

Technical Note

Project:	P21-390 Land South of Burbage		
Subject:	Land South of Burbage (application ref: 24/00083/HYB) Response to highways comments raised by statutory consultees		
Prepared by:	Jake Blay – Transport Planner	Date:	03/02/2025
Authorised by:	Jo Read – Associate Transport Planner	Status:	S2 - Information
Document Ref:	21390-RLL-24-XX-TN-D-5021	Revision:	P01

1 Introduction

- 1.1.1 This Technical Note (TN) has been produced by Rodgers Leask Ltd (RL) on behalf of Redrow Homes to respond to the highways comments raised by statutory consultees regarding the hybrid planning application for Land South of Burbage (ref: [24/00083/HYB](#)) submitted 23rd January 2024. The description of development is provided below:
- 1.1.2 *“Hybrid planning application for 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a Coventry Road, and Burbage Fields Farm and outline planning application for a residential care home and up to 11no. self-build plots (all matters reserved except for access).”*
- 1.1.3 The comments raised by Leicestershire County Council (LCC), National Highways (NH) and Active Travel England (ATE) are referenced below.
- Leicestershire County Council (LCC) - 2024/0083/04/H/R3 - (01/11/2024) **(Appendix A)**
 - National Highways (NH) - NHPR 24-02 - (20/09/2024) **(Appendix B).**
 - Active Travel England (ATE) - ATE/24/00145/HYB – (19/02/2024) **(Appendix C).**
- 1.1.4 At the time of writing this response, the application is awaiting determination by Hinckley & Bosworth Borough Council (the local planning authority) and the updated Masterplan has been submitted.
- 1.1.5 When referring to the submitted Transport Assessment (TA) within this response, this is in reference to the latest document (21390-RLL-23-XX-RP-D-5001P08), uploaded to the Hinckley Bosworth Borough Council website on the 30th of August 2024.

2 Leicestershire County Council Highways

2.1 Site Access Arrangements: Overview

- 2.1.1 As a point of clarification, the proposed development has two points of access onto the public highway.
- 2.1.2 The western area of the development comprises 378 dwellings (full application) and the residential care home (outline application). This western area of the development will be served via a new access off Coventry Road.
- 2.1.3 The eastern area of the development will comprise of 55 dwellings (full application) and will be served via an extension off Flanders Close. This eastern area of the development will access the local highway network via the existing B578 Lutterworth Road / Passchendaele Drive priority junction.
- 2.1.4 An emergency link is provided between the two parts of the development as shown on the masterplan. There will be no through route for typical vehicular traffic between the two areas of the development.

2.2 Coventry Road Access

Stage 1 Road Safety Audit & Junction Visibility

- 2.2.1 To provide LCC with reassurance that the proposed Coventry Road site access can provide safe and suitable access to the western part of the development, the applicant has started to engage with the TRO process with LCC to determine whether double yellow lines either side of the site access within the extent of the calculated visibility splays are necessary to ensure an enforceable method which would keep the visibility splays clear.

Coventry Road Crossing Point

- 2.2.2 LCC have accepted the position of the proposed uncontrolled crossing point on Coventry Road, located adjacent to the proposed Coventry Road / Site Access junction.

Swept Path Analysis

- 2.2.3 The provision of a bollard to ensure that vehicles accessing properties no.67 & 69 do not overrun tactile paving for the proposed uncontrolled crossing point on Coventry Road can be investigated at the detailed design stage as suggested by LCC.

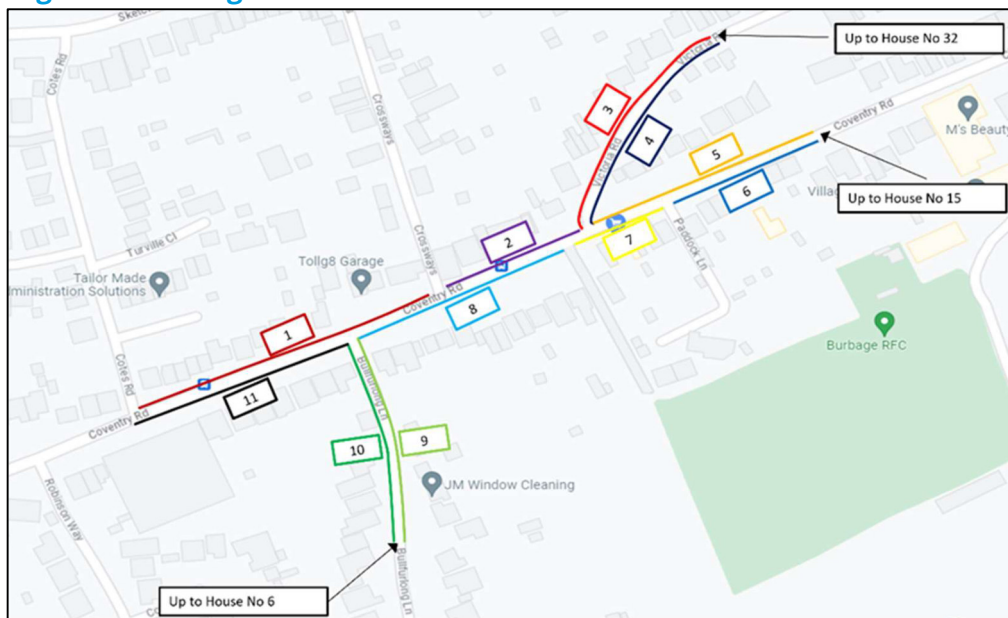
Ghost Island Right Turn Lane

- 2.2.4 LCC stated in their response the following:
- 2.2.5 *"The LHA acknowledge the additional information, but the paragraph quoted from Manual for Streets 2 mentions daily flows of 500 vehicles from a side road and the proposals would generate a significant number of trips above this. Given this will be the only site access to serve the proposed development the applicant should look at any additional information / measures that could be implemented to ensure that the site access is safe and suitable."*
- 2.2.6 The quote from Manual for Streets 2 (MfS2) has been misunderstood. Paragraph 9.4.7 from MfS2 is shown below.
- 2.2.7 *TD 42/9554 recommends that consideration should be given to providing a right turning lane at priority junctions where the side road flow exceeds 500 vehicles per day, but this advice relates to trunk roads, where there is an emphasis on providing an unimpeded route for through traffic. It is a relatively low flow, and junctions without right turn lanes will often be able to cater for higher levels of turning traffic without resulting in significant congestion.*
- 2.2.8 The extract from MfS2 is highlighting that TD 42/9554 was written for all purpose trunk roads, not residential streets. The advice in MfS2 raises the point that a threshold of 500 vehicles per day is not a hard fast rule in the context of a residential street where lower traffic flows allow for junctions to accommodate a greater number of turning traffic without the need for a dedicated lane.
- 2.2.9 Accordingly, it has been demonstrated through the use of a Junctions 10 model of the Coventry Road site access that the proposed site access arrangements operate well within capacity with a simple priority arrangement.

Parking Survey

- 2.2.10 As requested by LCC, **Figure 1** shows the zones for the parking beat survey.

Figure 1: Parking Beat Zone Plan



Junction Capacity Assessment

- 2.2.11 The Coventry Road / Site Access junction modelling reflects the latest iteration of the proposed site access design off Coventry Road. Traffic flows used within the junction capacity model are correct and consistent with the traffic flows presented within the appendices of the submitted TA. These traffic flows reflect vehicle movements associated with the western area of the development comprising 378 dwellings and the residential care home.
- 2.2.12 LCC have highlighted that the junction model results predict that drivers approaching the site access junction from the spine road (the minor arm) will experience delay of 15 seconds in AM peak hour for both the 2026 and 2031 forecast years. It is expected that any new priority junction will experience some delay on the minor arm given that vehicle movements from the minor arm will be turning in the gaps in traffic travelling along Coventry Road.
- 2.2.13 The predicted 15 seconds of delay is not considered severe and will be indiscernible to drivers.

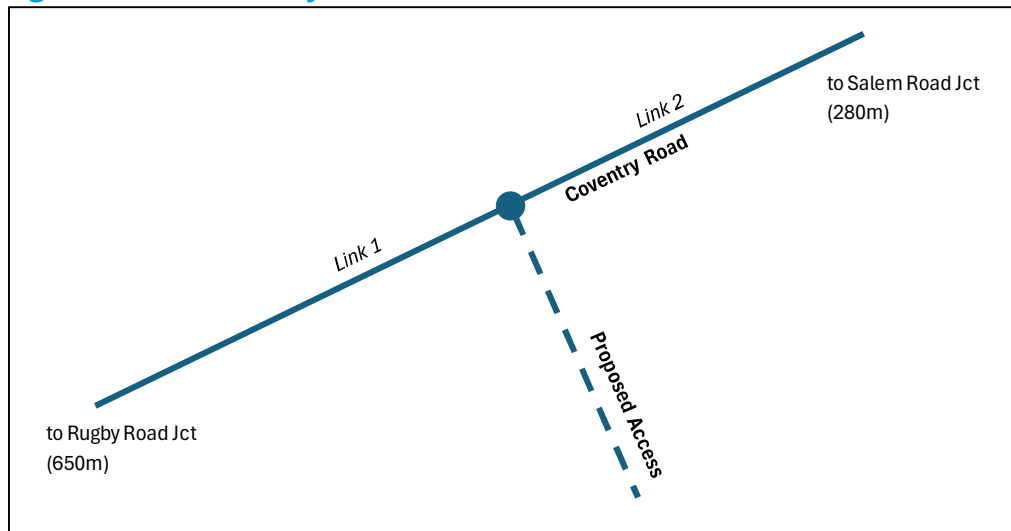
2.3 Bus Stop Removal

- 2.3.1 The continued dialogue with LCC Highways regarding the relocation of the bus stop is welcomed.

2.4 Highway Safety

- 2.4.1 To provide LCC Highways reassurance that the proposed development will not have an adverse impact on highways safety along Coventry Road, the Department for Transport COBALT (COst and Benefit to Accidents – Light Touch) software has been utilised.
- 2.4.2 The software compares accidents by severity and associated costs across an identified network for 'Without-Scheme' and 'With-Scheme' forecasts scenarios, using details of link and junction characteristics, relevant accident rates and costs and forecast traffic volumes by link and/or junction for a user defined study area.
- 2.4.3 For the purposes of this assessment, COBALT has been used to understand the change in accident rates on two links forming Coventry Road with the inclusion of development traffic.
- 2.4.4 The study area for the COBALT study area is shown below in **Figure 2**.

Figure 2: COBALT study area



- 2.4.5 Both the input file used within the COBALT v2.7 assessment and the detailed results generated by COBALT are included within **Appendix D** of this response for review by LCC.
- 2.4.6 A summary of the results is shown below in **Table 1**.

Table 1: COBALT Results: Collision estimate along Coventry Road

Year	Without Scheme	With Scheme	Difference
Coventry Road (west of proposed access)			
2026	0.2	0.2	+0.034
2027	0.2	0.2	+0.033
2028	0.2	0.2	+0.033
2029	0.2	0.2	+0.032
2030	0.2	0.2	+0.032
2031	0.2	0.2	+0.031
Coventry Road (east of proposed access)			
2026	0.1	0.1	+0.015
2027	0.1	0.1	+0.015
2028	0.1	0.1	+0.015
2029	0.1	0.1	+0.014
2030	0.1	0.1	+0.014
2031	0.1	0.1	+0.014

As shown in **Table 1** the change in the accident rate along both sections of Coventry Road included within the assessment is considered marginal.

On this basis the COBALT assessment has provided further evidence to support the conclusions from the submitted TA that the proposed development will not have an detrimental impact on highway safety along Coventry Road.

2.5 Highway Impact

2.5.1 With regard to the use of the PRTM within the TA, both LCC and NH have provided comments on the following:

- Calculated trip distribution and assignment of development trips
- PRTM growth used to develop the forecast year turning movements matrices

Trip Distribution and Assignment: Methodology

2.5.2 It is recognised that the latest masterplan for Land South of Burbage contains several key differences from the development proposals modelled within the commissioned PRTM forecast runs.

2.5.3 **Table 2** below provides a summary of these differences.

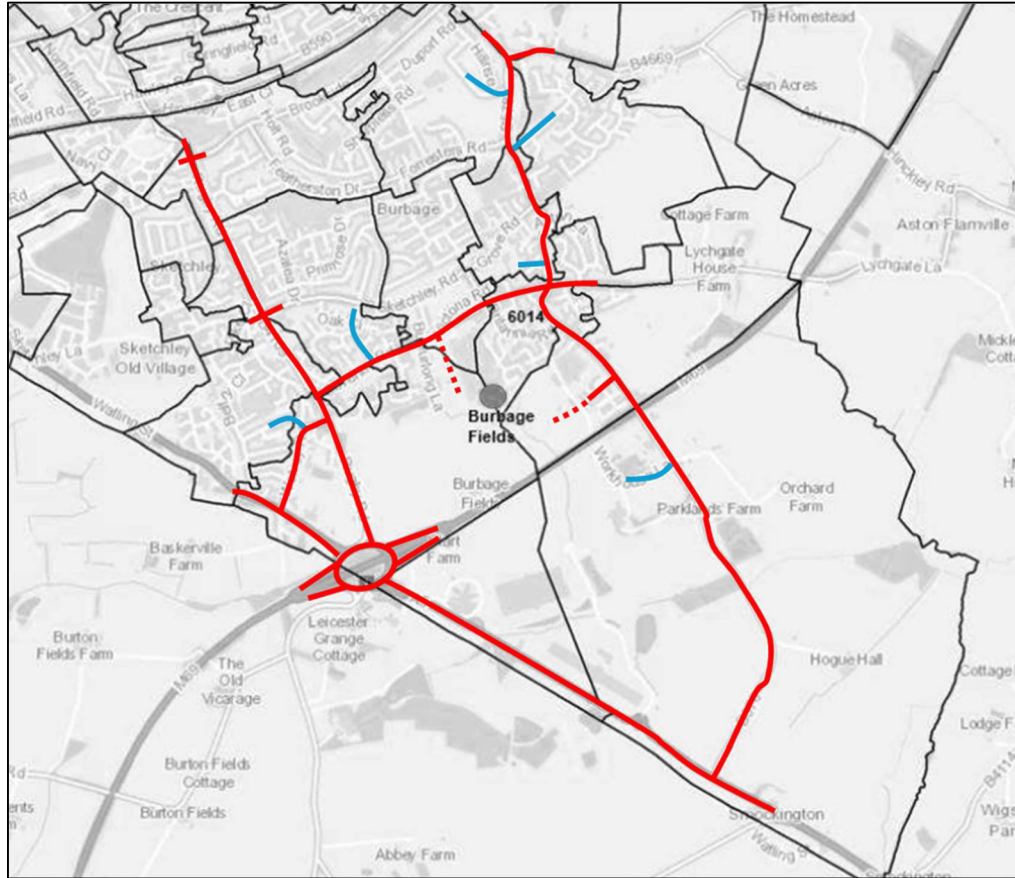
Table 2: Development Proposals

	As represented in the PRTM	Development Proposals
Quantum	450 dwellings	433 dwellings with Care Home
Accessed off Coventry Road	370 dwellings	378 dwellings + Care Home
Accessed off Flanders Close	80 dwellings	55 dwellings
Internal connection	Internal link road connecting both accesses	No internal connection (emergency link only)

- 2.5.4 It is acknowledged that the assignment of vehicle trips from the proposed development within the PRTM forecast 'with development' model runs would have been influenced by the inclusion of an internal link road, representative of the original masterplan. However, the trip distribution applied to the zone representing the proposed development is unaffected by this, given that trip distribution relates to the proportion of trips travelling between zones, not the route they take through the network.
- 2.5.5 As the PRTM forecast 'with development' model runs were considered obsolete following the amendments to the planning layout, the residential vehicle trip distribution used within the PRTM model runs needed to be extracted from the model outputs.
- 2.5.6 The methodology used for trip distribution for the proposed development was as follows:
- Residential development (433 dwellings) – calculated from the 2026 'Proposed Development Site (Burbage Fields – 450 dwellings)' select link analysis plots included within the *PRTM Burbage Fields, Burbage, Development Trip Distribution Plots report*
 - Care Home – gravity model, agreed by NH in their response (NHPR 22-12) dated 16/02/24.
- 2.5.7 The vehicle trip distribution for the residential component of the proposed development was calculated from the select link analysis plots provided to RL by LCC (Network Data & Intelligence Team) within the PRTM Burbage Fields, Burbage, Development Trip Distribution Plots report.
- 2.5.8 The study area for this exercise was defined by the junctions listed within the *PRTM Burbage Fields, Burbage, Forecasting Report*. A plan of the study area, including the zone plan is shown in **Figure 3**.
- 2.5.9 Using the select link analysis plots, the trip distribution for the residential component of the proposals was calculated from the vehicle trips routing to/from the externals of the study area for the TA. This was undertaken for both the AM and PM peak hour.

2.5.10 The calculated percentages, i.e. the vehicle trip distribution, were then applied to vehicle trips to/from both site accesses to understand the number of trips that would be travelling to the externals of the study area. The assignment of these vehicle trips through the network was then undertaken manually to reflect the routes through the study area as derived by the PRTM model. This exercise was undertaken for both site accesses for both time periods.

