Baydon, Ermin Street, West End

Stage 2 Road Safety Audit Report Wiltshire Council

22 July 2016

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1. Introduction

1.1. Commission and Terms of Reference

Atkins has been commissioned by Wiltshire Council to undertake a Stage 2 Road Safety Audit (RSA) of the proposed traffic calming measures at Ermin Street, Baydon, Wiltshire. Two traffic islands are to be constructed on the main road. The RSA was undertaken at the request of Steve Hind of Wiltshire Council in an email dated 1st July 2016.

The RSA Team membership was as follows:

James BEng (Hons) MCIHT MSoRSA Heathcote Senior Assistant Engineer

Atkins Transportation

Alan Powning Road Safety Consultant

Atkins Transportation

The RSA comprised a desktop review of the information provided in the RSA Brief and a site visit, which was carried out during daylight hours on Wednesday 20th July 2016. Weather conditions at the time of the site visit were sunny with a dry road surface. Traffic flows appeared to be normal, for a village location and the time of day, although the amount of horse transport vehicles where observed was higher than would be expected.

The RSA has been conducted with reference to the procedures and scope set out in the Design Manual for Roads and Bridges, Volume 5, Section 2, Part 2, Road Safety Audit Standard HD 19/15 and the Wiltshire Council Practice for Road Safety Audits Version 2. The RSA Team has examined and reported only on the road safety implications of the measures as proposed and has not specifically examined or verified the compliance of the designs to any other criteria. Where there are issues that may be of interest to the scheme designer, but not necessarily within the scope of the RSA, these have been provided to the client separately.

Details of the information provided are included in **Appendix A**. Problems and recommendation locations are indicated on the plan of the scheme included in **Appendix B**.

1.2. Scope

The proposals involve the installation of two traffic islands at separate locations designed to slow through traffic by creating a priority requirement.

The issues raised by this Stage 2 RSA are detailed in Section 2 with recommendations to be considered. Section 3 comprises the RSA Team Statement.

1.3. Notes and clarifications

The recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with HD19/15. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

The RSA Team were provided with no details of any departure from standard applications associated with the proposals. It is the Designer's responsibility to ensure that any departures and relaxations are identified, recorded and approval gained where necessary.

Where diagram numbers from the Traffic Sign Regulations and General Directions (TSRGD) 2016 have been referenced in this report, they are simply referred to as 'Diag.x' where 'x' is the diagram number.

2. Items Raised at this Stage 2 Road Safety Audit.

General

2.1. PROBLEM

Location: Western build-out.

Summary: East-bound traffic may approach the build-out too quickly.

The western village gateway and 30mph limit signs are not very visible for eastbound drivers entering Baydon. The road markings are worn and the signs are set back in the hedge (there is no verge on this section of road and the hedge meets the carriageway). Drivers who do not know the area may not see the speed limit signs until late and may be approaching the build-out at close to the national speed limit. It is essential to slow traffic before the build-out.

RECOMMENDATION

Cut back the hedges to drastically improve the sight lines and refresh the road markings.



Photograph 1: Approach to 30mph gateway. Photograph 2: Village 30mph gateway from a car.



Photograph 3: Gateway signs from the rear showing how the road marking are worn and the signs hidden by the hedges.

2.2. PROBLEM

Location: Western build-out.

Summary: There are several locations near the proposed build-out where hedges are close to the carriageway restricting visibility for those joining the carriageway.

Hedges close to the carriageway next to the driveway to a property makes visibility very difficult. The driver cannot see oncoming vehicles and cannot be seen by them either. Although this problem exists even if the traffic calming is not installed, measures should be taken to improve the visibility.

RECOMMENDATION

Cut back the hedges to improve the visibility.



Photograph 4: Hedge near "Beechcroft".

Photograph 5: East entrance to Manor Farm

2.3. PROBLEM

Location: Western build-out.

Summary: Reversing into the existing garage of Manor Farm will be made more difficult.

Accessing the garage to Manor Farm is difficult at present. It is not thought that the difficulty of driving out will change, nor reversing in when approaching from the west. It is currently necessary to ensure the road is clear in both directions when making the manoeuvres.

However, when approaching from the east it could be more difficult when the road is busy. It is necessary to ensure that the road is clear, drive towards the entrance to Beechcroft and then reverse back into the garage. At the present, it is possible to wait on the nearside before reaching the garage to allow traffic to pass and clear. When the build-out is constructed, that will prevent a vehicle waiting here as the road would be blocked.

