

A52 Bingham Road Junction (Harlequin Junction)

Questions and answers from the Public Information Event 2019

1 Why do your proposals remove the left turn from Carter Avenue to the A52?

Removing the left turn from Carter Avenue onto the A52 westbound carriageway towards Nottingham will help to improve safety and the flow of traffic through the junction, helping 30,000 journeys on this section of the A52 to be smoother and more reliable every day. This change is planned alongside our other changes to the junction, including:

- Widening to provide extra lanes on the A52 and Bingham Road junction approaches.
- New lanes on the A52 for traffic turning right into Bingham Road and Carter Avenue.
- Removal of the left turn from the A52 eastbound carriageway onto Bingham Road.
- New traffic lights to manage traffic and improve safety by reducing turning conflicts and increasing capacity.
- New traffic light controlled crossings for pedestrians to cross the junction safely.
- Upgrading the existing drainage, street lighting, road signs, surfacing and markings.

2 How many vehicles turn left from Carter Avenue to the A52? Will diverting them be unsafe?

Our observations found low numbers of vehicles turning left from Carter Avenue on to the A52. Following the public information event in 2019, further traffic counts were undertaken which showed a weekday average of five vehicles per hour turning left from Carter Avenue during peak hours (8am to 9am and 5pm to 6pm), supporting the previous observations. This data can be found in the appendix below.

The most direct alternative route will be for drivers to turn left onto the A52 from Hillside Road to the west. This will slightly increase the use of the Hillside Road/A52 priority junction. However, the junction has suitable visibility and the increase in traffic will be well within its capacity.

In addition, the operation of the traffic signals at the Bingham Road junction will create regular gaps in westbound A52 traffic which will help drivers to safely turn left onto the A52 from Hillside Road.

3 Overgrown vegetation impairs visibility for traffic turning left from Hillside Road onto the A52. Could you put traffic lights or a zebra crossing at the Hillside Road junction?

