



ADL have been instructed to investigate the suitability of reducing the speed limit on the B4362 and the U92404.

### **Relevant Factors and Considerations:**

Department for Transport Circular 01/2013 Setting Local Speed Limits (DfT Circular 01/2013) advocates for single carriageway rural roads:

*At point 122 “In most instances consideration of collision history, road function, mix of road user including presence of vulnerable road users, road geometry, engineering and environment and actual traffic speed should enable authorities to determine the appropriate speed limit on single carriageway rural roads”*

*At point 123 “Roads may have primarily either a through traffic function or a local access function. Both need to be provided safely. Mobility benefits will be more important for roads with a through function, while environmental and community benefits are likely to be of greater importance for the local access roads”*

*At point 126 “The choice of speed limits should take account of whether there is substantial roadside development and whether the road forms part of a recognised route for vulnerable road users, including whether there is a footway”*

*At point 127 Table 2 sets out where speed limits should apply on rural single carriageway roads with a predominant motor traffic flow function given certain prevailing characteristics. However this does not necessarily mean that speed limits should be automatically reduced.*

<b>TABLE 2</b>	<b>SPEED LIMITS FOR SINGLE CARRIAGEWAY ROADS WITH A PREDOMINANT MOTOR TRAFFIC FLOW FUNCTION. EXCLUDING VILLAGES</b>
<b>Speed Limit – (mph)</b>	<b>Where limit should apply</b>
60	Recommended for most high quality strategic A and B roads with few bends, junctions or accesses.
50	Should be considered on lower quality A and B roads that may have a relatively high number of bends, junctions or accesses. Can also be considered where mean speeds are below 50 mph, so lower limit does not interfere with traffic flow.
40	Should be considered where there are many bends, junctions or accesses, substantial development, a strong environmental or landscape reason, or where there are considerable numbers of vulnerable road users.

*At point 131 “Fear of traffic can affect people’s quality of life in villages and it is self-evident that villages should have comparable speed limits to similar roads in urban areas. Therefore it is Government Policy that a 30mph speed limit should be the norm through villages”*

At point 133 it makes reference to Traffic Advisory Leaflet 01/2004 (DfT 2004) which suggests that *“reasonable minimum criteria for the definition of what constitutes a village for the purpose of applying a village speed limit of 30mph would be that there were 20 or more houses (on one or both sides of the road) and a minimum length of 600 metres”*

