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# Roden Lane (B5062), Roden Highway Safety Scheme & Speed Review Scheme Review Report (Revised Proposals)



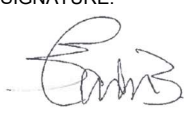

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## Contents

1	Background .....	3
2	Traffic Data .....	4
3	Personal Injury Collision Record .....	6
4	Public Consultation Feedback .....	7
5	Initial proposals carried forward .....	8
5.1	Speed Limits .....	8
5.2	Removal of centre lines .....	9
5.3	Speed Limit Countdown Markers .....	9
5.4	Speed Indicator Device .....	9
5.5	Footway Improvement Works .....	9
6	Additional Proposals .....	10
6.1	Priority Give Ways .....	10
6.2	Mini roundabout .....	10
7	Recommendations .....	12
7.1	Considerations .....	12
7.2	Next Steps .....	12
8	Appendix A – Personal Injury Collision Record .....	13

## Document Control

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# 1 Background

Concerns have been raised by residents, ward members and Ercall Magna Parish the speed of vehicles travelling through Roden.

In response to this, Section 106 funding was gained through the planning process to implement a minor traffic scheme to address some of these concerns.

The review area in Roden is shown below and runs from approx. 280m east of the village along Roden Lane (B5062) to the Dogs Trust and from along Poynton Road from the junction with Roden Lane (B5062) to approx. 100m northeast of Marlbrook Way.

B5062 is in a generally rural setting and runs through Roden. The road has a 60mph speed limit on approach to the village and from both Shrewsbury and Admaston directions where it drops to 30mph through Roden and Poynton Road within the review area. There are a small number of residential properties, farm buildings, nursery, care home, Dogs Trust and fence supplies business in the study area.

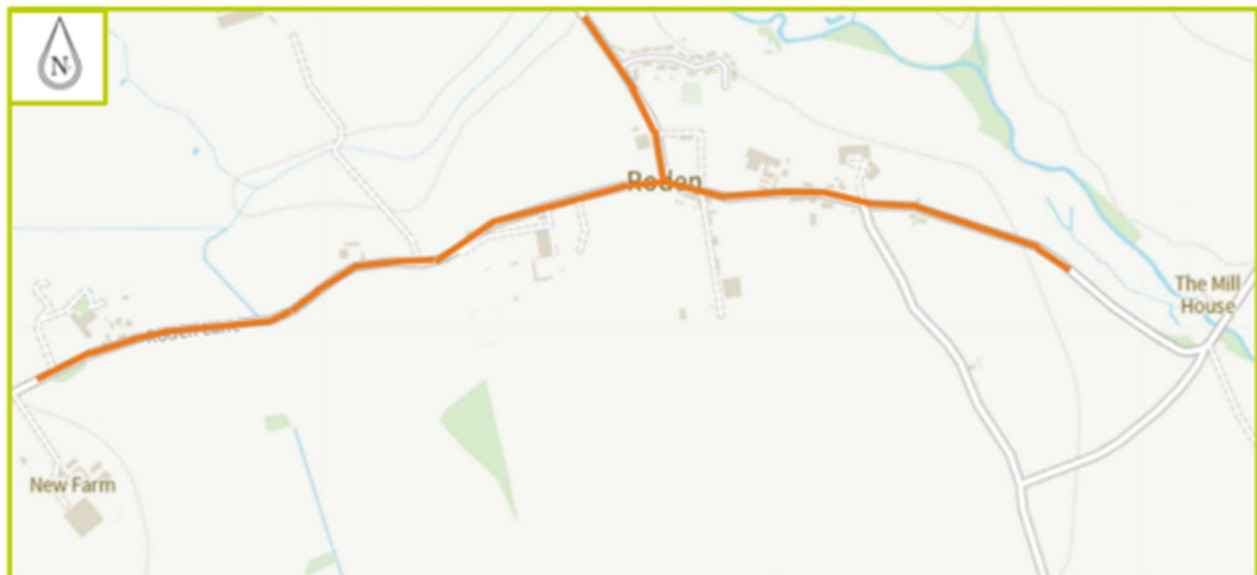


Figure 1.1 Review Areas (Source: Telford & Wrekin Corporate Map)