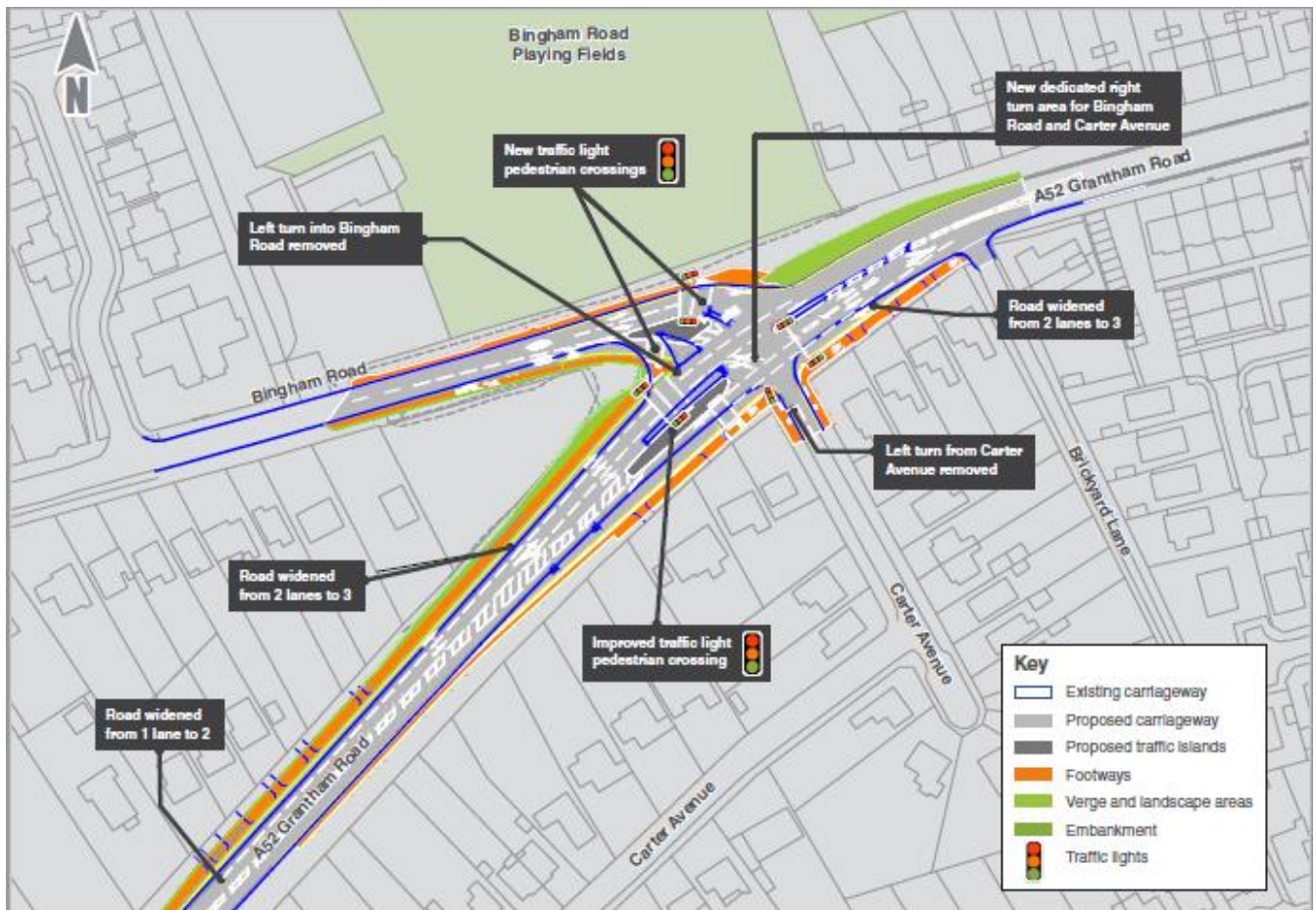
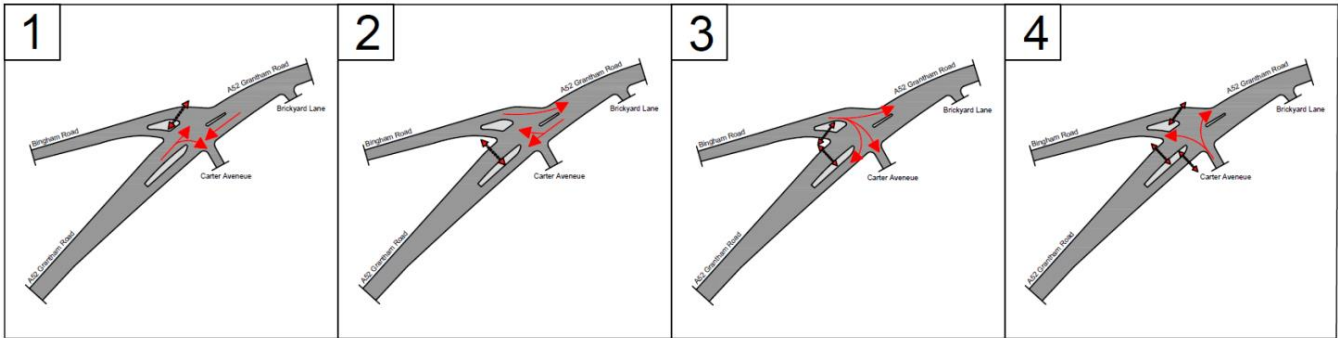
There have been no reported collisions at the Hillside Road/A52 junction. The operation of the traffic signals at the Bingham Road junction will create regular gaps in westbound A52 traffic which will help drivers to safely turn left onto the A52 from Hillside Road. We currently have no proposals to put traffic lights or a zebra crossing at Hillside Road as this is not appropriate for this junction and would increase queuing on the A52.

4 What is the proposed new sequence for the traffic lights?

The proposed new sequence for the traffic lights is described below. The movements that will have a green light in each phase are listed, all other movements will have a red light.

- **Movement 1:** A52 eastbound and westbound. Pedestrian crossing across the eastern side of Bingham Road.
- **Movement 2:** A52 westbound. Bingham Road to A52 eastbound. Pedestrian crossing across the northern half of the A52.
- **Movement 3:** Bingham Road to A52 eastbound and westbound, and Carter Avenue. Pedestrian crossing across the western side of Bingham Road and northern half of the A52.
- **Movement 4:** Carter Avenue to A52 eastbound and Bingham Road. Pedestrian crossing across both halves of A52, and eastern side of Bingham Road.

The proposed new sequence for the traffic lights is also shown in the image below.



