



# A350 Chippenham Bypass Phases 4&5

Engagement booklet

November 2022

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# Background

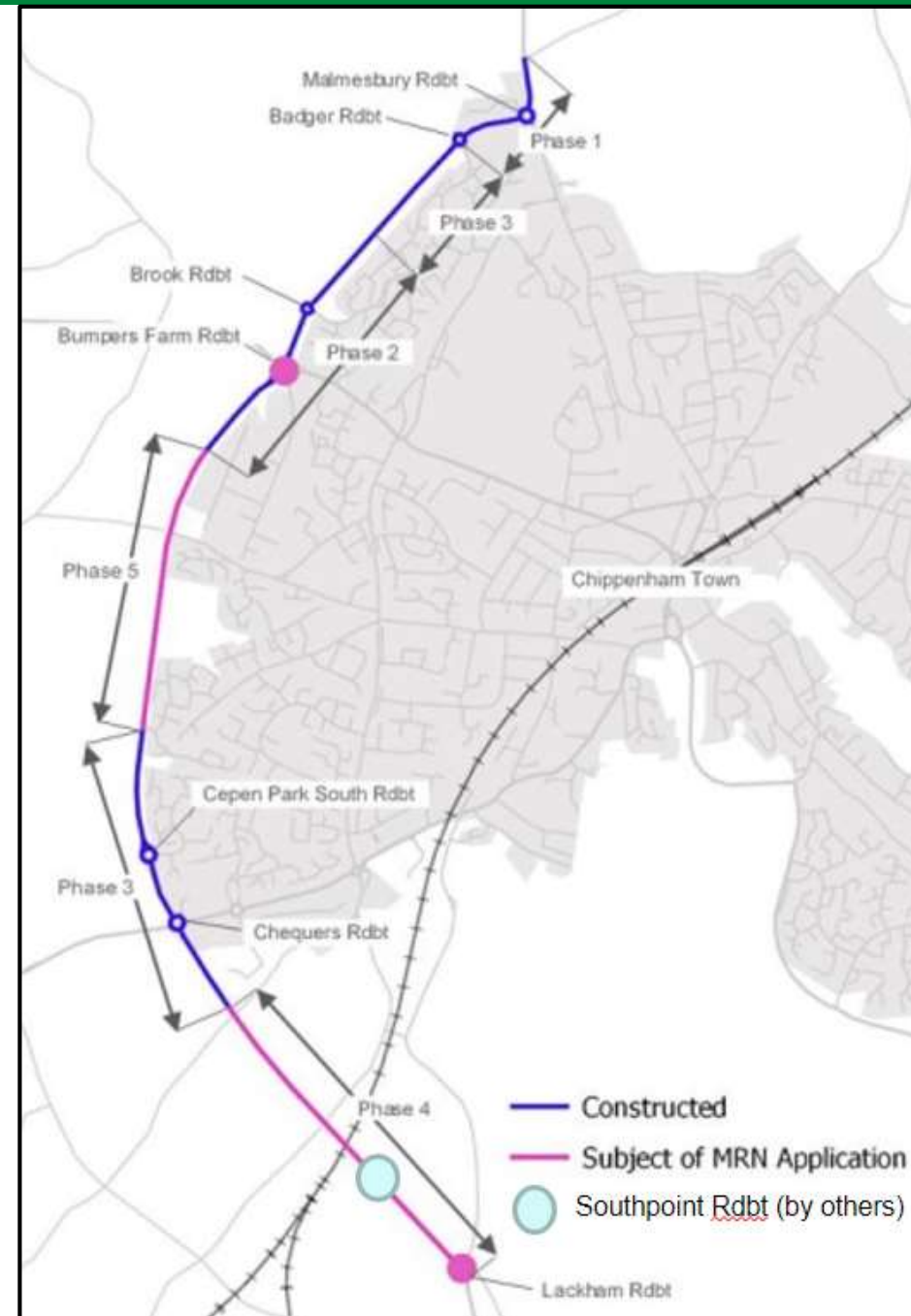
The A350 is one of the most important strategic routes within Wiltshire, and ensuring it operates effectively helps support the local economy. For many years, high traffic volumes on the A350 Chippenham Bypass have resulted in delays and unpredictable journey times for road users. Increasing traffic demand associated with housing and employment growth is forecast to make the situation worse.

