From:
A303 Sparkford to Ilchester

Cc:
Subject: A303 submission by Mr Bryan Norman

 Date:
 14 September 2020 21:19:00

 Attachments:
 A303 BGN letter 100920.docx

A303 BGN letter 100920.docx A303 BGN App A re East OFF slip road080920.docx

A303 BGN App B on LPR 080920.docx A303 Hazlegrove junction sketches .pdf

Dear Sirs

On behalf of Mr Bryan Norman I submit his letter with appendices commenting on the Department of Transport's letter of 21 July 2020 and Highways England's response thereto regarding the DCO application for dualling the Sparkford to Ilchester section of the A303 . I would be grateful if this could be circulated to all the relevant parties.

kind regards

John Brendon

Ms Natasha Kopala Dept of Transport

Ref: SPL-AF001

10 September 2020

Dear Madam

A303 Sparkford to lichester dualling order application

In accordance with your letter of 21 July 2020 and Highways England's (HE) reply 17 August 2020 I am responding in summary form with comments I believe are important to be considered on whether or not to grant consent to the Development Consent Order (DCO).

I introduced and pioneered Project Management as a Surveying skill in the UK and spent 30 years controlling major projects. The basic principle of Project Management is to secure the client's objectives with cost efficient design and management. This has not been achieved by HE's current DCO application for dualling the A303 between Sparkford and Ilchester.

Whilst I fully support the requirement for a dual carriageway, there are three basic shortcomings in HE's management of this project:

- 1. the poor design of the Hazlegrove junction,
- 2. the design of the dual-carriageway creating a surplus 155,000 cm of excess fill, and
- 3. not including a local parallel road (LPR) with all the advantages it gives.

As a result HE does not meet its own criteria for:

- 1. a safe and reliable network (3.6.5)
- 2. reduced congestion to ensure connectivity of businesses in the local area (3.6.5), and
- 3. improved user satisfaction (4.1.2).

The proposals do not therefore comply with the requirements of NNNPS 4.31 & 4.32 in respect of design and safety, socio-economic impacts and sustainable transport (ER14.4.4).

1. Hazlegrove junction

The Examining Authority (ExA) at 10.4.29 / 30 concisely summarised the problems of the Hazlegrove junction. I draw your attention to the more important issues. The first two shortcomings mentioned above are linked. The proposal at the time of the route selection used a design for the Hazlegrove junction akin to that which I, with support from Fairhurst, consultant engineers, subsequently developed. HE's change to the current design coincided with the need to deal with the 155,000 cm of excess fill; a very expensive problem if taken off site. The design as reflected in the DCO application conveniently absorbed some 143,500 cm of fill.

From before the beginning of the DCO process, and in detail for deadline 1, I drew attention to the problems with the East ON slip design, in particular the extensive additional travel distances it generated, amounting to 780,000 kms per annum (creating an additional 195 tons of CO2 pa), the likely tailback to the Sparkford roundabout and the excessive land use within the Registered Park and Garden of Hazlegrove House. HE therefore had the chance to amend the DCO design in order to secure an improved outcome, but choose to proceed without change. Hence a year has been lost.

On the principle that you do not criticise a design without producing a solution, I worked out with Fairhurst for deadline 1 the alternative proposal, also illustrated on the plan attached to my letter of 22 November 2019 to you, which the ExA described as an indicative drawing; nevertheless, the design, together with the full specification of gradients, levels, diameters, etc supplied at deadline 6 (action12) complies in all respects with the DMRB requirements. Bearing in mind the Design & Build basis of HE's proposed contract, this design was then effectively at the same level as HE's.

The design overcomes all the problems described at a substantial cost saving. Further shortcomings were also exposed in my submission at deadline 6 relating to conflicts at the East ON slip turn, which would cause delays and tailbacks at peak school hours to the existing roundabout, increasing the risk of accidents involving school children. HE has chosen not to dispute this evidence, which has been based on actual traffic surveys, as it would, according to its counsel, result in a material change to the DCO and the withdrawal of the application. Nevertheless I consider the problems so severe that this unfortunate result must be exposed.