A52 Bingham Road junction (also known as Harlequin junction) scheme design proposal

5 The left turn from Carter Avenue appears to be banned so that the lights at a pedestrian and cyclist crossing on the A52 can be green at the same time as traffic is exiting Carter Avenue. Couldn't you just put a set of traffic lights on the A52 for the cyclists and pedestrians and keep the left turn open?

In the new traffic light sequence, pedestrians and cyclists will be crossing the A52 westbound, to the west of Carter Avenue, at the same time as vehicles exiting Carter Avenue. A conflict would therefore exist between users of the crossing and vehicles turning left out of Carter Avenue, if this movement were still possible. In addition, the crossing would be very close to Carter Avenue and traffic turning left from Carter Avenue would have poor visibility of the crossing. The proximity would not leave enough time for drivers to react to a red signal.

6 Why are you removing the left turn from the A52 eastbound into Bingham Road? How many vehicles turn left from the A52 into Bingham Road? Will diverting them be unsafe?

Removing the left turn from the A52 eastbound into Bingham Road will allow us to widen the junction and create a central right-turn area for vehicles turning right into Carter Avenue and Bingham Road. There is not enough space available within the constraints of the junction to also retain a left turn into Bingham Road.

Our observations found that low numbers of vehicles turn left from the A52 into Bingham Road. Following the public information event in 2019, further traffic counts were undertaken which show a weekday average of five vehicles per hour turn left from the A52 into Bingham Road during peak hours (8am to 9am and 5pm to 6pm), which supports the previous observations. This data can be found in the appendix below.

Traffic turning left into Bingham Road was observed to be higher at weekends when the highest observed average was 11 vehicles per hour due to football matches on the adjacent sports pitches. However, weekend turning movements are still low. This data can be found in the appendix below.

Safe alternative routes are available using either Cropwell Road or Golf Road to access Bingham Road from the A52 eastbound.

7 Currently A52 westbound traffic turning into Bingham Road sits in the middle of the road and blocks the exit for traffic turning from Carter Avenue and Bingham Road. Will your proposals address this? Will there be a filter light for the A52 westbound traffic turning into Bingham Road?

Our proposals include a new right-turn area for traffic turning right into Bingham Road from the A52 westbound. The operation of the new traffic signals is as described in question 4 above, which shows that those wanted to right turn from the A52 westbound into Bingham Road will be able to complete the turn unimpeded in 'Movement 2'.

8 Will improving the flow of traffic make it more difficult to:

- a) turn right at Woodside Road, South Avenue, Thomas Avenue and Northfield Avenue?
- b) turn left or right from Hudson Way?
- c) cross the A52 at these junctions?

Could you include pedestrian crossings at these junctions?

The benefits of this scheme will improve traffic flow through the Bingham Road junction, helping journeys to be smoother and more reliable. There will still be gaps in traffic for people joining and pedestrians crossing the A52. The junctions listed above are outside the limits of our scheme and there are no current proposals to include traffic lights at these junctions.

9 Will there be railings around the new crossings?

We will provide pedestrian guard rails in the new central island refuges.

10 Do your proposals take into account local developments such as those proposed on Shelford Road and Grantham Road?

When developing our scheme, we undertook traffic modelling to understand the future performance of the proposals. This included traffic forecasts from planned major developments and a general level of growth in line with national road traffic forecasts. As the developments at Shelford Road and Grantham Road are relatively small they are accounted for in the general growth forecasts.

11 How will your proposals provide a benefit when the A52 on either side of the junction is a single carriageway?

The single carriageway links either side have a greater capacity than the current junction, our proposals are to increase the junction capacity to better match the wider capacity along the A52 corridor. While developing our

scheme we undertook traffic modelling which covered the whole corridor to ensure that the collection of improvements and existing infrastructure provide meaningful improvements to journeys along the A52 corridor.

12 Why can't you build a dual carriageway bypassing Radcliffe-on-Trent?

Providing a dual carriageway bypass around Radcliffe-on-Trent would be a major new scheme which is beyond the scope of our improvement proposals.

13 Why can't you put a weight restriction on the A52 to reduce the use by heavy goods vehicles?

The A52 is the key east-west link across the East Midlands. Our junction improvement proposals are intended to reduce congestion and delays. The classification of the road means it is suitable for heavy goods vehicles. Any diversion would result in the HGVs being re-routed to less suitable roads.

