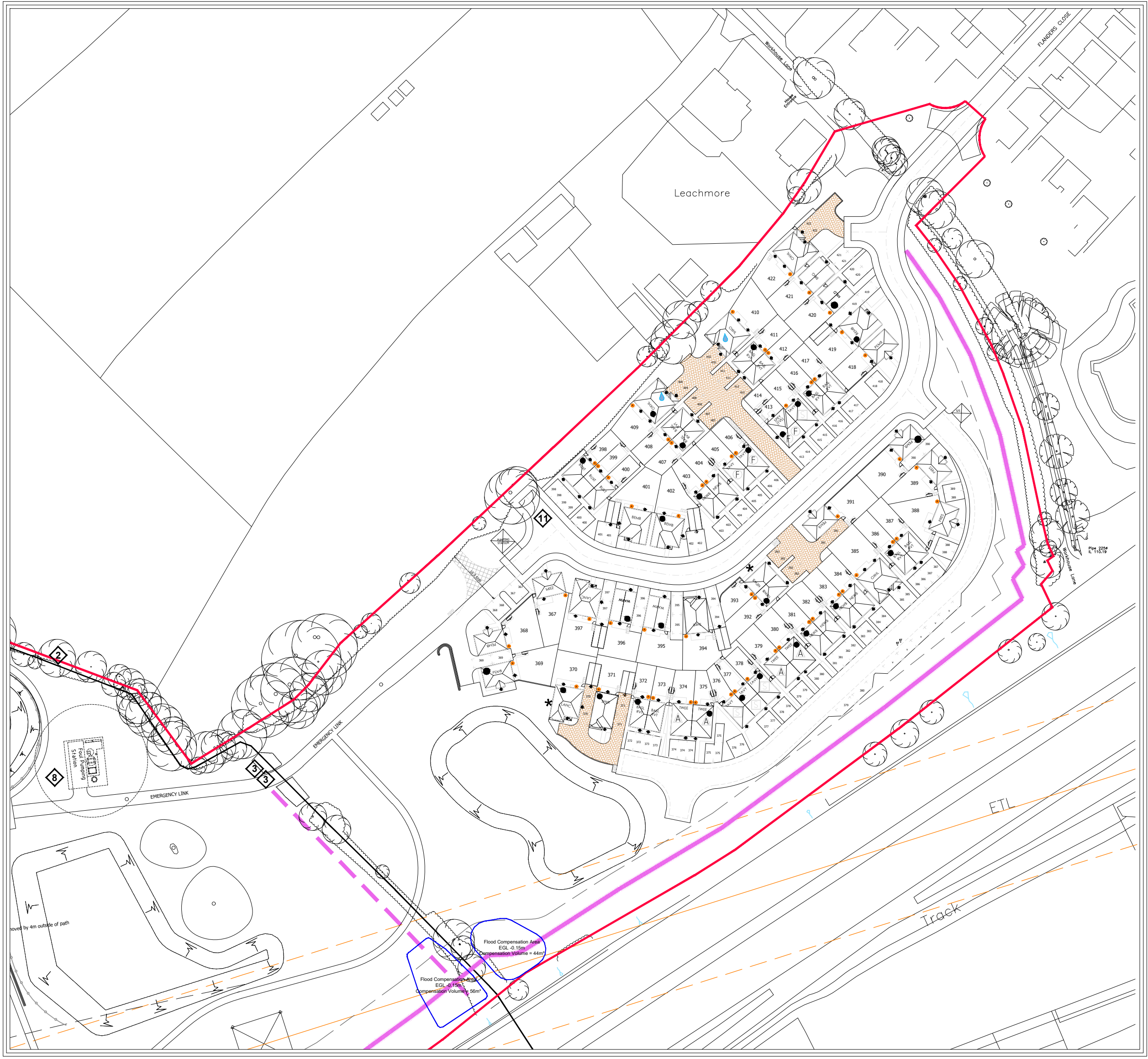
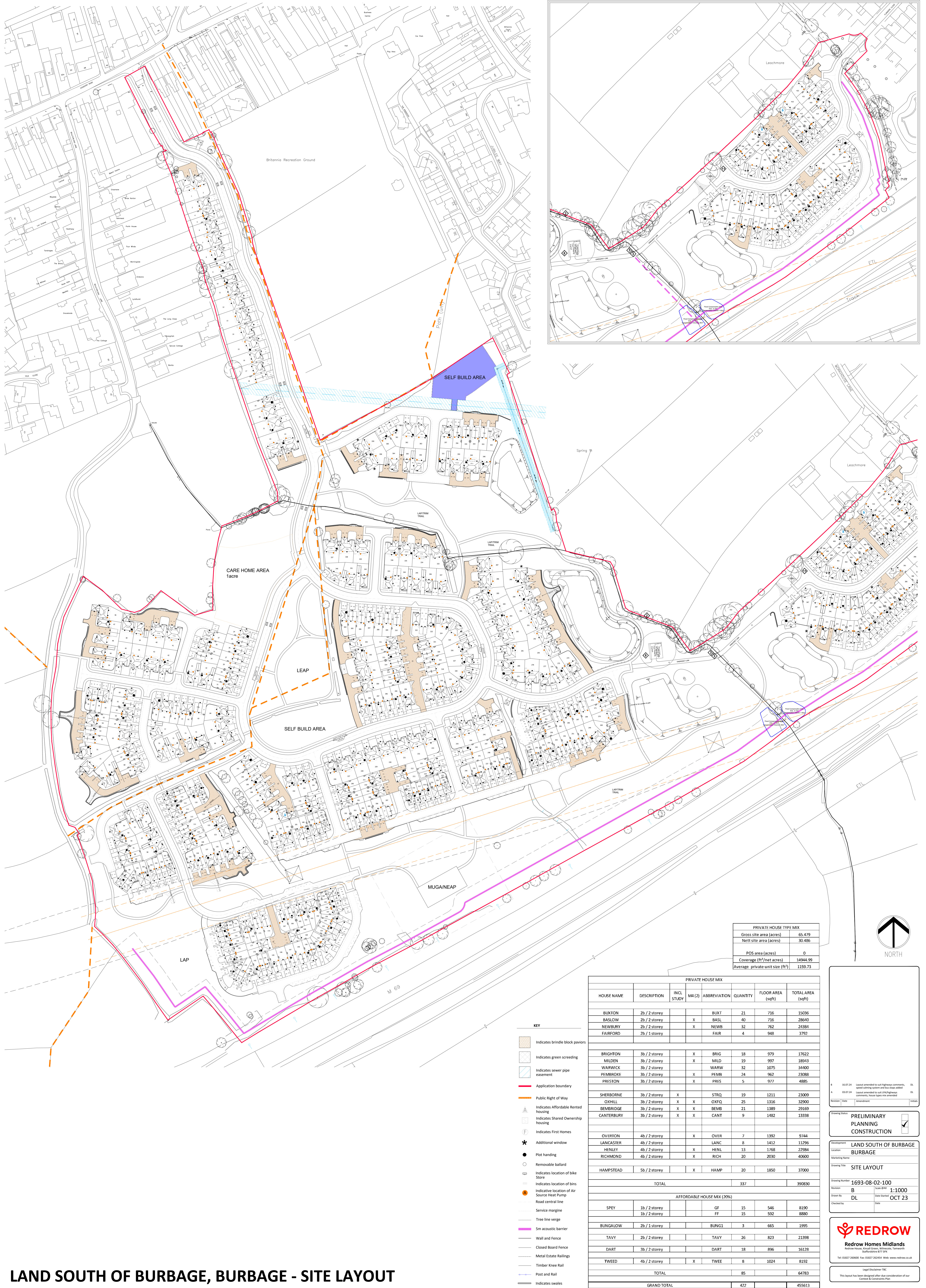


Appendices

Appendix A: Proposed Masterplan



PRIVATE HOUSE TYPE MIX	
Gross site area (acres)	65.479
Nett site area (acres)	30.486
POS area (acres)	0
Coverage (ft²/net acres)	14944.99
Average private unit size (ft²)	1159.73

PRIVATE HOUSE MIX						
HOUSE NAME	DESCRIPTION	INCL STUDY	M4 (2)	ABBREVIATION	QUANTITY	FLOOR AREA (sqft)
BUXTON	2b / 2 storey			BUXT	21	716
BASLOW	2b / 2 storey		X	BASL	40	716
NEWBURY	2b / 2 storey		X	NEWB	32	762
FAIRFORD	2b / 1 storey			FAIR	4	948
BRIGHTON	3b / 2 storey		X	BRIG	18	979
MILDEN	3b / 2 storey		X	MILD	19	997
WIARWICK	3b / 2 storey		X	WIARW	32	1075
PENBROKE	3b / 2 storey		X	PENB	24	962
PRESTON	3b / 2 storey		X	PRE	5	977
SHERBORNE	3b / 2 storey	X		STRQ	19	1211
OXHILL	3b / 2 storey	X	X	OXFQ	25	1316
BENBRIDGE	3b / 2 storey	X	X	BEMB	21	1389
CANTERBURY	3b / 2 storey	X	X	CANT	9	1482
OVERTON	4b / 2 storey		X	OVER	7	1392
LANCASTER	4b / 2 storey			LANC	8	1412
HENLEY	4b / 2 storey		X	HENL	13	1768
RICHMOND	4b / 2 storey		X	RICH	20	2030
HAMPSTEAD	5b / 2 storey		X	HAMP	20	1850
TOTAL					337	390830
AFFORDABLE HOUSE MIX (20%)						
SPEY	1b / 2 storey			GF	15	546
	1b / 2 storey			FF	15	592
BUNGALOW	2b / 1 storey			BUNG1	3	665
TAVY	2b / 2 storey			TAVY	26	823
DART	3b / 2 storey			DART	18	896
TWEED	4b / 2 storey		X	TWEE	8	1024
TOTAL					85	64783
GRAND TOTAL					422	455613

LAND SOUTH OF BURBAGE, BURBAGE - SITE LAYOUT

16.07.24
03.07.24
Revision
Date
Amendment
Initials

16.07.24
03.07.24
Revision
Date
Amendment
Initials

16.07.24
03.07.24
Revision
Date
Amendment
Initials

PRELIMINARY
PLANNING
CONSTRUCTION

Development
Location
Marking Name
Drawing Title
Drawing Number
Revision
Checked by
Date

1693-08-02-100
B
DL
1:1000
OCT 23

REDROW

Redrow Homes Midlands
Redrow House, Bristol Green, Walscott, Tamworth
B47 9JH
Tel: 01827 260600 Fax: 01827 262454 Web: www.redrow.co.uk

Legal Disclaimer
This layout has been designed after due consideration of our
Context & Constraints Plan

Appendix B: Consultee Scoping Correspondence

Andy Miles

Subject: RE: P19-409 Burbage Fields, Burbage Phase 2 - Wider Site

From: Harry Horsley [REDACTED]
Sent: 30 July 2021 16:41
To: Nick Smith [REDACTED]
Subject: RE: P19-409 Burbage Fields, Burbage Phase 2 - Wider Site

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

Good afternoon Nick,

Thank you for your enquiry below.

I would focus in the first instance of understanding if safe and suitable access can be gained from the areas indicated as I am familiar with the network in this area and think it could be challenging. You are probably already aware of the design guide requirement of no more than 150 dwellings from a single point of access so agree with the approach of seeking two points of access.

With regard to the off site impact, a development of the scale proposed would need to be tested using LCC's PRTM strategic transport model. Enquiries can be made via ndi@leics.gov.uk in the first instance and we would welcome involvement in this process and in agreeing necessary inputs. You may also be advised to consult with Highways England given the proximity to the SRN.

Kind regards,

Harry

a

Highway Development Management

0116 305 4562



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](#).

Jake Blay

From: Seldon, Martin [REDACTED]
Sent: 09 August 2022 14:53
To: Andy Miles
Cc: Moss, Stephen R; Stachelek, Dagmara
Subject: RE: P21-390 - Burbage Fields Farm, Burbage - Forecast Assumptions

Follow Up Flag: Follow up
Flag Status: Flagged

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

Hi Andy,

Thank you for sending through the forecasting assumptions on 1 August 2022, our comments are detailed below:

- The use of three development zones would seem to be acceptable, although we would need to agree the neighbouring “parent” zones upon which the distribution is being based;
- As mentioned the distribution at the access points has been previously agreed, although we understand that the Local Authority have some concerns over the acceptability of the Coventry Road access, and this therefore would change the distribution of traffic and thus the results of any PRTM modelling. We would therefore recommend that this is agreed with Leicestershire CC prior to undertaking any modelling of the highway way network to avoid any potential abortive work;
- However, we will await the results of the PRTM distribution and can discuss the results at that time;
- The assessment years are proposed as 2021, 2026 and 2031, in line with the Circular 02/2013 we would require an assessment at:
 - the development and construction phase;
 - the opening year, assuming full build out and occupation, and
 - either a date ten years after the date of registration of the associated planning application or the end of the Local Plan period (whichever is the greater).
- The assessment at opening will be used for the determination of impact mitigation needs whilst the latter is necessary to determine the risk which will transfer to us. It should then be confirmed how the years proposed meet with this requirement;
- We have reviewed the Uncertainty Log and deem them as acceptable; and
- In regard to the use of the November 2021 TAG Databook values, considering the limited changes in the guidance, as outlined in your email, and taking into account that PRTM flow changes do not directly feed into the detailed junction assessments, the use November 2021 Databook is acceptable to us in this instance.

Highway Outputs

- Highway Outputs to be obtained from the SATURN model (AM/PM Peaks) (PDF zoomable plots with small labels over appropriate bandwidths), including:
 - Highway flow changes (This should provide a good overview of change in flows and routings among various scenarios.)
 - Between Base year and do-minimum forecast year 1

- Between do-minimum (DM) forecast year 1 (FY1) and DM forecast year 2 (FY2)
- Between do-something (DS) FY1 and DM FY1
- Between DS FY2 and DM FY2
- Highway Flow
 - Base year
 - DM FY1
 - DM FY2
 - DS FY1
 - DS FY2
- Volume Capacity Ratios (single plot for all nodes in AOI with bands <70%, 70% - 85%, 85% and above) – Base, DM/DS FY1 and DM/DS FY2;
- Individual Junction Plots (Delays and V/C at approaches) - Further plots for DM FY1, DM FY2 and Base may be required based on DS performance;
- Select Link Analysis of Development Traffic – Origins and Destination separate and combined;
- Flow data for junctions – For junctions to be considered for detailed assessment or which are showing V/C of greater than 85% at any approach;
- *“The traffic flows from the PRTM model for the base year and ‘with development’ and ‘without development’ forecast scenarios will be input into standalone junction capacity assessments where required”.* PRTM model flow outputs will only provide input for the furnishing flows that needs to be used for detailed junction assessment. Procedure for furnishing the input flows is well established by LCC and needs to be applied to PRTM output flows before they can be used for detailed junction assessment;
- *“Junctions for capacity testing will be determined by the Individual Junction Volume Capacity Ratios extracted from the PRTM model”.* Agreed, subject to how well the junction is calibrated in the base model. We will need to see the Volume capacity ratios as individual approaches in addition to the overall junction to ensure there are no unrealistic delays at some approaches;

I hope that the above is clear and will allow you to proceed but if you require any further information then please do not hesitate to contact me, and I would just again like to highlight that we would recommend that the modelling approach is agreed with Leicestershire CC at the earliest opportunity to avoid any potential abortive work.

Kind regards

Martin Seldon, Assistant Spatial Planner

National Highways | The Cube | [REDACTED]

Tel: [REDACTED]

Web: www.nationalhighways.co.uk

GTN: 0300 470 3345

For information about our engagement with the planning system please visit

<https://highwaysengland.co.uk/our-work/planning-and-the-strategic-road-network-in-england/>

From: Andy Miles [REDACTED]

Sent: 01 August 2022 16:48

To: Seldon, Martin [REDACTED] Moss, Stephen R [REDACTED]

Subject: P21-390 - Burbage Fields Farm, Burbage - Forecast Assumptions

Martin / Stephen,

Jake Blay

From: Seldon, Martin [REDACTED]
Sent: 29 September 2022 14:24
To: Andy Miles
Cc: Moss, Stephen R
Subject: RE: 3851.161 Burbage Fields - Dev Trip Distribution Plots

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

Hi Andy,

Thank you for sending through the development traffic plots for Burbage Fields Farms. We have undertaken a high level assessment including a sensitivity test utilising census data and Google journey planner, upon which it can be determined that the assignment presented is sensible.

On this basis, the assignment of trips within the model is deemed as acceptable.

We would though recommend that the approach is also agreed with the Local Authority to avoid any potential abortive work.

Kind regards

Martin Seldon, Assistant Spatial Planner

National Highways | The Cube | 199 Wharfside Street | Birmingham | B1 1RN

Tel: + [REDACTED]
Web: [REDACTED]
GTN: [REDACTED]

For information about our engagement with the planning system please visit
<https://highwaysengland.co.uk/our-work/planning-and-the-strategic-road-network-in-england/>

From: Andy Miles [REDACTED]
Sent: 20 September 2022 11:23
To: Moss, Stephen R [REDACTED] Seldon, Martin [REDACTED]
Subject: FW: 3851.161 Burbage Fields - Dev Trip Distribution Plots

Good morning Martin / Stephen,

Please see attached the development traffic plots for Burbage Fields Farm.

Once you have agreed to the assignment of trips within the model we can progress with the forecast model runs.

Regards
Andy

Jake Blay

To: Seldon, Martin
Subject: RE: P21-390 - Burbage Fields Farm, Burbage - furnessing process

From: Seldon, Martin [REDACTED]
Sent: Wednesday, October 19, 2022 12:33 PM
To: Andy Miles [REDACTED]
Cc: Moss, Stephen R [REDACTED] Stachelek, Dagmara [REDACTED]
Subject: RE: P21-390 - Burbage Fields Farm, Burbage - furnessing process

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

Good afternoon Andy

Thank you for sending through the proposed methodology for the furnessing and we can set out our thoughts as follows:

Firstly, we would suggest that you also contact Leicestershire County Council, as any methodology will impact the local road network, and as such their agreement will be required.

However, we can then set out our recommendations, but as above, we suggest that these are agreed with Leicestershire to avoid any abortive work:

- Ensure that count data is all ATC from neutral days as recommended in TAG UNIT M1.2 'Data Sources and Surveys'.
- Please note, that as we understand, 2021 is not a PRTM traffic model base year but a forecast year with a base of 2014.

Thus, a potential furnessing method could be applied using a 3 Step Furnessing Approach for 2021 Observed Data as below:

Step 1	Uplifting the 2021 Observed Data with local covid factors from Leicestershire to create neutral traffic data as represented in PRTM.
Step 2	Calculating the difference between each Forecast Scenario (2026 DM, 2026 DS, 2031 DM, 2031 DS) and the 2021 PRTM model forecast.
Step 3	Adding the differences between each Forecast Scenario resulted in Step 2 on top of the 2021 Observed Data in STEP1

If only 2021/2026 forecasts are available, then following steps maybe required

--

Step 1	Uplifting the 2022 Observed Data with local covid factors from Leicestershire to create neutral traffic data as represented in PRTM.
Step 2	Calculating the 2022 Equivalent of the PRTM, assuming 2021 and 2026 forecasts are available. This is calculated by: 2022 PRTM Equivalent Formula: $\text{PRTM 2021} + ((\text{PRTM 2026} - \text{PRTM 2021})/5)$
Step 3	Calculating the difference between each Forecast Scenario (2026 DM, 2026 DS, 2031 DM, 2031 DS) and the 2022 PRTM model forecast.
Step 4	Adding the differences between each Forecast Scenario resulted in Step 3 on top of the 2022 Observed Data in STEP1

Martin Seldon, Assistant Spatial Planner

National Highways | The Cube | 199 Wharfside Street | Birmingham | B1 1RN

Tel: [REDACTED]

Web: www.nationalhighways.co.uk

GTN: 0300 470 3345

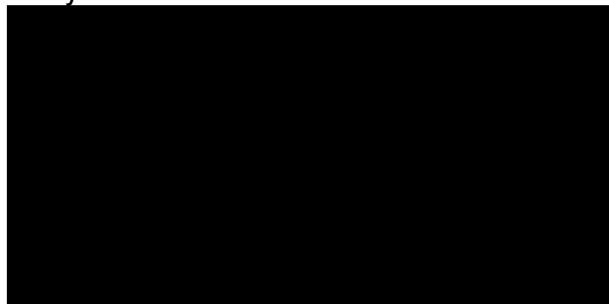
For information about our engagement with the planning system please visit

<https://highwaysengland.co.uk/our-work/planning-and-the-strategic-road-network-in-england/>

Our ref: 7046

Your Ref:

Andy Miles



Sammantha Rose
Assistant Spatial Planner



28 April 2023

Dear Andy,

Pre-Application on Land South of Burbage (formerly Burbage Fields Farm, Burbage)

Thank you for providing National Highways the opportunity to comment on the above-mentioned pre-planning application for a proposed residential scheme of 442 dwellings in Burbage.

National Highways (formally Highways England) 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.

In responding to development related consultations, we have regard to the National Planning Policy Framework (NPPF) and DfT Circular 01/2022: The Strategic Road Network and the Delivery of Sustainable Development ('the Circular'). The latter document sets out National Highways policy on sustainable development and our approach to proposals which may have an impact on our network.

The SRN in the vicinity of the proposed development is the A5 trunk road and M69 motorway.

We note the proposal comprises of two parcels of land (388 dwellings on the west side and 38 dwellings on the east side) with no highway access between them.

Traffic Impact

We note the two-vehicular trips during weekday AM and PM peaks would be 374 and 301, respectively. The figures are derived from a local housing estate, and we accept the methodology and findings.

However, in terms of trip distribution, given the current trip rates and the lack of highway access between the two parcels, we would require the distribution methodology to be reviewed. Given the significant demand pressures, applications that could potentially impact the A5 Longshoot / Dodwells junction have been requested to quantify their traffic impacts on it. Whilst we acknowledge the distance between the application site and this junction is more than 2.5 miles, given this junction has significant planning implications to National Highways, we would request this application's trip distribution assessment to be extended to cover the A5 Longshoot / Dodwells junction. This allows us to review any material implications of the development proposal on the SRN on a broader scale.

The use of the Hinckley Bosworth 014 Middle Super Output Area is considered acceptable as a basis to determine the modal share for person trips as this includes the existing residential areas adjacent to the site. We also support the use of the PRTM assessment to evaluate the traffic impact. In the impact assessment, the scenarios in 2026 and 2031 (with and without development) are acceptable. Whilst we deem the Furness methodology acceptable, the consensus from local highway authority of Leicestershire ought to be sought by the applicant.

We note that a PRTM Forecasting Report dated October 2022 has been included. Yet, it is essential to demonstrate all planning and network assumptions are correct and are based on the most updated data. We would, therefore, require the report to be updated based on the agreed trip rates before we can comment on the details of the methodology to be adopted.

It is estimated that 81 and 73 two-way vehicular trips would be generated onto the M69 Junction 1 during the AM and PM peaks respectively. The maximum increase of trips on the M69 northbound diverge slip road is likely to be 10 and 32 in the AM peak PM peaks respectively. The use of LINSIG to assess the junction is acceptable.

I hope the above would be helpful for you to take further actions. If I can be of any further assistance on this matter, or to arrange a meeting, please do not hesitate in contacting me directly.

Yours sincerely,

Sammantha Rose
Sammantha Rose

Midlands Operations Directorate

Email: [REDACTED]

Appendix C: Consultee Post Submission Correspondence



National Highways Planning Response (NHPR 22-12) Formal Recommendation to an Application for Planning Permission

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

To: Hinckley & Bosworth Borough Council (FAO Alex Jelley)

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

Council's Reference: 24/00083/HYB

Location: Land At Burbage Fields Farm Bullfurlong Lane Burbage

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/24/04828

Referring to the consultation on a planning application dated 29 January 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.

Date: 16 February 2024	
 Signature:	
Name: Martin Seldon	Position: Assistant Spatial Planner
National Highways National Highways The Cube 199 Wharfside Street 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.

Recommended Non-Approval

It is recommended that the application should not be approved for a period of three months from the above date to allow the applicant to provide the additional information set out below.

The site is in the outskirts of Burbage village, Leicestershire. The closest point of impact with the Strategic Road Network (SRN) is the M69 junction 1 / A5 trunk road, circa 800m north from the junction. The site also abuts the M69 at the northbound side.

National Highways has previously engaged with the applicant at pre-application stage and provided comments to agree on transport matters.

The proposed development comprises 422 dwellings, 11 self-build plots and a residential care home for 66 members. Based on our review of the Transport Assessment (TA) we have the following comments:

The trip generation methodology utilised a combination of self-build plots and housing development to create a total of 433 dwellings. Trip rates were obtained from a traffic survey conducted in a nearby residential area at Ambion Way which comprises a total of 72 dwellings. The trip rates from TRICS are lower than the trip rates obtained from the traffic survey. We therefore consider that the approach undertaken by the applicant is suitable.

For the residential care facility, the trip rates are derived from the TRICS data, and this is confirmed by our independent checks. We are therefore content with the trip generation process overall.

National Highways had already agreed to adopt the PRTM model for the trip distribution process for the residential development consisting of 433 homes. It is noted that the applicant has used appropriate 2021 census data to calculate the trip distribution for the residential care home using a gravity model. Traffic assignment has

been assigned using the PRTM mode, this information matches with the number of trips calculated during the trip generation process.

In the TA, the TEMPro growth factor is based on Version 7.2C. We recommend growth factors are recalculated using the most recent version of TEMPro V8.1.

Traffic flows shown in Appendix CC do not match with those provided in Appendix QQ capacity assessment. This needs to be reviewed and corrected. In addition, we request the applicant provides the calculation spreadsheets used for the forecast year to validate the information provided.

There appears to be some confusion in the PRTM forecasting report between the trip distribution and trip assignment. The trip distribution involves determining origins and destinations for development trips, which are not impacted by the zone connection. On the other hand, the trip assignment relates to the path/route taken by the trips. We are agreeable to retaining the trip distribution, but we require a detailed explanation of the procedure for the trip assignments applied without an actual PRTM run. This is crucial, as the paths of the trips will change if the connection between two zones is removed. This isn't a straightforward case of simple addition and subtraction once the trips leave the zone connection, as additional traffic loaded onto the Coventry Road access will have different route choices based on generalised costs for various links in the assignment model. Consequently, this is likely to lead to discrepancies in the local area route choice.

It is noted that zone 6014 from the PRTM model, situated adjacent to the proposed development, is utilised as a representative zone for trip distribution. Given that this zone is primarily residential, it is deemed a suitable match for the proposed development. Additionally, we would like to review the absolute trip distribution from the two development parcels stipulated in the TA, delineating the specific values for each.

While we cannot find the Volume/Capacity (V/C) comparison within the Area of Interest (AOI) selection criteria, we are broadly content with the choice of junctions for the detailed assessment, which includes M69 Junction 1 and A5/Lutterworth Road.

We note that the initial proposal identified 11 junctions for detailed assessment, while the TA section 6.1.8 has excluded two junctions, namely:

- i. A5 Watling Street / Wolvey Road junction.
- ii. B4109 Rugby Road / Brookside junction.

While we are not concerned about the Rugby Road junction, given its location away from the site and not being near to the Strategic Road Network (SRN), we would like to request detailed results for the A5/Wolvey Road junction.

We are happy with the application of the Furnessing methodology. Notably, we have observed the use of 2020 data for two locations, Burbage Road and Sapcote Road, where 2021 data was not available. While this may not be considered a major issue, it is acknowledged that the 2020 data could have been adjusted further with a growth rate to align it with 2021.

We have undertaken a review of the modelling assessments and merge and diverge assessments for the A5 / B578 Lutterworth Road priority junction and M69 Junction 1 signalised junction as these are the only two junctions assessed that will impact the SRN. There are two junctions on the B4109 Rugby Road which queues appear small and therefore it is unlikely these junctions will affect the operation of the M69 J1.

A5 / B578 Lutterworth Road - Junctions 10 Modelling Assessment

We note that the applicant has supplied the Junctions 10 model inputs and results for the A5/B578 Lutterworth Rd junction. An independent check has been undertaken and has identified differences in some geometric properties input into the junction model. In order to validate the information provided in the TA, we request the applicant supplies a CAD drawing of the junction with annotated geometric measurements for our review.