Mitigation is needed to maintain an acceptable level of service on the A350, to preserve the attractiveness of the Chippenham area as a principal development location, and to benefit existing and future road users as well as Wiltshire as a whole.

Originally, the A350 Chippenham Bypass was built as a single carriageway, and over the past decade, a comprehensive programme of A350 dualling and junction improvements has been underway, with Wiltshire Council having already successfully completed the first three phases of the programme. The A350 Chippenham Bypass phases 4 & 5 scheme will build upon this work and will complete the Council's aim to dual the entire Chippenham Bypass.

The scheme aims to:

- Reduce journey times along the A350 Chippenham Bypass.
- Improve average speeds and decrease congestion at pinch-point locations such as the Bumpers Farm Roundabout.
- Reduce traffic collisions along the A350 Chippenham Bypass.



# Where we are now

Following a public inquiry in the 1990s, the A350 dual carriageway Chippenham bypass scheme was granted planning consent.

Although initially built as a single carriageway, the highways boundary was secured and bridges were constructed to future-proof the bypass corridor for the full dualling.

The first three phases of dualling has been completed, and the A350 Chippenham Bypass phase 4 & 5 scheme will build upon that work and will conclude the Council's aim to dual the entire Chippenham Bypass.

The scheme has been identified by the Western Gateway, who are the Sub-national Transport Board, as a regional priority. In addition, the scheme has been listed in the Government's recent Growth Plan 2022 for accelerated delivery.

The Outline Business Case for the project was submitted to the Department for Transport several years ago, and was subsequently approved in November 2021.

We have now received funding to develop the project through to the Full Business Case Stage.