I draw your attention to the fact that 10 pages of the ExA's report is devoted to NMUs, whereas only 2 paragraphs relate to the severe problems at the Hazlegrove junction. Whilst fully supporting the needs of NMUs, which will, at most, have users in the low hundreds per week, the East ON slip turn will be used by some 23,000 vehicles per week and it was estimated by over a million vehicles a year by 2023. This level of local users must be entitled to proper consideration.

Additional information regarding the East OFF slip road. I apologise that only recently when revisiting the problems of the East ON slip road that I realised that I had not checked the East OFF slip road for similar problems, due to its design on two separate drawings. The important details are set out in Appendix A attached showing the serious problems at this location.

2. Excavation

The basic problem of excess excavation should have been recognised very early in the scheme design, and still could be, by raising the level of the carriageways by one metre over the first 3 km from the west of the scheme, saving approximately 144,000 cm of fill and providing space for a further 44,000cm for deposits; a major cost saving.

3. Local Parallel Road

I attach Appendix B dealing in some detail with your letter of 21 July 2020 and HE's reply of 17 August 2020 on the LPR.

The ExA clearly leans in favour of incorporating a full LPR by constructing the missing link on Camel Hill. The important facts to note are:

- 1. With Fairhurst support, I proved that a full DMRB specification LPR can be built through the 'pinch point' without any land from the MoD by slightly changing the radii of the main carriageways, as it could in the 1998 and 2003 schemes, which were approved.
- 2. The missing 0.6km section should be built before the main works commence in order to obtain all its benefits. It will be quicker and cheaper to build than 2.5km of haul roads and a temporary bailey bridge, all of which have to be subsequently removed, and is more efficient and economic.
- 3. The full benefits of retaining a LPR were set out in my submission at deadline 1.

Recommendation

The long term economic benefits to the South West, used to justify the project, cannot be realised until all the bottlenecks between the M3 and M5 are removed. There is time for HE to amend its

proposal, removing the current disadvantages, and resubmit a new DCO application and complete this project before the Stonehenge section is completed.

Therefore, I consider that this application should be refused and a recommendation made to HE to resubmit a new application including a redesign of the Hazlegrove junction, reducing excessive excavation and incorporating the missing 0.6km of the LPR, to obtain the long term very substantial economic and operational benefits as well as a cheaper, by at least £25m, project to build.

These are key points which I wish to draw to the Secretary of State's attention, which means that the current DCO application does not meet the requirements of NNNPS on design and safety. I have throughout the process had the approval of the three Parish Councils and support of Hazlegrove School to seek these improvements.

yours sincerely

BG Norman

Appendix A

Comments on East OFF slip road to the Hazlegrove Junction

HE's reply to the questions 2.4.2/3 in the DoT letter of 5 November 2019 relating to traffic movements at the Hazlegrove junction is set out in the transport report (APP 150), items 7.1 & 7.2. HE's statement on Table 7.1 that the Hazlegrove Eastbound slip roads operate at only 44/62% respectively of capacity is clearly nonsense.

The complications of this junction would be more easily understood if accompanied by a diagram. I therefore attach a copy of the diagrammatic traffic movements sketch as submitted at deadline 7. The top part relates to HE's junction layout and the lower part to the alternative developed with Fairhurst. The vehicle numbers are for the old A303, which may change if a LPR existed, but are unlikely to change the impact on the East ON and OFF slips.

