



Highways Response

Author:	Paul Mew Associates
Date:	26 th August 2022
Project:	P2584: Bricket Wood Development
Subject:	Response to HCC comments of 2 nd August 2022

1.0 INTRODUCTION

- 1.1 Paul Mew Associates (PMA) is instructed by London & Counties Property Co Ltd to provide highways consultancy services in relation to the proposed development of land at Lye Lane, Bricket Wood, Hertfordshire, AL2 3TF.
- 1.2 This document will provide responses to Hertfordshire County Council's comments on the submitted Transport Assessment and Travel Plan provided on the 2nd of August 2022.

2.0 TRANSPORT ASSESSMENT COMMENTS AND RESPONSES

- 2.1 **HCC Comment:** *The site is also close to the Strategic Road Network (SRN); we therefore suggest that the applicant seek pre-application advice from National Highways.*
- 2.2 National Highways have been contacted. No response has been received to date.
- 2.3 **HCC Comment:** *The peak hours are said to be 8am to 9am and 3pm to 4pm. The AM peak is correct. The PM peak would actually be 4pm to 5pm on Lye Lane alone; and also 4pm to 5pm for Lye Lane plus Park Street Lane. However, the differences are not significant and 3pm to 4pm is close to the volumes of the following hour.*
- 2.4 **Response:** this comment suggests that the peak hours identified in the transport assessment can be used. No changes is required.
- 2.5 **HCC Comment:** *Regarding the day-to-day variability factors, Section 6 of the TA reviews the ATC data for Lye Lane and states that the MCC survey date is typical, as the total weekday two-way flows on the MCC survey date were similar to both the average and the median total weekday two-way flows on Lye Lane. This approach is not entirely appropriate: using averages does not account for variability around those averages, which is the main concern. It is important to consider the worst-case traffic*

scenarios (or rather the worst case, excluding the exceptionally worst case). Furthermore, Lye Lane has far lower volumes than Park Street Lane so is less of an indication of traffic variability. To address these shortcomings, we have assessed the day-to-day variability of the ATC data for both Lye Lane and Park Street Lane. This shows the following variations

	Percentage of Weekday Average 2-way flows	
	Lye Lane	Park Street Lane
Lowest weekday 2-way total	93%	94.6%
Highest weekday 2-way total	109.6%	116.3%

These results show that the MCC data may be under-estimating likely volumes part of the time, especially for Park Street Lane. The criticality of this will depend on the criticality of the junction modelling results (when all other modelling parameters are agreed). That is to say, if the agreed junction modelling reveals results close to capacity (or over-capacity), then this potential further variation in volumes could be a concern.

- 2.6 **Response:** As part of this response document, new junction assessments have been carried out and are attached at Appendix A of this response document. These show that the junctions assessed operate within capacity and with minimal queuing. As such, the criticality of amending ATC data as set out in the HCC response is allayed, and therefore potential variations in volumes are not considered to be a concern.
- 2.7 **HCC Comment:** *The missing detail is the Tempro input data, to show the selection parameters applied to determine the resultant growth factors.*
- 2.8 **Response:** Tempro input data will be provided in the TA. Separate growth rates have been derived for AM and Interpeak periods to correspond with peak hours identified. In addition to TEMPRO growth data, fuel / income adjustment factors have been applied based on TAG Unit M4 and the TAG Data Book (May 2022 v1.18) Table M4 2.1. Resulting growth rates used are shown below;

TEMPRO v7.2b	
Dataset Version	72
Result Type	Trip ends by time period
Area Definition	St Albans Local Authority
Current Year	2022
Future Year	2025
Trip Purpose	All Purposes
Transport Mode	Car Driver
Trip End Type	Origin / Destination
Time Period #1	Weekday AM Peak (07:00-09:59)
Time Period #2	Weekday Inter Peak Period (10:00-15:59)

	Origin	Destination	Average
AM	1.0317	1.0809	1.0563 (a)
Interpeak	1.1013	1.0981	1.0997 (b)

Income & Fuel Cost Factors

TAG Data Book May 2022 v 1.18 - Table M4.2.1

	2022	2035	Factor
Income	1.018	1.044	1.026 (c)
Fuel Cost	1.090	1.146	1.051 (d)
Combined Factor (e) = (c) x (d)			1.078

Total Growth Factors

AM (a) x (e)	1.139
Interpeak (b) x (e)	1.186

- 2.9 HCC Comment: *HCC withdrew its parking standards in 2011. However, this is a matter that could be addressed with the development layout at Reserved Matters.*
- 2.10 Response: The Transport Assessment will be updated to remove reference to these standards.
- 2.11 HCC Comment: *Car parking: The TA refers to St Alban's City District Council's Local Plan Review, Policy 39 and 40. Updated HCC response: An online search has not revealed this document. It might have been superseded.*
- 2.12 Response: The current adopted Local Plan is The District Local Plan Review 1994. This is being replaced by a new Local Plan. Local Plans "expired" after 27th September 2007 unless "saved", in whole or in part. In 2007, a Direction was made saving specified policies of the District Local Plan Review 1994, i.e. they are still part of the development plan for St Albans. The policies listed in the List of Saved Policies are therefore the remaining operational policies within the District Local Plan Review 1994. Any policies not on the list have expired and are no longer part of the development plan.
- <https://www.stalbans.gov.uk/sites/default/files/documents/publications/planning-building-control/planning-policy/Saved%20Policies%2C%20Direction%20and%20Correction.pdf>
- 2.13 As can be seen from the link above Policies 39 and 40 have been retained and will be part of the new Local Plan.
- 2.14 HCC Comment: *The error is that the percentages of all Census respondents have been applied, including those who work at home. This would be incorrect because the TRICS rates would not capture these, as TRICS just determines actual trips to and from a site.*
- 2.15 Response: Work from home data has been removed and trip generations updated. An updated version of the trip generation assessment, excluding 'work from home' data is attached in Appendix B of this response document.

- 2.16 HCC Comment: *Highway Layout: Improvements to the West Riding/Oak Avenue junction: The 4 April response stated that these proposed improvements will need to be assessed in the TA including the junction modelling and that highway improvements should not seek to provide highway capacity that may induce additional traffic. Updated HCC response: This has not been assessed in the junction modelling. This is outstanding.*
- 2.17 Response: The junction capacity assessment include in Appendix A of this response document shows that the junctions assessed operate within capacity and with minimal queueing and therefore no improvements to junctions are required. Had the junction assessments shown problems with junction capacities, mitigation measures would have been provided.
- 2.18 HCC Comment: *Road Safety Audit (RSA): The 4 April response stated that Road Safety Audits will be required as the design is progressed. This has not been provided as yet.*
- 2.19 Response: A Road Safety Audit (RSA) has been scheduled with the results being analysed and included in the Transport Assessment. At the time of writing this response document (26/08/22) we are awaiting approval from HCC for the CV's of the road safety audit team before the audit can be carried out.
- 2.20 HCC Comment: *Crash Data Assessment: This remains partially outstanding; please refer again to the 4 April response (not all of the requested locations have been covered). The 4 April response requested a crash data assessment of the latest five years of injury accident data at certain specified locations. The TA Appendix C includes plots of 5-year accident data but only for accidents involving pedestrians and cyclists. It also does not cover all of the requested locations detailed in the 4 April response.*
- 2.21 Response: Crash Map data for the following locations will be added to Transport Assessment and are attached for information in Appendix C of this response document. The locations on the crash data plan in Appendix B of the Feasibility Assessment and the below additional locations;
- The area of Bricket Wood surrounded by the following roads, and including these roads themselves:
 - West Riding;
 - Oak Avenue;
 - Park Street Lane west of Station Road (also referred to as Lye Lane east);
 - Station Road;
 - Mount Pleasant Lane.
 - Lye Lane up to and including the junction with A405 North Orbital Road.

Travel Plan

- 2.22 HCC Comment: *We also draw attention to the comments above under "Proposed Footpath", a plan of which is in Appendix E of the TP. In the 4 April response, we stressed that, given the site's proximity to major roads, as well as the current lack of*

safe, convenient pedestrian and cycle provision, there is a significant challenge to make this site sustainable. This remains to be the case, though we appreciate that the applicant is taking this challenge seriously given the details already provided within this framework travel plan. HCC look forward to further development of the travel plan. At this stage, we are not in a position to approve the proposal yet; but we do acknowledge that positive progress is being made and we welcome the efforts of the applicant's consultant in this regard. In developing the TP further, we re-iterate also our points raised in the 4 April response.

- 2.23 **Response:** No further action is required at this stage. The Travel Plan will be updated in line with Transport Assessment and a range of additional initiatives.

Updated Junction Assessments

- 2.24 All comments from WSP regarding the PICADY assessments have been addressed and updated junction assessments carried out. Full results are attached in Appendix A of this response document and will be included in an update of the Transport Assessment.

New Site Access / Lye Lane Junction Assessment (Site 4)

- 2.25 PICADY 10 assessments were carried out for the scheme for a proposed new site access junction on Lye Lane based on a priority junction layout.
- 2.26 The PICADY 10 assessment for the scheme, took into account base flows growth to the forecast year of 2035 with development flows assigned to the local road network. Junction geometry was taken from the proposed junction layout and is included in Appendix A of this response document.
- 2.27 With regards to the distribution of proposed development flows, these were based on the north / south split of flows on Lye Lane from ATC data as shown in Table 1. For example, 27% of development flows departing from the site between 08:00 to 09:00 were assumed to be heading north on Lye Lane towards the A405, and 71% of development flows arriving at the site between 15:00 to 16:00 were assigned to have come from the north (southbound).

Table 1. Lye Lane Flow Direction Split (Average Weekday)

Hour	Northbound Flow	Southbound Flow	Northbound Split	Southbound Split
0800	30	82	27%	73%
1500	27	65	29%	71%
24 Hour	434	704	38%	62%

Source: ATC survey

- 2.28 Table 2 show a summary of the PICADY assessment results for the scheme while full results are attached.

