

Area 03 - A37 Whitchurch Village

Pilot Scheme

Bath and North East Somerset

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Quality information

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1 Introduction

This report has been prepared on behalf of Bath and North East Somerset Council (B&NES) as part of the Liveable Neighbourhoods (LN) programme. The programme aims to improve streets and neighbourhoods across Bath and North East Somerset through a combination of temporary, permanent, and behavioural change interventions. The interventions will help reduce vehicular traffic speeds in addition to providing safer environments for pedestrians and cyclists to navigate the A37 and access the play park from surrounding residential areas. Encouraging people to explore their neighbourhoods by way of walking, cycling, and wheeling.

The purpose of this report is to outline the current context around Whitchurch Village and the journeys required for pedestrians and cyclists crossing the A37, along with reducing the current issue of speeding traffic. This document provides:

- The details on the current situation within this section of the A37 at its junctions with Queen Charlton Lane and Norton Lane, (Section 2.1).
- A summary of the outputs of the public consultations carried out in Autumn 2020, (Section 2.2)
- The key issues and ambitions for the areas identified by the public consultation and by B&NES, (Section 2.4)
- Descriptions of the solutions identified by AECOM to address said issues to meet the ambitions, (Section 3.1).
- The outstanding information needed to develop, implement, and monitor the scheme (Section 3.7).

Feedback collected to date has been obtained through the original Liveable Neighbourhood application and the recent public engagement phase, which took place in December 2021. This has provided the Project Team with a better understanding of the issues facing the local community, and this report outlines potential interventions that would deliver improvements through a combination of temporary and permanent measures. The proposed interventions are described in Section 3 of this report. Several other options were considered during this design stage and discounted but not developed for reasons which are outlined in Section 4 of this report. Some additional data and information may be required to support the design process, provide confirmation of the identified problems, and support ongoing monitoring post implementation.

2 Background of Area

2.1 Description of area

The A37 is a major route in and out of Bristol, with high volumes of traffic including heavy vehicles and high vehicle speeds on the approach to Whitchurch Village. The issue comes from both cars, vans, and HGVs, which also negatively impact on pollution. Currently there are no pedestrian priority crossings along this stretch of the A37.

The scheme area is located along the A37, just to the South of Whitchurch Village, as shown in Figure 1, and includes the junction with Queen Charlton Lane and Woollard Lane, which connects the South of Bristol with Keynsham and Bath. At the junction with Queen Charlton Lane the A37 is over 12.5 metre wide. There are right turn pockets into the junction with Queen Charlton Lane, as well as the same turning into Norton Lane. Due to the geometry of the road and its width, the recorded mean speed is well in excess of the 30mph speed limit.

Norton Lane is a narrow side road with marked parking bays for the nearby Whitchurch Village Play Park. The current challenge for pedestrians and cyclists is to cross the busy and fast A37 to access the play park and the National Cycling Network route 3.

Figure 1: Site Location Plan – A37 Whitchurch Village & Norton Lane



2.1.1 Heritage and Conservation Implications

Whitchurch Village is not part of a conservation area and there are no listed buildings in the immediate proximity of the proposed scheme.

2.2 Current Challenges

Several issues have been raised throughout the engagement process. Feedback following public consultation carried out in autumn 2020 reported that there is a high traffic flow which, although is subject to a 30mph speed limit along the A37, is not always abided to. Due to the location of the play park, it is necessary for pedestrians to cross the A37 from and to the residential area at Whitchurch Village which puts them at high risk of collision with speeding traffic. The current footway and cycleway way facilities are below the minimum standard, both along the A37 and Norton Lane. Existing bus stops also have poor connectivity to the play park, and the existing facilities to link them are also substandard. The village population has grown by 50% as a result of recent residential developments and this has seen more need for younger generations to use the play area. However, this is seen to currently only be safely accessed by car. Records show that between 2010 and 2020 there were twelve collisions associated with the junction of A37 and Queen Charlton Lane; three serious incidents, nine slight incidents and one involving a child.

Speed data obtained in January 2022 observed both Northbound and Southbound routes along the A37, within the area subject to a 30mph speed limit. The average 85th percentile for Northbound traffic was 40.5mph and Southbound was 40. The highest 85th percentile speed for Northbound and Southbound traffic was 49.2mph and 48.4mph respectively.