## 2 Traffic Data

Automated traffic counts (ATC's) were installed on 20th May 2021 for 7 days along the review area to collect vehicular traffic data (see ATC 1, ATC 2, ATC 3 and ATC 4). The ATC's were located as shown in Figure 2.1 and a summary of the collected data in Table 2-1.



Figure 2-1 ATC Locations (source Telford & Wrekin Corporate Map)

Road Name	Site Name	Date	Direction	Speed Limit	Average Weekday Traffic Flow	Average Speed	85 <sup>th</sup> %ile Speed
Roden Lane B5062	ATC 1	May 2021	Northbound	60	1924	45.3 mph	50.9 mph
			Southbound	60	1847	46.5 mph	53.1 mph
	ATC 2	May 2021	Northbound	30	1928	32.5 mph	34.6 mph
			Southbound	30	1854	30.4 mph	38.2 mph
	ATC 3	May 2021	Eastbound	30	1894	33.3 mph	40.5 mph
			Westbound	30	1999	34.7 mph	41.5 mph
	ATC 4	May 2021	Eastbound	60	1919	49.6 mph	57.3 mph
			Westbound	60	2028	46.5 mph	56.0 mph

Table 2-1 ATC Data

Speeds are compliant within the 60mph speed limit (ATC 1 and ATC 4) though above the 30mph limit through the village. The higher speeds recorded are to the west of Roden in both the average and 85<sup>th</sup> percentile<sup>1</sup> speeds.

<sup>1</sup> The 85th percentile speed denotes the speed at or below that 85 percent of all vehicles travel under free-flowing conditions





Further traffic counts were installed June 2024 for 7 days at the same locations and an additional 3 locations (ATC 5, ATC 6, ATC 7). The ATC's were located as shown in Figure 2.2 and a summary of the collected data in Table 2-1.