Table 2. PICADY Assessment Results Summary – Site Access / Lye Lane Junction

Movement	AM Peak (08:00-09:00)			PM Peak (15:00-16:00)		
	RFC	End Queue (PCU)	Level of Service	RFC	End Queue (PCU)	Level of Service
B-AC Site Access to Lye Lane North & South	0.14	0.2	A	0.05	0.0	A
C-AB Lye Lane South to Site Access and Lye Lane North	0.02	0.0	A	0.09	0.1	A

Source: PICADY 10

- 2.29 The key movement was 'Lye Lane South to Site Access and Lye Lane North' as this represents southbound traffic on Lye Lane either continuing north or turning right in to the development site. As can be seen there was a very low RFC level during both peak periods and no queuing with Levels of Service of A for all movements during both peak periods. This suggested there are ample gaps in through traffic to allow traffic to turn right in to the site. As such, a right turn lane facility would not be required.

Lye Lane / A405 North Orbital Road Junction Assessment (Site 1)

- 2.30 Due to the central reserve on the A405 North Orbital Road, the only site traffic related movements are the left turn from the A405 in to Lye Lane, and the right turn movement out of Lye Lane on to the A405. It is noted that only a small proportion of site flows have been assigned to Lye Lane north of the site.
- 2.31 Table 3 shows a summary of the PICADY assessment for the Lye Lane / A405 North Orbital Road junction for the future year with development flows, while full results are shown in Appendix A of this response document.

Table 3. PICADY Assessment Results Summary – A405 / Lye Lane Junction

Movement	AM Peak (08:00-09:00)			PM Peak (15:00-16:00)		
	RFC	End Queue (PCU)	Level of Service	RFC	End Queue (PCU)	Level of Service
B-AC Lye Lane to A405 westbound	0.14	0.2	B	0.21	0.3	C

Source: PICADY 10

- 2.32 The assessment shows that in both the AM and PM peak hours, there would be low RFC's and minimal queuing. The Level of Service during both peak periods would be acceptable.

Lye Lane / West Riding / Oak Avenue Junction Assessment (Site 2)

- 2.33 The majority of site traffic would route to / from the south of the site and pass through the junction of Lye Lane / West Riding and Oak Avenue.
- 2.34 Table 4 shows a summary of the PICADY assessment for the Lye Lane / West Riding and Oak Avenue junction for the future year with development flows, while full results are shown in Appendix A of this response document.

Table 4. PICADY Assessment Results Summary – Lye Lane / West Riding and Oak Avenue Junction

Movement	AM Peak (08:00-09:00)			PM Peak (15:00-16:00)		
	RFC	End Queue (PCU)	Level of Service	RFC	End Queue (PCU)	Level of Service
B-ACD Oak Avenue to other arms	0.62	1.6	C	0.55	1.2	C
A-BCD Lye Lane East to other arms	0.25	0.3	A	0.11	0.1	A
D-ABC West Riding to other arms	0.51	1.0	C	0.37	0.6	B
C-ABD Lye Lane North (inc site) to other arms	0.05	0.1	A	0.04	0.0	A

Source: PICADY 10

- 2.35 The assessment shows that in both the AM and PM peak hours, there would be low RFC's and minimal queuing on all junction arms. The Level of Service during both peak periods would be acceptable.

Lye Lane / Park Street Lane Junction Assessment (Site 3)

- 2.36 Table 5 shows a summary of the PICADY assessment for the Lye Lane / Park Street Lane junction for the future year with development flows, while full results are shown in Appendix A of this response document.

Table 5. PICADY Assessment Results Summary – Lye Lane / West Riding and Oak Avenue Junction

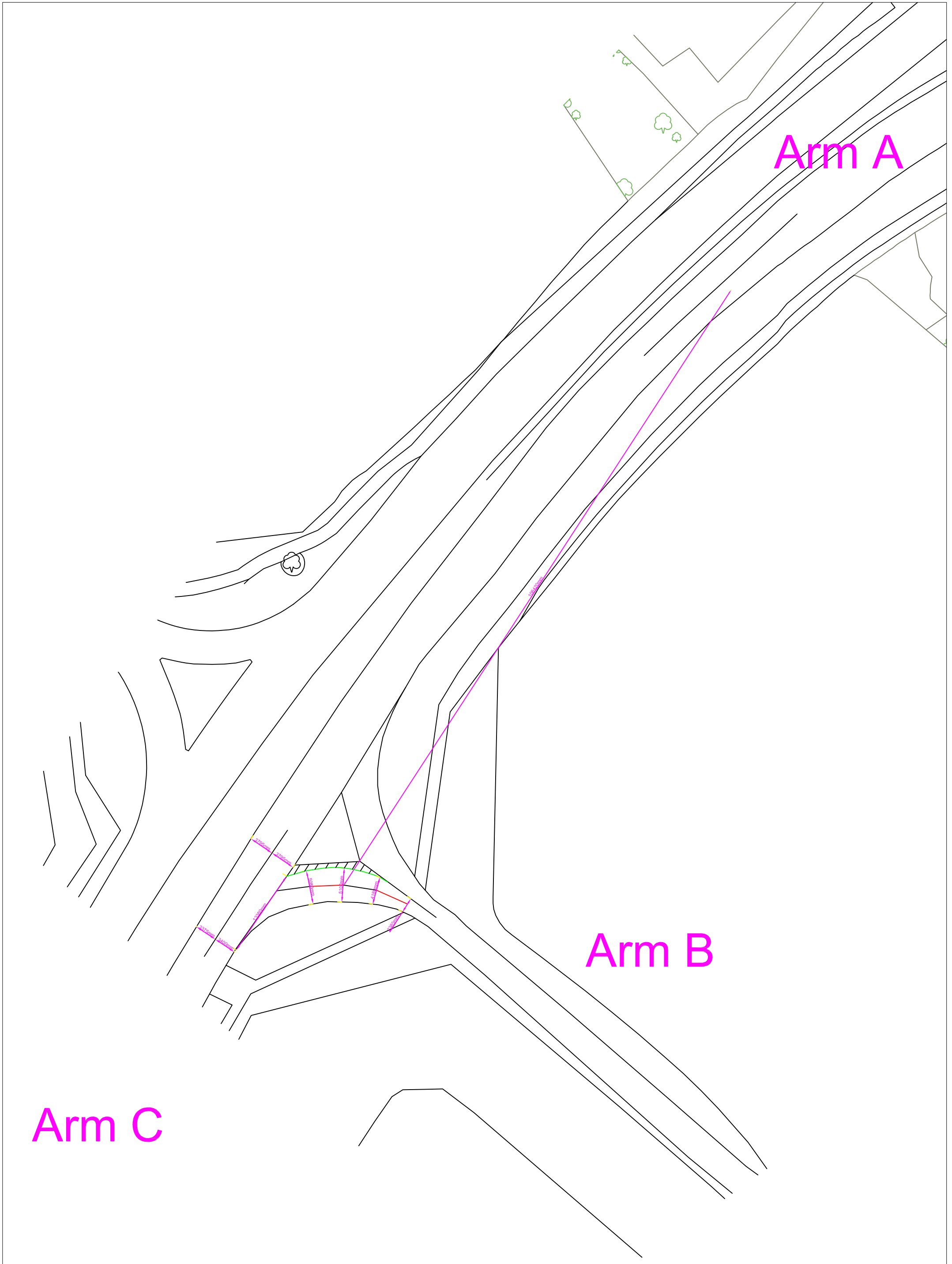
Movement	AM Peak (08:00-09:00)			PM Peak (15:00-16:00)		
	RFC	End Queue (PCU)	Level of Service	RFC	End Queue (PCU)	Level of Service
B-AC Lye Lane to Park Street Lane north and south	0.50	1.0	B	0.35	0.5	B
C-AB Park Street Lane southbound, ahead and to Lye Lane	0.40	0.8	A	0.34	0.6	A

Source: PICADY 10

- 2.37 The assessment shows that in both the AM and PM peak hours, there would be low RFC's and minimal queuing on all junction arms. The Level of Service during both peak periods would be acceptable.
- 2.38 All arms assessed of all junctions return Levels of Service of A (free flow), B (reasonable free flow), or C (stable flow).
- 2.39 In summary, the impact of the proposed development for the future year of 2035 has been shown to be minimal in both peak hours at all junctions assessed.

Appendix A

New Junction Capacity Assessments

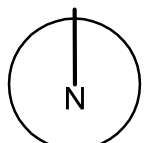


Arm A

Arm B

Arm C

Date: 15/08/22
Scale: 1:500@A3
Source: OS / AD Practice
Appendix D



P2584: Land North of Bricket Wood, Herts
Junction I A405 / Lye Lane


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<h1>Junctions 10</h1>
<h2>PICADY 10 - Priority Intersection Module</h2>
Version: 10.0.0.1499 © Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: P2584 Site 1 Lye Lane jw A405 2035 with Development.j10
Path: C:\Users\johnf\Paul Mew Associates Ltd\PMA - Projects\P2584\Junction Assessment
Report generation date: 15/08/2022 11:59:30

»A405 Junction - 2035, AM

»A405 Junction - 2035, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A405 Junction - 2035										
Stream B-AC	D1	0.2	10.45	0.14	B	D2	0.3	16.42	0.21	C
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A

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

File summary

File Description

Title	P2584 Site 1 Lye Lane j/w A405
Location	Lye Lane / A405
Site number	1
Date	15/08/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	P2584
Enumerator	john ross
Description	Assessment of the impact of the proposed development on the junction of Lye Lane with the A405 Southbound. As at this location the A405 is a dual carriageway with solid barrier between north and southbound lanes, the junction has been modelled as a T-junction with the A405 as a one-way southbound road

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	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2035	AM	ONE HOUR	07:45	09:15	15
D2	2035	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	A405 Junction	100.000

A405 Junction - 2035, AM

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	A405 / Lye Lane	T-Junction	Entry Only	Two-way	Exit Only		0.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.38	A

Arms

Arms

Arm	Name	Description	Arm type
A	A405 N		Major
B	Lye Lane		Minor
C	A405 S		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	7.18				✓	

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	4.31	106	250

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	724	0.132	0.334	0.210	0.476
B-C	884	0.126	0.319	-	-
C-B	574	0.215	0.215	-	-

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.

