



The Hoad family of Parsonage Farm, and the Trustees and Executors of the Noel de Quincey Estate and Mrs Emma Ainslie of Moat Farm

ROTHER VALLEY RAILWAY

Transport and Works Act 1992 (TWA): Application for the Rother Valley Railway (Bodiam to Robertsbridge Junction) Order

Proof of Evidence: Highways and Transport

Ian Robert Fielding BSC (Hons) MCIHT CMILT

Reference: OBJ/1002/IF/1





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TYPE OF DOCUMENT (VERSION) PUBLICPUBLIC

PROJECT NO. 7004715870047158

OUR REF. NO. OBJ/1002/IF/1OBJ/1002/IF/1

DATE: JUNE 2021

WSP

Phone:

Fax:

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	First Draft	Second Draft	Final	
Date	May 2021	May 2021	June 2021	
Prepared by	Ian Fielding	Ian Fielding	Ian Fielding	
Signature				
Checked by	Ian Fielding	Ian Fielding	Ian Fielding	
Signature				
Authorised by	Ian Fielding	Ian Fielding	Ian Fielding	
Signature				
Project number	70047158	70047158	70047158	
Report number				
File reference	c:\users\david\appdata\local\leap desktop\user\997251d9-a2ea-b546-81e6-80f63372a1ae\leap documents and images\leap documents\474a098c-40e1-184a-b68f-dd8af8a49fb8.docx			

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PLEASE SEE OBJ/1002/IF/2 – Proof of Evidence: 2 Figures and Appendices

1 INTRODUCTION

1.1 PERSONAL DETAILS – QUALIFICATIONS AND EXPERIENCE

- 1.1.1. I am Ian Robert Fielding. I am a member of the Chartered Institute of Highways and Transportation and a Member of the Chartered Institution of Logistics and Transportation. I have a Bachelors of Science degree in Combined Studies (Majoring in Geography).
- 1.1.2. I am a Technical Director within WSP Planning and Advisory team and have been engaged in the planning, assessment and design of transport matters concerning development proposals since 1996.
- 1.1.3. WSP is a specialist firm of Consulting Engineers and Transport Planners providing advice on traffic, transportation, travel planning, accessibility planning and highways and development infrastructure to both the private and public sectors. WSP UK Limited, forms part of the WSP group which has approximately 54,000 staff worldwide.
- 1.1.4. My colleague, Mr Philip Clark has been appointed to provide specialist evidence on the proposed level crossings on the A21, the B2244 and Northbridge Street, the crossings of Public Rights of Way and any accommodation crossings (OBJ/1002/PC/1). My evidence focuses on the highway elements of the proposals.

1.2 DECLARATION

- 1.2.1. I am instructed by The Hoad family of Parsonage Farm, and the Trustees and Executors of the Noel de Quincey Estate and Mrs Emma Ainslie of Moat Farm (“the Landowners”) to prepare and present evidence at the Transport and Works Act (TWA) Order Inquiry. The Landowners are “statutory objectors” to the Order for the purposes of Rule 23 of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006.
- 1.2.2. I am based in WSP Basingstoke office and I have visited the application site and the surrounding area for the purposes of providing evidence at this Inquiry.
- 1.2.3. The evidence which I have prepared and provide for this Public Inquiry (in this Proof of Evidence) is true and has been prepared and is given in accordance with the guidance of my professional institutions. I confirm that the opinions expressed are my true and professional opinions.

1.3 FIGURES AND APPENDICES

- 1.3.1. Document OBJ/1002/IF/2 – Proof of Evidence: 2 Figures and Appendices contains the full sized figures and drawings referenced and embedded in this text, alongside the following Appendices;
 - Appendix A – Traffic Survey Data - 2018
 - Appendix A-1 – Traffic Survey Data - 2020
 - Appendix B – WSP / ORR correspondence
 - Appendix C – Future year growth rates and Level Crossing flow Analysis
 - Appendix D – WSP Letters to Highways England
 - Appendix E – Highways England Departure submission response

1.4 STRUCTURE OF EVIDENCE

1.4.1. My proof of evidence is structured as follows:

- Section 2 sets out the Statement of Matters relevant to my evidence;
- Section 3 describes the existing highways and traffic conditions;
- Section 4 describes the Transport and Works Act Order (TWA) application;
- Section 5 identifies the relevant policies and design standards;
- Section 6 sets out the current position of the statutory authorities;
- Section 7 sets out my response to each of the relevant Transport points raised in the Statement of Matters; and
- Section 8 contains my summary and conclusions.

2 SECRETARY OF STATE FOR TRANSPORT - STATEMENT OF MATTERS

2.1 THE PROPOSALS

- 2.1.1. The Rother Valley Railway (RVR) is a heritage railway line based in Robertsbridge. The project for RVR is to re-establish the missing 3.42km link of the RVR and the Kent and East Sussex railway between Robertsbridge and Tenterden, resulting in a continuous 22.5km railway line for use by an existing heritage train service. The reinstatement of the line will include installing three level crossings that pass over the public highway as well as a crossing required across a bridleway.
- 2.1.2. The level crossings proposed are therefore as follows;
- Three public highway level crossings
 - A21 (120m south of Northbridge Roundabout);
 - Northbridge Street; and
 - B2244 Junction Road.
 - One uncontrolled Bridleway level crossing and one uncontrolled footpath crossing
 - Bridleway S&R 36b
 - Footpath 31
- 2.1.3. RVR applied to the Secretary of State for Transport for the Rother Valley Railway (Bodiam to Robertsbridge Junction) Order under the Transport and Works Act 1992 ("the Order") (RVR01) in April 2018. Whilst not explicitly set out in the Order, I also understand that a number of uncontrolled private accommodation level crossings (ALC) / user worked crossings (UWC)¹ will be implemented if the scheme is accepted.

2.2 BACKGROUND – 2018

- 2.2.1. The Department for Transport set out the procedures and programme for the TWA Order Inquiry in its letter dated 29 November 2018. The letter contains a Statement of Matters about which the Secretary of State for Transport particularly wishes to be informed.
- 2.2.2. The Matters identified and covered in my proof of evidence are:
- 2) The main alternative options considered by RVR and the reasons for choosing the proposals comprised in the scheme;
 - 3a) The impact of three new highway level crossings on safety, traffic flows, and congestion particularly in relation to the A21;
 - 3b) The impact of the scheme on roads, footpaths and bridleways;

¹ for the purpose of this proof I will use the Network Rail terminology of UWC for User Worked Crossings when referring to accommodation crossings

- 3e) The impact from the proposals on car parking provision within Robertsbridge;
- 4) The measures proposed by RVR to mitigate any adverse impacts of the scheme including any protective provisions proposed for inclusion in the draft TWA order or other measures to safeguard the operations of utility providers or statutory undertakers;
- 5) The extent to which the proposals in the TWA Order are consistent with the National Planning Policy Framework, National Transport Policy and Local Transport, Environmental and Planning Policies;
- 6) The adequacy of the Environmental Statement (including the data underpinning it) submitted with the application for the TWO Order, having regard to the requirements of the Transport and Works (Applications and Objections Procedure) Rules 2006; and
- 9a) Whether there are likely to be any impediments to RVR exercising the powers contained within the orders including availability of funding.

2.3 AVAILABILITY OF INFORMATION

- 2.3.1. I have prepared my proof of evidence based on the information available in the public domain, that includes the documents submitted with the application in April 2018, the package of information provided to the ORR in January 2020, and the updated Environmental Information published information on 8 March 2021.
- 2.3.2. At the first pre-inquiry meeting in February 2020 Counsel for RVR indicated that his client intended to progress discussions with Highway England and that these discussions would involve the sharing of detailed information regarding the highways impacts of the proposals. Leading Counsel for my clients requested that they be included within this exchange of information, and the sharing of information on this basis was encouraged by the Inspector.
- 2.3.3. Despite repeated requests and assurances that a composite package of all the information exchanged between RVR and Highways England would be provided, this package was not contained within the updated Environmental Information issued on 8 March. At the second pre inquiry meeting on 19 May 2021, my clients' solicitor explained that this information had still not been shared with my clients and requested that the package of information be shared at the very earliest opportunity.
- 2.3.4. Since the second pre-inquiry meeting, we have been provided with a suite of additional information on a piecemeal basis. I set out below, within Table 2-1, the documents provided for completeness together with the date it was made available to me:

Table 2-1 – Availability of Information

Date Provided	Information Provided	Component Documents and attachments not previously made available
19 May 2021	First Draft Statement of Common Ground between RVR and Highways England	n/a
24 May 2021	RVR's Departures Submission to Highways England	<ul style="list-style-type: none"> - Departure Submission (20 April 2021) - Bundle of Drawings - Traffic Assessment Note (May 2020) - Accident Analysis Note (March 2020) - Summary of NMU Data (October 2020) - Traffic Assessment Note (September 2020) - Costs Benefit Analysis of A21 Crossing (April 2021) - A21 Safety Risk Assessment (January 2020) - Letter from RVR to ORR regarding maintenance arrangements (5 February 2021) - Amended Protective Provisions (12 February 2021) - A21 Crossings Environmental Review (April 2021)
27 May 2021	Highways England's response to RVR's Departures Submission	n/a
28 May 2021	ORR's Addendum to its Statement of Case	<ul style="list-style-type: none"> - Letter RVR to ORR 12 February 2021 - A21 NRA Update (10 February 2021) - A21 Risk Assessment Update (10 February 2021) - Bridleway and UWC Risk Assessment (10 February 2021) - Junction Road NRA Update (31 January 2021) - Junction Road Risk Assessment Update (10 February 2021) - Northbridge Street Risk Assessment Update (29 January 2021) - Northbridge Street NRA Update (1 February 2021) - A21 New Build Level Crossing Narrative Risk Assessment (April 2021) - Bridleway Risk Assessment (April 2021)
1 June 2021	Second Draft of Statement of Common Ground between RVR and Highways England	n/a
3 June 2021	Walking Cycling and Horse-Riding Assessment for the A21 Level Crossing	n/a
3 June 2021	A Technical Note on A21 Level Crossing Timings	n/a

2.3.5. I would note that majority of the documents and reports are dated significantly earlier than the date on which they were made available to me. I do not see any reason why this information could not

have been made available much earlier nor why those documents pre-dating 8 March 2021 could not have been included within the Environmental Information published on that date.

- 2.3.6. This information has been provided extremely late in the public inquiry process and has made it very difficult for me to finalise my proof of evidence. In respect of the information most recently made available I have not had an opportunity to review matters in detail in the time available before the deadline for exchange of evidence.
- 2.3.7. I have tried as far as is possible to seek to note and comment on the information in the highly limited time available, but I reserve my position so far as necessary for me to clarify my evidence either before or during the public inquiry once I have had a proper opportunity to review this material in detail.

3 EXISTING CONDITIONS

3.1 INTRODUCTION

- 3.1.1. Robertsbridge is a rural village located in the Rother District of East Sussex. It is bypassed to the east by the A21 trunk road which runs between London and Hastings. It is located approximately 10 miles north of Hastings and 13 miles south-east of Royal Tunbridge Wells. The A21 connects both settlements, and joins the M25 at junction 5, providing access to Greater London and the wider areas of the United Kingdom.

3.2 A21

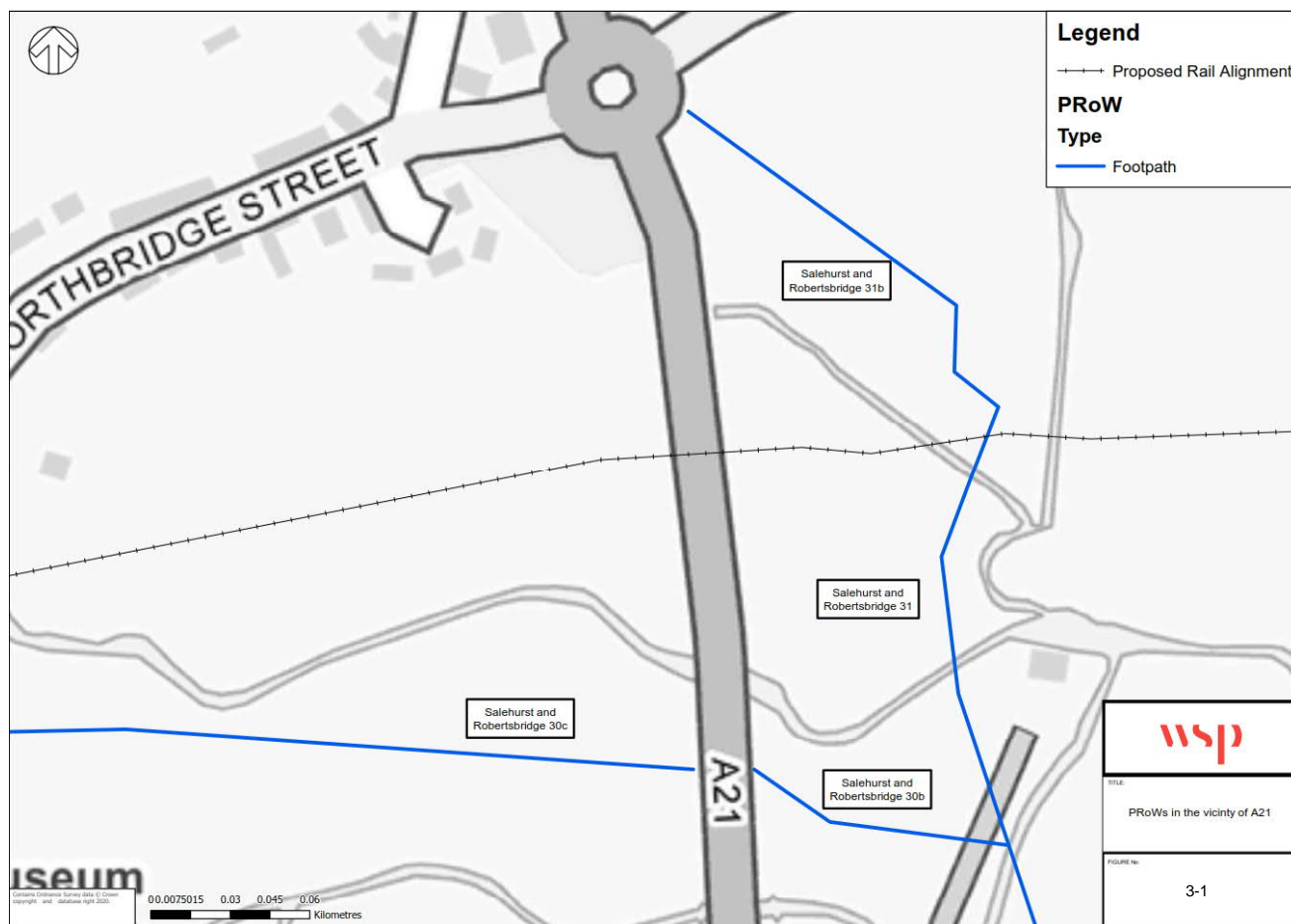
Existing Road Conditions

- 3.2.1. The A21 is a key link in the Strategic Road Network (SRN) and is managed by Highways England. The A21 is a mix of a single and dual carriageways, and generally runs on a north south alignment connecting south west London with Hastings. Sections of it have been progressively upgraded over time, including completion of the Robertsbridge bypass in 1989, the Lamberhurst Bypass in 2005; and dualling of the section between Tonbridge and Tunbridge Wells in 2018-19.
- 3.2.2. The section of the A21 Robertsbridge Bypass which will have the largest impact from the implementation of the level crossing is between the A21 Robertsbridge Bypass / Church Lane / Northbridge Street roundabout and Redlands Lane. The A21 at this location is subject to the national speed limit south of the River Rother, approximately 100 metres to the south of the roundabout the speed limit drops to 40mph.

Walking and Cycling Provision

- 3.2.3. There are no formal on carriageway walking or cycling facilities within this section of the A21. With regards to walking provision passing underneath the A21, footpaths 30b and 30c are located between the River Rother and the water course to the south as shown in Figure 3-1. A signal controlled pedestrian crossing is provided approximately 60 metres to the north of the Roundabout.