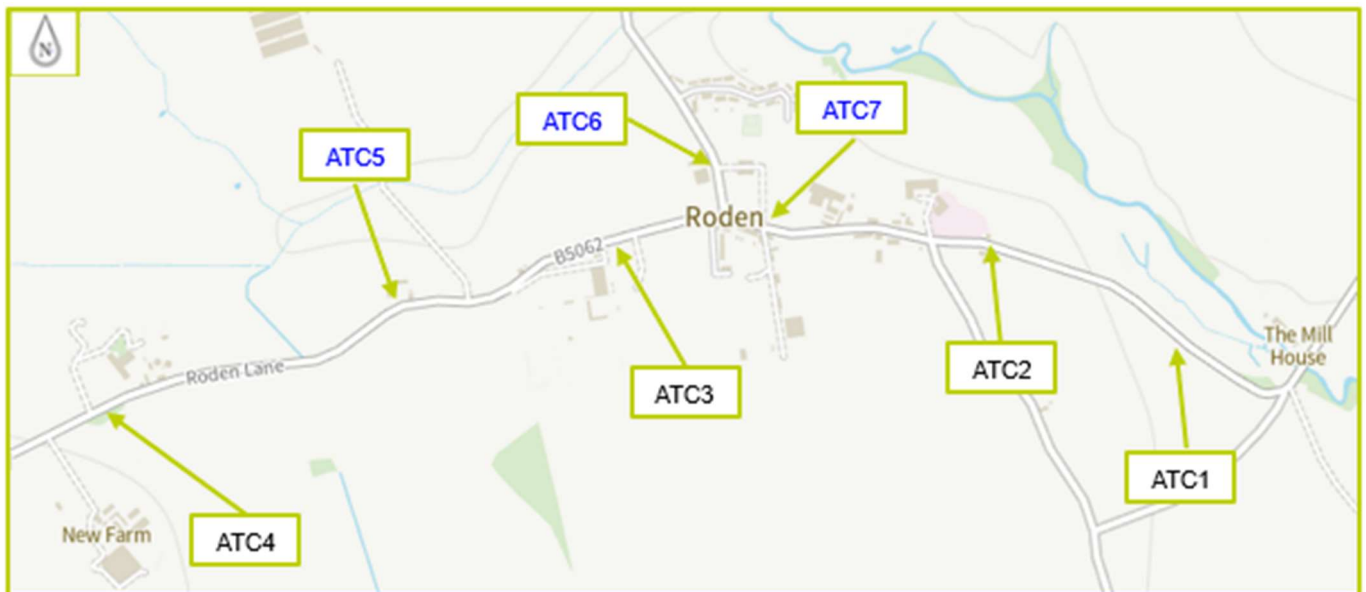


Figure 2-2 ATC Locations (source Telford & Wrekin Corporate Map)

Road Name	Site Name	Date	Direction	Speed Limit	Average Weekday Traffic Flow	Average Speed	85 <sup>th</sup> %ile Speed
Roden Lane B5062	ATC 1	June 2024	Eastbound	60	2000	44.4 mph	50.6 mph
			Westbound	60	2109	44.9 mph	51.1 mph
	ATC 2	June 2024	Eastbound	30	2023	33.7 mph	38.6 mph
			Westbound	30	2104	32.5 mph	37.7 mph
	ATC 3	June 2024	Eastbound	30	2052	34.6 mph	40.6 mph
			Westbound	30	2147	34.5 mph	39.9 mph
	ATC 4	June 2024	Eastbound	60	2123	49.1 mph	56.4 mph
			Westbound	60	2165	45.3 mph	53.0 mph
	ATC 5	June 2024	Eastbound	30	2049	35.9 mph	43.7 mph
			Westbound	30	2159	37.5 mph	44.4 mph
	ATC 6	June 2024	Northbound	30	187	22.3 mph	27.5 mph
			Southbound	30	202	24.1 mph	30.4 mph
	ATC 7	June 2024	Eastbound	30	2034	30.9 mph	35.5 mph
			Westbound	30	2131	30.9 mph	35.0 mph

Table 2-2 ATC Data

Speeds are compliant within the 60mph speed limit (ATC 1 and ATC 4) though above the 30mph limit through the village. The higher speeds recorded are to the west of Roden in both the average and 85<sup>th</sup> percentile<sup>2</sup> speeds. ATC 3 and ATC 5 show a steady increase in speed travelling westbound heading out of Roden.

<sup>2</sup> The 85th percentile speed denotes the speed at or below that 85 percent of all vehicles travel under free-flowing conditions



### 3 Personal Injury Collision Record

Analysis of available Personal Injury Collision (PIC) records has been undertaken for the 5 year period from April 2017 to April 2022, locations of which are shown in Figure 3-1 and a summary of their severity is shown in Table 3-1.