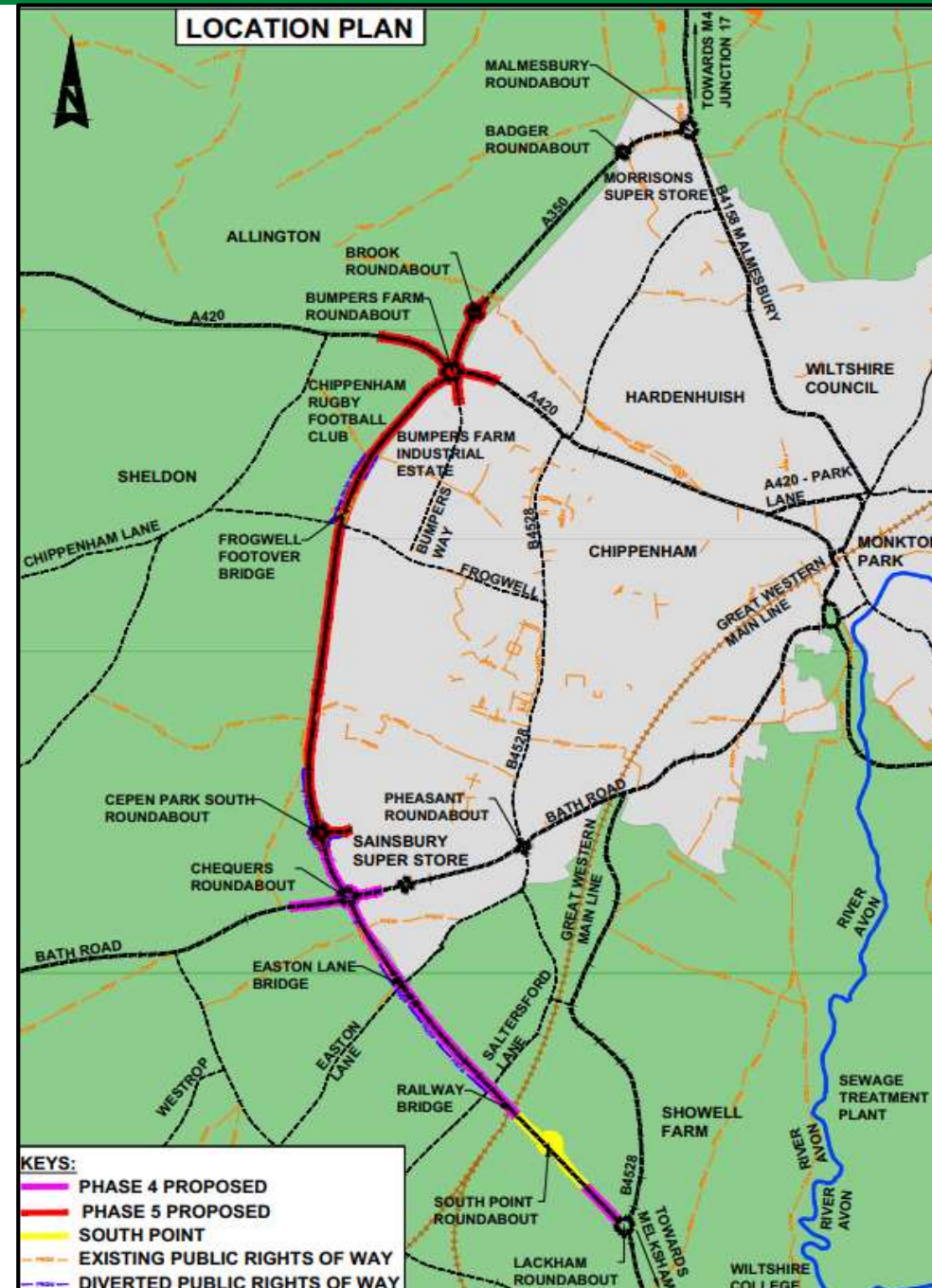


# The scheme

# The scheme

The A350 Chippenham Bypass phases 4 & 5 scheme includes the following improvement works:

- **Bumpers Farm Roundabout improvements:** we will be adding additional lanes and highway capacity on the A420 approaches and exits in both directions. We'll be also be adding additional lanes on A350 northbound approach to the roundabout. Traffic signals will be added to each of the A420 and A350 arms, and signal-controlled pedestrian and cycle crossings will be added to the northern A350, and eastern A420 arms.
- **Phase 4 dualling (Chequers to Lackham):** we will be widening the A350 to two lanes in both directions, between Chequers and Lackham roundabouts. A new roundabout at the Southpoint development is currently being built by a developer. The Phase 4 works will tie into that new junction.
- **Phase 5 dualling (Bumpers Farm to Cepen Park South):** we will be widening the A350 to two lanes in both directions between Bumpers Farm and Cepen Park South roundabouts. This is the section which passes the rugby club.
- **Lackham roundabout capacity enhancements:** the scheme is anticipated to complete the dualling down to Lackham Roundabout, with some minor changes at the junction to improve traffic flows there.



# Benefits

The scheme will benefit around 24,000 vehicles a day by helping to relieve congestion on the A350 Chippenham Bypass, building on previous phases to remove the remaining restrictions that can cause blockages during peak travel times. The key benefits include:

## Local benefits

- Improvements at Bumpers Farm Roundabout will reduce peak time queuing on Bumpers Way and allow easier exit onto the roundabout.
- Increased road capacity along the A350 Chippenham Bypass, which will:
  - Help deter traffic from using alternative parallel routes on the local road network such as the B4528 Hardenhuish Lane and B4528 Hungerdown Lane.
  - Help support the local economy by improving connections.
- Alterations to the local public rights of way network will improve safety for those accessing the countryside.
- Improvement in journey-time reliability along the bypass and a reduction in congestion, which will:
  - Support future growth in the town and help achieve the economic competitiveness and growth ambitions.
  - Contribute towards reducing greenhouse gas emissions and address the negative impacts on safety, security, health, and quality of life.
  - Reduction in the frequency of collisions along the bypass and parallel routes.

## Regional benefits

- Improvement in journey-time reliability along the bypass and a reduction in congestion, which will:
- Help preserve the route's key role as part of the advisory freight route network.
- Reduce transport costs for businesses and transport operators and encourage inward investment to the A350 Growth Zone.



# Traffic impact at Bumpers Farm Roundabout

The table below shows predicted traffic flows and queue length at Bumpers Farm Roundabout for the AM and PM peak hours, based on a computer traffic simulation model. The figures in **bold** demonstrate a significant reduction in projected queue lengths with the scheme.