Figure 3: Land South of Burbage Study Area

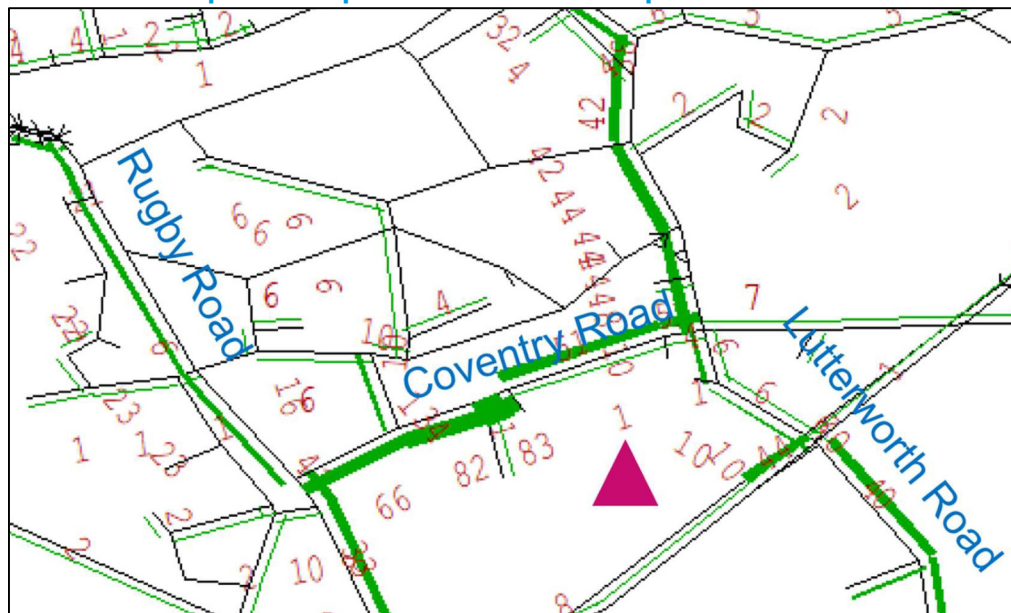


Study area annotated in **Red**, locations where trips arrive / depart the study area without using the assessed junctions are annotated in **Blue**. **Dashed Red** lines represent site access locations.

Trip Distribution and Assignment: Trips within the Study Area

- 2.5.11 It was also observed from the select link analysis plots that a proportion of development trips were predicted to arrive/depart the study area between the junctions identified in the *PRTM Burbage Fields, Burbage, Forecasting Report*.
- 2.5.12 As can be seen from the extract from the select link assignment plot shown in **Figure 4**, development trips assigned within the PRTM model have origins / destinations between the junctions forming the study area of the TA. In the example below, for the AM peak hour development trips are travelling to zones to the north of Coventry Road.

Figure 4: Extract from the select link analysis plots contained within the AECOM Development Trip Distribution Plots report.



- 2.5.13 The comment by NH suggesting that these trips should be *recaptured and presented at Sketchley Road / Rugby Road and Grove Road/B578 for interpretation* is unjustified.
- 2.5.14 As stated by LCC in their response when describing the function of the PRTM, *Whilst for most destinations there are several alternative routes which can be used, the optimal route is selected by the model based on time, journey cost, congestion and delay. This approach is used to better represent real life driver behaviour and choice through the modelling process...*
- 2.5.15 Any adjustment to the calculated trip distribution which was derived from these assignment plots will undermine the use of the distribution taken from the parent zone in the PRTM. It is also realistic to assume that a proportion of vehicle trips would be travelling to / from zones neighbouring the proposed

development, whether it be to access local retail, community or educational facilities contained within them.

- 2.5.16 On this basis the presented distribution and assignment for the proposed development is considered appropriate.

PRTM Growth

- 2.5.17 Both LCC and NH have queried the differences in turning movements between the 2021 & 2026 'no development' and 2021 & 2031 'no development' scenarios, highlighting that the calculated differences show a reduction in vehicles for certain movements.
- 2.5.18 The PRTM Transport Modelling Forecast Report, located within Appendix O of the TA and available on the Hinckley Bosworth Borough Council website ref: ([24/00083/HYB](#)), included the turning movement matrices provided to RL for each junction. These turning movement matrices were used by RL to calculate the differences between the 2021 base and forecast years.
- 2.5.19 It should be acknowledged that RL has had no involvement in the running and reporting of the PRTM model, with the results provided by the LCC Network Data & Intelligence Team. Accordingly RL have consulted with the LCC Network Data & Intelligence Team (and the councils framework consultant, Aecom) to seek clarification on this matter.
- 2.5.20 The response received from Aecom has been included within **Appendix E** with an extract provided below.
- 2.5.21 *...most movements see growth and most of the reductions are quite small and are probably at locations that are close to capacity in 2021 and can't accommodate more traffic, or occur as a result of changes in delay which causes rerouting and reductions for some movements.*
- 2.5.22 On this basis, the calculated traffic growth used by RL to calculate 2026 and 2031 forecast year 'no development' turning movement matrices is considered suitable.

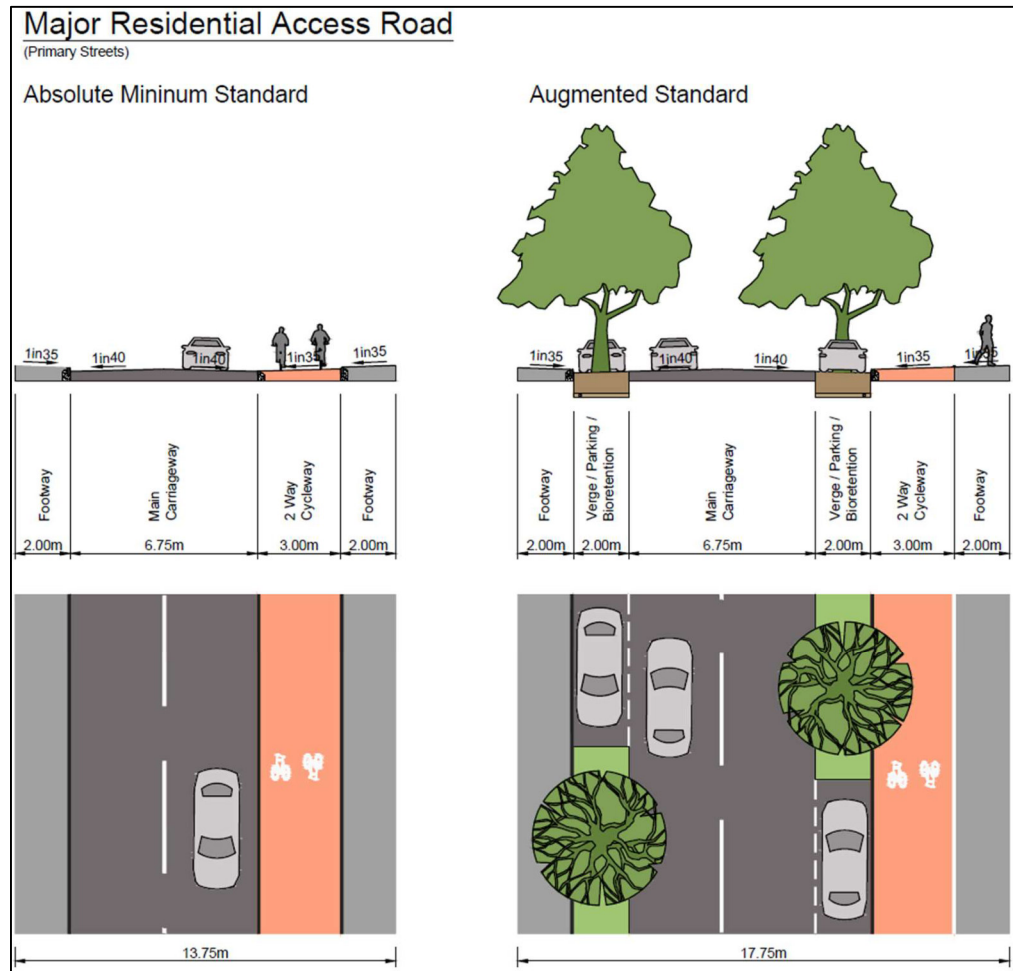
2.6 Internal Layout

Refuse Vehicle Tracking

- 2.6.1 Refuse vehicle tracking has been undertaken at all adoptable turning heads within the development using the vehicle specification sent through by LCC.

LTN 1/20 Cycling Infrastructure

- 2.6.2 The proposed cycling infrastructure has been amended to reflect the guidance in LTN1/20. It is proposed that a segregated 3m cycleway and 2m footway is provided on eastern side of the spine road in accordance with Figure 1 of the Leicestershire Highways Design Guide (December 2024) as shown below.



- 2.6.3 An updated site access drawing (21390-RLL-23-XX-DR-D-5008P10) has been produced to show the transition from on carriageway cycling to the segregated cycleway at the Coventry Road site access. This drawing is included within **Appendix F**.
- 2.6.4 In addition, the extent of the pedestrian / cyclist infrastructure along the spine road has been shown across multiple drawings included within **Appendix F**.
- 2.6.5 At the lower end of the spine road, the segregated cycleway and footway will transition to a shared footway / cycleway to continue around the internal loop

of the development. Details of the transition point are shown on a drawing (21390-RLL-25-XX-DR-D-5028) contained within **Appendix F**.

2.6.6 To ensure a consistent provision for pedestrians and cyclists, the shared footway / cycleway has been extended along the southern side of the access road within the eastern development area, similar to the internal loop within the western area of the development.

2.6.7 The Cycling Level of Service tool within LTN 1/20 has been used to audit the proposed cycle infrastructure within the site, specifically the segregated cycleway along the spine road and shared footway/cycleway connecting the western and eastern areas of the development, all of which have been audited as one continuous route. The results of using this tool have been included within **Appendix G**.

2.6.8 The Cycling Level of Service tool has scored the proposed cycle infrastructure 70% which is categorised as a 'High' quality route.

2.7 Residential Travel Plan

2.7.1 Following the latest comments on the residential travel plan by LCC, the following amendments have been made to the document:

- The mode share targets for active travel (walking and cycling) over the 5-year period of the Travel Plan have been revised.
- Peak hour and daily multi modal trip generation for the Base, Interim and Fifth Year of the Plan.
- Additional measures to encourage sustainable travel have been added.
- In the event that the LCC Road Safety and Education Team cannot provide Bikeability training to future residents, an alternative provider, B-Buddies Cycle Training', can be contacted by the Travel Plan Coordinator to provide this service.

Bus Provision

2.7.2 LCC have stated that they are reviewing their supported bus network, which may impact the availability of the bus services 7 & 8, both operated by Arriva. If it is confirmed by LCC that these services are under review, options for developer contributions to support this service could be explored.

3 National Highways

3.1 PRTM Model Outputs

- 3.1.1 The PRTM Development Trip Distribution Plots report and the PRTM Transport Modelling Forecast Report were included within Appendix O of the TA. This appendix can be found on the Hinckley and Bosworth Borough Council website, under planning application (ref: [24/00083/HYB](#)), within the document titled "*Transport Assessment_Appendix I-O*" uploaded on the 30th of August 2024.

3.2 A5 / B578 Lutterworth Road Junction

- 3.2.1 To provide NH with the relevant information to approve the A5 / B578 Lutterworth Road junction capacity testing, the latest junction capacity model has been included within this TN. The junction modelling was undertaken using the following:
- Traffic flow scenarios included within the Transport Assessment (ref: 21390-RLL-23-XX-RP-D-5001P08).
 - Junction parameters as shown on a drawing (ref: 21390-RLL-24-XX-DR-D-5023) provided below.



Key

B578 Parameters

A5 Parameters

NOTE
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

Rev	Date	Amendments	By	Chk

RLRE
Consulting Engineers

Client
Redrow Homes

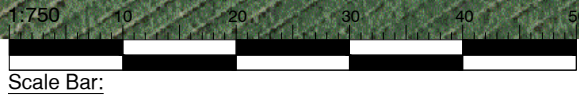
Project
Land South of Burbage

Drawing Title
A5 / B578 Lutterworth Road Junctions 10 Parameters

Status

For Information

Scale	Drawn	Checked	Date
A3@ 1:750	JWB	ADM	27/09/24
Drawing No.		Rev.	
21390-RLL-24-XX-DR-D-5023		#	



- 3.2.2 The results of the junction capacity assessment of the A5 / B578 Lutterworth Road junction can be seen below in **Table 3**, with the full results shown in **Appendix H**.

Table 3: A5 / B578 Lutterworth Road Junction Results

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-C	D1	0.6	11.36	0.39	B	D2	0.2	7.69	0.18	A
Stream B-A		0.1	25.74	0.12	D		0.0	29.19	0.03	D
Stream C-AB		0.3	9.18	0.21	A		0.7	11.93	0.42	B
	2026									
Stream B-C	D3	1.1	14.50	0.53	B	D4	0.3	9.27	0.25	A
Stream B-A		0.2	30.21	0.15	D		0.1	56.28	0.06	F
Stream C-AB		0.2	9.04	0.20	A		0.9	14.09	0.46	B
	2026 + Dev									
Stream B-C	D5	1.4	16.70	0.58	C	D6	0.4	9.70	0.27	A
Stream B-A		0.2	33.95	0.19	D		0.1	81.78	0.11	F
Stream C-AB		0.3	9.25	0.21	A		1.2	16.59	0.54	C
	2031									
Stream B-C	D7	4.2	42.52	0.83	E	D8	0.4	9.78	0.29	A
Stream B-A		1.3	77.58	0.60	F		0.1	90.83	0.10	F
Stream C-AB		0.2	8.86	0.20	A		1.2	16.41	0.55	C
	2031 + Dev									
Stream B-C	D9	7.9	74.36	0.93	F	D10	0.5	10.69	0.32	B
Stream B-A		3.0	171.97	0.85	F		0.2	182.47	0.22	F
Stream C-AB		0.3	9.06	0.21	A		1.6	19.79	0.62	C

Note: Arm A – A5 (N), Arm B – B578 Lutterworth Road, Arm C – A5 (S)

- 3.2.3 The results show that the junction will operate within theoretical capacity in the 2026 opening and 2031 forecast years both 'with' and 'without' development in both peak hours assessed. The inclusion of background traffic growth is showing an increase in delay for vehicles turning right from the B578 to the A5 north as a consequence of the increased A5 traffic flow. Development trips making this right turn manoeuvre are expected to be low and in reality, alternative routes would be taken if high levels of delay were perceived as a regular occurrence. On this basis the impact of development traffic on the A5 / B578 Lutterworth Road priority junction is not considered severe.

3.3 PRTM Model – Base Year Furnessing and Trip Distribution / Assignment

- 3.3.1 These comments have been addressed in Section 2.5 of this report.

4 Active Travel England

4.1 Internal Layout

- 4.1.1 Following discussions with LCC, the applicant has made changes to the site layout, to provide raised tables / speed tables in accordance with the LCC highways design guidance.

4.2 Connectivity to the Neighbouring Plot

- 4.2.1 The site layout shows a connection off the site access road onto existing Public Right of Way 'Footpath U65' which routes along the northern site boundary. This connection will provide residents access to the footpath to access Jubilee Way.
- 4.2.2 The request from ATE to provide a connection on the north eastern side of the site to Jubilee Way is not considered deliverable given that any connection to Jubilee Way at this location would need to connect to a private drive of an adjacent residential development, raising issues regarding third party land.
- 4.2.3 The proposed connection to footpath U65 off the spine road is considered suitable to encourage walking trips to Jubilee Way and Burbage village centre.

4.3 Public Transport

- 4.3.1 As mentioned within paragraph 4.4.18 of the TA, the details of the proposed bus stops will be discussed and agreed between the applicant, LCC and Arriva during the detailed design stage.

4.4 Quantification of Active Travel Trips

- 4.4.1 The Residential Travel Plan has been updated to provide interim multi-modal trip generation targets for the base, interim and fifth year of the Travel Plan.

4.5 Care Home Staff Facilities

- 4.5.1 As the proposed care home forms the outline application component of the hybrid planning application, at this stage the end occupier of the residential care home is unknown. It is expected that the care home will have changing rooms with showers, and lockers will be provided for employees. These details will be addressed in a reserved matters application submitted at a later date.

5 Appendix List

**Appendix A: Leicestershire County Council Highways comments
2024/0083/04/H/R3**

Appendix B: National Highways comments NH/24/05928

Appendix C: Active Travel England comments ATE/24/00145/HYB

Appendix D: COBALT Assessment Results

Appendix E: Response from AECOM (email dated 14th November 2024)

Appendix F: Site Access Drawing and Spine Road Arrangement

Appendix G: Cycling Level of Service Tool

Appendix H: A5 / B578 Lutterworth Road Junctions 10 Results

Appendix A: Leicestershire County Council Highways comments
2024/0083/04/H/R3

Substantive response of the Local Highway Authority to a planning consultation received under The Development Management Order.



Response provided under the delegated authority of the Director of Environment & Transport.