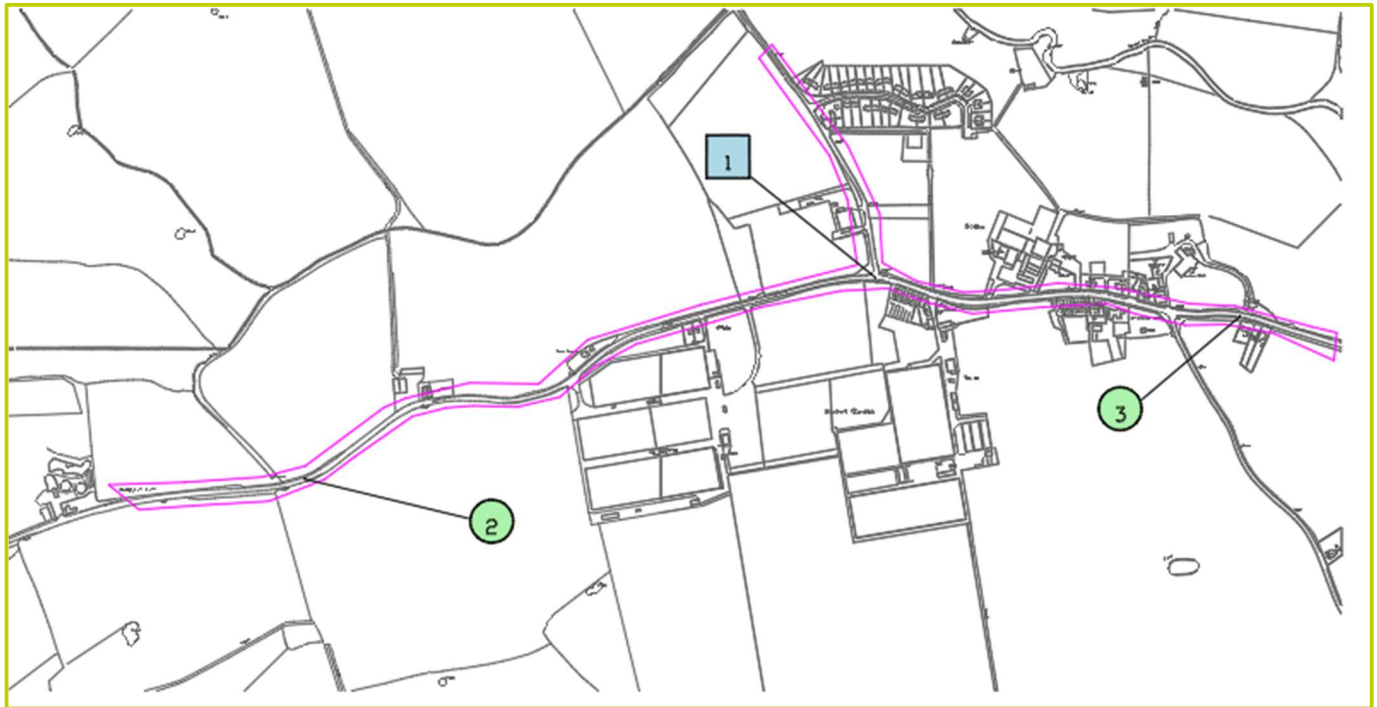


Figure 3-1 PIC Locations (source Key Accident (AutoCAD))

Road Name	Severity	2017	2018	2019	2020	2021	Total
Roden Lane B5062	● Slight	2	0	0	0	0	2
	■ Serious	0	0	0	0	1	1
	▲ Fatal	0	0	0	0	0	0
	<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>

Table 3-1 PIC Severity by Road

Overall, there were three PIC's reported to West Mercia Police in the five year period up to April 2022, resulting in one serious and two slight.

PIC Record can be found in Appendix B.

Analysis of the above data reveals the following key trends:

- Both occurred during daylight hours and weather condition was recorded as fine.
- The 'Slight' injury occurred when the road surface was icy and the 'Serious' on a dry road surface.
- There is no correlation between the collisions.

As the reported cause of the collisions are not related and random in nature, any measures proposed are likely to be more generalised as opposed to targeting specific causation factors.



## 4 Public Consultation Feedback

Within the initial public consultation documents, a short questionnaire containing three questions was provided to obtain feedback from the residents of Roden based on the Roden Lane traffic engineering measures proposed. The feedback from the public consultation process has been collated and condensed into the following trends.

- Where specified, most respondents agreed with the general aims of the scheme to introduce appropriate speed limits, with the aim of vehicle speed reduction within the village core;
- Where specified, more respondents disagreed with the phased speed limit reduction on the western approach to Roden village. However, this provided a balanced response overall;
- Where specified, most respondents disagreed with the revised speed limit gateways and proposed removal of the centre line markings within the 30mph core of the village.