14 Will you retain two-way access for the houses that lie off the north-east corner of the junction?

Yes, we will retain this access as part of our proposals.

Appendix

Summary of Results of Traffic Surveys, A52 Bingham Road Junction (November 2019)

- 1.1 The following outlines the results of the traffic surveys which were undertaken in November 2019, following comments received at the public information events held in August/September 2019.
- 1.2 Traffic surveys were undertaken at the following locations over a one-week period between Sunday 3 November and Saturday 9 November 2019:
- A52 Bingham Road Junction
 - Bingham Road adjacent to the Bingham Road Playing Field access
 - Golf Road between Bingham Road and Harewood Close
 - Hillside Road between Johns Road and the A52
 - Cropwell Road between Glebe Lane and Cherry Tree Close
- 1.3 A total of 310 vehicles turned left from Carter Avenue onto the A52 over the five weekdays within the survey period. This equates to an average of 62 vehicles per weekday. A further 77 vehicles made this manoeuvre over the surveyed two weekend days.
- 1.4 The weekday peak hours and the average inter-peak hour had the following numbers of left turners:
- AM Peak (8am to 9am) – average 5 vehicles per hour
 - IP (10am to 4pm) – average 4 vehicles per hour
 - PM Peak (5pm to 6pm) – average 5 vehicles per hour.
- 1.5 During the survey, no heavy goods vehicles (HGVs) were recorded turning left from Carter Avenue. Table 1 and Table 2 summarise the number of vehicles making the left turn per hour during the survey period.

Table 1 Carter Avenue Left Turn (Weekday) - Vehicles/Hour

Hour Start	Monday	Tuesday	Wednesday	Thursday	Friday	Weekday Averages
07:00	3	8	9	6	6	6
08:00	5	5	6	4	4	5
09:00	6	6	6	4	2	5
10:00	3	1	6	12	3	5
11:00	9	6	7	5	3	6
12:00	5	1	6	4	0	3
13:00	1	4	2	3	2	2
14:00	2	0	11	4	0	3
15:00	7	3	8	6	0	5
16:00	5	1	8	5	4	5
17:00	5	4	6	6	3	5
18:00	6	3	4	5	3	4

Table 2 Carter Avenue Left Turn (Weekend) - Vehicles/Hour

Hour Start	Sunday	Saturday	Weekend Averages
07:00	0	2	1
08:00	0	6	3
09:00	2	2	2
10:00	4	3	4
11:00	2	3	3
12:00	4	4	4
13:00	4	5	5
14:00	2	2	2
15:00	1	1	1
16:00	2	1	2
17:00	2	3	3
18:00	3	1	2

1.6 A total of 344 vehicles turned left from the A52 into Bingham Road over the five weekdays, with a further 129 vehicles over the two weekend days. The weekday peak hours and average interpeak hours had the following numbers of left turners:

- AM Peak (8am to 9am) – average 3 vehicles per hour
- IP (10am to 4pm) – average 5 vehicles per hour
- PM Peak (5pm to 6pm) – average 5 vehicles per hour

1.7 Table 3 and Table 4 summarise the number of vehicles turning left into Bingham Road per hour during the survey period.

Table 3 Bingham Road Left Turn (Weekday) - Vehicles/Hour

Hour Start	Monday	Tuesday	Wednesday	Thursday	Friday	Weekday Averages
07:00	4	6	3	4	2	4
08:00	1	4	2	5	5	3
09:00	4	6	8	4	5	5
10:00	8	5	6	7	3	6
11:00	6	2	6	4	6	5
12:00	8	6	6	2	5	5
13:00	5	2	6	7	12	6
14:00	3	1	6	3	5	4
15:00	4	2	7	10	4	5
16:00	8	3	0	3	4	4
17:00	2	7	1	8	7	5
18:00	3	4	6	6	9	6

Table 4 Bingham Road Left Turn (Weekend) - Vehicles/Hour

Hour Start	Sunday	Saturday	Weekend Averages
07:00	0	0	0
08:00	1	0	1
09:00	8	4	6
10:00	7	7	7
11:00	0	2	1
12:00	1	9	5
13:00	4	6	5
14:00	5	5	5
15:00	9	5	7
16:00	10	4	7
17:00	17	5	11
18:00	7	3	5

- 1.8 Turning traffic at weekends was proportionally higher due to football matches being played on the Bingham Road Playing Fields which are adjacent to the junction. Table 5 outlines the fixtures that occurred during the survey period.