APPLICATION DETAILS

Planning Application Number: 24/00083/HYB

Highway Reference Number: 2024/0083/04/H/R3

Application Address: Land At Burbage Fields Farm Bullfurlong Lane Burbage Leicestershire

Application Type: Hybrid

Description of Application: Re-consultation. Hybrid planning application for 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a Coventry Road, and Burbage Fields Farm and outline planning application for a residential care home and up to 11 no. self-build plots (all matters reserved except for access)

GENERAL DETAILS

Planning Case Officer: Alex Jelley

Applicant: Redrow Homes and Peter Andrew Farmer

County Councillor: Cllr Barry Walker

Parish: Burbage

Road Classification: Adopted Unclassified

Substantive Response provided in accordance with article 22(5) of The Town and Country Planning (Development Management Procedure) (England) Order 2015:

The Local Highway Authority does not consider that the application as submitted fully assesses the highway impact of the proposed development and further information is required as set out in this response. Without this information the Local Highway Authority is unable to provide final highway advice on this application.

Advice to Local Planning Authority

Background

The Local Highway Authority (LHA) has been reconsulted by the Local Planning Authority (LPA), Hinckley and Bosworth Borough Council (HBBC), on a mixed use development on land at Burbage Fields Farm Bullfurlong Lane Burbage, to provide 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a Coventry Road, and Burbage Fields Farm and outline planning application for a residential care home and up to 11 no. self-build plots.

This is the LHA fourth response to the planning application. The initial response (February 2024) was a holding response pending a review of the information submitted. In the second and third responses (April 2024, and June 2024) the LHA identified concerns with the following issues associated with the proposed development which are summarised below for reference:

- Proposed site access arrangements and swept path analysis;
- Additional Personal Injury Collision data for at least 2023;
- Junction model files to check junction capacity assessments;

- Amendments to internal layout;
- Updated Residential Travel Plan; and
- Details of Public Rights of Way improvements.

The applicant has now submitted the following documents / plans to address the outstanding issues:

- Lichfields Resubmission Covering Letter ref: 61188/04/JK/LGa/32623016v1, 'Application for Hybrid Planning Permission: Land to the south of Burbage', dated 29 August 2024;
- Pegasus Group Design and Access Statement, document ref: P22-2560_G001_C, 'Land at Burbage Fields Farm, Burbage', dated August 2024;
- Redrow Homes Midlands drawing number: 1693-08-02-100, 'Land south of Burbage – Site Layout', Revision C, dated 22 August 2024;
- Redrow Homes Midlands drawing number: 1693-08-02-120, 'Land south of Burbage – Site Location Plan', dated November 2023;
- Redrow Homes Midlands drawing number: 1693-08-02-122, 'Land south of Burbage – Highway Adoption Plan', Revision A, dated 22 August 2024;
- Redrow Homes Midlands drawing number: 1693-08-02-145, 'Land south of Burbage – Bin Refuse Plan', Revision A, dated 22 August 2024;
- Redrow Homes Midlands drawing number: 1693-08-02-147, 'Land south of Burbage – Parking Strategy Plan', Revision A, dated 22 August 2024;
- Redrow Homes Midlands drawing number: 1693-08-02-148, 'Land south of Burbage – Road Hierarchy Plan', Revision A, dated 22 August 2024;
- Rodgers Leask Limited Updated Transport Assessment (UTA) 'Land south of Burbage', Report Ref: 21390-RLL-23-XX-RP-D-5001, Revision P08, dated July 2024; and
- Rodgers Leask Limited Residential Travel Plan (RTP) 'Land south of Burbage', Report Ref: 21390-RLL-23-XX-RP-D-5009, Revision P07, dated August 2024.

Site Access

In the most recent highway observations on the planning application the LHA asked the applicant to reconsider the site access arrangements to ensure that a safe and suitable vehicular access could be delivered to serve the proposed development. The LHA has reviewed the updated site access information in Section 4 of the UTA and offers further comments below:

- An updated Stage 1 Road Safety Audit (RSA1) and designer responses form has been provided. The LHA note that the designer states that the presence of driveways either side of the proposed access will restrict space for parking and hence keep the visibility splays clear. However, the LHA understand that residents and their visitors may still be able to park across the driveways so they would not be guaranteed to be clear at all times.
- Notwithstanding the ghost right turn Section 4 of the Transport Assessment (July 2024 Rev P08) provides reasons for the location of the Coventry Road crossing point, and these are accepted. Drawing 21390-RLL-23-XX-DR-D-5008 rev P08 shows the proposed uncontrolled pedestrian crossing with tactile paving.
- The swept path for the No 67 left out manoeuvre shows approximately 450mm clearance between the tactile paving and the turning vehicle. The swept path for the No 69 left in manoeuvre shows approximately 900mm clearance between the tactile paving and the turning vehicle. At the detailed design stage, the provision of a bollard should be investigated to ensure vehicles do not overrun the tactile paving.

Ghost Right Turn

Paragraphs 4.2.5 to 4.2.15 of the UTA outlines the applicant's opinion as to why a ghost right turn lane would not be suitable and the reasons for the location of the spine road crossing point.

The LHA acknowledge the additional information, but the paragraph quoted from Manual for Streets 2 mentions daily flows of 500 vehicles from a side road and the proposals would generate a significant number of trips above this. Given this will be the only site access to serve the proposed development the applicant should look at any additional information / measures that could be implemented to ensure that the site access is safe and suitable. Furthermore, as discussed under the heading 'Highway Impact', clarification is required regarding flows, which will affect the assessment of the suitability of the junction type.

Parking Survey

The LHA previously expressed concerns with on-street parking in visibility splays and possible overtaking because of this. The applicant has undertaken a parking survey along Coventry Road on a Thursday, Saturday and Sunday in September 2023 to establish the current position. An overall plan of the study area is included in Appendix J of the UTS but in summary it covers a section of Coventry Road, between 21 Coventry Road and Cotes Road, and approximately 100m of Bullfurlong Lane and Victoria Road.

The study area has been split into 11 zones, and the results of the parking survey indicate that there is sufficient space in the vicinity of the site, including zones 7 and 8 (on the southern side of Coventry Road) even if the TRO is implemented which would restrict parking near the site access to protect the visibility splays. The full results of the parking survey are in Appendix J of the UTA. Notwithstanding the above the applicant has not provided details of which part of the highway each zone has been included therefore, the applicant should provide these details for review and approval. It is also important to note that a TRO is a Legal Order, and this is entirely separate from the planning process; to implement a TRO requires a formal consultation, and as such, there is no guarantee that the proposed restrictions could be implemented.

Junction Capacity Assessment

The LHA has checked the junction capacity assessment for the site access / Coventry Road and there is sufficient capacity, however the LHA note that there could be some minor delays for vehicles that leave the site in 2026 and 2031 particularly in the AM peak hour. The results from the capacity assessments are shown in Table 30 of the UTA is reproduced in Figure 1 below:

Table 30: Coventry Road / Site Access Results

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2026 Opening Year + Development									
Stream B-AC	D5	1.0	15.65	0.51	C	D6	0.2	9.25	0.18	A
Stream C-AB		0.2	5.46	0.14	A		0.5	5.90	0.23	A
	2031 Forecast Year + Development									
Stream B-AC	D9	1.0	15.35	0.51	C	D10	0.2	9.37	0.18	A
Stream C-AB		0.3	5.21	0.14	A		0.5	5.92	0.23	A

Note: A – Coventry Road East, B – Site Access Road, C – Coventry Road West

Figure 1: Junction Capacity Assessment results from Table 30 of the Updated Transport Assessment

Notwithstanding the above the LHA has concerns whether the correct flows have been used and therefore the applicant should ensure that the traffic flow diagrams and inputs into the junction models for the site access flows are correct and reflect the latest proposals i.e. all development traffic will use one access on to Coventry Road.

Bus Stop Removal

The applicant has identified that the existing bus stop on Coventry Road opposite the proposed development will need relocating to facilitate the site access arrangements.

Whilst a suitable location has not been identified yet the LHA will continue to liaise with the applicant to ensure an alternative location for the bus stop if permission is granted.

Highway Safety

After a review of the Personal Injury Collision (PIC) data the LHA asked the applicant to consider the circumstances around a collision on Coventry Road in January 2023.

The applicant has reviewed the details of the incident in paragraphs 3.3.7 – 3.3.9 of the UTA and concluded that this was an isolated case on Coventry Road and did not indicate a wider safety issue on Coventry Road.

The LHA acknowledge the further investigation however the LHA cannot determine if there would be an additional highway safety issue until the applicant has demonstrated they can deliver a safe and suitable access in accordance with Paragraph 114 of the National Planning Policy Framework (NPPF, December 2023).

Highway Impact

In the highway observations dated 14 June 2024, the LHA outlined how the applicant had tested the impact of the proposed development and the future scenarios that were considered. However, the LHA highlighted the discrepancies in how the assessment had been undertaken including:

- Implications of proposed Burbage Fields development modelled with two vehicular accesses and subsequent planning application only having one vehicular access;
- No detailed analysis of the results i.e. junction capacity assessments have been undertaken by the applicant for the 2031 scenario; and
- No details of B4109 Rugby Road / Brookside junction assessment submitted.

Trip Rates / Trip Generation

The trip rates / trip generation submitted by the applicant were robust and suitable to test the impact of the proposed development on the local highway.

Trip distribution and assignment

The LHA has considered the trip distribution derived from the Pan Regional Transport Model (PRTM) work undertaken to support the proposed development.

The applicant has predicted trip distribution for the development utilising a parent zone approach. An existing PRTM zone (6014) with similar characteristics to the development proposals was used to ensure a reasonable trip distribution was applied for the new trips generated and subsequently assigned to the network.

The PRTM model then assigns the traffic onto the network. Whilst for most destinations there are several alternative routes which can be used, the optimal route is selected by the model based on time, journey cost, congestion and delay. This approach is used to better represent real life driver behaviour and choice through the modelling process, rather than the traditional use of census data.

The approach taken is consistent with other developments of this scale but the outputs are subject to further analysis by the LHA.

Future PRTM Flows

To establish robust inputs for the local junction assessments a revised set of modelled flows for all scenarios (base + development) have been produced which utilise observed turning movements and modelled growth applied appropriately. This methodology is generally considered acceptable to the LHA.

Flow diagrams

Distribution plots / graphs in Appendix P of the UTA predict that of 46% of development traffic to / from the east of the site and 54% of traffic to / from the Rugby Road area to the west of the site. The LHA is concerned whether the flows / distribution from the Coventry Road site access are correct (as highlighted in National Highways (NH) response). Furthermore, the applicant should confirm that the Coventry Road site access includes any development traffic that might have used the Flanders Close access in the PRTM model runs has been reallocated to Coventry Road.

The LHA has also undertaken a high-level review of the flow diagrams for all scenarios. There are several areas of concern that need addressing and the LHA note NH's latest response to the application (September 2024) and their comments on the assignment. The LHA would agree with NH's summary on this issue and would ask the applicant to clarify the discrepancies i.e. reduced traffic flows in the 2026 2031 scenarios.

Junction Capacity Assessments

The applicant identified 11 junctions (including the site access referenced above) in their initial analysis. The revised TA now includes:

- Coventry Road / Site Access;
- B578 Lutterworth Road / Passchendaele Drive priority junction;
- B4109 Rugby Road / Three Pots Road / Canberra Way roundabout;
- B4109 Rugby Road / Sketchley Road / Sketchley Lane roundabout;
- B4109 Rugby Road / Brookside signalised junction;
- B578 Lutterworth Road / Lychgate Lane priority junction;
- B4669 Sapcote Road / B4669 Burbage Road / B578 Hinckley Road priority junction;
- A5 / B578 Lutterworth Road priority junction;
- A5 / Wolvey Road priority junction; and
- M69 Junction 1 signalised roundabout.

The LHA will check all the junction models and results when the applicant has checked the 2026 and 2031 traffic flows and development flows.

Internal Layout

The LHA has now had the opportunity to check the internal layout of the site submitted for the planning application shown on the following plans:

- Site Layout drawing number: 1693-08-02-100 Rev. C;
- Coloured Site Plan drawing number: 1693-08-02-110 Rev. A; and
- Bin Refuse Plan drawing number: 1693-08-02-145 Rev. A.

The LHA offers further comments below for consideration / action:

- The speed control measures currently designed into the layout are not acceptable. The maximum distance between speed control measures, junctions or 90-degree bends is either 60m or 40m depending on the design speed of the road. The use of cushions rather than full raised tables is also something that we do not accept. The chicanes proposed are not in accordance with the LHDG, please see Figure DG5b for further information.
- Further to the comment above, the minimum plateau length of vertical speed control measures should be 8m, and the ramps should not conflict with the access drives of the dwellings. For further information, please see Part 3 of the LHDG, Figure DG5e.
- The bend widening has not been shown in accordance with Para 3.33 in Part 3 of the LHDG. The widening covers both running lanes and so does not need to be replicated on either side. There are also bends of more than 10° within the development, serving more than 25 dwellings, without widening.
- The radii at the junctions and turning heads should be detailed on the plan to ensure they are in accordance with the LHDG.
- The junction radii should typically be 6m for any side roads. For further information please see Table DG5 of Part 3 of the LHDG.
- The applicant should also note that radii for turning heads should typically be 7.5m. Please see Figure DG4b of the LHDG (Part 3) for further information.
- Most of the shared surfaces in the layout are more than the maximum 50m between junctions/90-degree bends. In the affected areas, they should be shortened to be in accordance and the private drives/'normal' carriageway extended to suit.
- Some of the proposed areas of highway have visitor parking bays. The applicant should note that LCC would not seek to adopt these areas, so they should be relocated to be behind the finished highway boundary.
- Please note that turning heads should typically end at the tangent point of the radii, unless specifically identified to need lengthening for vehicle tracking purposes. In affected areas, the private drives can be extended to suit.
- A 1m service margin is required on the north/east side of the road that serves plots 130-175. This should provisionally be shown as a bituminous margin.
- As mentioned previously, if any roads with less than five frontages are proposed for adoption, these are not in accordance with the LHDG and should be altered to increase the number of frontages or made private.
- Please provide vehicle tracking for the site using the attached refuse vehicle specification, in addition to a bus. Tracking should include all adoptable turning heads for the refuse vehicle,

and any private drives where the bin collection point is sited more than 25m from the highway. The bus stop tracking should take place around the junctions and bends on the loop and tracking should also be submitted of these vehicles around any proposed chicanes (once updated in line with LCC standards).

- It is noted that a 3m shared footway/cycleway has been introduced on the east side of the spine. Please amend to a segregated 3m cycleway and 2m footway adjacent along the spine, where not fronting plots, in line with LTN 1/20.
- It is understood that a segregated cycleway and footway would be difficult to design at accesses/plot frontages. As such, please continue with the shared 3m footway/cycleway from Plot 340 all the way around the loop.
- Please also continue the 3m shared footway/cycleway along the road linking to the 'Emergency Link' as this could be a link through to the adjacent phase and to the east.
- Management and design of where the cycleways cross vehicle accesses and junctions are to be considered further at the Section 38 (S38) stage.

Other Considerations

- Please ensure that any tree that is to be planted within the highway or the vicinity of the highway is provided with the necessary root protection and likewise any tree that is to remain within the highway or vicinity of the highway is also provided with the necessary tree root protection.
- Where trees are to overhang the highway, they must be of a type with a minimum clear stem of 2.2m. Please note that any tree that is to be situated within the highway will attract a commuted sum in accordance with the LHDG Part 4, MC18, and will require further approval at the S38 stage from the LCC Forestry team (forestry@leics.gov.uk).
- Gradients should conform to the standards set out in Table DG1: General geometry of residential road (internal) of the LHDG, this will be checked further at the S38 stage.
- All drainage should be in accordance with part 3 DG11 of the LHDG. It must be ensured that surface water from private land does not run or pool in the public highway, this will be checked further at the S38 stage.
- At this stage it is not possible to comment on the vertical alignment, drainage, materials or proposed construction details.

Private Drives

All private drives across the development should be designed in accordance with Part 3 of the LHDG, and any private drives that connect adoptable roads will not be acceptable and should be severed.

Bin Collection Points

The LHA has carried out a spot check on the location of the Bin Collection Points (BCPs) shown on drawing number: 1693-08-02-145, to ensure they are not in the vehicular visibility splays or restrict the widths of drives and they are acceptable.

However, the applicant is reminded that any BCPs should be setback and 1m x 1m pedestrian visibility splays maintained.

Residential Parking

The LHA is pleased to advise that the parking provision across the site is in general accordance with the guidance in the LHDG and would not seek to resist the proposals based on the level of parking.

Care Home Parking

The LHA note that the residential care home is in outline and will provide accommodation of up to 66 bedrooms. Therefore, the LHA will comment on the internal layout and parking for the care home if the applicant secures planning permission.

However, the applicant should ensure that a refuse vehicle and ambulance can manoeuvre around the site and leave the site in a forward gear.

Public Rights of Way (PROW)

In the previous response, the LHA asked the applicant to consider the land ownership of Bullfurlong Lane and to formalise with the County Council the public pedestrian rights on the lane by a Deed of Dedication. This would be done in liaison with the neighbouring landowner on the western side of the lane to protect the existing movement network.