Taking the above feedback into consideration, the initial proposals have not been fully accepted by the local community and therefore we have revised the proposals in the remainder of the report.



## 5 Initial proposals carried forward

The proposals in this Section 5 are those detailed in the previous report and consultation. They are retained in the proposals as from the data available both nationally and locally they are the most appropriate engineering measures available to suit the prevailing traffic conditions in the village and surrounding.

### 5.1 Speed Limits

As noted in the ATC data, traffic speeds are above the posted speed limit at both the ATC2 and ATC3 locations, which are within the 30mph speed limit, significantly so at the ATC3 location which is essentially in open countryside, presents itself with very little frontage development, but is subject to the same speed limit as the core of the village further to the east.

It is proposed to amend the 30mph speed limit extents to the core village area only, between the existing eastern terminal signs just east of Roden Lane and a point approx. 30m west of Poynton Road.

West of Poynton Road, the speed limit is proposed to be increased to 40mph as there is limited development and based on the traffic data would be more appropriate as 85% of drivers are naturally choosing to drive at up to 41.5mph in spite of the 30mph speed limit.

Further to the west and while not part of this study it is noted that there is a small collision history in the vicinity of The Dogs Trust and it is proposed to implement a 50mph speed limit as far as the entrance to that facility – see Figure 5-1 below.



Figure 5-1 Proposed speed limit changes (source Telford & Wrekin Corporate Map)

In setting speed limits it is important to take in to consideration whether that speed limit is both appropriate for the character of the road and the level of development. Research has repeatedly found that compliance with speed limits is primarily psychological;- the choice of speed by most drivers is based on the appearance of the road at any given point and speed limits need to be seen to be credible by drivers:

*...speed limit credibility refers to the common agreement of drivers that one speed limit is appropriate and safe for one road scene, based on the subjects' comparable feelings and judgement of whether a driving speed is appropriate (neither too fast nor too slow) for a given road, and that the driving speed does not bring any unsafe feelings.*

**(Yao, Carsten et al, University of Leeds, 2019)**





## 5.2 Removal of centre lines

To further support the 30mph limit within the core of the village between the enhanced 30mph gateways, it is proposed to remove the centre and edge white lines.

Counter-intuitively, but supported by numerous research studies nationally, removal of road centre lines is proven to reduce traffic speeds by 2mph and up to 5mph in some cases. From TfL research

*A study conducted by Wiltshire County Council between in 2003 found that not reinstating the centre lines on a resurfacing sites led to a reduction in injury collisions and traffic speeds. This built on referenced research by TRL which concluded that there are safety benefits to be gained by removing centre lines in 30 mph zones*

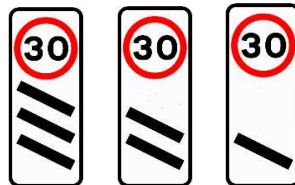
And

*The data recorded in this study and subsequent analysis shows that there was a statistically significant reduction in vehicle speeds as a result of removing central markings on the carriageway. (Cooper, Wright et al, Transport for London, 2014)*

The removal of the white lining is to make Roden Lane appear more like a village street, rather than a main road dissecting through the middle of the village. This should, based on all available evidence locally and nationwide, produce a traffic calming and speed reduction effect without having to resort to more extensive traditional engineering measures and would be in-line with other similar calming schemes in Allscot and Wellington.

## 5.3 Speed Limit Countdown Markers

In order to reinforce the change of limit from National Speed Limit to 30mph, on the eastern end of the village, a series of countdown markers are proposed at 300, 200 and 100 yards.



## 5.4 Speed Indicator Device

2No permanent speed indicator devices have been procured and will be installed when the main works for this project are underway.

## 5.5 Footway Improvement Works

While the main traffic scheme is being implemented, footway works as part of a separate Section 106 contribution will be carried out as part of the general highways Footway Maintenance programme.

