

# **Robert Wilkinson Primary - Safe Routes to School**

## **Feasibility Study 2010/11**

### **Introduction**

Robert Wilkinson Primary School is situated on West End in Strensall as shown in location plan **Annex A**. There are around 500 children on roll, and roughly 95% live in Strensall.

Around 140 pupils live to the north east of the village, and some of these cross Sheriff Hutton Road. The school has recently completed a review of its travel plan, and crossing this particular junction was raised as an issue because of the volume of traffic and poor visibility resulting in difficulty in crossing.

Therefore, this report considers the feasibility of introducing improvements to alleviate the above.

### **Background**

Sheriff Hutton Road is classified as a traffic route and The Village is classified as mixed priority under the Council's speed management plan. Both are subject to a 30mph speed limit. The Village to the east of the junction is where the majority of the village shops are. Sheriff Hutton Road is only built up for about 40m and it then becomes predominantly rural. Frequent bus service no. 5 runs along The Village.

The School originally wrote its original travel plan in 2003, and it has since been reviewed in June 2009 and March 2010. The School shows an active interest in school travel issues, and has relatively low car use considering the size of the village which is about 2 miles from one end to the other.

A planning application to develop the Tannery off Sheriff Hutton Road into a business park had been approved but permission has since expired. If this had progressed, it may have led to improvements on Sheriff Hutton Road being funded by the developer. Currently, the site is for sale.

### **Traffic Data**

Surveys have been undertaken to further assess conditions on Sheriff Hutton Road.

A vehicle survey was undertaken on 26<sup>th</sup> January 2011 between 7am to 7pm and the results are recorded below and on the attached plan as **Annex B**. There is also a high number of HGVs so this information is also included.

	Total vehicles 12 hours	Total HGVs 12 hours
Sheriff Hutton Road	3502	161
The Village west of Sheriff Hutton Road	4283	196
The Village east of Sheriff Hutton Road	2595	45

## Accident Data

There have been no recorded injury accidents at the junction in the last three years.

## Pedestrian Survey data

The 2011 School Travel survey (undertaken in January) suggests around 140 pupils live in the north east of the village with around 109 walking, 1 cycling and a further 30 being driven to school. It is difficult from the postcode spot plot to suggest how many need to cross Sheriff Hutton Road as there are alternative walking routes, however, there is a pleasant off-road path from Terrington Close which is used by quite a few parents on the way to School. This terminates at Sheriff Hutton Road.

To carry out a more detailed assessment of pedestrian activity at this location, a crossing survey was undertaken in January 2011 at the junction of The Village and Sheriff Hutton Road. This covered a 12 hour period from 7am to 7pm. In addition, the same survey recorded waiting time for pedestrians.

The main survey results are presented in the table below, and are also summarised on the attached plan **Annex B**.

	Location	Total peds crossing in 12 hours	Average waiting time (seconds)	Total children crossing 8am to 9am	Average waiting time (seconds)	Total children crossing 3pm to 4pm	Average waiting time (seconds)
A	50m section on Sheriff Hutton Road adjoining The Village junction	267	6	30	12	21	8
B	50m section on The Village west of the Sheriff Hutton Road junction	102	2	3	1	18	5
C	50m section on The Village east of the Sheriff Hutton Road junction	575	1	3	2	8	1

## Options / Discussion

The surveys indicate that there is a lot of pedestrian activity at the junction, with the most crossing movements on The Village to the east of Sheriff Hutton Road where the shops are. This arm of the junction is also the most lightly trafficked and easiest to cross. The second busiest arm is Sheriff Hutton Road, which has the highest waiting time.

Visibility is restricted to the north by the humped bridge, so vehicles do seem to appear quite suddenly. Pedestrians tend to cross in one of two places, at the junction or if they are using the footpath shortcut to Terrington Close, in the Ship Inn's vehicular access where the footway ends on the west side, and where there is another vehicle crossing opposite. Visibility is better at the junction both for vehicles coming over the bridge and traffic on The Village. The crossing point at the junction is only about 1m wide and has no tactile paving. There are often parked cars contravening the prohibition of waiting outside the chemist (no. 25 The Village). Options are therefore considered for crossing facilities and improvements on Sheriff Hutton Road.