After a review of the additional information provided by the applicant the LHA acknowledge that it is not within the applicants' gift to deliver the improvements suggested on Bullfurlong Lane and because it is outside of their site boundary it is beyond their control.

Notwithstanding the above, the LHA advise there is likely to be a requirement for the applicant to divert, extinguish or improve the PROWs across the site if planning permission is granted.

Travel Plan

The LHA confirmed in its highway observations in June 2024 that the Residential Travel Plan (RTP) did not contain the necessary detail required for the scale of the proposed development.

After a review of the revised document (dated 1 August 2024) the LHA would advise the applicant that the following points need to be clarified or addressed before the plan can be approved.

- The targets for active travel (walking and cycling) are relatively modest, aiming for only a 5% modal shift over the five-year life span of the RTP. This reflects the limited incentives outlined in the plan to encourage active travel. The LHA would recommend enhancing the incentives to support a more ambitious target for cycling and walking.
- Leicestershire County Council's Road Safety and Education Team may not be able to provide Bikeability training. As this service cannot be guaranteed, the applicant should identify an alternative provider to ensure this action is fulfilled.
- The document should include at least three key measurement points: baseline, interim, and final assessments of mode shift outcome targets. Additionally, the travel data in Table 8 should reflect total trip numbers for all modes, not just peak-hour figures.

- The largest proposed increase in sustainable travel is in bus patronage, with a target of 4.9% over five years. However, it's important to note that Leicestershire County Council is currently reviewing and redesigning its supported bus network. Services 7 and 8, operated by Arriva, are partially subsidised, and this review may affect the availability of bus services in the area. The applicant should be prepared to reconsider public transport options for residents if changes occur and may need to explore alternative provision.

Should the current services remain unchanged, it is acknowledged that Arriva's services 7 and 8 would need to route through the development to serve the three identified bus stops, as per Figure 5: Potential Bus Service Diversion, providing residents with convenient access to public transport. These considerations should be reflected in the RTP, along with a contingency to ensure the targeted reductions in single-occupancy vehicle (SOV) travel are still met.

Subject to obtaining planning permission, the LHA would advise the applicant that to support active travel measures there is likely to be Section 106 contributions for bus passes and travel packs for residents / employees of the care home, appointment of a Travel Plan Co-ordinator (TPC) and a Framework Travel Plan fee to provide support to the appointed TPC, audit annual performance reports to ensure that outcomes are being achieved

Date Received **Case Officer**
02 September 2024 **David Hunt**

Reviewer
RD

Date issued
01 November 2024

Appendix B: National Highways comments NH/24/05928



National Highways Planning Response (NHPR 24-02) Formal Recommendation to an Application for Planning Permission

From: Victoria Lazenby (Regional Director)
Operations Directorate
Midlands Region
National Highways
PlanningM@nationalhighways.co.uk

To: Hinckley & Bosworth Borough Council (FAO Alex Jelley)
planning@hinckley-bosworth.gov.uk

CC: transportplanning@dft.gov.uk
spatialplanning@nationalhighways.co.uk

Council's Reference: 24/00083/HYB

Location: Land At Burbage Fields Farm, Bullfurlong Lane, Burbage, Leicestershire

Proposal: Hybrid planning application for 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a Coventry Road, and Burbage Fields Farm and outline planning application for a residential care home and up to 11 no. self-build plots (all matters reserved except for access).

National Highways Ref: NH/24/05928

Referring to the consultation on a planning application dated 2nd September 2024 referenced above, in the vicinity of the M69 that forms part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- ~~a) offer no objection (see reasons at Annex A);~~
- ~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A — National Highways recommended Planning Conditions & reasons);~~
- c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);
- ~~d) recommend that the application be refused (see reasons at Annex A)~~

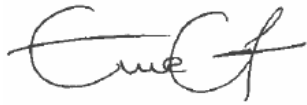
Highways Act 1980 Section 175B is not relevant to this application.¹

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the [Town and Country Planning \(Development Affecting Trunk Roads\) Direction 2018](#), via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to PlanningM@nationalhighways.co.uk.

Signature:



Date: 25 September 2024

Name: Eve Gibson-Field

Position: Assistant Spatial Planner

National Highways

199 Wharfside St, Birmingham B1 1RN

¹ Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Thank you for providing the updated TA as prepared by RLRE, National Highways has reviewed the information provided as part of re-consultation reference 24/00083/HYB. This response represents our formal recommendations and has been prepared by Eve Gibson-Field, Assistant Spatial Planner for National Highways.

Traffic Flows

Updated PRTM model flows were provided in Appendix P of the revised TA, with Junctions10 inputs being available in Appendix DD/EE. These flows now match in the base year and are therefore accepted.

Growth Factors

For the roundabout, the applicant has used PRTM growth factors. This is a valid approach; however, we would like the applicant to check why some flows are decreasing on the network and provide clarification to us.

Base Years

For validation purposes, the applicant has carried out further surveys at some junctions. The applicant has noticed that there was a difference between these flows and the 2021 furnished flows, so they have been updated at some junctions. To provide a robust approach, growth factors from 2021 to 2026 have still been applied. We are content with this approach.

Assessment Years

The applicant has confirmed no phasing is to be carried out, so the current assessment years are considered acceptable.

Junction 10 Modelling – A5/B578 Lutterworth Rd

The applicant has provided an updated A5/B578 Lutterworth Rd PICADY model. The applicant has not changed the flare length and has informed this based on video footage. This is considered acceptable. However, the visibility has only been reduced to 100m, therefore, we are requesting that visibility drawings are shared for our review.

Thank you for providing model validation for this in Section 8.11.5. We will only be able to confirm this once visibility splays have been checked as mentioned in our previous point above.

Junction 10 Modelling – A5/Wolvey Road

The applicant has informed us (in Section 8.2.5) that HGV splits will be taken from the base year case, this is acceptable.

Model validation was provided in Section 8.12.6. Based on this, we are content the model provided represents the current network performance.

Model Validation

In Section 8.13.11 of the revised TA, we see that the observed queues were compared against the mean max queues for the junction. From this we are content that the model provided represents current network performance.

PRTM Model

We are content that the vehicular trip generation numbers for the development sites, as reported in TA (July 2024) Table 18, match those presented in the trip distribution and assignment plots in Appendix P.

Sections 6.2.2 and 7.1.3 mention that the development trip distribution report has been included within Appendix O. However, within the appendices shared, we are unable to locate Appendix O. As such, we are not able to verify the robustness of the trip distribution applied from parent PRTM zone 6014 to the development trips, though this is partially interpreted through Appendix Q and appears to be plausible.

Section 6.2.6 misses listing the A5 / B578 Lutterworth Road priority junction, though we note that this has been reported in the analysis.

We welcome the supplementary information provided in section 6.5 with additional survey data.

Appendix P - PRTM Furnessing Results

There are a few areas that require clarification related to the outputs of the PRTM Furness results compared with PRTM outputs. There are significant changes in some movements as mentioned below. Please can it be confirmed as to whether the final proportions represent the observed data.

- In the AM peak, there is a significant reduction in traffic on the A5 in the northbound direction and from the B578 in the southbound direction at the A5/B578 junction.
- In the PM peak, there is a significant reduction in traffic on the A5 in both directions and in the right turn from the A5 south to the B578 at the A5/B578 junction.

While comparing the '2021 - 2026 PRTM Growth', we have observed many locations where traffic is decreasing in the forecast year 2026, we would appreciate some clarification on this.

In the AM peak, where traffic is reducing in 2026:

- A5/B578 NB on A5 and SB turn from B578 to A5
- Hinckley Rd/B578 SB movement through junction

In the PM Peak, where traffic is reducing in 2026:

- A5/B578, NB and SB on A5
- Hinckley Rd/ B578, NB and SB movement through junction and right turn from South to Coventry Rd
- A5/Wolverley Rd, traffic at South approach on A5 to straight ahead and right turn.

Similarly, in the AM peak, where traffic is reducing in 2031 as compared to 2021:

- Hinckley Rd/ B578/Coventry Rd junction
- B578 to A5 south

In the PM Peak, where traffic is reducing in 2031 as compared to 2021:

- Hinckley Rd/B578/Coventry Rd junction has much less through traffic on Lutterworth Road
- A5 at A5/B578 junction
- NB traffic on A5 is decreasing at Wolvey Rd junction

Appendix – Q Trip Distribution and Assignment

PRTM Residential Distribution Calculations

We require further elaboration as to what these plots (AM/PM) represent and their purpose. It is not clear as to whether these distribution plots from PRTM parent zone 6014 are showing how much traffic uses the local network around the development site. We would also appreciate explanation as to what the internal trip numbers represent in these two plots.

Coventry Road Access Plot

For the Coventry Road access plot in the AM, 56% of trips are reported to arrive from Coventry Road in the eastbound direction. Tracking it back to the previous junction with Rugby Road, we can only see 20% of trips coming from Rugby Road North and 20% from Rugby Road South. As 16% of trips appear to be missing, we will require further information about this. Similarly, total outbound trips from the development on Coventry Road west are 54%, but some of the individual turn percentages at the Rugby Road junction are 44%. Similar observations are noted in the PM peak. It needs to be explained as to why there are missing trips from this data. If the trips are using other minor roads in between, these trips should be recaptured and presented at the Sketchley Road/Rugby Road and Grove Road/B578 junctions for clear interpretation.

Boundary Matters

Geotechnical

Our technical experts are reviewing the supplied information in relation to the proposed bund and should further details or clarifications be required an updated response will be provided.

Lighting

Our technical experts are reviewing the supplied information and should further details or clarifications be required an updated response will be provided.

Acoustic Fencing

Our technical experts are reviewing the supplied information and should further details or clarifications be required an updated response will be provided.

Drainage

Our technical experts are reviewing the supplied information and should further details or clarifications be required an updated response will be provided.

Planting

Our technical experts are reviewing the supplied information and should further details or clarifications be required an updated response will be provided.

I hope that the above is clear and will allow you to provide the additional clarification required, but if you need to discuss anything then please do not hesitate to contact me.

National Highways Recommendations

Based on the above, we recommend that the application not be determined for a period of three months from the date of this notice. This is to enable the applicant to provide further information with regards to the information/requirements detailed above and the potential impacts on the SRN.

Standing advice to the local planning authority

The Climate Change Committee's [2022 Report to Parliament](#) notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 74 and 109 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 108 and 114 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of [PAS2080](#) promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

Appendix C: Active Travel England comments ATE/24/00145/HYB



Active
Travel
England

Active Travel England
West Offices
Station Rise
York
YO1 6GA
Tel: 0300 330 3000

Your Ref: 24/00083/HYB
Our Ref: ATE/24/00145/HYB
Date: 19 February 2024

Active Travel England Planning Response Detailed Response to an Application for Planning Permission

From: Planning & Development Division, Active Travel England

To: Hinckley and Bosworth Borough Council

Application Ref: 24/00083/HYB

Site Address: BURBAGE FIELDS FARM, BULLFURLONG LANE,
BURBAGE, LE10 2HQ

Description of development: Hybrid planning application for 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a Coventry Road, and Burbage Fields Farm and outline planning application for a residential care home and up to 11 no. self-build plots (all matters reserved except for access)

Notice is hereby given that Active Travel England's formal recommendation is as follows:

- a. ~~**No Objection:** ATE has undertaken a detailed assessment of this application and is content with the submission.~~
- b. ~~**Conditional approval:** ATE recommends approval of the application, subject to the agreement and implementation of planning conditions and/or obligations as set out in this response.~~
- c. **Deferral:** ATE is not currently in a position to support this application and requests further assessment, evidence, revisions and/or dialogue as set out in this response.
- d. ~~**Refusal:** ATE recommends that the application be refused for the reasons set out in this response.~~

1.0 Background

ATE welcomes the opportunity to comment on the hybrid planning application for 422 dwellings, public open space, associated infrastructure and the demolition of 65 and 65a

Coventry Road and Burbage Fields Farm and outline planning application for a residential care home and up to 11 no. Self-build plots (all matters reserved except for access).

The Design and Access Statement (section 3.5) notes that the development proposals are in accordance with Policy DM17 of the Hinckley and Bosworth Local Plan 2006-2026, and the site layout plan has been designed with reference to the LCC highways design guide.

2.0 Summary

- Bullfurlong Lane encloses the site from the west, the M69 motorway to the south, Workhouse Lane to the east with Britannia Fields and existing residential development to the north. The M69 motorway, therefore, restricts the site's permeability as it acts as a barrier along the south boundary.
- The internal layout of the site provides good permeability for pedestrians and cyclists. However, concerns are raised about the lack of apparent traffic calming measures, particularly noting the straight length of the main street entering the site.
- Access to the site could be improved by providing additional access for pedestrians and cyclists from the northeastern boundary of the site next to plot SB5 to increase overall permeability.
- The new potential bus route into the site is considered essential to provide access to public transport to new residents, ensuring a bus stop is within 400 metres of each dwelling. Moreover, it is important to include in the Section 106 agreement that bus stops would be provided in the appropriate form, as detailed below.
- Further detail on the quantification of daily active travel movements generated by the development needs to be included in the Transport Assessment and the Travel Plan, and therefore, information is requested.
- Finally, further information is requested on the staff facilities that would be provided at the care home to ensure compliance with LTN 1/20 guidance.

3.0 National Policy and Guidance

These proposals have been assessed in accordance with the following national policies and design guidance.

The National Planning Policy Framework (NPPF) sets out how:

108. Transport issues should be considered from the earliest stages of... development proposals, so that:

c) opportunities to promote walking, cycling and public transport use are identified and pursued.

110. In assessing... specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; [and]

b) safe and suitable access to the site can be achieved for all users.

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code

116. ...applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas...;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport; [and]

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

117. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

Gear change: a bold vision for cycling and walking - the Government's cycling and walking plan for England.

This sets the Government's vision for cycling and walking to be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030. Active Travel England's responsibilities for walking also extend to "wheeling", such as the use of wheelchairs (self-propelled or powered) and mobility scooters.

Inclusive mobility: making transport accessible for passengers and pedestrians provides guidance on designing and improving the accessibility and inclusivity of public transport and pedestrian infrastructure.

Active Design (Sport England, supported by Active Travel England and the Office for Health Improvement & Disparities) sets out how the design of our environments can help people to lead more physically active and healthy lives.

4.0 Areas of Concern

Internal layout

Concerns are raised regarding the main street that enters the site from the north due to its straight length, noting the guidance provided in the Manual for Streets of likely faster traffic speeds. ATE would welcome further details on whether raised tables would be provided and any other traffic calming measures.

Connectivity to the neighbouring plot

ATE considers there has been a missed opportunity to provide access from the northeast boundary of the site through to Jubilee Way (next to plot SB5). Providing additional pedestrian and cycle access would ensure communities are connected and improve the site's permeability.

Public transport

The closest bus stops to the proposed development are located approximately 640m from the centre of the site at the 'Crossways' bus stop along Coventry Road. It is noted that discussions are ongoing to remove these bus stops. However, "The Potential Bus Route Diversion" (Figure 14) included in the Transport Assessment illustrates the bus route into the site, funded through a Section 106 Agreement. ATE considers this route essential to continue to provide bus service within 400 metres of the new residents' dwellings. ATE considers that the agreement should include that the bus stops provided would provide real-time information (if available), seating, shelter, lighting and raised kerbs, as this would present residents with a practicable alternative to using a private car.

Quantification of Active Travel trips absent

Quantification of daily active travel movements generated by the development is missing from the Transport Assessment and the Travel Plan and therefore the analysis presented provides very little basis / or evidence upon which to inform travel plan measures. ATE therefore expects the applicant to present a multi-modal trip generation analysis of all modes of transport throughout the day, rather than the analysis being confined to peak hour periods.

Care home staff facilities

Confirmation of what staff facilities would be provided at the care home is requested. Section 11.7 of LTN 1/20 advises that to facilitate longer cycle commutes, places of work should have changing rooms, lockers, showers and drying rooms. It should be made clear which of these facilities will be provided within the development.

5.0 Next Steps

It is requested that these recommendations be forwarded to the planning case officer in addition to the applicant and its agent. ATE would be content to review further submitted information with a view to providing a further response and recommended wording for planning conditions and obligations as appropriate.

