

PUBLIC INQUIRY

APPLICATION BY NETWORK RAIL UNDER TRANSPORT AND WORKS ACT 1992

PROPOSED NETWORK RAIL (CAMBRIDGESHIRE LEVEL CROSSING REDUCTION) ORDER 200X

OBJ/12-CAMBRIDGESHIRE COUNTY COUNCIL REBUTTAL PROOF OF EVIDENCE

PETER TAYLOR ROAD SAFETY ENGINEER

1. This document is a Rebuttal Proof of Evidence (Rebuttal), which is submitted to the Inquiry, in response to, and with the intention of rebutting, evidence previously submitted to the Inquiry by Network Rail (NR) and by Mott MacDonald (MM) on NR's behalf. Each of the numbered paragraphs which are referenced below features in the respective NR or MM Proof of Evidence (PoE).

Paragraph 7.8

2. Mr Brunnen states that in the past 5 years there have been an average of 253 near misses with non-vehicular users of level crossings. He also makes the point that there is a worsening trend of near misses and that the most effective way of reducing the risk of level crossings is to remove them all together. Mr Brunnen states that:

"This is consistent with the General Principles of Prevention, set out in Schedule 1 of the Management of Health and Safety at Work Regulation 1999, and in particular, the following:

(a) avoiding risks;

(b) combatting the risks at source;

(c) replacing the dangerous by the non-dangerous or the less dangerous"

3. Due to the self-evident differences between them, any comparison of the risks involved at level crossings with those at roads can only be analogous. However, for every collision on a road, there is an estimated 10 near misses (based on DfT's WebTAG report A4.1 paragraph 2.3.12). There were 1,526 collisions on the roads of Cambridgeshire alone in 2016. Extrapolating this, there would have been an estimated 15,260 near misses on the roads of Cambridgeshire alone in a single year - far higher than the 253 near misses, for the whole of Great Britain, that Mr Brunnen references. Whilst the occurrence of these would be spread amongst various sites, this clearly shows that the risks at roads are not "non-dangerous or (...) less dangerous". However, as set out in my PoE, several of NR's proposed diversions are to roads. I submit to the Inquiry, that far from meeting the General Principles of Prevention, as Mr Brunnen claims, many of NR's proposals are at least inconsistent, and at worst entirely incompatible, with these principles.

4. I would also point out that the research paper to which Mr Brunnen refers does not present figures for vehicles, and neither is there an urban/rural split. This is necessary as the proposals in question are located in both rural and urban locations. The 1:10 near misses figure I quote above is an average for recorded injury accidents on the road. However the figure for rural areas is 1:8, of which there are a high proportion of the proposed crossing closures, whilst for urban areas it is 1:18. The tables below show the Collisions in Cambridgeshire and Great Britain as well as the urban/rural split.

<i>Collisions in Cambridgeshire</i>					
Year	Slight	Serious	Fatal	KSI	Total
2012	1400	234	26	260	1660
2013	1215	232	28	260	1475
2014	1265	257	23	280	1545
2015	1146	236	27	263	1409
2016	1234	264	28	292	1526
Jan-June 2017*	517	154	17	171	688
*2017 data is provisional					
<i>Collisions in Great Britain</i>					
Year	Slight	Serious	Fatal	KSI	Total
2012	123033	20901	1637	22538	145571
2013	117428	19624	1608	21232	138660
2014	123988	20676	1658	22334	146322
2015	118402	20038	1616	21654	140056
2016	113201	21725	1695	23420	136621

<i>Urban collisions in Cambridgeshire (speed limit 40mph or below)</i>					
Year	Total	Fatal	Serious	Slight	KSI
2012	944	2	114	828	116
2013	778	3	96	679	99
2014	822	3	123	696	126
2015	753	6	112	635	118
2016	853	1	143	709	144
Jan-June 2017*	387	6	77	304	83
*2017 data is provisional					
<i>Rural collisions in Cambridgeshire (speed limit above 40mph)</i>					
Year	Total	Fatal	Serious	Slight	KSI
2012	716	24	120	572	144
2013	697	25	136	536	161
2014	723	20	134	569	154
2015	657	21	124	512	145
2016	677	27	123	527	150
Jan-June 2017*	301	11	77	213	88
*2017 data is provisional					
<i>% Rural</i>					
Year	Total	Fatal	Serious	Slight	KSI
2012	43%	92%	51%	41%	55%
2013	47%	89%	59%	44%	62%
2014	47%	87%	52%	45%	55%
2015	47%	78%	53%	45%	55%
2016	44%	96%	46%	43%	51%
Jan-June 2017*	44%	65%	50%	41%	51%
*2017 data is provisional					

Eliane Algaard

Paragraph 2.6.7

5. In this paragraph, Eliane Algaard states that:

“This Order progresses level crossings that fall within phases 1, 2 and 4. These phases are being progressed first due to the minimal infrastructure investment required.”