## **Engineering and Environment:**

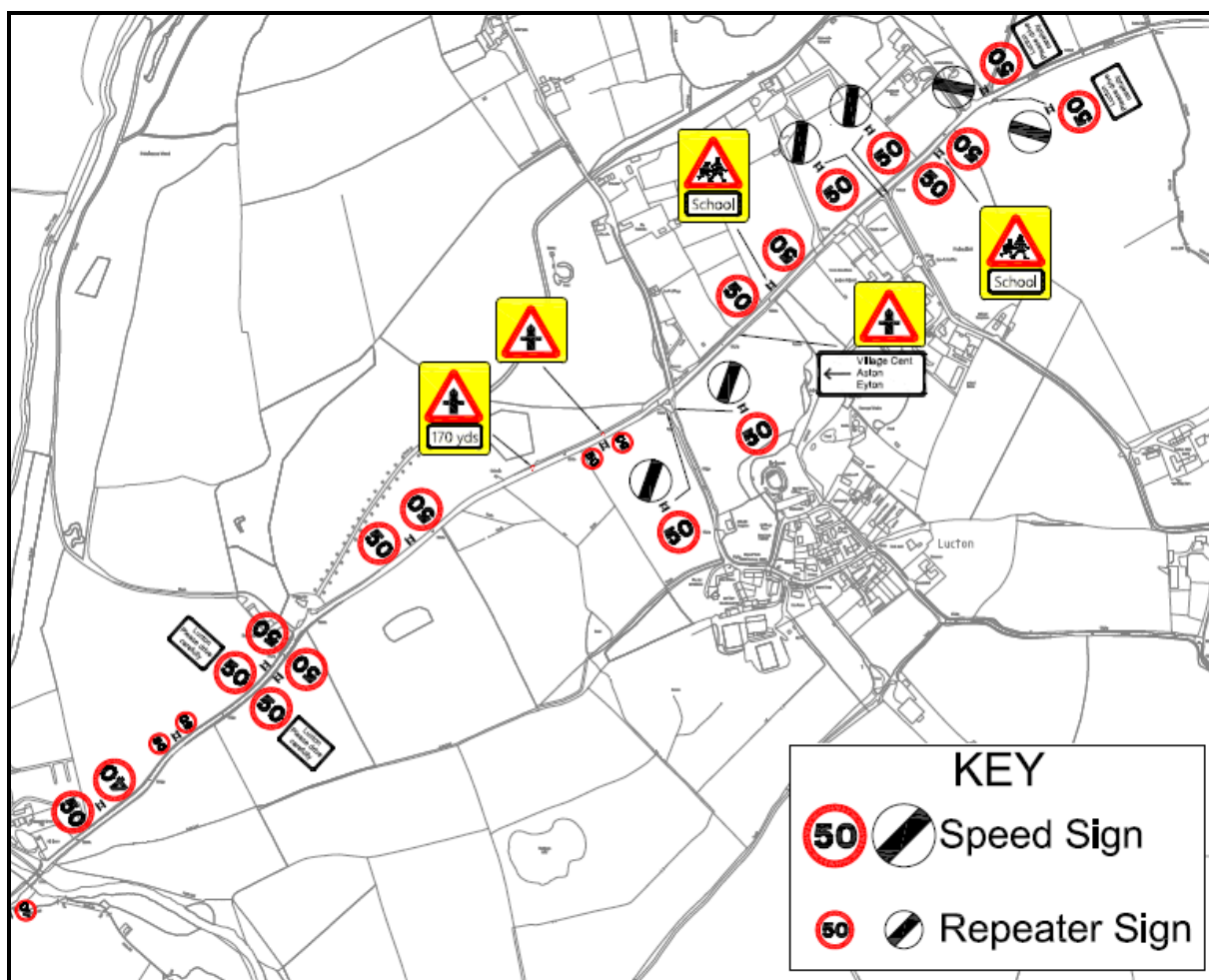
### **B4362**

The B4362 is an approximately 6.8 metres wide single carriageway road which runs in northeast-southwest direction and is characterised by noticeable bends and significant changes to the vertical alignment (gradients) especially at the junction with the C1040 and the U92406.

The B4362 is subject to a 50mph speed limit from a point approximately 190 metres northeast of the junction with the U92404 to a point approximately 320 metres northeast of Mortimers Close.

The main 50mph speed terminals on yellow backing boards are located approximately 600 metres northeast of Mortimers Close and 190 metres northeast of the junction with the U92404. These terminals are also provided with the village entry sign – **“Lucton – Please drive carefully”** and are distinctly visible.

There are a number of 50 mph repeater signs along this route. In the vicinity of Lucton School, there are school warning signs on the B4362, approximately 120 metres east and 200 metres west of the junction with the U92404. A sketch showing the existing signage along the B4362 is shown on the next page.



The section of the B4362 under review provides connection to three adopted roads i.e. the U92404, the U92406 and the C1040 in the form of simple priority junctions. It provides direct access to Lucton School (ingress only) and six public footpaths; Lucton Footpaths 4, 8, 9, 10, 5B and 14A.

This section also provides direct access to one house, a private lane linking to a house, two field accesses and a school (ingress only).

There is a short section of narrow footway on the north side of the B4362 to the immediate east of the junction with the U92404. The footway then continues on the south side and into the U92404. There are no street lights on this road.

#### B4362 / C1040 / U92406 crossroads

From the west, the gradient of the B4362 approach to the junction of the C1040 (village access) and the U92406 is characterised by a rise followed by a sudden dip. The B4362 /

C1040 / U92406 crossroads is located in this hidden dip. Given that the junction is located at a hidden dip, the visibility along the B4362 from the C1040 is approximately 2.4m x 67m (to the west) and 2.4m x 75m (to the east) and from the U92406 is approximately 2.4m x 80m (to the west) and 2.4m x 65m (to the east).