Junction approach & Peak Hour	Projected traffic flows (throughput in number of vehicles)				Projected maximum queue build up (in metres)				Projected average queue build up (in metres)			
	Existing situation (2022)		Future situation (2036)		Existing situation (2022)		Future situation (2036)		Existing situation (2022)		Future situation (2036)	
	No scheme	With scheme	No scheme	With scheme	No scheme	With scheme	No scheme	With scheme	No scheme	With scheme	No scheme	With scheme
<b>AM Peak Hour</b>												
<b>A350 Southbound traffic</b>	1,229	1,231	1,456	1,737	162	<b>105</b>	516	<b>336</b>	30	<b>14</b>	433	<b>50</b>
<b>A420 out of Chippenham</b>	569	571	518	519	214	<b>81</b>	236	<b>135</b>	38	<b>13</b>	53	<b>20</b>
<b>Bumpers Way</b>	193	191	218	215	56	<b>27</b>	84	<b>34</b>	5	<b>1</b>	9	<b>2</b>
<b>A350 Northbound Traffic</b>	1,358	1,357	1,730	1,723	118	<b>96</b>	189	<b>151</b>	11	13	23	24
<b>A420 towards Chippenham</b>	545	547	558	654	192	<b>63</b>	515	<b>112</b>	31	<b>10</b>	365	<b>20</b>
<b>PM Peak Hour</b>												
<b>A350 Southbound traffic</b>	1,159	1,152	1,654	1,647	88	<b>72</b>	320	<b>159</b>	9	9	82	<b>32</b>
<b>A420 out of Chippenham</b>	589	593	548	551	136	<b>60</b>	170	<b>62</b>	13	<b>8</b>	27	<b>10</b>
<b>Bumpers Way</b>	538	542	433	557	210	<b>61</b>	511	<b>88</b>	45	<b>8</b>	325	<b>11</b>
<b>A350 Northbound Traffic</b>	1,077	1,079	1,511	1,508	95	<b>83</b>	153	<b>127</b>	11	11	25	25
<b>A420 towards Chippenham</b>	578	581	534	659	212	<b>48</b>	516	<b>114</b>	54	<b>7</b>	484	<b>16</b>

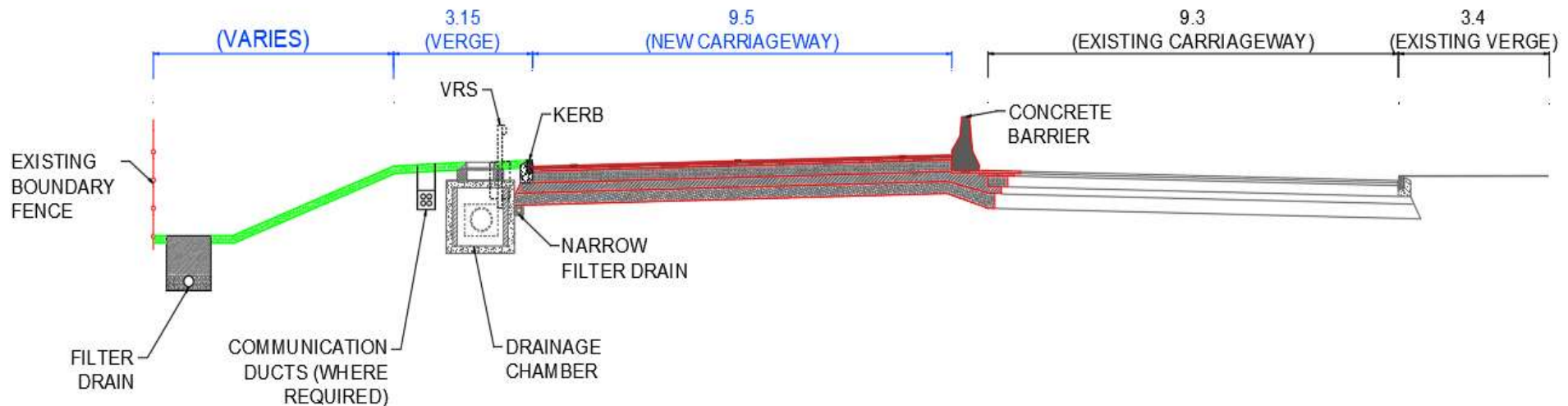


# Phases 4 & 5 dualling sections

A new northbound carriageway will be built within the existing highway verge area, with the existing road becoming the southbound carriageway.