We also note that traffic flows provided within Appendix CC for 2026 and 2031 forecast years, however the Junctions 10 report for the junction assessment in Appendix QQ only includes assessments for 2021 and 2026 scenarios. Similarly, to the above point, to validate the information contained within the TA, we request the applicant supplies 2031 models for our review.

M69 Junction 1 – LinSig Modelling Assessment

From a comparison of the phase diagram and link information provided in Appendix SS, signal phases G and H seem to be provided on the links the opposite way round. In the phase diagram Phase G is identified for the eastern circulatory and Phase H is for the M69 Westbound off-slip, however this is the opposite on the link information. This therefore needs reviewing and amending.

A few alterations to lane lengths are recommended for several long lanes within the model. These are where long lanes have been used but diverge from a single lane further upstream.

- For lane J2:1/2 and J2:1/3 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.
- For lane J3:1/1 and J3:1/2 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.

- For lane J4:1/2 and J3:1/3 a lane length of 37 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.
- For lane J6:1/1 and J2:1/2 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.

Saturation flow values of 1900 PCU/Hr have been used for each lane. We recommend the applicant provides justification for using this value.

A maximum flow giving way value of 1155 PCU/Hr has been used at the B4109 Hinckley Road give way approach. The applicant needs to clarify why this value has been used for National Highways consideration on the approach.

Similarly, a justification is required for a give way co-efficient of 0.27 being used at the B4109 Hinckley Road give way lane approaches.

The lane connectors provided for the M69 EB off-slip need reviewing. Lane J6:1/1 has a connector provided to lane J1:3/2 (A5 North), based on a review the satellite imagery of the road markings this should be removed and a lane connector between lane J6:1/2 and lane J1:3/2 should be provided for the M69 EB off-slip to A5 North movement.

The traffic flows provided within the models do not seem to match the flows identified within Appendix CC. It is appreciated that the values to be used in LinSig are required to be in PCUs and may not match, therefore the applicant should provide the flow calculation spreadsheet used within the LinSig assessments for our review and validation of the information provided by the applicant.

The traffic signal specification should be provided for us to review the signal controller elements.

For all assessments, the proposed opening year needs to be clarified, as well as how the modelling assessments undertaken satisfy the evaluation of the opening year and requirements of DfT Circular 01/2022.

In the assessments undertaken, no model validation appears to have been undertaken or reported within the TA. National Highways recommends that Degree of Saturation validation for the LinSig model assessments and queue comparison validation for Junctions 10 model assessments are undertaken. This will provide comfort that the models represent existing network conditions. We also request LinSig models are provided for our review.

Merge & Diverge Assessment

Initial checks of the assessments provided in appendices TT and UU indicate that the merge and diverge flows do not align with summations using the traffic flow diagrams provided with the TA. The applicant therefore needs to supply the flow data used for the merge and diverge assessment. This is for National Highways to complete the review including the mainline flow data for 2021, 2026 and 2031 scenarios. Paragraph 8.11.2 of the TA states that mainline flows were obtained from the TRIS database, we also seek clarification on the sites used from the database.

Construction Traffic

We note the applicant intends to submit a Construction Traffic Management Plan (CTMP) prior to the start of construction of the proposal and we welcome this approach.

The proposed site shares a boundary with the M69 and is near the M69 J1 and the A5 trunk road. We therefore recommend the submission and approval of the CTMP is managed through a suitable condition, prior to commencement of any works for our approval and agreement. This is to ensure that the structural integrity and safely operation of the SRN is maintained during the entire construction period of the development.

National Highways expects that the CTMP includes, as a minimum, the following:

- Hours of working; Date works will commence & anticipated completion date/duration;
- Site Contact Details responsible for ensuring Health & Safety;
- Location of the site compounds and offices, erecting fencing, etc in relation to the M69 boundary;
- Confirmation of the intended construction access arrangements to and from the site from the M69 and A5 trunk road;
- Review the standard of the access to be used as the construction access to and from the site from the M69 and A5 Details of any gates / security / barrier – location;
- Photographs and accompanying description of any defects within the M69 boundary prior to the commencement of activities on site [Before and after];
- Details of the management and routing of heavy goods vehicle to and from the site;
- Details of any proposed traffic management and signing arrangements to be implemented upon the M69 and A5 Trunk Road (TRSDG) [any implementation of such will require a Road Space booking with National Highways];
- Anticipated average two-way daily traffic numbers associated with the construction phase of the project;
- and in terms of accommodating the volume, nature and type of construction traffic vehicular movements;
- Consider any conflict between all vehicles associated with the construction site and existing users of the proposed construction access arrangements to and from the site;

- Details of any special or abnormal deliveries or vehicular movements;
- Pollution prevention of National Highways assets (if any);
- Arrangements for parking and turning facilities for the vehicles of all site personnel;
- Arrangements for visitor parking and directions;
- Arrangements for the loading and unloading of plant and materials;
- Areas of storage for plant and materials used during the construction of the development;
- Details of any temporary lighting, including the type, number, location, illumination details and hours of use;
- Measures to prevent the deposition of deleterious material on the public highway during the construction period;
- Measures to suppress noise and dust;
- Details of works or temporary works directly abutting the M69 boundary; example of issues of concern to National Highways, features causing a hazard to motorists, structural integrity of the M69 / protection of environment, habitat & trees / impact upon street furniture, drainage etc;
- This document should be used by the construction contractor in the development of their Construction Health and Safety Plan.

Boundary Treatment

The proposed development is adjacent to the M69. Details should therefore be provided of the proposed boundary treatment.

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 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 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.

Technical Note

Project:	P21-390 Land at Burbage Fields Farm, Bullfurlong Lane, Burbage		
Subject:	Land at Burbage Fields Farm (application ref: 24/00083/HYB) Response to National Highways Planning Response (NHPR 22-12)		
Prepared by:	Jake Blay – Graduate Transport Planner	Date:	25/04/2024
Authorised by:	Andy Miles – Principal Transport Planner	Status:	S2 - Information
Document Ref:	21390-RLL-24-XX-TN-D-5015	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 comments raised by National Highways (NH) in their Planning Response (NHPR 22-12) dated 16th February 2024.
- 1.1.2 The NH response provides comments on the hybrid planning application (ref: for Land at Burbage Fields Farm, Bullfurlong Lane, Burbage, Leicestershire ([24/00083/HYB](#)) submitted 23rd January 2024. The description of development is provided below:
- 1.1.3 *“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).”*
- 1.1.4 This TN looks to address the comments raised by NH and provide the relevant information to resolve the concerns from NH where applicable. The response from NH has been included within this TN as **Appendix A**.
- 1.1.5 The NH response provided comments on the content and findings of the Transport Assessment (TA) (document ref: 21390-RLL-23-XX-RP-D-5001) submitted in support of the planning application.
- 1.1.6 At the time of writing this TN, the application is awaiting determination by Hinckley & Bosworth Borough Council (the local planning authority).

2 Progress to Date

2.1.1 A list of the agreed items from the NH response are provided below in **Table 1**.

Table 1: Agreed Items and Outstanding Comments

Item	Agreed	Comments
Local Trip Rates (Ambion Way survey)	✓	-
TRICS Trip Rates (Residential Care Facility)	✓	-
Use of the PRTM model for the residential trip distribution	✓	-
Use of a gravity model for the care home trip distribution	✓	-
TEMPro Growth Factors	✗	Addressed in Section 3.1 of this TN
Traffic flows in Appendix CC and Appendix QQ in the submitted TA	✗	Addressed in Section 3.2 of this TN
Detailed explanation of the procedure for the trip assignments applied	✗	Addressed in Section 3.2 of this TN
Use of Zone 6014 in the PRTM Model as a representative zone for residential trip distribution	✓	-
Opening Year confirmation	✗	Addressed in Section 3.2 of this TN
Choice of junctions of the detailed capacity assessments	✓	-
Junction model of A5 Watling Street / Wolvey Road junction	✗	Addressed in Section 3.3 of this TN
Furnessing methodology	✓	-
A5 / B578 Lutterworth Rd jct approach geometric info	✗	Addressed in Section 3.4 of this TN
A5 / B578 Lutterworth Rd jct model with 2031 scenario	✗	Addressed in Section 3.4 of this TN
M69 J1 model	✗	Addressed in Section 3.5 of this TN
Merge / Diverge Assessments	✗	Addressed in Section 3.6 of this TN
Construction Traffic	n/a	Details suggested by NH will be incorporated into the CTMP
Boundary Treatment	n/a	Not addressed within this TN. Details have been provided separately by the applicant.

3 NH Comments and RL Response

3.1 TEMPro Growth Factors

- 3.1.1 NH have requested that the TEMPro growth factors used as part of the assessment work are recalculated using the most recent version of TEMPro.
- 3.1.2 A comparison of TEMPro growth factors extracted from v7.2c and v8.1 for the Hinckley and Bosworth 014 Middle Super Output Area is presented below in **Table 2**.

Table 2: TEMPro Growth Factors

Road Type	TEMPro v7.2C		TEMPro v8.1	
	AM	PM	AM	PM
2023 – 2026				
Principal / A-Road	1.0214	1.0211	1.0126	1.0133
Trunk	1.0255	1.0253	1.0234	1.0241
Motorway	1.0366	1.0363	1.0304	1.0312
2023 – 2031				
Principal / A-Road	1.0547	1.0549	1.0586	1.0610
Trunk	1.0655	1.0656	1.0888	1.0913
Motorway	1.0930	1.0932	1.1180	1.1205

Note: Category labelling change between the two versions; v7.2c = Principal & v8.1 = A-Road

- 3.1.3 As shown in the **Table 2**, the TEMPro growth factors extracted for the 2023 to 2026 period from v7.2c show higher growth across all roads types and for both peak periods than the factors extracted from v8.1. For the 2023 to 2031 time period this trend is reversed, with the TEMPro v8.1 growth factors showing higher growth over the time period than the factors extracted from v7.2c.
- 3.1.4 As requested by NH, the TEMPro growth factors used within this assessment have been recalculated using TEMPro v8.1.
- 3.1.5 As a point of the note, any change in growth factors will only impact the junction modelling undertaken for the M69 J1. The other junctions assessed as part of the submitted TA were developed using traffic growth calculated from the PRTM model outputs.

3.2 Traffic Flow Spreadsheet

- 3.2.1 As requested by NH, a spreadsheet showing the traffic flow calculations, trip distribution and trip assignment calculations has been sent as a zip file alongside this TN for review.
- 3.2.2 The forecast year scenarios were determined by the future year scenarios set within the PRTM. For the purposes of the M69 J1 modelling the opening year is 2026. In line with DfT Circular 01/2022, the 2026 opening year assessment included trips associated with the fully built out development, forecasted growth and committed development. A contents table explaining the development of the spreadsheet presented in **Table 3**.

Table 3: Spreadsheet Summary

Scenario	Description	Note
-	2021 PRTM Traffic Flow	PRTM Output
-	2021 Furnessed Traffic Flows	Furnessed
-	Committed Development	-
Base Year	2021 Traffic Flows	-
-	2021 – 2026 PRTM growth	PRTM growth
Opening Year	2026 Traffic Flows	-
-	2021 – 2031 PRTM growth	PRTM growth
Forecast Year	2031 Traffic Flows	-
-	PRTM Distribution	PRTM output
-	Resi Veh Trip Distribution	-
-	Resi Veh Trip Assignment Flanders Cl	-
-	Resi Veh Trip Assignment Coventry Rd	-
-	Care Home Veh Trip Distribution	Gravity Model
-	Care Homes Veh Trip Assignment	-
-	Total Dev Veh Trip Assignment	-
Opening Year + Development	2026 + Development Trip Assignment	-
Forecast Year + Development	2031 + Development Trip Assignment	-
-	2023 Traffic Survey data	29/06/2023
-	TEMPro Growth Factors	v8.2
-	LinSig Matrices	-
	Merge / Diverge Assessments	-

3.3 A5 / Wolvey Road Junction

- 3.3.1 At the request of NH, a junction model has been developed for the A5/ Wolvey Road junction.
- 3.3.2 A DWG file with the annotated geometric measurements, junction modelling file and results output has been included within the zip file sent to NH alongside this TN.
- 3.3.3 The Junctions 10 model of the A5 / Wolvey Road junction has assessed the operation of the junction for the 2021 base year, 2026 opening year and 2031 forecast year both 'with' and 'without' development. The results of this can be seen below in **Table 4**.

Table 4: A5 / Wolvey Road Junction Capacity Assessment Results

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2021								
Stream B-C	0.7	281.65	0.53	F	0.1	15.58	0.06	C
Stream B-A	4.1	144.53	0.87	F	1.1	74.01	0.55	F
Stream C-AB	0.1	9.02	0.05	A	0.2	8.68	0.14	A
2026								
Stream B-C	0.1	53.44	0.13	F	0.3	81.67	0.28	F
Stream B-A	2.2	86.12	0.71	F	2.9	192.24	0.82	F
Stream C-AB	0.0	9.01	0.03	A	0.5	7.95	0.24	A
2026 + Dev								
Stream B-C	0.2	99.11	0.22	F	0.5	117.15	0.37	F
Stream B-A	3.2	114.25	0.81	F	3.0	189.69	0.83	F
Stream C-AB	0.0	9.03	0.03	A	0.5	7.98	0.25	A
2031								
Stream B-C	0.1	53.58	0.13	F	2.9	561.14	1.22	F
Stream B-A	2.0	91.81	0.70	F	8.4	428.19	1.21	F
Stream C-AB	0.0	9.34	0.02	A	0.6	7.68	0.27	A
2031 + Dev								
Stream B-C	0.3	106.24	0.23	F	3.0	578.06	1.25	F
Stream B-A	3.1	124.06	0.81	F	8.9	445.04	1.24	F
Stream C-AB	0.0	9.37	0.02	A	0.6	7.71	0.27	A

Note: Arm A – A5 (NW), Arm B – Wolvey Road, Arm C – A5 (SE)

- 3.3.4 For the 2026 opening year, in the AM peak hour the junction is seeing a betterment in performance, explained by the reduction in traffic growth between 2021 and 2026 as output from the PRTM model for the A5 / Wolvey Road Junction. The junction is operating within capacity in the 2026 + Dev opening year although delay increasing on the Wolvey Road approach. Due to a minor reduction in traffic growth 2026 to 2031 junction operation is similar in both 2026 and 2031 both 'with' and 'without' development.
- 3.3.5 For the PM peak hour, the junction is operating within capacity in both the 2026 opening year 'with' and 'without' development scenarios. In 2031, the junction is operating over theoretical capacity with an increase in queueing on the Wolvey Road approach with a minor increase in delay and queueing as a consequence of the ten development trips using the junction the PM peak hour.
- 3.3.6 On this basis the impact of development traffic at the junction is considered indiscernible.

3.4 A5 / B578 Lutterworth Road Junctions 10 Modelling Assessment

- 3.4.1 As requested by NH, a review of the junction model parameters used for the A5 / B578 Lutterworth Road junction capacity assessment has been undertaken. Following this review several parameters have been updated. A summary is provided below in **Table 5**.

Table 5: A5 / B578 Lutterworth Road Junctions Parameters

Parameter	Submitted model	Revised model
Width at give-way	10	10
Width at 5m	9.20	8.60
Width at 10m	5.50	5.20
Width at 15m	4.80	4.40
Width at 20m	4.60	4.20
Flare length	3.00	2.00

- 3.4.2 A DWG file with the annotated geometric measurements has been included within the zip file sent to NH alongside this TN.

The updated junction capacity assessment for the A5 / B578 Lutterworth Road junction, including the 2031 forecast year, can be seen in **Table 6** The junction modelling file and results output has been sent to NH within the zip file alongside this technical note.

Table 6: A5 / B578 Lutterworth Road Junction Capacity Assessment Results

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	10.35	0.37	B	D2	0.2	7.27	0.17	A
Stream B-A		0.1	23.43	0.09	C		0.0	27.39	0.03	D
Stream C-AB		0.3	9.21	0.21	A		0.7	11.93	0.42	B
	2026									
Stream B-C	D3	1.0	12.88	0.50	B	D4	0.3	8.70	0.24	A
Stream B-A		0.1	27.02	0.11	D		0.1	52.69	0.06	F
Stream C-AB		0.2	9.07	0.20	A		0.9	14.09	0.46	B
	2026 + Dev									
Stream B-C	D5	1.2	14.48	0.55	B	D6	0.3	9.00	0.26	A
Stream B-A		0.1	29.54	0.13	D		0.1	74.39	0.08	F
Stream C-AB		0.3	9.32	0.21	A		1.2	16.54	0.54	C
	2031									
Stream B-C	D7	3.0	29.71	0.76	D	D8	0.4	9.15	0.28	A
Stream B-A		0.9	51.83	0.48	F		0.1	84.80	0.09	F
Stream C-AB		0.2	8.88	0.20	A		1.2	16.41	0.55	C
	2031 + Dev									
Stream B-C	D9	4.4	41.45	0.83	E	D10	0.4	9.70	0.30	A
Stream B-A		1.2	75.05	0.58	F		0.2	159.76	0.16	F
Stream C-AB		0.3	9.13	0.21	A		1.6	19.72	0.62	C

Note: Arm A – A5 (NW), Arm B – B578 Lutterworth Road, Arm C – A5 (SE)

- 3.4.3 The junction capacity assessment results shown above demonstrate that the A5 / B578 Lutterworth Road junction is expected to operate within its theoretical capacity in all scenarios assessed in both peak hours.
- 3.4.4 During the 2026 + Dev PM peak hour, there is an increase in delay by approximately 20 seconds for vehicle movements from the B578 Lutterworth Road to the A5 (NW) in the 2026 forecast year with the inclusion of development trips. This is only exacerbated in the 2031 scenarios.
- 3.4.5 However, it should be considered that only a small number of vehicles make this movement at the junction, recorded as 15 in the AM peak hour and 4 in the PM peak hour in 2026. The dominant movement from the B578 Lutterworth Road to the A5 (SE) can accommodate the additional development trips with a minor increase in delay and queueing in the 2026 and 2031 scenarios.
- 3.4.6 On this basis, the impact of development traffic on junction operation is considered indiscernible.

3.5 M69 Junction 1 – LinSig Modelling Assessment

- 3.5.1 NH raised multiple points regarding the submitted M69 J1 LinSig model used to support the planning application. The comments raised by NH and the responses from RL can be seen below in **Table 7**.

Table 7: NH Comments Regarding M69 J1 LinSig Model and RL Responses

NH Comments	RL Response
Signal phases G and H seem to be provided on the links the opposite way round.	The signal phases for G and H have been corrected.
Lane length values are recommended for several long lanes within the model.	Lane length (PCUs) have been updated to: J2:1/2 – 32 PCUs J3:1/1 – 32 PCUs J4:1/2 – 37 PCUs J6:1/1 – 32 PCUs
Saturation flow values of 1900 PCU/Hr have been used for each lane. We recommend the applicant provides justification for using this value.	As stated in the 'LinSig Signal Roundabout Design' handbook, JCT, Issue 1.0, Section 2.5: <i>"For evaluation work, the use of 1,900 pcu/hr saturation flows for all signal controlled entry and circulating lanes at the majority of roundabouts should provide a robust assessment. These may be adjusted if dictated by site observations. However, it is recommended that consistent saturation flows are utilised for all lanes. This avoids any issue that may arise when traffic arrives at a circulating lane with a slightly lower saturation flow than an upstream lane feeding it."</i>
A maximum flow giving way value of 1155 PCU/Hr has been used at the B4109 Hinckley Road give way approach.	The maximum flow giving way value was calculated using the junction geometry of the approach. The calculation is shown in Appendix B .
Justification is required for a give way co-efficient of 0.27 being used at the B4109 Hinckley Road give way lane approach.	The co-efficient was calculated using the junction geometry of the approach. The calculation is shown in Appendix B .
The lane connectors provided for the M69 EB off-slip need reviewing.	The lane connectors from the M69 EB off-slip approach to the junction have been corrected to replicate the road markings on the carriageway. The alteration to the connectors now replicates: J6:1/1 to J1:3/1 J6:1/2 to J1:3/2

NH Comments	RL Response
The traffic flows provided within the models do not seem to match the flows identified within Appendix CC. It is appreciated that the values to be used in LinSig are required to be in PCUs and may not match, therefore the applicant should provide the flow calculation spreadsheet.	The traffic flows submitted within Appendix CC are in 'vehicles' whereas the traffic flow matrices within the LinSig models are in PCUs. The flow calculation spreadsheet used to convert "vehicles" into "PCUs" for input into the LinSig modelling has been included within the spreadsheet sent to NH alongside this TN.
The traffic signal specification should be provided for us to review the signal controller elements	The traffic signal specification received from NH on 10 th May 2022, can be seen in Appendix C.

- 3.5.2 It should be noted that the traffic signal specification was obtained for the M69 J1 to understand the staging and phasing arrangements for the junction. The signal specification highlighted that the junction operates using three different controllers, one for the M69 eastbound off slip and the A5 (West), the second for the B4109 Rugby Road (North) and M69 eastbound on slip and the third for the A5 (East).
- 3.5.3 It is noted that for the permitted roadside services facility (ref: [20/00531/HYB](#)), situated adjacent to M69 J1, a LinSig model was produced modelling the junction with each signalised entry and adjacent circulatory operating with a two stage controller. It was reported within the TA that supported the application that discussions between the applicant and NH confirmed that the approach was preferred by NH when addressing a junction of this type.
- 3.5.4 On this basis, this approach was replicated when developing the LinSig model of M69 J1.
- 3.5.5 The M69 J1 LinSig model has been updated to include the changes suggested by NH, documented in **Table 7** above. This updated model has also included the revised traffic flows calculated using the latest TEMPro growth factors from version 8.1.
- 3.5.6 A summary of the junction modelling results is provided below in **Table 8**. The junction modelling file and results output has been sent to NH within the zip file alongside this TN.

Table 8: M69 J1 Results

Scenario	AM Peak Hour (08:00 – 09:00)		PM Peak Hour (17:00 – 18:00)	
	PRC (%)	Total Delay (pcuHr)	PRC (%)	Total Delay (pcuHr)
2023 Base Year	2.9%	50.14	-3.1%	55.79
2026 Forecast Year	0.7%	52.47	-6.1%	59.35
2026 with Land South of Burbage (433 dwellings)	0.7%	54.01	-6.1%	61.85
2031 Forecast Year	-4.7%	60.52	-15.4%	73.74
2031 with Land South of Burbage (433 dwellings)	-4.7%	64.34	-15.4%	77.90

- 3.5.7 It should be noted that the conclusions drawn from the junction results of the previous model have not changed with the revised growth factors and adjustments to the LinSig model. On this basis the impact of the proposed development cannot be considered severe and the effect on junction operation is considered negligible.

3.6 Merge & Diverge Assessment

- 3.6.1 The merge and diverge assessments were undertaken using the traffic survey data recorded at the M69 J1 on Thursday 29th June 2023. This ensured consistency with the calculated traffic flows (in PCUs) used within the M69 J1 LinSig modelling, which utilised the 2023 traffic survey data as documented within the submitted TA.
- 3.6.2 The links selected for the merge and diverge assessments can be seen below in **Table 9**.

Table 9: Merge and Diverge Assessment Flow Locations

Location	Date	Source	Code
M69 J1 Northbound Diverge			
M69 Northbound (South of Junction)	29 th June 2023	WebTRIS	M69/8010A
M6 J2 Off-Slip to M69 Northbound (South of Junction)	29 th June 2023	WebTRIS	M69/8010K
M69 Northbound Off-Slip	29 th June 2023	Traffic Survey	-
M69 J1 Northbound Merge			
M69 Northbound (South of Junction)	29 th June 2023	WebTRIS	M69/8010A
M6 J2 Off-Slip to M69 Northbound (South of Junction)	29 th June 2023	WebTRIS	M69/8010K
M69 Northbound Off-Slip	29 th June 2023	Traffic Survey	-
M69 Northbound On-Slip	29 th June 2023	Traffic Survey	-
M69 J1 Southbound Diverge			
M69 Southbound (North of Junction)	29 th June 2023	WebTRIS	M69/8147B
M69 Southbound Off-Slip	29 th June 2023	Traffic Survey	-
M69 J1 Southbound Merge			
M69 Southbound (North of Junction)	29 th June 2023	WebTRIS	M69/8147B
M69 Southbound Off-Slip	29 th June 2023	Traffic Survey	-
M69 Southbound On-Slip	29 th June 2023	Traffic Survey	-

- 3.6.3 The selected sites were the closest operational count points to the junction, and data was selected for Thursday 29th June 2023.
- 3.6.4 As revised TEMPro growth factors (version 8.1) have been applied to the traffic flow calculations for the M69 J1 LinSig model, the merge and diverge assessments have been updated with this updated growth.
- 3.6.5 The updated merge and diverge assessments have been included within the traffic flow spreadsheet sent to NH alongside this TN within the zip file.
- 3.6.6 The conclusion drawn from the merge and diverge assessments within the submitted TA remain the same, and therefore the existing merge and diverge forms along the M69 J1 are well suited to serve the increased traffic flow as a result of the proposed development.



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.

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

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

Application Type: Hybrid

Description of Application:

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 Amanda Wright

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:

Given the scale of development and due to the volume and complexity of technical evidence submitted the Local Highway Authority (LHA) would advise the Local Planning Authority (LPA) that whilst the analysis has commenced formal observations are still forthcoming. As a result the LHA would request that the LPA do not determine the application before the LHA has had the opportunity to establish whether the residual cumulative impact of development can be mitigated in accordance with paragraph 115 of the NPPF (2023). The LHA will be in a position to provide a further response by Monday 11 March 2024.

Date Received
29 January 2024

Case Officer
David Hunt

Reviewer
AW

Date issued
19 February 2024

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/R1

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 Amanda Wright

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 consulted by the Local Planning Authority (LPA), Hinckley & Bosworth Borough Council (HBBC), on a planning application for the following development on land At Burbage Fields Farm Bullfurlong Lane Burbage:

'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 site is located on the urban fringe of Burbage, Leicestershire, approximately 700 metres to the south-west of Burbage village centre and approximately 2.65km to the south-east of Hinckley town

centre. The site's northern boundary abuts Coventry Road for approximately 20m with the eastern boundary formed by the Burbage Rugby Football Club ground, Britannia Park playing fields, existing open fields and Workhouse Lane. The southern boundary is formed by the M69 with the western boundary formed by Bullfurlong Lane and existing residential properties accessed off Bullfurlong Lane. A location plan is included in Figure 1 below:



Figure 1: Site Location Plan reproduced from Pegasus Group drawing number: P22-2560_EN_0001_A_0001_SL, 'Land at Burbage Fields Farm, Burbage - Site Location Plan', Revision A, dated 6 January 2023.

The applicant has submitted the following relevant documents / plans to support the planning application:

- Planning application form;
- Lichfields Covering Letter ref: 61188/04/JK/MSe/26557505v3, 'Application for Hybrid Planning Permission: Land to the south of Burbage', dated 20 December 2023;
- Pegasus Group drawing number: P22-2560_EN_0001_A_0001_SL, 'Land at Burbage Fields Farm, Burbage - Site Location Plan', Revision A, dated 6 January 2023;
- Pegasus Group Design and Access Statement, document ref: P22-2560_G001_B, 'Land at Burbage Fields Farm, Burbage', dated December 2023;
- Redrow Homes Midlands drawing number: 1693-08-02-100, 'Land south of Burbage – Site Layout', dated October 2023;
- 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', dated November 2023;
- Farrow Walsh drawing number: FW2285-E-500-01, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 1 of 6', Revision A3, dated 10 November 2023;
- Farrow Walsh drawing number: FW2285-E-500-02, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 2 of 6', Revision A3, dated 10 November 2023;
- Farrow Walsh drawing number: FW2285-E-500-03, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 3 of 6', Revision A3, dated 10 November 2023;
- Farrow Walsh drawing number: FW2285-E-500-04, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 4 of 6', Revision A3, dated 10 November 2023;
- Farrow Walsh drawing number: FW2285-E-500-05, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 5 of 6', Revision A3, dated 10 November 2023;
- Farrow Walsh drawing number: FW2285-E-500-06, 'Burbage Field Farm, Bullfurlong Lane, Hinckley - Engineering Layout Sheet 6 of 6', Revision A3, dated 10 November 2023;
- Rodgers Leask Limited Transport Assessment (TA) 'Land south of Burbage', Report Ref: 21390-RLL-23-XX-RP-D-5001, Revision P07, dated November 2023;
- Rodgers Leask Limited Residential Travel Plan (RTP) 'Land south of Burbage', Report Ref: 21390-RLL-23-XX-RP-D-5009, Revision P04, dated November 2023; and
- Rodgers Leask Limited Employee Travel Plan (ETP) 'Land south of Burbage', Report Ref: 21390-RLL-23-XX-RP-D-5014, Revision P02, dated November 2023.