#### *Zebra / Pelican crossing*

Controlled crossings can be considered where there is a good level of pedestrian demand and clear difficulties being experienced crossing the road. Demand is highest at school times, but there is a steady number of pedestrians throughout the day who experience an average waiting time of 6 seconds (13 seconds in the morning school run) before being able to cross. Crossings on the approach to a junction should be sited very carefully to ensure that drivers turning in have time to judge the situation and have the distance to stop. Because of poor visibility when turning in, it would not be possible to site the crossing anywhere near the junction so this option is ruled out. The only way a controlled crossing could be achieved safely on this road would be to signalise the whole junction but this would cost at least £100,000 so could not be justified in this instance.

#### *Pedestrian refuge*

Although the carriageway is wide at around 8m, the regular turning movements of HGVs would make it impractical to retain the existing kerblines and install a pedestrian refuge, as these features would restrict turning resulting in overrunning of the footways or refuge. However, if the west kerbline was moved back, which would effectively close the footway to the car park of The Ship Inn, a refuge could be installed. However, utility company records have been checked and telecoms, water, gas and electric are all located somewhere in this footway. It is extremely likely that in order to move the kerbline, some or all of these services would have to be relocated. This is likely to cost tens of thousands of pounds. A length of prohibition of waiting would also be required opposite the junction to maintain HGV turning manoeuvres. This could be unacceptable to the local community as there is regular on-street parking here. A possible scheme is shown as **Annex C**, for completeness, but because of the high cost to move underground services, it is not considered a realistic option.

In addition to the provision of crossing facilities, other ways of improving safety at this crossing point have also been investigated:

#### *Traffic calming*

Traffic calming is often used to reduce vehicle speeds at crossing points, the most effective being speed tables or cushions. Unfortunately, this would not be considered appropriate as the status of the route under the Council Speed Management Plan is a traffic route, and therefore an important emergency service and bus route. In addition, a high volume of HGVs and agricultural vehicles could potentially cause noise and vibration problems.

### *Vehicle activated signs (VAS)*

VAS are another measure commonly used to reduce vehicle speed. The Council policy on VAS sets a criteria for their use. Importantly, VAS should only be installed from LTP funding where 85<sup>th</sup> percentile speeds are at least the speed limit plus 10% plus 2mph (the speed limit plus 10% for alternatively funded signs). The speed limit on Sheriff Hutton Road is 131m in length, but the extents of the footway is only 24m from the junction on the west side and, 64m on the east side. Speed readings have not been taken but as vehicles are either slowing down to stop at the junction, or have turned in it is highly unlikely that vehicles would be exceeding the speed limit at this point.

### *Improved dropped kerbs*



As the existing dropped kerbs are only 1m wide at the junction, it would be beneficial to extend these to 2m wide and add tactile paving as shown in **Annex C**, which would cost in the region of £3,500 including fees. This would improve conditions for less mobile pedestrians and those with pushchairs, and also make it easier for large groups of pedestrians to cross at the same time. A refresh of the double yellow lines at the junction is also recommended to discourage the fairly regular parking in contravention of the prohibition of waiting outside the chemist, which can affect visibility for any pedestrians crossing.

### *Improved signing and road markings*



The 30mph signs on Sheriff Hutton Road are situated on the other side of the bridge, where the environment is still rural. The village name plate is nearly 500m away, so unfortunately cannot be combined with the speed limit signs to create more of an impact. It is however proposed to change the speed limit signs to be yellow backed and install speed limit repeater signs as there are no lamp columns until you reach The Village. 30 roundel road markings would add extra emphasis to the signing. The proposals are shown as **Annex D**, and would cost in the region of £2000 including fees. Any measures would need to be considered in conjunction with the latest local policy on speed limits in urban areas when developed.

### **Conclusion / Recommendation**

Crossing Sheriff Hutton Road has been raised as a concern because of limited visibility and a high number of HGVs. Crossing facilities have been considered and a pedestrian refuge is a possibility, but very expensive (£10000s) because of the need to relocate underground services. It would also result in the closure of a short footway and a prohibition of waiting opposite the junction to ensure large vehicles can turn in and out. As the level of funding for a refuge is not feasible, minor improvements could be made to widen the dropped crossing point at a cost of around £3,500 and improvements to the speed limit signing would increase driver awareness that they are entering a village environment and should drive accordingly at a cost of around £2,000. Options are shown in **Annex C** and **D**.

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