A central reservation barrier will be added between the two carriageways. The work will be very similar to the previous A350 dualling schemes.

## Typical cross-section for dualled carriageway

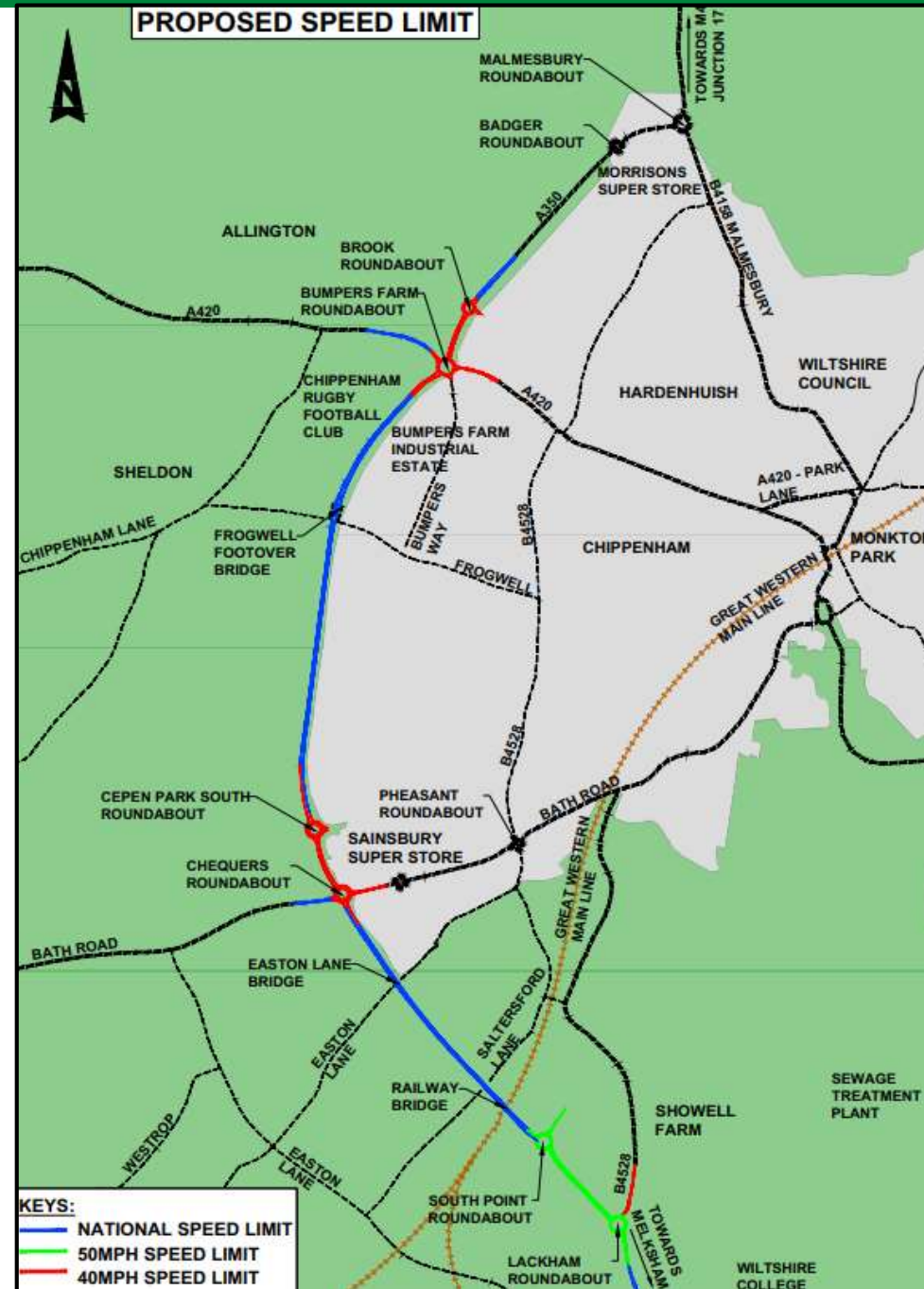


# Speed limits

The new dualled sections of the A350 will generally have a national speed limit, which is appropriate given the strategic importance of the route, and the role the A350 plays within the wider highway network.