This is the LHA's second response to the planning application, the first being a holding response dated 19 February 2024 pending a review of the application. The LHA has now had the opportunity to review some of the evidence submitted and is pleased to offer the following comments for consideration or further action by the applicant.

Site Access

The LHA acknowledge the intention to provide two site accesses to the proposed development and additional information regarding the constraints associated with the location of each site access.

The proposed vehicular accesses to the site would be achieved via a simple priority junction off Coventry Road and an extension to the existing Flanders Close, which connects to the wider network at B578 Lutterworth Road.

Coventry Road Access

According to the applicant, the access off Coventry Road would consist of a 6.75m wide carriageway and junction radius of 8m. There would be a 3m wide footway / cycleway on the eastern side of the new access on to Coventry Road and a 2m wide footway on the western side.

The proposed carriageway, which would be 6.75m wide, could normally serve up to 400 dwellings from a single point of access and facilitate access for buses. Given the scale of the proposals, the LHA consider the width of the proposed access road for this parcel of the development to be in line with the requirements in Part 3, Table DG1: General geometry of residential roads (internal) of the Leicestershire Highway Design Guide (LHDG).

The applicant has analysed the results from an Automatic Traffic Survey on Coventry Road that was undertaken in November 2021. The LHA notes that the data recorded an eastbound 85th percentile speed of 30.4 mph and westbound speeds of 32mph. However, the applicant has not submitted the raw data from the ATC and not provided a plan of where the speed survey was undertaken. Therefore, this information should be submitted to the LHA for review to enable the

LHA to check the data and confirm that it was collected at a suitable location. The Applicant should also confirm whether a permit was arranged for the survey.

The LHA note the parking survey data on Coventry Road and will provide further comments on this aspect of the proposed development when the speed survey and location plan has been provided.

Flanders Close Access

According to the applicant, the access off Flanders Close would form an extension to the access arrangements put forward as part of LPA applications 21/00502/OUT and 23/00148/OUT. The applicant proposed that the existing turning head / private drive will be re-constructed to accommodate the proposed development.

The extension to the access will consist of a 5.5m wide carriageway with 2m wide footways both sides of the carriageway.

Swept Path Analysis

The applicant has demonstrated on drawing numbers 21390-RLL-23-XX-DR-D-5012 Revision P03 that a refuse vehicle can access and egress the Coventry Road access. The applicant has also indicated that Appendix M of the TA includes swept path analysis to demonstrate that a refuse vehicle can safely access the development via Flanders Close access. However, whilst there is a drawing of the Flanders Close site access, there is no swept path analysis included.

Notwithstanding the above, the applicant has only used a 7.9m refuse vehicle, which is not acceptable. The LHA would advise the applicant to use a refuse vehicle of at least 11.2m length, unless the Local Waste Authority (Hinckley and Bosworth Borough Council) already uses a larger vehicle, in which case that vehicle should be used.

The swept path analysis should then be repeated for both accesses to ensure the refuse vehicle can access and egress the site for all movements. For all vehicles, the LHA require swept paths at junctions to be undertaken at a minimum vehicle speed of 10mph to provide a more realistic swept path. However, at turning heads a slower swept path analysis vehicle speed will continue to be acceptable.

The applicant should also submit updated drawings that demonstrate that the larger refuse vehicle and bus (see further comments below) can manoeuvre around the whole site.

Junction Operation

The applicant has tested the site access designs with the predicted flows in the 2026 Design Year with the proposed development. This predicts that the site accesses would operate within capacity in both the AM and PM peak hours.

Stage 1 Road Safety Audit

The Stage 1 Road Safety Audit (RSA1) identified three issues with the Coventry Road access that are listed below:

1. Risk of collisions at the access junction along Coventry Road;
2. Risk of pedestrian / cycle / vehicle conflict at shared pedestrian / cycle crossing just inside development access; and
3. Risk of pedestrian trips / falls at the access junction.

The LHA has reviewed the contents of the RSA1 and Designers Response for the Coventry Road access and they are accepted.

Notwithstanding the above, the LHA has reviewed the site access drawings against the guidance in the Leicestershire Highway Design Guide (available at resources.leicestershire.gov.uk/lhdg) and Design Manual Road and Bridges CD123 where appropriate and offers further comments for the applicant to consider / provide on the revised drawings:

Drawing number: 21390-RLL-23-XX-DR-D-5008 Coventry Rd Site Access

- The applicant should confirm that the simple junction arrangements are suitable for the proposed number of vehicle movements. The applicant should provide evidence that a ghost island has been considered; for example has DMRB CD123 Figure 2.3.1 been consulted and if so why it has not been required for the proposed access;
- For information, in accordance with LHDG Table DG 1 the longitudinal gradient at junctions should not exceed 1:30 for the first 10m;
- Provisions should be made for allowing cyclists to join the carriageway when exiting the development and to join the proposed shared footway/cycleway coming from Coventry Road; and
- The proposed uncontrolled crossing is remote from the desire lane for pedestrians on Coventry Road wishing to cross the access. It would be useful if this could be relocated closer to the junction.

Drawing number: 21390-RLL-23-XX-DR-D-5009 rev P05 Junction Bus Movements

- The drawings should state the vehicle speeds that have been used for the swept path analysis. LCC recommends a vehicle speed of 15kph is used;
- The right turn into the site manoeuvre shows overhanging of the Coventry Road kerbline which could result in pedestrians being struck by the bus if caught unaware. The applicant should provide clarification / further details on this point; and
- The left turn into the site manoeuvre shows overhanging of the Coventry Road centreline which could result in collisions with oncoming vehicles. The applicant should provide clarification / further details on this point.

Drawing number: 19409-RLL-20-XX-DR-C-2100 rev F Flanders Close General Arrangement

- There is a section of the proposed access road where the footways are 1.8m and 1.08m width, which is less than the 2.0m recommended by the LHDG Table DG9, although it is noted that in this location the access road is bounded by existing private properties;
- The 4.8m carriageway width at this pinch point complies with LHDG Table DG1 for developments of up to 50 dwellings;
- The proposed longitudinal gradient is in accordance with the requirements of LHDG Table DG1;
- For the vertical SSD diagram labels should be added showing the drivers eye height of 1.05m and object height of 0.26m as per LHDG Figure DG2c; and
- The drawing should confirm that the width of the proposed dropped crossing accesses where the turning head is to be removed will be in accordance with LHDG Figure DG17.

Drawing number: 19409-RLL-21-XX-DR-D-5004 rev C Workhouse Lane Stopping Up

- As noted on the drawing the exact layout of the bollards can be determined at the detailed design stage of the scheme. Facilities promoting pedestrian and cyclist use can also be investigated at that stage; and
- To the east of the proposed access road off Flanders Close, Workhouse Lane provides access to agricultural fields. The proposed dropped kerbs off the access road should be designed with agricultural vehicles in mind.

Highway Safety

Given the location of the proposed development, the applicant has reviewed the Personal Injury Collision (PIC) data in Leicestershire and an area of Warwickshire. A diagram of the study area is reproduced in Figure 2 below:

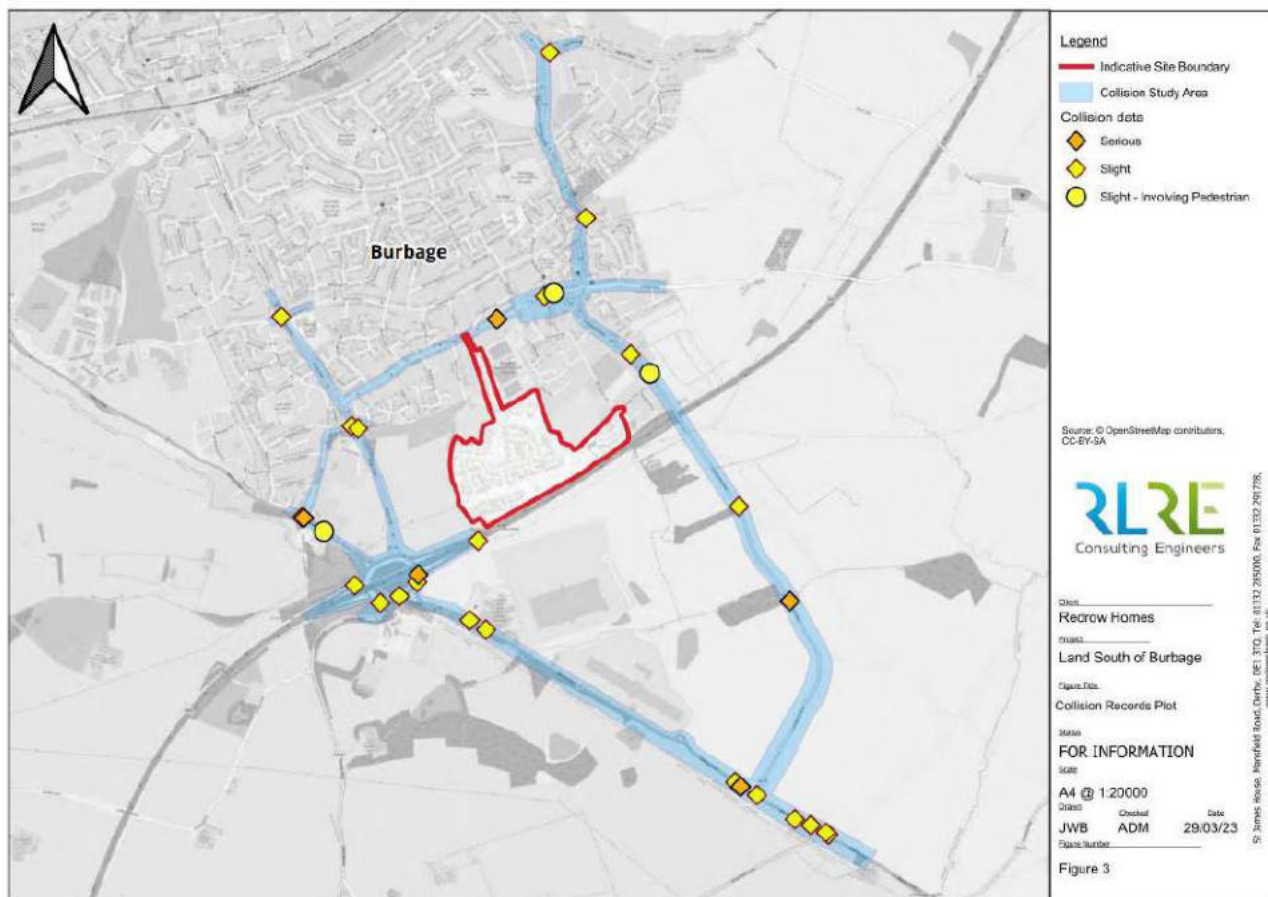


Figure 2: Extent of Personal Injury Collision study area included in Appendix 3 of Rodgers Leask Limited Transport Assessment (TA), Revision P07, dated November 2023.

The PIC data from Leicestershire County Council has been considered for the period between 1 January 2018 and January 2022. The applicant has identified 28 PICs on the Leicestershire network in the study area. To understand the current situation with the collision data the applicant should contact LCC for the latest PIC data and submit for review.

Highway Impact

The LHA advises applicants that to understand the highway and transportation implications of large development sites, they should be assessed using the LHA's strategic transport model (Pan

Regional Transport Model, PRTM) due to complex and interrelated transport issues. Following strategic assessment, the applicant can undertake more refined detailed analysis to understand and address the specific impacts of development on the network. The LHA is pleased that the applicant has utilised the LHA's strategic model in connection with the planning application.

The modelling approach taken by the applicant for the proposed development is summarised below:

- Strategic Modelling: Undertaken using the Pan Regional Transport Model (PRTM); this is particularly important given how local roads and junctions can be sensitive to variation in traffic flow; and
- Local Junction Testing: This analysis has been undertaken using industry standard software depending on the type of junction being assessed. Where required and appropriate, highway mitigation and improvements can be developed and refined.

The LHA has not had an opportunity to assess the impact of the proposed development and will provide comments in the next response to the planning application. However to assist in the LHAs review of the highway impacts of the proposed development the applicant should submit the junction model files for review by the LHA.

Notwithstanding the above, the LHA has checked the scheme of mitigation and provides comments on the drawings below. The applicant should note this does not mean that other mitigation measures may be required once the full impact of the proposed development has been established.

Drawing number: 21390-RLL-23-XX-DR-D-5011 rev P02 Preliminary B4109 Rugby Road / Coventry Road Mitigation

- Although an existing signalised junction, the drawing should confirm that the visibility requirements set out in DMRB CD123 Clauses 7.2 and 7.3 have been met;
- The proposed signals phasing should be shown on the drawing;
- The junction intervisibility zone should be shown on the drawing, in accordance with DMRB CD123 Figure 7.4;
- The lane widths are in accordance with DMRB CD123 clauses 7.7 and 7.9;
- The corner radius where the carriageway is to be widened is in accordance with DMRB CD123 clause 5.6.2; and
- The tactile paving layouts within the traffic islands do not require the "tails" and should be as shown in the DfT document Guidance on the Use of Tactile Paving Surfaces Figure 11.

21390-RLL-23-XX-DR-D-5016 rev P01 Preliminary B4109 Rugby Road / Coventry Road Mitigation Vehicle Tracking

- The drawings should state the vehicle speeds that have been used for the swept path analysis. LCC recommends a vehicle speed of 15kph is used.

Internal Layout

For the site to be suitable for adoption, the internal layout must be designed fully in accordance with the Leicestershire Highway Design Guide (LHDG). The acceptability of an adopted road layout is subject to a Section 38 agreement in accordance with the Highways Act (1980) once planning permission is granted.

The LHA has now had the opportunity to check the internal layout of the site submitted for the planning application and shown on drawing number 1693-08-02-122, 'Land south of Burbage – Highway Adoption Plan', dated November 2023 against the LHDG and offers further comments below.

Speed Control Measures

These are required to be designed into the road layout. In this instance, 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. Further information can be found in the LHDG, Part 3, section DG4, Table DG8.

Visibility

Forward visibility envelopes through bends and junction visibility splays should be shown on the plan, and the areas within the envelopes / splays should be conveyed as highway, in accordance with the LHDG. For further information, please see Part 3 of the LHDG, Figure DG2b.

Bend Widening

Bend widening should be included at all bend(s), in line with Paragraph 3.33, which can be found in Part 3 of the LHDG.

Suitability of Road for Adoption

Plots 364 onwards do not have five plots fronting the highway and therefore they should be private drives as they are not suitable for adoption.

Tracking

As referenced above the applicant is advised to undertake a tracking exercise for an 11.2m long refuse vehicle.

Shared Surface

The shared surfaces should be in accordance with the Residential Access Way column in Table DG1 of the LHDG. Shared surfaces are to be a completely flush block paved 7.5m corridor, consisting of a 4.8m 'carriageway' and 2x1.35m 'footways'. If shared surfaces are to remain in the development, please detail these areas in block paving.

The applicant should also note that the length of shared surfaces should be approx. 50m in maximum length before traffic calming in the form of 90-degree bends. Vertical calming features are not permitted on shared surfaces.

Footway Connectivity

A 2m footway is needed for access to the Local Equipment Area for Play (LEAP), adjacent to the carriageway.

Footway Link away from Carriageway

Any isolated and/or interconnecting footpaths would not be considered for adoption. If they were to be offered for adoption, they may incur an additional commuted sum.

Service Margin

The 1m service margin outside plots 83-90 should be a bituminous 1m service margin. It is noted that a 1m service margin is indicatively shown but it is unknown if this is to be verge or bituminous so the applicant should provide clarification on the revised drawing.

Commuted Sum

If the trees outside plots 274/275 remain as they are and the footpath does not change to follow the highway, this will incur a commuted sum.

Other Considerations

- The applicant should ensure that any tree that is to be planted or is to remain within the highway or the vicinity of the highway is provided with the necessary 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 Section 38 stage from the LCC Forestry team;
- Gradients should conform to the standards set out in Table DG1: General geometry of residential road (internal) of the LHDG;
- 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; and
- At this stage, it is not possible to comment on the vertical alignment, drainage, materials or proposed construction details.

Parking

Given the detailed comments on the internal layout, the LHA has not undertaken a detailed review of the parking provision at this time. The LHA note the reference to parking in Section 4.6 of the TA and the LHA reiterates that the applicant should ensure that parking is based on two parking spaces for dwellings of up to three bedrooms and three spaces for four or more bedrooms. All off-street parking spaces should measure a minimum of 2.4 x 5.5m with an additional 0.5m width if bounded by a wall, fence, hedge, line of trees or other similar obstructions on one side, 1m if bounded on both sides as set out in the LHDG. For a garage to count as a parking space, internal dimensions should measure a minimum of 3.0 x 6.0m for a single garage or 6.0 x 6.0m for a double garage.

The applicant should also avoid isolated parking spaces as residents will not use these and it may result in on-street parking occurring at inappropriate locations i.e. near to junctions. One such example of remote parking is at plots 415/414 (o/s Plot 387).

Lastly, the LHA will also not adopt private parking areas within the highway boundary.

Private Drives

The applicant is advised that for shared drives that are to remain private the minimum effective width of an access to a shared private drive serving two to five dwellings is 4.25m and for 6 to 25 dwellings is 4.8m for a minimum distance of 5m behind the highway boundary. The minimum width for private drives is 5m if more than 25m in length. In all cases the applicant should add 0.5m if bound by a wall, fence, hedge, line of trees, etc. 1m should be added if the drive is so bound on both sides please refer to Part 3, LHDG for further guidance.

Transport Sustainability

Section 3 of the TA considers the existing access and infrastructure for sustainable modes of travel. The LHA has considered this aspect of the proposed development and provides further comments below.

Walking and Cycling

The layout of the proposed development is shown on drawing number: 1693-08-02-100, and included in Appendix A of the TA. A 2km walking catchment and 5km cycling plan are provided in Figures 4 and 5 of the TA. Walking routes to other services / facilities are shown in Figures 7 – 11 and distances to these places are in Table 9 of the TA.

The applicant is planning to provide pedestrian / cycle links from the proposed development to tie in with the existing infrastructure. There will also be a network of footways / cycleways through the site to encourage shorter trips by foot or bicycle.

The LHA also note the applicant's commitment to provide cycle storage for all properties in resident's garages or cycle stores. Whilst this is welcomed to promote cycling this should not be to the detriment of the internal dimensions of a single garage required to accommodate a car (3m x 6m in LHDG) or a double garage (6m x 6m).

Cycling and Walking Infrastructure Plans

Leicestershire County Council are now in the process of developing Cycling and Walking Infrastructure Plans. These plans set out the vision and priorities for cycling and walking improvements in chosen areas of the county. These areas will create convenient and practical cycling and walking networks to help and encourage people to travel more sustainably.

With this in mind LTN 1/20 should be applied as this national guidance provides a recommended basis for those standards. Therefore, in this instance the LHA would require a two-way segregated cycle lane at 3m width and a 2m footway extending up to the crossing as per Table 5-2 in the Cycle Infrastructure Design - LTN 1/20. The applicant may also wish to refer to Section 6.5: Shared use, for an explanation of why shared use it not recommended.

The government are expecting local authorities to demonstrate that they have given due consideration to this guidance when designing new cycling schemes, when applying for Government funding that includes cycle infrastructure. This development has over 300 plots, serving Burbage to the north-east of the development and Hinckley to the north-west, therefore it has a good chance of helping to improve public health and the environment, reducing congestion, connecting our communities and creating cleaner, greener, happier places, thus a potential chance of receiving future funding for LCWIP. As such, the development should be designed in such a manner which allows for the local authority to have the option to tie in with this development as a part of the planned LCWIP over the Hinckley/Burbage area.

The applicant should note the highway authority does not adopt open public spaces or embankments unless they are supporting the carriageway/footway.

Public Transport

There are two Arriva services 7/7A that residents can use which could serve the proposed development. These serve Burbage, Nuneaton, Lutterworth and Hinckley at various intervals through Monday - Saturday.

The applicant has confirmed that they have spoken to Arriva about diverting the existing services to serve the site and provided some indicative locations of bus stops in Figure 14 of the TA. The applicant has indicated that they will fund the diversion of this bus service, secured through the Section 106 agreement.

The LHA will consider the implications of the proposed diversion of the route and provide additional comments in a future response to the planning application.

Active Travel England

The LHA welcome Active Travel England's general comments on the proposed development and suggestions for improvements in their response (19 February 2024).

Travel Plans

The LHA would have expected the applicant to produce a framework travel plan, however the LHA has considered the separate plans individually and provide further comments below.

Residential Travel Plan

After a review of the RTP the LHA cannot advise approval of the plan at this stage as it does not contain the necessary detail required. The LHA would ask the applicant to review the contents of the Residential Travel Plan in line with the Leicestershire County Council (LCC) guidance www.choosehowyoumove.co.uk/wp-content/uploads/2019/12/writing-a-successful-travel-plan.pdf before submitting a revised document for further consideration.

Employee Travel Plan

The LHA is happy to approve this plan, however the Travel Plan Co-ordinator (TPC) role should be undertaken by an employee who has the necessary skills and experience to deliver the obligations as specified in the plan and this must be part of their job role/description upon appointment.

The duly appointed TPC must liaise with the other TPC(s) and work collaboratively across the wider development. Once appointed the name and full contact details of the TPC should be provided to Leicestershire County Council (LCC) at S106monitoring@leics.gov.uk. LCC will then monitor the work of the TPC(s) on the delivery of the Travel Plan(s).

The preferred system for monitoring is Modeshift Stars – the TPC can register at Modeshift.org.uk. The Travel Plan Monitoring Fee required for this Development will be the sum of £11,337.50.

Notwithstanding the above, if the applicant does not want to make the amendments as part of the planning application process, then the LHA would be satisfied that a condition could be included to allow the submission of a revised TP for approval if the LPA is minded to grant permission.

Public Rights of Way (PROW)

The proposed development area includes Public Footpaths U66 and U66a. Adjoining the site, those public rights of way link to Footpath U65, and via Bullfurlong Lane, to Footpath U57 and U59. Footpath U65 is the shortest pedestrian route from the site to Burbage village centre, and Footpath U57 is the shortest route to the western end of Burbage. The unadopted section of Bullfurlong Lane is the drive to the Burbage Fields Farm site, which the development incorporates. The east end of the site adjoins Workhouse Lane which is a cul-de-sac adopted highway due to the M69.

Bullfurlong Lane, where it is the drive to Burbage Fields Farm, is the physical link between several footpaths but currently is not recorded as a public right of way (which the LHA understands is a common issue with lanes and tracks in the former Hinckley Urban District). The land ownership of Bullfurlong Lane is unregistered but all or part of it belongs with Burbage Fields Farm under the 'ad medium filum' legal presumption. To protect the existing movement network, the owners are asked to formalise with the County Council the public pedestrian rights on the lane by a Deed of Dedication, in liaison with the neighbouring landowner on the western side of the lane.

The northern end of Public Footpath U66 runs between 55 and 57 Coventry Road along a wide grass lane with no recorded landowner (though it is believed to be used by Burbage Parish Council to access their recreation ground and appears to be an access to land title LT483575 that is part of the application site). To protect the existing movement network and integrate with the development proposals the applicants are requested (after gaining any necessary landholder consents) to replace any existing stiles with metal kissing gates and, if the other landholders have no legal interest or objection, to construct a surface to match the adjoining Footpath U66 within the application site.

As Footpaths U65 and U57 are the shortest routes from the application site to other parts of Burbage - and will see increased recreational use from the new housing - the applicants are requested (after gaining any necessary landholder consents) to replace any existing stiles with metal kissing gates. In addition, if the Parish Council consents, the applicants are asked to create a new access onto Footpath U65 at the most north-easterly point where its route adjoins the application site boundary.

In drawing up a Rights of Way scheme the LHA would draw the applicant's particular attention to the following:

- Paths for everyday all-weather use require provision of a tarmacadamed surface;
- On footpaths that are to be shared cycleways, the minimum required width is 3 metres to comply with the LHDG and DfT cycle infrastructure design specification LTN 1/20.
- Where an estate road footway is proposed to overlay a current public footpath, extra elements are needed to preserve the identity of the PRoW as a through route and maintain the existing movement network as a whole. This would include: extra pedestrian signposting at junctions, road crossings, and changes of direction; also separating the footway from the carriageway at bends and road junctions so the pedestrian path continues to lead people on a direct alignment; also footways made wider or surfaced differently to reflect their dual role as roadside pedestrian path and through route linking PRoWs.
- Where a PRoW route is through public open space, a suitable surface should still be provided, reflecting the increased recreational use that will come from new housing.

Finally, an extract of the Definitive Map of Public Rights of Way is attached to this response for the applicant's information.

Closing

The LHA has identified some concerns and inconsistencies in the way that the transport impact of the development has been assessed. Therefore, the applicant should provide further evidence / clarification on the issues raised in this response, including:

- 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.

Date Received
19 February 2024

Case Officer
David Hunt

Reviewer
AW

Date issued
05 April 2024

Technical Note

Project:	P21-390 Land at Burbage Fields Farm, Bullfurlong Lane, Burbage		
Subject:	Land at Burbage Fields Farm (application ref: 24/00083/HYB) Response to LCC Highways Planning Response (2024/0083/04/H/R1)		
Prepared by:	Jake Blay – Graduate Transport Planner	Date:	23/04/2024
Authorised by:	Andy Miles – Principal Transport Planner	Status:	S2 - Information
Document Ref:	21390-RLL-24-XX-TN-D-5016	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 the comments raised by Leicestershire County Council Highways (LCC) in their Planning Response (ref: 2024/0083/04/H/R1) dated 5th April 2024.
- 1.1.2 The LCC Highways response provides comments on the Transport Assessment (TA) and Travel Plans included as part of the hybrid planning application for Land at Burbage Fields Farm, Bullfurlong Lane, Burbage, Leicestershire (ref: [24/00083/HYB](#)) submitted 23rd January 2024. The description of development is provided below:
- 1.1.3 *“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).”*
- 1.1.4 This TN looks to address the comments raised by LCC Highways and provide additional information where required. The response from LCC Highways has been included within this TN as **Appendix A**.

2 Progress to Date

- 2.1.1 A list of the agreed items from the LCC Highways response are provided below in **Table 1**.

Table 1: Agreed Items and Outstanding Comments

Item	Agreed	Comments
Coventry Road Access	✗	Addressed in Section 3.1 of this TN
Single point of access to serve 400 dwellings off Coventry Road Access	✓	Major residential access road with a carriageway width of 6.75m in accordance with the LCC design guide
Flanders Close Access	✗	Addressed in Section 3.2 of this TN
Swept Path Analysis	✗	Addressed in Section 3.3 of this TN
Coventry Road / Site Access Road Safety Audit & Designers Response	✓	-
Highway Safety	✗	Addressed in Section 3.4 of this TN
B4109 Rugby Road / Coventry Road Mitigation Scheme	✗	Addressed in Section 3.5 of this TN
Internal Layout	✗	Addressed in Section 3.6 of this TN
Residential Travel Plan	✗	Addressed in Section 3.7 of this TN
Employment Travel plan	✗	Addressed in Section 3.7 of this TN
Public Rights of Way	✗	Addressed in Section 3.8 of this TN

- 2.1.2 It is acknowledged in the LCC response, that there are several items within the TA that have yet to be commented on. These items are listed below in **Table 2**.