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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	1282	100.000
B		✓	52	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	102	1180
	B	0	0	52
	C	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	11
	B	0	0	2
	C	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	965	1064
	B	39	40
	C	0	0
08:00-08:15	A	1152	1271
	B	47	48
	C	0	0
08:15-08:30	A	1412	1557
	B	57	58
	C	0	0
08:30-08:45	A	1412	1557
	B	57	58
	C	0	0
08:45-09:00	A	1152	1271
	B	47	48
	C	0	0
09:00-09:15	A	965	1064
	B	39	40
	C	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.45	0.2	B

C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	560	0.071	40	0.1	7.056	A
C-AB	0	345	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	78			78			
A-C	986			986			

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	48	497	0.096	48	0.1	8.174	A
C-AB	0	301	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	94			94			
A-C	1177			1177			

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	58	410	0.143	58	0.2	10.440	B
C-AB	0	240	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	115			115			
A-C	1442			1442			

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	58	410	0.143	58	0.2	10.454	B
C-AB	0	240	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	115			115			
A-C	1442			1442			

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	48	497	0.096	48	0.1	8.186	A
C-AB	0	301	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	94			94			
A-C	1177			1177			

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	40	560	0.071	40	0.1	7.070	A
C-AB	0	345	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	78			78			

A-C	986			986			
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A405 Junction - 2035, PM

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	A405 / Lye Lane	T-Junction	Entry Only	Two-way	Exit Only		0.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.47	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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	1681	100.000
B		✓	52	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	78	1603
	B	0	0	52
	C	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	1266	1338
	B	39	39
	C	0	0
17:00-17:15	A	1511	1598
	B	47	47
	C	0	0
17:15-17:30	A	1851	1957
	B	57	57
	C	0	0
17:30-17:45	A	1851	1957
	B	57	57
	C	0	0
17:45-18:00	A	1511	1598
	B	47	47
	C	0	0
18:00-18:15	A	1266	1338
	B	39	39
	C	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	16.42	0.3	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	469	0.084	39	0.1	8.369	A
C-AB	0	287	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	59			59			
A-C	1279			1279			

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	47	388	0.120	47	0.1	10.539	B
C-AB	0	231	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	70			70			
A-C	1528			1528			

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							
C-AB							
C-A							
A-B							
A-C							

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	276	0.207	57	0.3	16.351	C
C-AB	0	154	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	86			86			
A-C	1871			1871			

17:30 - 17:45

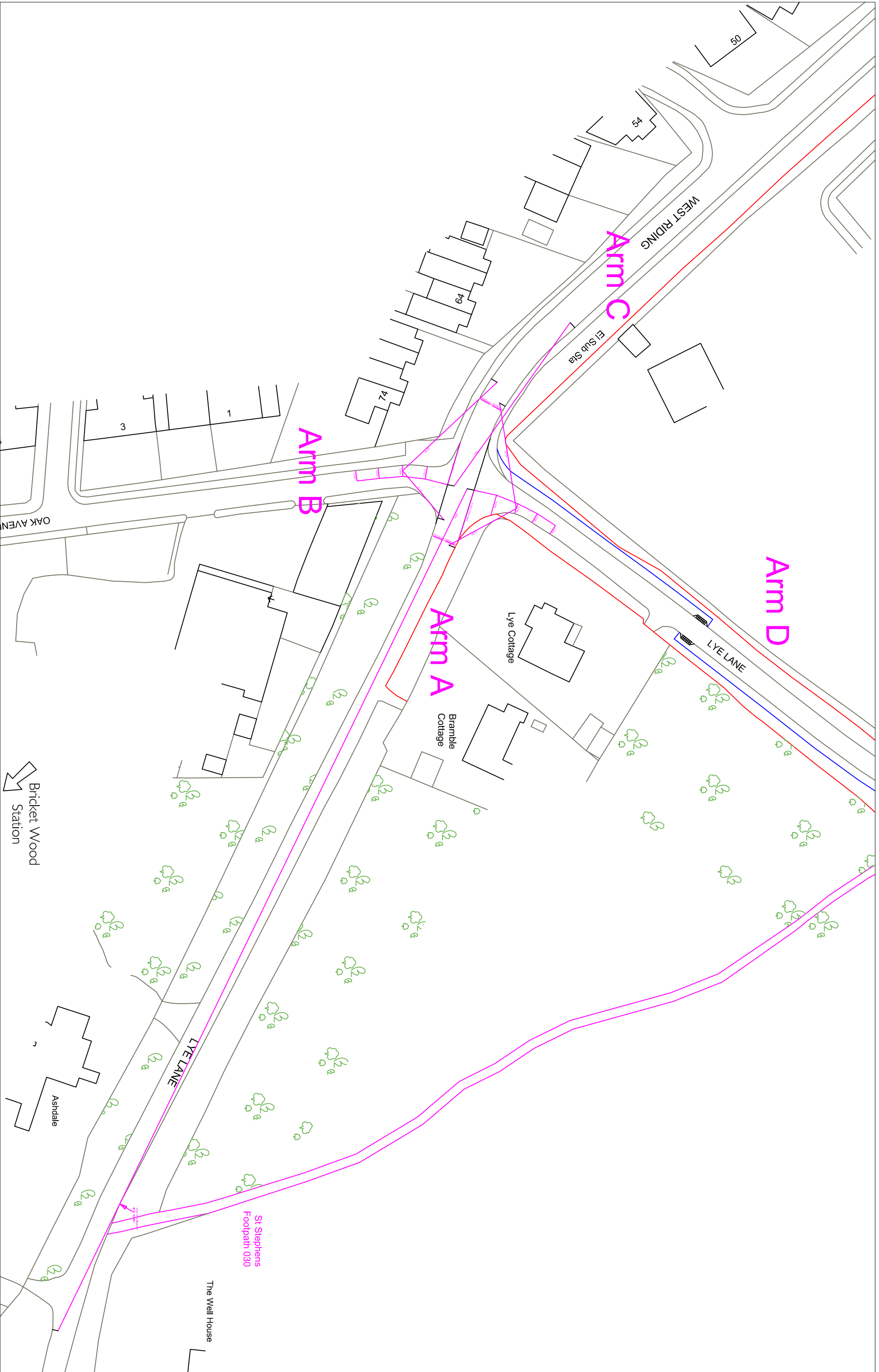
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	276	0.207	57	0.3	16.417	C
C-AB	0	154	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	86			86			
A-C	1871			1871			

17:45 - 18:00

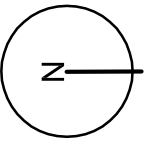
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	388	0.120	47	0.1	10.581	B
C-AB	0	231	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	70			70			
A-C	1528			1528			

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	39	469	0.084	39	0.1	8.389	A
C-AB	0	287	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	59			59			
A-C	1279			1279			



Date: 15/08/22
 Scale: 1:7500@A3
 Source: OS / AD Practice
 Appendix F



P2584: Land North of Bricket Wood, Herts
 Junction 2 Lye Lane Crossroads

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Bricket Wood
 Station

<h1>Junctions 10</h1>
<h2>PICADY 10 - Priority Intersection Module</h2>
Version: 10.0.0.1499 © Copyright TRL Software Limited, 2021
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Filename: P2584 Site 2 Lye Lane jw West Riding Oak Ave 2035 with Development.j10
Path: C:\Users\johnf\Paul Mew Associates Ltd\PMA - Projects\P2584\Junction Assessment
Report generation date: 25/08/2022 08:34:13

»Lye Lane Oak Ave Junction - 2035, AM
 »Lye Lane Oak Ave Junction - 2035, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
Lye Lane Oak Ave Junction - 2035										
Stream B-ACD	D1	1.6	21.73	0.62	C	D2	1.2	17.25	0.55	C
Stream A-BCD		0.3	7.95	0.25	A		0.1	6.54	0.11	A
Stream D-ABC		1.0	16.29	0.51	C		0.6	12.15	0.37	B
Stream C-ABD		0.1	6.02	0.05	A		0.0	5.60	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	P2584 Site 2 Lye Lane jw West Riding Oak Ave
Location	Lye Lane / West Riding / Oak Ave
Site number	2
Date	15/08/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	P2584
Enumerator	john ross
Description	Assessment of the impact of the proposed development on the junction of Lye Lane with West Riding and Oak Avenue

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	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

--	--	--	--	--	--	--	--

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2035	AM	ONE HOUR	07:45	09:15	15
D2	2035	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Lye Lane Oak Ave Junction	100.000

Lye Lane Oak Ave Junction - 2035, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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
2	Lye Lane / West Riding / Oak Ave	Crossroads	Two-way	Two-way	Two-way	Two-way		15.48	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.48	C

Arms

Arms

Arm	Name	Description	Arm type
A	Lye Lane E		Major
B	Oak Avenue		Minor
C	West Riding		Major
D	Lye Lane N		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	5.72			44.0	✓	0.00
C	5.72			205.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.97	29	14
D	One lane	3.28	17	24

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-A	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	Slope for D-C
A-D	599	-	-	-	-	-	-	0.235	0.336	0.235	-	-	-
B-A	492	0.091	0.229	0.229	-	-	-	0.144	0.328	-	0.229	0.229	0.115
B-C	631	0.098	0.248	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	492	0.091	0.229	0.229	-	-	-	0.144	0.328	0.144	-	-	-
B-D, offside lane	492	0.091	0.229	0.229	-	-	-	0.144	0.328	0.144	-	-	-

C-B	693	0.272	0.272	0.388	-	-	-	-	-	-	-	-	-
D-A	657	-	-	-	-	-	-	0.258	-	0.102	-	-	-
D-B, nearside lane	509	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
D-B, offside lane	509	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
D-C	509	-	0.149	0.339	0.118	0.237	0.237	0.237	0.237	0.094	-	-	-

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.