Appendix D: COBALT Assessment Results

Links' Accident
Statistics

All monetised impacts are in £s at 2010 prices and values

Link ID	Year	WITHOUT-Scheme																	
		Number of Accidents (PIAs)	PIAs by Accident Severity			Number of Damage-only Accidents	Number of Casualties			PIAs Insurance Costs	PIAs Damage To Property Costs	PIAs Police Costs	Casualty Costs			Damage-Only Accidents' Costs			TOTAL Associated Cost
			Fatal	Serious	Slight		Fatal	Serious	Slight				Fatal	Serious	Slight	Insurance	Damage To Property	Police	
1	2026	0.1684	0.00093	0.01351	0.15394	2.9805	0.00145	0.02549	0.18216	12.8	281.6	75.8	1,609.3	3,156.2	1,733.5	101.6	3,337.9	69.7	10,378.3
1	2027	0.1650	0.00089	0.01296	0.15119	2.9212	0.00142	0.02498	0.17853	12.3	270.3	72.4	1,553.5	3,045.2	1,672.2	97.7	3,208.2	67.0	9,998.8
1	2028	0.1618	0.00086	0.01243	0.14847	2.8631	0.00139	0.02449	0.17498	11.8	259.4	69.1	1,499.6	2,938.1	1,613.1	93.9	3,083.7	64.4	9,633.1
1	2029	0.1585	0.00082	0.01192	0.14580	2.8061	0.00136	0.02400	0.17150	11.4	249.0	66.0	1,447.6	2,834.8	1,556.1	90.2	2,963.9	61.9	9,280.9
1	2030	0.1571	0.00081	0.01168	0.14460	2.7805	0.00135	0.02378	0.16993	11.0	241.8	64.0	1,412.8	2,765.2	1,517.6	87.7	2,880.1	60.1	9,040.2
1	2031	0.1557	0.00079	0.01145	0.14341	2.7551	0.00134	0.02356	0.16838	10.7	234.8	62.0	1,378.8	2,697.2	1,480.0	85.2	2,798.6	58.4	8,805.8
2	2026	0.0588	0.00033	0.00472	0.05375	1.0407	0.00051	0.00890	0.06360	4.5	98.3	26.5	561.9	1,102.0	605.3	35.5	1,165.5	24.3	3,623.7
2	2027	0.0579	0.00031	0.00455	0.05304	1.0248	0.00050	0.00876	0.06263	4.3	94.8	25.4	545.0	1,068.3	586.6	34.3	1,125.4	23.5	3,507.6
2	2028	0.0570	0.00030	0.00438	0.05233	1.0090	0.00049	0.00863	0.06167	4.2	91.4	24.4	528.5	1,035.5	568.5	33.1	1,086.8	22.7	3,395.0
2	2029	0.0561	0.00029	0.00422	0.05162	0.9935	0.00048	0.00850	0.06072	4.0	88.2	23.4	512.5	1,003.7	551.0	31.9	1,049.4	21.9	3,286.0
2	2030	0.0559	0.00029	0.00416	0.05143	0.9890	0.00048	0.00846	0.06044	3.9	86.0	22.8	502.5	983.5	539.8	31.2	1,024.4	21.4	3,215.4
2	2031	0.0556	0.00028	0.00409	0.05124	0.9844	0.00048	0.00842	0.06016	3.8	83.9	22.1	492.6	963.7	528.8	30.4	999.9	20.9	3,146.3

Link ID	Year	WITH-Scheme																	
		Number of Accidents (PIAs)	PIAs by Accident Severity			Number of Damage-only Accidents	Number of Casualties			Insurance Costs	Damage To Property Costs	Police Costs	Casualty Costs			Damage-Only Accidents' Costs			TOTAL Associated Cost
			Fatal	Serious	Slight		Fatal	Serious	Slight				Fatal	Serious	Slight	Insurance	Damage To Property	Police	
Links Total/Overall																			
1	2026	0.2025	0.00112	0.01625	0.18517	3.5850	0.00174	0.03066	0.21910	15.4	338.7	91.1	1,935.7	3,796.4	2,085.1	122.2	4,014.9	83.8	12,483.3
1	2027	0.1985	0.00107	0.01558	0.18180	3.5127	0.00171	0.03004	0.21468	14.8	325.0	87.0	1,868.0	3,661.9	2,010.8	117.4	3,857.9	80.6	12,023.5
1	2028	0.1945	0.00103	0.01494	0.17849	3.4419	0.00167	0.02944	0.21036	14.2	311.9	83.1	1,802.8	3,532.1	1,939.2	112.8	3,707.1	77.4	11,580.6
1	2029	0.1905	0.00099	0.01432	0.17522	3.3725	0.00164	0.02884	0.20611	13.6	299.3	79.4	1,739.8	3,407.0	1,870.2	108.4	3,562.1	74.4	11,154.1
1	2030	0.1887	0.00097	0.01404	0.17374	3.3408	0.00162	0.02857	0.20417	13.2	290.5	76.9	1,697.5	3,322.3	1,823.4	105.3	3,460.4	72.3	10,861.9
1	2031	0.1870	0.00095	0.01376	0.17226	3.3093	0.00161	0.02830	0.20225	12.9	282.1	74.4	1,656.2	3,239.8	1,777.8	102.3	3,361.6	70.2	10,577.3
2	2026	0.0743	0.00041	0.00596	0.06790	1.3145	0.00064	0.01124	0.08034	5.7	124.2	33.4	709.8	1,392.1	764.6	44.8	1,472.2	30.7	4,577.4
2	2027	0.0730	0.00040	0.00573	0.06691	1.2927	0.00063	0.01106	0.07901	5.5	119.6	32.0	687.5	1,347.6	740.0	43.2	1,419.8	29.6	4,424.8
2	2028	0.0718	0.00038	0.00552	0.06592	1.2713	0.00062	0.01087	0.07770	5.2	115.2	30.7	665.9	1,304.6	716.3	41.7	1,369.2	28.6	4,277.3
2	2029	0.0706	0.00037	0.00531	0.06495	1.2501	0.00061	0.01069	0.07640	5.1	110.9	29.4	644.9	1,262.9	693.2	40.2	1,320.4	27.6	4,134.6
2	2030	0.0702	0.00036	0.00522	0.06463	1.2428	0.00060	0.01063	0.07595	4.9	108.1	28.6	631.5	1,235.9	678.3	39.2	1,287.3	26.9	4,040.7
2	2031	0.0698	0.00035	0.00514	0.06431	1.2355	0.00060	0.01057	0.07551	4.8	105.3	27.8	618.3	1,209.5	663.7	38.2	1,255.0	26.2	3,948.9

Link ID	Year	Scheme Benefit																	
		Number of Accidents (PIAs)	PIAs by Accident Severity			Number of Damage-only Accidents	Number of Casualties			Insurance Costs	Damage To Property Costs	Police Costs	Casualty Costs			Damage-Only Accidents' Costs			TOTAL Associated Cost
			Fatal	Serious	Slight		Fatal	Serious	Slight				Fatal	Serious	Slight	Insurance	Damage To Property	Police	
Links Total/Overall																			
1	2026	-0.0342	-0.00019	-0.00274	-0.03122	-0.6045	-0.00029	-0.00517	-0.03695	-2.6	-57.1	-15.4	-326.4	-640.2	-351.6	-20.6	-677.0	-14.1	-2105.0
1	2027	-0.0334	-0.00018	-0.00262	-0.03061	-0.5915	-0.00029	-0.00506	-0.03615	-2.5	-54.7	-14.7	-314.6	-616.6	-338.6	-19.8	-649.7	-13.6	-2024.7
1	2028	-0.0327	-0.00017	-0.00251	-0.03002	-0.5788	-0.00028	-0.00495	-0.03537	-2.4	-52.4	-14.0	-303.2	-594.0	-326.1	-19.0	-623.4	-13.0	-1947.5
1	2029	-0.0320	-0.00017	-0.00241	-0.02943	-0.5664	-0.00028	-0.00484	-0.03461	-2.3	-50.3	-13.3	-292.2	-572.2	-314.1	-18.2	-598.2	-12.5	-1873.2
1	2030	-0.0317	-0.00016	-0.00235	-0.02914	-0.5603	-0.00027	-0.00479	-0.03424	-2.2	-48.7	-12.9	-284.7	-557.2	-305.8	-17.7	-580.3	-12.1	-1821.6
1	2031	-0.0313	-0.00016	-0.00230	-0.02885	-0.5543	-0.00027	-0.00474	-0.03387	-2.2	-47.2	-12.5	-277.4	-542.6	-297.8	-17.1	-563.0	-11.8	-1771.5
2	2026	-0.0155	-0.00009	-0.00124	-0.01415	-0.2739	-0.00013	-0.00234	-0.01674	-1.2	-25.9	-7.0	-147.9	-290.0	-159.3	-9.3	-306.7	-6.4	-953.7
2	2027	-0.0151	-0.00008	-0.00119	-0.01387	-0.2680	-0.00013	-0.00229	-0.01638	-1.1	-24.8	-6.6	-142.5	-279.4	-153.4	-9.0	-294.3	-6.1	-917.3
2	2028	-0.0148	-0.00008	-0.00114	-0.01360	-0.2622	-0.00013	-0.00224	-0.01603	-1.1	-23.8	-6.3	-137.4	-269.1	-147.7	-8.6	-282.4	-5.9	-882.3
2	2029	-0.0145	-0.00008	-0.00109	-0.01333	-0.2566	-0.00012	-0.00219	-0.01568	-1.0	-22.8	-6.0	-132.4	-259.2	-142.3	-8.2	-271.0	-5.7	-848.7
2	2030	-0.0143	-0.00007	-0.00107	-0.01320	-0.2538	-0.00012	-0.00217	-0.01551	-1.0	-22.1	-5.8	-129.0	-252.4	-138.5	-8.0	-262.9	-5.5	-825.3
2	2031	-0.0142	-0.00007	-0.00104	-0.01307	-0.2511	-0.00012	-0.00215	-0.01535	-1.0	-21.4	-5.6	-125.7	-245.8	-134.9	-7.8	-255.1	-5.3	-802.6

Appendix E: Response from AECOM

Andy Miles

Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

From: Laura Good <[REDACTED]> **On Behalf Of** ETD - Commissioning Framework

Sent: 14 November 2024 12:36

To: Jake Blay <[REDACTED]>

Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

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Hi Jake,

Please see AECOM's response below. If it helps, can we arrange a call for AECOM to go through this? Please let me know your availability.

The map is helpful, but the descriptions given in the previous email are not always very clear so it's a bit difficult to match up all the locations with the data.

Generally the map confirms my original response that most movements see growth and most of the reductions are quite small and are probably at locations that are close to capacity in 2021 and can't accommodate more traffic, or occur as a result of changes in delay which causes rerouteing and reductions for some movements. If the client would like to discuss further perhaps we can arrange a call and go through things on screen?

Kind regards

Laura Good

Environment and Transport Modelling Services and Commissioning Framework Manager

Network Data & Intelligence Team | Environment and Transport | Leicestershire County Council

Tel: [REDACTED]



Environment and Transport
Commissioning Framework and Modelling Services

From: Jake Blay <[REDACTED]>

Sent: Wednesday, November 13, 2024 3:37 PM

To: ETD - Commissioning Framework <[REDACTED]>

Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

Hi Julia,

Thank you for your response.

Please see attached a comparison between the 2021 and 2026 flows and the 2021 and 2031 flows from the PRTM Forecasting Report.

The comparison shows some turning counts decreasing, but as highlighted by AECOM most turning counts are increasing in the forecast year.

Kind Regards,

Jake



Jake Blay BA (Hons) AMCIHT
TRANSPORT PLANNER



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From: Julia Brown <[REDACTED]> **On Behalf Of** ETD - Commissioning Framework

Sent: 13 November 2024 14:31

To: Jake Blay <[REDACTED]>

Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

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Hi Jake,

Please see response from AECOM:

I've been through the first few instances in the list and I'm struggling to see what National Highways is seeing. From what I can see none of these instances has reductions between 2021 and 2026 (although there are some small reductions for other movements at the same junctions). Could the numbers in question be provided to make sure we're looking at the same thing, at least for the first one or two instances?

Kind regards,

Julia Brown (she/her)

Environment and Transport Modelling Services and Commissioning Framework Officer

Network Data & Intelligence Team | Environment and Transport | Leicestershire County Council



Leicestershire County Council values are:



Positivity



Trust and
Respect



Flexibility



Openness and
Transparency



From: Jake Blay <[REDACTED]>
Sent: Wednesday, November 13, 2024 10:07 AM
To: ETD - Commissioning Framework <[REDACTED]>
Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

Good morning Julia,

Thank you for your response. Please see below the comments from National Highways regarding particular turning movements:

While comparing the '2021 - 2026 PRTM Growth', we have observed many locations where traffic is decreasing in the forecast year 2026, we would appreciate some clarification on this.

In the AM peak, where traffic is reducing in 2026:

- *A5/B578 NB on A5 and SB turn from B578 to A5*
- *Hinckley Rd/B578 SB movement through junction*

In the PM Peak, where traffic is reducing in 2026:

- *A5/B578, NB and SB on A5 - Hinckley Rd/ B578, NB and SB movement through junction and right turn from South to Coventry Rd*
- *A5/Wolverley Rd, traffic at South approach on A5 to straight ahead and right turn.*

Similarly, in the AM peak, where traffic is reducing in 2031 as compared to 2021:

- *Hinckley Rd/ B578/Coventry Rd junction - B578 to A5 south*

In the PM Peak, where traffic is reducing in 2031 as compared to 2021:

- *Hinckley Rd/B578/Coventry Rd junction has much less through traffic on Lutterworth Road*
- *A5 at A5/B578 junction - NB traffic on A5 is decreasing at Wolverley Rd junction*

Kind Regards,
Jake



Jake Blay BA (Hons) AMCIHT
TRANSPORT PLANNER



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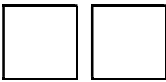
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From: Julia Brown <[REDACTED]> **On Behalf Of** ETD - Commissioning Framework

Sent: 13 November 2024 09:41

To: Jake Blay <[REDACTED]>

Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

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Morning Jake,

Please see response from AECOM:

We have reviewed the turning flows provided in the forecasting report. The general pattern of change between 2021 and 2026 is increasing flow as would be expected. There are a relatively small number of individual turning movements where flow does decrease slightly, and this will probably be as a result of local rerouting caused by changes in delay between 2021 and 2026. Are there any particular turning movements that are of concern?

Kind regards,

Julia Brown (she/her)

Environment and Transport Modelling Services and Commissioning Framework Officer

Network Data & Intelligence Team | Environment and Transport | Leicestershire County Council



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Trust and
Respect



Flexibility



Openness and
Transparency



From: Jake Blay <[REDACTED]>
Sent: Thursday, November 7, 2024 4:06 PM
To: Laura Good <[REDACTED]>
Subject: RE: 3851.161 Burbage Fields - Forecasting Report v1.0

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Good afternoon Laura,

Since receiving the PRTM Forecasting Report, we have submitted our planning application for the "Burbage Fields" development.

National Highways and Leicestershire County Council's Development Control have since responded to the planning application with some queries regarding traffic flows decreasing in the forecast years. Please see below a comment from NH, which was reiterated by LCC.

"While comparing the '2021 - 2026 PRTM Growth', we have observed many locations where traffic is decreasing in the forecast year 2026, we would appreciate some clarification on this."

Please could you provide an explanation as to why some turning movements are decreasing in the forecast years in comparison to the base year, that we could provide NH and LCC.

I appreciate it has been a long time since you sent us the forecasting report, and that the PRTM has since been updated.

Kind Regards,
Jake

Jake Blay BA (Hons) AMCIHT
TRANSPORT PLANNER

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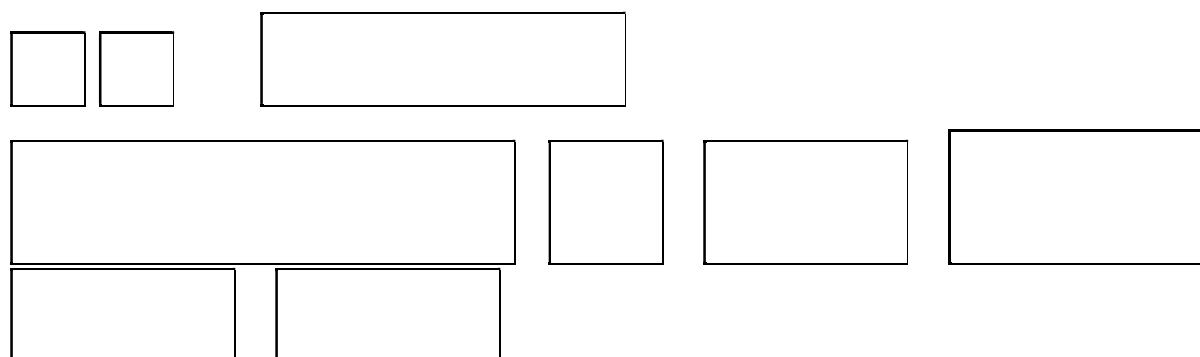
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From: Laura Good <[REDACTED]> **On Behalf Of** ETD - Commissioning Framework

Sent: 28 October 2022 13:02

To: Andy Miles <[REDACTED]>

Subject: 3851.161 Burbage Fields - Forecasting Report v1.0

ALERT: External email. Check the address. Think before you click links and attachments.

Afternoon Andy,

I hope you are well!

Please find attached the Forecasting Report for Burbage Fields.

If you have any queries, please let me know.

Kind regards

Laura Good

Environment and Transport Commissioning Framework Officer

Network Data & Intelligence

Environment and Transport | Leicestershire County Council

T: [REDACTED]

Please Note: In line with Government Guidance for COVID-19, all site visits and face-to-face meetings are to be cancelled/rescheduled where they are unable to be conducted electronically (skype etc.). There is also a likelihood of a delay in providing a

response to your query or concern at this time due to the impact of the COVID-19 restrictions. More details on the Council's policy on social distancing and how it will affect services can be found [here](#).