Table 2: Items Awaiting Further Comment

Item	Agreed	Comments
Traffic Modelling	-	Additional information on traffic modelling has been provided within Section 3.9
Parking	-	Awaiting comments from LCC Highways

- 2.1.3 As requested by LCC Highways, all the junction models developed by RL which have been used to assess the impact of the proposed development have been sent to the local highway authority alongside this TN.

3 LCC Comments and RL Response

3.1 Coventry Road Access

Junction Form

- 3.1.1 As stated in the LCC response, LCC have confirmed that the width of the spine road for the western part of the development is inline with the requirements within the Leicestershire Highway Design Guide (LHDG). In accordance with Table DG1, this part of the development is served from a single point of access off Coventry Road with a 6.75m wide carriageway providing access for 378 dwellings and the 66 bed residential care home.
- 3.1.2 The proposed access arrangements onto Coventry Road to serve the development take the form of a simple priority junction. The access design has been amended to include the following recommendations by LCC.
- Inclusion of a cycle ramp to facilitate the transition of cyclists from the carriageway to the shared footway/cycleway on the eastern side of the spine road.
 - Realignment of the kerb line of the eastern bell mouth to accommodate the cycle ramp.
 - Indicative cycle markings on the carriageway at the junction and on the shared footway/cycleway.
- 3.1.3 A drawing (drawing ref: 21390-RLL-23-XX-DR-D-5008P06) of the amended access junction onto Coventry Road has been included in **Appendix B**.
- 3.1.4 As requested LCC Highways, the raw traffic survey data recorded along Coventry Road and location plan for the survey can be seen in **Appendix C**. The survey company who undertook the ATC purchased the third party traffic survey licence from LCC on the 22nd of November 2021.
- 3.1.5 During the refinement of the site access arrangements, the provision of a ghost island right turn lane, designed to standards as set out in Design Manual for Roads and Bridges (DMRB) CD123, is considered unachievable given the extent of highway land available within the vicinity of the site access.
- 3.1.6 The suitability of a ghost island right turn lane should also be considered against current guidance in Manual for Streets 2 (MfS2).
- 3.1.7 As MfS2 states in paragraph 9.4.7: *“TD 42/95 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. If 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”.

- 3.1.8 Although DMRB TD 42-95 has been superseded by DMRB CD 123, the point raised within MfS2 is considered relatively. The traffic movement observed along Coventry Road are in the region of 400 two-way movements in the AM and PM peak hours. Even with the inclusion of the Pan-Regional Transport Model (PRTM) traffic growth up to the 2026 forecast year, through traffic movements navigating the proposed junction off Coventry Road are considered low. The results of the traffic modelling have also demonstrated that the site access junction can operate well within capacity in the 2026 forecast year in both the AM and PM peak hour.
- 3.1.9 MfS2 goes on to state in Paragraph 9.4.8: *“Right turning lanes make it more difficult for pedestrians to cross major roads and lead to higher traffic speeds and authorities should therefore consider carefully all of the effects before deciding to provide them”.*
- 3.1.10 It should also be considered that none of the existing priority junctions along the length of Coventry Road include a ghost island right turn lane.
- 3.1.11 On this basis the proposed simple priority junction arrangement is considered suitable to access the proposed development off Coventry Road.

Pedestrian Desire Line

- 3.1.12 The location of spine road crossing point, situated 12 metres back from the give way line of the junction, is considered appropriate for the following reasons:
- Provides carriageway space within the development to allow a bus or refuse vehicle to wait off the main carriageway of Coventry Road whilst a pedestrian or cyclist is using the crossing point.
 - Allows for a bus or refuse vehicle to wait at the stopline of the junction before manoeuvring onto Coventry Road without the rear of the vehicle obstructing the crossing point.
 - A crossing point at the bellmouth of the junction would result in a longer time for pedestrians walking in the carriageway. The shorter crossing point to the south of the junction, with surface colouring, dropped kerbs and tactile paving (400mm depth in accordance with Guidance on the Use of Tactile Paving Surfaces, December 2021) provides a safe, delineated crossing point.

3.2 Flanders Close Access

- 3.2.1 The access arrangements onto Flanders Close for the eastern part of the development have been previously agreed under the outline planning application for Land To The South West Of Lutterworth Road ([21/00502/OUT](#)), approved via an appeal decision. The development description is as follows:
- 3.2.2 *Up to 80 residential dwellings (Use Class C3), open space provision and associated infrastructure, with all matters reserved except access on Land To The South West Of Lutterworth Road Burbage Leicestershire.*
- 3.2.3 The access arrangements required a section of narrowing on Flanders Close, reducing the carriageway width to 4.8m for a 20m section. This narrowing acts a speed control feature whilst maximising footway provision for pedestrians within the available land. It should be considered that the access arrangements onto Flanders Close have not changed since the permission for Land To The South West Of Lutterworth Road was granted.
- 3.2.4 It is noted that the LCC response states that the 4.8m carriageway width of this speed control feature is compliant with Table DG1 of the LHDG for development of up to 50 dwellings.
- 3.2.5 The eastern part of the development proposes 55 dwellings, considerably less than approved under the previous application (21/00502/OUT). The proposed 5.5m width of the internal access road of the eastern part of the development is in accordance Table DG1 of the LHDG for a *residential access road (50 – 400 dwellings)*. This width is only reduced down to 4.8m for short 20m section as part of the speed control feature. As stated in Table DG1 of the LHDG:
- Where a road is to be narrowed, to help control vehicle speeds, for example, the minimum carriageway width (kerb to kerb) = 3.7m*
- 3.2.6 The speed control feature is providing a carriageway width that exceeds the minimum requirement for speed control features and has been supported with swept path analysis of a refuse vehicles demonstrating that the feature can be safely manoeuvred through.
- 3.2.7 As these access arrangements have previously been agreed as part of Land To The South West Of Lutterworth Road and, considering the information above, the access arrangements onto Flanders Close are considered suitable for the scale of development and meet the requirements of the LHDG.
- 3.2.8 As requested by LCC, labels for the stopping sight distance diagram and dimensions for the proposed dropped crossing accesses have been included on the Flanders Close general arrangement drawing. The drawing is included as **Appendix D**.

3.3 Swept Path Analysis

- 3.3.1 As requested by LCC revised swept path analysis drawings have been provided using a 15kph vehicle speed where vehicles are accessing / egressing junctions.
- 3.3.2 The revised swept path drawings, included as **Appendix E** within this TN, are as follows:
- Coventry Road Site Access Refuse Vehicle (11.2m) Access / Egress (drawing ref: 21390-RLL-23-XX-DR-D-5012 P04).
 - Coventry Road Site Access Bus Access / Egress (drawing ref: 21390-RLL-23-XX-DR-D-5009 P06).
 - Flanders Close Site Access Refuse Vehicle (11.2m) Access / Egress (drawing ref: 19409-RLL-21-XX-DR-D-5005 P02).
 - B4109 Rugby Road / Coventry Road Mitigation Vehicle Tracking (drawing ref: 21390-RLL-23-XX-DR-D-5016 P02).
- 3.3.3 It is acknowledged that minor carriageway overrun is shown on the bus swept path analysis drawing for the Coventry Road access. However, it should be noted that there is sufficient room for a car to wait safely on the spine road approach to the junction when a bus is manoeuvring onto the spine road.
- 3.3.4 It should also be considered that a bus would only pull out onto Coventry Road when there is suitable gap in traffic to do so. Considering the low hourly background traffic flows along Coventry Road, it is highly unlikely that a bus would have difficulty finding gaps in traffic.
- 3.3.5 Given that buses will be accessing/egressing the site each hour during the daytime, it is considered acceptable that vehicles will acknowledge a bus manoeuvring out of the site access when travelling along Coventry Road and approaching the site access. It is also expected that experienced motorists would be aware that buses, on occasion, may use more carriageway space than delineated by carriageway markings when manoeuvring in and out of Coventry Road and will leave sufficient space for the bus accordingly.

3.4 Highway Safety

- 3.4.1 The submitted TA included collision data from January 2018 - January 2023. As requested by LCC Highways, the latest available collision data has been purchased from the Network Data & Intelligence (NDI) team. The data covers the period January 2019 – December 2023.
- 3.4.2 This data includes additional collision records observed between the period January 2023 – December 2023. Three new collisions were recorded within this time period. **Figure 1** provides the location of these collisions in the context of

the study area used within the submitted TA. The full collision records obtained from the NDI team are available in **Appendix F**.

- 3.4.3 Of these three collisions, one occurred along the M69 mainline approximately 1.2km to the east of the M69 J1, which has not been considered due to the location of the collision falling outside of the study area.
- 3.4.4 The second collision occurred on the circulatory of the M69 J1, adjacent to the A5 north-westbound approach. This collision was classified as slight severity and involved a car and a motorcyclist. The collision occurred in fine weather and dry road conditions, with daylight present.
- 3.4.5 The third collision occurred along the B578 Lutterworth Road and involved a single heavy goods vehicle. The collision was also classified as slight severity and occurred during unknown weather and wet road conditions. This collision occurred during daylight hours.
- 3.4.6 The updated collision record plot showing all collisions within the study area from January 2018 – December 2023 can be seen in **Figure 2**.
- 3.4.7 It can be concluded from review of the additional collision data that the findings of the submitted TA are unchanged. It is considered that there are no existing highway safety concerns within the study area which would be exacerbated by the development proposals.

3.5 B4109 Rugby Road / Coventry Road Mitigation Scheme

- 3.5.1 As requested by LCC, additional annotation has been provided on the mitigation scheme drawing for the B4109 Rugby Road / Coventry Road junction. The annotation is as follows:
- The proposed signal phasing plan.
 - The junction intervisibility zone.
 - Removal of the tails on the traffic island tactile paving.
- 3.5.2 The annotated mitigation scheme drawing for the B4109 Rugby Road / Coventry Road junction has been included as **Appendix G**.

3.6 Internal Layout

Speed Control Measures

- 3.6.1 The form of speed control measures to be provided on the spine road and around the internal loop of the development will be discussed with LCC Highways. Redrow is willing to provide speed control measures within the development which will be agreed with LCC Highways and Arriva.

Shared Footway / Cycleway

- 3.6.2 The proposed development proposes a shared 3m wide footway/cycleway on the eastern side of the internal spine road, leading up to the Coventry Road site access. This shared footway/cycleway continues on the outside of the loop within the development.
- 3.6.3 LCC have requested a two-way 3m segregated cycle lane and a 2m footway along the internal spine road of the proposed development.
- 3.6.4 It should be considered that in the locality of site, the existing provision for cyclists along the B4109 Rugby Road consists of a shared footway/cycleway on the eastern side of the carriageway. There is also a shared footway/cycleway along the A5 to the southeast of the M69 J1.
- 3.6.5 As stated within *Table DG10: Joint Use of Cycle and Pedestrian Routes and Cycle-Only Use* of the LHDG, the width of a "Joint Use With Pedestrians" cycle route is required to be 3m.
- 3.6.6 It is noted that footnote (a) of Table DG10, providing additional guidance on the type of infrastructure, states: *"Normally provide joint use, except where cyclist and pedestrian flows are likely to be high, for example, outside a school or in a shopping area. Where cyclists and visually impaired pedestrians could meet, you should provide warning surfaces to standard drawings."*

- 3.6.7 Table 6-3 of Local Transport Note (LTN) 1/20 states the recommended minimum width for a shared use routes carrying up to 300 pedestrians and cyclists an hour is 3m. It should be noted that the development proposals are estimated to generate approximately 49 pedestrians and 11 cyclists in the AM peak hour and 38 pedestrians and 20 cyclists in the PM peak hour. This is prior to the implementation of Travel Plan measures that will likely see and increase in the number of pedestrians and cyclists travelling to/from the development.
- 3.6.8 Given that the estimated hourly pedestrian and cyclists trips generated by the development are well below the threshold identified within LTN 1/20 and the proposed shared footway/cycleway is in keeping with the existing provision of pedestrian/cyclists infrastructure within the locality, the proposed shared footway/cycleway is considered suitable for the scale of the development proposals.

3.7 Travel Plans

- 3.7.1 The *Choose How You Move "Writing a Successful Travel Plan – A Guide to Developers"* (July 2013) guidance has been reviewed and additional information has been provided in the Travel Plans submitted.

Residential Travel Plan (RTP)

- 3.7.2 The following information has been added:
- Targets include information on the quantitative reduction of single occupancy vehicle trips, as well as making residents aware of the RTP.
 - Clarity on the role of the Travel Plan Co-Ordinator (TPC).
 - Details on the methodology of the monitoring report.
 - RTP measures have been updated to include.
 - The proposed 3m wide shared footway/cycleway.
 - Introduction of a development wide car sharing scheme.
 - The proposed provision of secure and covered cycle storage.
 - Statement on Redrow's commitment to the RTP measures and targets.

Employee Travel Plan (ETP)

- 3.7.3 The following information has been added:
- Additional information on the TPC role

3.8 Public Rights of Way

- 3.8.1 Bullfurlong Lane is partly adopted, the unadopted section of the Lane provides direct access to Burbage Fields Farm before terminating. A pedestrian connection on to Bullfurlong Lane is proposed from the proposed development to enable pedestrian access to the wider footpath network.
- 3.8.2 LCC's request for the applicant to enter into a Deed of Dedication in respect of Bullfurlong Lane is acknowledged and will be investigated further.
- 3.8.3 A new surfaced footway connection is now proposed from Public Footpath U65 to the proposed development. This connection is on the northern boundary adjacent to the self-build plots.

3.9 Traffic Modelling

- 3.9.1 National Highways (NH) have also responded to the Land South of Burbage application in a formal response (ref: NH/24/04828).
- 3.9.2 This response includes comments on the traffic modelling at junctions which form part of the strategic road network. These comments have been summarised below in **Table 3**.

Table 3: NH Comments Regarding Traffic Modelling

Junction	RL Action
A5 / B578 Lutterworth Road	Revision of parameters on the Lutterworth Road approach to the junction model
A5 / Wolvey Road	Development of a junction capacity assessment model to assess the operation of this junction
M69 Junction 1	Revision to the LinSig model based on comments from NH

- 3.9.3 At the time of writing this TN, RL are in the process of providing a response to NH. Further dialogue is expected with NH to agree the traffic modelling evidence base.
- 3.9.4 To ensure that LCC Highways are aware of changes to the traffic modelling work, as requested by NH, the following information has been appended to this TN:
- A5 / B578 Lutterworth Road revised Junctions 10 model output.
 - A5 / Wolvey Road revised Junctions 10 model output.
 - M69 J1 revised LinSig model output.

- 3.9.5 The results of the revised junction modelling have been included as **Appendix H**. The junction modelling files for these revised junction models as well as the junction modelling files for the original models used to assess the impact of the proposed development (excluding the junctions listed above) have been sent to LCC Highways alongside this TN as requested.
- 3.9.6 In addition the traffic flow spreadsheet has been sent LCC Highways alongside this TN.

Andy Miles

Subject: RE: P21-390 - Land at Burbage Fields Farm, Burbage - LCC response & Junction modelling parameters

From: David Hunt <[REDACTED]>

Sent: Wednesday, May 15, 2024 3:06 PM

To: Andy Miles <[REDACTED]>

Cc: [REDACTED] <[REDACTED]> <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>

Subject: RE: P21-390 - Land at Burbage Fields Farm, Burbage - LCC response & Junction modelling parameters

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

Good afternoon Andy

Apologies for slight delay in sending the comments on the models over but I have summarised them in the table below

A5/Lutterworth Road	All OK
A5/Wolvey Road	All OK
Lutterworth Road/Lychgate Lane	The pedestrian crossing on Church Street should be included in the model although unless pedestrian numbers are very high this would likely not have a significant impact on the results. Right turns into Windsor Street will block traffic from Church Street but the model specifies that a queue of 10 pcu's can form before blocking occurs. This should be reduced to 0 pcu. On the road widths for Windsor Street the width at 5m from the give way line should be reduced to 3.7m The above changes will make RFC values only slightly worse and they will remain below 0.85, however, it should be noted that the delay on Windsor Street more than doubles from 20s to 46s with the development traffic added.
Lutterworth Road/Passchendale Drive	All Ok
M69 Junction 1	This junction is maintained by National Highways and we hold no information (drawing/configurations) so the LHA are unable to check the model.
B4669/ Burbage Road/Sapcote Road Mitigation Scheme	All OK. However, the 2031 forecast flows in the flow spreadsheet are not included in the LINSIG model (only 2026 flows are in the LINSIG model). As the junction has an PRC value of -9.7% the higher 2031 flows should be tested.
Coventry Road Site Access	The model has been checked and is ok.
Rugby Road/Canberra Way	For Rugby Road (South) there are two entry lanes at the roundabout and two exit lanes on the Rugby Road (north) exit. However, on the exit, the nearside lane is marked as ahead (towards Hinckley) and lane 2 is a dedicated right turn lane for Coventry Road. In the traffic flows spreadsheet, 1236 pcu are shown to be going ahead and it is possible that more traffic will use the nearside lane on Rugby Road

	south to avoid exiting in the incorrect lane. Observations/counts should be undertaken on site to see if the lane usage on Rugby Road south is balanced and if not, capacity corrections should be made in the model to correct for this.
Rugby Road/Coventry Road Mitigation Scheme	Model checked and OK (as with other models there are no 2031 flows entered). Some of the scenarios have negative capacity depending on the assumptions made for the pedestrian usage. It would be beneficial to have pedestrian counts undertaken to give some confidence on the assumptions made. In addition, the junction should include kerbside and on-crossing pedestrian detection which may improve capacity. A detailed drawing will be required for checking (for example, tactile paving is incorrectly shown on the planning drawing). Traffic speeds will also be needed to check that the right turn into Coventry Road would not require full signalisation.
Rugby Road/Sketchley Road Roundabout	All OK.

Please note this doesn't mean that the LHA has checked all the flows and outputs at this stage as this is part of my current review of the application. Furthermore I note there are some more traffic flow spreadsheets on the LPA website (uploaded 14 May 2024) so some of the comments may no longer be applicable once we have tested the 2031 scenarios.

Kind regards,
David

David Hunt - Senior Transport Planner
Highway Development Management

Technical Note

Project:	P21-390 Land at Burbage Fields Farm, Bullfurlong Lane, Burbage		
Subject:	Land at Burbage Fields Farm (application ref: 24/00083/HYB) RL Response to LCC Junction Modelling Comments		
Prepared by:	Jake Blay – Graduate Transport Planner	Date:	17/05/2024
Authorised by:	Andy Miles – Principal Transport Planner	Status:	S2 - Information
Document Ref:	21390-RLL-24-XX-TN-D-5018	Revision:	P01

1 Introduction

1.1 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 junction modelling comments raised by Leicestershire County Council Highways (LCC) in their email dated 15th May 2024.
- 1.1.1 The email from LCC provides comments on the parameters used within the junction modelling submitted in support of the hybrid planning application Land at Burbage Fields Farm, Bullfurlong Lane, Burbage, Leicestershire (ref: [24/00083/HYB](#)). 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 email containing the junction modelling comments from LCC Highways has been attached to this TN as **Appendix A**.

1.2 Background

- 1.2.1 Following the submission of the Transport Assessment, RL received comments from National Highways (ref: NHPR 22-12) on 16th February 2024 which included commentary of the junction modelling. Subsequently, RL updated the junction modelling evidence base and accompanying traffic flow spreadsheets and circulated this information to both LCC Highways and National Highways (NH) via email on 25th April 2024.

- 1.2.2 A summary of the changes to the junction modelling evidence base was included within a formal response sent to NH (doc ref: 21390-RLL-24-XX-TN-D-5015) on 7th May 2024 and a formal response sent to LCC (doc ref: 21390-RLL-24-XX-TN-D-5016) on 23rd April 2024.
- 1.2.3 This TN provides a summary of the revised junction modelling following the comments received from LCC in their email dated 15th May 2024. For transparency, the junction modelling results for all junctions assessed as part of the study area for the TA, whether updated or not, have been included within this TN and it has been clarified where junction models have been updated since they were previously circulated on 25th April 2024.

2 Progress to Date with LCC

- 2.1.1 A summary of the status of each junction model is provided below in **Table 1**.

Table 1: Junction Models and Outstanding Comments

Junction	Agreed	RL Comments
A5 / B578 Lutterworth Road Junction	✓	Junction model has remained unchanged, results included as Appendix B .
A5 / Wolvey Road Junction	✓	Junction model has remained unchanged, results included as Appendix C .
B578 Lutterworth road / Lychgate Lane Crossroads	✗	Addressed in Section 3.1 of this TN.
B578 Lutterworth Road / Passchendaele Drive Junction	✓	Junction model has remained unchanged, results included as Appendix D .
M69 Junction 1	-	Junction model has remained unchanged subject to further discussions with NH. Results included as Appendix E .
B4669 Burbage Road / B4669 Sapcote Road / B578 Hinckley Road Mitigation Scheme	✗	Addressed in Section 3.2 of this TN.
Coventry Road / Site Access Junction	✓	Junction model has remained unchanged, results included as Appendix F .
B4109 Rugby Road / Canberra Way Roundabout	✗	Addressed in Section 3.3 of this TN.
B4109 Rugby Road / Coventry Road Mitigation Scheme	✗	Addressed in Section 3.4 of this TN.
B4109 Rugby Road / Sketchley Road Roundabout	✓	Junction model has remained unchanged, results included as Appendix G .

3 LCC Comments and RL Response

3.1 B578 Lutterworth Road / Lychgate Lane Crossroads

- 3.1.1 LCC Highways provided comments on the modelling parameters used within the Lutterworth Road / Lychgate Lane crossroads junction model. A summary of these comments and the response by RL is summarised below in **Table 2**.

Table 2: B578 Lutterworth Road / Lychgate Lane Crossroads Parameters

LCC Comment	RL Response
Inclusion of the pedestrian crossing on Church Street	The crossing has been included assuming an average pedestrian flow of 50 pedestrians per hour in both peaks.
Right turn blocking queue value for vehicle movements from B578 Church Street to Windsor Street	The value has been changed to 0 PCUs
Windsor Street road width 5m back from the stopline	The road width has been changed to 3.7m as suggested by LCC.

- 3.1.2 The B578 Lutterworth Road / Lychgate Lane Crossroads Junctions 10 model has been re-run with the updated parameters stated above. The updated junction results can be seen below in **Table 3**, with the full output included as **Appendix H**.

Table 3: B578 Lutterworth Road / Lychgate Lane Crossroads Junctions 10 Results

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
Stream B-ACD	D1	0.4	17.06	0.28	C	D2	0.3	15.97	0.25	C
Stream A-BC		1.1	9.15	0.42	A		0.4	7.77	0.22	A
Stream A-D		0.8	12.97	0.57	B		0.7	11.33	0.48	B
Stream D-AB		0.4	9.88	0.28	A		1.4	16.19	0.59	C
Stream D-B-C		0.2	12.75	0.20	B		0.2	13.88	0.20	B
Stream C-ABD		0.0	6.40	0.01	A		0.1	5.64	0.04	A
	2026									
Stream B-ACD	D3	0.6	21.65	0.37	C	D4	0.4	17.93	0.27	C
Stream A-BC		1.6	10.01	0.52	B		0.6	8.18	0.27	A
Stream A-D		0.7	12.85	0.59	B		0.7	12.36	0.50	B
Stream D-AB		0.5	10.77	0.33	B		1.7	20.59	0.64	C
Stream D-B-C		0.6	20.78	0.39	C		0.3	17.86	0.26	C
Stream C-ABD		0.0	6.35	0.01	A		0.1	5.18	0.05	A
	2026 + Dev									
Stream B-ACD	D5	0.8	27.53	0.46	D	D6	0.4	20.37	0.31	C
Stream A-BC		1.8	10.98	0.55	B		0.6	8.73	0.29	A
Stream A-D		1.0	15.36	0.64	C		1.2	16.28	0.60	C
Stream D-AB		1.6	25.35	0.63	D		2.8	31.50	0.75	D
Stream D-B-C		1.9	46.84	0.67	E		0.7	29.45	0.42	D
Stream C-ABD		0.0	6.27	0.01	A		0.1	5.09	0.05	A

Note: Arm A – B578 Church Street, Arm B – Lychgate Lane, Arm C – B578 Lutterworth Road, Arm D – Windsor Street

- 3.1.3 The Junctions 10 results show that the B578 Lutterworth Road / Lychgate Lane crossroads will still operate within its theoretical capacity in all of the scenarios assessed although an increase in delay on the Windsor Street approach is noted in the AM peak hour with the inclusion of development trips.
- 3.1.4 It should be noted that the traffic flows calculated from the furnished PRTM outputs were representative of the highway network of the PRTM, a network which does not include Strutt Road. Strutt Road is a one-way street (southeast bound) located approximately 100m to the west of the crossroads and connects Windsor Street to the B578 Lutterworth Road south of the crossroads. The 26 seconds increase in delay in the AM peak hour as a consequence of the inclusion of development traffic represents a worst case assessment as in reality a proportion of development trips and background traffic would bypass the crossroads by using Strutt Road.
- 3.1.5 It is concluded that the updated junction modelling demonstrates that the impact of the proposed development on junction operation is negligible.

3.2 B4669 Burbage Road / B4669 Sapcote Road / B578 Hinckley Road Mitigation Scheme

- 3.2.1 LCC have requested that the 2031 forecast year traffic flows are assessed using the B4669 Burbage Road / B4669 Sapcote Road / B578 Hinckley Road mitigation scheme LinSig model.
- 3.2.2 The LinSig results for this assessment can be seen below in **Table 4** and for comparison purposes the results of the 2026 forecast year scenarios have also been included. The full LinSig results are provided within **Appendix I**.

Table 4: B4669 Burbage Road / B4669 Sapcote Road / B578 Hinckley Road Mitigation Scheme LinSig Results

Approach	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)		
	Degree of Saturation (%)	Average Delay (s/pcu)	Mean Max Queue (pcu)	Degree of Saturation (%)	Average Delay (s/pcu)	Mean Max Queue (pcu)
2026 Forecast Year						
B587 Hinckley Rd	94.4%	65	10	83.4%	28	6
B4669 Burbage Rd	96.3%	54	16	84.7%	29	10
B4669 Sapcote Rd	94.0%	44	16	72.9%	14	6
2026 Forecast Year + Development						
B587 Hinckley Rd	97.8%	97	15	85.4%	30	6
B4669 Burbage Rd	96.5%	93	28	84.7%	28	10
B4669 Sapcote Rd	98.7%	59	20	74.8%	14	6
2031 Forecast Year						
B587 Hinckley Rd	99.5%	97	15	82.7%	26	6
B4669 Burbage Rd	101.4%	93	28	86.3%	30	10
B4669 Sapcote Rd	97.1%	59	20	75.9%	15	6
2031 Forecast Year + Development						
B587 Hinckley Rd	103.0%	129	21	88.5%	33	7
B4669 Burbage Rd	101.4%	71	23	86.3%	30	10
B4669 Sapcote Rd	102.2%	105	30	77.6%	15	6

- 3.2.3 The results of the 2031 forecast year assessments show the junction will operate over capacity in the AM peak hour with junction performance worsening with the inclusion of development traffic. For the PM peak hour the junction is operating within capacity both with and without development trips.
- 3.2.4 It should be noted that optimisation for the signal timings in the 2031 forecast year with development scenario for the AM peak hour decreases green time for Stage 1, increasing the green time for Stage 2 (right turners) when compared to the 2031 forecast year scenario (no development). This is to balance the queuing on the approaches and results in an increase in queuing

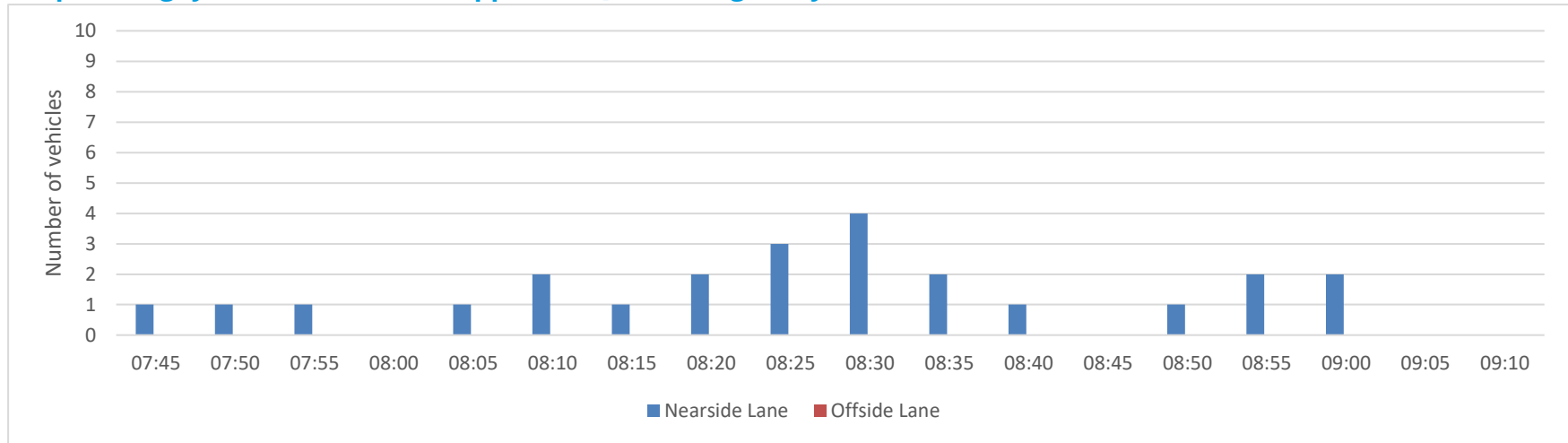
on the Sapcote Road approach whilst reducing the queuing on the Burbage Road approach.