However, speed limits will be reduced at various locations in response to factors including:-

- Safety.
  - The exiting bypass layout and design constraints.
  - The relatively close proximity of some junctions.
  - The need to include for Public Rights of Way changes and crossing locations.
- 
- In general terms, the relatively straight dual carriageway sections of the bypass will be subject to national speed limit. However, reductions to 40 / 50mph will be introduced where appropriate.



# Dualled section images

The finished dualled sections will look very similar to the works constructed as part of previous dualling schemes as shown in the before and after images below.

Before



After



# Bumpers Farm Roundabout improvements

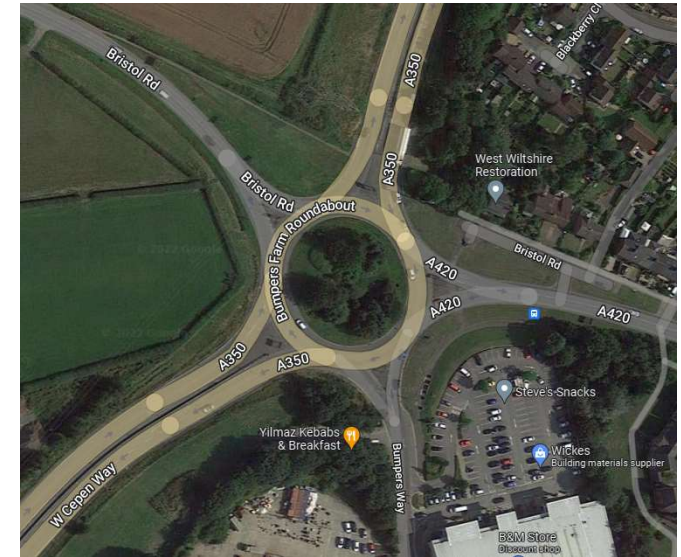
The key upgrades being made at Bumpers Farm Roundabout include:

- Increased capacity through adding an additional lane on the approach of both the eastern and western arms of the A420, and to the approach on the A350 northern arm (two to three lanes).
- Adding an additional lane on the exits of both the eastern and western arms of the A420 (one to two lanes).
- Adding traffic signals on the A350 and A420 arms to better manage traffic flow.
- Adding signal-controlled crossings on the eastern A420 and northern A350 arms.

## Benefits for Bumpers Way traffic

Currently, during afternoon peak periods, significant traffic queuing occurs along Bumpers Way as traffic seeks to leave the industrial/business area. This is due to the dominant A350 southbound traffic flow restricting access onto the junction from both the A420 and Bumpers Way.

To improve this situation, the scheme will include traffic sensors on the Bumpers Way approach. The sensors will detect stationary traffic, and when a large queue is identified, the timings of the traffic signals system at the roundabout will be adjusted to help generate gaps in the traffic flow and ease the traffic movement out of Bumpers Way. The sensors will be calibrated on-site to ease the Bumpers Way queuing issue, whilst maximising traffic flows through and around the junction.



Current layout



Proposed layout

# Mount Pleasant

The residential area of Mount Pleasant is accessed via the A420 just off Bumpers Farm Roundabout. The proposed layout for this area is indicated in the images below. We plan to include landscape planting on the verge between Mount Pleasant and the A420.

## Existing



## Proposed



# Public rights of way and connections

# Pedestrian and cycle facilities - Bumpers Rbt

The existing A350 crossing to the north of the roundabout will be upgraded to be traffic signal-controlled. It will be located between two roundabouts which are relatively close together. Traffic speeds will naturally tend to be lower and better controlled here, which will improve the safety for those using the crossing. The new facilities will also tie in and supplement the existing routes.