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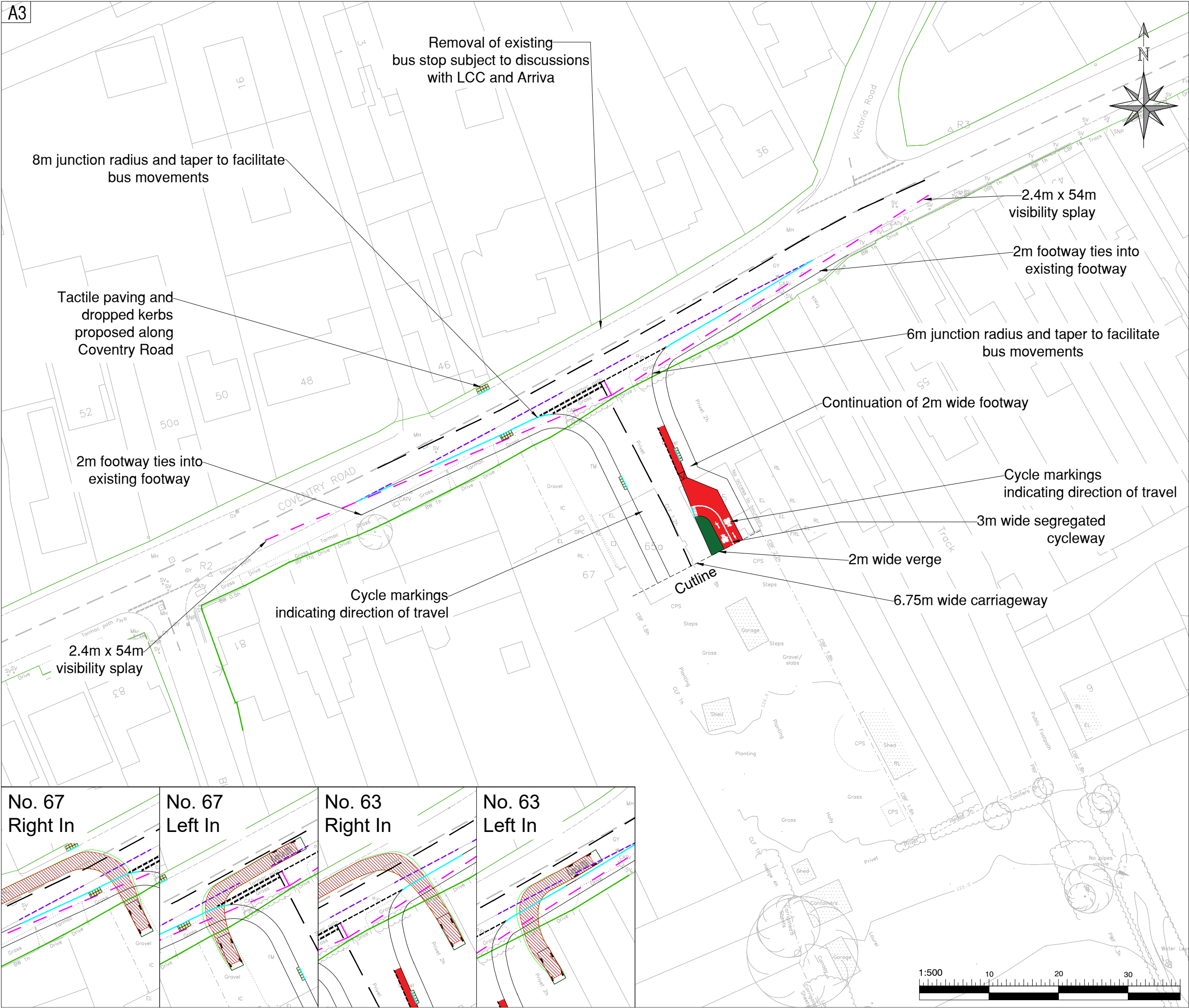
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Appendix F: Site Access Drawing and Spine Road Arrangement



Legend:

-  Indicative Site Boundary
-  Highway Boundary
- Junction Visibility Splay
- Existing Dropped Kerbs (to be removed)
- New Dropped Kerbs

NOTES

Preliminary scheme only for comment & review. Based upon information provided / available at the time.

The tactile paving has been designed in line with drawing 'SD-11-20 Tactile Paving at Uncontrolled Crossings' from the Kerbs Footway Series 1100 within the Leicestershire Highways Design Guide (2024).

Do not scale from this drawing.

P10	03/02/25	Changed the design of the access to accord with the LHGD 'Augmented Standard' Major Residential Access Road	JWB	JR
P09	04/12/24	Changed the 3m shared footway / cycleway to a 3m segregated cycleway, repositioned the cycle ramp and increased the length of the pedestrian crossing	JWB	ADM
P08	25/06/24	Removed eastern tactile paving, reduced western tactile to 1.8m and relocated the western tactile	JWB	ADM
P07	19/06/24	Removed double yellow lines and realigned site access tactics, added new tactics along Coventry Road	JWB	ADM
P06	17/04/24	Revised based on LCC comments	JWB	ADM
P05	01/11/23	New masterplan and revised kerb line	JWB	ADM
P04	11/07/23	Revised based on Stage 1 RSA comments	JWB	ADM
P03	01/06/23	Tree-lined Verge and Footway Swapped	JWB	ADM
P02	17/04/23	Internal layout verge added	JWL	ADM
P01	12/04/23	Amended Carraigeeway Alignment	JWL	ADM
Rev	Date	Amendments	By	Chk



Client

Redrow Homes

Project

Land South of Burbage

Drawing Title

Preliminary Site Access Design

Status

For information

Scale	Drawn	Checked	Date
A3@ 1:500	JWL	ADM	04/04/23

Drawing No. _____ Rev. _____

21390-RLL-23-XX-DR-D-5008

P10



Client

Redrow Homes

Project
Land South of Burbage

Drawing Title

Extent of Proposed 3m
Segregated Cycleway 1/5

For Information

Scale	Drawn	Checked	Date
A4@ 1:2000	JWB	ADM	13/01/25
Drawing No.	Rev.		
21390-RLL-25-XX-DR-D-5024	#		

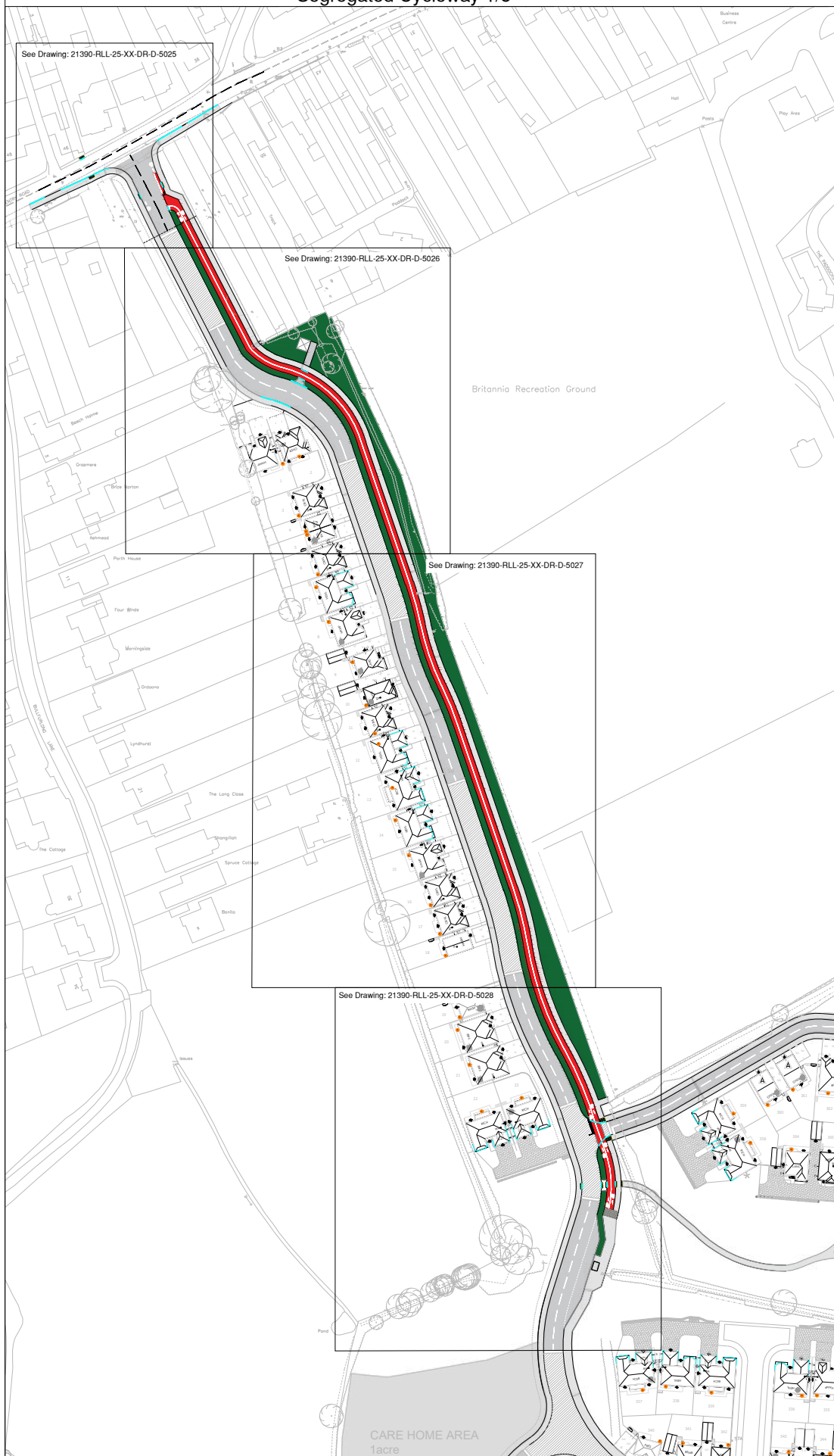
Rev	Date	Amendments	By	Chk

NOTE

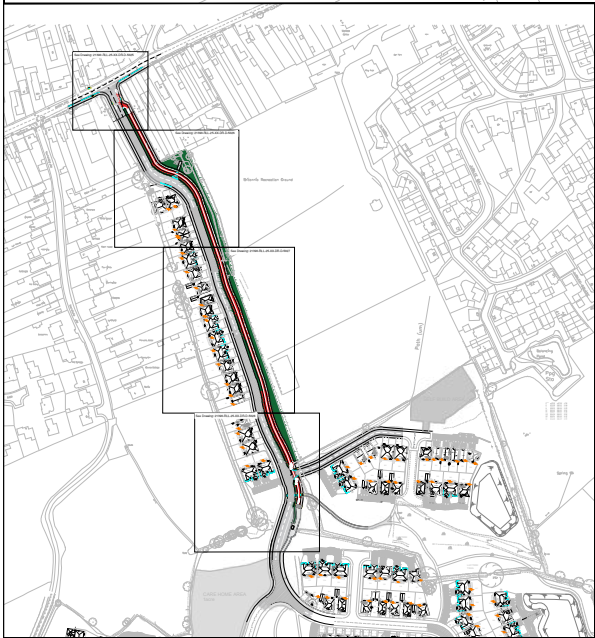
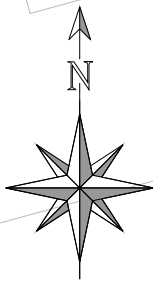
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

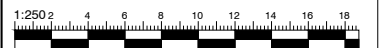


- Dropped Kerbs
- 3m Segregated Cycleway
- ▨ Raised Table
- Carriageway
- Footway
- Verge / Grass



Legend:

- Dropped Kerbs
- 3m Segregated Cycleway
- Raised Table
- Carriageway
- Footway
- Verge / Grass



NOTE
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

Do not scale from this drawing.

Rev	Date	Amendments	By	Chk



Client

Redrow Homes

Project

Land South of Burbage

Drawing Title

Extent of Proposed 3m Segregated Cycleway 2/5

Status

For Information

Scale	Drawn	Checked	Date
A3@ 1:250	JWB	ADM	13/01/25

Drawing No.	Rev.
21390-RLL-25-XX-DR-D-5025	#



Client

Redrow Homes

Project
Land South of Burbage

Drawing Title

Extent of Proposed 3m Segregated Cycleway 3/5

For Information

Scale	Drawn	Checked	Date
A4@ 1:500	JWB	ADM	13/01/25
Drawing No.	Rev.		
21390-RLL-25-XX-DR-D-5026	#		

Rev	Date	Amendments	By	Chk

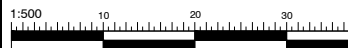
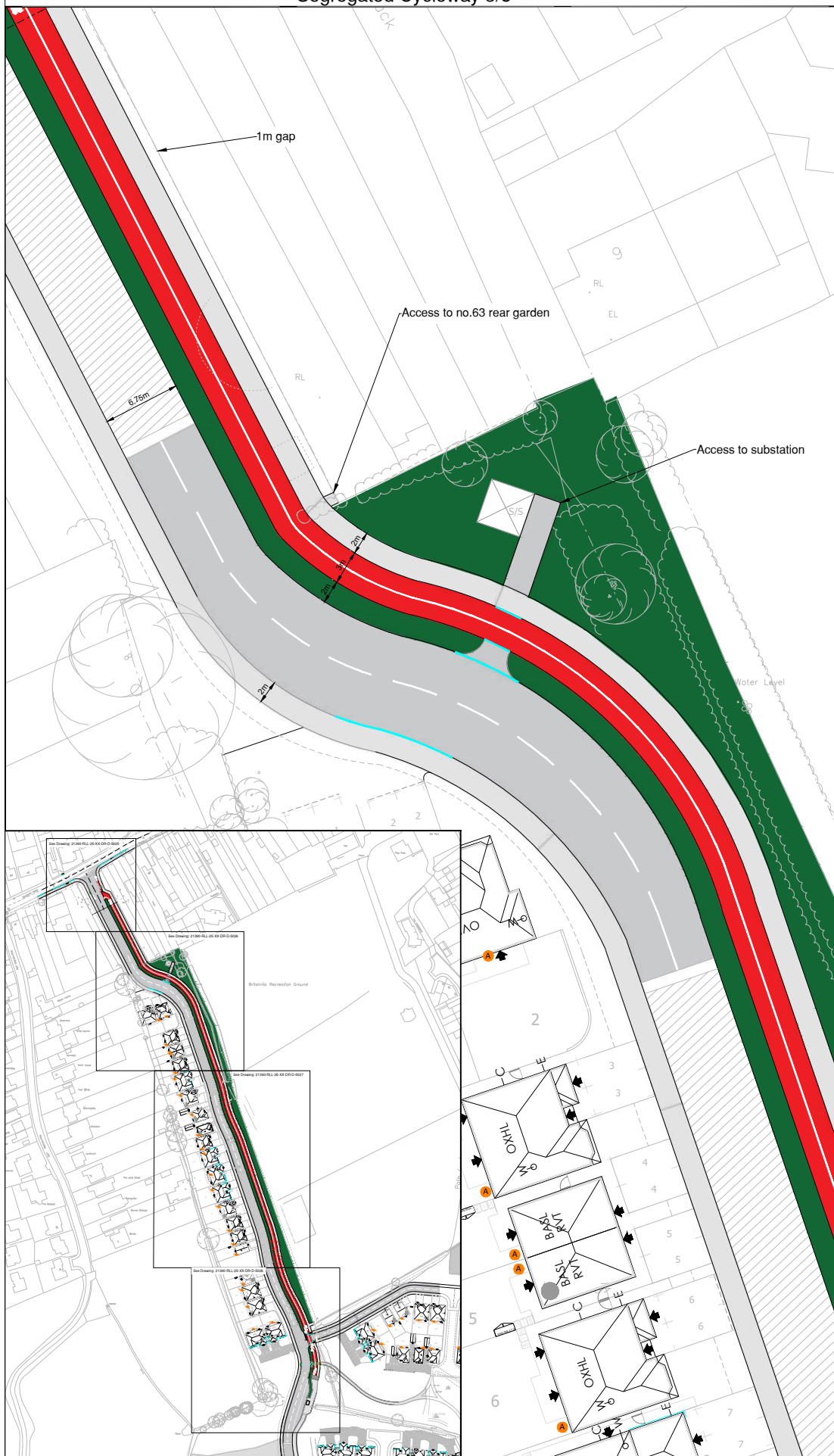
NOTE

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Do not scale from this drawing.