Substandard pedestrian and cyclist facilities

Figure 2, shows an example of the existing crossing facilities for pedestrians wishing to access the playpark. Dropped kerbs and central islands have been provided, however to the west of the crossing there is no footway connecting the to the entrance to the play park and the crossing itself leads pedestrians into the bell mouth of the junction. The eastern footway, adjacent to the flag type sign in Figure 2 below, is very narrow (estimated <1m) and close to the carriageway. The western shared footway and cycleway is also narrow and might pose a risk of conflict between the two categories of road users.

Figure 2: Junction along A37 and Norton Lane



Figure 3: Norton Lane Approach to A37



Speeding traffic

Figure 4, shows the width of the existing carriageway, with large right turn pocket heading into Queen Charlton Lane. The width of the road encourages speeding and dangerous driving behaviours along this stretch of road.

Figure 4: Junction along the A37 and Queen Charlton Lane - Southern approach



2.3 Potential for improvement

There is an opportunity to improve the current road alignment and the footway layouts, by upgrading and installing infrastructure that reallocates space to pedestrians and cyclists. It is clear that much of the road layout was implemented when speed limits were higher and have not been changed with reductions in the posted limits. The potential improvements include the introduction of junction narrowing, proposed signalised crossing points for pedestrians and cyclists, and wider footways and cycleways. These interventions could reduce the risk of conflicts between motorised traffic and pedestrians / cyclists crossing the A37, improving the access to Whitchurch Village and its play park.

2.4 Community Steer

Whitchurch Village was one of the original 48 applications submitted to Bath and North East Somerset Council, as part of the initial review with Liveable Neighbourhoods, and was shortlisted as one of the first fifteen areas to be taken forward as part of Phase 1.

As part of the Liveable Neighbourhoods programme, AECOM and B&NES Council carried out public engagement in December 2021, which identified a series of themes across the 15 areas and the engagement report 2021-22 produced by AECOM on behalf of B&NES is referred to below (Please refer to section 5 in the report for further detail). As part of the original application, the initial request was for:

- 1) A new pedestrian crossing to give access to the North bound village bus stop and at the entrance to the village.
- 2) A new pedestrian crossing to access the new Parish play park.
- 3) Address speeding issues through Whitchurch Village and along the A37.
- 4) Improve the lighting provision on existing cycle routes along the National Cycle Network (NCN3) into and out of Bristol.

Figure 5 and Figure 6 highlight the participants connection to the area and overall sentiment for interventions to be installed. The response was predominantly from residents, Figure 7, with no responses against any interventions going in, as shown in Figure 8.

Figure 5: Summary of Area 03 participants' connection to the area (multiple-choice question). Extract from engagement in December 2021