If eastbound traffic is queueing to pass the build-out it will be necessary for that traffic to clear before the garage can be accessed.

The whole manoeuvre will be more difficult at times and may even be impossible. The driver may need to drive away and come back to try again.

RECOMMENDATION

There is not an easy solution to this problem. It may be necessary to find another location for the build-out.

2.4. PROBLEM

Location: Eastern build-out.

Summary: The proposed build-out will not be sufficiently visible to westbound drivers.

The approach to the eastern build-out is uphill to a crest. The island will be over the crest and the island kerbing will not be seen until late. Although the bollards may be seen, the layout of the island will not be visible until the vehicle is very close to the island. It will also be difficult to see oncoming traffic.

RECOMMENDATION

Relocate the build-out or provide much improved information to westbound drivers.



Photograph 6: Proposed build-out will be close to the street light on the left over the crest.

Non-motorised Users

2.5. PROBLEM

Location: Eastern build-out.

Summary: There does not appear to be a provision for cyclists to pass the build-out on the nearside.

Cyclists can experience difficulty when passing build-outs and vehicles may try to overtake them through the narrow section. A common solution is to provide a nearside bypass, similar to the one proposed for the western build-out.

RECOMMENDATION

Provide a nearside cycle bypass through the island.

Signing and Lighting

2.6. PROBLEM

Location: Western build-out.

Summary: The street lighting is insufficient for road safety.

The only street light near the proposed build-out is between the existing 30mph gateway and the proposed new island. A large tree masks the lamp from the proposed traffic calming measures and will render the illumination of the build-out ineffective.

RECOMMENDATION

Provide extra street lighting to illuminate the build-out.

3. Road Safety Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with HD 19/15 and the Wiltshire Council Procedures for Road Safety Audit Version 2.

RSA Team Leader

James Heathcote Signed:

Senior Assistant Engineer

Atkins Transportation Date: 26/07/16

RSA Team Member

Alan Powning Signed:

Road Safety Consultant

Atkins Transportation Date: 26/07/16

Others involved

N/A

Appendices



Appendix A. Drawings and Documents

The following is list of information provided to the Audit Team as part of the Audit Brief.

A.1. Drawings

2015-031-D001	Rev. O	Location Plan
2015-031-D005	Rev. O	Western Traffic Island
2015-031-D006	Rev. O	Eastern Traffic Island
2015-031-D007	Rev. O	Western Traffic Island Construction Detail
2015-031-D008	Rev. O	Eastern Traffic Island Construction Detail

A.2. Documents

Copy of a letter from Mr. & Mrs. T. Norman of Manor Farm dated 25th June 2016 addressed to Baydon Parish Council regarding their access issues.

Tel: 01672 540279

Manor Farm Baydon Marlborough Wiltshire SN8 2JP

25 June 2016

Clerk to the Baydon Parish Council 1 The Green Baydon Marlborough SN8 2JW

Dear Sir.

Re: Proposed West Traffic Island - Opposite Manor Farm, Ermin Street, Baydon

We refer to the above proposal to construct a traffic island opposite our property. We understand this is intended to restrict vehicles from speeding, especially past the school which is approximately 170 metres further into the village.

Manor Farm is located just within the 30mph zone with two entrances off Ermin Street. The western entrance is to a garage, previously a tractor shed, the opening to which abuts the highway. Hinged doors that opened onto the road were replaced with an electrically operated roller-shutter door as an attempt to improve safety. However, fast passing traffic in both directions and lack of visibility demands extreme care when entering and exiting the garage. It is used to accommodate a light truck, not least because without a bonnet, it enables earlier visibility in both directions than with a car. Due to the width of the garage opening, a vehicle cannot start turning either to the left or right until after crossing the nearside lane. It also has to temporarily halt in order to ensure that the roller shutter door is fully open and fully closed when respectively entering and exiting. Although both manoeuvres have always been hazardous, a traffic island will clearly exacerbate the dangers, especially when exiting to the right when it will be necessary to cross both lanes twice. Additionally, if when emerging, the truck is forced to halt in the nearside lane to give way to vehicles approaching from the left that have to halt and give way at the island, traffic leaving Baydon from the right will have to stop because the truck will be blocking the nearside lane. This will create further dangers and congestion and require the truck to reverse back into the garage. When returning from the left, the truck would have to drive almost to the island before stopping in order to reverse back into the garage. Any vehicles travelling in the same direction would undoubtedly stop close behind and prevent the truck reversing. If then realising the situation, a driver might blindly drive around the truck, straight into the path of a vehicle that had assumed a right of way in the other direction.