Table 5 Radcliffe-on-Trent Playing Field Fixtures

Date/Time	Team
3/11/19 – 10:30	Under 11 Girls
3/11/19 – 10:30	Under 18 Sunday League
3/11/19 – 10:30	Under 13 Girls
3/11/19 – 10:30	Under 10 Girls
3/11/19	Girls Under 15 Training
9/11/19 – 10:00	Under 15 Blue
9/11/19 – 11:15	Under 15 Red
9/11/19 – 11:30	Under 10 Blue

- 1.9 The observed volumes of left turns were comparable with the surveys undertaken on 4 October 2016. Table 6 compares the results from the one-day survey undertaken in 2016 with the one-week survey undertaken in 2019. The 2019 data in the table below represents the average weekday.

Table 6 2016 Survey vs 2019 Survey Results

Movement	A52 Eastbound to Bingham Road		Carter Avenue to A52 Westbound	
	2016	2019	2016	2019
Time period \ Year				
AM Peak (08:00-09:00)	5	3	5	5
Average IP (10:00-16:00)	7	5	2	4
PM Peak (17:00-18:00)	2	5	3	5

- 1.10 Figure 1, Figure 2 and Figure 3 summarise recorded traffic flows for the AM Peak, inter-peak (IP) and PM Peak time periods respectively.

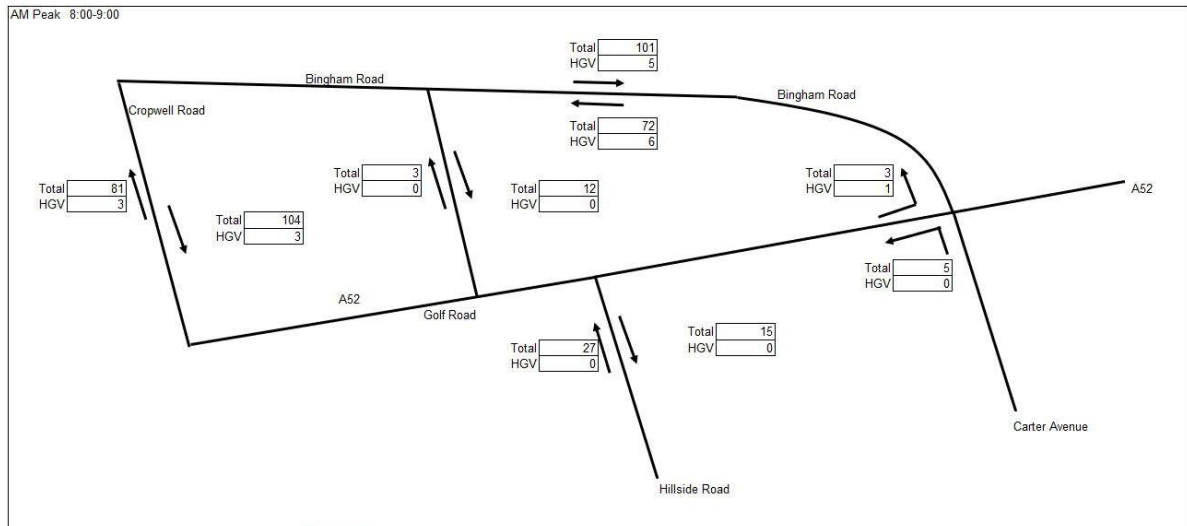


Figure 1 Radcliffe-on-Trent Survey Data AM Weekday (vehicles/hour)