There are signs on the B4362 warning motorists of this crossroads from both the sides. From the west, there are two such signs – one approximately 200 metres from the crossroads and the second at approximately 100 metres from the crossroads. These signs are coupled with SLOW road marking with red surfacing. There is a give way sign on the C1040 approach to the junction.

From the east, there is a crossroads sign which is co-located with directional sign to the village centre, Aston and Eyton, at approximately 130 metres from the crossroads. The sketch showing the existing signage on the B4362 is shown below.

#### U92404

The U92404 is subject to a national speed limit and the speed terminals are located approximately 7 metres south of the junction with the B4362. There is a sign warning motorists of school ahead on the approach.

The U92404 is a narrow single carriageway road with the width of approximately 4m to 5m with no formal footways. There are number of accesses to Lucton School and its playground on the U92404.

Approximately 180 metres south of the junction with the B4362, the U92404 exhibits a noticeable left-hand bend in the southerly direction.

#### **Personal Injury Collision Information:**

No collisions were recorded either on the B4362 or on the U92404 in the last five-year period up to November 2017.

### Existing Speed Survey Data:

Most road engineering and speed limit design refers to the 85<sup>th</sup> percentile speed. This is the speed that 85 per cent of vehicles do not exceed when measured in free-flowing conditions at any single point on the highway.

One aim of a speed limit is to encourage more drivers to travel at about the same speed which has shown to reduce the likelihood of collisions. However, to be successful speed limits must be evidence led and not set unrealistically low as this can quickly lead to an erosion of respect for speed limits.

Speed limits on their own are very unlikely to reduce vehicle speeds if they are set significantly lower than a prudent driver would choose to travel if there were no limit and such a course of action can lead to a worsening safety record.

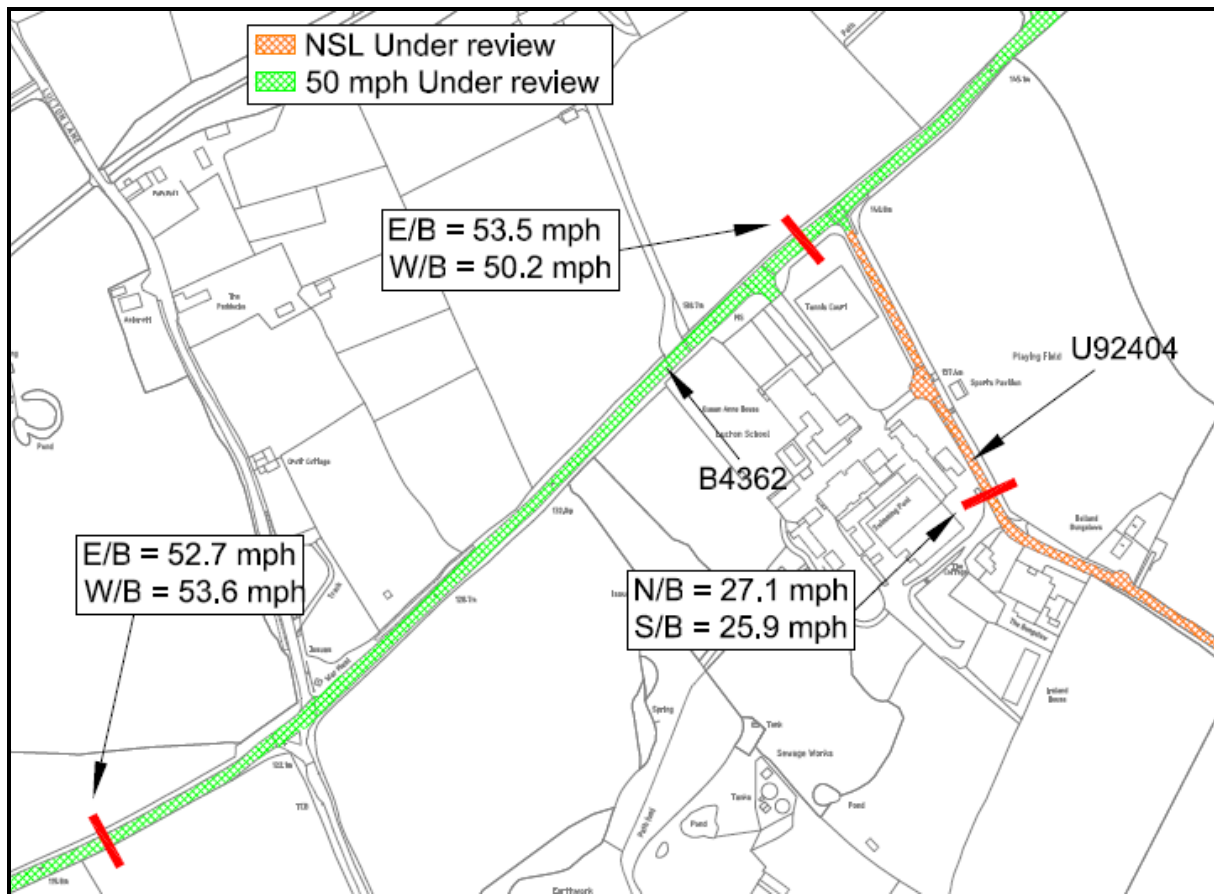
Research has shown that the safest and most responsible group of drivers travel at or below the 85<sup>th</sup> to 90<sup>th</sup> percentile speed and this leads to recommendations that speed limits should normally be set at or around the 85<sup>th</sup> percentile speed recorded under good conditions.