Figure 3-1 - Walking and Cycling Provision in the vicinity of the proposed A21 Crossing

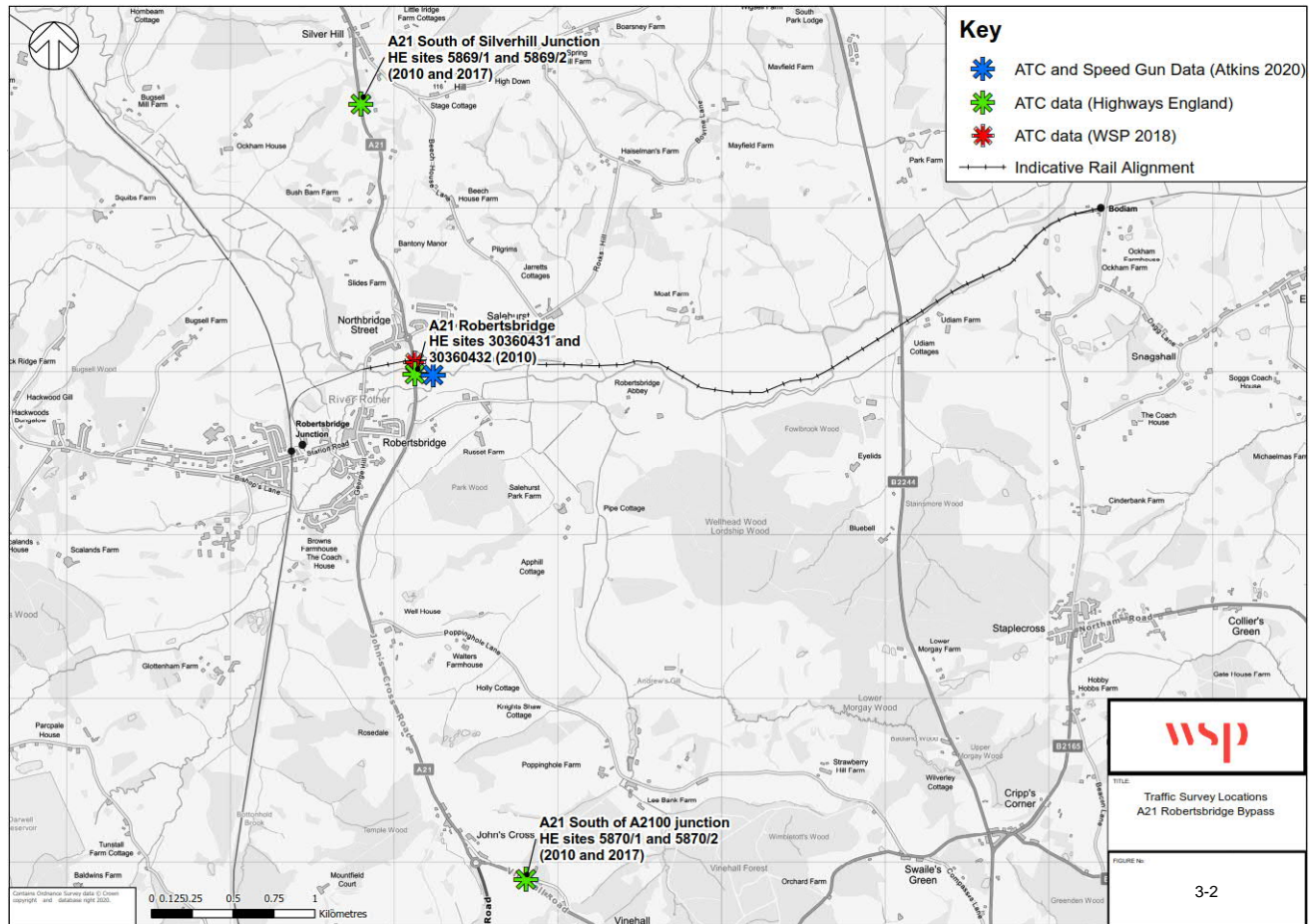


Traffic Flows

- 3.2.4. WSP commissioned an Automatic Traffic Counter (ATC) survey on the A21 Robertsbridge Bypass in May 2018 over a seven day period. The full outputs of the traffic survey are presented in Appendix A. The results of the survey have been compared against the information contained within the Mott MacDonald Traffic Impact Study prepared for RVR in October 2011 (RVR32), and the Transport Assessment Addendum (contained within RVR75), both of which used a Highways England traffic count for the data.
- 3.2.5. I note that the RVR proposals had excluded services running in the AM peak hour of 0800 – 0900, originally this had allowed train services to run during the PM peak hour of 1700 – 1800. However, condition 21 of the planning permission (Reference RR/2014/1608/P) (RVR7) required that the movement of trains across the A21 shall only be permitted outside of the hours of 0700 – 0900 and 1700 – 1900 which would also apply during Bank Holidays. Notwithstanding this, as I explain later within my evidence, I have concerns as to the practical enforceability of this condition during the PM period and the relevance of the application of this condition during Bank Holidays. I therefore provide a review of the PM peak hour conditions for contextual purposes.

3.2.6. Atkins working on behalf of Highways England commissioned an ATC and a speed gun traffic survey in March 2020. The full outputs of the traffic survey are presented in Appendix A-1. Figure 3-2 presents the locations of the survey traffic data.

Figure 3-2 - Traffic Survey Locations A21 Robertsbridge Bypass



3.2.7. The data used in the Mott MacDonald report was taken over the month of May 2010. The Atkins data was taken for a week from the 19th March 2020, this was during the first set of COVID-19 movement restrictions. Table 3-1 and Table 3-2 present the traffic volume on the A21 Robertsbridge Bypass.

Table 3-1 – A21 Traffic Flows - WSP 2018 Traffic Flows

Time period / Date	Direction		
	Northbound	Southbound	Total
PM Peak (17:00-18:00) 25/05/2018	543	841	1,384
Average Hour Weekday Off Peak (10:00-17:00)	532	648	1,180
Average hour Weekends (10:00-18:00)	512	684	1,196
24hr Traffic Flow 25/05/2018	8,546	9,708	18,254
Peak hour 11:00 - 12:00 - Bank Holiday 28/05/2018	818	749	1567
Average Hour Bank Holiday (10:00-17:00) 28/05/2018	711	671	1382
24hr Traffic Flow - Bank Holiday 28/05/2018	9,205	7,602	16,807

Table 3-2 – A21 Traffic Flows - Mott MacDonald 2010 Data

Time period / Date	Direction		
	Northbound	Southbound	Total
PM Peak (17:00-18:00) 28/05/2010	536	921	1,457
Average Hour Weekday Off Peak (10:00-17:00)	476	528	1,004
Average hour Weekends (10:00-18:00)	517	680	1,197
24hr Average Traffic Flow 24-28/5/2010	7,811	8,368	16,179

- 3.2.8. The traffic flows in Table 3-1 and Table 3-2 present a similar PM peak traffic flow northbound and southbound. The average hourly weekday off-peak traffic flow is 180 vehicles higher in 2018 than in 2010 which equates to an increase of 17%. This is reflected across the whole day with a 13% increase in AADT flows.
- 3.2.9. I am aware that further traffic flow information on the A21 has been obtained by I Transport acting for RVR and this has been submitted to Highways England. This formed part of the information provided to me on 24 May 2021. The March 2021 Environmental Statement Update provides further traffic flow information; however I am unclear whether this data is the same as that obtained by I – Transport. Whilst the March 2021 ES Transport Chapter, completed by Mott MacDonald outlines flows in 2019, no source or dates are provided
- 3.2.10. For comparison, I have used the data from I Transport, which is reference within their document ITL14477-007 “Traffic Assessment Note”, dated May 2020 (attached as part of the Departures submission, ref RVR/HE/01 RVR Application for Departure from Standard).

- 3.2.11. The I Transport report summarises the busiest 15 min period for a number of day types / scenarios. Appendix B of the I Transport report contained the survey data outputs, which I have interrogated to provide further flow summaries. Table 3-3 below presents a summary of flows on the A21, from various 2019 dates.

Table 3-3 – A21 Traffic Flows - I Transport 2019 Data

Time period / Date	Direction		
	Northbound	Southbound	Total
March 2019 - Weekday (15:45 - 16:00)	158	191	349
March 2019 - Weekday (16:45 - 17:00)	121	193	314
April 2019 - Weekday (10:15 - 10:30)	161	139	300
April 2019 - Weekday (16:15 - 16:30)	133	126	259
Weekday 24 hrs (14/03/2019)	8028	8247	16,275
PM Peak (17:00-18:00) 14/03/2019	523	785	1,308
Bank Holiday - 10:45 - 11:00 (Easter Monday)	266	167	433
Bank Holiday - 10:45 - 11:00 (Good Friday)	202	246	448
Hourly flow 10:00 - 11:00 - Bank Holiday 19/04/2019	730	776	1,506
24hr Traffic Flow - Bank Holiday 19/04/2019	8430	9372	17,802
Hourly flow 10:00 - 11:00 - Bank Holiday 22/04/2019	979	664	1,643
24hr Traffic Flow - Bank Holiday 22/04/2019	9748	7201	16,949

- 3.2.12. The I Transport data confirms that Bank Holiday hourly flows are greater than the Weekday PM commuter periods. This is observed in both the 15 minute profiles and the hourly summaries. This was also observed in Table 3-1 when using the 2018 data sources. This would indicate that vehicles utilised the A21 on Bank Holiday periods to a significant extent, at times outside of traditional commuter peaks.
- 3.2.13. I note that in Table 3-3, the Good Friday daily flows show a higher two way movement than the Weekday 2019 flows, with a dominant southbound flow. This pattern is reversed on the Easter Monday, where northbound flows are dominant. This would indicate that the A21 is a key route for users travelling at the start and return journeys over the long weekend. Both Bank Holiday dates were shown to have a higher daily flow compared to that of the selected weekday traffic in March 2019.
- 3.2.14. The traffic flows from the Atkins ATC survey presented in Appendix A, show that during the four periods the traffic flows are significantly lower than the WSP and the Mott MacDonald data. As such, I have not presented a summary table within this proof. This is presumably due to the first set of movement restrictions implemented by the Government on the 16th March 2020. Whilst, the Atkins surveys provide an indication of recent conditions, it is evident that travel restrictions in place had an impact, and as such we do not consider the traffic flow data to be representative.

- 3.2.15. DMRB (Design Manual for Roads and Bridges) document, TA 46/97² “Traffic Flow Ranges for Use in the Assessment of New Rural Roads” gives an indication on the capacity of different road types. Whilst withdrawn, TA46 / 97 remains a recognised document that has been used as a proxy to determine the levels at which capacity issues may occur. As shown in TA 46/97 Table 2.1 “opening year economic flow ranges” that an S2 carriageway which is a 7.3m wide single carriageway road is considered to be over capacity if the AADT flow exceeds 13,000. As shown in Table 3-1 and Table 3-2 above, the 24 hour traffic flow was above this level in 2010 and 2018.
- 3.2.16. I understand that Highways England are due to review the capacity of the A21 as part of their “route strategy” which is due to start shortly.

Speed and Safety

- 3.2.17. The May 2018 ATC survey provided a summary of the speed of vehicles travelling on the A21 Robertsbridge Bypass at the proposed location of the level crossing, the 85th Percentile speed is presented in Table 3-4. A full breakdown in the speed of vehicles on the A21 is presented in Appendix A.

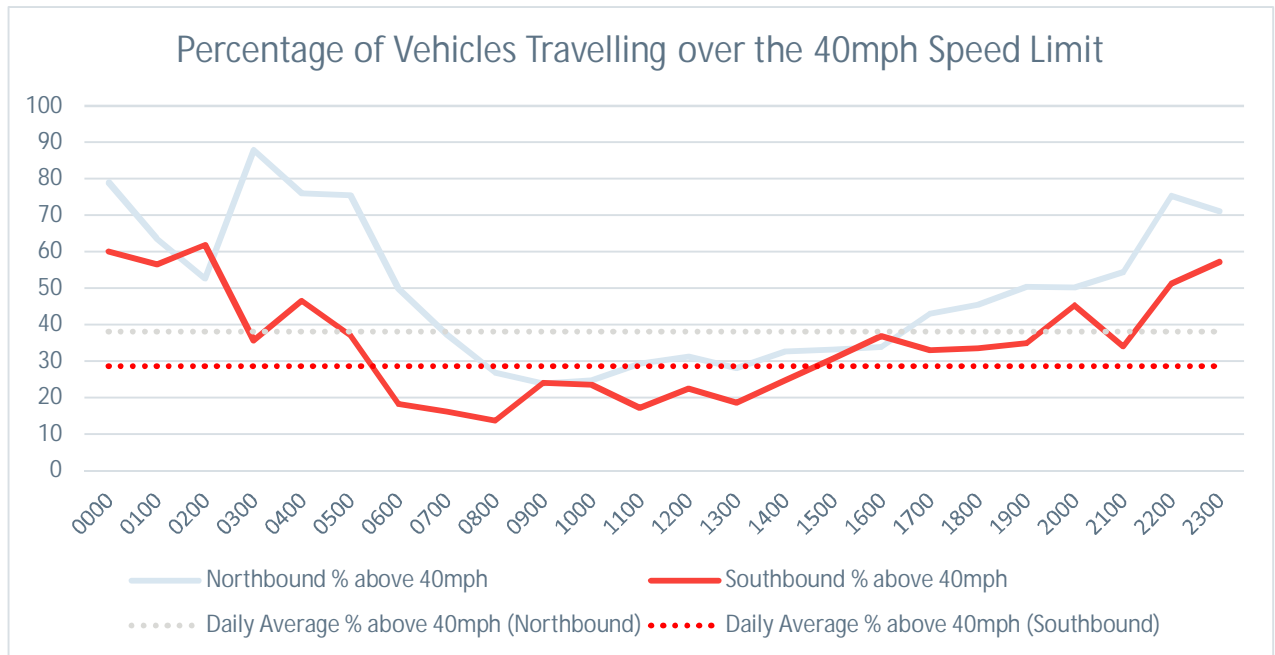
Table 3-4 – A21 85th Percentile Speed - 2018 Data.

Direction	PM Peak (17:00-18:00) - mph	Weekday Off Peak (10:00-17:00) - mph	Weekends (10:00-18:00) - mph	Bank Holiday (28/05/2018) – Daily
Northbound	43.2	42.0	42.9	42.9
Southbound	42.6	41.3	42.2	42.9

- 3.2.18. The 85th percentile speed has been analysed as this provides the basis for speed limit changes. The 85th percentile speed is approximately 3mph faster than the posted speed limit of 40mph across the weekday, weekend and Bank Holiday periods. 38.1% of drivers were shown to travel over the speed limit northbound and 28.6% southbound during a typical day. This is shown in Figure 3-3 below.

² It is acknowledged that as of April 2020, new DMRB guidance documents were published. With regards to TA46, no new guidance is available and instead DMRB have stated that the “Document withdrawn without replacement”. In the absence of newer guidance, and / or alternative thresholds, it is considered that the use of TA46 / 97 remains valid at this point.

Figure 3-3 - Percentage of Vehicles Travelling over the 40mph Speed Limit



- 3.2.19. The ATC data contained within I Transports document ITL14477-007 “Traffic Assessment Note” (attached as part of the Departures submission, ref RVR/HE/01 RVR Application for Departure from Standard) also provides a summary of speeds recorded. I have interrogated that data and have presented a summary of 85th percentile speeds for a selected weekday (March 2019), and both Bank holidays (April 2019), as shown in Table 3-5.

Table 3-5 – A21 – I Transport ATC survey 2019 Data – 85th Percentile Speeds

Direction	Weekday 24 hrs (14/03/2019)	24hr Traffic Flow - Bank Holiday 19/04/2019	24hr Traffic Flow - Bank Holiday 22/04/2019
Northbound	43.7	42.9	42.1
Southbound	42.1	43.8	44.6

- 3.2.20. The 2019 ATC data confirms that the 85th percentile speeds recorded in both directions on the A21 are above the posted speed limit. This mirrors the 2018 data, suggesting that driver patterns have not changed across the two datasets. It is of note that the Bank Holiday data outlines that the southbound traffic regularly travels approximately 4 to 4.6 mph above the posted speed limit.
- 3.2.21. Atkins also undertook a handheld Speed Gun survey on 19th March 2020 between 10:00-15:00, the full outputs of the Speed Gun are included in Appendix A-1. The results of the survey are presented in Table 3-6.

Table 3-6 – A21 - Atkins Speed Gun survey 19th March 2020 (10:00-15:00)

Direction	Average Speed - mph	85 th Percentile - mph	Maximum Speed - mph
Northbound	50.1	55	74
Southbound	46.6	52	81

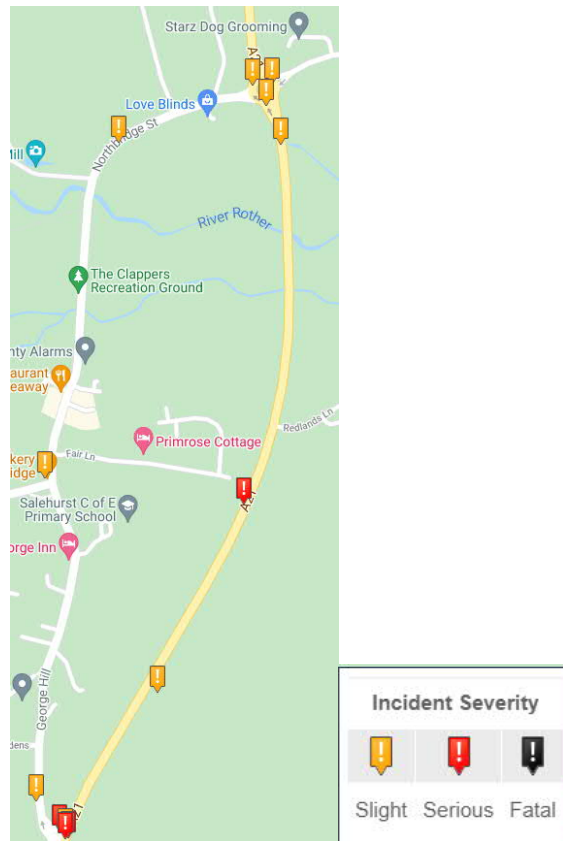
- 3.2.22. The average speed recorded by the Atkins survey for northbound traffic is 50.1mph which is 10mph over the posted speed limit of 40mph, while southbound the average speed is 46.6mph. Over the five hour survey period 92% of the vehicles were travelling above the posted speed limit of 40mph.
- 3.2.23. The Highways England A21 Safety Package web page acknowledges that the A21 suffers significant levels of collisions. In response, it is currently developing an A21 Safety Package, which will see schemes introduced in order to deliver the following: -
- junction improvements;
 - improvements to road alignment and visibility;
 - changes to speed limits; and
 - improved signing, markings and road studs.
- 3.2.24. As it relates to the RVR proposals, I understand that highway safety improvement schemes are proposed at the Station Road and Silver Hill junctions to the north and the George Hill and Cripps Corner junctions to the south of the Robertsbridge Roundabout.

Accident Data

- 3.2.25. Accident data has been obtained from Crashmap³, which has a collision map detailing the location and severity of collisions. Figure 3-4 below shows collisions in the vicinity of the Northbridge Roundabout on the A21 between January 2016 and December 2020.