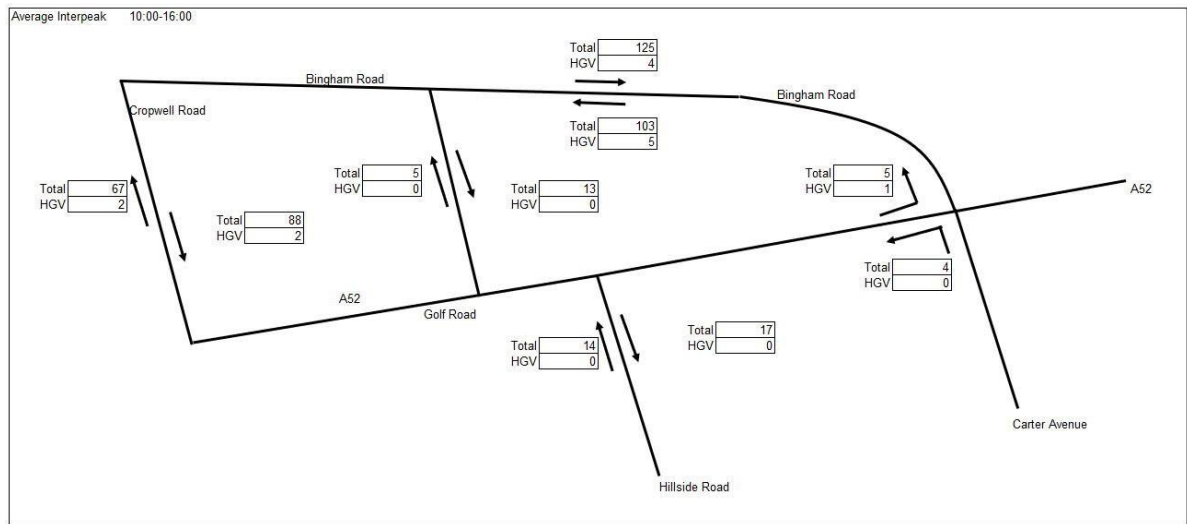


Figure 2 Radcliffe-on-Trent Survey Data Average IP Hour Weekday

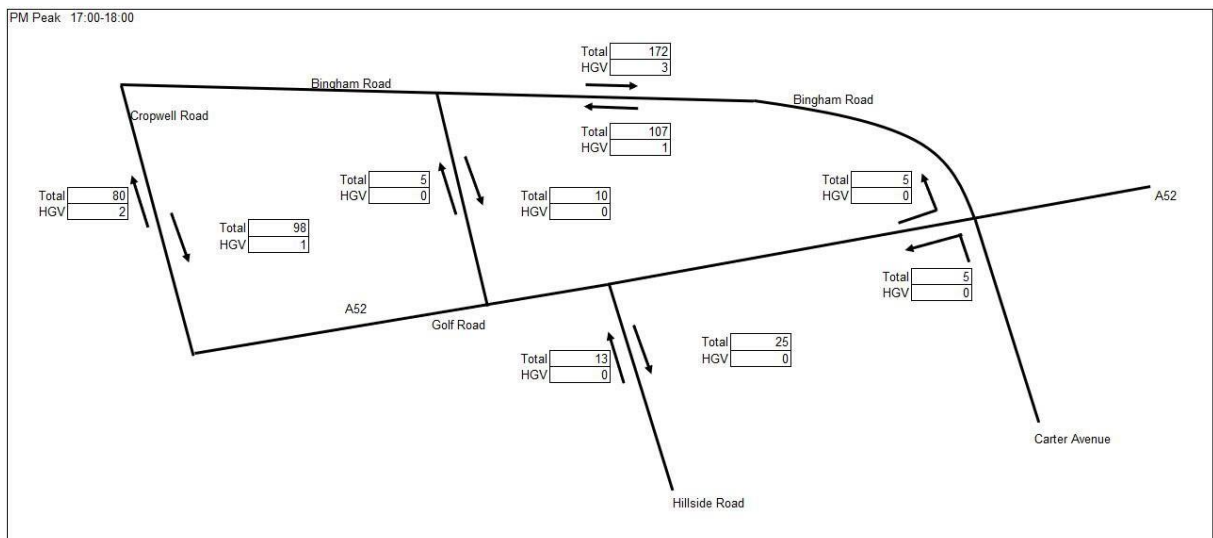


Figure 3 Radcliffe-on-Trent Survey Data PM Weekday

- 1.11 The traffic surveys undertaken on Golf Road and Hillside Road, indicate low volumes of traffic used these side roads both in the peak hours and the inter-peak hours.
- 1.12 Of the total traffic flow recorded along Bingham Road in the westbound direction, approximately 5% were accessing Bingham Road from the A52 Eastbound.