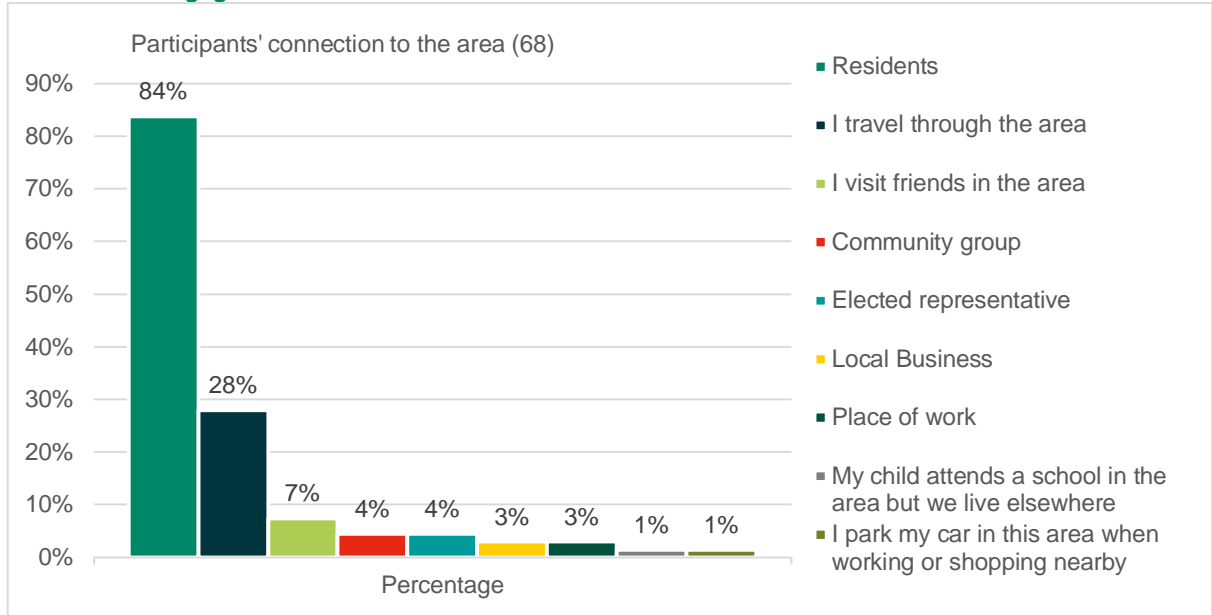


Figure 6: Summary of sentiments of Area 03 responses (65). Extract from engagement in December 2021

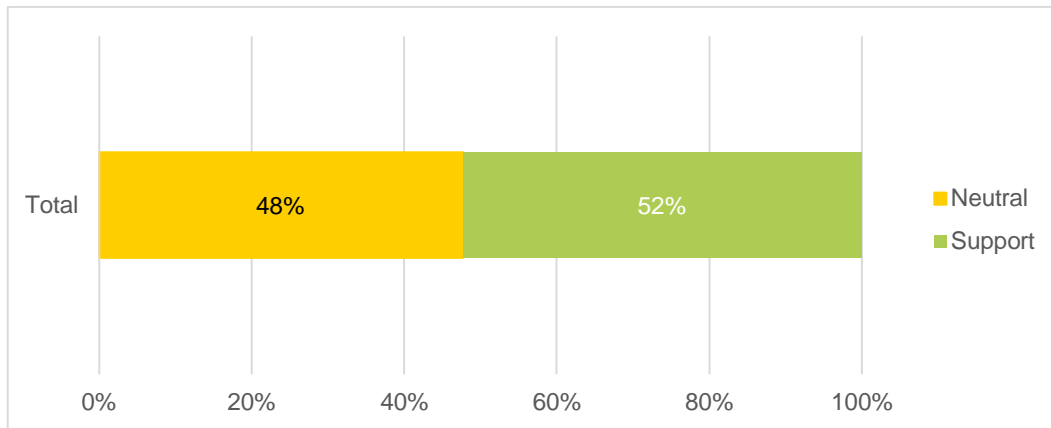


Figure 7 and Figure 8 below identify through traffic (and the associated school run) as the main issues impacting the community and this was backed overwhelmingly by support for the introduction of measures to restrict movements of through traffic with motor vehicles.

Figure 7: Summary of Area 03 transport related problems (multiple-choice question). Extract from engagement in December 2021