In addition, sweeping and cutting back of any encroachment on to the public pavements will also be carried out at the same time in order to further improve the routes for pedestrians and the aesthetic qualities of the village.

## 6 Additional Proposals

In addition to the proposals already put forward in Section 5, the following additional features are proposed in order to overcome some of the concerns identified from the public consultation.

### 6.1 Priority Give Ways

As a physical measure to reduce speed on the approaches and within the core 30mph zone in the village, two priority give way points are proposed to be implemented at each gateway in to the 30mph speed limit, with an additional point approx. 130m east of Poynton Rd. An example of this is shown in figure 6-1.



Figure 6-1 Priority junction at Station Road, Horsehay (source Google Streetview)

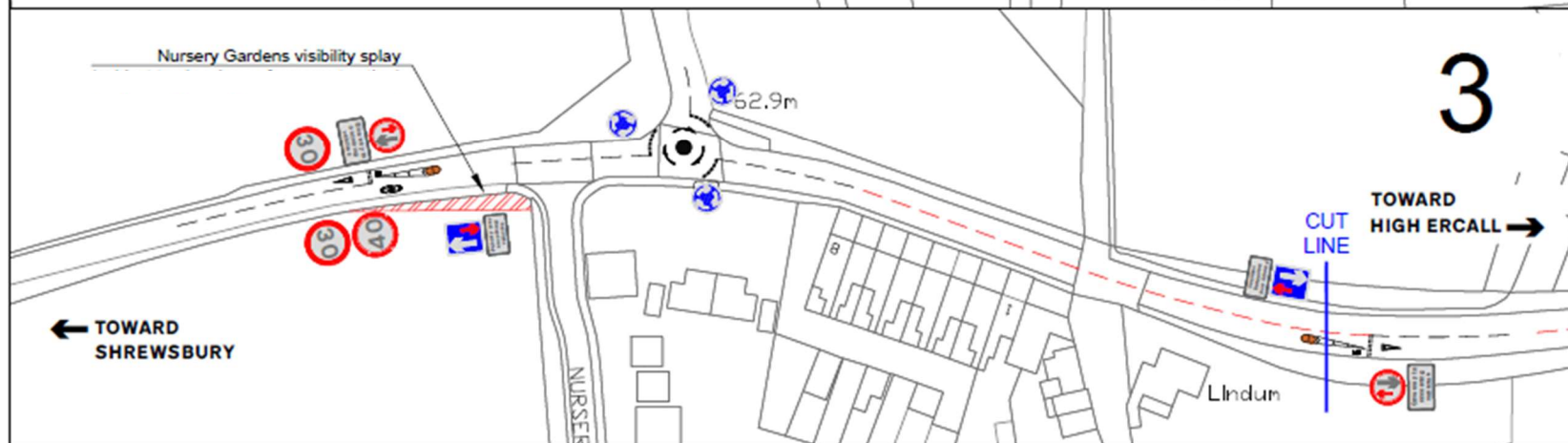
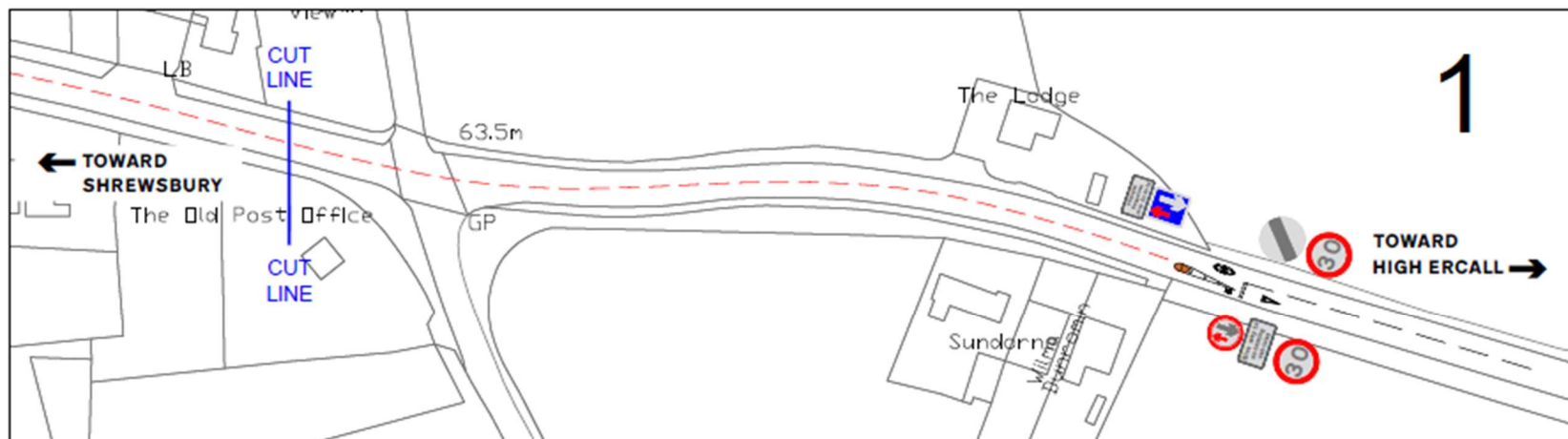
The traffic volumes along the B5062 in Roden are very similar to the B5063 in Longden on Tern, which has a single priority give way feature over the River Tern bridge. This feature does not cause any appreciable congestion and traffic delay but does have a calming effect on traffic in the vicinity.

