

**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.

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**APPLICATION DETAILS:**

Planning Application Number: P/20/2380/2

Highway Reference Number: 2020/2380/02/H/R1

Application Address: Barkby Road Queniborough Leicestershire

Application Type: Outline (with access)

Description of Application:

Re-consultation. Outline application for up to 150 dwellings, together with new open space, landscaping and drainage infrastructure, with all matters reserved except for access.

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**GENERAL DETAILS**

Planning Case Officer: Mark Pickrell

Applicant: David Wilson Homes

County Councillor: Cllr James Poland

Parish: Queniborough

Road Classification:

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**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. Under the current Covid-19 situation we would ask that any such work is carried out in accordance with the latest Government guidance.

## **Advice to Local Planning Authority**

### **Background**

The Local Highway Authority (LHA) has been consulted on an outline application for up to 150 dwellings, together with new open space, landscaping and drainage infrastructure, with all matters reserved except for access. The site is located at Barkby Road Queniborough.

These highway observations are based on a review of the following documents and drawings:

- Transport Assessment prepared by ADC Infrastructure dated 8th February 2018;
- Travel Plan prepared by ADC Infrastructure dated 8th February 2018;
- Illustrative Masterplan drawing no. QUEN-CONC-SK2 Rev E;
- ADC1659-DR-001-P2 (Proposed Access Junction Layout); and
- Location Plan drawing no. QUEN-LOCA-01 Rev B

The following sections of this document form the LHA's observations on various aspects of the planning application.

### **Site Access**

Barkby Road is an adopted C classified road. The proposed access is shown in on Drawing ADC1659-DR-001-P2 in Appendix B of the TA and is a priority controlled T-junction with a 5.5m wide carriageway, 2m wide footways either side of the carriageway, and 6m kerb radii.

The location of the proposed access is subject to a 30mph speed limit and therefore visibility splays of 2.4 x 43m are demonstrated on drawing ADC1659-DR-001-P2. However, the existing gateway feature where the limit changes from 30mph to 40mph is to the immediate south of the proposed site access. Hence, visibility splays of 2.4 x 120m are also demonstrated.

Notwithstanding the above, the LHA note there has been no swept path analysis undertaken for the site access. This should be carried out and submitted to demonstrate a large vehicle i.e. a refuse vehicle can enter and egress the site in a forward gear. The LHA also note there has been no Road Safety Audit undertaken for the proposed site access. At this stage, an independent Stage 1 Road Safety Audit should be carried out with an accompanying designer's response submitted as part of this planning application, along with an amended access design if required.

### **Highway Safety**

The Applicant has used the Crashmap database to obtain Personal Injury Collision (PIC) data for the study area. The data shows the recorded accidents near the site between 2013 and June 2017 as shown in figure 4 of the TA.

No accidents have been recorded in the urban section of Barkby Road. Three slight accidents have been recorded along Syston Road and Queniborough Road at or near the crossroads.

Notwithstanding this, the LHA would request for the most recent PIC data for the last five years for the study area to be obtained and demonstrated. Leicestershire County Council's Network Data & Intelligence team can be contacted to obtain the most up to date data.

### **Trip Generation**

Immediately north of the development is an estate of 64 houses clustered around the Glebe Road cul-de-sac. Given the locational comparability, the trip rate and distribution of traffic of residents on Glebe Road should be similar to those of the proposed development. Hence a traffic count was undertaken at the Barkby Road/Glebe Road junction. From that count, trip rates were determined, that were used to forecast the amount of traffic generate by 160 dwellings, as shown in the table below.

GLEBE ROAD COUNT		arrive	depart	two-way
trip rates (per dwelling)	AM peak hour	0.125	0.297	0.422
	PM peak hour	0.250	0.203	0.453
vehicle trips (160 dwellings)	AM peak hour	20	48	68
	PM peak hour	40	32	72

Based on this method, the proposed development would generate 68 two-way vehicles in the AM peak and 72 trips in the PM peak hour.

