	90	6966	4623	53077
2008	Estimated using previous year's AADF on this link	4	296	41787	92	6432	4828	53435
2007	Manual count	3	317	42596	92	6143	5092	54240
2006	Estimated using previous year's AADF on this link	10	272	38289	73	5346	5566	49546
2005	Estimated using previous year's AADF on this link	6	262	38174	74	5262	5488	49260

Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2004	Estimated using previous year's AADF on this link	8	258	39153	75	5129	5684	50299
2003	Manual count	9	294	39075	81	5175	5655	50280
2002	Estimated using previous year's AADF on this link	18	393	37594	118	5054	4233	47392
2001	Estimated using previous year's AADF on this link	18	389	37669	116	5044	4293	47511
2000	Manual count	19	376	36930	114	5064	4338	46822

Download data

Data disclaimer

Traffic figures at the regional and national level are robust, and are reported as National Statistics. However, DfT's traffic estimates for individual road links and small areas are less robust, as they are not always based on up-to-date counts made at these locations. Where other more up-to-date sources of traffic data are available (e.g. from local highways authorities), this may

Quality flags in data downloads

DfT's road link level traffic estimates are calculated using a variety of methods, with some methods likely to produce more accurate estimates than others.

The data tables available to download here contain a column - **estimation_method** – showing the method used to estimate traffic for each location and year.

provide a more accurate estimate of traffic at these locations.

It is the responsibility of the user to decide which data are most appropriate for their purpose, and if DfT road link level traffic estimates are used, to make a note of the limitations in any published material.

Figures having an estimation method of “Counted” are likely to be more accurate than those marked as “Estimated”, and the latter should be used with caution.

Data	Description	Records	Download
Site details	Manual count point site 57767 details.	1	JSON | CSV
Average annual daily flow	Number of vehicles that travel past the count point (in both directions) on an average day of the year.	19	JSON | CSV
Average annual daily flow by direction	Number of vehicles that travel past the count point on an average day of the year, by direction of travel.	38	JSON | CSV
Raw counts	Vehicle counts recorded at this count point.	168	JSON | CSV

Contact

Road traffic statistics

Email
roadtraff.stats@dft.gov.uk

Public enquiries
020 7944 3095

count_point_id	direction_of_travel	year	count_date	hour	region_id	region_name	local_authority_id	local_authority_name	road_name	road_type	start_junction_road_name	end_junction_road_name	easting	northing	latitude	longitude	link_length_km	link_length_miles	pedal_cycles	two_wheeled_motor_vehicles	cars_and_taxis	buses_and_coaches	lgvs	hgvs_2_rigid_axle	hgvs_3_rigid_axle	hgvs_3_or_4_articulated_axle	hgvs_4_or_more_rigid_axle	hgvs_5_articulated_axle	hgvs_6_articulated_axle	all_hgvs	all_motor_vehicles
57767	S	2017	13/06/2017	11	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	11	1140	2	325	58	9	9	21	53	79	231	1709
57767	S	2017	13/06/2017	12	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	9	1349	2	249	49	10	10	17	52	68	208	1817
57767	S	2017	13/06/2017	13	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	10	1334	3	278	69	17	17	23	50	73	242	1867
57767	S	2017	13/06/2017	14	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	9	1303	2	293	59	14	14	15	67	49	214	1821
57767	S	2017	13/06/2017	15	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	10	1564	7	331	69	7	7	10	38	73	204	2116
57767	S	2017	13/06/2017	16	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	10	1852	3	319	29	7	7	3	46	70	168	2352
57767	S	2017	13/06/2017	17	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	3	20	1796	3	180	23	5	5	2	49	46	130	2129
57767	S	2017	13/06/2017	18	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	5	2018	0	171	18	5	5	5	23	64	123	2317
57767	N	2017	13/06/2017	7	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	8	1919	1	399	80	16	16	14	62	47	222	2549
57767	N	2017	13/06/2017	8	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	6	1775	3	265	59	10	10	14	64	52	207	2256
57767	N	2017	13/06/2017	9	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	7	1317	6	271	55	14	14	22	52	82	230	1831
57767	N	2017	13/06/2017	10	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	1	7	1188	4	311	50	12	12	22	82	47	224	1734
57767	N	2017	13/06/2017	11	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	10	1215	1	216	96	20	20	23	81	67	294	1736
57767	N	2017	13/06/2017	12	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	7	1194	2	243	58	8	8	12	97	46	234	1680
57767	N	2017	13/06/2017	13	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	12	1235	2	317	63	16	16	20	104	61	280	1846
57767	N	2017	13/06/2017	14	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	11	1394	3	363	51	20	20	22	71	65	254	2025
57767	N	2017	13/06/2017	15	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	9	1584	4	420	40	11	11	16	62	60	206	2223
57767	N	2017	13/06/2017	16	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	13	1833	4	474	27	7	7	8	66	47	161	2485
57767	N	2017	13/06/2017	17	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	19	2042	4	334	20	6	6	5	38	34	110	2509
57767	N	2017	13/06/2017	18	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	16	1523	4	191	13	1	1	6	46	37	108	1842
57767	S	2017	13/06/2017	7	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	19	1593	3	410	50	11	11	28	29	72	198	2223
57767	S	2017	13/06/2017	8	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	12	1670	3	327	44	26	26	19	54	74	227	2239
57767	S	2017	13/06/2017	9	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	1	8	1615	13	325	63	14	14	24	61	87	260	2221
57767	S	2017	13/06/2017	10	2	East Midlands	119	Derby	A38	Major	A5111	A52	433000	336550	52.92535449	-1.51057774	1.1	0.68	0	1	1182	3	319	59	13	13	30	59	94	264	1769