

A358 Parish Councils' Informal Group

Statement on National Highways' plans for Southfields Roundabout

Introduction

As part of its preferred route for the dualled A358 (West) between Taunton/M5 and Southfields, National Highways (NH) is consulting publicly on changes to the configuration of Southfields Roundabout. These involve:

- A segregated left turn lane from A358 (West) to A303 (East) Ilminster Bypass with diverging and merging tapers at the respective ends of the lane;
- Widening the A303 (East) Ilminster Bypass exiting the Roundabout to 2 lanes;
- Widening the A303 (East) Ilminster Bypass approach to the Roundabout to 3 lanes;
- Widening of a short section of the A358 (South) approach to 3 lanes;
- Addition of a third circulatory lane on the Roundabout.
- Improvements to spiral markings on the Roundabout.

No changes are proposed to the B3168 (Ilminster) or A303 (West) connections with the Roundabout.

Southfields Roundabout is a particularly important point on the strategic corridor for traffic travelling between the South-West and London and the South-East region, since it is here that traffic makes a significant change of direction away from the geographically more logical route via Honiton. Moreover, it does so at a location which already suffers from significant congestion at particular times of the day and year on the Roundabout and its approach roads. The Group believes that a grade-separated junction with a short link to the existing Southfields Roundabout is the only option to ensure the safe and free-flowing passage of vehicles in both directions between the A358 (West) and the A303 (East), in the process separating most long-distance from local traffic. It is noted that improvements to this corridor are supported by Peninsula Transport (a partnership of the five lead transport authorities in the Peninsula) for the strategic economic benefits for the South-West region.

Congestion and safety concerns with National Highways current proposals

NH has told the Group that a grade-separated junction at the Roundabout will be considered as a candidate scheme at the next strategic review of the national Road Investment Strategy for 2025 to 2030. Based on the information provided to date, the Group believes that this will mean that the problems of significant congestion already experienced at the Roundabout will be exacerbated because:

1. The proposed layout for the segregated left turn lane from the A358 (West) to the A303 (East) is likely to cause congestion/tailbacks on the A358 because of slow moving traffic on the lane from its point of "give way" merger with the A303 (East) lanes. There is also the risk of shunt accidents on the A358 (West) and on the segregated lane if

congestion occurs and of large and towed vehicles overturning on the tight radius curved section of the segregated lane.

2. The proposal to add an A303 (East) Ilminster Bypass third approach lane to Southfields Roundabout restores the layout when the bypass was constructed. This original layout was subsequently modified to **reduce** carriageway widths in an attempt to address the accident history at this location, including Heavy Goods Vehicles overturning on several occasions. This proposal should be revisited.
3. Traffic using the Roundabout from the B3168 (Ilminster), the A303 (West) and the A358 (South) approach legs, or turning onto the A358 (South), will encounter a higher volume and speed of traffic using the Roundabout from the A303 (East) to join the A358 (West). The creation of an additional, third circulatory lane on the Roundabout will make access from these approaches more difficult. This will exacerbate the regular lengthy delays experienced on the B3168 (Ilminster) and A358 (South) approach legs.
4. NH's traffic modelling has indicated that, presumably in the 2038 design year, the **theoretical** maximum peak time delay is only 25 seconds for the B3168 (Ilminster) and 20 seconds for the A358 (South) approaches. For many years traffic from Broadway, Horton and Donyatt has experienced much more than a 20 second delay on the A358 (South) waiting to use Southfields Roundabout at numerous times of the day and year, with queues that can reach past the Broadway/Horton junction of the A358 (South). A short extra third approach lane on this road will not of itself achieve a reduction to the claimed theoretical maximum 20 second delay time. A significant number of vehicles on this approach are seeking to reach the A303 Ilminster Bypass or the B3168 to Ilminster. This can be expected to increase as a result of the diversion of traffic from the closure of accesses to the A358 (West) proposed by NH. There is also the further complication of traffic crossing and entering this approach from the recently extended Horton Cross Services. Scepticism of the outcome of the traffic modelling for the altered roundabout is further reinforced by the knowledge that NH's traffic data has indicated that there is forecast to be a 48% increase in average annual daily traffic flow using the A303 Ilminster Bypass from 28,800 in the 2015 (Base Year) to 42,700 in the 2038 (Design Year).
5. Southfields Roundabout is a relatively small 5-leg roundabout trying to accommodate 1 B Class and 4 A Class roads carrying a difficult mix of long distance and local traffic. Also, taking into account that the age profile of local drivers is higher than the national average, the full theoretical capacity improvements from the introduction of a third circulating lane as proposed are unlikely to be achieved.

Improvements to current layout proposals

For these reasons, and in the absence of NH's willingness to consider the optimum option of a grade-separated junction, the Parish Councils' Group suggests that the following changes need to be made to NH's current plans for the Roundabout:

A358 (West) traffic approaching the Roundabout

As a strategic route in the national road network, it is anticipated that the majority of the traffic heading towards Southfields Roundabout from this direction would want to use the

segregated left turn lane to head east onto the A303 Ilminster Bypass. Considering the speed reduction and consequent reduced traffic flow caused by the acuteness of the segregated lane curve at the roundabout, the following measures would help to alleviate the possibility of tailbacks on the dual carriageway:

1. The addition of a significant length of auxiliary lane (similar to that shown in CD 122 Figure 3.30b Layout A option 2 - Single Lane auxiliary diverge) rather than the taper diverge currently proposed;
2. The introduction of speed reduction measures for traffic approaching both the segregated left turn lane and the A358 approach to the roundabout;
3. The introduction of real-time congestion warning signage.

A303 (East) Ilminster Bypass traffic leaving the Roundabout

4. For the same strategic reasons as mentioned above, a substantial length of parallel merge lane at the end of the segregated left turn lane should be introduced so that east-bound vehicles exiting Southfields Roundabout itself can merge with the potentially dominant segregated left turn lane traffic up to and past the first right hand curve of the eastbound A303.

A303 (East) Ilminster Bypass traffic approaching the Roundabout

5. Concerns arising from the re-introduction of a third approach lane at the roundabout have been described in item 2 of the congestion and safety section above. Additional speed reduction and other safety measures should be implemented if this third approach lane is implemented.

A358 (South) traffic approaching the Roundabout

6. The proposed third approach lane should be converted into a segregated left turn lane so that all traffic joining the A358 (West) can merge rather than giving way at the Roundabout.

Additional proposals at the Roundabout

7. The permitted speed on the Roundabout should be below the national speed limit as is the case of the 40-mph limit at the South Petherton roundabout on the A303.
8. In order to give traffic from lower priority roads namely the B3168, the A303 (West) and the A358 (South) a safer and fairer opportunity to use the Roundabout, traffic signals (either full-time or part-time) should be used at relevant locations, as is already the case at other major A303 roundabouts, including Amesbury and Podimore.
9. Subject to the implementation of the first 2 proposals for the Roundabout, the vertical profile of its central island comprising banks and foliage should be lowered so that traffic joining the Roundabout has better visibility and consequently longer decision times, compensating to some extent for the increased volume and, potentially, speed of traffic from the A303 (East) joining the A358 (West).

Conclusion

The Parish Councils' Group continue to believe that, to address a fundamental flaw in the scheme proposals, the opportunity should be taken to provide a grade-separated junction at Southfields, permitting A358 (West) and A303 (East) through-traffic to be separated from local traffic. Without this, the aim of reduced and consistent travel times will not be achieved.

In the absence of the Parish Councils' preferred option, the layout of the Roundabout should be re-thought in the light of the suggestions above to reduce the already significant congestion and improve safe traffic flows.

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