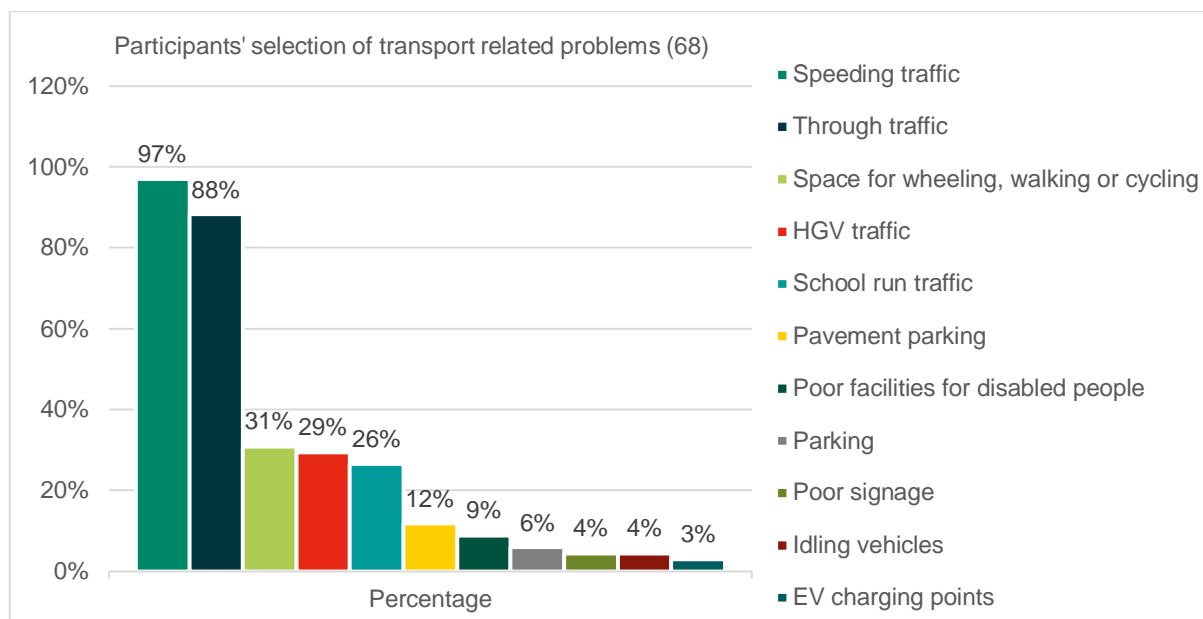


Figure 8: Summary of Area 03 participants' selection of measures with greatest impact (multiple-choice question). Extract from engagement in December 2021

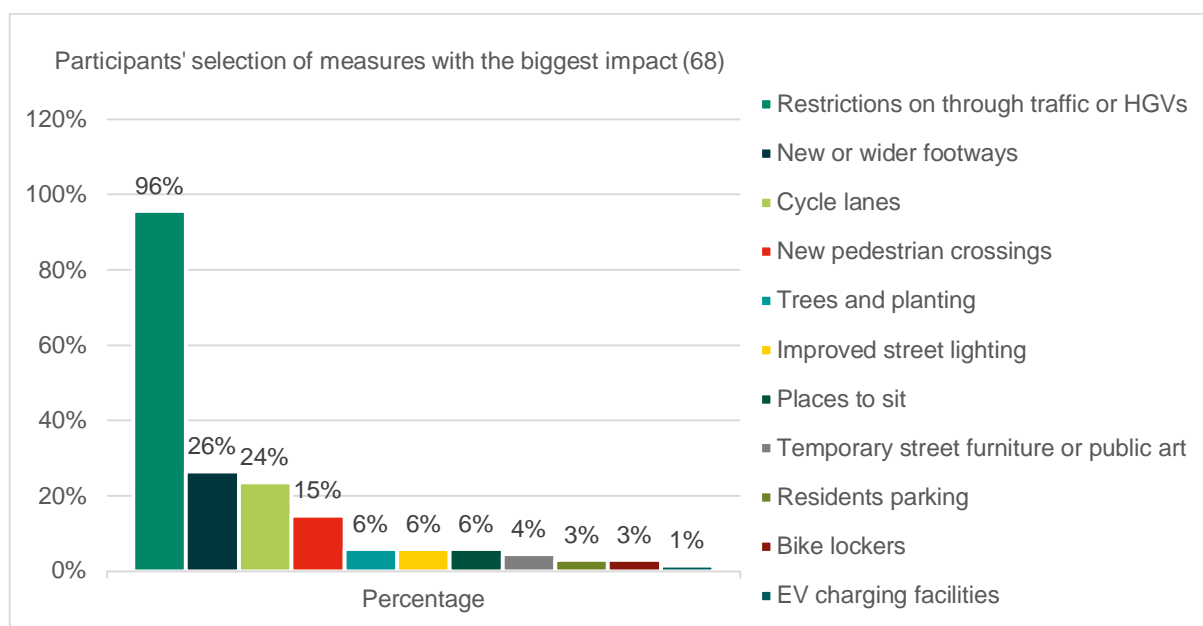


Table 1: Summary of Area 3 responses to Q6 'Any other comments?'. Extract from engagement in December 2021

Theme	Summary of responses to 'Any other comments?'	Number of comments
Cycling	Safety Comments that cyclist safety is often at risk because of rat-running and through traffic.	18
Pedestrian	Safety Comments that pedestrian safety is at risk, often in relation to, lack of crossings, missing pavements, and rat-running.	25