³ <https://www.crashmap.co.uk/Search/>

Figure 3-4 - Collision data for the A21 and Northbridge Roundabout



- 3.2.26. There were a total of eight collisions along the stretch of A21 road around Robertsbridge. Four of these collisions occurred either in proximity to or at the Northbridge roundabout on the A21. All four collisions resulted in one casualty with a slight severity. Two collisions were on the roundabout and two were on the A21 approaching the roundabout. Further south of the Northbridge roundabout two collisions which have occurred results in serious casualty and a slight casualty, these collisions occurred between Redlands Lane and George Hill. At the George Hill junction on the A21 there were four collisions, one resulting in three serious casualties, one resulting in two serious casualties, one results in one serious casualty and the final collision resulting in one slight casualty.
- 3.2.27. I am aware that further accident analysis is presented by I – Transport, submitted to Highways England via document ref ITL14477-008 (as part of the Departures submission, ref RVR/HE/01 RVR Application for Departure from Standard). I Transport reviewed the date period 01/02/2015 – 31/01/2020 and found that four accidents (three slight and one serious) were recorded on the A21 in the vicinity of the proposed level crossing.
- 3.2.28. The accidents reports in the I-Transport document indicate that the serious injury accident occurred southbound approaching Robertsbridge roundabout and was attributed to the influence of alcohol. Two of the slight injuries occurred northbound at Robertsbridge roundabout, involving a rear end shunt and a loss of control. The other slight injury accident occurred south of Robertsbridge roundabout and involved a southbound vehicle towing a caravan.

- 3.2.29. I note however that the PIA area reviewed in the I Transport document did not extend on the A21 past Redlands Lane or to the junction with George Hill. As shown in my review on Figure 3-4, further south on the A21, a number of further Serious incidents are recorded.

3.3 NORTHBRIDGE STREET

Existing Road Conditions

- 3.3.1. Northbridge Street / High Street provides the link between the A21 roundabout and Robertsbridge Village Centre. Northbridge Street is a single carriageway road and is subject to a 30mph speed limit.
- 3.3.2. Northbridge Street provides the primary access from the A21 north to Robertsbridge and serves several residential streets. The road is also used by the 304 and 305 bus services operated by Stagecoach on the route Hastings to Hawkhurst.

Walking and Cycling Provision

- 3.3.3. There is a consistent footway on the west / north side of the High Street, which continues to Northbridge Roundabout. There is an intermittent footway on the east / south side.
- 3.3.4. There is no dedicated cycling provision along Northbridge Street, but the road is consistently flat and good quality. Some stretches of road are restricted by on-street parking, but the majority of the route is acceptable for cycling.
- 3.3.5. There are several Public Rights of Way in the vicinity of the proposed RVR route. Around Northbridge Street, Footpath 16a (Salehurst and Robertsbridge) runs parallel to the existing railway line, meeting The Clappers Recreation Ground from the west. This footpath, and footpath 27 both pass beneath the existing railway line. Footpath 30c begins on the east side of Northbridge Street, passing beneath the A21, connecting to footpath 30b and 30a to the east. In the vicinity of Northbridge roundabout are footways 64, 7, 65, and 31.

Traffic Flow Analysis

- 3.3.6. WSP commission an ATC survey on Northbridge Street in May 2018, a full breakdown in traffic flows is presented in Appendix A. The Mott MacDonald traffic impact study (RVR32) October 2011 and the addendum to the traffic impact study, March 2019 (RVR ORR Submission) summarised the traffic flows for Northbridge Street, which were obtained from turning counts at the A21 roundabout undertaken by East Sussex County Council in September 2010 and November 2018. The surveys utilised by Mott MacDonald were undertaken during weekdays, so no traffic volumes are available for Saturday or Sunday. Figure 3-5 presents the locations of the survey traffic data. Table 3-7, Table 3-8 and Table 3-9 presents the traffic volume on Northbridge Street.

Figure 3-5 - Traffic Survey Locations Northbridge Street

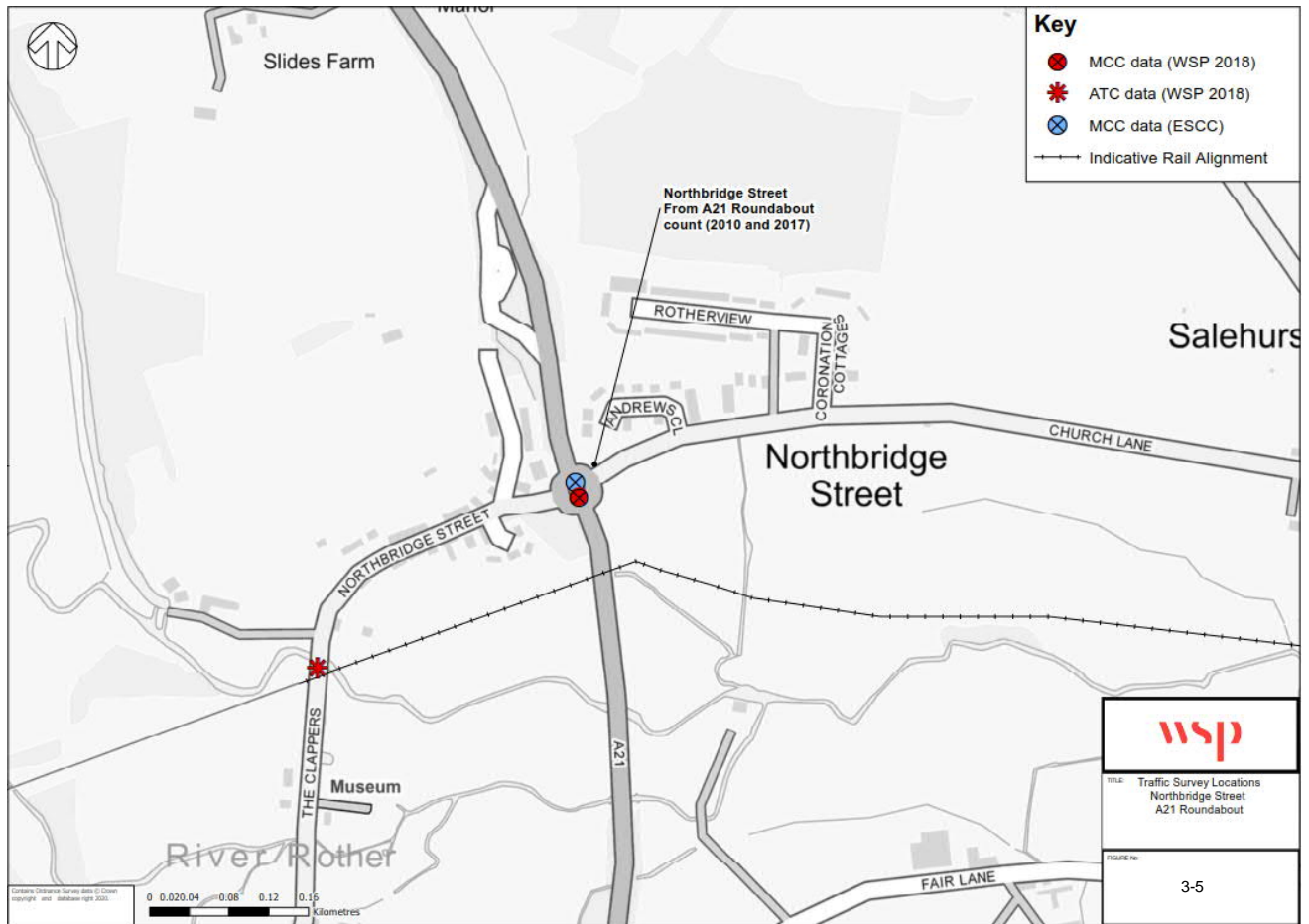


Table 3-7 – Northbridge Street Average Traffic Flows - WSP 2018 Data

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00- 17:00)	Weekends (10:00- 18:00)	AADT (Average Annual Weekday)
Northbound	98	83	77	1,206
Southbound	96	62	52	1,019
Total	199	145	129	2,225

Table 3-8 - Northbridge Street Average Traffic Flows - Mott MacDonald 2010 Data

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)	Daily (07:00-19:00)
Northbound	82	77	N/A	1040
Southbound	101	73	N/A	922
Total	183	150	N/A	1,962

Table 3-9 - Northbridge Street Average Traffic Flows - Mott MacDonald 2018 Data

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)	Daily (07:00-19:00)
Northbound	115	90	N/A	1194
Southbound	240	96	N/A	1,395
Total	355	186	N/A	2,589

- 3.3.7. The datasets above show that there has been an increase in traffic volume since 2010. The Mott MacDonald data shows a larger increase than the WSP data. The main disparity between the two datasets is for the PM peak southbound volume, which Mott MacDonald found to be 240 vehicles, in comparison to 96, as found by WSP.
- 3.3.8. Nevertheless, the datasets produce a similar average daily flow of 2,225 (WSP) and 2,589 (Mott Macdonald). This is an increase of 263 (WSP) and 627 (Mott MacDonald) cars daily, compared to the 2010 figure of 1,962.
- 3.3.9. The WSP data does not show a significant difference for weekend volumes, however flows appear to be slightly lower.

Speed and Safety

- 3.3.10. Table 3-8 shows the average speed of vehicles using Northbridge Street at specific times. Notably the average speed is much faster travelling northbound, likely due to space restrictions made by on-street parking and road width reductions on the southbound lane.

Table 3-10 – Northbridge Street Average Speed – WSP 2018 Data

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)
Northbound	27	27	26
Southbound	18	20	20

- 3.3.11. The 85th percentile speed in Table 3-9 show that traffic speeds for northbound traffic are higher than those travelling southbound.

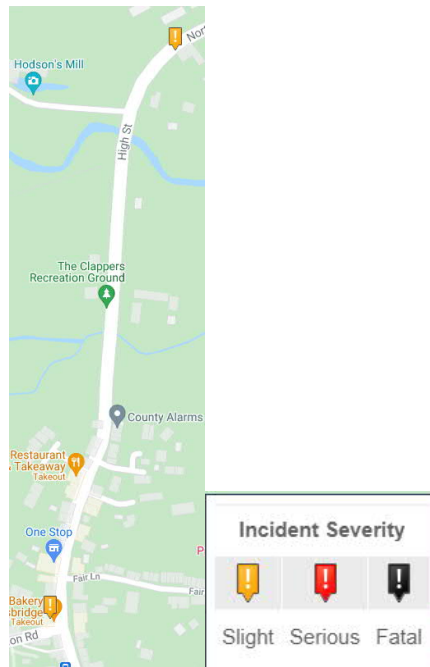
Table 3-11 - Northbridge Street - 85th Percentile Speed – WSP 2018 Data .

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)
Northbound	31	31	31
Southbound	26	27	27

Accident Data

- 3.3.12. Collision Data, taken from the Sussex Safer Roads Partnership, shows three accidents on Northbridge Street/ High Street through Robertsbridge as shown in Figure 3-6. The two accidents have been classified as slight in terms of severity.

Figure 3-6 - Collision Data on Northbridge Street



3.4 B2244 JUNCTION ROAD

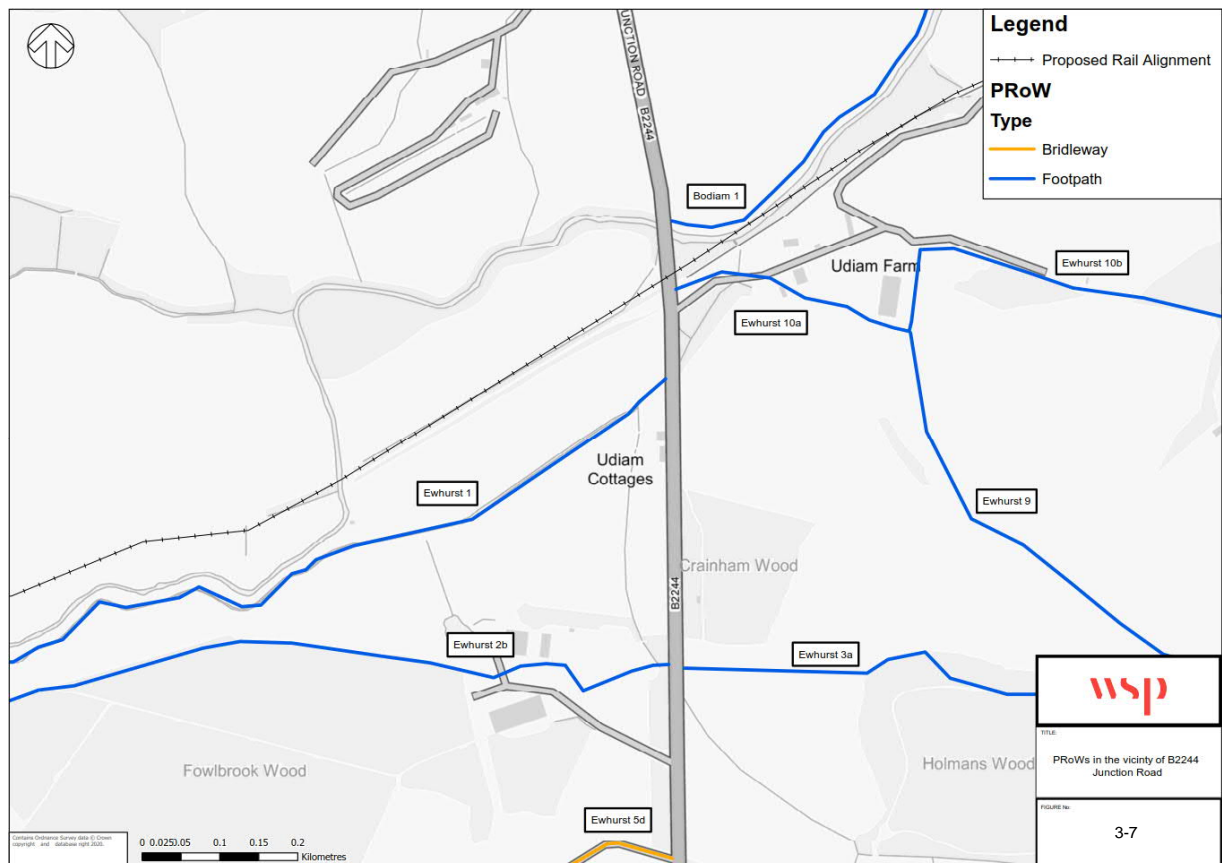
Existing Road Conditions

- 3.4.1. The B2244 Junction Road is a single carriageway. The road is rural in nature and has limited property entrances fronting the road. It has a generally straight alignment and runs north-south from Hawkhurst to Cripps Corner.
- 3.4.2. The B2244 is currently derestricted in terms of speed at the location of the proposed level crossing. Approximately 50 metres north of the proposed level crossing the carriageway narrows where it passes over the River Rother to approximately 5m with the central road markings removed. 100m south of the proposed level crossing location the road also narrows to 5 metres in width with the central road markings removed.

Walking and Cycling Provision

- 3.4.3. There are no formal on carriageway walking or cycling facilities in the vicinity of the proposed level crossing on the B2244 Junction Road. However, the Public Right of Way network is present around B2244 Junction Road, in proximity to the proposed railway line. These footpaths provide access to the surrounding area, in particular to Bodiam and Ewhurst. Footway 1 to Ewhurst is currently closed.

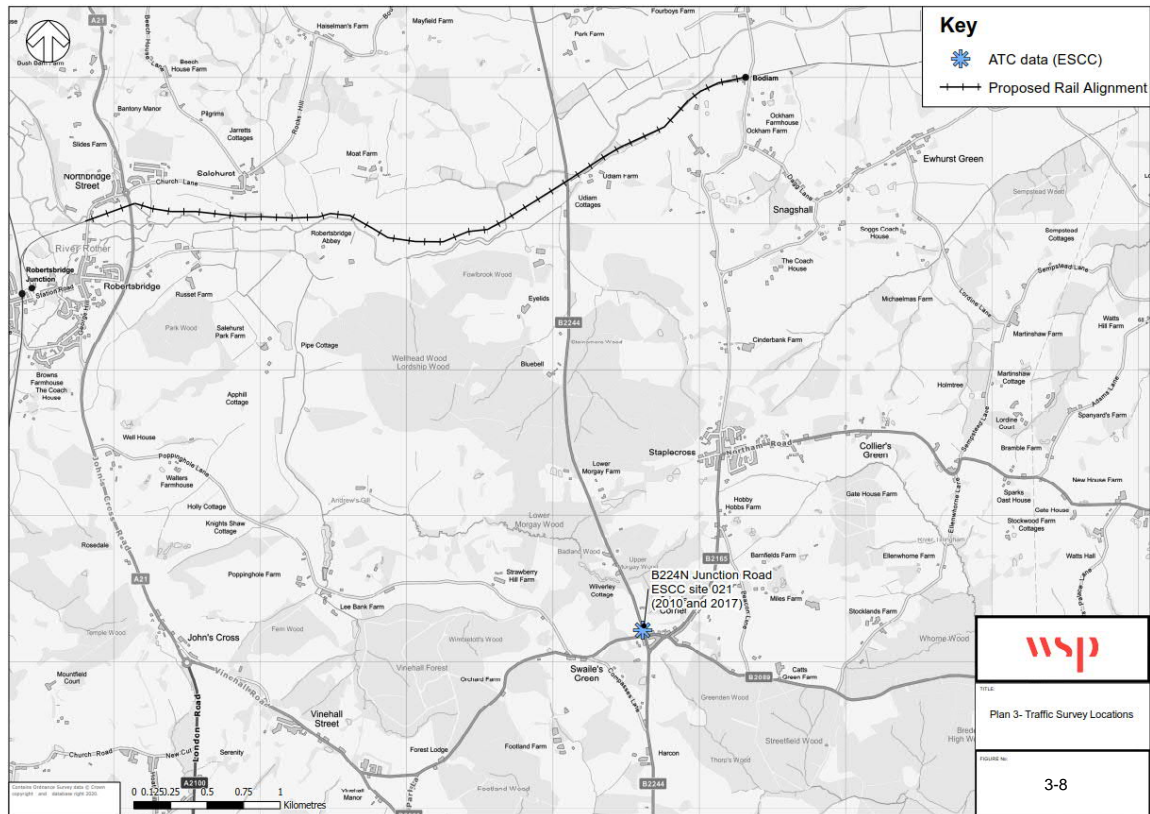
Figure 3-7 - B2244 Junction Road Existing Public Rights of Way



Traffic Flow Analysis

- 3.4.4. The traffic flows were obtained from the March 2018 Mott MacDonald Addendum to Traffic Impact Study - “Annex B. Road Crossings. Narrative Safety Report” (RVR ORR Submission). The data itself was provided by East Sussex County Council, who undertook turning count surveys in 2010 and 2017.