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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	156	100.000
B		✓	246	100.000
C		✓	37	100.000
D		✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	14	14	128
	B	23	0	19	204
	C	5	31	0	1
	D	17	183	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	1
	B	0	0	0	3
	C	0	0	0	0
	D	0	2	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	117	118
	B	185	190
	C	28	28
	D	155	158
08:00-08:15	A	140	141
	B	221	227
	C	33	33

	D	185	188
08:15-08:30	A	172	173
	B	271	278
	C	41	41
	D	227	231
08:30-08:45	A	172	173
	B	271	278
	C	41	41
	D	227	231
08:45-09:00	A	140	141
	B	221	227
	C	33	33
	D	185	188
09:00-09:15	A	117	118
	B	185	190
	C	28	28
	D	155	158

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.62	21.73	1.6	C
A-BCD	0.25	7.95	0.3	A
A-B				
A-C				
D-ABC	0.51	16.29	1.0	C
C-ABD	0.05	6.02	0.1	A
C-D				
C-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	190	464	0.409	187	0.7	13.182	B
A-BCD	101	605	0.167	100	0.2	7.180	A
A-B	9			9			
A-C	9			9			
D-ABC	158	476	0.332	156	0.5	11.386	B
C-ABD	24	652	0.036	23	0.0	5.724	A
C-D	0.73			0.73			
C-A	4			4			

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	227	457	0.496	226	1.0	15.863	C
A-BCD	121	606	0.200	121	0.3	7.498	A
A-B	10			10			
A-C	10			10			
D-ABC	188	467	0.403	188	0.7	13.077	B
C-ABD	28	644	0.044	28	0.0	5.845	A
C-D	0.86			0.86			
C-A	4			4			

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	278	447	0.621	275	1.6	21.178	C
A-BCD	150	607	0.247				
A-B	12			12			
A-C	12			12			
D-ABC	231	456	0.507	229	1.0	16.100	C
C-ABD	34	633	0.054	34	0.1	6.014	A
C-D	1			1			
C-A	5			5			

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	278	447	0.621	277	1.6	21.728	C
A-BCD	150	607	0.247	150	0.3	7.950	A
A-B	12			12			
A-C	12			12			
D-ABC	231	455	0.507	231	1.0	16.294	C
C-ABD	34	633	0.055	34	0.1	6.015	A
C-D	1			1			
C-A	5			5			

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	227	457	0.496	229	1.0	16.371	C
A-BCD	121	606	0.200	122	0.3	7.515	A
A-B	10			10			
A-C	10			10			
D-ABC	188	467	0.404	190	0.7	13.277	B
C-ABD	28	644	0.044	28	0.0	5.850	A
C-D	0.86			0.86			
C-A	4			4			

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	190	464	0.409	191	0.7	13.585	B
A-BCD	101	605	0.167				
A-B	9			9			
A-C	9			9			
D-ABC	158	475	0.332	159	0.5	11.593	B
C-ABD	24	652	0.036	24	0.0	5.731	A
C-D	0.73			0.73			
C-A	4			4			

Lye Lane Oak Ave Junction - 2035, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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
2	Lye Lane / West Riding / Oak Ave	Crossroads	Two-way	Two-way	Two-way	Two-way		12.24	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.24	B

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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	97	100.000
B		✓	233	100.000
C		✓	41	100.000
D		✓	159	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	18	23	56
	B	45	0	36	152
	C	14	23	0	4
	D	25	128	6	0

Vehicle Mix

Heavy Vehicle Percentages

--	--

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	3	1
	C	0	0	0	0
	D	5	4	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	73	73
	B	175	177
	C	31	31
	D	120	124
17:00-17:15	A	87	87
	B	209	212
	C	37	37
	D	143	149
17:15-17:30	A	107	107
	B	257	259
	C	45	45
	D	175	182
17:30-17:45	A	107	107
	B	257	259
	C	45	45
	D	175	182
17:45-18:00	A	87	87
	B	209	212
	C	37	37
	D	143	149
18:00-18:15	A	73	73
	B	175	177
	C	31	31
	D	120	124

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.55	17.25	1.2	C
A-BCD	0.11	6.54	0.1	A
A-B				
A-C				
D-ABC	0.37	12.15	0.6	B
C-ABD	0.04	5.60	0.0	A
C-D				
C-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	177	483	0.367	175	0.6	11.733	B
A-BCD	44	611	0.073	44	0.1	6.345	A
A-B	13			13			
A-C	16			16			
D-ABC	124	502	0.248	123	0.3	9.845	A
C-ABD	18	676	0.026	18	0.0	5.464	A
C-D	3			3			
C-A	10			10			

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	212	478	0.443	211	0.8	13.606	B
A-BCD	54	613	0.087	54	0.1	6.429	A
A-B	15			15			
A-C	19			19			
D-ABC	149	497	0.299	148	0.4	10.718	B
C-ABD	21	673	0.031	21	0.0	5.520	A
C-D	3			3			
C-A	12			12			

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	259	470	0.552	258	1.2	17.003	C
A-BCD	67	617	0.108	66	0.1	6.543	A
A-B	18			18			
A-C	23			23			
D-ABC	182	490	0.371	181	0.6	12.102	B
C-ABD	26	669	0.039	26	0.0	5.599	A
C-D	4			4			
C-A	15			15			

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	259	470	0.552	259	1.2	17.254	C
A-BCD	67	617	0.108	67	0.1	6.544	A
A-B	18			18			
A-C	23			23			
D-ABC	182	490	0.372	182	0.6	12.154	B
C-ABD	26	669	0.039	26	0.0	5.602	A
C-D	4			4			
C-A	15			15			

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	212	477	0.444	213	0.8	13.864	B
A-BCD	54	613	0.087	54	0.1	6.434	A
A-B	15			15			
A-C	19			19			
D-ABC	149	497	0.299	149	0.5	10.788	B
C-ABD	21	673	0.031	21	0.0	5.523	A
C-D	3			3			
C-A	12			12			

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	177	483	0.367	178	0.6	11.986	B
A-BCD	44	611	0.073	45	0.1	6.356	A
A-B	13			13			

A-C	16			16			
D-ABC	124	502	0.248	125	0.3	9.942	A
C-ABD	18	676	0.026	18	0.0	5.467	A
C-D	3			3			
C-A	10			10			

<h1>Junctions 10</h1>
<h2>PICADY 10 - Priority Intersection Module</h2>
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Filename: P2584 Site 3 Lye Lane jw Park Street Lane 2035 with Development.j10
Path: C:\Users\johnf\Paul Mew Associates Ltd\PMA - Projects\P2584\Junction Assessment
Report generation date: 15/08/2022 12:20:18

»Lye Lane Park Street - 2035, AM
 »Lye Lane Park Street - 2035, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
Lye Lane Park Street - 2035										
Stream B-AC	D1	1.0	14.33	0.50	B	D2	0.5	10.26	0.35	B
Stream C-AB		0.8	9.21	0.40	A		0.6	8.83	0.34	A

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

File summary

File Description

Title	P2584 Site 3 Lye Lane with Park Street Lane
Location	Lye Lane / Park Street Lane
Site number	3
Date	15/08/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	P2584
Enumerator	john ross
Description	Assessment of the impact of the proposed development on the junction of Lye Lane with Park Street Lane

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	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2035	AM	ONE HOUR	07:45	09:15	15
D2	2035	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Lye Lane Park Street	100.000

Lye Lane Park Street - 2035, AM

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
3	Park Street Lane	T-Junction	Two-way	Two-way	Two-way		7.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.14	A

Arms

Arms

Arm	Name	Description	Arm type
A	Park Street Lane (south)		Major
B	Lye Lane		Minor
C	Park Street Lane (north)		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	6.55			25.0	✓	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	3.55	120	17

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	553	0.101	0.255	0.160	0.364
B-C	669	0.114	0.289	-	-
C-B	588	0.241	0.241	-	-

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.

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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	188	100.000
B		✓	230	100.000
C		✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	76	112
	B	95	0	135
	C	165	172	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	1
	B	2	0	2
	C	1	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	142	145
	B	173	177
	C	254	258
08:00-08:15	A	169	173
	B	207	211
	C	303	308
08:15-08:30	A	207	212
	B	253	258
	C	371	377
08:30-08:45	A	207	212
	B	253	258
	C	371	377
08:45-09:00	A	169	173
	B	207	211
	C	303	308
09:00-09:15	A	142	145
	B	173	177
	C	254	258

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.50	14.33	1.0	B

C-AB	0.40	9.21	0.8	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	177	548	0.322	175	0.5	9.775	A
C-AB	164	640	0.257	163	0.4	7.654	A
C-A	93			93			
A-B	60			60			
A-C	85			85			

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	211	534	0.395	210	0.7	11.304	B
C-AB	205	651	0.315	205	0.6	8.209	A
C-A	102			102			
A-B	72			72			
A-C	102			102			

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	258	515	0.502	257	1.0	14.174	B
C-AB	267	666	0.401	266	0.8	9.158	A
C-A	109			109			
A-B	88			88			
A-C	125			125			

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	258	514	0.502	258	1.0	14.328	B
C-AB	268	667	0.401	268	0.8	9.205	A
C-A	109			109			
A-B	88			88			
A-C	125			125			

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	211	534	0.395	212	0.7	11.458	B
C-AB	206	652	0.316	207	0.6	8.265	A
C-A	102			102			
A-B	72			72			
A-C	102			102			

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	177	548	0.322	177	0.5	9.927	A
C-AB	165	641	0.257	165	0.4	7.726	A
C-A	93			93			
A-B	60			60			

A-C	85			85			
-----	----	--	--	----	--	--	--

Lye Lane Park Street - 2035, PM

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
3	Park Street Lane	T-Junction	Two-way	Two-way	Two-way		5.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.52	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	2035	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 (Veh/hr)	Scaling Factor (%)
A		✓	180	100.000
B		✓	168	100.000
C		✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	74	106
	B	52	0	116
	C	109	154	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	1
	B	2	0	3
	C	1	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	136	137
	B	126	130
	C	198	200
17:00-17:15	A	162	164
	B	151	155
	C	236	239
17:15-17:30	A	198	201
	B	185	190
	C	290	292
17:30-17:45	A	198	201
	B	185	190
	C	290	292
17:45-18:00	A	162	164
	B	151	155
	C	236	239
18:00-18:15	A	136	137
	B	126	130
	C	198	200

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.35	10.26	0.5	B
C-AB	0.34	8.83	0.6	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	130	576	0.225	129	0.3	8.239	A
C-AB	135	613	0.221	134	0.3	7.590	A
C-A	65			65			
A-B	57			57			
A-C	81			81			

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	155	565	0.274	155	0.4	8.993	A
C-AB	167	618	0.270	166	0.4	8.054	A
C-A	72			72			
A-B	68			68			
A-C	96			96			

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							
C-AB							
C-A							
A-B							
A-C							

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	190	550	0.345	189	0.5	10.225	B
C-AB	213	625	0.341	212	0.6	8.805	A
C-A	80			80			
A-B	83			83			
A-C	118			118			