- 3.2.5 Although the assessment of the 2031 forecast years flows indicates the junction will be operating over theoretical capacity, it should be considered that the mitigation scheme provides significant benefits to road safety through the signalisation of the approaches and a betterment to pedestrian crossing facilities when compared to the current priority arrangement.

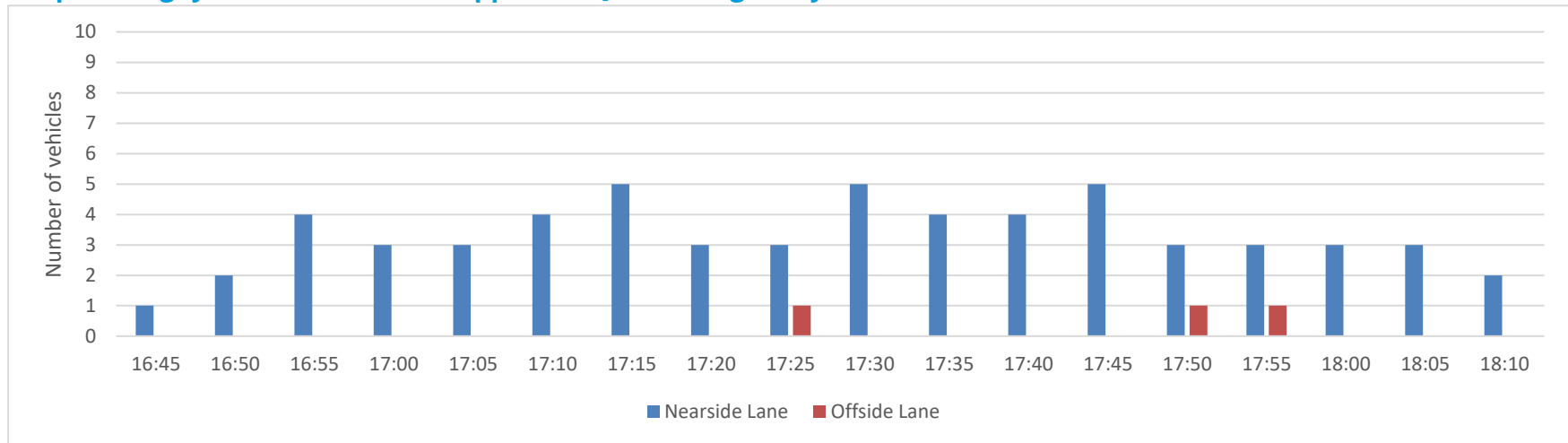
3.3 B4109 Rugby Road / Canberra Way Roundabout

- 3.3.1 LCC have suggested that the B4109 Rugby Road / Canberra Way Roundabout Junctions 10 model may not be representing potential unequal lane usage on the B4109 Rugby Road northbound approach to the roundabout. Unequal lane usage is likely to be caused by the downstream road markings on the approach to the B4109 Rugby Road / Coventry Road junction whereby the nearside lane is marked for straight ahead movements continuing on Rugby Road and the offside lane is marked as a dedicated right turn lane for movements to Coventry Road. The assumption is that vehicles would move to the correct lane upstream of the Rugby Road / Coventry Road junction; on the approach to the Rugby Road / Canberra Way Roundabout.
- 3.3.2 RL have previously collected queue length data at B4109 Rugby Road / Canberra Way Roundabout, recorded in 5-minute intervals during the AM (07:00 – 10:00) and PM (16:00 – 19:00) peak periods on Thursday 29th June 2023. Queue length data by lane on the B4109 Rugby Road northbound approach has been examined to determine the extent of queuing per lane which in turn gives an indication of peak hour lane usage.
- 3.3.3 The maximum recorded queue lengths within every five minute segment in the AM peak hour and the PM peak hour for both lanes of the B4109 Rugby Road northbound approach can be seen in **Graph 1** and **Graph 2** respectively. The full queue length survey data is available in **Appendix J**.

Graph 1: Rugby Road Northbound Approach Queue Lengths by Lane – AM Peak Hour



Graph 2: Rugby Road Northbound Approach Queue Lengths by Lane – PM Peak Hour



- 3.3.4 The queue length data shows that queuing is consistent within the nearside lane with no queuing in the offside lane observed in the AM peak hour and identifies only three 5-minute segments with queuing in the offside lane in the PM peak hour
- 3.3.5 It is considered that the queue length data indicates unequal lane usage on the B4109 Rugby Road northbound approach to the roundabout however, the recorded queuing in the nearside lane is considered low in both peak hours.
- 3.3.6 A comparison of the modelled queue lengths against the observed average queues in the AM and PM peak periods has been provided below in **Table 5**.

Table 5: Rugby Road / Canberra Way Rdbt Queue Length Comparison

Approach	AM Peak Hour (08:00 – 09:00)		PM Peak Hour (17:00 – 18:00)	
	Ave. Observed Queuing (veh)	Modelled Queue (veh)	Ave. Observed Queuing (veh)	Modelled Queue (veh)
Rugby Rd (north)	1.9	2.1	1	0.8
Canberra Way	1.3	0.2	0.7	0
Rugby Rd (south)	0.8	0.6	2	1.6
Three Pots Rd	2.3	0.5	4	0.7

- 3.3.7 It is acknowledged that unequal lane usage is occurring at the roundabout, however as the level of queuing recorded within the model is comparable with the queue lengths observed at the junction in both peak hours, the model is considered representative of the junction and therefore is suitable for forecasting the impact of the proposed development. It should also be considered that the junction has been shown to operate well within capacity in all scenarios assessed.
- 3.3.8 Considering the information presented above, the Junctions 10 model of the Rugby Road / Coventry Road junction has remained unchanged. The Junctions 10 output has been included as **Appendix K**.

3.4 B4109 Rugby Road / Coventry Road Mitigation Scheme

- 3.4.1 LCC have requested information on the pedestrian movements at the B4109 Rugby Road / Coventry Road junction and confirmation on whether or not the right turn from Rugby Road (south) to Coventry Road requires full signalisation.

Pedestrian and cyclist count

- 3.4.2 As detailed within Section 8.4 of the TA submitted as part of the planning application, a pedestrian and cyclist count was undertaken on Thursday 29th June 2023 at both the existing dropped kerb crossing across Coventry Road and the toucan crossing on Rugby Road. The analysis of this survey data, as documented within the submitted TA, concluded that use of both crossings was infrequent within the peak hours and provided adequate validation for modelling runs to be undertaken without the pedestrian crossings being called. This was produced to quantify the performance of the mitigation scheme when running with traffic phases only, which considering the existing usage of the crossing, will be the majority of the time.
- 3.4.3 For clarity, the pedestrian and cyclist count has been included as **Appendix L**.

Right turn signalisation

- 3.4.4 As stated in DMRB 'CD123 - Geometric design of at-grade priority and signal-controlled junctions' (Nov 2021) paragraph 7.18.2:
- Where the 85th percentile approach speed is greater than 72 kph (45 mph), right-turns should be separately signalled.*
- 3.4.5 It should be considered that there are posted 40mph speed limit signs to the south of the Rugby Road / Sketchley Road roundabout and several repeater 40mph speed limit signs between the roundabout and the Rugby Road / Coventry Road junction for vehicles travelling southbound on Rugby Road. It should also be acknowledged that there is a footway on one side of the carriageway and a shared footway/cycleway on the other, clearly indicating to drivers that they are in an urban area. In addition when vehicles approach the Rugby Road / Coventry Road junction they are entering an area of the network with formal pedestrian crossing facilities and associated white lining and zig-zag line markings, all acting as a deterrent against travelling above the posted limit.
- 3.4.6 Given the presence of the posted speed limit and the streetscape in the vicinity of the junction, there are numerous indicators to motorists that they are travelling in a urban area and abide by the posted speed limit. It should also be realised that when travelling in the peak hours speeds will be lower than free flow conditions and likely will be lower than the posted 40mph limit.
- 3.4.7 Given that the guidance in DMRB CD123 allows right turning movements in gaps when speeds are lower than 45mph, the assumption that right turning movements can turn safely in gaps during the AM peak hour is considered appropriate.

- 3.4.8 Considering the information presented above, the LinSig model of the Rugby Road / Coventry Road junction has remained unchanged. The full LinSig results can be seen in **Appendix M**.
- 3.4.9 RL acknowledge the potential inclusion of kerbside and on-crossing detection as suggested by LCC and it is considered that this can be reviewed during the detailed design stage.

4 Summary

- 4.1.1 This TN has provided LCC with the additional information as requested in their email dated 15th May 2024 concerning the junction modelling submitted in support of the Land at Burbage Fields Farm planning application (ref: 24/00083/HYB).
- 4.1.2 Where requested, the junction models have been updated based on LCC recommendations and further justification has been provided by RL where required.
- 4.1.3 It is considered that alongside the submitted junction models, this TN provides LCC with the requested information to agree the junction modelling evidence base submitted as part of the Land at Burbage Fields Farm planning application.



National Highways Planning Response (NHPR 22-12) 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)

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

Council's Reference: 24/00083/HYB

Location: Land At Burbage Fields Farm Bullfurlong Lane Burbage

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/24/04828

Referring to the consultation on a planning application dated 29 January 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.

Date: 24 May 2024	
 Signature:	
Name: Martin Seldon	Position: Spatial Planner
National Highways National Highways The Cube 199 Wharfside Street 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.

The site is in the outskirts of Burbage village, Leicestershire. The closest point of impact with the Strategic Road Network (SRN) is the M69 junction 1 / A5 trunk road, circa 800m north from the junction. The site also abuts the M69 at the northbound side.

Recommended Non-Approval

It is recommended that the application should not be approved for a period of three months from the above date to allow the applicant to provide the additional information set out below.

Update – May 2024

Further information has recently been submitted by the applicant in response to our concerns. We have reviewed this material and commented as set out below:

TEMPPro Growth Factors

We previously requested that the TEMPPro growth factors be recalculated using the most recent version of TEMPPro v8.1. We welcome the inclusion of TEMPPro v 8.1 data and are content with the provided growth factors.

Traffic Flows

We thank the applicant for providing us with the traffic flows spreadsheet as requested during our previous review. We note that the traffic flows used in the Junctions 10 model outputs in appendix QQ for the 2026 + Dev AM and PM peak scenarios do not match the traffic flows identified within the spreadsheet. Please can the applicant clarify why these differences occur and look to resolve the issue.

Assessment Years

We thank the applicant for confirming the proposed development will achieve full build out by 2026. National Highways agree with the applicant in that the DfT Circular 01/2022 requires developments to be assessed in baseline, opening year and opening

year + development scenarios, including an opening year assessment for each phase of development. Please can the applicant confirm whether the development will be delivered as a phased approach. If so, the applicant should note that the DfT Circular 01/2022 requires an opening year assessment for each phase of delivery.

Junctions10 Modelling – A5/B578 Lutterworth Rd

The applicant has provided an updated A5/B758 Lutterworth Rd PICADY model with an accompanying CAD file of geometric parameters for our review. Please can the applicant reduce the minor arm flare length to 1 PCU as the width of the minor road at 10m is reported as 5.2m, which constrains two vehicles queueing side by side in this location. We also note that Google Street view indicates that minor arm visibility to the right is heavily obscured by overgrown vegetation encroaching onto the highway boundary. Therefore, we require the applicant to reduce the minor arm right arm visibility to reflect this (high-level check indicates the visibility in this location is limited to approximately 35 metres).

Junctions10 Modelling – A5/Wolvey Road

The applicant has provided a PICADY model of the A5/Wolvey Road junction, as requested by National Highways, to quantify the impact of the proposed development upon the SRN in the location. AECOM have completed high level check of CAD drawings supplied by the applicant, which detail geometric inputs into the local junction model, and can confirm that these measurements are accepted. Furthermore, National Highways can confirm that the traffic flow inputs within the model align with traffic flow diagrams contained within Land at “Burbage Fields Farm Traffic Flow Spreadsheet.xlsx”, however it is noted that this spreadsheet does not contain HGV splits for future year scenarios (2026 AM/PM and 2026 AM+Dev/PM+Dev). Please can the applicant provide the outstanding HGV splits for our review.

LinSig Modelling - M69 Junction 1

Thank you for providing the LinSig model, together with the changes to the model based on National Highways comments. The only outstanding comment that we now have is in relation to any validation that has been undertaken on the model, to identify that the model represents existing network conditions.

Model Validation

Please can confirmation be provided on whether any model validation has been undertaken on any of the local junction models. National Highways previously raised this within the planning response dated 16th February 2024. National Highways will not be in a position to fully accept the traffic modelling provided until clarity on this is provided.

Merge & Diverge Assessment

The applicant has provided merge and diverge flow calculations and assessments for our review. We can confirm that the development merge and diverge assessments for the M69 Junction 1, up to and including 2026 forecast models are considered accepted by National Highways.

National Highways has previously engaged with the applicant at pre-application stage and provided comments to agree on transport matters.

The proposed development comprises 422 dwellings, 11 self-build plots and a residential care home for 66 members. Based on our review of the Transport Assessment (TA) we have the following comments:

The trip generation methodology utilised a combination of self-build plots and housing development to create a total of 433 dwellings. Trip rates were obtained from a traffic survey conducted in a nearby residential area at Ambion Way which comprises a total of 72 dwellings. The trip rates from TRICS are lower than the trip rates obtained from the traffic survey. We therefore consider that the approach undertaken by the applicant is suitable.

For the residential care facility, the trip rates are derived from the TRICS data, and this is confirmed by our independent checks. We are therefore content with the trip generation process overall.

National Highways had already agreed to adopt the PRTM model for the trip distribution process for the residential development consisting of 433 homes. It is noted that the applicant has used appropriate 2021 census data to calculate the trip distribution for the residential care home using a gravity model. Traffic assignment has been assigned using the PRTM mode, this information matches with the number of trips calculated during the trip generation process.

In the TA, the TEMPro growth factor is based on Version 7.2C. We recommend growth factors are recalculated using the most recent version of TEMPro V8.1.

Traffic flows shown in Appendix CC do not match with those provided in Appendix QQ capacity assessment. This needs to be reviewed and corrected. In addition, we request the applicant provides the calculation spreadsheets used for the forecast year to validate the information provided.

There appears to be some confusion in the PRTM forecasting report between the trip distribution and trip assignment. The trip distribution involves determining origins and destinations for development trips, which are not impacted by the zone connection. On the other hand, the trip assignment relates to the path/route taken by the trips. We are agreeable to retaining the trip distribution, but we require a detailed explanation of the procedure for the trip assignments applied without an actual PRTM run. This is crucial, as the paths of the trips will change if the connection between two zones is removed. This isn't a straightforward case of simple addition and subtraction once the trips leave the zone connection, as additional traffic loaded onto the Coventry Road access will have different route choices based on generalised costs for various links

in the assignment model. Consequently, this is likely to lead to discrepancies in the local area route choice.

It is noted that zone 6014 from the PRTM model, situated adjacent to the proposed development, is utilised as a representative zone for trip distribution. Given that this zone is primarily residential, it is deemed a suitable match for the proposed development. Additionally, we would like to review the absolute trip distribution from the two development parcels stipulated in the TA, delineating the specific values for each.

While we cannot find the Volume/Capacity (V/C) comparison within the Area of Interest (AOI) selection criteria, we are broadly content with the choice of junctions for the detailed assessment, which includes M69 Junction 1 and A5/Lutterworth Road.

We note that the initial proposal identified 11 junctions for detailed assessment, while the TA section 6.1.8 has excluded two junctions, namely:

- i. A5 Watling Street / Wolvey Road junction.
- ii. B4109 Rugby Road / Brookside junction.

While we are not concerned about the Rugby Road junction, given its location away from the site and not being near to the Strategic Road Network (SRN), we would like to request detailed results for the A5/Wolvey Road junction.

We are happy with the application of the Furnessing methodology. Notably, we have observed the use of 2020 data for two locations, Burbage Road and Sapcote Road, where 2021 data was not available. While this may not be considered a major issue, it is acknowledged that the 2020 data could have been adjusted further with a growth rate to align it with 2021.

We have undertaken a review of the modelling assessments and merge and diverge assessments for the A5 / B578 Lutterworth Road priority junction and M69 Junction 1 signalised junction as these are the only two junctions assessed that will impact the SRN. There are two junctions on the B4109 Rugby Road which queues appear small and therefore it is unlikely these junctions will affect the operation of the M69 J1.

A5 / B578 Lutterworth Road - Junctions 10 Modelling Assessment

We note that the applicant has supplied the Junctions 10 model inputs and results for the A5/B578 Lutterworth Rd junction. An independent check has been undertaken and has identified differences in some geometric properties input into the junction model. In order to validate the information provided in the TA, we request the applicant supplies a CAD drawing of the junction with annotated geometric measurements for our review.

We also note that traffic flows provided within Appendix CC for 2026 and 2031 forecast years, however the Junctions 10 report for the junction assessment in Appendix QQ only includes assessments for 2021 and 2026 scenarios. Similarly, to the above point, to validate the information contained within the TA, we request the applicant supplies 2031 models for our review.

M69 Junction 1 – LinSig Modelling Assessment

From a comparison of the phase diagram and link information provided in Appendix SS, signal phases G and H seem to be provided on the links the opposite way round. In the phase diagram Phase G is identified for the eastern circulatory and Phase H is for the M69 Westbound off-slip, however this is the opposite on the link information. This therefore needs reviewing and amending.

A few alterations to lane lengths are recommended for several long lanes within the model. These are where long lanes have been used but diverge from a single lane further upstream.

- For lane J2:1/2 and J2:1/3 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.
- For lane J3:1/1 and J3:1/2 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.
- For lane J4:1/2 and J3:1/3 a lane length of 37 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.
- For lane J6:1/1 and J2:1/2 a lane length of 32 PCUs is recommended to be used for one of the two long lanes due to the carriageway reducing to a single lane upstream.

Saturation flow values of 1900 PCU/Hr have been used for each lane. We recommend the applicant provides justification for using this value.

A maximum flow giving way value of 1155 PCU/Hr has been used at the B4109 Hinckley Road give way approach. The applicant needs to clarify why this value has been used for National Highways consideration on the approach.

Similarly, a justification is required for a give way co-efficient of 0.27 being used at the B4109 Hinckley Road give way lane approaches.

The lane connectors provided for the M69 EB off-slip need reviewing. Lane J6:1/1 has a connector provided to lane J1:3/2 (A5 North), based on a review the satellite imagery of the road markings this should be removed and a lane connector between lane J6:1/2 and lane J1:3/2 should be provided for the M69 EB off-slip to A5 North movement.

The traffic flows provided within the models do not seem to match the flows identified within Appendix CC. It is appreciated that the values to be used in LinSig are required to be in PCUs and may not match, therefore the applicant should provide the flow calculation spreadsheet used within the LinSig assessments for our review and validation of the information provided by the applicant.

The traffic signal specification should be provided for us to review the signal controller elements.

For all assessments, the proposed opening year needs to be clarified, as well as how the modelling assessments undertaken satisfy the evaluation of the opening year and requirements of DfT Circular 01/2022.

In the assessments undertaken, no model validation appears to have been undertaken or reported within the TA. National Highways recommends that Degree of Saturation validation for the LinSig model assessments and queue comparison validation for Junctions 10 model assessments are undertaken. This will provide comfort that the models represent existing network conditions. We also request LinSig models are provided for our review.

Merge & Diverge Assessment

Initial checks of the assessments provided in appendices TT and UU indicate that the merge and diverge flows do not align with summations using the traffic flow diagrams provided with the TA. The applicant therefore needs to supply the flow data used for the merge and diverge assessment. This is for National Highways to complete the review including the mainline flow data for 2021, 2026 and 2031 scenarios. Paragraph 8.11.2 of the TA states that mainline flows were obtained from the TRIS database, we also seek clarification on the sites used from the database.

Construction Traffic

We note the applicant intends to submit a Construction Traffic Management Plan (CTMP) prior to the start of construction of the proposal and we welcome this approach.

The proposed site shares a boundary with the M69 and is near the M69 J1 and the A5 trunk road. We therefore recommend the submission and approval of the CTMP is managed through a suitable condition, prior to commencement of any works for our approval and agreement. This is to ensure that the structural integrity and safely operation of the SRN is maintained during the entire construction period of the development.

National Highways expects that the CTMP includes, as a minimum, the following:

- Hours of working; Date works will commence & anticipated completion date/duration;
- Site Contact Details responsible for ensuring Health & Safety;
- Location of the site compounds and offices, erecting fencing, etc in relation to the M69 boundary;
- Confirmation of the intended construction access arrangements to and from the site from the M69 and A5 trunk road;
- Review the standard of the access to be used as the construction access to and from the site from the M69 and A5 Details of any gates / security / barrier – location;
- Photographs and accompanying description of any defects within the M69 boundary prior to the commencement of activities on site [Before and after];
- Details of the management and routing of heavy goods vehicle to and from the site;
- Details of any proposed traffic management and signing arrangements to be implemented upon the M69 and A5 Trunk Road (TRSDG) [any implementation of such will require a Road Space booking with National Highways];
- Anticipated average two-way daily traffic numbers associated with the construction phase of the project;
- and in terms of accommodating the volume, nature and type of construction traffic vehicular movements;
- Consider any conflict between all vehicles associated with the construction site and existing users of the proposed construction access arrangements to and from the site;
- Details of any special or abnormal deliveries or vehicular movements;
- Pollution prevention of National Highways assets (if any);
- Arrangements for parking and turning facilities for the vehicles of all site personnel;
- Arrangements for visitor parking and directions;
- Arrangements for the loading and unloading of plant and materials;
- Areas of storage for plant and materials used during the construction of the development;
- Details of any temporary lighting, including the type, number, location, illumination details and hours of use;
- Measures to prevent the deposition of deleterious material on the public highway during the construction period;
- Measures to suppress noise and dust;
- Details of works or temporary works directly abutting the M69 boundary; example of issues of concern to National Highways, features causing a hazard to motorists, structural integrity of the M69 / protection of environment, habitat & trees / impact upon street furniture, drainage etc;
- This document should be used by the construction contractor in the development of their Construction Health and Safety Plan.

Boundary Treatment

The proposed development is adjacent to the M69. Details should therefore be provided of the proposed boundary treatment.

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 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 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.

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/R2

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 Amanda Wright

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 re-consulted by the Local Planning Authority (LPA), Hinckley and Bosworth Borough Council (HBBC), on a hybrid planning application at land at Burbage Fields Farm, Bullfurlong Lane, Burbage, Leicestershire. The proposed development is 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.

This is the LHA's third response to the planning application. The LHA's initial response (19 February 2024) was a holding response pending a review of the information submitted. In its second response (5 April 2024), the LHA provided observations on the following:

- Site access arrangements;
- Highway safety matters in the vicinity of the site;
- Sustainable modes of travel to serve the proposed development; and
- Public Rights of Way.

However, the LHA's second response also identified several concerns associated with the proposed development, as follows:

- Proposed site access arrangements and swept path analysis;
- Additional Personal Injury Collision data required for at least 2023;
- Junction model files required to check junction capacity assessments;
- Amendments to internal layout;
- Updated Residential Travel Plan; and
- Details of Public Rights of Way improvements.

After the LHA's previous response to the application, the LHA had a meeting with the applicant and LPA on 9 May 2024. The LHA has now been consulted on additional information submitted in support of the application which is listed below:

- Rodgers Leask Limited Highway Technical Note (HTN) 'Land at Burbage Fields - Response to National Highways', Document Ref: 21390-RLL-24-XX-TN-D-5015, Revision P01, dated 25 April 2024;
- Rodgers Leask Limited Highway Technical Note (HTN - LCC) 'Land at Burbage Fields - Response to LCC Highways', Document Ref: 21390-RLL-24-XX-TN-D-5016, Revision P01, dated 23 April 2024;
- Rodgers Leask Limited Highway Technical Note (HTN - LCC) 'Land at Burbage Fields - Response to LCC Junction Modelling Comments', Document Ref: 21390-RLL-24-XX-TN-D-5018, Revision P01, dated 17 May 2024;
- Traffic flow spreadsheet;
- Results of junction capacity assessments; and
- Highway schemes of mitigation.

Further comments on the additional evidence and the impact of the proposed development are provided below.

Site Access

Coventry Road Access

In the highway observations dated 5 April 2024 the LHA provided several comments on the site access drawing and supporting information.

After a review of the revised drawing 21390-RLL-23-XX-DR-D-5008 Revision P06, the LHA would advise the following:

- The drawing now shows dropped kerbs and road markings allowing cyclists to join and leave the cycle facilities; and
- The proposed uncontrolled crossing is quite far away from the desire lane for pedestrians on Coventry Road wishing to cross the access. It would be useful if it could be relocated closer to the junction.

Traffic Regulation Order

The applicant has indicated that they will provide double yellow line restrictions to protect the visibility splays from the site access. The LHA is not against the principle of imposing such restrictions here, however the applicant should note that the approval and implementation of the Traffic Regulation Order (TRO) would be subject to a separate process and consultation. The contribution for the TRO is £7,500, which would be included in the Section 106 if planning permission is granted.

Vehicle Swept Path Analysis

To ensure a refuse vehicle or bus could access / egress the site, the LHA advised the applicant that they would need to repeat the previous Swept Path Analysis (SPA) with a refuse vehicle of at least 11.2m length, or a larger refuse vehicle if the Local Waste Authority (HBBC) already uses a larger vehicle. The applicant has now submitted the following drawings:

- Coventry Road Site Access Refuse Vehicle (11.2m) Access / Egress (drawing ref: 21390-RLL-23-XX-DR-D-5012 Revision P04); and
- Coventry Road Site Access Bus Access / Egress (drawing ref: 21390-RLL-23-XX-DR-D-5009 Revision P06).

Vehicle speeds of 15kph have been used and after checking these drawings the LHA is satisfied that a refuse vehicle and bus could access and egress the site from Coventry Road in all directions in a safe and controlled manner.

Ghost Right Turn

In the previous highway observations the LHA highlighted that further justification was required to demonstrate that a simple priority junction was appropriate to serve the quantum of development being applied for. The applicant has now submitted further evidence in paragraphs 3.15 to 3.1.11 of the technical note to support the site access arrangements.

The applicant has quoted 400 two-way movements on Coventry Road in the AM-PM peaks, but Annual Average Daily Traffic (AADTs) are needed to use the chart in DMRB CD123 in Figure 1 below. The predicted trip generation figures seem to point to something more substantial than a simple junction being needed based on the AADT on Coventry Road which are presented in the traffic flow diagrams on the LPA website on 23 January 2024 and the likely AADT on the minor road which will serve the proposed development.