To provide a further measure, the 'privately owned houses' category of the TRICS database was examined. The 85th percentile trip rates and resultant traffic generation are shown in the table below.

TRICS DATABASE		arrive	depart	two-way
trip rates (per dwelling)	AM peak hour	0.177	0.523	0.700
	PM peak hour	0.478	0.248	0.726
vehicle trips (160 dwellings)	AM peak hour	28	84	112
	PM peak hour	76	40	116

Using TRICS, the proposed development would generate 112 two-way vehicles in the AM peak and 116 trips in the PM peak hour.

The figures derived from TRICS are significantly greater than the estimate based on the local survey. The Appicant states that the local survey is more representative. Notwithstanding this, for robustness, the TRICS figures have been adopted for the remainder of the analysis in the TA.

The LHA are therefore satisfied with the proposed trip rates.

## **Modal split and person trip generation**

The proportion of trips by each mode was calculated using the 2011 National Census 'Method of travel to Work' data (dataset QS701EW). The site is in the parish of Queniborough and data for this parish was examined. The resultant modal split and person trip generation is shown in the table below.

	walk	cycle	bus	train	m/cycle	car driver	passenger
	6.0%	3.0%	4.2%	0.4%	0.6%	79.2%	5.0%
AM Peak	9	4	6	2	1	112	7
PM Peak	9	4	6	2	1	116	7

The proposed residential development would generate approximately nine pedestrian trips, four bicycle trips, and six bus trips in the peak hours.

The TA details the existing accessibility of the site, including a description of the existing pedestrian, cycle and public transport infrastructure. The Applicant states that the existing and proposed infrastructure has the capacity to accommodate the additional trips, and no further infrastructure is required as part of the development.

## **Vehicle Distribution and Assignment**

Traffic turning in and out of the proposed development was assigned at the access junction in the same proportions as recorded in the traffic count at the Barkby Road/Glebe Road junction. At the remaining three junctions that form the study area, development traffic was assigned in the same proportions as recorded in the November 2017 traffic counts. The LHA would prefer for the distribution to be calculated by using a Census based approach.

## **Assessment Traffic Flows**

As a result of the increase in traffic associated with the proposed development, the detailed capacity assessments have been carried out at the junctions below:

- Proposed site access;
- Rearsby Road/Queniborough Road/Barkby Road/Syston Road crossroads;
- Queniborough Roundabout; and
- Syston Road/Melton Road T-junction

## **Observed traffic flows**

Traffic flows at the junctions were obtained from traffic counts undertaken on Tuesday 7 November 2017. The surveyed morning and evening peak hour traffic flows are shown in Diagrams 1 and 2 in Appendix D of the TA.

## Growth Factors

An assessment year of 2023 has been adopted for this report, five years from the submission of the planning application. The observed traffic flows were therefore growthed to 2023 levels using TEMPRO (version 7.2, dataset 72). TEMPRO gives the following growth rates for 'all roads' in the Charnwood 015 MSOA:

- 2017 to 2023 (AM) 1.0957
- 2017 to 2023 (PM) 1.0961

The LHA would request for the assessment year of 2026 to be assessed as the planning application has been submitted and registered in 2021. The LHA have not reviewed any of the submitted development flow scenarios due to the assessment year used and the earlier comments on distribution / assignment. Once revised traffic flow scenarios have been submitted, the LHA will provide detailed comments.

## Highway Impact

The Applicant has assessed the following junctions using a 2023 with development scenario.

- Site Access
- Rearsby Road / Queniborough Road / Barkby Road / Syston Road crossroads - existing layout
- Rearsby Road / Queniborough Road / Barkby Road / Syston Road crossroads – proposed layout
- Queniborough Roundabout
- Melton Road / Syston Road T-junction

The LHA has reviewed the proposed mitigation for the Rearsby Road / Queniborough Road / Barkby Road / Syston Road crossroads and has concerns over the junction design, as it would appear that traffic going ahead from Rearsby Road to Barkby Road will be lined up with traffic waiting to turn right from Barkby Road. The alignment is such that a vehicle going ahead will have to dog-leg around a vehicle waiting at the give way line on Barkby Road and risk side swiping a vehicle turning left from Rearsby Road.