Figure 3-8 - Traffic Survey Location B2244 Junction Road



3.4.5. Table 3-10 and Table 3-11 present the 2010 and 2017 traffic volume on the B2244 Junction Road just to the north of the B2089 at Crisps Corner. The survey location is two miles south of the proposed crossing location but due to the lack of accesses or major junctions in between the traffic flows are considered robust. The average daily traffic is based on 07:00-19:00 flows as 24-hour data was not available.

Table 3-12 – B2244 Junction Road Average Traffic Flow - East Sussex 2010 Data

Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)	Daily (Weekday 07:00-19:00)
Northbound	155	129	134	1,542
Southbound	310	175	159	1,833
Total	465	304	293	3,375

Table 3-13 – B2244 Junction Road Average Traffic Flow - East Sussex 2017 Data

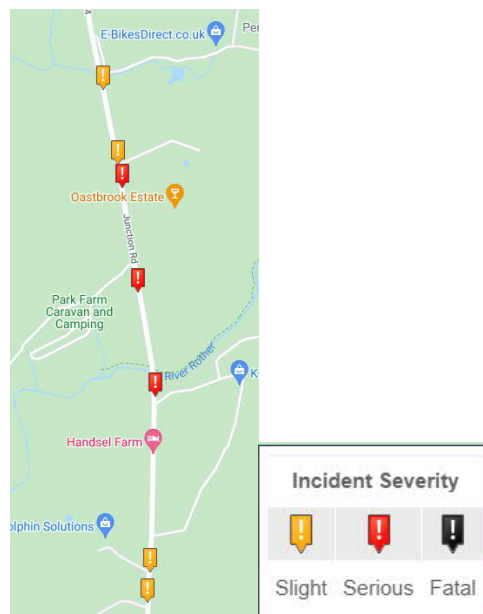
Direction	PM Peak (17:00-18:00)	Weekday Off Peak (10:00-17:00)	Weekends (10:00-18:00)	Daily (Weekday 07:00-19:00)
Northbound	245	188	212	2,273
Southbound	375	236	257	2,727
Total	630	424	469	5,000

- 3.4.6. The traffic flow data shows an increase between 2010 and 2017, with daily flows (07:00 – 19:00) rising from 3,375 in 2010 to 5,000 in 2017. The data also consistently shows that journeys travelling southbound are more popular than northbound, with an average of 500 more journeys going southbound daily in 2017.
- 3.4.7. Whilst no speed survey information is available, I have visited B2244 Junction Road for the purposes of preparing my Evidence. My on-site observations identified that traffic travelling southbound tended to do so at speed and given the straight alignment of the route, overtaking opportunities were available. To the south, given the restricted width of the bridge crossings, speeds were generally of a lower value.

Accident Data

- 3.4.8. The Crash Map figure below shows seven collisions along Junction Road between January 2016 and December 2020. There were four incidents of a slight severity, between them resulting in nine slight casualties. There have been three collisions resulting in a *serious* casualty. Figure 3-9 below shows the location of the reported incidents.

Figure 3-9 - Collision Data from Junction Road



3.5 FARMLAND ACCESS

- 3.5.1. A large proportion of the proposed route between the A21 Robertsbridge Bypass and the B2244 Junction Road is farmland. Movement across the farmland is currently open with no restrictions to landowners. The impact of the railway on access to farmland is presented in Mr Highwood's evidence.

3.6 SUMMARY

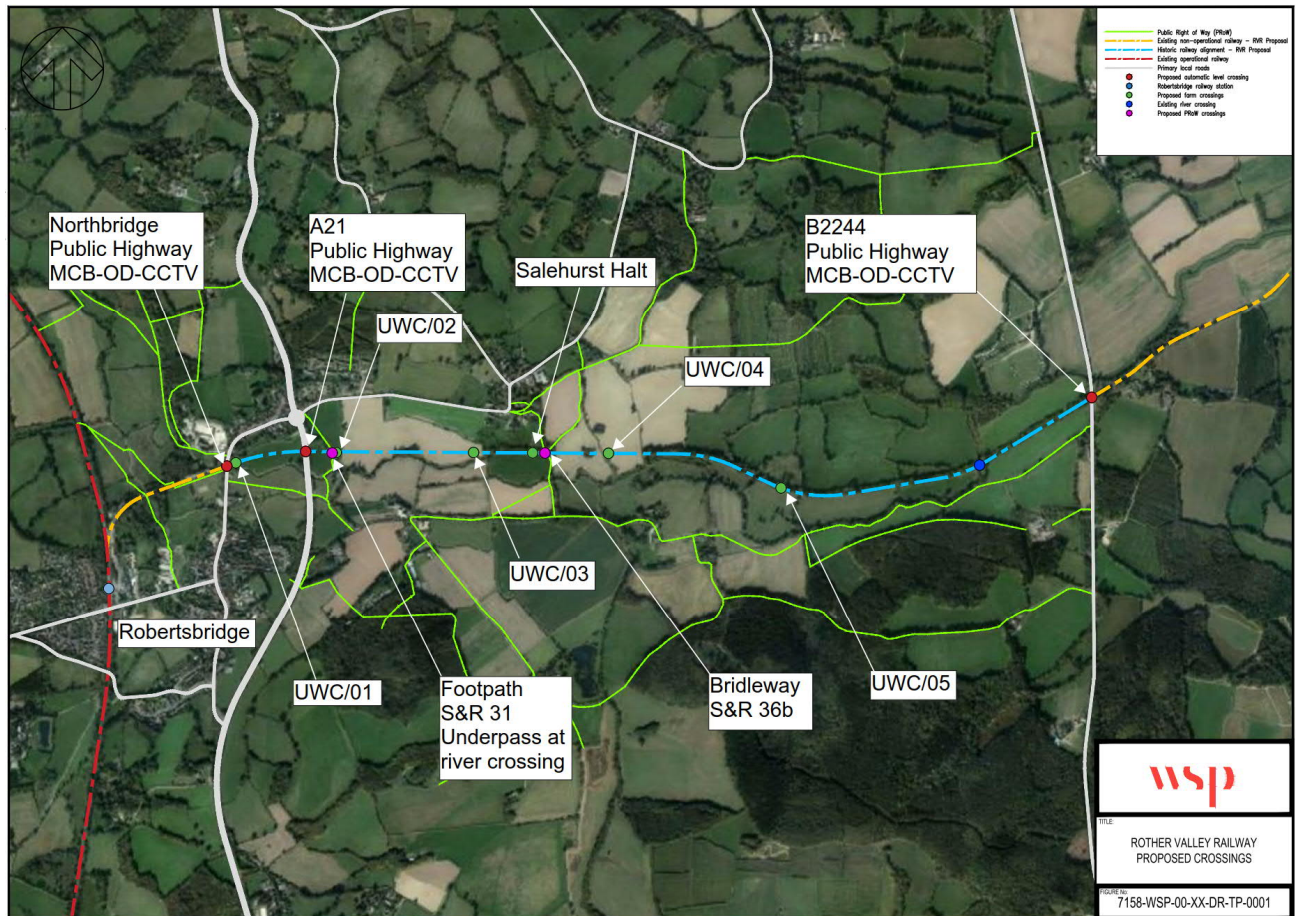
- 3.6.1. The A21 is a mixture of single and dual carriageways and is the key strategic route between Hastings and London. The A21 Robertsbridge Bypass section carries approximately 18,000 vehicles per day, the road is currently operating significantly over capacity, suffers from a poor safety record as acknowledged by Highways England who are due to implement safety improvements along its length. Capacity improvements are due to be considered as part of the organisations emerging "route strategy" work.
- 3.6.2. Northbridge Street is a single carriageway road and provides access to Robertsbridge village and the A21, the existing two-way daily traffic flows is 2,225. The road is representative of a village high street link, with on-street parking limiting the carriageway to one way working in sections, particularly near to Robertsbridge railway station. The road is subject to a 30mph speed limit with footways on both sides of the carriageway. There have been three accidents recorded in the past five years in the vicinity of the crossing.
- 3.6.3. The B2244 Junction Road is a single carriageway road that is more rural in nature, the road links Hawkhurst to the A21 south of Sedlescombe. The B2244 Junction Road has an existing two-way traffic flow of approximately 5,000 vehicles. There are numerous existing pinch points along the B2244 with carriageway narrowing's at bridge structures. There have been nine accidents in the past 5 years on the B2244 in the vicinity of the proposed level crossing.
- 3.6.4. There are a number of existing public rights of way in the vicinity of the proposals as well as farmland access points.

4 TRANSPORT & WORKS ACT ORDER APPLICATION

4.1 CONTEXT

- 4.1.1. On 19 April 2018, Rother Valley Railway Limited (RVR) applied to the Secretary of State for Transport for the Rother Valley Railway (Bodiam to Robertsbridge Junction) Order under the Transport and Works Act 1992 (“the Order”) (RVR 01).
- 4.1.2. The purpose of the Order is to confer on RVR the necessary powers to construct, maintain and operate a heritage railway service along the route of the former Rother Valley Railway between Bodiam and Robertsbridge. This would enable the Kent and East Sussex Railway (“KESR”) to operate steam trains between the town of Tenterden and the main line railway at Robertsbridge, with intervening stops at Rolvenden, Wittersham Road, Northiam and Bodiam.
- 4.1.3. KESR owns and operates a railway which runs from Tenterden to Bodiam. It is understood that Rother Valley Railway Heritage Trust owns land (a) between the end of the line at Bodiam and Junction Road (the B2244) in Udiam; and (b) between the A21 and the new Robertsbridge Junction Station. KESR and Rother Valley Railway Heritage Trust do not own the section of former railway corridor, running from Junction Road (the B2244) in Udiam to Robertsbridge. This section, which is owned by my clients, is referred to by RVR as the “Missing Link”. The previous railway in this section has been completely removed, and as such would require full re-instatement should the Order be granted.
- 4.1.4. Planning permission for the 3.42km stretch between Udiam and Robertsbridge was granted by Rother District Council (RR/2014/1608/P) (RVR07). Pursuant to that permission, new sections of railway line have been constructed between Bodiam and the B2244, and the A21 and Robertsbridge Junction Station respectively, but still lack statutory authorisation for their maintenance and operation.
- 4.1.5. If confirmed, the Order would enable completion of the railway line across the Missing Link. It would authorise the permanent compulsory acquisition of the land, currently owned by my clients, which is required permanently for the railway, and the temporary use of land for purposes of construction and for maintenance during the specified maintenance period. There is also a category of land where RVR seeks rights of access, limited to surveys and investigations, necessary to ensure full compliance with the planning conditions.
- 4.1.6. The Order also would authorise crossings of the public highway and street works at the following locations:
- Northbridge Street (Robertsbridge);
 - A21 (Robertsbridge);
 - B2244 (Junction Road, Udiam);
 - A footpath (S&R 31) South from Church Lane, Robertsbridge; and
 - A combined footpath and bridleway (S&R 36b) south of Salehurst.
- 4.1.7. In addition, and linked with the Order, the proposals would also see the creation of private user worked crossings. Figure 4.1 below presents the proposed highway level crossings and the User Worked Crossings.

Figure 4-1 - RVR Proposed Level Crossings part of the TWA Order



- 4.1.8. Finally, the Order would provide statutory authority for RVR to maintain and operate the two recently constructed lengths of railway between the K&ESR railway at Bodiam and the start of the new railway at Junction Road, Udiam (Railway No.1), and between the A21 and the terminus at the new Robertsbridge Junction Station.

Proposed Operation of the Railway and the Level Crossings

- 4.1.9. My colleague Mr Clark, in Section 3.3 of his Proof sets out the detailed information with regards to the specific level crossing types proposed and the operation of the railway. It is not my intention to repeat that commentary, however I raise certain points below which will also have an influence on the surrounding highway networks.
- 4.1.10. Based on the economic impact report produced by Steer in September 2018 (RVR09), it is understood that the existing operation of the railway varies on a seasonal basis. In general, and prior to the COVID-19 lockdown, the railway operates between April and October with between 5 to 8 return journeys per day during these times and is in operation for approximately 160 days a year. For the purposes of my assessment, I consider the implications of up to 16 closures of the crossing per day, to take account of the fact that there will be two closures of the level crossings associated with each journey. Prior to the COVID-19 lockdown, there were a number of special events that are supplementary to the regular service, including an existing evening dining service operated by Kent

and East Sussex railway that would be extended to Robertsbridge. The service would finish around 23:00.

- 4.1.11. I note that in the recent narrative risk assessment material for the A21 (“A21 NRA April 2021”), provided on the 28 May 2021, reference is made to “up to 10 trains” a day. I would note that this could therefore create 20 level crossing closures crossing the 3 highways, however as it is unclear in the documentation what this number refers to, I have based my analysis on 16 closures as set out above in paragraph 4.1.10.
- 4.1.12. As a consequence of the COVID-19 lockdown, I understand that the railway has not been operational, but it is due to reopen on 22 May 2021 and will do so at a lower frequency.
- 4.1.13. I would highlight that Condition 21 of the existing planning consent (RVR007) (RR/2014/1608/P) precludes closure of the A21 level-crossing during peak travel times (defined as 0700-0900 and 1700 to 1900 Monday to Friday and on Bank Holidays).
- 4.1.14. As set out in Section 3.2 of my proof above, the various traffic surveys undertaken outline that the Bank Holidays record significant volumes of traffic outside of the “peak” travel times indicated in Condition 21. The Bank Holiday hourly flows are shown to be higher than traditional weekday commuter time periods. The data therefore outlines that on Bank Holidays the peak time periods are different and as such, restricting closures as per the condition would not have the benefit of reducing queuing impacts.
- 4.1.15. I understand that the intended design of the highway level crossings will be a full barrier CCTV design in an attempt to reduce highway risk.
- 4.1.16. Relevant to transport matters, and as set out in Section 6.4 of RVR’s Statement of Case (SOC) dated 10 May 2021, I understand that the crossings will be locally monitored by the train driver and that a signalman located in the nearest signal box will also view / oversee the road crossings by cameras. The bridleway crossing at Salehurst will be user worked.

A21 Barrier Timings

- 4.1.17. Throughout RVR submitted documentation there are widespread inconsistencies regarding the train speed and closure time of the level crossing in particularly, the level crossing on the A21.
- 4.1.18. The March 2021 submission documents, including the ES Updates, set out in Paragraph 6.3.3 of Chapter 6, advise that Temple Group (the authors of the chapter) have been advised by I-Transport regarding level crossing closure times and updated traffic data. It notes that a barrier closure time of 72 seconds has been assumed. From verbal discussions with Highways England, it is understood that this time had been agreed between the appellant, ORR and Highways England.
- 4.1.19. Highways England’s response to the Departures Submission (reference RVR/HE/02 Redacted HE Response to Departures Submission), also included within Appendix E gives acknowledgement of a 72 second assessment. The March 2021 ES Transport chapter does not reference these timings, and it is unclear as to whether this has therefore been assessed.
- 4.1.20. I was provided a Technical Note (HE_005 Redacted Technical Note on A21 Level Crossing Timings) on A21 Level Crossing Timings on 03 June 2021. This document, provides an explanation, undertaken by Atkins as to how the 72 seconds barrier time has been derived. In Section 4 of his evidence, Mr Clark explains the limitations of this and why it is considered to be an underestimate.

- 4.1.21. I note that the Atkins report sets out that a typical road closure time of 97 seconds (based on Network Rail requirements) could be expected. Atkins acknowledge that the calculations within the report outline *that a road closure time (72 seconds) may be possible by utilising modern technology and restricting the types of rolling stock that are permitted to operate over the level crossing.*
- 4.1.22. I highlight though that Atkins consider this closure to be a ‘minimum’ or ‘lowest achievable road closure times’. I also highlight that, as stated by Atkins;
If determined that minimal timings (circa 72 seconds) are required, specific consideration must be given to increased level crossing risk and lower functionality.
- 4.1.23. The above, as acknowledged by Atkins is caveated with the following, *“calculated timings will require further review following confirmation of the RVR train performance details, with any aspirations of further reductions to consider the potential increase in level crossing overrun risk and operational inflexibility.”*
- 4.1.24. Table 4-1 below sets out the various barrier closure times assumed by either organisation or report. As set out in Section 4 of Mr Clark’s proof, it has been calculated that as a minimum the barrier time would be between 73 and 85 seconds.

Table 4-1 - Barrier Closure Times Reported across RVR documentation

Organisation	Scenario	Barrier Closure Time (s)
RVR Original	Assumed Time	53*
RVR 2021	Minimum road closure time**	72
ORR	Best Case Scenario	51
	Sensitivity Test	112
Mott Macdonald	Best Case Scenario	55
	Sensitivity Test	110
WSP	Forecast Minimum	73-85

*see RVR schematic plan in Figure 4.2 or within the ORR Submission Pack

**As set out by Atkins report – HE_005

- 4.1.25. The barrier closure times presented in Table 4-1 highlight inconsistencies in the approach taken by RVR and its consultants.
- 4.1.26. As part of the analysis within this proof, I have tested a range of closure times between those times presented in Table 4.1. Section 7.3 of this proof identifies the potential implications as a result of varying closure times. A range has been assessed as it is highly unlikely that the crossing barrier down time will be the same each time the barrier is closed.