The applicant would need 8.5m for the carriageway (2.5m turning lane and 3m running lanes), plus a 2m footway. Following a review of the drawings which have been provided there would not be space to fit in this 10.5m total corridor width. Therefore the LHA would agree with the applicant that there would be insufficient room within the highway to fit in a ghost island right turn lane. However, the effect on pedestrians crossing on Coventry Road could be mitigated by providing traffic islands with tactile paving.

Figure 2.3.1 Approximate priority junction provision on single carriageway roads based on flows only

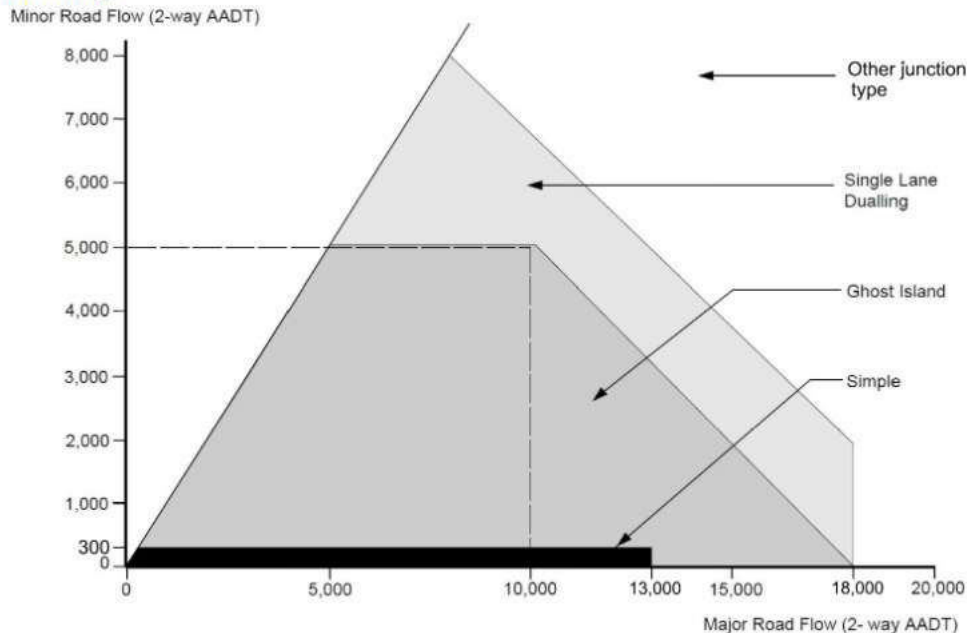


Figure 1: Approximate priority junction provision on single carriageway roads based on flows only reproduced from Figure 2.3.1 of CD 123: Geometric design of at-grade priority and signal-controlled junctions

Notwithstanding this, the applicant is therefore required to consider the access proposals and submit revised proposals accordingly.

Flanders Close Access

In the initial proposals the applicant identified Flanders Close as a second point of access to serve the proposed development and this would form an extension to the access arrangements put forward as part of LPA applications 21/00502/OUT and 23/00148/OUT.

The applicant has now added the missing information in line with the LHA request and the details of that site access are acceptable. Flanders Close Site Access Refuse Vehicle (11.2m) Access / Egress shown on drawing ref: 19409-RLL-21-XX-DR-D-5005 Revision P02 also demonstrates that there is sufficient clearance for a refuse vehicle to pass oncoming vehicles.

Notwithstanding the above, the LHA understands the applicant has changed the proposals so that vehicular access will not be via Flanders Close to the development and will be from Coventry Road only.

Workhouse Lane Stopping Up

Drawing 19409-RLL-20-XX-DR-C-2100 Rev G shows a wider length of dropped kerbs. If planning permission is granted the exact length of dropped kerbs can be confirmed by a swept path analysis at the S278 detailed design stage.

Summary

Based on the quantum of the proposed development and the AADT / development flows the LHA would have concerns that the proposed simple priority junction would be more than twice the recommended figure that a single access according to the guidance in Table DG1: General geometry of residential roads of the LHDG.

Therefore the applicant should revisit the site access arrangements and ensure that safe and suitable access proposals are submitted for review and approval.

Highway Safety

The initial Transport Assessment (TA) provided a review of the Personal Injury Collision (PIC) data for the period January 2019 – January 2023. The applicant has now obtained additional PIC data to cover January 2023 – December 2023, which showed there were another three collisions. Two of the collisions were on the M69, which is under the jurisdiction of National Highways (NH). The other collision occurred on the B578 Lutterworth Road.

Notwithstanding the above the LHA has checked its own database for the period from January 2019 to 31 March 2024 and a summary of the results is presented below:

- Total of 46 PICs –There was one fatal collision, seven serious collisions and 38 slight collisions in the period under consideration; and
- 10 collisions in 2019, eight collisions in 2020, five collisions in 2021, eight collisions in 2022, 11 collisions in 2023 and four collisions up to 31 March 2024.

The fatal collision in September 2023, happened on the A5 Watling Street, just north of the M69 Junction 1. The A5 is under the jurisdiction of NH so the LHA does not have any further comments on this collision.

However, the LHA note that one collision occurred on Coventry Road in January 2023. The PIC was classified as serious and involved a vehicle overtaking parked vehicles.. Therefore the LHA would ask the applicant to consider the circumstances around this collision and what mitigation may be required given the LHA concerns with the site access arrangements.

Trip Generation

The applicant considered the predicted trip generation for the proposed development in the initial TA dated November 2023. The applicant has used locally derived trip rates, which are based on survey data from the existing Ambion Way development, which consists of 72 dwellings. The Care Home trip rates were extracted from the TRICS database, which is the industry standard system for predicting trip generation. More details of the trip rates by land use can be found in Tables 13 and 14 of the initial TA. The total predicted vehicle trip generation is outlined in Table 16 and reproduced in Figure 2 below.

Table 16: Vehicle Trip Generation

Time Period	Arrivals	Departures	Two-Way
Residential (433 dwellings)			
AM Peak Hour 07:30 – 08:30	120	247	367
PM Peak Hour 17:00 – 18:00	210	84	295
12-Hour 07:00 – 19:00	1,275	1,293	2,568
24-Hour 00:00 – 24:00	1,491	1,503	2,995
Residential Care Home (66 residents)			
AM Peak Hour 08:00 – 09:00	5	4	9
PM Peak Hour 17:00 – 18:00	2	3	5
12-Hour 07:00 – 19:00	51	55	106
24-Hour 00:00 – 24:00	59	63	123
Total			
AM Peak Hour 08:00 – 09:00	125	251	376
PM Peak Hour 17:00 – 18:00	213	87	300
12-Hour 07:00 – 19:00	1,326	1,348	2,674
24-Hour 00:00 – 24:00	1,551	1,567	3,118

Note: Rounding error to 1dp

Figure 2: Predicted vehicle trip generation for proposed development from Rodgers Leask Transport Assessment, Revision P07, dated November 2023

The LHA considers the approach to trip rates / trip generation is robust and suitable to test the impact of the proposed development on the local highway.

Highway Impact

Since the latest highway observations in April 2024, the LHA has had the opportunity to review the transport modelling outputs and the junction capacity assessments. For reference the applicant has used Pan Regional Transport Model (PRTM) and then used the outputs along with observed flows to inform the junction capacity assessments.

Base Year Traffic Assessment

To establish an understanding of the performance of the existing highway network, a base year assessment was first undertaken using PRTM by the LHA's Framework Modelling Consultant, AECOM, on the applicant's behalf.

The review of the baseline PRTM model including a review of how the model performs in the vicinity of the site, concluded that the model was suitable to test the impact of the proposed development.

Future Scenarios

During initial discussions with the applicant and the LHA, various scenarios with and without development have been considered to understand the impact of the proposed development on the highway: These are listed below:

- 2021 Base Core – Without Development;
- 2026 Base Core – Without Development;
- 2026 Base + Development;
- 2031 Base Core – Without Development; and
- 2031 Base + Development;

The applicant has undertaken a detailed assessment of the initial forecast years including analysis of 'with' and 'without development scenario' to determine the highway impacts of the development. Whilst this testing assists in demonstrating the full impact over the full development in the future, it can also provide a detailed evidence base to enable the determination of suitable trigger points for highway infrastructure and mitigation. This response primarily considers the overall impact of the development in the 2026 modelled year with reference made to appropriate interim and phased testing where appropriate.

As set out above, the model runs also consider the phased impact of development up to 2031 by which time it was anticipated the full development would be built out, however no detailed analysis of the results i.e. junction capacity assessments have been undertaken by the applicant for the 2031 scenario.

Strategic Modelling

It is important to note that the proposed Burbage Fields development was modelled with *two vehicular accesses*.

In the scenarios tested, the development would connect to Flanders Close, thus providing highway access to the Passchendaele Drive / Lutterworth Road junction, and a new priority junction was proposed to the north of the development to connect to Coventry Road.

The full PRTM report is provided in Appendix T of the TA but after a review of the development impact within the study area in the 2026 and 2031 AM and PM peak hours the following key observations can be made:

- Development traffic will route to and from the M69 via Rugby Road and Sapcote Road;
- Increase in vehicles going east towards the A5 via the B578 Lutterworth Road;
- Increase in traffic that goes north towards the centre of Hinckley via Coventry Road, Rugby Road, the B578 Hinckley Road, and Burbage Road;
- Changes in delays between the 2026 'With Development', and the 2031 'With Development' scenarios were generally modest; and
- Most significant delays are forecast at the A5 / B4114 junction.

Junction Capacity Assessments

To establish appropriate inputs for the local junction assessments a revised set of modelled flows for all scenarios (base + development) have been produced which use observed turning movements (from traffic counts undertaken in 2021 and 2023) and modelled growth applied appropriately. The junctions highlighted in the PRTM report are listed below:

1. Coventry Road / Site Access priority junction (site access junction);
2. B578 Lutterworth Road / Passchendaele Drive priority junction;
3. B4109 Rugby Road / Three Pots Road / Canberra Way roundabout;
4. B578 Lutterworth Road / Lychgate Lane Crossroads priority junction;
5. B4109 Rugby Road / Coventry Road priority junction;
6. B4669 Sapcote Road / B4669 Burbage Road / B578 Hinckley Road priority junction;
7. B4109 Rugby Road / Sketchley Road / Sketchley Lane roundabout;
8. A5 / B578 Lutterworth Road priority junction;
9. M69 Junction 1 signalised junction;
10. A5 Watling Street / Wolvey Road; and
11. B4109 Rugby Road / Brookside junction.

Junctions 8, 9 and 10 include arms on the Strategic Road Network so they are under the jurisdiction of NH, however the LHA also note NH comments on the A5 / B578 Lutterworth Road and would ask the applicant to also send the CAD drawing of the junction with annotated geometric measurements for the LPA to review.

It should be noted that while B4109 Rugby Road / Brookside junction was highlighted in the list for detailed assessment this has not been included in any of the documents reviewed by the LHA. This should therefore be submitted.

Whilst the methodology for assessing the impact of the proposed development from the PRTM runs is generally acceptable, there does not appear to be any assessments of the impact of the proposed development in 2031. As 2031 is only seven years away from the date of the planning application the impact of the proposed development is likely to be more noticeable on the network. This should therefore be submitted.

Junction models

The applicant has submitted a technical note (document ref: 21390-RLL-24-XX-TN-D-5018) which provides commentary on the updates to the 2026 junction modelling based on previous LHA comments. The LHA has rechecked the junction models and can advise the following:

Rugby Road/Canberra Road roundabout

The technical note acknowledges that unequal lane usage is occurring on the Rugby Road south arm with no vehicles using the offside lane in the AM peak and very few vehicles using the offside lane in the PM peak (maximum of one vehicle queue using the offside lane).

The applicant should add capacity corrections as it has been demonstrated that drivers would prefer to queue in the nearside lane rather than use the offside lane (and then must get back over to the nearside lane on the exit to carry on north on Ruby Road).

As a basic test, the LHA have removed the right turn traffic (going from Rugby Road South to Canberra Way) from all the flow groups and then modelled the Rugby Road South approach as a single 4m wide lane and the results are shown in Figure 3 below:

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2021									
1 - Canberra Way	D1	0.2	12.31	0.17	B	D2	0.0	6.05	0.03	A
2 - B4109 Rugby Road South		1.2	6.90	0.54	A		5.7	20.18	0.86	C
3 - Three Pots Road		0.5	7.00	0.33	A		0.7	10.87	0.41	B
4 - B4109 Rugby Road North		2.1	6.17	0.68	A		0.8	3.34	0.44	A
	2026									
1 - Canberra Way	D3	0.2	14.80	0.19	B	D4	0.0	6.33	0.04	A
2 - B4109 Rugby Road South		2.1	9.75	0.68	A		22.0	66.29	0.99	F
3 - Three Pots Road		0.6	8.11	0.36	A		0.4	10.76	0.31	B
4 - B4109 Rugby Road North		2.7	7.43	0.74	A		0.9	3.51	0.46	A
	2026 + Dev									
1 - Canberra Way	D5	0.3	18.08	0.23	C	D6	0.0	6.44	0.04	A
2 - B4109 Rugby Road South		2.3	10.49	0.70	B		44.3	115.86	1.05	F
3 - Three Pots Road		0.6	8.48	0.38	A		0.5	11.58	0.34	B
4 - B4109 Rugby Road North		3.5	9.05	0.78	A		0.9	3.57	0.47	A

Figure 3: Results of Rugby Road/Canberra Road roundabout junction capacity assessments with LHA amendments.

Although the LHA acknowledge this is a simple method of intercept correction it does highlight that there is potential for the development traffic to increase the Ratio of Flow to Capacity (RFC) value from 0.99 to 1.05 which increases the maximum queue from 22 vehicles to 44 vehicles on the Rugby Road South approach.

RFC is a term used in Transport Modelling to assess the operation of a junction. The result provides an indication of the likely junction performance, with a value of 1 implying that the demand flow is equal to the capacity. Typically, a value of 0.85 is seen as the threshold of practical capacity, with results higher than this more likely to experience queuing or delay.

Therefore it would be useful for the applicant to consider using a method such as the “Barbara Chard Arcady Heath Warning” in this case or undertake individual lane counts to establish exactly how the lanes are being used.

Non-PRTM runs

As set out above the applicant tested the impact of the proposed development in PRTM with two site accesses to serve the proposed development. However, given that vehicular access to the proposed development will be via Coventry Road only the LHA would agree with NH’s response dated 24 May 2024 which asked for a detailed explanation of the process of reassigning the Flanders Close trips to the Coventry Road access and the implications on the junctions near the site.

Therefore the applicant should send all the information highlighted above for review and approval in the 2026 and 2031 scenarios once the correct traffic flows have been identified. The revised flows should consider any changes that arise because of the changes to the flows from the non-PRTM runs. The junction models should then be rerun in 2026 and 2031 scenarios.

Off-Site Implications

Notwithstanding the above concerns with the assessments, the applicant has identified that a scheme of mitigation was required at the B4109 Rugby Road / Coventry Road junction and the B4669 Sapcote Road / B4669 Burbage Road / B578 Hinckley Road junction.

B4109 Rugby Road / Coventry Road junction

The LHA provided observations on the applicant's scheme of mitigation at the B4109 Rugby Road / Coventry Road junction and the applicant has now submitted the following drawings in response to the initial comments:

- RLRE Consulting Engineers drawing ref: 21390-RLL-23-XX-DR-D-5011, Revision P03, dated 10 April 2024; and
- RLRE Consulting Engineers drawing ref: 21390-RLL-23-XX-DR-D-5016, 'B4109 Rugby Road / Coventry Road Mitigation Vehicle Tracking', Revision P02, dated 10 April 2024.

After a review of the updated scheme the LHA comments are listed below:

- The signals phasings are now shown on drawing Rev P03 in line with the LHA previous request. The LHA note that some of the phasings appear to have errors e.g. Stage 1 and 2 show A as being ahead and right, Stage 2 shows B as being ahead only. However these have no impact on the design of the junction i.e. the proposed road markings;
- The junction intervisibility zone has been added to drawing Rev P03 and it falls entirely within the existing highway boundary; and
- The tactile paving layouts within the traffic island on the B4109 do not require the "tails" and should be as shown in the DfT document Guidance on the Use of Tactile Paving Surfaces Figure 11. The tactile paving on Coventry Road has been amended as requested. This can be rectified at the S278 detailed design stage.

Vehicle Swept Path Analysis

The LHA welcome that the vehicle tracking shown on drawing rev P01 shows that vehicle speeds of 15kph have been used. The initial analysis shows the vehicle touching the kerbs for the right turn out and left turn in manoeuvres. Furthermore, the length of the Max Legal Length Articulated Vehicle has increased from 16.5m to 18.55m (May 2023) so the LHA would advise the applicant to rerun the swept path analysis with the longer vehicle and consider the implications for the junction and if any further amendments are required.

Sapcote Road / Hinckley Road / Burbage Road

There was a scheme of mitigation at this junction secured as part of planning applications ref: 21/00502/OUT / 23/00148/OUT and shown on drawing: P19409-22-XX-DR-D-5006, Revision A.

Notwithstanding the above, the LHA would advise the applicant should ensure that once the correct flows have been identified that the highway scheme will accommodate the development traffic or provide an enhanced scheme at this junction to account for the additional vehicles.

Internal Layout

The LHA provided comments on the internal layout of the site and what changes were needed to make the site adoptable. The applicant has provided further information on the cycle / walking links within the site in Paragraph 3.6 of the TN.

The LHA has checked the revised layout shown on Redrow drawing number: 1693-08-02-110, 'Land South of Burbage – Coloured Site Plan' against the LHDG and offer further comments below.

Speed control

Speed control measures will need to be designed into the road layout. In this instance, 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. Further information can be found in the LHDG Part 3, section DG4, table DG8.

Forward visibility through bends

Forward visibility envelopes through bends and junction visibility splays should be shown on the plan, and the areas within the envelopes / splays should be conveyed as highway, in accordance with the LHDG. For further information, please see Part 3 of the LHDG, Figure DG2b'.

Bend widening 10 degrees

Bend widening should be implemented at all bends, in line with Para 3.33 which can be found in Part 3 of the LHDG.

Plots 264-363

The road running alongside that which serves plots 264 and 363 is not suitable for adoption due to the road serving fewer than five frontages. The private road should start after the radii. In addition, the private road should also start on the radii outside the front of plot 363 also due to fewer than five houses fronting the highway.

Tracking

The applicant should ensure tracking for a refuse vehicle around the site is carried out, using the specification attached to this response.

Shared surface

The shared surfaces should be in accordance with the Residential Access Way column in Table DG1 of the LHDG. Shared surfaces are to be a completely flush block paved 7.5m corridor, consisting of a 4.8m 'carriageway' and 2x1.35m 'footways'. If shared surfaces are to remain in the development, please detail these areas in block paving.

The applicant should also note that the length of shared surfaces should typically be a maximum of approximately 40m, as the length of the shared surface should not require speed control features, which are not akin to the ethos of a shared surface.

Footway connectivity

A 2m footway is needed at the front of the Local Equipped Area for Play (LEAP), adjacent to the carriageway.

Footway

The footway must follow the carriageway in the vicinity of plots 275/274.

Pedestrian link beyond carriageway

Any isolated and/or interconnecting pedestrian links would not typically be considered for adoption. If they were to be offered for adoption, they may incur an additional commuted sum.

Service margin

The 1m service margin outside plots 83-90 should be a bituminous 1m service margin. It is noted that a 1m service margin is indicatively shown but it is unknown if this is to be verge or bituminous. The applicant should clarify on a revised plan.

Cycleway width and markings

The LHA note that the applicant has introduced a 3m footway, but notwithstanding the applicant's information in their technical note, the LHA would advise the applicant that the principles of LTN1/20 should be applied as this provides guidance for local authorities on designing high-quality, safe cycle infrastructure.

Therefore, in this instance the LHA would advise that a 2-way segregated cycle lane at 3m width and a 2m footway extending up to the crossing as per Table 5-2 in the Cycle Infrastructure Design - LTN 1/20. Please also refer to Section 6.5 Shared Use of LTN 1/20, for an explanation of why shared use it not recommended.

The proposed development has over 400 plots, serving Burbage to the north-east of the development and Hinckley to the north-west, therefore it has a good chance of helping to improve public health and the environment, reducing congestion, connecting our communities, and creating cleaner, greener, happier places, thus a potential chance of receiving future funding for Local Cycling and Walking Infrastructure Plans (LCWIPs).

As such, the development should be designed in such a manner which allows the LHA to have the option to tie in with this development as a part of the planned LCWIP over the Hinckley/Burbage area.

Open public spaces embankments

The LHA would advise the applicant that the LHA does not adopt open public spaces or embankments unless they are supporting the carriageway/footway.

Other Considerations

- The applicant should 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 Leicestershire County Council's (LCC's) Forestry team.
- Gradients should conform to the standards set out in Table DG1: General geometry of residential road (internal) of the LHDG.
- 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.
- At this stage the LHA is unable to comment on the vertical alignment, drainage, materials, or proposed construction details.

Private Drives

The LHA has checked the private drives and is satisfied that they have been designed in accordance with the requirements in Part 3 Figure DG17 of the LHDG for the number of dwellings they serve.

Parking

The LHA has reviewed the parking provision across the site and offers further comments below:

- Parking spaces for plots 371-373 need to be wider as they are bound on both sides; and
- The spaces for the following plots are only approx. 5m in length: 30-35, 45-49, 55-59, 70-72, 75-80, 84, 95-96, 101-107, 126-128, 130-131, 141- 147, 152, 157-161, 163-169, 173-178, 180-181, 183-187, 189-195, 204-205, 207-213, 214-216 (these spaces are marked wrong on the plan as 231-233), 222-225, 229-235, 237-239, 261-266, 283-284, 286-291, 298-305, 366, 385-291, 395-396, 399-402. 404-407 and 414-418.

As previously advised by the LHA, the minimum parking space sizes and aisle widths are shown in Figure DG13. Minimum parking size 2.4m x 5.5m, add 0.5m if bounded by a wall, fence, hedge, line of trees or other similar obstructions on 1 side, 1m if bounded on both sides. Therefore, the parking provision for the plots referenced should be reviewed to ensure the parking dimensions are provided in line with the LHDG.

For a garage to count as a parking space it should have internal dimensions of 3m x 6m. The LHA has checked the garage sizes provided and they are acceptable.

Construction Traffic Management Plan (CTMP)

The LHA note the applicants overview of construction requirements in the initial TA and their intention to submit a Construction Traffic Management Plan (CTMP) prior to start of construction.

If planning permission is granted the LHA would require the inclusion of a suitably worded condition to be included on any planning permission for the applicant to provide a CTMP which should include as a minimum details of the proposed routeing of construction traffic, wheel cleansing facilities, location of construction compounds, vehicle parking facilities, treatment of any affected Public Rights of Way, details of any temporary construction accesses that are required, and a timetable for when the measures are required to be in place.

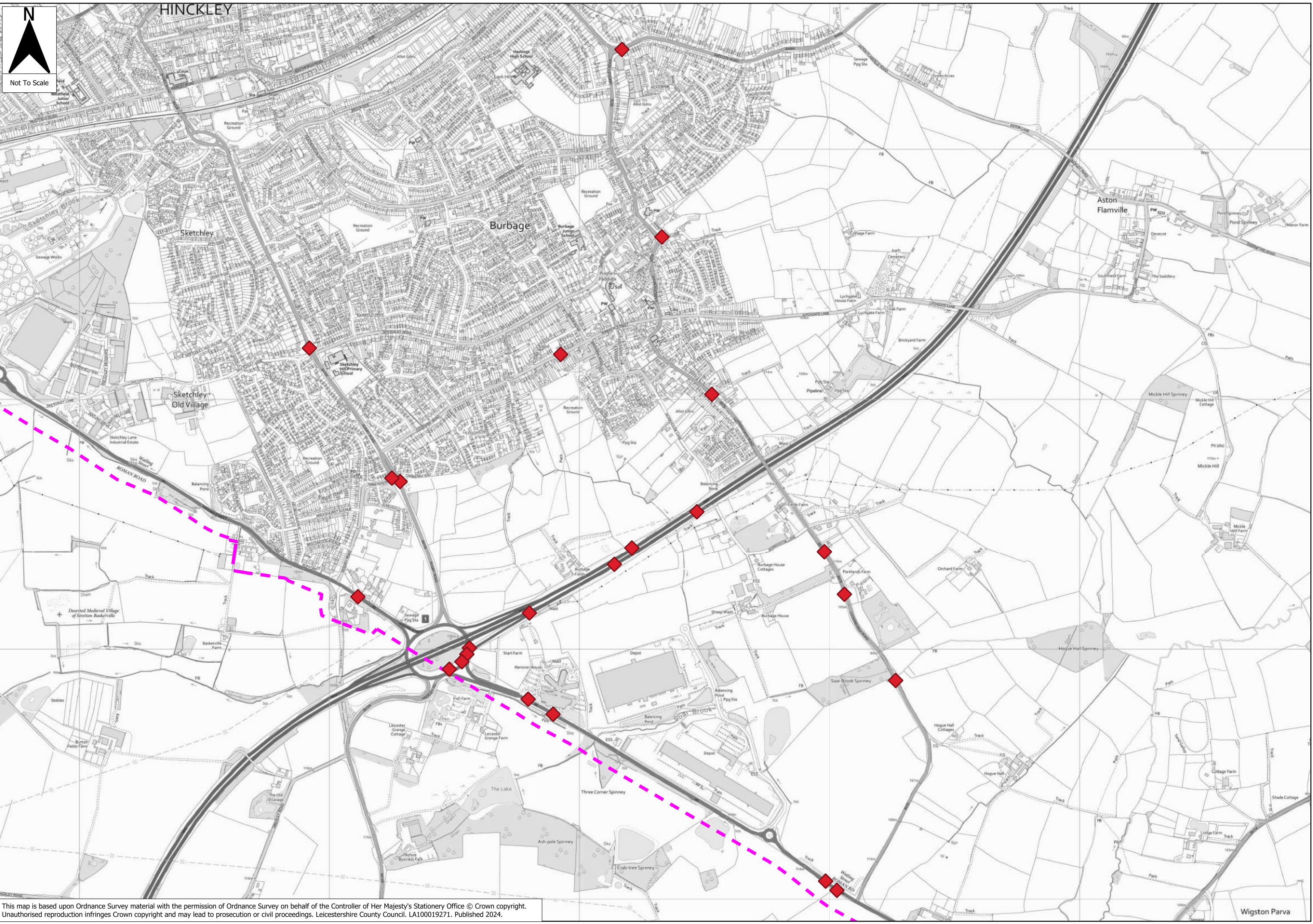
Date Received
24 April 2024

Case Officer
David Hunt

Reviewer
RD

Date issued
14 June 2024

Appendix D: Personal Injury Accident Data



Accidents between dates 01/01/2019 and 02/01/2024 (60) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Selected Polygon:Rodgers Leask - Burbage Fields Farm, Burbage - 10.04.24

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900131	16/01/2019	443283	291671	Fine without high winds	Wet/Damp	Daylight	Slight

Location: B4109 RUGBY ROAD BURBAGE ROUNDABOUT JW CANBERRA WAY

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead but held up	NW	SE
Car	Cleared junction or waiting/parked at junction exit	Going ahead but held up	NW	SE
Car	Cleared junction or waiting/parked at junction exit	Stopping	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900179	09/01/2019	443114	291210	Fine without high winds	Dry	Darkness: street lights present and lit	Slight
Location: A5 WATLING STREET BURBAGE APPROX 50M SOUTH EAST JW WOLVEY ROAD							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900468	10/05/2019	444985	290072	Fine without high winds	Dry	Daylight	Slight
Location: A5 WATLING STREET BURBAGE APPROX 150M NORTH WEST JW LUTTERWORTH ROAD							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	SE	NW
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 02/01/2024 (60) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage - 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901582	20/09/2019	444140	291340	Fine without high winds	Dry	Daylight	Slight
Location: M69 BURBAGE NR JUNCTION 1. EXACT LOCATION & DIRECTION UNKNOWN.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000308	10/06/2020	444330	292650	Fine without high winds	Dry	Daylight	Slight
Location: ASTON LANE BURBAGE JW CHURCH LANE.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead right bend	S	NE
Car	Jct Approach	Parked	Parked	Parked
Car	Jct Approach	Parked	Parked	Parked
Car	Jct Approach	Parked	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000604	11/07/2020	443560	291005	Fine without high winds	Dry	Daylight	Serious