It's important to remember that a speed limit does not imply that it is a safe speed to travel at under all conditions. On all journeys on all types of road it is necessary to trust drivers to adopt lower speeds than the posted speed limit as conditions dictate and setting speed limits cannot be expected to replace this decision-making process.

Whilst the 85<sup>th</sup> percentile speed is an important and influential factor in deciding an appropriate speed limit other factors are also considered alongside the 85<sup>th</sup> percentile speed and may influence the recommendation. These are discussed in the review section below.

The speed surveys were undertaken on the B4362 (on either side of the B4362 / C1040 / U92406 crossroads) and on the U92404. The figure below shows the speed survey locations and the 85<sup>th</sup> percentile speed survey results.

<b>Speed Survey Location</b>	<b>Northeastbound</b>	<b>Southwestbound</b>
B4362 (East of crossroads)	53.5mph	50.2mph
B4362 (West of crossroads)	52.7mph	53.6mph
<b>Speed Survey Location</b>	<b>Northbound</b>	<b>Southbound</b>
U92404	27.1mph	25.9mph



With reference to information contained in the sections above:

### B4362

The 85<sup>th</sup> percentile speeds on the B4362 indicate a good level of compliance with the existing 50mph speed limit and are below ACPO guidelines for the speed enforcement intervention level of 57mph i.e. speed limit (50mph) +10% +2mph.

The vehicle speeds are dictated by the road side environment and topography and not by the speed limits. The 85<sup>th</sup> percentile speeds on the B4362 demonstrate that the speed limit are already set to an optimum level that suits the road side environment and topography. The fact that there have been no speed related collisions recorded in the last five-year period is a good indication that the current speed limit is appropriate

The reduction in speed limit on the B4362 could be perceived by responsible drivers as unreasonably low. The imposition of lower speed limit could result in an increase in

overtaking, tailgating, inattention etc., all of which would increase the risk of collisions occurring. This could have a serious impact on the motorists especially to those negotiating the B4362 / C1040 / U92406 crossroads which is located in a hidden dip.

#### U92404

The 85<sup>th</sup> percentile speeds on the U92404 indicate that the road side environment and road geometry dictate the vehicle speeds and not the posted national speed limit.

The 85<sup>th</sup> percentile speeds on the U92404 are less than the speed enforcement intervention level of 36 mph which is for a speed limit of 30mph.