Line Speed and Infrastructure

- 4.1.27. Mr Clark details within his Evidence the operational details of the level crossings. Whilst the barrier timings have been reviewed above, these will be directly related to the assumed speeds of the trains on the track. As such, changes in line speed and / or not factoring for acceleration or deceleration of

trains could have an impact on the journey time when passing through the crossings and therefore also extend the barrier down time.

- 4.1.28. Section 7 of Mr Clark's proof highlights the considerable concerns between the user worked crossings interacting with the other highway's crossings in the vicinity. His proof identifies that RVR proposals and suggested procedure fails to address the significant consequence arising from blocking of user worked crossings UWC/01 and UWC/02, such as by conflict with agricultural vehicles or obstruction by farming debris from spilt loads on the line, and potential extensive traffic delays to the local and strategic road networks.

5 RELEVANT POLICY AND DESIGN STANDARDS

5.1 ORR'S POSITION ON LEVEL CROSSINGS

- 5.1.1. According to ORR, there are just under 5,800 level crossings in use on the mainline rail network in Great Britain with another estimated 1,500 on heritage and minor railways.
- 5.1.2. The ORR states that Network Rail, operators of heritage and light railways and those who control depots have an explicit legal duty under the Health and Safety at Work Act 1974 (HSWA) to minimise risks arising on their networks, so far as is reasonably practicable.
- 5.1.3. The ORR acknowledges that level crossings present a risk to the railway and users of the crossing.
- 5.1.4. It is important to remember that the A21 is a key link in the Strategic Road Network (SRN) in the South East. Highways England as the body responsible for the management of the A21 have identified that a series of highway safety improvements are to be delivered for this route and that a review of capacity improvements will be considered by its "route strategy". It is clear that the route is a sensitive one, therefore a through a review of the risks and operation of the level crossing is of utmost importance.
- 5.1.5. As my proof focuses on the transport implications, I will not review the ORR design standards in detail and instead refer to my colleague Mr Clark's proof, which discusses the ORR specifics in more detail within his level crossing analysis and Section 9 of his proof.
- 5.1.6. I would note that National policy on level crossings is reflected in the ORR Railway Safety Publication 7 from December 2011: Level Crossings: A guide for managers, designers and operators:

Risk control should, where practicable, be achieved through the elimination of level crossings in favour of bridges, underpasses or diversions. Where elimination is not possible, ORR aims to ensure that duty holders reduce risk so far as is reasonably practicable and in accordance with the principles of protection.⁴

- 5.1.7. Since heritage train speeds are lower the risks associated with level crossings on heritage railways are different but are still significant and therefore the strategy set out by RVR needs to meet ORR requirements. Indeed, heritage railways need to manage crossings to the same legal standard as their mainline counterparts, as the risk faced by individual users of crossings is akin to that run by users on the main line network.

ORR UPDATED GUIDANCE – CONSULTATION DRAFT

- 5.1.8. ORR have published a consultation on their updated guidance on level crossing safety (20 January 2021). At the time of writing, the updated guidance is still going through the consultation process. The updated guidance does still advocate closing level crossings and eliminating risk but set out an updated review to reflect latest policy.

⁴ https://orr.gov.uk/data/assets/pdf_file/0016/2158/level_crossings_guidance.pdf

- 5.1.9. With regards to risk factors, ORR highlight in paragraph 19. *“...that a level crossing design that minimises cognitive demands and places as little onus as possible on the user to take decisions about when it is safe to use the crossing is preferable.”*
- 5.1.10. Within the consultation draft, of relevance to this proof, more detail on how to approach the cost benefit case if the costs of grade separation are disproportionate and substantially outweigh the benefits/impacts although it is clearly noted that each crossing is to be considered on a case by case basis.
- 5.1.11. The draft guidance also places increased emphasis on technological solutions such as Obstacle detection.
- 5.1.12. In relation to new level crossings that are linked with older railway lines the draft guidance states:
26. Proposals for new level crossings are rare, but projects to reinstate old railways may include proposals to reinstate a level crossing which previously existed on the route. In principle, ORR does not support the creation of new level crossings where there is a reasonably practicable alternative, and we encourage alternatives such as diversions, bridges or tunnels, to be fully explored and delivered where reasonably practicable.
- 5.1.13. It should be noted that the RVR proposals do not fit within this consideration as no level crossings were ever located on the A21 Robertsbridge bypass. This is because, at the time the railway line was dismantled, the A21 in its current form was not present. Consequently, although the RVR proposals would reinstate the old railway, this is not a case where the crossing would be “reinstated”, it would be a new level crossing on the SRN.

5.2 NPPF AND RELEVANT PLANNING / TRANSPORT POLICIES

National Planning Policy (RVR/HE/06)

- 5.2.1. An updated National Planning Policy Framework (NPPF) was published in February 2019. The document seeks to reduce the complexity and improve the accessibility of the planning system, whilst protecting the environment and encouraging growth in a sustainable manner.
- 5.2.2. The document’s overarching objective is to achieve sustainable development through economic, social and environmental consideration. These should be delivered throughout the preparation and implementation of plans but should not be the criteria against which every decision can or should be judged by.
- 5.2.3. The NPPF highlights in Paragraph 108 that developments should only be considered if certain elements are considered acceptable. The policy states -
“In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location
b) safe and suitable access to the site can be achieved for all users; and
c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree “

- 5.2.4. Promoting sustainable transport is key to the success of any development and transport issues should be considered from the earliest stages of plan-making and development proposals. Paragraph 109 states:

“Development should only be prevented or refused on highways ground if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe”

Local Planning Policy

- 5.2.5. The current Rother District Local Plan (adopted in 2006) includes considerations for the proposed Scheme. Policy EM8 indicates that an extension to the Kent & East Sussex Steam Railway from Bodiam to Robertsbridge, along the route identified on the Proposals Map, will be supported, subject to any proposal meeting the following criteria:

- 1) *it must not compromise the integrity of the floodplain and the flood protection measures at Robertsbridge;*
- 2) *it has an acceptable impact on the High Weald Area of Outstanding Natural Beauty; and*
- 3) ***it incorporates appropriate arrangements for crossing the A21, B2244 at Udiam, Northbridge Street and the River Rother”.***

- 5.2.6. I consider the relevance of this Policy later within my evidence.

- 5.2.7. In September 2014 Rother District Council adopted their Local Plan Core Strategy document, document has a pivotal role in delivering development and sets out the council's vision and objectives over the period up to 2028. Chapter 5 outlines a vision for Rother in 2028 it is as follows

“Rother District is recognised for its high quality of life, where there is a strong emphasis on community life. This has been achieved by continuing to support and further develop vibrant, safe, balanced and inclusive communities.”

- 5.2.8. The Core Strategy outlines a top ten strategic development issues in particular to Rother district they are seen as

- *“securing economic development*
- *delivering affordable housing to meet all needs*
- *carbon reduction and adaptation to climate change*
- *maintaining safe places to live*
- *supporting strong sustainable communities*
- *planning for an ageing population*
- *better access to jobs and services*
- *conserving Environmental Quality*
- *better facilities for sports, leisure and culture*
- *managing uncertainties”*

- 5.2.9. Chapter 18 of the local plan core strategy focuses on Transport and Accessibility the overall strategic objective for transport in Rother states:

“To provide a higher level of access to jobs and services for all ages in both urban and rural areas and improve connectivity with the rest of the region.”

- 5.2.10. Policy TR1 management an investment in strategic accessibility highlights the improvements needed to the strategic infrastructure that would strengthen the Rother region. The policy will give priority to improve connectivity along key investment and transport corridors.
- 5.2.11. Within the integrated transport section of chapter 18, road safety is highlighted as indicators demonstrate that the accident rate in Rother is significantly worse than the regional and national average. This has led to the promotion of road safety through education and design being included in policy TR2 integrated transport.
- 5.2.12. Policy TR3 of the local plan core strategy looks at the access to new developments, the policy states that
- “Development will be permitted when mitigation against transport impacts which may arise from that development or cumulatively with other proposals is provided”*
- 5.2.13. Further to this the relevant planning/highway authority will seek funding contributions for improvements to infrastructure to facilitate highway capacity and safety in particular.

Emerging Rother District Local Plan 2019 – 2039

- 5.2.14. Rother District Council is currently undergoing the process to begin working on the new Local Plan that will cover the period 2019-2039. The new Local Plan will outline the spatial strategy for the region and the areas for new developments, the document will focus on infrastructure improvements to improve connectivity. Whilst still being reviewed, the new local plan period could be a material consideration given the uncertainties in the forecast year impacts on the A21.

Local Transport Policy

- 5.2.15. The East Sussex Local Transport Plan 3 (LTP) was published in 2011 to provide a direction for planning and providing the transport infrastructure and services in order to deliver sustainable economic growth. The two overarching aims of the document over its 15-year lifespan are “improve economic competitiveness and growth” and “improve safety, health and security”. Alongside the LTP a four-year Local Transport Plan Implementation Plan is produced, the aim of the document is to implement the planned transport infrastructure improvements to the county.
- 5.2.16. Improving safety is a theme that runs through the LTP document. The Transport Infrastructure section of the Issues/ Challenges and Opportunities chapter states that:
- The inconsistency in the standard of our strategic road network is a real challenge to the efficacy and safety of our network and is seen as a major constraint to achieving economic growth and improving our connectivity with the rest of the region.*
- 5.2.17. Further in this chapter road safety is highlighted:
- Road safety is a key concern of residents. In 2010, 321 people were killed or seriously injured (KSI) on our roads.*
- 5.2.18. I note that the LTP identifies that The Battle, Rye and Rural Rother region suffers from a particularly high road casualty record with 428 road casualties out of 2,187 county wide in 2008.

5.3 DEPARTMENT FOR TRANSPORT – CIRCULAR 02/13 (RVR/HE/06)

- 5.3.1. This Circular explains how Highways England will engage with the planning system to fulfil its remit to be a delivery partner for sustainable economic growth whilst maintaining, managing and operating a safe and efficient strategic road network.
- 5.3.2. The Circular provides details on the assessment approach, including the forecast flows to be used and future scenarios for consideration. The document also sets out the duty of any proposal to comply with relevant design standards, in this case, as set out in the DMRB.
- 5.3.3. Of particular relevance is paragraph 11 of Circular 02/2013 which states: *“Local authorities and developers will be required to ensure that their proposals comply in all respects with design standards. Where there would be physical changes to the network, schemes must be submitted to road safety, environmental, and non-motorised user audit procedures, as well as any other assessment appropriate to the proposed development. DMRB sets out details of the Secretary of State’s requirements for access, design, and audit, with which proposals must conform.”*
- 5.3.4. I do not consider that the designs presented fulfil this criteria or that any evidence has been presented that confirms suitable agreements are in place. The state of design of the proposals is such that there can be no certainty about the cost and deliverability of the proposals and the land required for them, and the impacts of the scheme.
- 5.3.5. In terms of assessment approach paragraph 25 of the circular sets out *that “The overall forecast demand should be compared to the ability of the existing network to accommodate traffic over a period up to ten years after the date of registration of a planning application or the end of the relevant Local Plan whichever is the greater. This is known as the review period.”*
- 5.3.6. I believe there is a level of uncertainty over the future forecasts presented in the RVR analysis and as such the applicant has not adequately set out the potential impacts of the proposals.

5.4 DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB)

- 5.4.1. The Design Manual for Roads and Bridges (DMRB) is a suite of design documents providing the design standards for roads that fall under the jurisdiction of Highways England forming the Trunk Road network. It does not set out the requirements for level crossings. However, DMRB is relevant to associate changes to surrounding highways and non-motorised links / users that would be impacted by the RVR proposals.
- 5.4.2. It is important to consider that any proposals also comply with the design and assessment criteria set out in the DMRB or set out via agreed mechanisms (such as departures from standards) where they do not. In the case of the A21 crossing, as such an item of works is not covered by the DMRB, a departure application shall be submitted. At the time of writing of my Proof, the application for the Departure from Design standards had been submitted and a response provided by Highways England to this submission (reference RVR/HE/02 Redacted HE Response to Departures Submission), also provided at Appendix E and confirms that there are omissions from the submission that prevent an informed decision from being made and specific areas are required to be addressed. 33 specific areas are highlighted requiring further action before the departure can be reconsidered.
- 5.4.3. It is a requirement of DMRB that a Walking, Cycling and Horse Riding Assessment (WCHAR) should be carried out in accordance with GG142.

- 5.4.4. Following discussions with Highways England, I was provided with a WCHAR prepared by I Transport on behalf of RVR on 03 June 2021, (reference RVR/HE/04 Redacted Walking Cycling and Horse-Riding Assessment). This document was originally completed in January 2021. Given that this report was provided four days before exchange of proofs (which includes a weekend) – I have not had enough time to review this document in detail and consider its implications. I note that the WCHAR is focused on the A21 level crossing, being located on the SRN, and as such I have seen no updates or consideration on the other proposed crossing locations.
- 5.4.5. In accordance with DMRB GG119, the Applicant should carry out a Stage 1/2 Road Safety Audit (RSA). In compliance with DMRB, the Audit Brief and Audit Team must be approved by Highways England's Project Sponsor and Highways England's Project Sponsor must direct the conduct of the RSA. A specific comment of the departure response is that the RSA should now be carried out.
- 5.4.6. There is no information on whether the Applicant is planning to re audit the other crossing points. DMRB guidance GG119 states that Stage 1 and stage 2 RSAs shall be repeated if the previous RSA for the relevant stage is more than 5 years old.
- 5.4.7. RVR had submitted a Stage 1 RSA (undertaken in Jan 2014) – as document RVR44). However, considering this is more than five years old, it would be expected to be updated in order to meet the requirements of the DMRB. I understand that Highways England and RVR are currently discussing a RSA1 Brief for the A21, however, as confirmed by Highways England - this has not been shared as it is still in draft.

SUMMARY

- 5.4.8. The above section sets out my review of ORR, National (NPPF), Local (East Sussex) policy, relevant Design Manual for Roads and Bridges (DMRB) design guidance and DfT Circulars pertaining to transport related matters that should be reviewed against the RVR proposals.
- 5.4.9. For reference, I have provided a further review of these policies and the RVR proposals in section 7.7 of this Proof of Evidence.

6 CURRENT POSITION OF STATUTORY AUTHORITIES

6.1 INTRODUCTION

- 6.1.1. This section outlines the current position of the Statutory Authorities on the proposals to implement the three level crossings and the additional private users' crossings.

6.2 ORR'S CURRENT POSITION

- 6.2.1. Following RVR's submission of additional documents in January 2020 (RVR 75), the ORR provided a Statement of Case on 31 January 2020. Based on the information submitted to ORR by the applicant at that time, it was ORR's view that the proposed level crossings across the highway network (A21, B2244 and Northbridge Street), in terms of railway safety, meet the exceptional circumstances test and no alternative to the level crossings is reasonably practical. Mr Clark however disagrees with this position, as is set out within his evidence.
- 6.2.2. Within the 2020 SOC, ORR set out its preference to avoid the private User Worked Crossings and recommended that these should be avoided if at all reasonably practical. ORR found that there is not enough justification for the at grade bridleway crossing to meet the exception test and have also asked for the removal of all the private user worked crossings due to the potential safety implications where feasible. Furthermore, within paragraph 36, the ORR continue to state the following;
- ...We acknowledge that there are wider issues related to highway safety that we are not competent to comment on, and various environmental impacts of alternatives to crossings that we are also unable to offer a view on, and that it is quite properly the role of the Inquiry to consider the wider issues.*
- 6.2.3. WSP sent a clarification letter with a series of questions, on the 17 March 2020 to the ORR following their Statement of Case submitted in January 2020. The letter outlines several points for clarification which WSP believe require further discussion and is included in Appendix B. WSP received a response from ORR with answers to these points via letter sent by email on 25 March 2020. This response is also included within Appendix B.
- 6.2.4. As I understand matters, ORR have clarified that they are not the relevant authority to consider the implications of the introduction of the highway level crossings as it relates to users of the public highway, specifically in respect of the A21, Northbridge Road and B2244 Junction Road crossings. As it relates to the implications of the level crossing on the public highway, it is for the relevant highway authorities to provide their view to the TW&A Inquiry, in this case Highways England as it relates the A21 crossing and East Sussex County Council for the Northbridge Street and B2244 Junction Road crossings.
- 6.2.5. As I explain later within this section, it is clear that at the time of writing Highways England continue to object to the scheme and that in the case of East Sussex County Council, insufficient evidence has been submitted to provide details that conditions can be discharged relating to the crossings.
- 6.2.6. As part of the information provided to me on the 28 May 2021, this included a document from ORR with an addendum to their Statement of Case. The ORR SOC Addendum appended multiple documents and information that had been provided to the ORR from RVR in February 2021 and throughout April 2021. As set out in paragraph 6 of the ORR SOC Addendum the provision of the

additional documentation has resulted in ORR clarifying their position on three points; the control arrangement for highway level crossings, the bridleway and the user worked crossings.

- 6.2.7. With regards to the public highway level crossings, the ORR SOC Addendum sets out that the information has removed ORR's previous concerns, originally set out in paragraph 35 of the SOC.
- 6.2.8. With regards to the bridleway, the ORR SOC Addendum outlines that the ORR consider that the matter for whether a bridge can be practically delivered should be a consideration for the Inquiry. The ORR maintain, in paragraph 15 of the SOC Addendum that "not having a level crossing will always [be] a safer solution", however acknowledge that this does not mean risks could not be reduced to a tolerable level. ORR set out that a holistic view is required of the surrounding issues for the bridleway and it is for the Inquiry to decide if the residual risk of an at-grade crossing is outweighed by the benefits of the creation of the railway.
- 6.2.9. With reference to the user worked crossings, the ORR SOC Addendum maintains that ORR's position remains that they prefer that user-worked accommodation crossings are avoided by RVR and landowners come to agreement on alternatives, but if that is not possible, for the number of UWC's to be kept to an absolute minimum. ORR set out that RVR acknowledge that alternatives to crossings would be considered first and only where not reasonably practicable would at-grade crossings be considered. ORR will apply a risk-based approach to the assessment of any crossings that are required.
- 6.2.10. I acknowledge that ORR's position has been updated and I note that ORR do not comment on the impact on highway safety as a result of the proposals. For the reasons presented within this Proof I consider that the application will give rise to significant safety risks that currently do not exist and will detrimentally impede upon the flow of traffic on the SRN.