Excerpt from Wiltshire Council Plan No: 2015-031-0005



Exiting right from the eastern entrance is difficult with vision restricted by the neighbour's fence and vehicles often parked along the nearside lane. Vision when exiting left is similarly difficult due to a roadside hedge but at least approaching traffic is in the opposite lane. The proposed island would divert approaching traffic into an obvious blind spot thus exacerbating the existing dangers.

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Continued	

A recently conducted experiment with a car parked in the proposed island position clearly showed that coaches, buses and large lorries, approaching Baydon from the west, must pass within 400mm (16 inches) of our eastern entrance kerb before returning to their nearside lane. This, together with the lack of visibility, increases the possibility tenfold of a vehicle exiting our drive being struck by a passing lony or bus with no time or chance to take any evasive actions, and which would undoubtedly result in a very serious accident.

We appreciate that the community and parish council are concerned to slow up traffic through Baydon, mainly for the safety of children crossing Ermin Street at the school, and any traffic calming measures are understandably sought. However, apart from the potential dangers at the proposed western traffic island, it is approximately 170 metres from the school and we doubt it would be as effective as some believe. The eastern island is much closer to the school and probably more effective although we have witnessed cars purposely accelerating to beat an approaching vehicle to the island and not have to stop. A similar attitude by some drivers at the western island would further exacerbate the dangers we foresee.

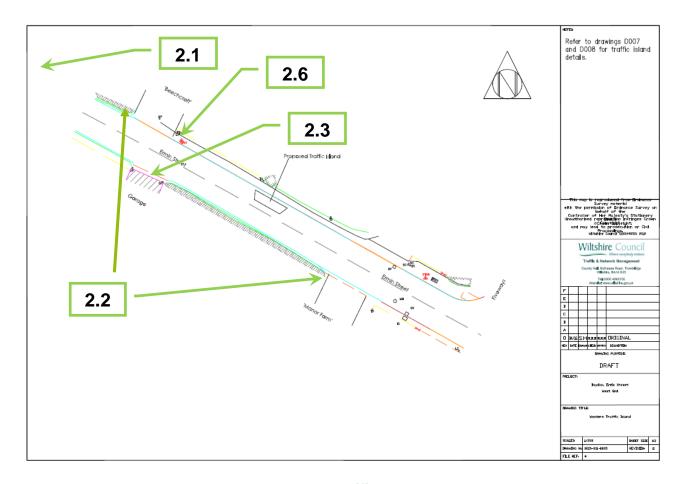
We are concerned that by calling a public meeting to discuss this matter, the parish council may be considering a verbal referendum for a majority decision. We trust this is not the case and that further advice will be sought from the Wiltshire Council Highway Engineer who will undoubtedly wish to further consider the obvious dangers and possible liabilities that this traffic island would create at its proposed location adjacent to our property.

Yours faithfully,

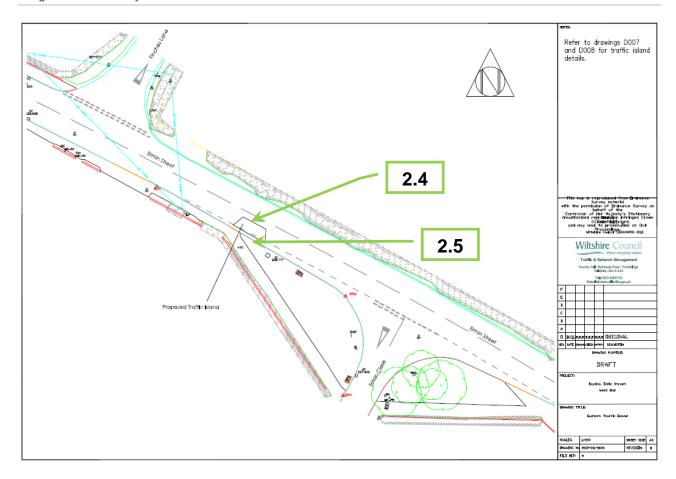
Mr & Mrs T Norman

CC/ Mr S Hind Principal Engineer Traffic & Network Management Wiltshire Council

Appendix B. Location of Problems



Western Traffic Island



Eastern Traffic Island

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