The HE figures give no details of the number of vehicles involved, are unreliable in these complex circumstances and meaningless to ordinary people. I would draw your attention to the following facts based on HE's general arrangement drawings 2066/7 dated 17 July 2018 and the <u>peak</u> period traffic generated from survey details submitted for deadline 1:

- 1. the distances from the school turn to the roundabout to its west is 143m,
- 2. and from the roundabout to the dual carriageway on the slip road 195m;
- 3. at 6m intervals these section will accommodate 24 and 32 vehicles respectively
- **4.** 180 vehicles in the morning (160 in the afternoon) enter the East OFF slip road, meeting the first delay at the school turn where 100 go straight on and 180 (1/2 from east and 1/2 from the west) enter the school and 120 come out. They then encounter the East ON slip turn (only146 m to the west) where 220 heading east meet 410 heading west of which the majority (320) turn across incoming traffic.

No formula can cope with such complexity, but it is my contention that these circumstances will in a very short time (approximately 8 minutes) lead to a tail back to the roundabout on Camel Hill and fill the slip road in a further 11 minutes at peak periods, with a very real risk of the back up then extending onto the dual carriageway. This is an unacceptable risk to the safe and efficient functioning of any dual carriageway and will cause delays, danger and frustration for all users of this section of the spur road; a situation worse than that predicted for the tail back to the Sparkford roundabout for the East ON slip.

A further complication may arise as the distances were revised early in the process following safety reviews agreed with SCC. I have been unable to ascertain whether these changes were before or after 16 July 2018, the date of HE's drawings from which the distances from the school turn to the East ON slip measuring 143m and from there to the bridge of only 90m were taken. If these changes were made after 16 July 2018 it will just worsen the position.

Appendix B

Comments on HE's submission of 16 August on the de-trunked road and LPR

HE's statements that the LPR is not deliverable as it does not have the required land width to meet design standards which could only be brought forward as a substandard design, or that land needs to be acquired from the MoD, are not correct.

Fairhurst, highways engineers, were employed to investigate and have confirmed that the LPR could be accommodated to full DMRB standards. Thus the connection over Camel Hill between the B3151 and A359 can be achieved to link the remaining de-trunked sections of the old A303 without acquiring any land from the MoD.

No criticism has been made by HE relating to the validity of Fairhurst's design, but HE has stated that including a LPR would be a material change to the present DCO scheme. HE statements that the LPR has not been allowed for in the scheme budget may be true, but savings should be taken into account resulting from the omission of 2 1/2km of haul roads (subsequently to be removed) and savings from the ability to deliver fill along the direct line of the dual carriageway etc which have been estimated by quantity surveyors to be in the region of £16m.

I emphasise that no land is required from the MoD. All lanes can be accommodated within the red line boundary of the present DCO scheme at this location. Nevertheless a wedge of land some 90m by 4.5m, which I suggested at deadline 7 as "although not essential", would facilitate construction. HE has never approached the MoD as far as I am aware for this wedge.

With Fairhurst, I have proposed a full DMRB design for the LPR enclosed with my letter of 22 November 2019. The ExA's described these as being sketches when they are, in fact, scale drawings by Fairhurst taking full account of the topography and the proposed levels for the dual carriageway and attendant embankments.

There may be a technical argument that provision does not need to be made for a future "express-way" upgrade, but HE's documentation at the start of the project mentioned this future upgrade. It is possible to construct the new dual carriageway to allow for the LPR. As a matter of prudence it would be sensible to design in this possibility, which would not increase costs.

Clearly a continuous LPR, instead of a cul-de-sac, would assist the Mattia diner and the filing station and generally a LPR would help all businesses, including the Bakery, farmers and pubs such as the Red Lion at Babcary to continue with better trading. The survival of businesses at the end of a cul-de-sac is unlikely. A few extra signs are unlikely to help much. There is already been illegal fly-tipping on Gason Lane. HE have not submitted safety proposal for the decommissioning of this section of the road.

My only comment regarding the under bridge at the Hazlegrove junction is that I would not allow to take their ponies through it, lit or not, and, having regard to the shortcomings of the Hazlegrove junction, the new design, if adopted, would provide an alternative safer route for NMUs, which also considerably shortens the distances for them compared to the present scheme.

Neither 3PCs nor I have pressed HE to deliver a sub-standard LPR.