	Pavements Comments that pavements are not continuous, causing pedestrians to have to walk on the road.	7
	Crossings Comments that the junction near to Queen Charlton Lane is unsafe to cross and a new crossing is needed from the A37, Queen Charlton Lane to Norton Lane to help people access the play park safely.	4
	Footpaths Off road activities and dangerous driving is negatively impacting accessibility and desirability of local footpaths.	3
Public spaces	Littering Comments that public spaces there is an issue with littering, fly-tipping, and dog poo.	4
Road	Restrictions Comments Charlton Road or Queen Charlton Lane should be closed to through traffic to prevent rat -running.	16
	Street lighting Comments that street lighting is needed to improve pedestrian and cyclist safety.	3
Traffic	Issues Comments that the area experiences traffic related issues, with the most commonly referenced issues being rat-running and speeding.	52

As illustrated in Table 1, there is support for upgrading the crossing points at the A37 and Queen Charlton Lane Junction. Following local support and endorsement from local Ward Member; the A37 between Queen Charlton Lane and Norton Lane was identified as a Pilot Project, which will see critical interventions accelerated.

2.5 Ongoing Designs

As part of the Sommer Valley Links project, which will propose various Mobility Hub locations throughout the area, it has been proposed to develop a Mobility Hub to the west of the Queen Charlton Lane junction. The purpose of this scheme is to reduce vehicular traffic entering Whitchurch Village and Bristol by providing a multimodal parking area outside of town where drivers and cyclists can leave their mode of transport and transfer to a bus stop nearby which has connections direct to Bristol. These proposals will provide larger hubs on public transport routes and at key destination points and smaller, local hubs in neighbourhoods to provide more options to connect to public transport and to make it easier for people to switch to active travel and public transport for part, or all of their journey.

3 Proposal

3.1 Description

The proposals have been summarised below, in Figure 9 and Figure 10, to illustrate the proposals for the A37 and its junctions with Queen Charlton Lane and Norton Lane to improve the pedestrian and cyclist facilities. The proposals will also aim to reduce speeding traffic. The reduction in speeding traffic can aid drivers exiting Queen Charlton Lane, allowing them to do so safely within gaps in the traffic. The following proposals also have potential to improve the facilities across the National Cycle Network (NCN) throughout Bristol and Bath.

Figure 9: Site Location Plan – A37 Whitchurch Village/ Queen Charlton Lane proposals