17:30 - 17:45

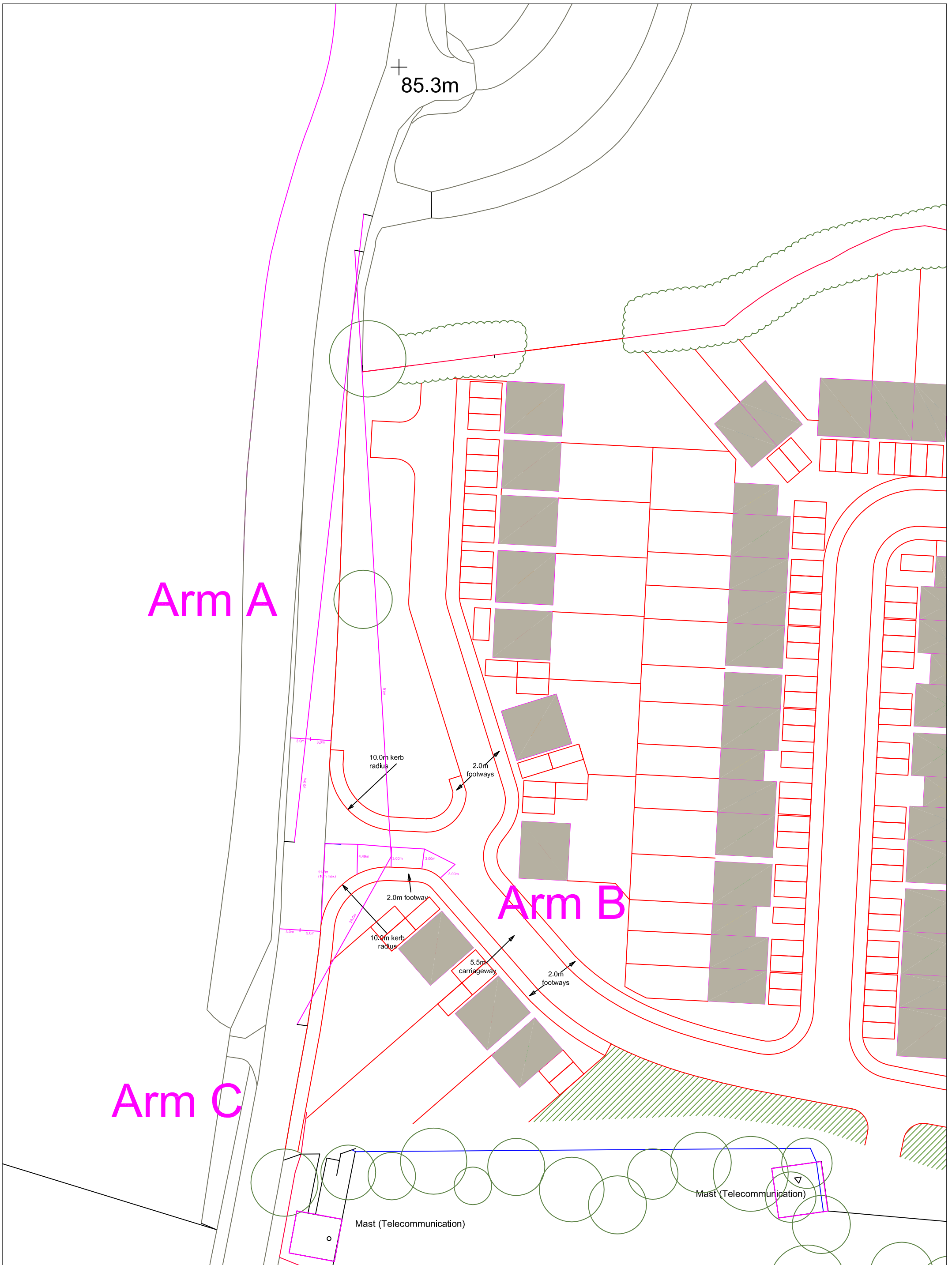
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	190	550	0.345	190	0.5	10.260	B
C-AB	213	625	0.341	213	0.6	8.833	A
C-A	80			80			
A-B	83			83			
A-C	118			118			

17:45 - 18:00

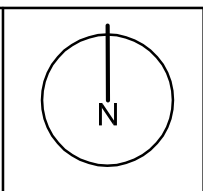
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	565	0.274	156	0.4	9.040	A
C-AB	167	618	0.270	168	0.4	8.093	A
C-A	72			72			
A-B	68			68			
A-C	96			96			

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	130	576	0.225	130	0.3	8.301	A
C-AB	136	613	0.221	136	0.3	7.637	A
C-A	64			64			
A-B	57			57			
A-C	81			81			



Date: 15/08/22
 Scale: 1:500@A3
 Source: OS / AD Practice
 Appendix D



P2584: Land North of Bricket Wood, Herts
 Junction 4 Proposed Site Access / Lye Lane


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<h1>Junctions 10</h1>
<h2>PICADY 10 - Priority Intersection Module</h2>
Version: 10.0.0.1499 © Copyright TRL Software Limited, 2021
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Filename: P2584 Site 4 Lye Lane jw Proposed Site Access 2035 with Development.j10
Path: C:\Users\johnf\Paul Mew Associates Ltd\PMA - Projects\P2584\Junction Assessment
Report generation date: 15/08/2022 13:07:54

»Site Access - 2035, AM

»Site Access - 2035, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
Site Access - 2035										
Stream B-AC	D1	0.2	6.60	0.14	A	D2	0.0	5.88	0.05	A
Stream C-AB		0.0	5.88	0.02	A		0.1	6.32	0.09	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	P2584 Site 4 Lye Lane jw Site Access
Location	Lye Lane / Proposed Site Access
Site number	4
Date	15/08/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	P2584
Enumerator	john ross
Description	Assessment of the impact of the proposed development on the junction of Lye Lane with the Proposed Site Access road

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	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
			Site Access				

D1	2035	AM	Juntion	ONE HOUR	07:45	09:15	15
D2	2035	PM	Site Access Junction	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Site Access	100.000

Site Access - 2035, AM

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		2.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.64	A

Arms

Arms

Arm	Name	Description	Arm type
A	Lye Lane N		Major
B	Site Access		Minor
C	Lye Lane S		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			95.0	✓	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	3.70	29	91

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	569	0.104	0.262	0.165	0.374
B-C	729	0.126	0.319	-	-
C-B	629	0.260	0.260	-	-

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.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
			Site Access				

D1	2035	AM	Juntion	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 (Veh/hr)	Scaling Factor (%)
A		✓	99	100.000
B		✓	79	100.000
C		✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	94
	B	25	0	54
	C	35	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	75	75
	B	59	59
	C	35	35
08:00-08:15	A	89	90
	B	71	71
	C	42	42
08:15-08:30	A	109	110
	B	87	87
	C	52	52
08:30-08:45	A	109	110
	B	87	87
	C	52	52
08:45-09:00	A	89	90
	B	71	71
	C	42	42
09:00-09:15	A	75	75
	B	59	59
	C	35	35

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
--------	---------	---------------	-----------------	---------

B-AC	0.14	6.60	0.2	A
C-AB	0.02	5.88	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	644	0.092	59	0.1	6.150	A
C-AB	9	627	0.015	9	0.0	5.829	A
C-A	26			26			
A-B	4			4			
A-C	71			71			

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	71	639	0.111	71	0.1	6.336	A
C-AB	11	627	0.018	11	0.0	5.851	A
C-A	31			31			
A-B	4			4			
A-C	85			85			

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	87	632	0.138	87	0.2	6.598	A
C-AB	14	626	0.022	14	0.0	5.881	A
C-A	38			38			
A-B	6			6			
A-C	105			105			

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	87	632	0.138	87	0.2	6.600	A
C-AB	14	626	0.023	14	0.0	5.881	A
C-A	38			38			
A-B	6			6			
A-C	105			105			

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	71	639	0.111	71	0.1	6.341	A
C-AB	11	627	0.018	11	0.0	5.851	A
C-A	31			31			
A-B	4			4			
A-C	85			85			

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	59	644	0.092	60	0.1	6.162	A
C-AB	9	627	0.015	9	0.0	5.832	A
C-A	26			26			

A-B	4			4			
A-C	71			71			

Site Access - 2035, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

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		2.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2035	PM	Site Access Junction	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 (Veh/hr)	Scaling Factor (%)
A		✓	93	100.000
B		✓	27	100.000
C		✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	16	77
	B	7	0	20
	C	32	48	0

Vehicle Mix

Heavy Vehicle Percentages

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

	C	0	0	0
--	---	---	---	---

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	70	70
	B	20	20
	C	60	60
17:00-17:15	A	84	84
	B	24	24
	C	72	72
17:15-17:30	A	102	102
	B	30	30
	C	88	88
17:30-17:45	A	102	102
	B	30	30
	C	88	88
17:45-18:00	A	84	84
	B	24	24
	C	72	72
18:00-18:15	A	70	70
	B	20	20
	C	60	60

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	5.88	0.0	A
C-AB	0.09	6.32	0.1	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	20	654	0.031	20	0.0	5.681	A
C-AB	38	627	0.060	37	0.1	6.105	A
C-A	23			23			
A-B	12			12			
A-C	58			58			

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	24	649	0.037	24	0.0	5.765	A
C-AB	45	626	0.072	45	0.1	6.194	A
C-A	27			27			
A-B	14			14			
A-C	69			69			

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	30	642	0.046	30	0.0	5.882	A
C-AB	56	626	0.090	56	0.1	6.316	A
C-A	32			32			
A-B	18			18			
A-C	85			85			

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	30	642	0.046	30	0.0	5.882	A
C-AB	56	626	0.090	56	0.1	6.319	A
C-A	32			32			
A-B	18			18			
A-C	85			85			

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	24	649	0.037	24	0.0	5.766	A
C-AB	45	626	0.072	45	0.1	6.196	A
C-A	27			27			
A-B	14			14			
A-C	69			69			

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	20	654	0.031	20	0.0	5.684	A
C-AB	38	627	0.060	38	0.1	6.111	A
C-A	23			23			
A-B	12			12			
A-C	58			58			

Appendix B

Amended Trip Generation Forecasts

TRICS 7.9.2
Trip Rate Parameter: No of Dwellings

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 03 - RESIDENTIAL
Category M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

2 SOUTH EAST
ES EAST SUSSEX 4 days
HC HAMPSHIRE 1 days
OX OXFORDSHIRE 1 days
SC SURREY 1 days
WS WEST SUSSEX 3 days
3 SOUTH WEST
SM SOMERSET 1 days
WL WILTSHIRE 1 days
4 EAST ANGLIA
NF NORFOLK 6 days