6.3 HIGHWAYS ENGLAND / HIGHWAYS AGENCY

- 6.3.1. Highways England is the government company charged with operating, maintaining and improving England's Motorways and major A roads⁵.
- 6.3.2. RVR initially approached the then Highways Agency about the proposed level crossing on 21 March 2012 and on 23 March 2012 provided documents including a report dated October 2011 titled '*Rother Valley Railway Proposed Level Crossings Traffic Impact Study*' prepared by Mott Macdonald (RVR 32) and a letter dated 20 January 2012 from ORR.
- 6.3.3. It should be noted that, in January 2013 (when considering the planning application) the Highways Agency appointed Parsons Brinkerhoff to review the highways and traffic assessment. At that time, they raised concerns that the introduction of the new level crossing and associated reduction in speed limits.

⁵ <https://www.gov.uk/government/organisations/highways-england/about>

- 6.3.4. I note that the then Highways Agency issued three successive holding objections and requested additional information to fully assess impacts on traffic flows and road safety matters in December 2013 and May 2014.
- 6.3.5. In April 2015 the status of The Highways Agency changed, when it became Highways England. This change saw Highways England become a Government owned company instead of an executive agency for the Department for Transport.
- 6.3.6. Highways England's Statement of Case outlines the role difference between Highways England and the Highways Agency; where it states.
- "Access to or from a trunk road in England must not be constructed, formed or laid out without the consent of the highway authority for the trunk road".* In addition, the Highways Agency could direct refusal of an application, Highways England cannot, other than in exceptional circumstances.
- 6.3.7. In their e-mail 27 March 2015, the Highways Agency noted that following the reorganisation to Highways England they were no longer permitted to issue holding directions. This e-mail specifically recorded that they had still not at that date received all the information previously requested. This correspondence indicates that Highways Agency's clear preference would have been for options other than the level crossing to be considered. Nonetheless, Highways England indicated that, because they were no longer able to direct refusal, their objection was withdrawn, subject to conditions which effectively required RVR to submit the information which had still not been received. These conditions are summarised below: -
- Condition 19 – Level Crossing Maintenance Plan;
 - Condition 20 – Level Crossing Design & Departures from Standard;
 - Condition 21 – Restrictions on the Level Crossing Operating Times; and
 - Condition 22 – Requirements in respect of Insurance.
- 6.3.8. I find Highways England's position at that stage difficult to understand. The fact that Highways England had lost its power to direct refusal did not change the underlying issues in relation to safety, nor did it deprive them of the power to object and recommend refusal. Critically, it is clear from correspondence from the Highways Agency / Highways England in 27 March 2015 in response to the planning application that the concerns which had previously led the Highways Agency to direct refusal had not been addressed, but had simply been moved off to be dealt with by way of relevant planning conditions, supported by three Informatives.
- 6.3.9. For the reasons outlined further in this proof, I consider that it has not been demonstrated that these conditions are capable of being discharged.

HIGHWAY ENGLAND'S OBJECTION TO THE TWA ORDER

- 6.3.10. At the time of writing this Proof, I understand that Highways England maintains its Order Objection as set out within their Statement of Case (20 September 2018). It is understood that Highways England were reviewing several documents received from the Applicant in the beginning of 2020.
- 6.3.11. From my review of the Highways England Statement of Case, they object to the Order for the following reasons:
- a. Highways England considers that the installation of a level crossing on the A21 will be detrimental to safety on the A21;

- b. Highways England considers that the installation of a level crossing on the A21 will adversely impact the free movement of users along the A21;
- c. The Environmental Statement (ES) accompanying the application is out-of-date and deficient in respect of traffic and transportation matters.
- d. The design of the proposed railway where it crosses the A21 Trunk Road does not conform to the Design Manual for Roads and Bridges (DMRB) contrary to the policy in paragraph 11 of Circular 02/2013.
- e. There are no protective provisions in the draft Order to protect the reasonable and legitimate interests of Highways England were the Order to be made.
- f. The draft Order provides that the A21 would be temporarily stopped up, thus denying the right of the public to use it and for utilities to retain their plant in it.

6.3.12. The conclusion of the Highways England 's Statement of Case (paragraph 44) outlines;

The draft Order as submitted and the works it proposes to the A21 Trunk Road are inadequately prepared such that there are compelling reasons to believe that the works proposed in the draft Order would result in severe harm to the safe and effective operation of the SRN. Therefore, Highways England continues to object to the proposed development on the grounds stated in this Statement of Case. The Order should not therefore be made by the Secretary of State.

6.3.13. I am aware that the Applicant and Highways England have continued to have further discussions on the proposals to progress the A21 design. On numerous occasions (and notably at the first Pre-Inquiry Meeting) my clients have requested to be kept informed of the nature of these discussions, and to be supplied with any information being submitted by the Applicant to Highways England. As set out in Section 2.3 of my proof, despite these requests, we have been kept almost completely in the dark until very recently where additional information has now been drip fed.

6.3.14. I wrote to Paul Harwood at Highways England on 19 April 2021 to highlight where my clients and I continue to have areas of concern. The letter is attached to this Proof within Appendix D. A further letter was issued to request to discuss matters, as per my correspondence of 21 May 2021, also provided at Appendix D. Following this, Paul Harwood provided an email response on the 27 and 28 May 2021 where a meeting (between Highways England and WSP) was arranged for the 10 June 2021.

HIGHWAYS ENGLAND – REVIEW OF DEPARTURE FROM DESIGN STANDARDS APPLICATION

6.3.15. I am aware that a departure from standards application has been submitted to Highways England pertaining to the introduction of the level crossing of the A21. A response to this submission has been prepared by Highways England (RVR/HE/02 Redacted HE Response to Departures Submission), dated 26 May 2021, provided at Appendix E.

6.3.16. The outcome of this process to date is that Highways England consider that there are omissions from the submission which prevent an informed decision from being made. The submission has been returned to be reworked with 33 specific areas required to be addressed. Whilst I do not list all of these points, the substantive items I consider requiring detailed consideration by RVR are as follows: -

- Designs to be amended to adopt the principles of CD 123 Geometric design of at grade priority and signalised junctions for example in terms of visibility, sight stopping distance;
- The impact of the A21 crossing must be considered in combination with the two crossings on the local highway network, due to traffic potentially diverting away from the A21
- Evidence of the consultation and agreement from Highways England concerning the changes to the A21;
- The designer to provide evidence of consultation with Highways England regarding the relocation of the 40 mph speed limit and compliance with DfT Circular 01/2013 Setting Local Speed Limits;
- Confirm that visibility towards signage and new roadside assets can be achieved;
- Undertake overtaking assessment and consult with the relevant Highways England operations team in relation to the reduction in overtaking opportunities to the south of the Northbridge Roundabout;
- Additional surveys of walkers, cyclists and horse riders to be carried out during the warmer months;
- The impact of the level crossing should consider the additional visitors to the area that are claimed as providing economic benefit;
 - Mitigation measures to be identified to address additional queuing arising from the level crossing for both north and south bound traffic, in particular to deal with any queues extending through the Northbridge Roundabout;
- Provide evidence of consultation with relevant environmental bodies on their preferred option of crossing type;
- Update the Safety Risk Assessment (SRA) to include the assessment of the following key points
 - Hazards affecting cyclists and walkers
 - Consideration of the changes to the vertical alignment of the A21 to that of a higher design speed
 - Comparison of risk between the existing situation and the risks to users of the A21 with the crossing in place
 - A comparison of risk between the existing situation and the risks to users of the A21 assuming grade separated level crossing options
- Provision of evidence that RVR contractors and volunteers have suitable experience and expertise to enable them to work on the SRN, including previous experience of installing a level crossing over the SRN; and
- Undertake a final Stage 1 Road Safety Audit.

6.3.17. Given the extent and nature of the further points raised, it is my view that there are a significant number of matters that require further work from RVR, with outcomes that cannot be prejudged.

6.3.18. As confirmed by Highways England at the Pre-Inquiry Meeting of 19 May 2021, the current position remains that their objection still stands. Following receipt of the response to the departure application, I understand that this position has not changed.

6.3.19. I acknowledge that Counsel for Highways England confirmed, during the May 2021 Pre-Inquiry Meeting, that should the departures submission be accepted, it would be likely that Highways England would remove their objection to the TWAO. As set out in my evidence throughout this proof, I believe there are insurmountable hurdles to reach this position, especially with regards to safety and traffic flow on the A21.

- 6.3.20. As discussed further in Section 7 of this Proof, I therefore agree with Highways England's previously communicated concerns as set out in their current SoC, particularly in respect of the implications on highway safety to users of the A21 and the adverse impact on the free flow of traffic along this route.
- 6.3.21. The submission of an application concerning a Departure from Design Standards of the DMRB confirms that the A21 crossing could not be provided in a form that accords with the DMRB. In the absence of the outcome of this submission, it remains the case that the scheme is in contravention of Circular 02/13 and there is no certainty that the departure application will be satisfactorily resolved.

HIGHWAYS ENGLAND – DRAFT STATEMENT OF COMMON GROUND WITH RVR

- 6.3.22. Following the Pre-Inquiry Meeting of 19 May 2021, RVR shared a draft Statement of Common Ground (SoCG) that had been prepared by their consultants I Transport for agreement with Highways England (reference RVR/HE/03 Statement of Common Ground_Highways England).
- 6.3.23. Highways England provided a response on 31 May 2021, acknowledging that it was in draft and had not been agreed with the Applicant. The response document outlined further Highways England modifications and changes.
- 6.3.24. Upon review of that draft document, I note that whilst some items are agreed, a large number of elements, including the most important in terms of risk, safety and traffic impacts are still classified as "list of matters under discussion". At the time of this proof my understanding is that Highways England maintains its objection

6.4 EAST SUSSEX COUNTY COUNCIL'S CONSULTATION RESPONSE

- 6.4.1. It is worth noting that the response from East Sussex County Council (ESCC) of 14 April 2015 regarding the proposals, mentioned that as the A21 is part of the Trunk Road Network and is therefore the responsibility of the Highways Agency/ Highways England and ESCC will be guided by them in terms of any recommendation.
- 6.4.2. The latest ESCC response to the TWA order (REP-018) is dated 31 May 2018. ESCC are the authority responsible for the east and west arms of the Robertsbridge Roundabout (Church Lane and Northbridge Street respectively) and the B2244 Junction Road. As the local highway authority, ESCC are also responsible for the management of Rights of Way within the County.
- 6.4.3. Given the stance of Highways England it is assumed that ESCC will also review their stance, particularly given the requirement for the Designer to engage with ESCC in respect of the in combination implications of the A21 crossing on the local highway network, in particular as a consequence of drivers diverting away from the A21.
- 6.4.4. The 31 May 2018 email from ESCC outlines that at the time of the planning application submission (in 2014), that ESCC as highways authority raised road safety concerns about the construction of the level crossings on the two local roads that they manage (B2244 Junction Road and Northbridge Street).
- 6.4.5. ESCC summarise that at the time (of the original application) that ESCC would not object to planning permission being granted, subject to a number of planning conditions and the need for the

applicant to enter into a s278 agreement with ESCC to complete the necessary works on the highway.

- 6.4.6. The conditions set by ESCC relating to highway matters are as follows;
- Condition 16 A Construction Traffic Management Plan (CTMP) to be agreed prior to commencement and in operation throughout the construction phase;
 - Condition 17 Controlled delivery times of plant and materials during construction;
 - Condition 18 Queue length monitoring at the level crossings for Three years with remedial measures as necessary;
 - Condition 19 A Level Crossing Operational Management Plan to be submitted and agreed prior to commencement of development;
 - Condition 23 Stage 3 and 4 Road Safety Audits and remedial measures as needed;
 - Condition 25 Traffic calming on approach to the level crossings on the B2244 and C18 (Northbridge Street) including a speed limit review. All works to be agreed and secured by a s278 agreement; and
 - Condition 26 A Travel Plan to be agreed prior to opening of the railway and in operation on the railway being brought into use and in accordance with ESCC Travel Plan Guidance.
- 6.4.7. I have not seen evidence within the current TWA Order application that progress has been made to discharge any of the conditions with the exception of Condition 25 where I understand the process has commenced in respect of the introduction of a 40 mph speed limit on B2244 Junction Road.
- 6.4.8. This concern over lack of evidence is shared by ESCC, who in their 2018 email highlight that *“there is little detail relating to these highway conditions within the application for the TWA Order”* and that *“ESCC requires that either this information is submitted and agreed by ESCC prior to the Order being made or that confirmation is given that the conditions and requirements of the planning permission are still valid and will need to be agreed / resolved / in place in accordance with that permission”*
- 6.4.9. ESCC also highlight that with regards to public rights of way that *“the applicant’s intentions with regard to the continued use of these routes is not detailed in the submissions. Diversions and / or structures to allow continue access should be agreed with East Sussex County Council”*
- 6.4.10. I do not consider that RVR have addressed the concerns raised by ESCC sufficiently within the TWA Order application and submitted material. I do not believe that the Secretary of State can therefore find the Order acceptable, regardless of any planning permission that came before it if the local Authority have not been provided with enough certainty that the proposals can be suitably managed in line with the conditions.
- 6.4.11. It should be noted that ESCC response clearly demonstrates that residual safety, transport and access concerns remain and that substantial conditions would be required for the Order to proceed. The absence of an outright objection does not deter from the fact that these concerns continue to be raised, and that the applicant has not provided updated information to satisfy ESCC requirements.
- 6.4.12. It is unclear whether RVR has sought the opinion of ESCC on the acceptability of the proposals with regards to highway matters after May 2018. As detailed in Highways England’s response to the departures submission (26 May 2021), point 27 outlines the following; *“To support this submission and justification, the designer must provide evidence of consultation with the LHA and agreement*

from them that they are content that the safe operation of their network will not be compromised by road users diverting onto their network to avoid queuing from the operation of the level crossing.”

6.4.13. I have not seen evidence that RVR have engaged with ESCC in this regard.

6.5 SUMMARY

- 6.5.1. Upon reviewing the SOC and Addendum to SOC, I understand that ORR is satisfied that the proposals meet the exception test for new level crossings on the local highway network but cannot comment on further issues that must be considered for the other crossings. The ORR would prefer to avoid the private User Worked Crossings and recommend that these should be avoided if at all reasonably practical. With regards to the bridleway crossing proposal, I note that ORR considers that the practicality of delivering an alternative to an at grade crossing should be a point of consideration for the Inquiry.
- 6.5.2. It is noted that the Highways Agency (at the time) directed refusal for the initial planning application, and only changed this stance once the holding direction expired in March 2015 and they became the new organisation called Highways England.
- 6.5.3. As the Highways Agency, the organisation had powers to direct, and objected for the reasons that I have outlined above, ultimately directing refusal for the application. When the organisation became Highways England, and lost the power to direct refusal, it wrote in 2015 saying that it had still not received the information required in order to satisfy itself of the matters previously raised, but that since it no longer had the power to direct refusal, it withdrew its objection to the grant of planning permission subject to imposition of relevant planning conditions.
- 6.5.4. The fact that Highways England had lost its power to direct refusal did not change the underlying issues in relation to safety, nor did it deprive Highways England of the power to object. Critically, what is clear from Highways England's 2015 correspondence is that the concerns which had previously led the Highways Agency to direct refusal had not been addressed but had simply been moved off to be dealt with under the relevant planning condition. This is important because that condition has still not been discharged. For the reasons outlined further in this proof, we do not consider there is any realistic prospect that it could be discharged.
- 6.5.5. As set out in their current Statement of Case (SoC) Highways England objects to the TWA order proposals as discussed above. This position was reiterated at the Pre-Inquiry Meeting (19 May 2021).
- 6.5.6. I am aware that the Applicant continues to have discussions with Highways England and further technical information submitted, including a Departure from Design Standard application. Highways England have confirmed that further work is required in respect of the Departure application. Whether the further information requested can be dealt with during the Inquiry timetable remains to be seen. As such, I consider that the Highways England SoC remains valid.
- 6.5.7. ESCC response from May 2018, prior to the Highways England Statement of Case outlines that there are safety, transport and access concerns related to the proposals. These were raised from the original planning application stage and numerous conditions were recommended. ESCC have requested that the information required as part of those conditions is submitted and agreed to ESCC prior to the order, or at least confirmation sought that they remain applicable.

- 6.5.8. The response to the departure application requires further engagement between RVR and ESCC in order to assess the in combination impacts of the A21 crossing.
- 6.5.9. I have highlighted that there is no certainty that the proposed 40 mph speed limit change at B2244 Junction Road could proceed and that previous Stage 1 Road Safety Audits should be repeated given that they were carried out more than five years ago.
- 6.5.10. As noted above, Highways England SoC response came after ESCC's emails, and as ESCC has historically noted that they are guided by HE's stance, we assume that they will therefore review their position prior to the Inquiry.
- 6.5.11. Notwithstanding the position of ORR and Highways England, I still consider that the proposals will create increased unacceptable risks through the introduction of level crossings, where there are currently none, for users on the A21 (part of the SRN), Northbridge Street, B2244 Junction Road, footpath (S&R 31) and footpath and bridleway (S&R 36b). As set out in my proof, I maintain that the increases in queues will result in safety concerns alongside secondary impacts such as congestion and delay, which demonstrably outweigh any claimed benefits from the extension of a heritage railway line.