- Dropped Kerbs
- 3m Segregated Cycleway
- Raised Table
- Carriageway
- Footway
- Verge / Grass



[illegible]

NOTE

NOTE
Preliminary scheme only for
comment & review. Based upon
information provided / available at
the time.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

-  3m Segregated Cycleway
-  Raised Table
-  Carriageway
-  Footway
-  Verge / Grass





Client

Redrow Homes

Land South of Burbage

Extent of Proposed 3m Segregated Cycleway 5/5

For Information

Scale A4@ 1:500 Drawn JWB Checked ADM Date 13/01/25 Drawing No. 21390-RLL-25-XX-DR-D-5028 Rev. #

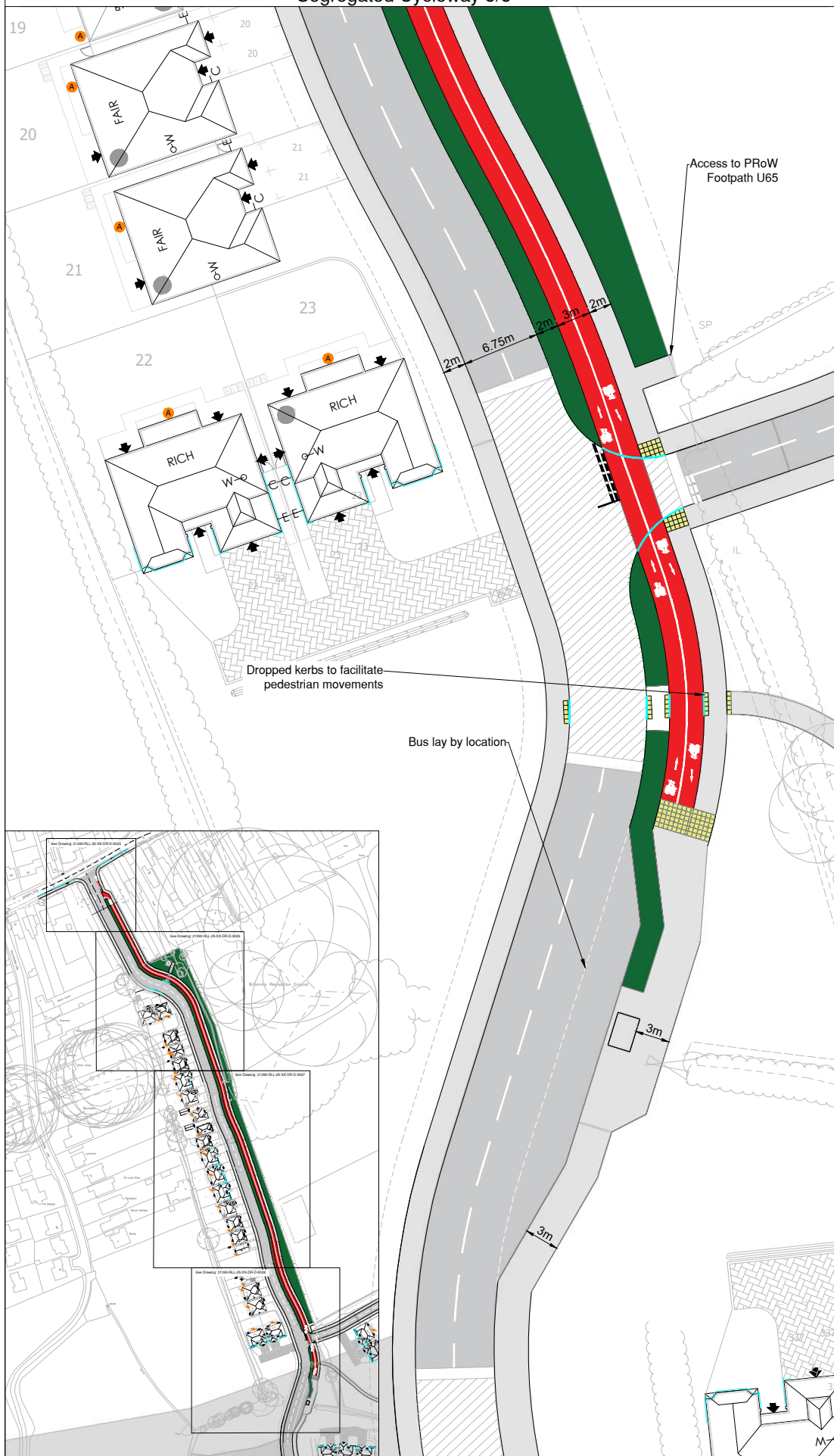
Rev	Date	Amendments	By	Chk

NOTE

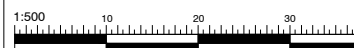
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.



- Dropped Kerbs
- 3m Segregated Cycleway
- ▨ Raised Table
- Carriageway
- Footway
- Verge / Grass



Appendix G: Cycling Level of Service Tool

Key Requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	1	Connection to shared route to the south of the segregation, provision for on-carriageway transition to the north.
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	1	Mix of a segregated cycleway and shared footway/cycleway on the spine road, around the internal loop and connecting to the eastern part of the site
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	1	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	2	Route 'as-the-crow-flies' taking account of land ownership is circa 880m, measured distance on proposed segregated cycleway & shared footway/cycleway connecting the northern and eastern sides of the development circa 1010m. (1.15)
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	1	Segregation has no stops, internal loop, cyclists give way to side roads.
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	1	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	1	section of shared use requires cyclist speed to be influenced by pedestrians
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended Chapter 5 of LTN 1/20	There are no sections of route steeper than the gradients recommended in Chapter 5 fo LTN 1/20	There are no sections of route which steeper than 2%	1	Subject to detailed design
	Reduce/remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	Interaction between cyclists and vehicles at the Coventry Road site access
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	No section are shared by design speed will be 20mph, suitable speed control features in the form of raised tables / speed tables

Safety			shared carriageway						in the form of raised tables / speed tables are also incorporated into the layout.
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5% HGV	2500-5000 and <2% HGV	0-2500 AADT	1	Cyclists will need to join the carriageway at the Connetry Road junction, diversion of local bus service will see buses using the internal roads within the development.
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	2	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	1	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	1	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	2	
	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	2	subject to detailed design
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	2	subject to detailed design

Comfort	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	2	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	2	subject to detailed design
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	2	subject to detailed design
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	2	Low number of pedestrian flow, segregated footway provided along spine road connecting to a shared footway/cycleway.
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	1	subject to detailed design
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	0	N/A, no cycle parking required along route given it is with a residential area. Cycle parkign for the proposed care home will be provided within curtilage of the care home
Audit Score Total								35	

KEY: Quality of Section	
0	Low: Score<50
1	Intermediate: 50<=Score<70
2	High: Score>70
C	Critical: Design fails due to one or more critical scores.

Audit Score Total	35
Audit Score Percentage	70%
Contain Critical?	No
Cohesion	50%
Directness	60%
Safety	69%
Comfort	100%
Attractiveness	70%

Appendix H: A5 / B578 Lutterworth Road Junctions 10 Results

Junctions 10										
PICADY 10 - Priority Intersection Module										
Version: 10.1.1.1905										
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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: A5_Lutterworth Road.j10

Path: P:\2021\P21-390\T&T\Reports\Transport Assessment\TA P08\TA 21390-RLL-23-XX-RP-D-5001 Junction Model Files

Report generation date: 23/09/2024 12:41:46

»2021 , AM
 »2021 , PM
 »2026, AM
 »2026, PM
 »2026 + Dev, AM
 »2026 + Dev, PM
 »2031, AM
 »2031, PM
 »2031 + Dev, AM
 »2031 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-C	D1	0.6	11.36	0.39	B	D2	0.2	7.69	0.18	A
Stream B-A		0.1	25.74	0.12	D		0.0	29.19	0.03	D
Stream C-AB		0.3	9.18	0.21	A		0.7	11.93	0.42	B
	2026									
Stream B-C	D3	1.1	14.50	0.53	B	D4	0.3	9.27	0.25	A
Stream B-A		0.2	30.21	0.15	D		0.1	56.28	0.06	F
Stream C-AB		0.2	9.04	0.20	A		0.9	14.09	0.46	B
	2026 + Dev									
Stream B-C	D5	1.4	16.70	0.58	C	D6	0.4	9.70	0.27	A
Stream B-A		0.2	33.95	0.19	D		0.1	81.78	0.11	F
Stream C-AB		0.3	9.25	0.21	A		1.2	16.59	0.54	C
	2031									
Stream B-C	D7	4.2	42.52	0.83	E	D8	0.4	9.78	0.29	A
Stream B-A		1.3	77.58	0.60	F		0.1	90.83	0.10	F
Stream C-AB		0.2	8.86	0.20	A		1.2	16.41	0.55	C
	2031 + Dev									
Stream B-C	D9	7.9	74.36	0.93	F	D10	0.5	10.69	0.32	B
Stream B-A		3.0	171.97	0.85	F		0.2	182.47	0.22	F
Stream C-AB		0.3	9.06	0.21	A		1.6	19.79	0.62	C

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

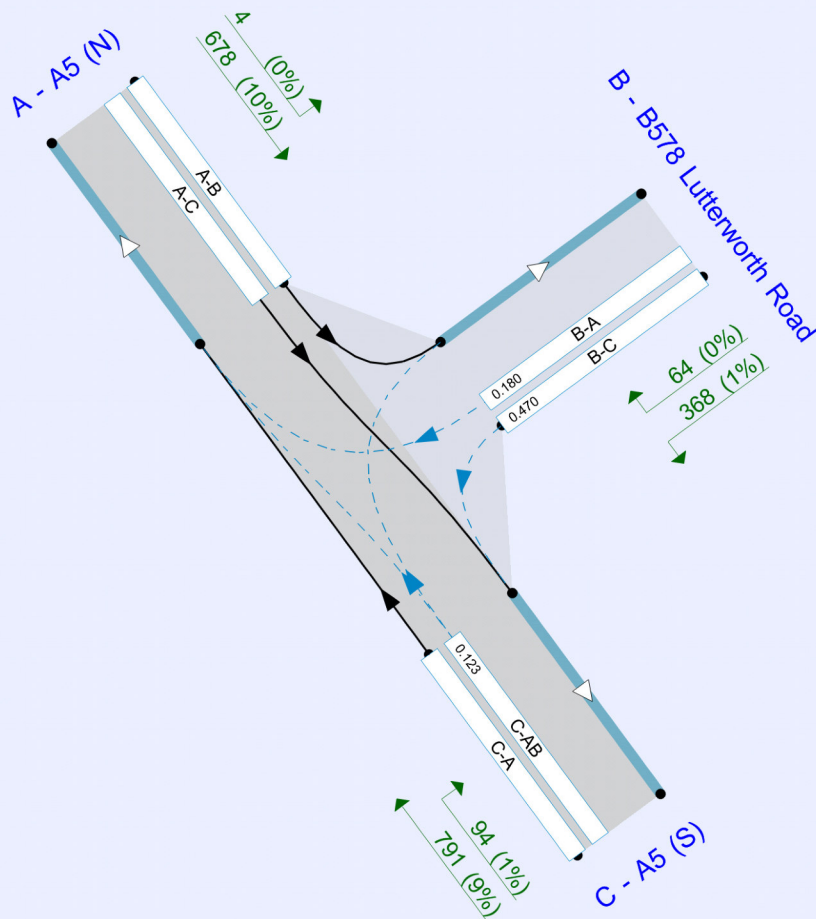
File summary

File Description

Title	A5 Watling Street / B578 Lutterworth Road Junction
Location	Burbage
Site number	
Date	27/10/2023
Version	
Status	Existing
Identifier	
Client	Redrow Homes
Jobnumber	P21-390
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75				✓		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)	Run automatically
D1	2021	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2021 , 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		1.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.85	A

Arms

Arms

Arm	Name	Description	Arm type
A	A5 (N)		Major
B	B578 Lutterworth Road		Minor
C	A5 (S)		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 - A5 (S)	6.50		✓	3.25	150.0	✓	12.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B578 Lutterworth Road	One lane plus flare	10.00	8.60	5.20	4.40	4.20		2.00	110	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	527	0.094	0.238	0.149	0.339
B-C	804	0.121	0.305	-	-
C-B	736	0.279	0.279	-	-

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)	Run automatically
D1	2021	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	705	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	204	100.000
C - A5 (S)		ONE HOUR	✓	808	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	3	702
	B - B578 Lutterworth Road	17	0	187
	C - A5 (S)	716	92	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	11.36	0.6	B	172	257
B-A	0.12	25.74	0.1	D	16	23
C-AB	0.21	9.18	0.3	A	84	127
C-A					657	986
A-B					3	4
A-C					644	966

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	141	35	613	0.230	140	0.0	0.3	7.584	A
B-A	13	3	277	0.046	13	0.0	0.0	13.610	B
C-AB	69	17	568	0.122	69	0.0	0.1	7.206	A
C-A	539	135			539				
A-B	2	0.56			2				
A-C	529	132			529				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	576	0.292	168	0.3	0.4	8.801	A
B-A	15	4	228	0.067	15	0.0	0.1	16.947	C
C-AB	83	21	536	0.154	83	0.1	0.2	7.930	A
C-A	644	161			644				
A-B	3	0.67			3				
A-C	631	158			631				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	206	51	523	0.394	205	0.4	0.6	11.291	B
B-A	19	5	159	0.118	18	0.1	0.1	25.633	D
C-AB	101	25	493	0.205	101	0.2	0.3	9.179	A
C-A	788	197			788				
A-B	3	0.83			3				
A-C	773	193			773				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	206	51	523	0.394	206	0.6	0.6	11.362	B
B-A	19	5	159	0.118	19	0.1	0.1	25.738	D
C-AB	101	25	493	0.205	101	0.3	0.3	9.185	A
C-A	788	197			788				
A-B	3	0.83			3				
A-C	773	193			773				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	576	0.292	169	0.6	0.4	8.867	A
B-A	15	4	227	0.067	16	0.1	0.1	17.010	C
C-AB	83	21	536	0.154	83	0.3	0.2	7.943	A
C-A	644	161			644				
A-B	3	0.67			3				
A-C	631	158			631				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	141	35	613	0.230	141	0.4	0.3	7.639	A
B-A	13	3	277	0.046	13	0.1	0.0	13.650	B
C-AB	69	17	568	0.122	69	0.2	0.1	7.225	A
C-A	539	135			539				
A-B	2	0.56			2				
A-C	529	132			529				

2021 , 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		1.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.73	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)	Run automatically
D2	2021	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	653	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	97	100.000
C - A5 (S)		ONE HOUR	✓	1007	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	12	641
	B - B578 Lutterworth Road	4	0	93
	C - A5 (S)	808	199	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	7.69	0.2	A	85	128
B-A	0.03	29.19	0.0	D	4	6
C-AB	0.42	11.93	0.7	B	183	274
C-A					741	1112
A-B					11	17
A-C					588	882

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	645	0.108	70	0.0	0.1	6.246	A
B-A	3	0.75	253	0.012	3	0.0	0.0	14.396	B
C-AB	150	37	587	0.255	148	0.0	0.3	8.192	A
C-A	608	152			608				
A-B	9	2			9				
A-C	483	121			483				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	614	0.136	83	0.1	0.2	6.779	A
B-A	4	0.90	200	0.018	4	0.0	0.0	18.288	C
C-AB	179	45	559	0.320	178	0.3	0.5	9.449	A
C-A	726	182			726				
A-B	11	3			11				
A-C	576	144			576				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	570	0.180	102	0.2	0.2	7.683	A
B-A	4	1	128	0.034	4	0.0	0.0	29.085	D
C-AB	219	55	521	0.421	218	0.5	0.7	11.860	B
C-A	890	222			890				
A-B	13	3			13				
A-C	706	176			706				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	570	0.180	102	0.2	0.2	7.693	A
B-A	4	1	128	0.034	4	0.0	0.0	29.189	D
C-AB	219	55	521	0.421	219	0.7	0.7	11.931	B
C-A	890	222			890				
A-B	13	3			13				
A-C	706	176			706				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	614	0.136	84	0.2	0.2	6.793	A
B-A	4	0.90	200	0.018	4	0.0	0.0	18.348	C
C-AB	179	45	559	0.320	180	0.7	0.5	9.523	A
C-A	726	182			726				
A-B	11	3			11				
A-C	576	144			576				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	645	0.109	70	0.2	0.1	6.261	A
B-A	3	0.75	252	0.012	3	0.0	0.0	14.439	B
C-AB	150	37	587	0.255	150	0.5	0.3	8.262	A
C-A	608	152			608				
A-B	9	2			9				
A-C	483	121			483				

2026, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.53	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.53	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)	Run automatically
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	693	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	270	100.000
C - A5 (S)		ONE HOUR	✓	894	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	3	690
	B - B578 Lutterworth Road	19	0	251
	C - A5 (S)	804	90	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.53	14.50	1.1	B	230	345
B-A	0.15	30.21	0.2	D	17	26
C-AB	0.20	9.04	0.2	A	83	124
C-A					738	1107
A-B					3	4
A-C					633	950