Primary Filtering selection:

Parameter: No of Dwellings
Actual Range: 16 to 544 (units:)
Range Selected by User: 9 to 1412 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 28/03/22

Selected survey days:

Monday 2 days
Tuesday 5 days
Wednesday 7 days
Thursday 2 days
Friday 2 days

Selected survey types:

Manual count 18 days
Directional ATC Count 0 days

Selected Locations:

Town Centre 0
Edge of Town Centre 0
Suburban Area (PPS6 Out of Centre) 0
Edge of Town 2
Neighbourhood Centre (PPS6 Local) 16
Free Standing (PPS6 Out of Town) 0
Not Known 0

Selected Location Sub Categories:

Industrial Zone 0
Commercial Zone 0
Development Zone 0
Residential Zone 0
Retail Zone 0
Built-Up Zone 0
Village 16
Out of Town 2
High Street 0
No Sub Category 0

Secondary Filtering selection:

Use Class:
C3 18 days

Population within 500m Range:
All Surveys Included

Population within 1 mile:

1,000 or Less 2 days
1,001 to 5,000 11 days
5,001 to 10,000 2 days
10,001 to 15,000 3 days

Population within 5 miles:

5,001 to 25,000 1 days
25,001 to 50,000 5 days
50,001 to 75,000 2 days
75,001 to 100,000 3 days
100,001 to 125,000 1 days
125,001 to 250,000 5 days
250,001 to 500,000 1 days

Car ownership within 5 miles:

0.6 to 1.0 1 days
1.1 to 1.5 14 days
1.6 to 2.0 3 days

Travel Plan:

Yes 17 days
No 1 days

PTAL Rating:

No PTAL Present 18 days

LIST OF SITES relevant to selection parameters

ES-03-M-05 A26 CROWBOROUGH RD FIVE ASH DOWN VILLAGE NEAR UCKFIELD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 138 Survey date: MONDAY 30/06/2014 Survey Type: MANUAL	HOUSES & FLEAST SUSSEX	10	NF-03-M-43 MIXED HOUS NORFOLK PIGOT LANE FRAMINGHAM EARL NEAR NORWICH Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 100 Survey date: TUESDAY 21/09/2021 Survey Type: MANUAL
ES-03-M-09 STATION ROAD NORTHIAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 16 Survey date: WEDNESDAY 17/05/2017 Survey Type: MANUAL	DETACHED/S EAST SUSSEX	11	NF-03-M-45 MIXED HOUS NORFOLK MILL LANE HORSFORD NEAR NORWICH Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 125 Survey date: WEDNESDAY 15/09/2021 Survey Type: MANUAL
ES-03-M-18 NORTH COMMON ROAD WIVELSFIELD GREEN Neighbourhood Centre (PPS6 Local Centre) Village	MIXED HOUS EAST SUSSEX	12	OX-03-M-02 MIXED HOUS OXFORDSHIRE GODSTOW ROAD WOLVERCOTE OXFORD

Total No of Dwellings:	75	Neighbourhood Centre (PPS6 Local Centre)
Survey date:	TUESDAY 15/06/2021	Village
Survey Type:	MANUAL	Total No of Dwellings: 117
ES-03-M-20	MIXED HOUS/EAST SUSSEX	Survey date: WEDNESDAY 20/10/2021
HOREBEECH LANE		Survey Type: MANUAL
HORAM	13	SC-03-M-08 MIXED HOUS/SURREY
Neighbourhood Centre (PPS6 Local Centre)		CHOBHAM LANE
Village		LONGCROSS
Total No of Dwellings:	47	Neighbourhood Centre (PPS6 Local Centre)
Survey date:	TUESDAY 05/10/2021	Village
Survey Type:	MANUAL	Total No of Dwellings: 107
HC-03-M-12	MIXED HOUS/HAMPSHIRE	Survey date: TUESDAY 12/11/2019
BARNFIELD WAY		Survey Type: MANUAL
HEDGE END	14	SM-03-M-01 DETACHED & SOMERSET
NEAR SOUTHAMPTON		MILTON HILL
Edge of Town		MONKTON HEATHFIELD
Out of Town		TAUNTON
Total No of Dwellings:	181	Neighbourhood Centre (PPS6 Local Centre)
Survey date:	WEDNESDAY 23/10/2019	Village
Survey Type:	MANUAL	Total No of Dwellings: 135
NF-03-M-01	MIXED HOUS/NORFOLK	Survey date: WEDNESDAY 26/09/2018
LONG LANE		Survey Type: MANUAL
MULBARTON	15	WL-03-M-04 MIXED HOUS/WILTSHIRE
NEAR NORWICH		WARNEFORD CRESCENT
Neighbourhood Centre (PPS6 Local Centre)		LONGHEDGE
Village		NEAR SALISBURY
Total No of Dwellings:	173	Neighbourhood Centre (PPS6 Local Centre)
Survey date:	FRIDAY 20/09/2019	Village
Survey Type:	MANUAL	Total No of Dwellings: 544
NF-03-M-02	MIXED HOUS/NORFOLK	Survey date: THURSDAY 18/11/2021
CAWSTON ROAD		Survey Type: MANUAL
AYLSHAM	16	WS-03-M-23 MIXED HOUS/WEST SUSSEX
Edge of Town		STANE STREET
Out of Town		WESTHAMNETT
Total No of Dwellings:	250	CHICHESTER
Survey date:	TUESDAY 17/09/2019	Neighbourhood Centre (PPS6 Local Centre)
Survey Type:	MANUAL	Village
NF-03-M-05	MIXED HOUS/NORFOLK	Total No of Dwellings: 99
CAISTOR LANE		Survey date: WEDNESDAY 13/10/2021
PORINGLAND	17	Survey Type: MANUAL
NEAR NORWICH		WS-03-M-24 MIXED HOUS/WEST SUSSEX
Neighbourhood Centre (PPS6 Local Centre)		COPTHORNE WAY
Village		COPTHORNE
Total No of Dwellings:	150	NEAR CRAWLEY
Survey date:	MONDAY 16/09/2019	Neighbourhood Centre (PPS6 Local Centre)
Survey Type:	MANUAL	Village
NF-03-M-42	MIXED HOUS/NORFOLK	Total No of Dwellings: 80
STALHAM ROAD		Survey date: FRIDAY 08/10/2021
HOVETON	18	Survey Type: MANUAL
Neighbourhood Centre (PPS6 Local Centre)		WS-03-M-26 MIXED HOUS/WEST SUSSEX
Village		MILL STRAIGHT
Total No of Dwellings:	120	SOUTHWATER
Survey date:	THURSDAY 16/09/2021	Neighbourhood Centre (PPS6 Local Centre)
Survey Type:	MANUAL	Village
		Total No of Dwellings: 193
		Survey date: WEDNESDAY 16/03/2022
		Survey Type: MANUAL

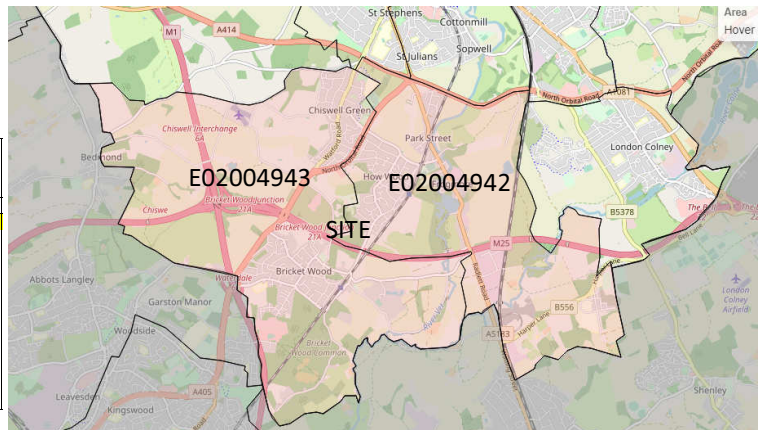
TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
Calculation Factor: 1 DWELLS
Count Type: TOTAL PEOPLE

Time Range	ARRIVALS			DEPARTURES			TOTALS			Proposal Arr	109 Dep	Units Total
	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	18	147	0.104	18	147	0.537	18	147	0.641	11	59	70
08:00-09:00	18	147	0.182	18	147	0.836	18	147	1.018	20	91	111
09:00-10:00	18	147	0.21	18	147	0.264	18	147	0.474	23	29	52
10:00-11:00	18	147	0.174	18	147	0.238	18	147	0.412	19	26	45
11:00-12:00	18	147	0.195	18	147	0.21	18	147	0.405	21	23	44
12:00-13:00	18	147	0.208	18	147	0.206	18	147	0.414	23	22	45
13:00-14:00	18	147	0.205	18	147	0.208	18	147	0.413	22	23	45
14:00-15:00	18	147	0.245	18	147	0.281	18	147	0.526	27	31	57
15:00-16:00	18	147	0.678	18	147	0.287	18	147	0.965	74	31	105
16:00-17:00	18	147	0.507	18	147	0.236	18	147	0.743	55	26	81
17:00-18:00	18	147	0.568	18	147	0.231	18	147	0.799	62	25	87
18:00-19:00	18	147	0.474	18	147	0.238	18	147	0.712	52	26	78
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			3.75			3.772			7.522	409	411	820

QS701EW - Method of travel to work
ONS Crown Copyright Reserved [from Nomis on 30 June 2022]

population All usual residents aged 16 to 74
units Persons
date 2011
rural urban Total

Method of Travel to Work	msoa2011:E02004942 St Albans 019		msoa2011:E02004943 St Albans 020		Average Split
	Persons	Split	Persons	Split	
Work mainly at or from home					
Underground, metro, light rail, tram	59	2%	60	2%	2%
Train	325	11%	322	9%	10%
Bus, minibus or coach	50	2%	63	2%	2%
Taxi	17	1%	18	1%	1%
Motorcycle, scooter or moped	27	1%	30	1%	1%
Driving a car or van	2,073	73%	2,639	75%	74%
Passenger in a car or van	113	4%	138	4%	4%
Bicycle	34	1%	33	1%	1%
On foot	124	4%	168	5%	5%
Other method of travel to work	13	0%	30	1%	1%
Total	2,835	100%	3,501	100%	100%