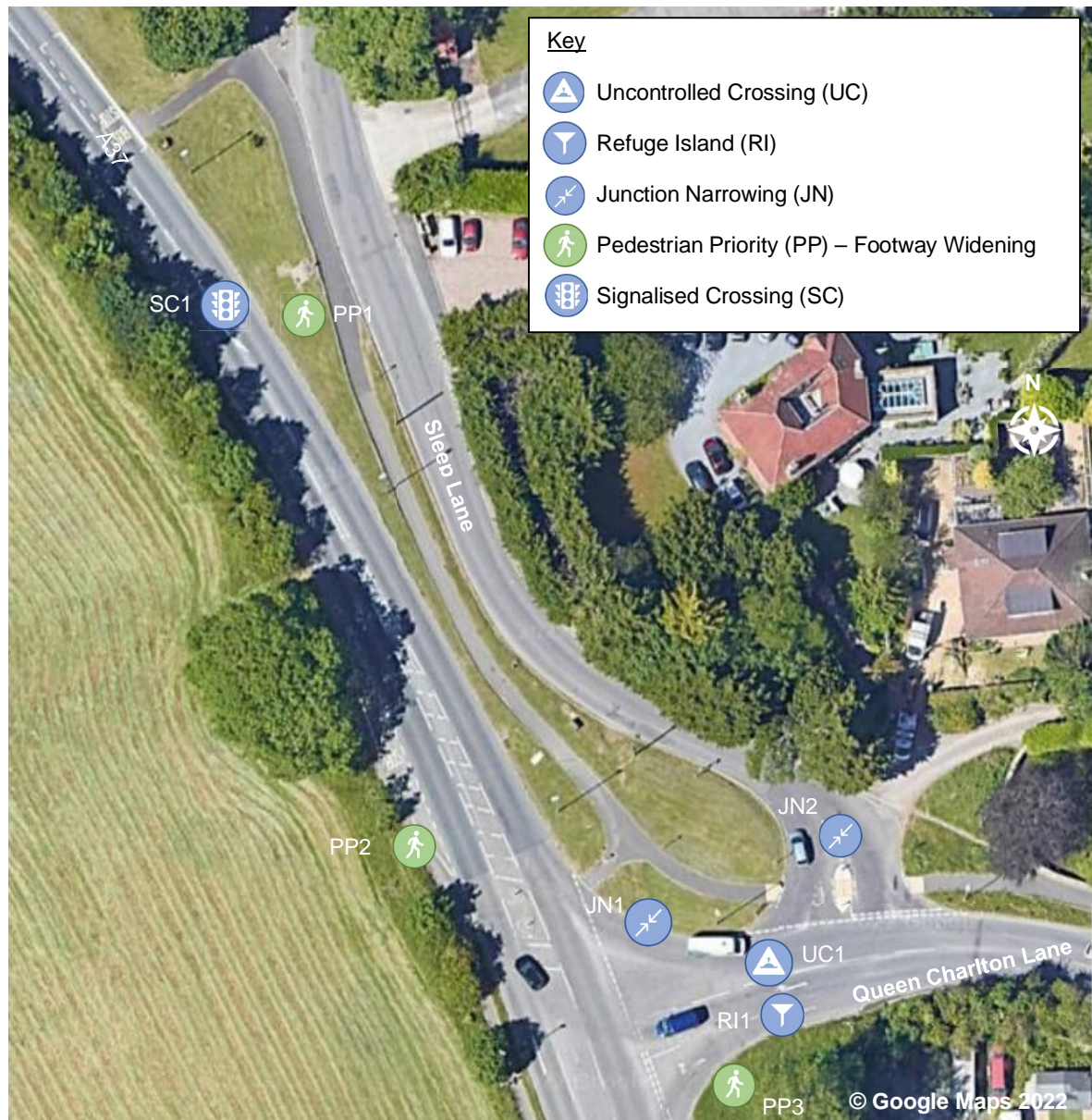


Figure 10: Site Location Plan – A37/ Norton Lane proposals



A37 Crossings (SC1) and (UC2)

A signalised toucan crossing (SC1) between the two bus stops to the north of Queen Charlton Lane will provide a safe and effective crossing facility for pedestrians and cyclists. Blister tactile paving, along with road markings and signage to indicate its presence would also be provided.

An uncontrolled crossing point (UC2) is proposed between the Queen Charlton Lane Junction and Norton Lane Junction. A new pedestrian refuge island in the centre of the road will ensure the crossing can be carried out in two separate movements and will narrow down the carriageway width at the location, encouraging lower vehicular speeds.

The two existing islands to the North and South of the junction are not to standard and will be removed as part of these proposals.

The two new formal crossing points (SC1 & UC2) will improve the level of service of the Active Travel facilities in the area. However, providing the crossings on their own, without supplementary measures to support vehicle speeds are within the 30pmh speed limit, might retain a level of risk of conflicts between motorised vehicles and pedestrians / cyclists. A proposed mitigation is reallocating the carriageway width currently occupied by the right turn pockets to pedestrian and cycling facilities, thus reducing the carriageway width, and ensuring that the geometry of the road matches the 30-mph speed limit.

Footway Improvements (PP1, 2, 3, 4) & Junction Narrowing (JN1)

The existing footway and shared facilities along the A37 are extremely narrow, being around 1.5m wide, and on Norton Lane approximately 1.8m wide. By narrowing the lanes and reducing the right turn pockets provision, the carriageway width can be reduced, and the resulting space re-allocated to footways and cycleways / shared paths (PP2, PP3). This will improve the connection between the village and the

playpark, as well as the cemetery and the rugby fields, and will incentivise lower traffic speeds. It also supports the likely pedestrian usage of families enabling space for parents walking with children.

There are existing formal parallel parking facilities along Norton Lane and this proposal aims to retain most of this parking, whilst also widening the footway and installing a more appropriate uncontrolled crossing to tie in with the existing footway (PP4, UC3). This will act as traffic calming measure at the beginning of Norton Lane, as well as ensuring a safer crossing point to the playpark.