6. By Dr Algaard's own admission, NR's focus has been on asset strategy rather than safety. The crossings being chosen for closure within the remit of this Order have not been chosen because they "present the highest risk" but rather because they require "minimal (...) investment". NR's motives are primarily financially driven rather than safety driven as purported in their SoC.

Paragraph 2.8.2

7. Dr Algaard notes that:

"The strategic case for pursuing the Order is based on both operational efficiency of the network and its overall safety."

8. I bring to the attention of the Inquiry the importance of highlighting that this strategy refers only to the Rail Network and not the Highway Network, and in particular the Road Network, for which this Order would have a detrimental effect on efficiency and overall safety.

Susan Tilbrook

Paragraph 1.6.8

9. Susan Tilbrook states that:

"The need to carry out a road safety audit (RSA) was considered for each concept solution by a road safety specialist within Mott MacDonald design team."

10. I bring to the attention of the Inquiry that it is standard practice for CCC as the Highway Authority to carry out its own independent RSAs where a developer intends to undertake works on CCC's highway network, and has undertaken RSAs. Alternatively, external developers can be given dispensation for an Audit Review of their RSAs. However, NR declined to do this. The reasons for this are set out in my PoE at paragraphs 4 and 5, together with my concerns over Mott MacDonald's RSAs as

summarised in paragraphs 6 and 7 of my PoE, and dealt with in detail in CCC's Audit Review at Appendix 1 to my PoE.

Paragraph 2.3.17

11. In this paragraph, Ms Tilbrook states:

"Publicly available accident data shows that there were no recorded pedestrian casualties on the Station Road diversion route from 1999-2016. Accident data for the most recent five year Cambridgeshire PROW Proof of Evidence 24 period was also received from CCC. This data confirmed there was one vehicle collision on Station Road during this period along the proposed diversion route."

12. This Statement is incorrect. There were two vehicle collisions on Station Road between 2011 and 2016, one in March 2013 and one in August 2014.

Paragraph 2.4.15

13. In this paragraph Ms Tilbrook gives details of the RSA undertaken by MM at C07. This RSA fails to acknowledge the risks for pedestrian road crossings in the vicinity of reduced forward visibility owing to the presence of restrictions resulting from the vertical alignment across the rail bridge. These are maximum visibility and little more than 120m is available to the north from the bridge deck.

Paragraph 2.4.18

14. The figures that Ms Tilbrook gives in this paragraph are incorrect. Calculations for forward stopping sight distance should be 215m for a 100kph road not the 85kph speed selected (DfT , Design Manual for Roads & Bridges, Volume 6, Part 1 standard TD9/93). Traffic Speeds are often high along this route and no evidence of collecting observed speeds has been included.

Paragraph 2.4.23

15. Ms Tilbrook states that the stepped access has been agreed in principle with CCC. This is not the case, as set out at paragraphs 6-9 of Camilla Rhodes's Rebuttal.

Paragraph 2.21.13

16. Ms Tilbrook gives details about the proposals for C29 Cassells. Reference is made to a further and subsequent Stage 1 Audit. Contrary to requirements of HD19/15 the Problem and Recommendation were replicated across each Stage 1 Audit with no reference to the design change for the more recent document. Further details can be found in the Audit Review submission at Appendix 1 to my PoE, under C29 Cassells.

17. Ms Tilbrook states that the Audit Team did not identify any safety issues which is not the case.

Paragraph 2.21.17

18. In this paragraph Ms Tilbrook states:

“The Council suggests that speed reduction measures would be required on the basis that pedestrians would have to cross at the level crossing where there is a kink in the road. This is not the case, as the onward PRow route is on the other side of the level crossing. Both sides of the level crossing have a space for pedestrians demarked by white lining. Pedestrians are therefore able to walk over the crossing and cross the road at point which maximises visibility in both directions.”

19. Currently the level crossing has no footway provision on either approach. Coupled with narrow un-made verges the Safety Audit was correct in identifying the potential hazard for pedestrians in this location. Both the horizontal and vertical alignments combine to present a “kink” along the northern verge that restricts extensive forward visibility. Given that pedestrians are now to be expected to use the carriageway west of the crossing (in the 40-speed limit) and to use the road corridor to the point where users may cross between Footpaths 1 and 11 the proposal to include widening on the southern verge will assist, however an opportunity to cross near the rail crossing to the northern verge (where optimum visibility could be achieved) must also be a consideration.

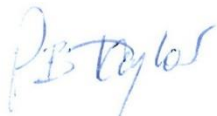
Paragraph 2.21.8

20. In this paragraph, Ms Tilbrook details the proposals for C29 Cassells and states:

“Following a scoping study, a DIA was not considered necessary at this crossing due to the current restricted accessibility of the existing crossing route.”

Mott MacDonald considered that access was restricted by vegetation at the time of the site visit (paragraph 2.21.2), and has been assumed to be an ongoing and permanent obstruction. That is unlikely to be the case. It could have been cut the next day, and would not be such an issue in winter. Therefore a DIA should have been undertaken. The fact that a path is temporarily obstructed should not be considered as if the path is never used.

Signed



.....

Dated21st November 2017.....