# Drake Crescent

## Public Rights of Way change

The current crossing at the end of Drake Crescent is well-used. The new dual carriageway will cut off access at his location, so we will be replacing this facility with a new crossing to the south of the Cepen Park South Roundabout.

The new crossing will be signal-controlled and placed between two roundabouts where the traffic speed is naturally lower; therefore, enhancing the safety for people wishing to access to the countryside from the residential areas.

We'll also be ensuring that connections to existing public routes are maintained and new ones are provided where needed, both to the residential area and to the existing rights of way network west of the A350.





# Rugby Club

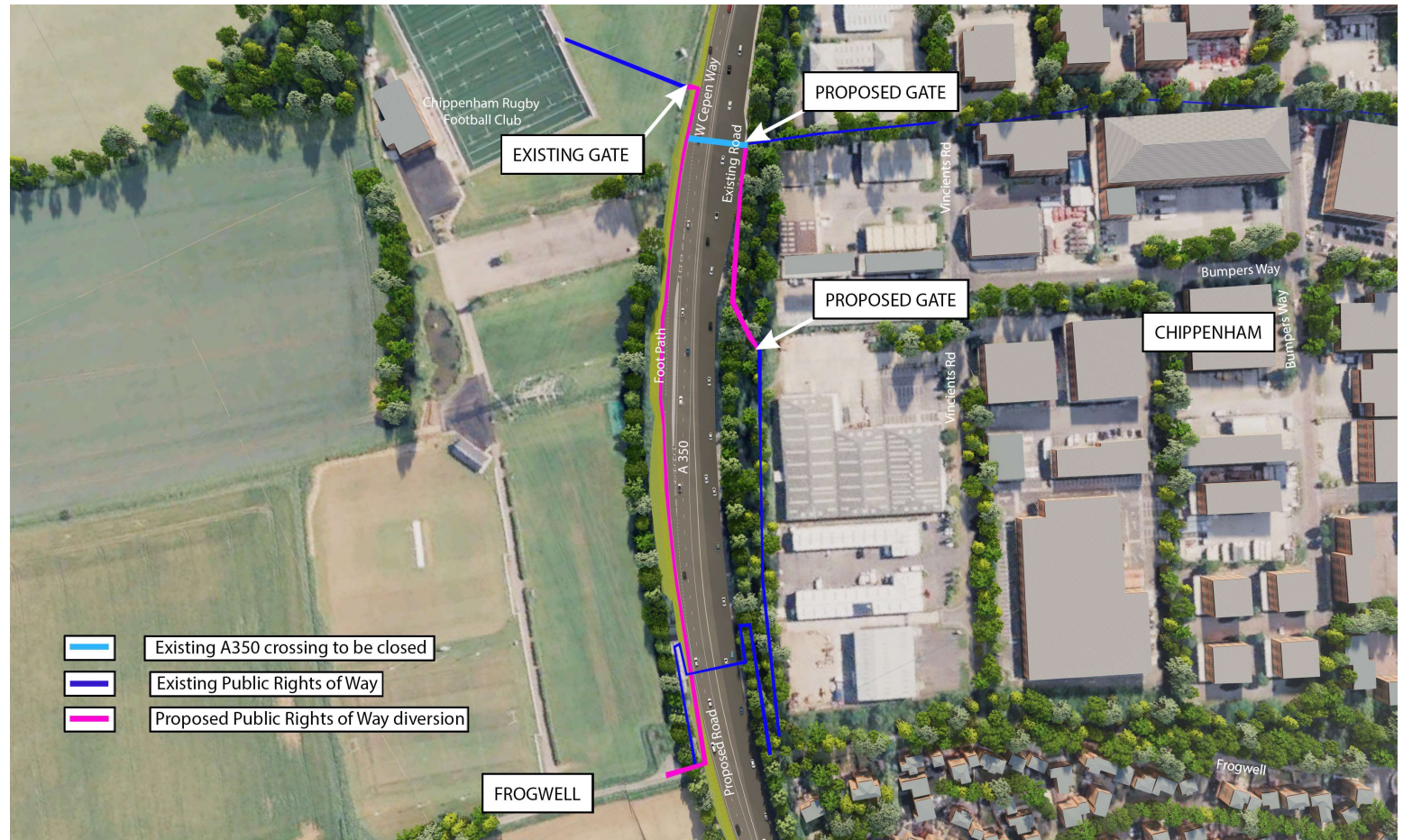
## Public Rights of Way change

The current crossing of the A350 at the Rugby Club will be cut off by the new dual carriageway.