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	189	47	617	0.306	187	0.0	0.4	8.352	A
B-A	14	4	267	0.054	14	0.0	0.1	14.238	B
C-AB	68	17	571	0.119	67	0.0	0.1	7.145	A
C-A	605	151			605				
A-B	2	0.56			2				
A-C	519	130			519				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	580	0.389	225	0.4	0.6	10.128	B
B-A	17	4	214	0.080	17	0.1	0.1	18.222	C
C-AB	81	20	540	0.150	81	0.1	0.2	7.840	A
C-A	723	181			723				
A-B	3	0.67			3				
A-C	620	155			620				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	276	69	525	0.527	275	0.6	1.1	14.279	B
B-A	21	5	140	0.149	21	0.1	0.2	29.971	D
C-AB	99	25	497	0.199	99	0.2	0.2	9.029	A
C-A	885	221			885				
A-B	3	0.83			3				
A-C	760	190			760				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	276	69	524	0.527	276	1.1	1.1	14.496	B
B-A	21	5	140	0.149	21	0.2	0.2	30.209	D
C-AB	99	25	497	0.199	99	0.2	0.2	9.041	A
C-A	885	221			885				
A-B	3	0.83			3				
A-C	760	190			760				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	579	0.390	227	1.1	0.6	10.288	B
B-A	17	4	214	0.080	17	0.2	0.1	18.334	C
C-AB	81	20	540	0.150	81	0.2	0.2	7.856	A
C-A	723	181			723				
A-B	3	0.67			3				
A-C	620	155			620				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	189	47	616	0.307	190	0.6	0.4	8.457	A
B-A	14	4	266	0.054	14	0.1	0.1	14.295	B
C-AB	68	17	571	0.119	68	0.2	0.1	7.166	A
C-A	605	151			605				
A-B	2	0.56			2				
A-C	519	130			519				

2026, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		1.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.93	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)	Run automatically
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	791	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	122	100.000
C - A5 (S)		ONE HOUR	✓	1126	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	12	779
	B - B578 Lutterworth Road	4	0	118
	C - A5 (S)	925	201	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	9.27	0.3	A	108	162
B-A	0.06	56.28	0.1	F	4	6
C-AB	0.46	14.09	0.9	B	184	277
C-A					849	1273
A-B					11	17
A-C					715	1072

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	612	0.145	88	0.0	0.2	6.858	A
B-A	3	0.75	212	0.014	3	0.0	0.0	17.189	C
C-AB	151	38	556	0.272	150	0.0	0.4	8.824	A
C-A	696	174			696				
A-B	9	2			9				
A-C	586	147			586				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	575	0.185	106	0.2	0.2	7.678	A
B-A	4	0.90	152	0.024	4	0.0	0.0	24.267	C
C-AB	181	45	523	0.346	180	0.4	0.5	10.482	B
C-A	832	208			832				
A-B	11	3			11				
A-C	700	175			700				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	519	0.250	129	0.2	0.3	9.237	A
B-A	4	1	69	0.064	4	0.0	0.1	55.653	F
C-AB	221	55	477	0.464	220	0.5	0.8	13.956	B
C-A	1018	255			1018				
A-B	13	3			13				
A-C	858	214			858				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	518	0.251	130	0.3	0.3	9.266	A
B-A	4	1	68	0.064	4	0.1	0.1	56.279	F
C-AB	221	55	477	0.464	221	0.8	0.9	14.091	B
C-A	1018	255			1018				
A-B	13	3			13				
A-C	858	214			858				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	574	0.185	106	0.3	0.2	7.702	A
B-A	4	0.90	151	0.024	4	0.1	0.0	24.439	C
C-AB	181	45	523	0.346	182	0.9	0.5	10.598	B
C-A	832	208			832				
A-B	11	3			11				
A-C	700	175			700				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	612	0.145	89	0.2	0.2	6.881	A
B-A	3	0.75	212	0.014	3	0.0	0.0	17.263	C
C-AB	151	38	556	0.272	152	0.5	0.4	8.914	A
C-A	696	174			696				
A-B	9	2			9				
A-C	586	147			586				

2026 + Dev, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		3.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.02	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)	Run automatically
D5	2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	710	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	293	100.000
C - A5 (S)		ONE HOUR	✓	899	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	4	706
	B - B578 Lutterworth Road	22	0	271
	C - A5 (S)	806	93	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.58	16.70	1.4	C	249	373
B-A	0.19	33.95	0.2	D	20	30
C-AB	0.21	9.25	0.3	A	85	128
C-A					740	1109
A-B					4	6
A-C					648	972

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	204	51	611	0.334	202	0.0	0.5	8.772	A
B-A	17	4	262	0.063	16	0.0	0.1	14.634	B
C-AB	70	18	567	0.124	69	0.0	0.1	7.233	A
C-A	607	152			607				
A-B	3	0.75			3				
A-C	532	133			532				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	244	61	572	0.426	243	0.5	0.7	10.901	B
B-A	20	5	208	0.095	20	0.1	0.1	19.085	C
C-AB	84	21	535	0.156	83	0.1	0.2	7.963	A
C-A	725	181			725				
A-B	4	0.90			4				
A-C	635	159			635				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	298	75	514	0.580	296	0.7	1.3	16.326	C
B-A	24	6	131	0.185	24	0.1	0.2	33.519	D
C-AB	102	26	492	0.208	102	0.2	0.3	9.235	A
C-A	887	222			887				
A-B	4	1			4				
A-C	777	194			777				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	298	75	513	0.581	298	1.3	1.4	16.704	C
B-A	24	6	130	0.186	24	0.2	0.2	33.947	D
C-AB	102	26	492	0.208	102	0.3	0.3	9.250	A
C-A	887	222			887				
A-B	4	1			4				
A-C	777	194			777				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	244	61	571	0.426	246	1.4	0.8	11.145	B
B-A	20	5	208	0.095	20	0.2	0.1	19.269	C
C-AB	84	21	535	0.156	84	0.3	0.2	7.983	A
C-A	725	181			725				
A-B	4	0.90			4				
A-C	635	159			635				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	204	51	610	0.334	205	0.8	0.5	8.907	A
B-A	17	4	262	0.063	17	0.1	0.1	14.704	B
C-AB	70	18	567	0.124	70	0.2	0.1	7.252	A
C-A	607	152			607				
A-B	3	0.75			3				
A-C	532	133			532				

2026 + Dev, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.48	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)	Run automatically
D6	2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	799	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	130	100.000
C - A5 (S)		ONE HOUR	✓	1184	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	14	785
	B - B578 Lutterworth Road	5	0	125
	C - A5 (S)	950	234	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	9.70	0.4	A	115	172
B-A	0.11	81.78	0.1	F	5	7
C-AB	0.54	16.59	1.2	C	215	322
C-A					872	1307
A-B					13	19
A-C					720	1080

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	610	0.154	93	0.0	0.2	6.960	A
B-A	4	0.94	200	0.019	4	0.0	0.0	18.354	C
C-AB	176	44	555	0.318	174	0.0	0.5	9.421	A
C-A	715	179			715				
A-B	11	3			11				
A-C	591	148			591				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	571	0.197	112	0.2	0.2	7.841	A
B-A	4	1	137	0.033	4	0.0	0.0	27.215	D
C-AB	210	53	521	0.404	210	0.5	0.7	11.533	B
C-A	854	214			854				
A-B	13	3			13				
A-C	706	176			706				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	510	0.270	137	0.2	0.4	9.644	A
B-A	6	1	50	0.110	5	0.0	0.1	79.707	F
C-AB	258	65	475	0.544	256	0.7	1.1	16.316	C
C-A	1046	261			1046				
A-B	15	4			15				
A-C	864	216			864				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	509	0.271	138	0.4	0.4	9.701	A
B-A	6	1	49	0.111	5	0.1	0.1	81.785	F
C-AB	258	65	475	0.544	258	1.1	1.2	16.587	C
C-A	1046	261			1046				
A-B	15	4			15				
A-C	864	216			864				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	570	0.197	113	0.4	0.2	7.878	A
B-A	4	1	136	0.033	5	0.1	0.0	27.551	D
C-AB	210	53	521	0.404	212	1.2	0.7	11.737	B
C-A	854	214			854				
A-B	13	3			13				
A-C	706	176			706				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	610	0.154	94	0.2	0.2	6.989	A
B-A	4	0.94	199	0.019	4	0.0	0.0	18.464	C
C-AB	176	44	555	0.318	177	0.7	0.5	9.555	A
C-A	715	179			715				
A-B	11	3			11				
A-C	591	148			591				

2031, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		9.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.78	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)	Run automatically
D7	2031	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	665	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	409	100.000
C - A5 (S)		ONE HOUR	✓	880	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	3	662
	B - B578 Lutterworth Road	61	0	348
	C - A5 (S)	789	91	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.83	42.52	4.2	E	319	479
B-A	0.60	77.58	1.3	F	56	84
C-AB	0.20	8.86	0.2	A	84	125
C-A					724	1086
A-B					3	4
A-C					607	911

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	262	65	596	0.440	259	0.0	0.8	10.600	B
B-A	46	11	274	0.168	45	0.0	0.2	15.706	C
C-AB	69	17	577	0.119	68	0.0	0.1	7.065	A
C-A	594	149			594				
A-B	2	0.56			2				
A-C	498	125			498				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	313	78	551	0.567	311	0.8	1.3	14.838	B
B-A	55	14	214	0.256	54	0.2	0.3	22.459	C
C-AB	82	20	547	0.149	82	0.1	0.2	7.727	A
C-A	709	177			709				
A-B	3	0.67			3				
A-C	595	149			595				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	383	96	468	0.818	373	1.3	3.7	34.821	D
B-A	67	17	117	0.572	64	0.3	1.1	63.912	F
C-AB	100	25	507	0.198	100	0.2	0.2	8.845	A
C-A	869	217			869				
A-B	3	0.83			3				
A-C	729	182			729				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	383	96	462	0.830	381	3.7	4.2	42.523	E
B-A	67	17	112	0.602	66	1.1	1.3	77.581	F
C-AB	100	25	507	0.198	100	0.2	0.2	8.857	A
C-A	869	217			869				
A-B	3	0.83			3				
A-C	729	182			729				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	313	78	547	0.572	324	4.2	1.4	16.914	C
B-A	55	14	210	0.261	59	1.3	0.4	24.291	C
C-AB	82	20	547	0.149	82	0.2	0.2	7.742	A
C-A	709	177			709				
A-B	3	0.67			3				
A-C	595	149			595				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	262	65	595	0.441	264	1.4	0.8	10.977	B
B-A	46	11	273	0.168	47	0.4	0.2	15.963	C
C-AB	69	17	577	0.119	69	0.2	0.1	7.087	A
C-A	594	149			594				
A-B	2	0.56			2				
A-C	498	125			498				

2031, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		2.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.46	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)	Run automatically
D8	2031	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	778	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	140	100.000
C - A5 (S)		ONE HOUR	✓	1241	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	13	765
	B - B578 Lutterworth Road	4	0	136
	C - A5 (S)	1003	238	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.29	9.78	0.4	A	125	187
B-A	0.10	90.83	0.1	F	4	6
C-AB	0.55	16.41	1.2	C	219	328
C-A					920	1380
A-B					12	18
A-C					702	1053

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	616	0.166	102	0.0	0.2	6.992	A
B-A	3	0.75	196	0.015	3	0.0	0.0	18.658	C
C-AB	179	45	559	0.320	177	0.0	0.5	9.382	A
C-A	755	189			755				
A-B	10	2			10				
A-C	576	144			576				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	578	0.211	122	0.2	0.3	7.888	A
B-A	4	0.90	132	0.027	4	0.0	0.0	28.003	D
C-AB	214	53	526	0.407	213	0.5	0.7	11.464	B
C-A	902	225			902				
A-B	12	3			12				
A-C	688	172			688				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	519	0.289	149	0.3	0.4	9.723	A
B-A	4	1	45	0.099	4	0.0	0.1	88.331	F
C-AB	262	66	482	0.545	261	0.7	1.2	16.147	C
C-A	1104	276			1104				
A-B	14	4			14				
A-C	842	211			842				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	518	0.289	150	0.4	0.4	9.782	A
B-A	4	1	44	0.100	4	0.1	0.1	90.832	F
C-AB	262	66	482	0.545	262	1.2	1.2	16.412	C
C-A	1104	276			1104				
A-B	14	4			14				
A-C	842	211			842				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	578	0.212	123	0.4	0.3	7.924	A
B-A	4	0.90	131	0.027	4	0.1	0.0	28.354	D
C-AB	214	53	526	0.407	216	1.2	0.7	11.666	B
C-A	902	225			902				
A-B	12	3			12				
A-C	688	172			688				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	616	0.166	103	0.3	0.2	7.021	A
B-A	3	0.75	195	0.015	3	0.0	0.0	18.770	C
C-AB	179	45	559	0.320	180	0.7	0.5	9.517	A
C-A	755	189			755				
A-B	10	2			10				
A-C	576	144			576				

2031 + Dev, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		18.44	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.44	C

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)	Run automatically
D9	2031 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	682	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	432	100.000
C - A5 (S)		ONE HOUR	✓	885	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	4	678
	B - B578 Lutterworth Road	64	0	368
	C - A5 (S)	791	94	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	10
	B - B578 Lutterworth Road	0	0	1
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.93	74.36	7.9	F	338	507
B-A	0.85	171.97	3.0	F	59	88
C-AB	0.21	9.06	0.3	A	86	129
C-A					726	1089
A-B					4	6
A-C					622	933

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	277	69	590	0.470	274	0.0	0.9	11.261	B
B-A	48	12	267	0.180	47	0.0	0.2	16.322	C
C-AB	71	18	573	0.123	70	0.0	0.1	7.152	A
C-A	596	149			596				
A-B	3	0.75			3				
A-C	510	128			510				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	83	543	0.609	328	0.9	1.5	16.541	C
B-A	58	14	204	0.282	57	0.2	0.4	24.401	C
C-AB	85	21	543	0.156	84	0.1	0.2	7.852	A
C-A	711	178			711				
A-B	4	0.90			4				
A-C	610	152			610				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	405	101	450	0.900	388	1.5	5.7	48.764	E
B-A	70	18	97	0.729	64	0.4	1.9	98.914	F
C-AB	103	26	501	0.207	103	0.2	0.3	9.045	A
C-A	871	218			871				
A-B	4	1			4				
A-C	746	187			746				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	405	101	435	0.930	397	5.7	7.9	74.356	F
B-A	70	18	83	0.851	66	1.9	3.0	171.969	F
C-AB	103	26	501	0.207	103	0.3	0.3	9.057	A
C-A	871	218			871				
A-B	4	1			4				
A-C	746	187			746				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	83	532	0.622	355	7.9	1.7	22.939	C
B-A	58	14	194	0.297	68	3.0	0.4	30.661	D
C-AB	85	21	543	0.156	85	0.3	0.2	7.865	A
C-A	711	178			711				
A-B	4	0.90			4				
A-C	610	152			610				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	277	69	589	0.471	280	1.7	0.9	11.798	B
B-A	48	12	266	0.181	49	0.4	0.2	16.671	C
C-AB	71	18	573	0.123	71	0.2	0.1	7.173	A
C-A	596	149			596				
A-B	3	0.75			3				
A-C	510	128			510				

2031 + Dev, 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	A5 / B578 Lutterworth Road Junction	T-Junction	Two-way	Two-way	Two-way		3.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.33	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)	Run automatically
D10	2031 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A5 (N)		ONE HOUR	✓	786	100.000
B - B578 Lutterworth Road		ONE HOUR	✓	148	100.000
C - A5 (S)		ONE HOUR	✓	1299	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	15	771
	B - B578 Lutterworth Road	5	0	143
	C - A5 (S)	1028	271	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A - A5 (N)	B - B578 Lutterworth Road	C - A5 (S)
From	A - A5 (N)	0	0	5
	B - B578 Lutterworth Road	0	0	0
	C - A5 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	10.69	0.5	B	131	197
B-A	0.22	182.47	0.2	F	5	7
C-AB	0.62	19.79	1.6	C	250	374
C-A					942	1414
A-B					14	21
A-C					707	1061

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	613	0.176	107	0.0	0.2	7.099	A
B-A	4	0.94	183	0.021	4	0.0	0.0	20.040	C
C-AB	204	51	558	0.366	202	0.0	0.6	10.058	B
C-A	774	193			774				
A-B	11	3			11				
A-C	580	145			580				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	574	0.224	128	0.2	0.3	8.067	A
B-A	4	1	117	0.038	4	0.0	0.0	32.006	D
C-AB	244	61	524	0.465	243	0.6	0.8	12.723	B
C-A	924	231			924				
A-B	13	3			13				
A-C	693	173			693				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	157	39	500	0.315	157	0.3	0.5	10.471	B
B-A	6	1	26	0.213	5	0.0	0.2	166.399	F
C-AB	301	75	482	0.624	298	0.8	1.6	19.228	C
C-A	1129	282			1129				
A-B	17	4			17				
A-C	849	212			849				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	157	39	494	0.319	157	0.5	0.5	10.692	B
B-A	6	1	25	0.221	5	0.2	0.2	182.468	F
C-AB	301	75	482	0.624	301	1.6	1.6	19.788	C
C-A	1129	282			1129				
A-B	17	4			17				
A-C	849	212			849				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	573	0.224	129	0.5	0.3	8.130	A
B-A	4	1	116	0.039	5	0.2	0.0	32.883	D
C-AB	244	61	525	0.465	247	1.6	0.9	13.094	B
C-A	924	231			924				
A-B	13	3			13				
A-C	693	173			693				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	613	0.176	108	0.3	0.2	7.136	A
B-A	4	0.94	182	0.021	4	0.0	0.0	20.211	C
C-AB	204	51	558	0.366	205	0.9	0.6	10.253	B
C-A	774	193			774				
A-B	11	3			11				
A-C	580	145			580				