Location:

A5/M69 ROUNDABOUT BURBAGE EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	NW	SE
Motorcycle over 500cc	Leaving roundabout	Changing lane to left	NW	SE

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000689	10/09/2020	444170	293400	Fine without high winds	Dry	Daylight	Slight

Location:

B4669 SAPCOTE ROAD BURBAGE JW HINCKLEY ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Going ahead right bend	E	NW

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000794	09/10/2020	443480	290920	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight
Location: A5/M69 ROUNDABOUT BURBAGE,							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	NE	SW
Car	Mid Junction - on roundabout or main road	Going ahead other	NE	S

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000973	11/12/2020	444210	291405	Fine without high winds	Dry	Darkness: no street lighting	Slight
Location: M69 NORTHBOUND BURBAGE EXACT LOCATION UNKNOWN.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Vehicle Passenger	Slight
Vehicle Passenger	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data

Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage

- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202001172	30/10/2020	444980	291390	Fine without high winds	Dry	Darkness: street lighting unknown	Slight
Location:	B578 LUTTERWORTH ROAD BURBAGE EXACT LOCATION & DIRECTIONS UNKNOWN.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100018	09/01/2021	443250	291685	Fog or mist	Wet/Damp	Daylight	Slight
Location:	B4109 RUGBY ROAD BURBAGE JW THREE POTS ROAD.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N
Car	Entering roundabout	Turning right	W	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100136	18/03/2021	444530	292020	Fine without high winds	Dry	Daylight	Slight

Location:

B578 LUTTERWORTH ROAD BURBAGE EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100179	07/04/2021	443800	291145	Fine without high winds	Dry	Daylight	Slight

Location:

M69 SOUTHBOUND BURBAGE NR J1 EXIT SLIPROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	NE	SW
Car	Mid Junction - on roundabout or main road	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100270	03/05/2021	442920	292205	Raining without high winds	Wet/Damp	Daylight	Slight
Location: B4109 RUGBY ROAD BURBAGE 10M N OF HERALD WAY ROUNDABOUT.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100874	01/11/2021	443895	290740	Fine without high winds	Wet/Damp	Daylight	Slight
Location: A5 WATLING STREET BURBAGE OUTSIDE JURYS INN HOTEL.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Starting	NW	SE
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200144	20/02/2022	445030	290035	Raining without high winds	Flood / Standing water (over 3mm)	Darkness: no street lighting	Serious
Location:	A5 BURBAGE BETWEEN B4114 7 M69. WXACT LOCATION NOT GIVEN.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Serious
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200430	25/05/2022	443795	290800	Fine without high winds	Dry	Daylight	Slight
Location:	A5 SOUTHBOUND BURBAGE OUTSIDE HINCKLEY ISLAND HOTEL.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	NW	SE
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates

01/01/2019 and 02/01/2024

(60) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200713	30/08/2022	443550	290980	Fine without high winds	Dry	Daylight	Slight
Location: A5/M69 ROUNDABOUT BURBAGE.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Changing lane to left	NW	SE
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Changing lane to left	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202201030	26/11/2022	445060	291220	Raining without high winds	Wet/Damp	Darkness: no street lighting	Serious
Location: B578 LUTTERWORTH ROAD BURBAGE NR PARKLANDS FARM.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead right bend	NW	S

Casualties:

Class	Severity
Vehicle Passenger	Serious

Accidents between dates 01/01/2019 and 02/01/2024 (60) months

Selection: Notes:
; Refined using Accidents within selected Polygons -Data
Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage
- 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300039	14/01/2023	443925	292180	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Serious
Location: COVENTRY ROAD BURBAGE OUTSIDE NUMBER 21.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE
Car	Not at, or within 20M of Jct	Overtaking stat vehicle O/S	NE	SW

Casualties:

Class	Severity
Vehicle Passenger Driver / Rider	Slight Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300399	27/05/2023	443530	290950	Fine without high winds	Dry	Daylight	Slight
Location: A5/M69 ROUNDABOUT BURBAGE. EXACT LOCATION UNKNOWN.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	N	S
Car	Mid Junction - on roundabout or main road	Changing lane to right	N	SW

Casualties:

Class	Severity
Vehicle Passenger Driver / Rider	Slight Slight

Accidents between dates 01/01/2019 and 02/01/2024 (60) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage - 10.04.24")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300869	17/09/2023	444470	291550	Fine without high winds	Dry	Darkness: street lighting unknown	Slight
Location: M69 SOUTHBOUND BURBAGE EXACT LOCATION UNKNOWN.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301097	07/11/2023	445265	290875	Other	Wet/Damp	Daylight	Slight
Location: B578 LUTTERWORTH ROAD BURBAGE APPROX 250M N HOGUE HALL.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Number of records in selection: 23



Accidents between dates: 01/01/2019 and 02/01/2024

Selection: ; Refined using Accidents within selected Polygons -Data Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage - 10.04.24")

Table 1 - Accidents by Month	2019	2020	2021	2022	2023	2024	Total
January	2	-	1	-	1	-	4
February	-	-	-	1	-	-	1
March	-	-	1	-	-	-	1
April	-	-	1	-	-	-	1
May	1	-	1	1	1	-	4
June	-	1	-	-	-	-	1
July	-	1	-	-	-	-	1
August	-	-	-	1	-	-	1
September	1	1	-	-	1	-	3
October	-	2	-	-	-	-	2
November	-	-	1	1	1	-	3
December	-	1	-	-	-	-	1
TOTAL	4	6	5	4	4	0	23

Table 2 - Casualties by Month	2019	2020	2021	2022	2023	2024	Total
January	2	-	1	-	2	-	5
February	-	-	-	2	-	-	2
March	-	-	1	-	-	-	1
April	-	-	1	-	-	-	1
May	1	-	1	1	2	-	5
June	-	1	-	-	-	-	1
July	-	1	-	-	-	-	1
August	-	-	-	1	-	-	1
September	2	1	-	-	2	-	5
October	-	6	-	-	-	-	6
November	-	-	2	1	2	-	5
December	-	2	-	-	-	-	2
TOTAL	5	11	6	5	8	0	35

Table 3 - All Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	1	0	4
Slight	4	5	5	2	3	0	19
TOTAL	4	6	5	4	4	0	23

Table 4 - Casualties by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	1	0	4
Slight	5	10	6	3	7	0	31
TOTAL	5	11	6	5	8	0	35

Table 5 - Pedestrian Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0
Slight	1	1	0	0	0	0	2
TOTAL	1	1	0	0	0	0	2

Table 6 - Cycle Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0
Slight	0	0	0	0	0	0	0



Accidents between dates: 01/01/2019 and 02/01/2024

Selection: ; Refined using Accidents within selected Polygons -Data Requests 2024 ("Rodgers Leask - Burbage Fields Farm, Burbage - 10.04.24")

TOTAL	0	0	0	0	0	0	0
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Table 7 - Motor Vehicle Only Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	1	0	4
Slight	3	4	5	2	3	0	17
TOTAL	3	5	5	4	4	0	21

Table 8 - 60 Plus Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	0	1	0	2
Slight	1	1	0	1	1	0	4
TOTAL	1	2	0	1	2	0	6

Table 9 - Child Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	1	0	0	1
Slight	0	1	0	0	0	0	1
TOTAL	0	1	0	1	0	0	2

Table 10 - P2W Accidents by Severity	2019	2020	2021	2022	2023	2024	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	0	0	0	1
Slight	0	0	0	1	1	0	2
TOTAL	0	1	0	1	1	0	3

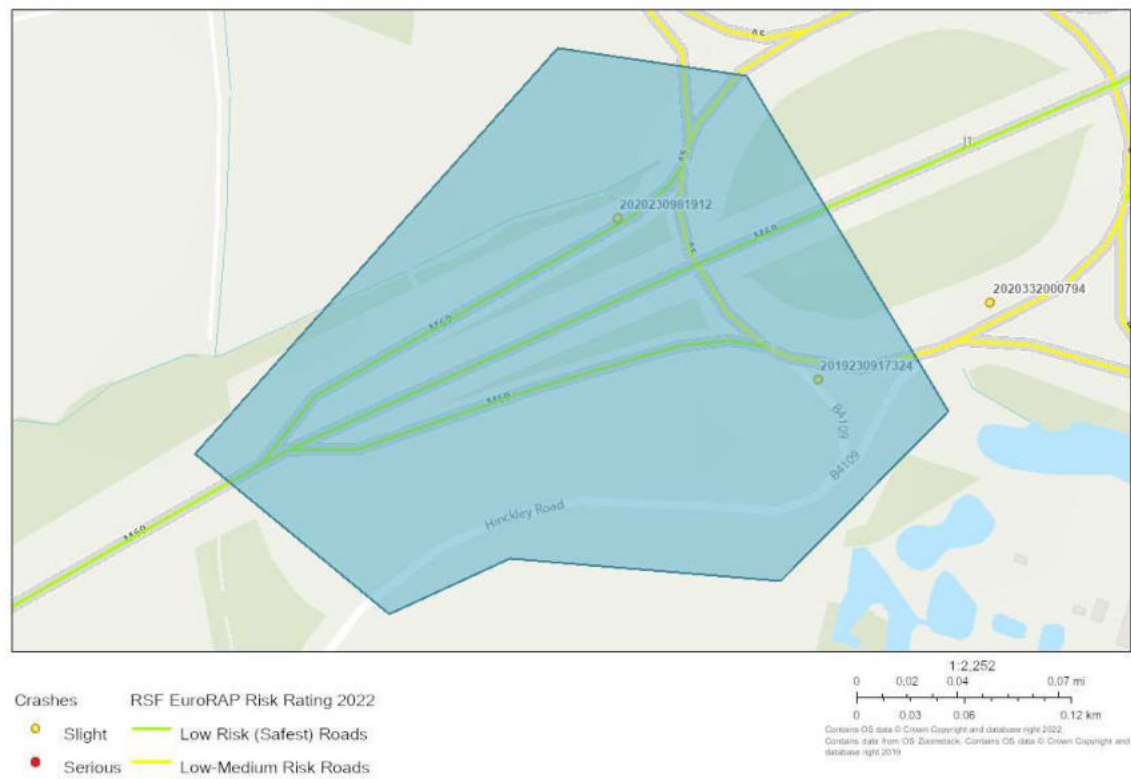


Crash Report

Area of Interest (AOI) Information

Area : 81,031.99 m²

Mar 31 2023 9:18:49 British Summer Time



Summary

Name	Count	Area(m²)	Length(m)
Crashes	2	N/A	N/A

Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year	Number_of_vehicles	Number_of_casualties	Easting
1	None	Slight	No officer attended crash scene	December 14, 2019	2019	2	1	443384
2	None	Slight	Police officer attended crash scene	September 9, 2020	2020	3	1	443272

#	Northing	Highway_Authority	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit	Light_conditions
1	290877	Warwickshire	B4109	Fine without high winds	Dual carriageway	Wet or Damp	50	Daylight: regardless of presence of streetlights
2	290967	Warwickshire	M69	Fine without high winds	Slip Road	Dry	70	Daylight: regardless of presence of streetlights

#	Junction_detail	Pedestrian_Crossing	Involved_pedalcycle	Involved_Motorcycle	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty
1	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
2	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0

#	Involved_car	Involved_goodsvehicle	Involved_Bus	Involved_young_driver	Local_Authority_District	Junction_control	Is_Provisional	Is_Amended	Web_Link	Count
1	1	0	0	0	Rugby Borough	Give way or uncontrolled	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2019230917324	1
2	1	0	0	1	Rugby Borough	Not Applicable	No	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2020230981912	1

Report produced from CrashMap Pro

Appendix E: Footpath and Cycle Infrastructure Plans

Figure 9: Footpaths

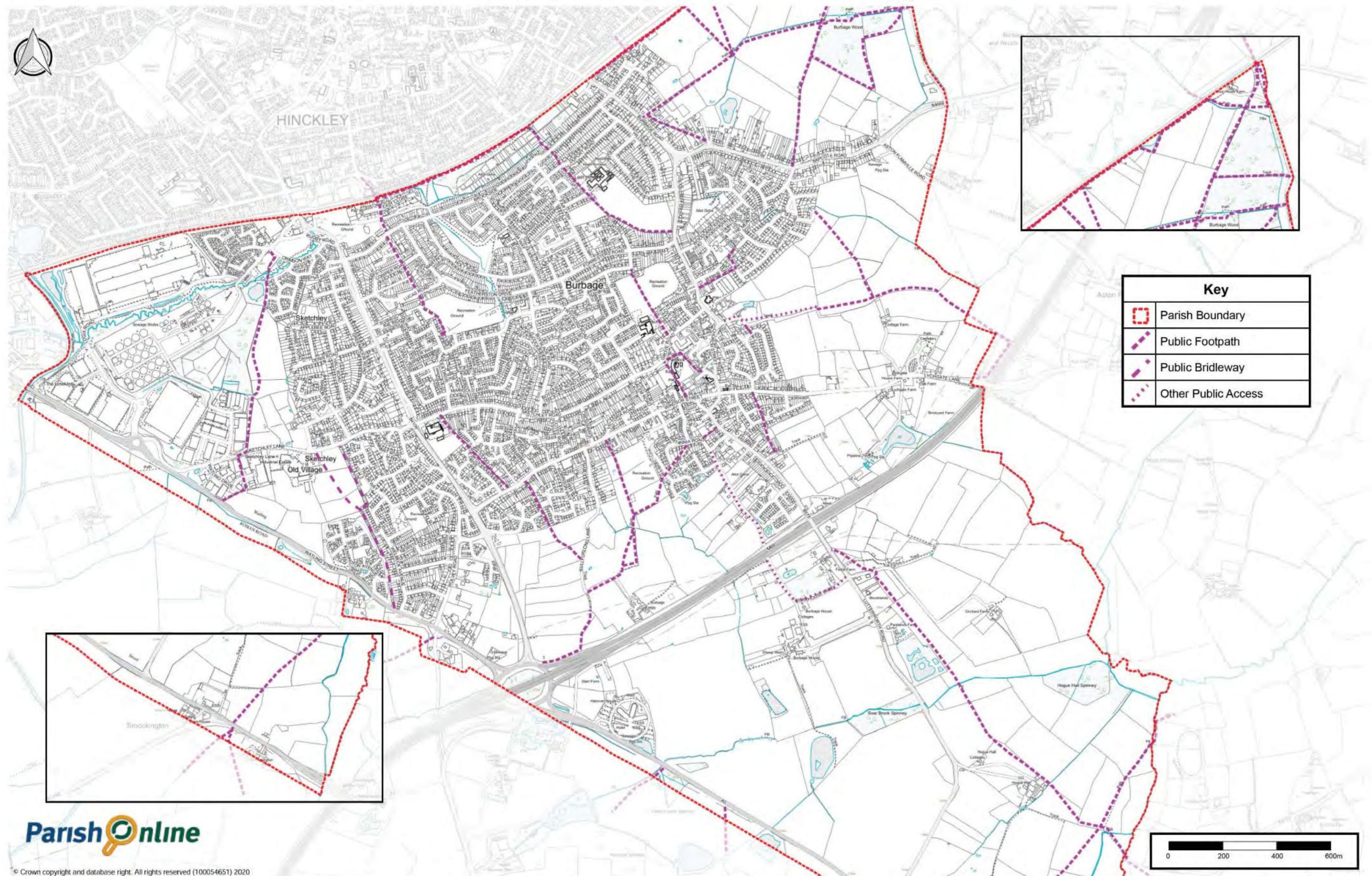
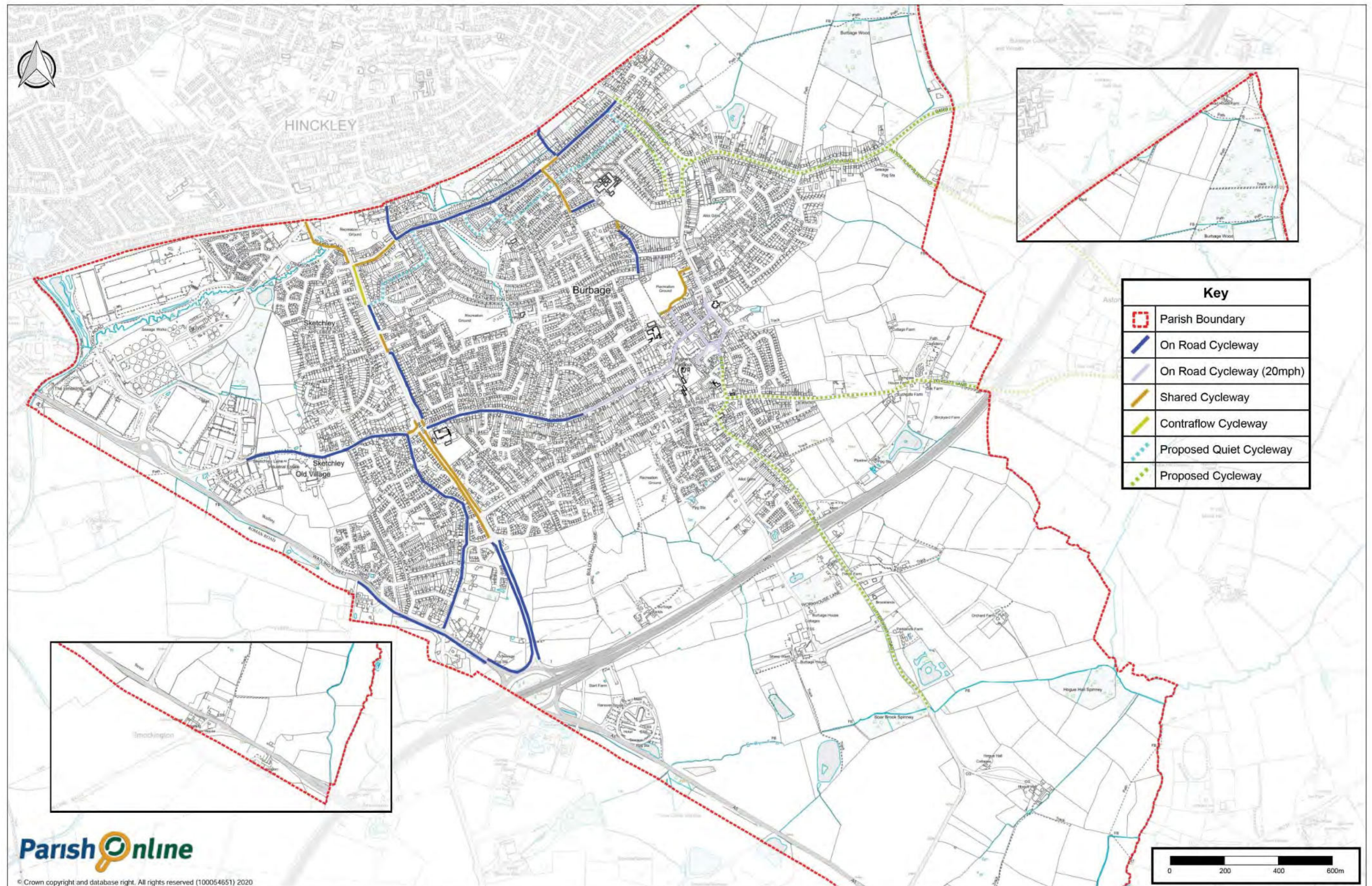


Figure 10: Cycleways



Further Information

Choose How You Move is Leicester and Leicestershire's information point for travel and transport.

Here are just a few of the services which we offer:

- **Adult Cycle Training:** courses available from learning how to ride to boosting your confidence on the road.
- **Business Support:** see how we can support your staff to travel in an active and sustainable way.
- **Journey Planner:** new to cycling in Leicester? Find out the best route for getting from A to B.
- **Ride Leicester Events:** take part in one of the numerous events on offer throughout the year. Sign up to the newsletter to stay up to date.

Visit: choosehowyoumove.co.uk

Good Cycling Tips



- 1 Follow the Highway code
- 2 Be courteous The streets are shared with other people. So be aware and be prepared to slow down and stop if necessary.
- 3 Do not cycle on footways Adults may be fined for riding on footways except where it is legally permitted.
- 4 Be heard if sharing space with other street users use a bell but be aware not everyone can hear you.
- 5 Be seen Powered front and rear lights are required by law at night and visible clothing may be useful.
- 6 Consider a helmet Helmets may help in the event of a fall or crash and should comply with British Standard EN 1078.
- 7 Keep your cycle safe Use a good quality lock when parking your bike and use secure bike parks where available.

choosehowyoumove.co.uk

Look Out For These Signs

- Shared route for cyclists and pedestrians together
- Segregated route for cyclists and pedestrians on separate side of path
- Route for use by cyclists only
- Route reserved for use by cyclists only (road marking)
- Caution - cycle route ahead
- No cycling
- Recommended route for cyclists (usually on road with no special provisions)
- With-flow cycle lane ahead
- Shared cycle and bus lane on road ahead
- With-flow cycle lane
- On road cycle lane in the opposite direction to other traffic (usually on one-way roads)
- Advisory contraflow sign
- Warning sign for pedestrians that there is a cycle lane ahead or cycleway crossing on the road ahead
- Cycle parking
- Direction to cycle parking
- Direction sign for National Cycle Route
- Direction sign showing recommended route for cyclists

HINCKLEY town



KEY

- Other cycle routes on-road / off-road
- Quater route *
- 20 mph zones
- Pedestrian street
- One-way street
- Steep gradient
- Restricted access road
- Bridleway / Footpath
- Railway with station
- Cycle parking
- Toucan crossing
- Zebra crossing
- Hospital
- District boundary
- County boundary

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Distance Survey 10000271.
Digital Cartography by Pixart Creative
www.pixartcreative.co.uk

* These routes are often quieter and in some cases may provide an opportunity to experience cycling along roads with less motor traffic. As always care should be taken when planning and riding a route. We cannot guarantee that all routes and bridleways will always be possible to ride particularly in wet weather.

0 0.5 1 1.5 kilometre
0 0.5 1 1.5 mile

Appendix F: Arriva Bus Timetables

7/7A Burbage to Nuneaton

via Hinckley Town Centre, Hollycroft and St Nicolas Park - Valid from Saturday, July 13, 2024 to Sunday, October 6, 2024

Monday to Friday - Nuneaton Bus Station

	7	7	7A	7A	7	7A	7	7A	7	7A	7	7A	7	7A	7	7	7A	7A	7	7A	7A	7
Burbage Co-operative Store	--	--	0735	--	--	0930	1000	1030	1100	1130	1200	1230	1300	1335	1400	1435	--	1545	1625	1710	1755	1820
Burbage Horsepool	--	--	0742	0842	--	0937	1007	1037	1107	1137	1207	1237	1307	1342	1407	1440	--	1552	1632	1717	1802	1825
Burbage Forryan Road	--	--	0748	0848	--	0943	1013	1043	1113	1143	1213	1243	1313	1348	1413	--	--	1558	1638	1723	1807	--
Hinckley The Crescent Bus Station	0725	0755	0800	0855	0925	0955	1025	1055	1125	1155	1225	1255	1325	1410	1425	--	1520	1610	1650	1735	1820	--
Hinckley Lyneham Close	0735	0805	0810	0905	0935	1005	1035	1105	1135	1205	1235	1305	1335	1420	1435	--	1530	1620	1700	1745	1830	--
Hinckley Windrush Drive	--	--	--	0908	--	--	--	--	--	--	--	1307	--	--	--	--	1533	--	--	--	--	--
Hinckley Normandy Way	--	--	0814	0910	--	1009	--	1109	--	1209	--	1311	--	1424	--	--	1535	1624	--	1749	1834	--
Hinckley Redmoor High School	--	--	0817	0912	--	1012	--	1112	--	1212	--	--	--	1427	--	--	1538	1627	--	1752	1837	--
Stoke Golding St Martins School	--	--	0825	0919	--	1019	--	1119	--	1219	--	1319	--	1435	--	--	1544	1634	--	1759	1844	--
Stoke Golding Methodist Church	--	--	0827	0921	--	1021	--	1121	--	1221	--	1321	--	1437	--	--	1546	1636	--	1801	1846	--
Higham-on-the-Hill Cherry Orchard	--	--	0833	0928	--	1028	--	1128	--	1228	--	1328	--	1444	--	--	1553	1643	--	1808	1855	--
Nuneaton Coniston Way	0747	0817	--	--	0947	--	1047	--	1147	--	1247	--	1347	--	1447	--	--	--	1715	--	--	--
Nuneaton Bus Station	0755	0825	0845	0940	0955	1040	1055	1140	1155	1240	1255	1340	1355	1455	1455	--	1605	1655	1725	1820	--	--

Monday to Friday - Burbage Co-operative Store

	7A	7A	7	7A	7	7A	7	7A	7	7A	7	7A	7	7A	7	7A	7	7A	7	7A
Nuneaton Bus Station	--	0805	0840	0905	0945	1005	1045	1105	1145	1205	1245	1305	1345	1415	1500	1525	1625	1700	1735	1835
Higham-on-the-Hill Cherry Orchard	--	0816	--	0915	--	1015	--	1115	--	1215	--	1315	--	1425	--	1536	--	1711	--	1846
Stoke Golding Methodist Church	--	0825	--	0922	--	1022	--	1122	--	1222	--	1322	--	1432	--	1542	--	1717	--	1855
Stoke Golding St Martins School	--	0827	--	0924	--	1024	--	1124	--	1224	--	1324	--	1434	--	1546	--	1719	--	1857
Hinckley Redmoor High School	--	0833	--	0930	--	1030	--	1130	--	1230	--	1330	--	1440	--	1554	--	1725	--	1903
Hinckley Normandy Way	--	0835	--	0932	--	1032	--	1132	--	1232	--	1332	--	1442	--	1556	--	1727	--	1905
Nuneaton Coniston Way	--	--	0847	--	0952	--	1052	--	1152	--	1252	--	1352	--	1507	--	1632	--	1742	--
Hinckley Windrush Drive	--	--	--	--	--	1034	--	--	--	1234	--	--	--	--	--	--	--	--	--	--
Hinckley Deveron Way	--	0839	0901	0936	1006	1036	1106	1136	1206	1236	1306	1336	1406	1446	1521	1558	1646	1731	1756	1909
Hinckley The Crescent Bus Station	0725	0850	0915	0950	1020	1050	1120	1150	1220	1250	1325	1350	1425	1455	1535	1615	1700	1745	1810	1920
Burbage Co-operative Store	0735	--	0925	1000	1030	1100	1130	1200	1230	1300	1335	1400	1435	--	1545	1625	1710	1755	1820	--

Saturday - Nuneaton Bus Station

	7A	7	7A	7	7A	7	7A	7A	7A	7	7A
Burbage Co-operative Store	0830	--	0930	1000	1030	00	30	1600	1630	1700	1730
Burbage Horsepool	0837	--	0937	1007	1037	07	37	1607	1637	1705	1735
Burbage Forryan Road	0842	--	0942	1012	1042	12	42	1612	1642	--	--
Hinckley The Crescent Bus Station	0855	0925	0955	1025	1055	25	55	1625	1655	--	--
Hinckley Lyneham Close	0905	0935	1005	1035	1105	35	05	1635	1705	--	--
Nuneaton Coniston Way	--	0947	--	1047	--	Then at	47	--	past each hour	1647	--
Hinckley Normandy Way	0909	--	1009	--	1109	these mins	09	--	hour until	1709	--
Hinckley Redmoor High School	0912	--	1012	--	1112	--	12	--	--	1712	--
Stoke Golding St Martins School	0919	--	1019	--	1119	--	19	--	--	1719	--
Stoke Golding Methodist Church	0921	--	1021	--	1121	--	21	--	--	1721	--
Higham-on-the-Hill Cherry Orchard	0928	--	1028	--	1128	--	28	--	--	1728	--
Nuneaton Bus Station	0940	0955	1040	1055	1140	55	40	1655	--	--	--