As mentioned in the section above, a design year of 2026 should be used for assessing the capacity for each junction listed.

The LHA will provide further comments on the junction analysis once the traffic flow scenarios have been updated and revised junction capacity analysis provided.

## Internal Layout

As access only is to be determined at this stage, the submitted indicative site layout and matters such as the proposed numbers of parking spaces have not been reviewed or considered by the LHA in preparing this response. However, the TA suggests that the internal road network would be put forward for adoption and accordingly, the accordingly the LHA advises that that the

proposals are required to be designed in accordance with the prevailing Leicestershire Highways Design Guide (LHDG) and local parking standards when a future reserved matters application is submitted. The LHA will require these matters to be conditioned appropriately.

## **Transport Sustainability**

### **Bus accessibility**

The nearest bus stops located to the site are on Melton Road and Syston Road, as demonstrated on figure 9 extracted from the TA below.



Figure 9: local bus services and closest bus stops to site (extract from LCC bus map)

The bus stop on Syston Road adjacent to Barkby Road is approximately 320m from the site and serves the number 5 bus which runs from East Goscote to Leicester City centre via Syston.

### **Rail Accessibility**

The nearest train station to the site is Syston Railway Station, approximately 2.4 km from the site and therefore well within the acceptable cycling distance.

The Applicant states in the TA that the rail journeys from Syston Railway Station can form part of a multi-modal journey from the site as the station provides six cycle spaces. Additionally, the number 5 bus route provides regular access to the train station from the site, stopping 160m from the station.

## Cycle Accessibility

Barkby Road is a recommended on-road cycle route and adjoins with Queniborough Road, Thorpe Lane and Barkbythorpe Road to provide cycle access to northeast Leicester. In addition, Syston Road is an on-road cycle route that provides cycle access through the heart of Queniborough.

Melton Road, to the west of the site, provides a shared footway/cycleway which is also utilised as National Cycle Network (NCN) route 48. NCN48 provides cyclists with good connectivity to Syston and Birstall both of which are within the 5km cycle catchment, whilst adjoining with NCN route 6, providing direct access to the centre of Leicester.

## Pedestrian Accessibility

Footpath I84/1 runs through the heart of the site in a southwest to northeast direction, connecting Melton Road with Barkby Road via Millstone Lane and Avenue Road.

To the northeast, there is a cluster of local facilities along Queniborough Road and the adjoining Main Street, which includes a Church, Primary School, Post Office and Convenience Store. There is also a cluster of local amenities to the southwest of the site.

## Travel Plan

The LHA have reviewed the submitted Travel Plan prepared by ADC Infrastructure dated 8th February 2018 and can confirm that the principle measures and targets within the Travel Plan are acceptable, subject to the following amendments / considerations being provided in a revised travel plan:

- A copy of both the application form for free bus passes/£50 bike voucher and the proposed Welcome Packs (which are to be funded by the developer) will need to be submitted to Leicestershire County Council (LCC) for approval before being issued to residents. An administration fee of £500 will be required when submitting these documents for approval.
- Ensure that an action plan detailing initiatives, promotions and incentives is documented on to the MODESHIFT STARS for monitoring system
- A contingency plan for if a steering group is not established by the Travel Plan Coordinator i.e. commitment that the developer will continue to fund/resource a Travel Plan Coordinator throughout the lifespan of the Travel Plan until such a steering group is formed.
- LCC's role is to undertake with the Travel Plan Co-ordinator the on-going monitoring and review of the Travel Plan. If the developer would like LCC to attend the steering group a further fee in addition to the Travel Plan Monitoring fee would be required to ensure officer resource is available as this is not part of the monitoring agreement.
- The preferred system to capture survey information is MODESHIFT STARS.

**Date Received**  
**10 March 2021**

**Case Officer**  
**Suraj Dave**

**Reviewer**  
**AW**

**Date issued**  
**6 April 2021**