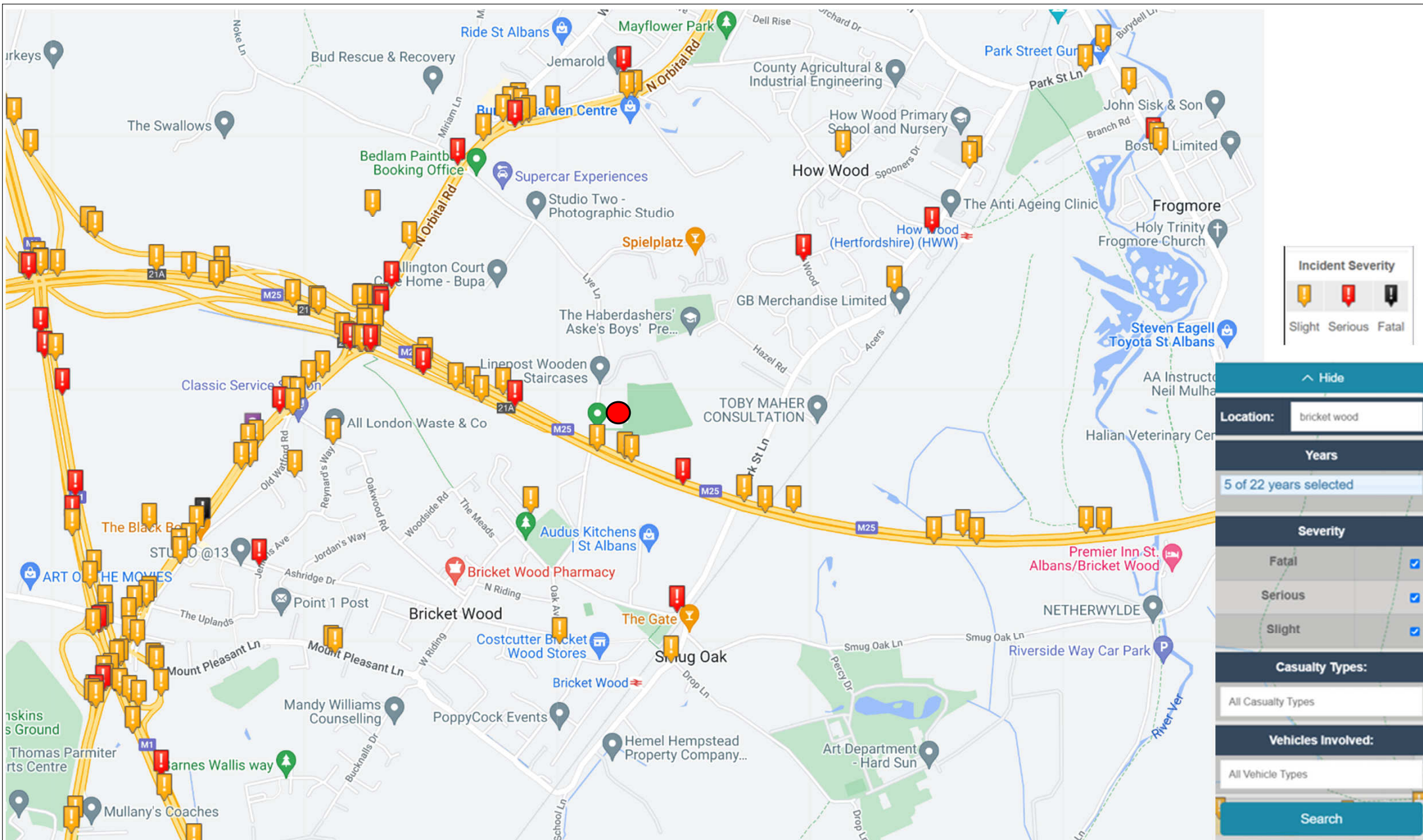


Proposed Development Trip Generations

	Total Person Trips		Census % Car Driver		Census % Rail + Underground		Total Census % Car Based Trips		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
00:00	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	11	59	8	44	1	7	10	51	60
08:00	20	91	15	68	2	11	17	79	96
09:00	23	29	17	21	3	3	20	25	45
10:00	19	26	14	19	2	3	16	22	39
11:00	21	23	16	17	3	3	18	20	38
12:00	23	22	17	17	3	3	20	19	39
13:00	22	23	17	17	3	3	19	20	39
14:00	27	31	20	23	3	4	23	26	50
15:00	74	31	55	23	9	4	64	27	91
16:00	55	26	41	19	7	3	48	22	70
17:00	62	25	46	19	7	3	54	22	75
18:00	52	26	38	19	6	3	45	22	67
19:00	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0
Total	409	411	304	306	49	50	353	355	709

Appendix C

Updated Road Traffic Accident Data



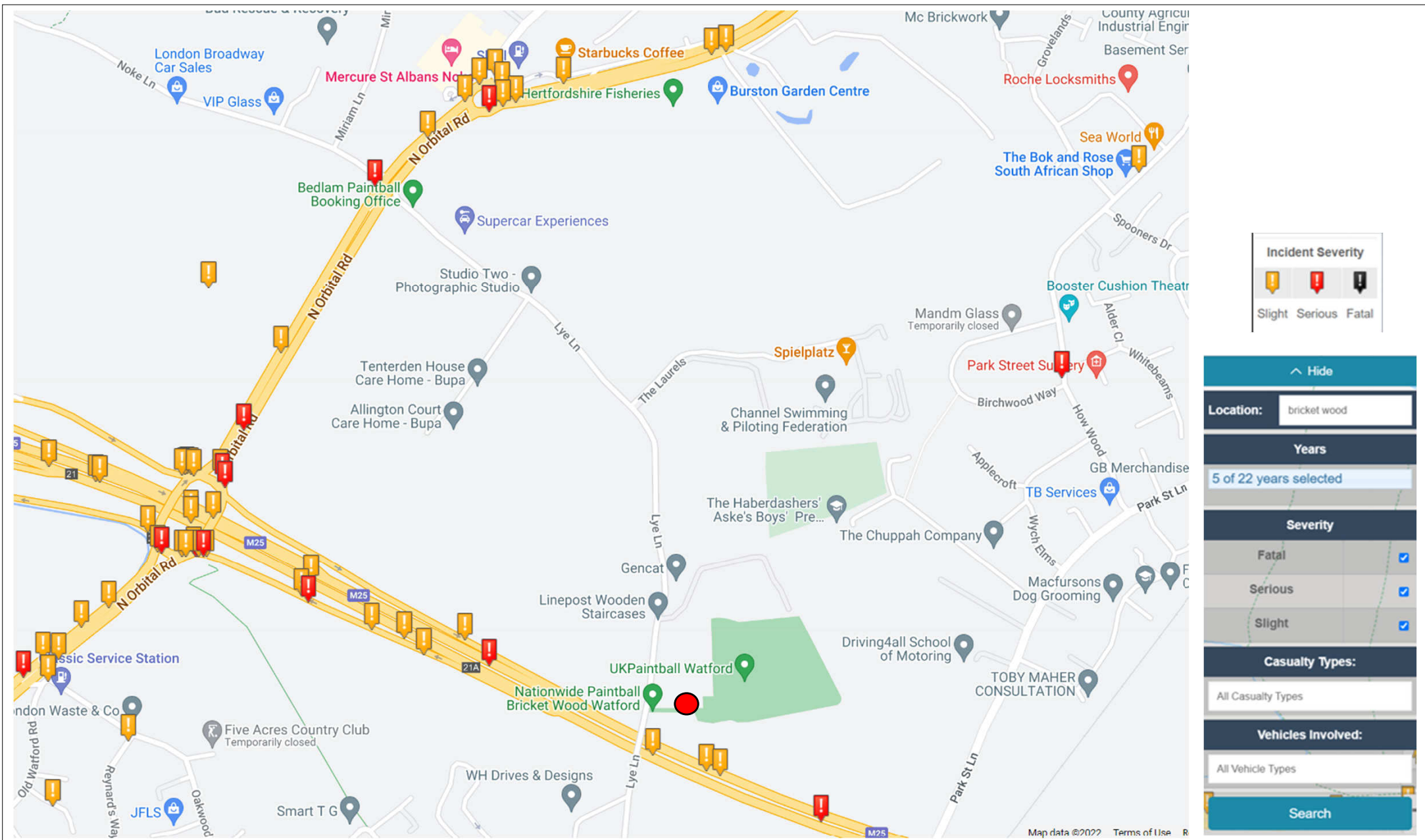
Date: 25/08/22
 Scale: NTS
 Source: CrashMap
 ● Site Location



P2584. Bricket Wood Development, Hertfordshire
 Road Traffic Accident Data Summary (2017-2021) – All Casualty Types



PAUL MEW ASSOCIATES
 TRAFFIC CONSULTANTS
 Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
 T: 0208 780 0426 W: www.pma-traffic.co.uk