Saturday - Burbage Co-operative Store

	7A	7	7A	7	7A	7A	7A	7	7A	7	7A	7	7A	7	7A
Nuneaton Bus Station	0905	0945	1005	45	05	1245	1305	1345	1405	1445	1505	1545	1605	1645	1705
Nuneaton Coniston Way	--	0952	--	52	--	1252	--	1352	--	1452	--	1552	--	1652	--
Higham-on-the-Hill Cherry Orchard	0915	--	1015	--	15	--	1315	--	1415	--	1515	--	1615	--	1715
Stoke Golding Methodist Church	0922	--	1022	Then at	22	past each hour	--	1322	--	1422	--	1522	--	1622	--
Stoke Golding St Martins School	0924	--	1024	--	24	--	--	1324	--	1424	--	1524	--	1624	--
Hinckley Redmoor High School	0930	--	1030	these mins	30	hour until	--	1330	--	1430	--	1530	--	1630	--
Hinckley Normandy Way	0932	--	1032	--	32	--	--	1332	--	1432	--	1532	--	1632	--
Hinckley Deveron Way	0936	1006	1036	06	36	1306	1336	1406	1436	1506	1536	1606	1636	1706	1736
Hinckley The Crescent Bus Station	0950	1020	1050	20	50	1320	1350	1420	1450	1520	1550	1620	1650	1720	1745
Burbage Co-operative Store	1000	1030	1100	30	00	1330	1400	1430	1500	1530	1600	1630	1700	1730	--

8 Hinckley to Lutterworth

via Burbage, Hinckley Park, Ullesthorpe and Magna Park - Valid from Saturday, July 13, 2024 to Sunday, October 6, 2024

Monday to Friday - Hinckley The Crescent Bus Station

	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Lutterworth George Street Car Park	--	0600	0700	0800	0900	1000	1100	1200	1300	1400	1515	1500	1600	--	1715	1900	2205
Lutterworth College	--	--	0705	--	--	--	--	--	--	--	1520	--	--	--	--	--	--
Magna Park George Building	--	0611	--	0806	0906	1006	1106	1206	1306	1406	--	1506	1611	--	1726	1911	2216
Magna Park Disney	--	0616	--	0810	0910	1010	1110	1210	1310	1410	--	1510	1615	--	1730	1915	2220
Magna Park Eddie Stobart Logistics	--	0620	--	0815	0915	1015	1115	1215	1315	1415	--	1515	1620	--	1735	1920	2225
Ullesthorpe South Avenue	--	--	0713	0821	0921	1021	1121	1221	1321	1421	1528	1521	1626	--	1741	--	--
Claybrooke Magna Bell Street	--	--	0717	0825	0925	1025	1125	1225	1325	1425	1532	1525	1630	--	1745	--	--
Magna Park Stop J	--	0606	--	--	--	--	--	--	--	--	--	--	1606	--	1721	1906	2211
Burbage Hinckley Park	0510	0631	0728	0836	0936	1036	1136	1236	1336	1436	--	1536	1640	1730	1755	1930	2235
Burbage Horsepool	0518	0639	0738	0845	0945	1045	1145	1245	1345	1445	1545	1545	1650	1739	1805	1938	2243
Hinckley The Crescent Bus Station	0535	0650	0750	0855	0955	1055	1155	1255	1355	1455	1600	1555	1705	1755	1820	1950	2255

Monday to Friday - Lutterworth George Street Car Park

	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Hinckley The Crescent Bus Station	0500	0600	0700	0735	0800	0900	1000	1100	1200	1300	1400	1400	1500	1615	1710	1800	2110
Burbage Aston Lane	0508	0608	0709	0744	0810	0910	1010	1110	1210	1310	1410	1410	1510	1625	1720	1810	2118
Burbage Hinckley Park	0517	0617	0719	0754	--	0920	1020	1120	1220	1320	1420	1420	1520	1635	1730	1820	2128
Claybrooke Magna Bell Street	--	--	0726	0801	0824	0927	1027	1127	1227	1327	1427	1427	1527	1642	--	--	--
Ullesthorpe South Avenue	--	--	0730	0806	0828	0931	1031	1131	1231	1331	1431	1431	1531	1646	--	--	--
Lutterworth New Street	--	--	--	0816	--	--	--	--	--	--	--	--	--	--	--	--	--
Lutterworth Morrisons	--	--	--	0821	--	--	--	--	--	--	--	--	--	--	--	--	--
Magna Park George Building	0535	0635	0744	0837	0842	0945	1045	1145	1245	1345	1445	1445	1545	1700	--	1838	2146
Magna Park Stop J	0540	0640	--	0832	0847	--	--	--	--	--	--	1450	--	--	--	1843	2151
Lutterworth Kingsway	--	--	--	0826	--	--	--	--	--	--	--	1505	--	--	--	--	--
Magna Park Eddie Stobart Logistics	0527	0627	0736	--	0834	0937	1037	1137	1237	1337	1437	1437	1537	1652	--	1830	2138
Magna Park Vulcan Way	0528	0628	0737	0840	0835	0938	1038	1138	1238	1338	1438	1438	1538	1653	--	1831	2139
Magna Park Disney	0531	0631	0740	--	0838	0941	1041	1141	1241	1341	1441	1441	1541	1656	--	1834	2142
Lutterworth George Street Car Park	0550	0650	0755	--	0855	0955	1055	1155	1255	1355	1455	1510	1555	1710	--	1855	2200

Saturday - Hinckley The Crescent Bus Station

	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Lutterworth George Street Car Park	--	0605	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1805	2205	
Magna Park Stop J	--	0611	--	--	--	--	--	--	--	--	--	--	--	1811	2211	
Magna Park George Building	--	0616	0706	0806	0906	1006	1106	1206	1306	1406	1506	1606	1706	1816	2216	
Magna Park Disney	--	0620	0710	0810	0910	1010	1110	1210	1310	1410	1510	1610	1710	1820	2220	
Magna Park Eddie Stobart Logistics	--	0625	0715	0815	0915	1015	1115	1215	1315	1415	1515	1615	1715	1825	2225	
Ullesthorpe South Avenue	--	--	0721	0821	0921	1021	1121	1221	1321	1421	1521	1621	1721	--	--	
Claybrooke Magna Bell Street	--	--	0725	0825	0925	1025	1125	1225	1325	1425	1525	1625	1725	--	--	
Burbage Hinckley Park	0510	0636	0736	0836	0936	1036	1136	1236	1336	1436	1536	1636	1736	1836	2236	
Burbage Horsepool	0519	0644	0745	0845	0945	1045	1145	1245	1345	1445	1545	1645	1745	1844	2244	
Hinckley The Crescent Bus Station	0535	0655	0755	0855	0955	1055	1155	1255	1355	1455	1555	1655	1755	1855	2255	

Saturday - Lutterworth George Street Car Park

	8	8	8	8		8		8	8	8
Hinckley The Crescent Bus Station	0510	0610	0700	0800		00		1600	1700	2110
Burbage Aston Lane	0518	0618	0709	0809		09		1609	1709	2118
Burbage Hinckley Park	0527	0627	0719	0819		19		1619	1719	2127
Claybrooke Magna Bell Street	--	--	0726	0826	Then at these mins	26	past each hour until	1626	1726	--
Ullesthorpe South Avenue	--	--	0730	0830		30		1630	1730	--
Magna Park Eddie Stobart Logistics	0536	0637	0736	0836		36		1636	1736	2136
Magna Park Disney	0539	0640	0739	0839		39		1639	1739	2139
Magna Park George Building	0543	0644	0743	0843		43		1643	1743	2143
Magna Park Stop J	0548	--	--	--		--		--	1748	2148
Lutterworth George Street Car Park	0555	0655	0755	0855		55		1655	1755	2155

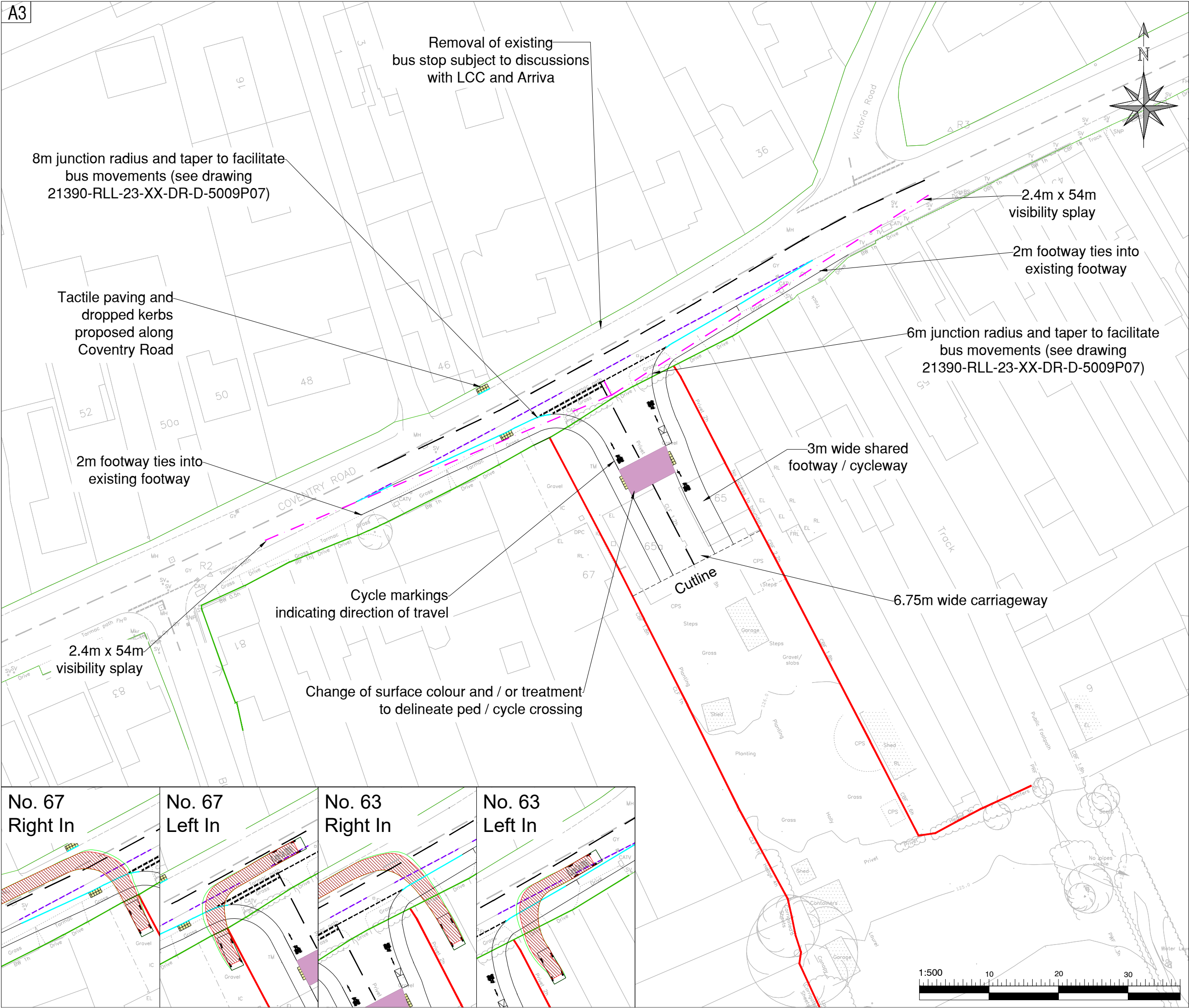
Sunday - Hinckley The Crescent Bus Station

	8	8	8
Lutterworth George Street Car Park	0605	1405	2205
Magna Park Stop J	0611	1411	2211
Magna Park George Building	0616	1416	2216
Magna Park Disney	0620	1420	2220
Magna Park Eddie Stobart Logistics	0625	1425	2225
Burbage Hinckley Park	0636	1436	2236
Burbage Horsepool	0644	1444	2244
Hinckley The Crescent Bus Station	0655	1455	2255

Sunday - Lutterworth George Street Car Park

	8	8	8
Hinckley The Crescent Bus Station	0505	1305	2105
Burbage Aston Lane	0513	1313	2113
Burbage Hinckley Park	0522	1322	2122
Magna Park Eddie Stobart Logistics	0531	1331	2131
Magna Park Disney	0534	1334	2134
Magna Park George Building	0538	1338	2138
Magna Park Stop J	0543	1343	2143
Lutterworth George Street Car Park	0550	1350	2150

Appendix G: Coventry Road Site Access Drawing



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-11-20A Tactile Paving at Uncontrolled Crossings' from the Kerbs Footway Series 1100 within the Leicestershire Highways Design Guide (Interim 2022).

Do not scale from this drawing.

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	JWB	ADM
P04	17/07/23	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 Carraigeaway 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

P08

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Appendix H: Coventry Road / Site Access

Stage 1 RSA + Designers Response

REDROW HOMES DEVELOPMENT COVENTRY ROAD, BURBAGE SECTION 278 WORKS

STAGE 1 ROAD SAFETY AUDIT
REVISION 02

SA 4558

July 2024



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REV	ISSUE STATUS	PREPARED BY/DATE	CHECKED BY/DATE	APPROVED BY/DATE
1	DRAFT	JC 16 July 2024	LB 16 July 2024	
2	FINAL	JC 16 July 2024	LB 16 July 2024	ASD 16 July 2024

Disclaimer notes

The client has confirmed that it is entering into the agreement under which this report is being prepared on its own behalf and not on behalf of, or for the benefit of any other party and has agreed that in any event of any claim arising out of or in connection with that agreement and/or the report itself it shall be entitled to recover from Waterman Aspen Limited only the losses, if any, it has itself suffered.

This report therefore is for the private and confidential use of the client for whom it was prepared solely for the purposes requested by the client. It should not be reproduced in whole or in part or relied upon by any third party for any use whatsoever without the express written authority of Waterman Aspen Limited.

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1.0 INTRODUCTION

- 1.1 This report is a Stage 1 Road Safety Audit (RSA) carried out on the proposed Section 278 works on land south of Burbage for a new residential development. This report was requested by Rodgers Leask on behalf of Redrow Homes.
- 1.2 The RSA team, staff members from Waterman Aspen, present at the RSA were:
- Joe Clarbour
Audit Team Leader
- Liam Bourne
Audit Team Member
- 1.3 We confirm that no member of the Audit Team has been involved with the design process and that at least one member of the Audit Team holds the Highways England Certificate of Competency.
- 1.4 The Audit Team visited the site together on Thursday, 04 July 2024. The weather during the site visit was dry and sunny with a dry carriageway surface.
- 1.5 The RSA brief issued to the team comprised various elements listed at Appendix Two.
- 1.6 The scheme has been examined and this report compiled only with regard to the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 1.7 All of the problems described in this report are considered by the RSA team to require action in order to improve the safety of the scheme and minimise collision occurrence. However, if any of the problems or recommendations within this Road Safety Audit report is not accepted, a copy of the signed exception report from the Overseeing Organisation should be sent to the Road Safety Audit Team Leader.
- 1.8 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2.0 SCHEME DESCRIPTION

- 2.1 The scheme involves the construction of a priority “Give Way” junction on the southern side of Coventry Road that will serve as the access to a residential development proposed on land to the south. The design is at preliminary stage and therefore drawings lack some detail. However, the scheme appears to include proposals for a footway leading into the site on the western side and for a shared footway/cycleway on the eastern side. The proposals also include some form of pedestrian / cycle crossing facility or similar just inside the junction.

3.0 RECORDED INJURY COLLISION HISTORY

- 3.1 A substantial print out of Accsmap data covering a wide area of Burbage between 2018 and 2023 was provided to the Audit Team as part of the previous Stage 1 Audit undertaken in June 2023 although no accompanying plan to assist was provided. Insofar as the Audit Team could determine from the data provided, no injury collisions had occurred within the vicinity of the proposed site access on Coventry Road.
- 3.2 No further collision data has been provided as part of this revised Stage 1 Audit.

4.0 DEPARTURES FROM STANDARD

- 4.1 No departures from standard have been highlighted within the Audit Brief

5.0 DOCUMENTS AND INFORMATION NOT PROVIDED

- 5.1 The following information was not provided within the audit brief and therefore has not been considered with the audit:
- Site clearance
 - Street lighting
 - Landscaping
 - Road signing/lining
 - Drainage
 - Longitudinal sections
 - Cross sections
 - Highway construction details
 - Kerb details
 - Surfacing
 - Shared space details
 - Utilities apparatus
 - Footway/cycleway details

6.0 MATTERS ARISING FROM PREVIOUS ROAD SAFETY AUDITS

- 6.1 Three previous Stage One Road Safety Audits have been undertaken in relation to the proposed Section 278 works; the first in January 2022, the second in February 2023 and third in June 2023, copies of which have been provided to the Audit Team.
- 6.2 Problems raised in the January 2022 and February 2023 audits were reviewed as part of the June 2023 audit with those considered to remain valid and applicable to the revised scheme retained and re-raised.
- 6.3 Three problems were raised in the June 2023 audit. Problem 7.1 raised concerns about the impact of parked cars along Coventry Road to either side of the access junction on visibility for drivers of vehicles pulling out of the junction. Problems 7.2 and 7.3 raised concerns about the proposed pedestrian / cycle crossing arrangements at the junction. All of these problems are considered to remain valid and are re-raised under the same numbering system as previously in the following chapter.

7.0 MATTERS ARISING FROM THIS STAGE 1 ROAD SAFETY AUDIT

7.1 Problem

Location: At the access junction along Coventry Road

Summary: **Risk of collisions**

The Audit Team observed that there is a significant parking demand along both sides of Coventry Road to the east and west of the proposed access junction. The existing parking activity has potential to obscure visibility splays for drivers of vehicles turning out of the access road onto Coventry Road. If visibility splays are routinely obscured by parked vehicles, then there is a risk of drivers failing to observe oncoming traffic on Coventry Road as they attempt to turn out of the access. As a result, they may pull out into the path of oncoming traffic resulting in a risk of collisions.

Recommendation

It is recommended that the design includes measures to ensure the vicinity of the junction and associated visibility splays are kept free of parked vehicles.

7.2 Problem

Location: Shared pedestrian / cycle crossing just inside development access

Summary: **Risk of pedestrian / cycle / vehicle conflict**

The drawings submitted for audit show only limited details of an indicative shared pedestrian / cycle crossing point located just inside the site access road. No details have been provided concerning how pedestrians / cyclists will be directed to use the facility and/or how they are to integrate between the crossing and footways / footway / cycleways to the east and west. The preliminary layout drawings do not include details of signage and/or line markings and do not stipulate whether or not the crossing point is to include dropped-kerbs. (It is noted that the drawings appear to indicate that tactile paving is to be installed on each side of the crossing but as per the drawings provided, the depth of the tactiles indicated is inadequate and not to standard). Consequently, there is a risk that movements of pedestrians and cyclists will conflict leading to a risk of collisions occurring. Additionally, if dropped-kerbs and tactile paving are not included in the design, then there is a risk of pedestrians tripping up full height kerbs and/or falling down full height kerbs in front of a moving vehicle, which may result in injuries. This would likely be a particular problem for pedestrians with visual impairments.

Recommendation

It is recommended that full details of the proposed crossing design should be included at detailed design stage, together with details of signage and line markings proposed to manage interaction of pedestrians and cyclists using the crossing and upon entry to and along the proposed shared footway/cycleway along the eastern side of the access road.

7.3 Problem

Location: At the access junction

Summary: **Risk of pedestrian trips / falls**

No pedestrian crossing facilities have been included in the design across the access road junction to serve pedestrian movements along the southern side of Coventry Road. Without pedestrian crossing facilities in this location to serve a clear desire line, there is a risk of pedestrians tripping and falling over full height kerbs when attempting to cross in this location.

Recommendation

It is recommended that pedestrian crossing facilities are included across the junction in this location at detailed design stage.

APPENDIX ONE

8.0 AUDIT TEAM STATEMENT

AUDIT TEAM STATEMENT

We certify that the audit has been carried out in accordance with the requirements set out in GG119. The problems identified have been noted in this report together with associated safety improvement suggestions which we recommend should be studied for implementation.

AUDIT TEAM LEADER

Joe Clarbour MSc, BA Hons
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5th Floor
1 Cornwall Street
Birmingham
B3 2DX

Signed.....

Date: 16 July 2024

AUDIT TEAM MEMBER

Liam Bourne MCIHT
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Signed.....

Date: 16 July 2024

APPENDIX TWO

9.0 LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM

LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM

Drawings

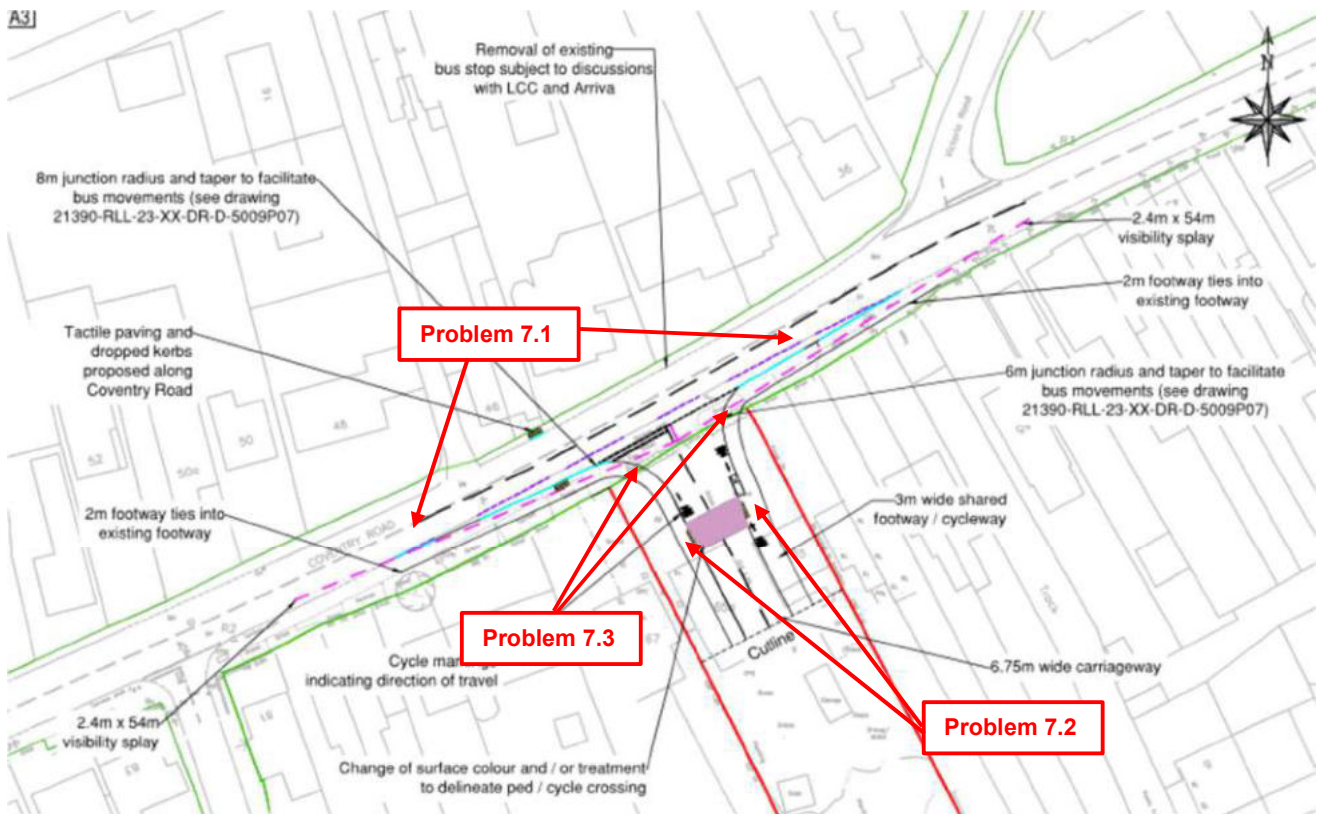
- Coventry Road Access - 21390-RLL-23-XX-DR-D-5008(P08) Site Access Design

Documents

- 4138 Redrow Coventry Road Burbage S278 RSA1 Revision

APPENDIX THREE

10.0 PROBLEM LOCATION PLAN





ROAD SAFETY AUDIT DESIGNER'S RESPONSE DOCUMENT

Junction Layout / Reference No	Coventry Road, Burbage	Road Safety Audit Stage	1
Project Title	Land South of Burbage	Audit Site Visit Undertaken	Thursday 4 th July 2024
Project Reference	P21-390	RSA Document Reference No	SA 4558 (16 th July 2024)
Designer's Response Prepared by	Andy Miles Principal Transport Planner	Auditors' Name and Company	Joe Clarbour (Team Leader) Liam Bourne (Team Member) Waterman Aspen (WA)

Reference	Location	Problem	Recommendation	Designer's Response
7.1	<i>At the access junction along Coventry Road</i>	Summary: Risk of Collisions <i>The Audit Team observed that there is a significant parking demand along both sides of Coventry Road to the east and west of the proposed access junction. The existing parking activity has potential to obscure visibility splays for drivers of vehicles turning out of the access road onto Coventry Road. If visibility splays are routinely obscured by parked vehicles, then there is a risk of drivers failing to observe oncoming traffic on Coventry Road as they attempt to turn out of the access. As a result, they may pull out into the path of oncoming traffic resulting in a risk of collisions.</i> Problem accepted? Yes: ☐ No: ☒	It is recommended that the design includes measures to ensure the vicinity of the junction and associated visibility splays are kept free of parked vehicles. Recommendation accepted? Yes: ☐ No: ☒	The driveways and dropped kerbs either side of the proposed site access restrict the space available for vehicles to park within the visibility splay. This is indicated on the site access drawing and discussed within the submitted Transport Assessment

Reference	Location	Problem	Recommendation	Designer's Response
7.2	Shared pedestrian / cycle crossing just inside the development access	Summary: Risk of pedestrian / cycle / vehicle conflict <i>The drawings submitted for audit show only limited details of an indicative shared pedestrian / cycle crossing point located just inside the site access road. No details have been provided concerning how pedestrians / cyclists will be directed to use the facility and/or how they are to integrate between the crossing and footways / footway / cycleways to the east and west. The preliminary layout drawings do not include details of signage and/or line markings and do not stipulate whether or not the crossing point is to include dropped-kerbs. (It is noted that the drawings appear to indicate that tactile paving is to be installed on each side of the crossing but as per the drawings provided, the depth of the tactiles indicated is inadequate and not to standard). Consequently, there is a risk that movements of pedestrians and cyclists will conflict leading to a risk of collisions occurring. Additionally, if dropped-kerbs and tactile paving are not included in the design, then there is a risk of pedestrians tripping up full height kerbs and/or falling down full height kerbs in front of a moving vehicle, which may result in injuries. This would likely be a particular problem for pedestrians with visual impairments.</i> Problem accepted? Yes: ☒ No: ☐	It is recommended that full details of the proposed crossing design should be included at detailed design stage, together with details of signage and line markings proposed to manage interaction of pedestrians and cyclists using the crossing and upon entry to and along the proposed shared footway/cycleway along the eastern side of the access road. Recommendation accepted? Yes: ☒ No: ☐	The indicative shared pedestrian / cycle crossing point will include dropped kerbs to facilitate pedestrian and cycle movements. Full details of the proposed crossing design, including tactile paving, signage and line markings, will be included at the detailed design stage.

Reference	Location	Problem	Recommendation	Designer's Response
7.3	At the access junction	<i>Summary: Risk of pedestrian trips / falls</i> <i>No pedestrian crossing facilities have been included in the design across the access road junction to serve pedestrian movements along the southern side of Coventry Road. Without pedestrian crossing facilities in this location to serve a clear desire line, there is a risk of pedestrians tripping and falling over full height kerbs when attempting to cross in this location.</i> Problem accepted? Yes: ☐ No: ☒	It is recommended that pedestrian crossing facilities are included across the junction in this location at detailed design stage. Recommendation accepted? Yes: ☐ No: ☒	The indicative shared pedestrian / cycle crossing point is provided within the site and is clearly delineated with surface colour/treatment. This location, set back within the development, provides a safer crossing point for pedestrians using Coventry Road due to the carriageway width being narrower than at the bellmouth of the junction.