A speed limit reduction on this section of the U92404 from national speed limit to a 30mph would therefore achieve good compliance from the motorists.

#### **Response from Statutory Committees:**

##### Warwickshire Police and West Mercia Police

*"I'd have no objection to a reduction in the limit on the U92404 in the vicinity of the school entrance. I could not support a reduction to the 50mph limit on the B4362 though. As it stands I feel the current limit is appropriate for the rural environment and if it were to be reduced I don't think there would be routine compliance by drivers."*

##### Yarpole Group Parish Council

*"The Parish Council fully supports the proposal to reduce the speed limit in this area on the B4362 and U92404. This issue has been discussed at previous Parish Council meetings, and parishioners have long been concerned that a speed limit of 50mph in the vicinity of a school is entirely inappropriate. We sincerely hope that the speed limit is reduced so that the safety of children and staff of Lucton School and local residents is better protected."*

##### Bircher Ward - Cllr Sebastian Bowen

*"... Both I and the Parish Council had always asked that the whole length of the B road from the beginning of the 50 mph limit to the East of Lucton School down to well beyond the crossroads (School Lane and the entrance to Lucton village) should be reduced to a 40mph speed limit. The entrance and exit to the village is very unpleasant and dangerous, especially if trying to access the B road going East. If approaching the crossroads from the West, there is a decided rise and fall in the road that trickily*



*conceals the crossroads until you are almost upon them. I have been present when two people in a car, waiting to enter the village, were shunted from behind. One was killed and the other was badly injured. It is very scary trying to exit the village and there have been many near misses and nasty scares. All too often one finds a big Tarmac or Kingspan truck bearing down on one, often at above 60 mph. These trucks do not stop in a hurry...”*

## **Recommendation:**

### B4362

The fact that there have been no collisions recorded on the B4362, indicates that the speed limit on the B4236 has been set at an appropriate level. Also, the recorded 85<sup>th</sup> percentile speeds on the B4362 on either side of the crossroads are; although slightly above the speed limit; are still within the ‘acceptable’ range which shows that the drivers currently see the 50 mph speed limit as an appropriate speed limit.

A reduction from a 50mph limit to lower speed limit imposed by signing alone is likely to lead to disappointment as to its effect on reducing the existing speeds. This view is supported by the Police who would be responsible for enforcing any speed restrictions.

As such, any reduction in speed limit from the current 50 mph speed limit to a lower speed limit on this road should only be processed if accompanied by appropriate traffic engineering measures that would slow down the motorists and thereby complement the reduced speed limit.

Therefore, without appropriate traffic engineering measures in place, it is not recommendable to reduce the speed limit of the B4362 from its current 50mph to 40mph.

### B4362 / C1040 / U92406 crossroads

Given the topography at the B4362 / C1040 / U92406 crossroads, it is considered to be an isolated hazard and as such a speed limit reduction should not be used as a mitigation to overcome the difficulty that drivers may face during negotiating this junction.

The hazard such as this should be generally addressed by appropriate signage. However, the review of the current signage in the vicinity of this crossroads reveal that there is significant signage already in place which are considered to be appropriate.

However, subject to approval, there could be additional signage such as Danger Ahead Sign (which is an exclamation sign in a red triangle) along with “Hidden Dip” located on the B4362 to the west of the crossroads. This would warn drivers travelling eastwards on the B4362 of the sudden dip in the topography as they approach the crossroads.

It would be beneficial to implement similar arrangement adjacent to the junction ahead sign to the east of the crossroads.

Also, a give-way warning sign could be placed on the U92406 approaches to the junction to enhance the profile of the crossroads from the side roads.

Flag type direction sign with the text (for e.g. Lucton Village Centre) with reflective backing board could be placed on the B4362 opposite the junction with the C1040 to improve the profile of the junction.

#### U92404

It is recommended to reduce the speed limit of the U92404 from its current national speed limit to 30mph from a point approximately seven metres south of the junction with the B4362 for a distance of 230 metres in southerly direction.