Placing priority give ways at the boundaries to the 30mph section of the village will slow traffic down on the entrance to the village and give a definite gateway feature to change the character of the road sufficiently to affect the choice of speed by the majority of drivers.

Having confirmed the latest traffic flow data, these features will not cause any significant queuing or congestion.

### 6.2 Mini roundabout

A mini roundabout is proposed at the Poynton Road junction in order to break up traffic flow and create an additional calming feature, with the additional benefit of allowing easier access and egress from Poynton Road and, due to the slowing of traffic, egress from Nursery Gardens which has limited visibility when looking right.



REV	DATE	DESCRIPTION	DRAWN	CHKD
A	Feb 24	ISSUED FOR CONSULTATION	CP	AHC
 <b>Telford &amp; Wrekin</b> Co-operative Council				
Protect, care and invest to create a better borough				
Strategic Transport & Highway Network Management, Derby House, Lawn Central, Telford, TF3 4JA				
Project <b>RODEN TRAFFIC CALMING</b>				
Drawing title <b>GENERAL ARRANGEMENT</b>				
Date <b>Feb 2024</b>		Scale <b>1:1000</b>		
Drawing number <b>NM22_CP04/001</b>				<b>A3</b>
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## 7 Recommendations

### 7.1 Considerations

Having taken in to account the representations made during the consultation process, the following points have been taken in to consideration;

- The request to extend the 30mph beyond the nursery access has been considered and discounted on the basis that the access does not form part of the core of the village and traffic data suggests that this is unsustainable. The addition of the priority give way on the approach to the village will have a downward effect on vehicle speeds. Additional signage for the nursery access is proposed;
- Speed cameras will not be provided as the road does not meet the criteria for the number of casualties caused by excessive speed;
- The speed limits proposed are proportionate and appropriate for the road characteristics and prevailing speeds of traffic in those locations. Maintaining artificially low speed limits on open roads undermines the effectiveness of lower limits where these are justified.
- The removal of centre line markings has proven elsewhere in the UK to have a downward effect on drivers' choice of speed, therefore the proposal to remove the road markings will remain within the scheme;
- The request for a footpath to the nursery has been considered and is being investigated further however the costs (currently circa £55k) are prohibitive from existing highways budgets; this is due to technical considerations relating to ground conditions, drainage mitigation and underground services affecting the design. Without contributions from other sources, the provision of a footpath here is unlikely to proceed further at the present time;
- The limited visibility from Nursery Gardens looking left toward Shrewsbury is currently subject to enforcement action by Telford and Wrekin Council for the implementation of the required visibility splay;
- The conditions of the footways within the village has been noted and will be considered in due course by the Highways Maintenance team;

### 7.2 Next Steps

The revised scheme containing both the original proposals and the additional engineering features shall, following approval, to be taken forward to the parish council and local residents for a final consultation.