7 STATEMENT OF MATTERS

7.1 INTRODUCTION

- 7.1.1. This chapter sets out a review of the evidence presented by RVR with regards to the relevant Statement of Matters headings set out by the Inspector. Where appropriate, I reference additional data or evidence, which is attached to this Proof within the respective appendices.

7.2 2) THE MAIN ALTERNATIVE OPTIONS CONSIDERED BY RVR AND THE REASONS FOR CHOOSING THE PROPOSAL COMPRISED IN THE SCHEME

- 7.2.1. I have reviewed the recent March 2021 submission package from RVR and have not found any further information on the alternative options considered and as such base my review on the information contained within RVR 75 documentation.
- 7.2.2. The package of documents RVR submitted to ORR in January 2020 included the Arup A21 (T) crossing Feasibility Report (dated 4 July 2019, contained within RVR75 and as a standalone document as RVR76). The Arup Feasibility Report assesses four different options for the potential crossing at the A21 site, which have been considered alongside industry standard construction costs of each of the options to provide a “like for like” comparison.
- 7.2.3. In terms of alternative crossing options considered for the B2244 Junction Road, Northbridge Street / The Clappers or the Bridleway Crossing 36b at Salehurst points, these are not included in the Arup report. Instead, discussion has been provided by RVR themselves through their own reports, also contained within the package of information sent through to ORR. The document references (from RVR, contained with the ORR Submission pack of documents – RVR75) are as follows:
- B2244 Junction Road (Document 3),
 - Salehurst Bridleway (Document 4) and
 - Northbridge Street (Document 5).
- 7.2.4. This chapter presents a summary of the reviews of relevant documents and provides commentary on the alternatives considered for each of the crossing points.

A21 ALTERNATIVES CONSIDERED

- 7.2.5. The four options for the crossing of the A21 explored in the Arup A21 (T) crossing Feasibility Report (dated 4 July 2019) are as follows;
- Option 1 – At grade level crossing;
 - Option 2 – Rail under existing highway;
 - Option 3 – Rail over existing highway; and
 - Option 4 – Highway raised by 2m with rail under.
- 7.2.6. It is considered that the option analysis is unfairly favoured to Option 1, with the assessment of the alternative options failing to acknowledge the benefits arising from the alternative designs. The alternatives would negate the need for a level crossing, the associated increase in queue profile and impact on users of the A21. The importance of this point is reflected in the Highways England response to the Departure submission, which requires a comparative risk assessment to be

undertaken by the designer of the differences between the existing situation together with grade separated crossing options and the level crossing option.

- 7.2.7. Whilst not provided as part of the updated ES material submitted on 8 March 2021, I note that the departure application included an “A21 crossing options- environmental review” document prepared by Temple. This document provides a high-level subjective assessment of comparative impacts associated with the crossing, including transport considerations. It should be noted that this document does not consider detailed assessment of environmental effects as it relates to transport, such as severance, Driver stress and delay; Pedestrian delay and amenity; Cyclist delay and amenity and accidents and safety. It is focused solely on traffic from the operational perspective.
- 7.2.8. A review of the information contained within the submitted ES Chapter is discussed in this PoE in Section 7.8.
- 7.2.9. The below summary text, taken from Chapter 10 of the Arup feasibility report summarises the options;

Option 1, involving an at-grade level crossing, introduces the fewest engineering challenges and would involve the least disruption during construction. Construction costs are the lowest for this option. Full planning consent exists for this option, but further statutory authority is required and RVR would be required to demonstrate that there are exceptional circumstances to justify the creation of a new road level crossing.

Option 2 looks at the feasibility of taking the rail beneath the existing road. Principal engineering and approval challenges are around the railway being placed below the level of the adjacent River Rother. Mitigation of this is likely to require a long length of waterproof trough structure, with significant engineering challenges including maintenance of water flow paths during flood events and long-term pumping requirements. Planned flood relief culverts and bridges would not be possible with this option and the alternatives would be unlikely to be accepted by the Environment Agency. Disruption to local residents and road users is likely to be very significant with this option.

Option 3 considers the potential to take the rail over the existing road. This scheme introduces a sizeable length of elevated viaduct structure which would have significant impacts, both on cost and visual intrusion. Construction duration for this option is also likely to enhance the difficulties around gaining acceptance for this option from the relevant authorities. The structural works for this option are by far the most extensive than any of the other options.

Option 4, involving realignment of the existing highway, would result in a series of engineering works for both the road and rail. Extension of existing speed restrictions close to the roundabout would be required for this option, together with temporary highway diversions and prolonged construction durations.

- 7.2.10. The options considered with the Arup report fail, in their summary and review, to adequately take into account the benefits / reduction in queues and the disbenefits / increases in queuing / delay and congestion as a result of the level crossing. Options 2, 3 and 4 could be designed to safeguard the possibility of dualling or improving the A21 while Option 1 does not allow this provision.
- 7.2.11. Similarly, the report fails to acknowledge that Option 1 is also reliant on speed reductions to operate satisfactorily and safely. This is an important consideration when reviewing options as reflected with the Departure response which requires evidence that consultation with Highways England concerning the reduction in speed limit has taken place and the approach complies with DfT Circular 01/2013. It notes that Circular 01/2013 states that “Speed limits should not be used to attempt to solve the problem of isolated hazards, such as a single road junction or reduced forward visibility, for example, at a bend”. I consider that the proposal for the application of this speed limit change is in

direct response to difficulties in achieving appropriate Sight Stopping Distance towards the Level Crossing.

- 7.2.12. The option appraisal is inconsistent in its approach and in summary, whilst I acknowledge that the Option 1 would likely result in lower costs, I do not consider the option appraisal to be based on current, correct and unbiased data from the costs perspective. I therefore consider the options and feasibility report to be unsatisfactory.

B2244 JUNCTION ROAD (RVR DOCUMENT 3),

- 7.2.13. . The RVR prepared document on review of the options at B2244 is based upon the A21 Feasibility report undertaken by Arup's and is contained within document RVR75. RVR provides text on the following four options;
- Option 1 is an at-grade level crossing;
 - Option 2 is a tunnel under B2244 Junction Road;
 - Option 3 is a railway bridge over B2244 Junction Road; and
 - Option 4 raises B2244 Junction Road with a railway bridge over.
- 7.2.14. I would note that the narrative risk assessment attached to the B2244 Option review is undertaken by RVR and does not appear to have been reviewed by any third party / independent party.
- 7.2.15. The options report for the B2244 Junction Road crossing appears to be biased to Option 1 with unfair consideration and due diligence in the alternative options considered. I have not seen evidence provided that the safety concerns raised by the Arup Stage 1 RSA, or any new RSA, which would be required given the historic nature of the previous audit, have been addressed and would highlight that residual safety concerns remain on the introduction of a crossing, regardless of option, at this location.
- 7.2.16. I was provided with an updated narrative risk assessment (NRA) of the B2244 Junction Road crossing proposals on 28 May 2021. My colleague Mr Clark reviews these in more depth within his proof, but I would note that the document refers to the RSA1 audit (RVR43), which was completed in November 2013 and is now considered out of date according to DMRB.
- 7.2.17. One of the points raised in the RSA outlines that narrow bridges north and south of the level crossing location would result in a conflict between larger vehicles and opposing traffic, potentially resulting in the crossing being obstructed or vehicle / train conflict. In the February 2021 NRA, RVR state that to remove this concern, priority at the narrowing's for vehicles driving away from the level crossings would be established. I have seen no evidence as to the designs of that measure, nor any consultation with ESCC over the practicality and acceptability of delivery of such a scheme. In addition, I have seen no evidence or analysis of the combined effects on queues and journey times with a level crossing and priority traffic controls in place on this link. These have not been considered with the option review either.

SALEHURST BRIDLEWAY (RVR DOCUMENT 4),

- 7.2.18. The options reports for the Bridleway Crossing 36b at Salehurst, Robertsbridge, was completed by RVR and follows the same format as the B2244 Junction Road report. The options considered for the bridleway are as follows;
- Option one, involving an "at grade" level crossing;

- (b) Option 2, looks at the feasibility of taking the bridleway beneath the railway either parallel to or at right angles to the railway;
- (c) Option 3, considers taking the rail over the bridleway; and
- Option 4, would be a bridge carrying the bridleway over the railway.

7.2.19. The assessment contains the same wording on the timing (Section 6) and operation (Section 7) as per the B2244 Junction Road report, and the comments I have made above regarding those are pertinent to the Bridleway proposals. There is no breakdown of how the costs have been calculated. It is unclear how RVR have calculated the costs and without this information, no reliance can be placed on RVR's numbers.

7.2.20. I note within the updated narrative risk assessment (NRA) of the Bridleway, provided on 28 May 2021, is a response from Rother District Council that sets out their informal view that a planning application for a bridge would not be supported by the local planning authority. As set out in ORR's SOC addendum, ORR consider that the balance and acceptability of this option should be considered during the Inquiry. I do not consider that RVR have adequately assessed the potential implementation of a bridge structure as a viable alternative to an at grade crossing.

NORTHBRIDGE STREET (RVR DOCUMENT 5)

7.2.21. The options report for the Northbridge Street crossing was completed by RVR and follows the same format as the Bridleway and B2244 Junction Road reports. The options considered for the bridleway are as follows;

- Option 1 is an at-grade level crossing
- Option 2 is a tunnel under Northbridge Street
- Option 3 is a railway bridge over Northbridge Street
- Option 4 raises Northbridge Street with a railway bridge over

7.2.22. I note that within the updated NRA of the Northbridge street crossing, provided on 28 May 2021, reference is still made to the stage 1 RSA that was completed for Northbridge Street crossing proposals (RVR42). This was completed in 2013, and as such is considered to be out of date as set out in relevant DMRB guidance (GG119).

USER WORKED CROSSINGS

7.2.23. No details on the alternative options considered for the user worked crossings have been provided. I consider this to be a key omission and indicates that RVR have not reviewed other designs in depth, or if at all. Whilst I acknowledge that ORRs recent Addendum SOC outlines that RVR have stated that alternatives to crossings would be considered first and only where not reasonably practicable, would at-grade crossings be considered, with a risk-based approach to the assessment of any crossings that are proposed, I have seen no evidence that this review process has been progressed. This is considered further within Mr Clark's evidence.

SUMMARY

7.2.24. I have reviewed the available reports outlining the various alternatives considered at each of the proposed highway level crossings and the proposed bridleway crossing. I do not believe any such assessment has been undertaken for the user worked crossings.

- 7.2.25. In all reviews, there is an unfair approach adopted that focuses on the negatives of each alternative against the preferred at grade option, without taking due consideration of the benefits or reduction in risks that these other infrastructure would bring. Option 1 (at grade) would introduce queues and safety implications, which could be minimised through the implementation of other options.
- 7.2.26. Furthermore, I have not seen any comparison on the differences in risk or safety between the Options reviewed. It is evident that the introduction of an at grade level crossing would be the highest risk in terms of safety when compared to the other options for all of the crossings. The comparison documents fail to consider this within their reviews. I would consider that safety is the driving force behind decision making in terms of review hierarchy, with buildability and costs coming after. Highways England express concerns in terms of risk within their response to the departure application, requiring a comparative assessment between the existing situation with all A21 crossing types.
- 7.2.27. I acknowledge that in terms of costs, it is likely that Option 1 at each site would represent the lowest number. However, the financial justification must not take precedence over safety of users.
- 7.2.28. I have not seen any evidence on the alternatives considered for the user worked crossings. Considering ORR's continued position that user worked crossings should be avoided, or simply not used for fear of safety implications, I consider this to be a serious omission from the TWA order material.

7.3 3A) IMPACT OF THREE NEW LEVEL CROSSINGS ON SAFETY, TRAFFIC FLOWS, AND CONGESTION PARTICULARLY IN RELATION TO THE A21 AND FUTURE PLANS FOR THIS ROAD

IMPACT OF LEVEL CROSSINGS ON TRAFFIC FLOWS AND CONGESTION

- 7.3.1. This section provides commentary on the impact of existing and future traffic flows on the Level Crossings with particular focus on the A21.

Forecast Traffic Flows

- 7.3.2. This section forecasts the future year traffic flows on the A21. Whilst vehicular flow increases would be expected on the B2244 Junction Road and Northbridge Street by way of background growth, as RVR have not provided confirmation on any updated assessment assumptions for these crossings I have limited my review to the A21 only. This allows for particular focus on the A21 as well as the existing queues at the roundabout and the impact this will have on the operation on the level crossing.
- 7.3.3. This section also outlines the operation of the level crossing and the forecast queuing resulting from the closures in the PM peak, during a weekday and at the weekend. The proposed timetable for RVR, set out in Appendix D of RVR34 outlines that PM peak hour services will be running. Whilst condition 21 prevents the A21 level crossing from being lowered between the hours of 1700 – 1900, I have not seen an updated alternative timetable proposed and have therefore considered this document in my review. If Condition 21 is applied, it remains the case that it may be necessary to activate the A21 crossing in order to allow trains to either leave or arrive at Robertsbridge in the event that trains are delayed for whatever reason. If this is the case, there would be a breach of Condition 21.

- 7.3.4. The current Rother District Council Core Strategy Local Plan covers development up to 2028, so the forecast flows provided in the analysis are relatively close to this – however, as set out in Circular 02/2013 “*The overall forecast demand should be compared to the ability of the existing network to accommodate traffic over a period up to ten years after the date of registration of a planning application or the end of the relevant Local Plan whichever is the greater. This is known as the review period.*” This would suggest that as a minimum, a future year of 2028 should be applied. My assessment considers a 2027 future year for consistency with the Mott Macdonald analysis.
- 7.3.5. It is also worth noting that Rother District Council have begun early preparatory work on a new Local Plan that will cover the period 2019-2039. Whilst still being reviewed, the new local plan period could be a material consideration given the uncertainties in construction programme and the resulting forecast year impacts on the A21.
- 7.3.6. In order to provide a comparison between the Mott MacDonald traffic flows included in the Addendum to Traffic Impact Study, WSP has factored the 2018 baseline surveyed traffic flows on the A21 to 2027 using TEMPRO version 7.2B with National Transport Model (NTM) factors.
- 7.3.7. To calculate growth factors for the A21, the data for the region of East Sussex has been selected in TEMPRO. The factors for a ‘Rural Trunk’ road type have then been applied to calculate the overall traffic growth predicted. The May Bank Holiday assumes the same growth factor as an average Sunday. The growth factors and application of those factors to the relevant surveyed flows of the A21, can be found in Appendix C of this proof.

EXISTING QUEUES AT THE A21 NORTHBRIDGE ROUNDABOUT

- 7.3.8. To understand the existing queuing at the A21 Robertsbridge Bypass and on Northbridge Street roundabout, WSP undertook a queue survey on the approaches from the A21 to the roundabout. The surveys were undertaken for a week between 23rd-29th May 2018. Table 7.1 presents the average and maximum queue across various key time periods at the roundabout. I also consider the forecast queues at a future year of 2027. A full breakdown on the existing queuing on the A21 is presented in Appendix A. Whilst condition 21 would prevent the closure of the level closure between 1700 – 1900, it remains the case that it may be necessary to activate the A21 crossing in order to allow trains to either leave or arrive at Robertsbridge during this time in the event that trains are delayed for whatever reason. If it is necessary for the crossing to be activated between 1700-1900, this would mean the operator would be in breach of condition 21. I therefore have reservations as to the practical enforceability of this condition.

Table 7-1 – Northbridge Street / A21 Roundabout - Average and Maximum queue (vehicles) - 2018

	Direction of Travel	PM Peak (17:00-18:00) (Metres)	Weekday Off Peak (10:00-17:00) (Metres)	Weekends (10:00-18:00) (Metres)
Average hour Queue	Northbound	1 (6m)	1 (6m)	1 (6m)
	Southbound	3 (17m)	2 (12m)	2 (12m)
Maximum Queue	Northbound	9 (52m)	18 (105m)	11 (63m)
	Southbound	10 (58m)	27 (155m)	16 (92m)

- 7.3.9. The maximum queue in a northbound direction is 18 vehicles which occurs during the Weekday off-peak. This queue equates to approximately 105m (assuming an average vehicle length of 5.75m). As the proposed level crossing on the A21 is approximately 115m south of the roundabout this will lead to vehicles being forced to slow down and potentially stop on the level crossing as they approach the back of the queue. This could cause serious safety impacts with the barriers being closed on a vehicle. The maximum queue in a southbound direction is 27 vehicles which also occurs during the Weekday off-peak. This queue equates to a distance of 155m which if it occurred at the level crossing would queue back and block the A21 roundabout.
- 7.3.10. It should be noted that RVR have suggested the adoption of yellow boxes for south bound traffic on the roundabout to prevent blocking of the junction should the crossing be in operation. This would elongate the queue further and also potentially interact with the signalised crossing north of the junction. No impact analysis of this has been undertaken by RVR or its consultants.

LEVEL CROSSING OPERATION AND IMPACTS TO TRANSPORT

- 7.3.11. This section outlines the operation of A21 Level Crossings in terms of the closure time and the queue that will form at the end of each of the cycles. In the ORR response to WSP dated 25 March 2020 the ORR state that each level crossing can be treated in isolation in railway operational terms as there is no intrinsic reason or increased safety risk. The ORR continued to say that they were not competent to conduct the interdependencies between the sites and this should be done by the relevant highway authorities.

WSP understanding of the Level Crossing Operation

- 7.3.12. This section outlines my understanding of the closure with some further assessments being required alongside the assessment scenarios outlined by RVR and ORR. My assessment is not based on a single closure time but a range of closure times as it is unlikely that level crossing will be closed for the same period of time for each closure.
- 7.3.13. In terms of the number of times the crossing is closed, I have allowed for the fact that this would be between 10 – 16 times per day, which reflects the 5 – 8 services running from Robertsbridge when the train is running.
- 7.3.14. I understand that RVR, ORR and Highways England have agreed that for assessment purposes, the A21 crossing will be lowered for 72 seconds. Mr Clark considers that the closure time should be between 73 and 85 seconds.