To ensure the public rights of way is maintained, the footpath will be diverted south on both sides of the A350 and will cross over at the existing Frogwell Footbridge.

This will provide for a safer crossing facility.

Styles and fences will be replaced by gates where possible to aid accessibility.



# Saltersford Lane

An existing pedestrian desire line exists along the alignment of Saltersford Lane, just to the north of the Railway bridge.

This informal crossing location will be affected by the new dual carriageway construction.

A connection will be provided between the Saltersford Lane area and Easton Lane which has recently been closed to vehicular traffic and is now a safe pedestrian and cycle link across the A350.



# Environment

# Environmental aspects

Environmental surveys have been carried out as part of our environmental assessment, and a mitigation plan is currently being developed. Any need for animal crossings will be identified via the mitigation plan, and liaison with Wiltshire Council Ecology Officers.

At this stage, we've identified that hedgerow planting along the western side of the A350 will need to be replaced where this is affected by construction. There is the potential for landscape planting at Bumpers Farm Roundabout and wildflower seeding of suitable verges as part of the scheme.



## Environmental surveys and findings

Survey	Findings
Badger	Evidence of foraging badgers has been found on site. No badger setts have been recorded.
Reptiles	Grass snake and slow worm have been identified.
Dormice	No evidence of dormice has yet been found.
Otter	Evidence of otter has been found on the Pudding Brook. No resting sites for otter have been recorded, therefore otter are considered to be using the watercourse for commuting/foraging only.
Water Vole	No evidence of water voles has been found.
Bats	Bats have been recorded using the hedgerow and woodland habitats in the adjacent fields to the west of the bypass. To date, we've identified a Bechsteins maternity roost at Lackaham College.
Aquatic ecology	Several ditches and streams are located adjacent to, and culverted beneath, the A350, mostly ephemeral in nature providing limited aquatic habitat.
Noise	A noise survey has been undertaken to establish baseline noise levels within the area.
Air quality	A three-month nitrogen dioxide (NO <sub>2</sub> ) air quality survey was undertaken at locations along the A350 to inform the environmental assessment. The annualised data for 2018 shows no exceedances of the annual mean NO <sub>2</sub> Air Quality Strategy objective with concentrations < 40 ug/m <sup>3</sup> at all five monitoring locations.
Visual	The majority of the existing A350 is bordered by existing vegetation along both sides. To the east this is generally dense tall hedge or woodland providing good screening for the properties at Chippenham Town. The western side is generally low hedgerow allowing views into the fields beyond, but there are also hedgerow trees and blocks of wood that provide occasional screening. Views from properties to the west towards the A350 are most often screened by other woodland, field and roadside vegetation, although there are occasional gaps and glimpses of the traffic on the A350. Although vegetation clearance will be required during construction along the western side, no vegetation clearance is required on the eastern side, protecting this screening effect from Chippenham Town. Vegetation will be reinstated and enhanced with trees along the western side following construction.

# Next steps

# Next steps

We would welcome thoughts or comments on our improvement plans for the A350, and we invite you to complete the questionnaire by the end of **3<sup>rd</sup> February 2023**. Your feedback will help us to develop our proposals as we move through the detailed design phase and beyond.

To return the questionnaire, you can either:

- Complete the questionnaire online via our webpage <https://www.wiltshire.gov.uk/article/1809/A350-highway-improvements>
- Print a copy from our website and send to our postal address at: Major Highway Projects, Wiltshire Council, Trowbridge, Wiltshire, BA14 8JN

For more information on the scheme, you can visit the scheme's webpage at

<https://www.wiltshire.gov.uk/article/1809/A350-highway-improvements>

## Further engagement ahead of construction

We anticipate a further round of public engagement once we have a contractor on board during the run up to the start of site works. At that stage we will be better placed to advise of the construction programme and traffic management arrangements.

## Indicative timeline