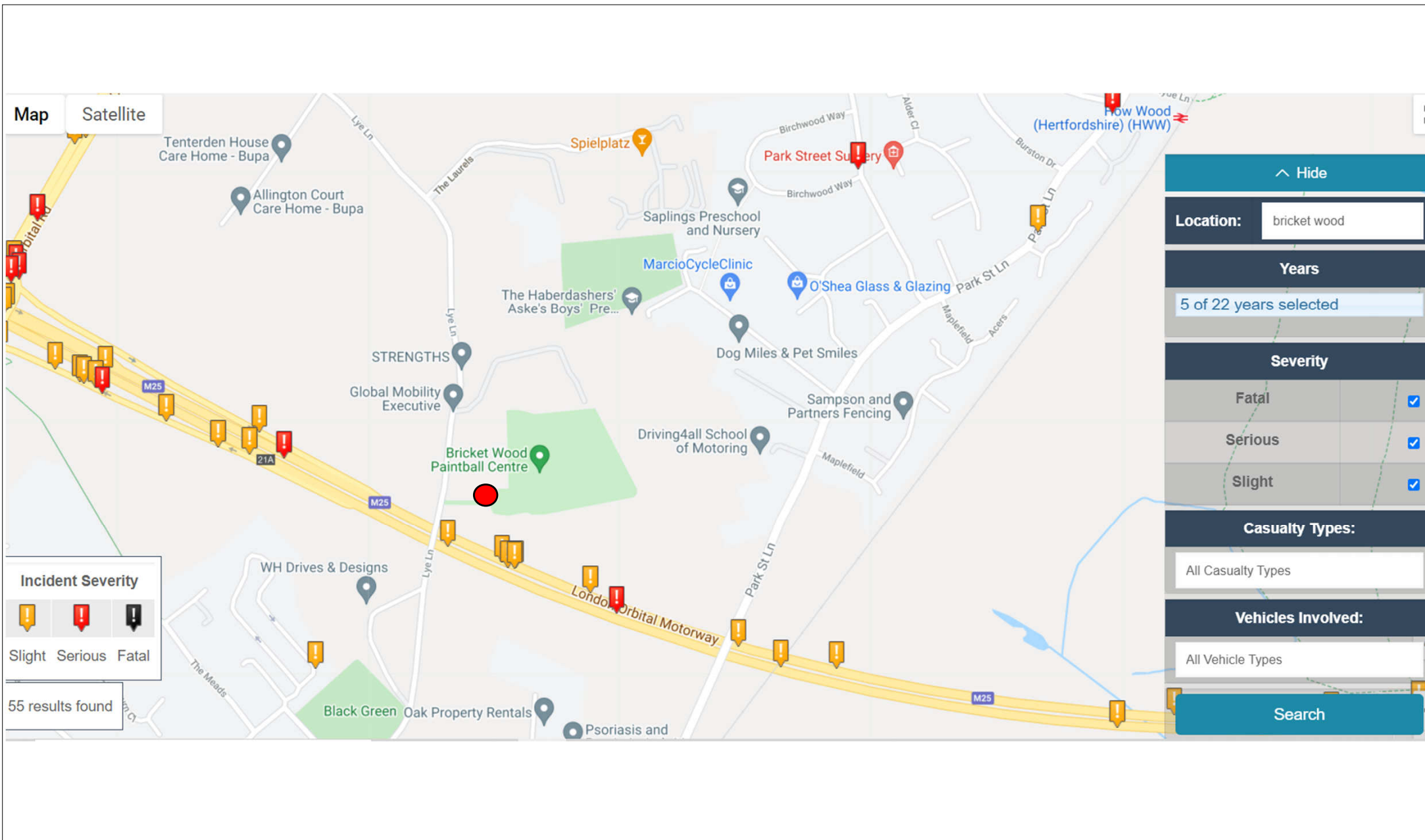
Date: 25/08/22
 Scale: NTS
 Source: CrashMap
 ● Site Location



P2584. Bricket Wood Development, Hertfordshire Road Traffic Accident Data Summary (2017-2021) – All Casualty Types



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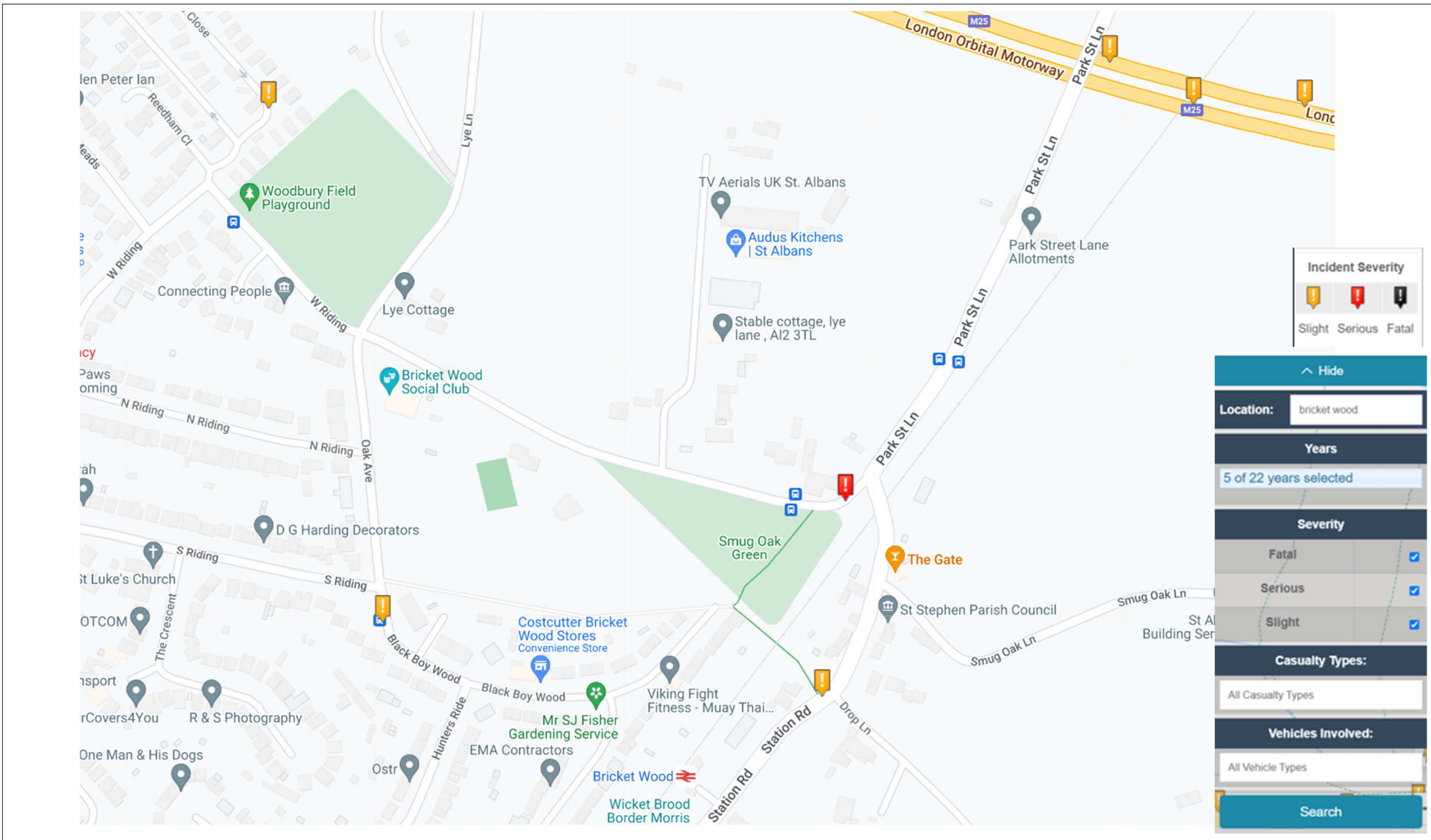
Date: 25/08/22
 Scale: NTS
 Source: CrashMap
 ● Site Location



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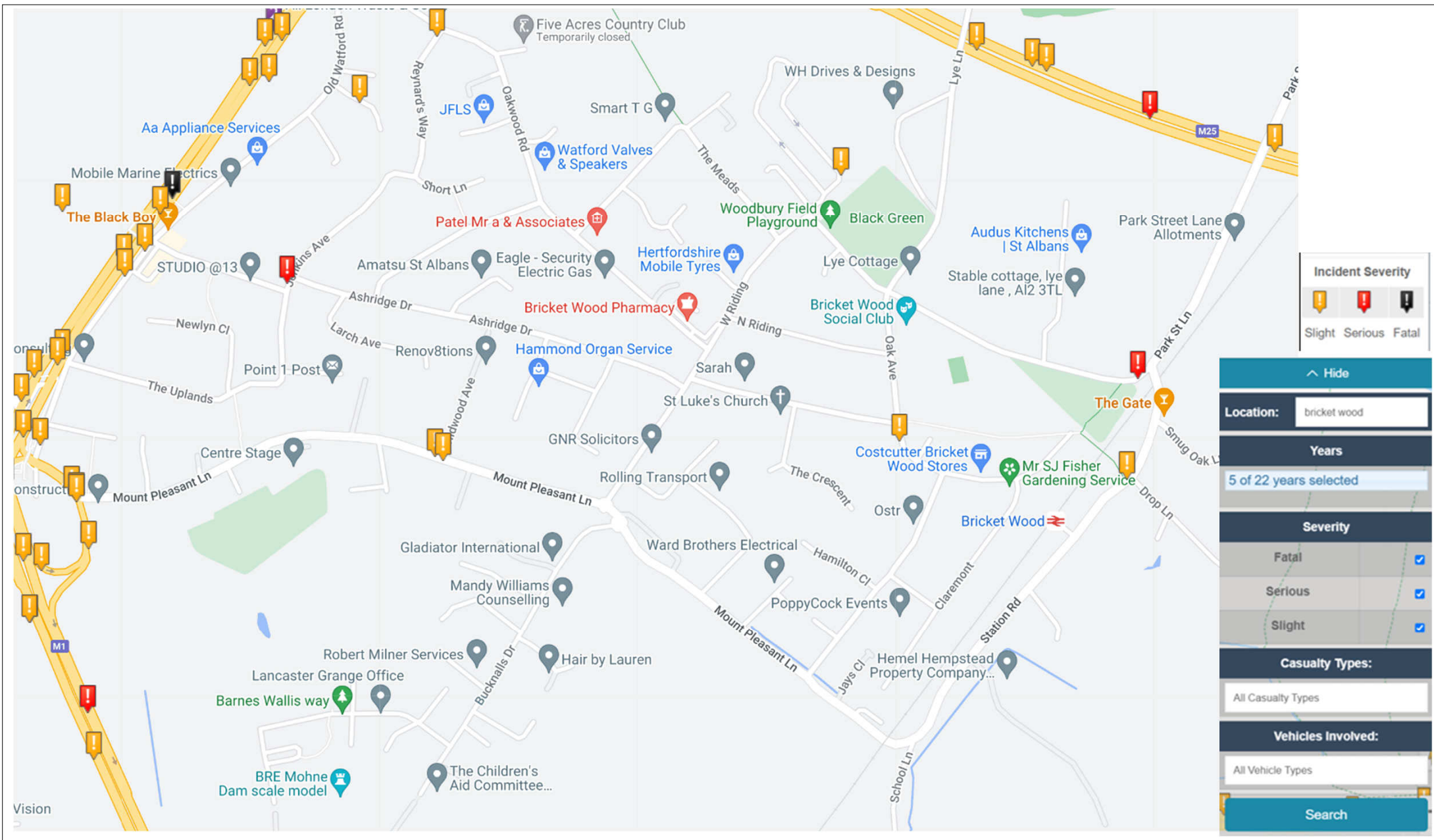
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