The existing bell mouth junction of Queen Charlton Lane is extremely wide, resulting in fast turning movements and an unsafe environment for pedestrians. Narrowing this junction from the current span of 34.8m, by building out verges and footways (JN1), will encourage slower and safer turning movements, and it will reduce the crossing distance for pedestrians and cyclists, as well as increasing the visibility for the same users. It will also support recent changes to the Highway Code. As such, a further crossing point (UC1 & RI1) is proposed across Queen Charlton Lane, with the refuge island ensuring pedestrians/cyclists have a safe resting point and acting as de-facto splitter island for motorised vehicles.

The bell mouth at Sleep Lane could also be narrowed (JN2), providing a shorter crossing distance for pedestrians. This proposal would also include a raised crossing traversing the junction mouth, tying in the surrounding residential areas to the bus stops and the proposed Mobility Hub. This will involve the removal of the existing refuge island.

Bus Lane Build Out (PP2)

The existing bus stop on the Western stretch of the A37 has a layby bus bay. It is suggested that this area is built out to provide only a half-width bus bay, to increase the space at the back of the bus shelter so that pedestrians and cyclists can safely pass alongside the back of it and not clash with users boarding or alighting from the bus. The removal of the existing refuge islands should allow sufficient space for vehicles to still bypass the bus stop without increasing vehicle congestion.

Additional waiting restrictions and new signage will be required to regulate the new road layout. It should be noted that "New Road Layout Ahead" signs will have to be provided for a limited period, in line with current regulations. Supplementary direction signs may also be needed.

3.2 Cost of Works

In 2022, the estimated cost for the proposals have been totalled to approximately **£512,000** for the design and installation of the interventions detailed in Figure 9 and Figure 10. The cost has been determined with the use of SPONS handbook 2022 and previous costs of similar projects. The cost at this stage is for indicative purposes only and may vary dependant on final scheme choice. The proposals have been broken down per intervention and have been summarised below, within Table 2.

Table 2: Intervention costing breakdown

Intervention	Cost
SC1	£120,000.00
PP1	£32,000.00
PP2	£62,000.00
JN1	£30,000.00
JN2	£35,000.00
UC1 & RI1	£6,000.00
UC2 & RI2	£6,000.00
UC3	£4,000.00
PP3	£15,000.00
PP4	£14,000.00
Total (Incl. costs)	£512,000.00

3.3 Time to Implement Design

The Experimental Road Traffic Order (ETRO) can be implemented within 3-6 months of the approval of this report, and it will be reviewed within 18 months to 2 years from implementation to determine if the intervention should be made permanent. Timings for the implementation are subject to further consultation and availability of contractors to complete the works. The timescale may also be affected by the final scheme choice and by the delivery of other schemes in the local area.

3.4 How Improvements meet the Community Steer

The proposals will introduce improved crossing facilities and wider footways, thus providing a safer journey along the A37. In addition to addressing speeding traffic. This proposal addresses priorities 1, 2, and 3 from Section 2.4, and most of the issues identified in Figure 7, including speeding traffic and poor pedestrian facilities (Figure 7).

3.5 Diversionary Impacts

The interventions proposed will not have any diversionary impacts.

3.6 Opportunities to Reclaim Space for Local Community

The junction narrowing will increase the grassed verge area at the junction, and the new space could be used to provide village gateway features and community gardening spaces, subject to visibility requirements.

Although the play park is space already implemented for local community use, the improvement of crossing points will revitalise the use of the play park by allowing for a much more accessible route to the play park.

The proposed narrower road layout will lead to lower average traffic speed and improve the overall safety of the junction and surrounding area.

3.7 Key data required for scheme completion

To ensure that there is the best possible result regarding the development and implementation of the measures proposed in this report, the following data is required:

Table 3: Key Data required for scheme completion

Data Required	Justification for data
Further quotes from street scape suppliers for cost of street furniture	This will assist in defining the final cost and programme for the installation of the intervention.
Traffic counts (motorised vehicles split by classes, cyclists, pedestrians, etc.)	Information on usage for different modes of transport. The comparison before the counts before and after the intervention is put in place will provide a metric to measure the success of the intervention.
Land Ownership records of landowners	Records for the landowners of the surrounding fields and nearby residents will allow for proper engagement of these stakeholders during consultation.
Origin and Destination information	This data would allow the design team to obtain a better understanding of traffic behaviour along the route and monitor the rates frequency of traffic and

Data Required	Justification for data
	their preferred route before and after the scheme intervention.
Vehicle classification	This data would allow the design team to obtain a better understanding of what classification of vehicles regularly use the route.