Planned implementation is proposed for Autumn/Winter 2024.





## 8 Appendix A – Personal Injury Collision Record

<b>No.1</b>	Road <b>U</b> Section	Map ref: E357315 N316607
Location	<b>RODEN LANE (B5062) RODEN JUNCTION WITH POYNTON ROAD</b>	
Description	Vehicle 1 travelling on B5062 from Haughmond Hill towards Roden. Vehicle 2 is waiting to turn right onto B5062 from an unclassified road having travelled from the Astley direction. Vehicle 3 is travelling same direction as Vehicle 1. Vehicle 3 is slowing and indicating to turn left into side road. Vehicle 1 is directly behind Vehicle 3. Vehicle 1 is not visible to Vehicle 2. As Vehicle 3 starts to turn left Vehicle 2 starts to turn right. Vehicle 1 then overtakes Vehicle 3 in the mouth of the junction. Vehicle 1 collides with the rear offside of Vehicle 2.	
Severity <b>SERIOUS</b>	Date: 06/05/2021 Thu 08:35	Road Surface Dry Weather Fine Speed limit 60mph
Single carriageway		
<b>No.2</b>	Road <b>U</b> Section	Map ref: E356477 N31631
Location	<b>RODEN LANE B5062.</b>	
Description	DRIVER OF V1 HAS DESCRIBED DRIVING TO WORK ALONG THE B5062 FROM SHREWSBURY, AND FINDING A BEE ON HIS LEG.HE THEN PANICKED AND ATTEMPTED TO OPEN THE DRIVER'S WINDOW. WHILE DISTRACTED, HE HAS DRIFTED OVER SLIGHTLY ON THE OPPOSITE SIDE OF THE CARRIAGEWAY, AND INTO THE PATH OF V2, WHICH WAS TRAVELLING IN THE OPPOSITE DIRECTION. V1 HAS COLLIDED WITH THE TRAILER BEING TOWED BY V2, CAUSING IT TO FLIP AND ROLL OVER AT LEAST ONCE, AND THEN CAME TO REST ON IT'S WHEEL ON THE CARRIAGEWAY. V3 WAS TRAVELLING TOWARDS SHREWSBURY AND WAS UNABLE TO BREAK IN TIME, CAUSING IT TO COLLIDE AT LOW SPEED WITH V1, AND SUFFERED VERY MINOR DAMAGE. V1 SUFFERED EXTENSIVE DAMAGE. V2'S TOW BAR WAS RIPPED OFF BY THE IMPACT AND TRAILER COMPLETELY DESTROYED. ONLY INJURIES WERE TO DRIVER OF V1	
Severity <b>SLIGHT</b>	Date: 24/07/2017 Mon 07:35	Road Surface Dry Weather Fine Speed limit 60mph
Single carriageway		
<b>No.3</b>	Road <b>U</b> Section	Map ref: E357851 N316550
Location	<b>TRAVELLING FROM HIGH ERCALL DIRECTION TOWARDS RODEN.</b>	
Description	V001 WAS TRAVELLING FROM HIGH ERCALL DIRECTION TOWARDS RODEN. AS V001 ENTERED THE 30MPH SPEED LIMIT AREA, IT LOST CONTROL AND SPUN OFF TO THE N/S AND INTO A HEDGE	
Severity <b>SLIGHT</b>	Date: 12/12/2017 Tue 08:15	Road Surface Dry Weather Fine Speed limit 60mph
Single carriageway		