4 Other Options Considered

4.1 Raised crossings

To further improve the overall safety and reduce traffic speeds, it is recommended to upgrade the proposed crossing points to raised table crossings. This form of vertical deflection will induce drivers to further reduce their travelling speed, slowing down the vehicles along the A37 and prior to the Queen Charlton Lane junction in both directions.

The proposal was dismissed for the following reasons:

- **Noise pollution.** This type of traffic calming measure often results in noise pollution and vibrations as a result of larger vehicles (HGVs, buses etc) passing over the vertical deflections and negatively impacting the nearby residential area.

4.2 Signalised Junction

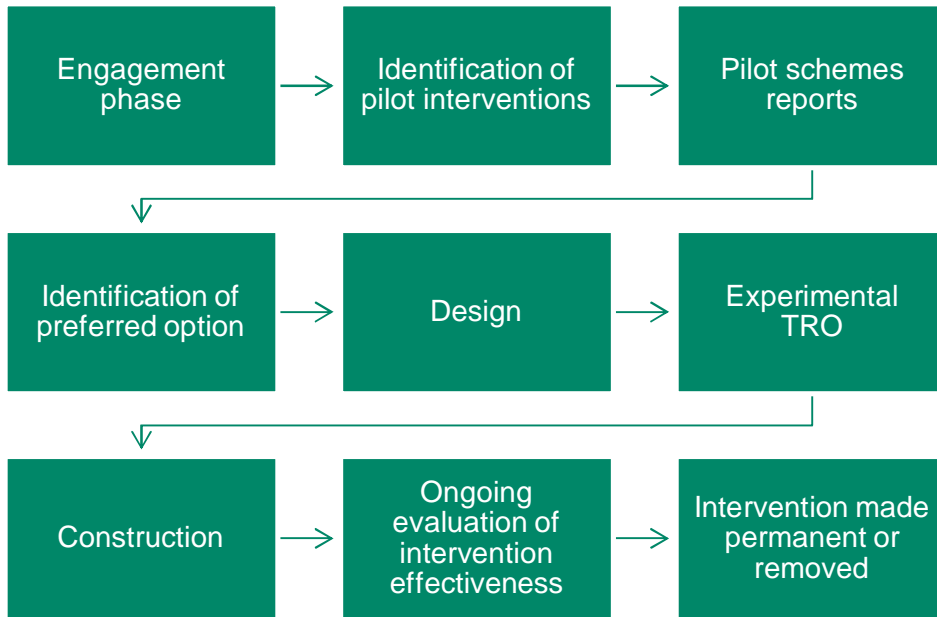
In addition to the proposal rejected above, there is the opportunity to create a signalised T-junction at the A37 and Queen Charlton Lane Junction, with the potential to have a fourth arm at the entrance to the proposed mobility hub. This would provide dedicated phases for all movements, including pedestrian and cycling phases, as well as controlling the flow of traffic entering and exiting Whitchurch Village and potentially alleviating the existing congestion issues at this junction.

However, this proposal has currently been dismissed due to the following reasons:

- **Traffic Flow Impact** – The A37 is a major route into Whitchurch village and a strategic traffic model is needed to determine the effect of this measure on the wider road network.
- **Cost** – The design and construction of a signalised crossroads/T-junction is likely to be higher than the cost for the proposed measures.

5 Looking forward

A diagram outlining the process and key milestones for the Pilot Projects is shown below.



6 Conclusions

Following the initial Liveable Neighbourhoods application and public engagement exercise in December 2021, it is clear there is a consistent demand from the local community for interventions to address issues with speeding traffic and pedestrians' safety.

The design improvements proposed in this document seek to address the issues raised by the local community and improve the local streets. The interventions proposed provide merit and meet the needs and requests of the local people, providing design solutions which will improve the safety of the area. In addition, the interventions will also provide greater opportunity for active travel modes to safely navigate the A37 and encourage the shift to Active Travel for some of their journeys.

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