Forecast Queues

- 7.3.15. I have undertaken further analysis on the closure times assessed by RVR and how this corresponds to the forecast queues on the road network. The assessment does not take account of the fact the level crossing could be operated manually and if it were to be manned it would likely lengthen the barrier closure times.
- 7.3.16. As it is not evident whether RVR have agreed alternative barrier closure times on the other highway level crossings, and whether the 72 seconds for the A21 crossing is also applicable to the Northbridge Street or B2244 crossings, I have focused my analysis on the A21 only.
- 7.3.17. A breakdown of the various crossing barriers times is presented in Chapter 4 of my Proof and discussed in detail within Mr Clark's proof. The assessment later in this section forecast the number of vehicles queuing for a range of barrier closing times.

- 7.3.18. The ORR assessment scenarios for the barrier closure times are also presented in Chapter 4 of my Proof which were taken from Appendix B of the Traffic Impact Study (RVR34) a letter from the ORR/HMIR (HM Inspector of Railways) on 24th August 2011.
- 7.3.19. Table 7-2 below presents the forecast queues, using the 2018 and 2019 surveyed data on the A21 and assesses against the barrier times suggested by RVR in their recent 2021 SoC, Mr Clark's suggested barrier times and the ORR suggested sensitivity test. Table 7-3 presents the forecast 2027 queues using the growth factors set out in Appendix C.
- 7.3.20. The assessment presented in the tables takes the surveyed or forecast flows and assumes a uniform arrival rate on approach to the barrier in either the northbound or southbound direction.
- 7.3.21. The corresponding arrival rate is then applied to the barrier times set out. This allows for an approximation of the queue formation. I would note however, these assessments have taken no account / addition of forecast changes in vehicular flow as a result of the RVR proposals. As the RVR material does not adequately set out the potential increase in flows on the A21 as a result of the scheme, I have not been able to add these into the forecast, however I would conclude that any additional traffic would naturally increase queues regardless of barrier times.
- 7.3.22. The analysis also does not take into account the existing queues observed on the roundabout as set out in Table 7-1.

Table 7-2 – Forecast Queues - A21 Level Crossing operation – 2018 and 2019 data (Vehicles)

Time / Day	Direction	Flow	2018 & 2019 Queues (Vehs)*			
			Barrier Time (Secs)*			
			72	73	85	112
Weekday (17:00-18:00 PM Peak)	Northbound	543	11	11	13	17
	Southbound	841	17	17	20	26
Weekday (12:00-17:00 Off Peak)	Northbound	532	11	11	13	17
	Southbound	648	13	13	15	20
Bank Holiday (11:00 - 12:00 - 28/05/18)	Northbound	818	16	17	19	25
	Southbound	749	15	15	18	23
Bank Holiday (10:00 - 11:00 - 19/04/19)	Northbound	730	15	15	17	23
	Southbound	776	16	16	18	24
Bank Holiday (10:00 - 11:00 - 22/04/19)	Northbound	979	20	20	23	30
	Southbound	664	13	13	16	21

Table 7-3 – Forecast Queues - A21 Level Crossing operation – 2027 Forecast data (Vehicles)

Time / Day	Direction	Flow	2027 Forecast Queues (Vehs)*			
			Barrier Time (Secs)			
			72	73	85	112
Weekday (17:00-18:00 PM Peak)	Northbound	599	12	12	14	19
	Southbound	919	18	19	22	29
Weekday (12:00-17:00 Off Peak)	Northbound	560	11	11	13	17
	Southbound	692	14	14	16	22
Bank Holiday (11:00 - 12:00 - 28/05/18)	Northbound	944	19	19	22	29
	Southbound	864	17	18	20	27
Bank Holiday (10:00 - 11:00 - 19/04/19)	Northbound	827	17	17	20	26
	Southbound	879	18	18	21	27
Bank Holiday (10:00 - 11:00 - 22/04/19)	Northbound	1109	22	22	26	35
	Southbound	752	15	15	18	23

*Source of barrier times:

72 seconds - RVR 2021 SoC

73 seconds - Mr Philip Clark (lower estimate)

85 seconds - Mr Philip Clark (upper estimate)

112 seconds - ORR sensitivity

- 7.3.23. Table 7-2 presents the queue lengths forecast on the A21 level crossing when applying the 2018 and 2019 surveyed data. Reviewing the range of barrier times used in the assessment, assuming the 2018 forecast queues for southbound traffic are shown to be between 11 and 30 vehicles long (approximately 63m and 173m) depending on the barrier time and day type. I acknowledge that condition 21 in theory prevents this circumstance, but I have concerns as to the enforceability of the condition. Northbound queues during this time are shown to be lower, amounting to 11 and 17 vehicles or 60 – 100 metres.
- 7.3.24. During the off peak conditions, lower queue values are shown, ranging from 14 – 21 vehicles (80 – 120 m) for southbound traffic and 11 – 17 vehicles for (60 – 97m) for northbound traffic.
- 7.3.25. Also provided are details of queuing traffic during the record Bank Holiday in 2018. Whilst I note that condition 21 prevents the closing of crossing between the hours of 1700-1900, I do not consider this to be effective in terms of management of the free flow of traffic on the A21 during Bank Holidays as peak traffic conditions during such events take place at other times of the day.
- 7.3.26. Applying the lower 72 second barrier time results in the smallest queues, however as evident for the Bank Holiday traffic, this still generates queues approaching 100m long. As the level crossing is approximately 115m south of the roundabout, if the closure time of 85 seconds is utilised and trains stray into the weekday PM peak hour – then this would create queues tailing back to the roundabout.

- 7.3.27. If the sensitivity time of 112 seconds occurs on any occasion the queue from the southbound vehicles from the level crossing will back up through the Northbridge roundabout to the north causing highway safety concerns.
- 7.3.28. Assuming the minimum crossing time of 72 seconds, the forecast queue for southbound traffic would extend to some 80m from the crossing based on a uniform arrival rate, although using Mr Clark's upper limit, this would extend to a distance of 100m. Whilst this could be accommodated without extending back to the roundabout, it would be necessary to ensure suitability forward visibility is provided to this queue. There would also be increased risks from drivers exiting the roundabout, only to be faced with a static queue just 15m further to the south.
- 7.3.29. Increases in driver delay would, I consider, result in adverse impacts in terms of driver behaviour, where risk taking to avoid congestion would be expected to occur in order to avoid delays and seek to make better progress during a journey. Whilst queues may be formed beyond the Northbridge Roundabout, drivers exiting the roundabout may not necessarily be expecting to come across the crossing. The imposition of this further delay point may well therefore have unintended consequences.
- 7.3.30. The highway safety issues relate to an increase in rear end shunts as drivers would not be expecting to see vehicles queuing through a roundabout, particularly as this crossing would not necessarily be activated regularly and drivers would be focused on looking right for conflicting movements instead of ahead at the queue. Vehicles arriving via the minor arms of the roundabout would not be expecting a queue at the roundabout, this could cause drivers to perform reckless manoeuvres to get around the queuing traffic to reduce their own delay. This is also consideration for southbound drivers given the overtaking opportunity to the south of the Northbridge Roundabout.
- 7.3.31. The forecast queue for 2027 is presented in Table 7-3 and shows an increase from the 2018/2019 for both north and south bound traffic. when using the ORR sensitivity barrier closure time during the 1700 – 1800 hour.
- 7.3.32. Assuming the minimum crossing time of 72 seconds, the forecast queue for southbound traffic would extend to some 85m from the crossing, although using Mr Clark's upper limit, this would extend to a distance of 100m. Whilst this could be accommodated without extending back to the roundabout, again it would be necessary to ensure suitability forward visibility is provided to this queue.
- 7.3.33. It should be noted that no allowance has been included for any increases in visitor numbers attracted to the area as a consequence of the new railway, which is a specific criticism raised by Highways England within the departure response (RVR/HE/02 Redacted HE Response to Departures Submission).
- 7.3.34. I note that I Transport have undertaken a different analytical technique to forecast the potential queues that could arise from the barriers at the A21 level crossing. This is set out in documents ITL14477-007 and 016 provided by the Application for Departure from Standards submission (Reference RVR/HE/01 RVR Application for Departure from Standards), where a LinSig model has been created to replicate the impacts of assuming a 'red light' in both directions of vehicular flow to simulate the effect of a level crossing closure, using the closure time of 60 seconds and 72 seconds.

- 7.3.35. The queues forecast in those documents, focusing on the 72 seconds barrier closures assessments, indicate that the implementation of a level crossing on the A21 would result in the following approximate queue lengths;
- 110m for northbound traffic (March Weekday);
 - 150m for southbound traffic (March Weekday).
 - 110m for northbound traffic (April Weekday);
 - 180m for southbound traffic (April Weekday).
 - 500m for northbound traffic (Bank Holiday);
 - 420m for southbound traffic (Bank Holiday).
- 7.3.36. The I Transport queues using their alternative approach are greater than my forecasts, as LinSig assessments would also account for intergreens and presents a more detailed approach to forecast compared to applying uniform arrival rates. The I Transport queue analysis outlines that at multiple points throughout the day types assessed, included weekdays, weekends and Bank Holidays, queues would form that would extend to the Northbridge Roundabout.
- 7.3.37. I note that the I Transport queues reflect the maximum 15 min periods, but as shown in my assessment of traffic flows, in Section 3.2 of my proof, – the hourly flow is consistently high, especially on Bank Holidays.
- 7.3.38. In simple terms, based upon the timetable information I have seen, the queues shown could occur up to twice an hour throughout the main part of the day. This would see an increase in delay to users of the A21 and worsening of highways safety conditions through the generation of further queuing vehicles at a location where this does not currently take place.

IMPACT OF LEVEL CROSSINGS ON HIGHWAYS SAFETY

- 7.3.39. This section focuses on the impact of level crossings on highway safety, the implications of reducing the speed limit on the A21 and the impact on driver behaviour.
- 7.3.40. The implementation of level crossings barrier closures at the three locations, in particular on the A21, will increase delay and will decrease the safety performance of the road associated with it, as the closure will have an impact on driver behaviour.
- 7.3.41. My colleague Mr Clark details the safety implications at the level crossings, whereas I discuss the implications on the surrounding highway network.

ROAD TRAFFIC INCIDENTS IN THE VICINITY TO LEVEL CROSSINGS

- 7.3.42. My colleague Mr Clark presents a review of accident records at comparable existing level crossings. Section 8 of Mr Clark's proof provides a detailed review of the risk profiles of the proposed level crossings.
- 7.3.43. The propensity of increased risk or safety incidents is a key consideration, and it is demonstrated that level crossings, including those linked with heritage railways will generate safety risks, regardless of the crossing mechanism adopted. As my proof focuses on the transport aspects and potential for risk, the following sections identify where deficiencies in approach may further increase safety concerns for users of the public highway.

PROPOSED SPEED LIMIT CHANGE ON THE A21 AND STOPPING SIGHT DISTANCE (SSD)

- 7.3.44. RVR has proposed to extend the 40mph section on the A21 as a result of the crossing, presumably to account for deficiencies in terms of providing sufficient forward visibility along this section of the A21 required by a 100 kph (60 mph) design speed. Within the document RVR63 - "Highways & Traffic Assessment Report (Response to HA comments on A21 crossing), January 2013" the Highways Agency's consultants Parsons Brinckerhoff raised concerns that the introduction of the new level crossing and associated reduction in speed limit would inhibit the free flow of traffic and increase the road safety, stating:
- "the risk is further increased if the queue interacts with the Northbridge Street roundabout which it is forecast to do during peak flow days. Given that the above changes to the spreadsheet model are likely to result in greater forecast levels of queuing and the frequency of queue interaction with the roundabout the road safety risk is likely to increase"*
- 7.3.45. I consider compliance with the proposed 40mph speed limit is highly unlikely especially when analysing the speed data from the ATC and The Speed Gun traffic survey undertaken by Atkins in March 2020 showed that over 90% of drivers fail to comply with the existing posted speed limit of 40mph. Having driven the section of the A21 to the south of the existing 40 mph speed limit, it is clear that the existing topography facilitates high vehicular speeds and it will be difficult for drivers to comply with the proposed 40 mph speed limit.
- 7.3.46. The Applicant therefore fails to demonstrate how they will maintain and enforce the lower speed limit.
- 7.3.47. 'CD109 Highway Link Design' of the DMRB provides the highway link design requirements and advice for both new and improved all-purpose and motorway trunk roads. Table 2.10 of the guidance presents the Stopping Sight Distance (SSD) according to varying design speeds, as illustrated by Figure 7.1 below.

Figure 7-1 - Extract of Table 2.10 from CD 109 Highway Link Design

Table 2.10 Design speed related parameters

Design speed kph	120	100	85	70	60	50	V2/R
Stopping sight distance (metres)							
Desirable minimum	295	215	160	120	90	70	-
One step below desirable minimum	215	160	120	90	70	50	-

- 7.3.48. The A21 is subject to a 60mph speed limit which reduces to 40mph around the proposed location of the level crossing. This relates to a desirable minimum SSD of 215m for 100kph (60mph) design speed, or 120m for a 70kph (40mph) design speed. The Arup report (RVR 63) highlighted the need to extend the 40mph speed limit to include the approach to the crossing, presumably in order to trigger the requirement for a lower SSD. Reference to the speed limit change is shown on the most recent A21 drawings submitted in March 2021 and has been commented upon within the Highways England departure response.
- 7.3.49. As the road curves to a northerly direction vehicles approaching from the south may not be able to see the back of any queues at the level crossing, Given the topography and vertical alignment of the A21 it is unlikely that vehicles will be travelling at the 40 mph speed limit. No evidence has been presented to demonstrate that SSD for a 70kph design speed is appropriate given the existing

highway character approaching from the south which is a concern given that there is the potential for the proposed Traffic Regulation Order (TRO) to not be implementable due to lack of driver compliance. I have not seen any evidence that this TRO has been secured or consulted with either local Councils, Highways England or the Police.

- 7.3.50. If this is the case, the absence of the TRO together with the practicalities of compliance with a 40 mph speed would prove to be an impediment to the delivery of the order.
- 7.3.51. The forecast queues, as set out in I Transport documents ITL14477-007 and 016 (contained within the Departures submission RVR/HE/01 RVR Application for Departure from Standards), using the 72 seconds barrier closures assessments, indicate that that the implementation of a level crossing on the A21 would result in queues of 110m to 500m for northbound traffic (weekday and bank holiday respectively), and 150m to 420m for southbound traffic (weekday and bank holiday respectively). In my own analysis, contained within Tables 7-2 and 7-3, the range of forecast queues for northbound vehicles amount to 11 and 20 vehicles or 60 – 115 metres and 13 to 16 vehicles or 75 92 metres for southbound vehicles.
- 7.3.52. I raise this for consideration because the potential queues reported would therefore sit within the visibility zone and SSD requirements even on ‘normal’ weekday conditions. This is particularly important for the northbound traffic and is relevant, because vehicles travelling northbound may not be expecting stationary traffic or queues as a result of the crossing. This could increase the risk of vehicle conflict on the northbound approach. On busier days, such as Bank Holidays, the queues would extend further down the A21, which could then cause further interaction and issues with nearby junctions such as Redlands Lane, which is approximately 430m south of the proposed crossing. I have seen no evidence that this has been considered within the RVR analysis and understand that Highways England have also required this point be considered further.
- 7.3.53. In addition, changes are proposed to the vertical geometry of the A21 on the approach to the level crossing and within the proposed 40 mph zone assuming an 85 kph (53 mph) design speed. In my judgement, providing the vertical geometry in such a way will by definition facilitate vehicle speeds in excess of the proposed speed limit. Given the presence of the level crossing and associated queues, this may give rise to safety concerns. Drivers would therefore be likely to be travelling at a speed that is beyond that commensurate with the available forward visibility that is achievable. On this basis drivers may not be able to safely identify and react to any queues or other obstructions or signage, therefore resulting in adverse safety impacts. In addition, my colleague Mr Clark presents this further within Section 7 of his proof, that the re-profiling of the A21 may lead to flat spots and / or potential instances of aquaplaning and increased risk.
- 7.3.54. I am aware that Highways England are embarking upon a review of safety improvements along the A21 however I am not aware whether this considers the section of the A21 where the proposed level crossing would be provided.
- 7.3.55. Drivers who infrequently drive along the A21 will not expect to see a Level Crossing, either open or closed and is a point acknowledged within the Highways England Departure response. In addition, as the railway will not be operational at all times of the year, this will create further uncertainty for drivers who will not be expecting to encounter an at grade crossing of the A21. The Arup A21(T) Crossing Options Feasibility Report from July 2019 (RVR 75) acknowledges that the infrequent operation of the level crossing could cause safety concerns for all drivers as they will not expect a level crossing on the A21, particularly as the route forms part of the Strategic Road Network.

No mitigation has been identified as it relates to the interaction of identified queues and adjacent junctions.

- 7.3.60. In my professional opinion, the potential interaction between queuing vehicles at the proposed level crossing and existing infrastructure, namely the A21 and Northbridge Street roundabout would lead to increased risks, potential safety implications and increased delays. Furthermore, drivers approaching the level crossings, many of whom will not be familiar with the A21, will not be expecting potentially significantly long static queues. This in turn could increase the risk of rear end shunt type incidents. I have not seen any assessment of the change in risk profile arising the introduction of these level crossings. These issues arise directly as a result of the level crossing and introduce risk to the travelling public at a point on the highway network where this does not currently exist.

IMPACT OF LEVEL CROSSINGS ON FUTURE PLANS FOR THE A21

- 7.3.61. The A21 Robertsbridge Bypass is part of the Trunk Road network and is managed by Highways England.
- 7.3.62. The future capacity and flexibility of the A21 should not be understated. The implementation of the level crossing will jeopardise the ability to implement further widening should Highways England seek to continue improvements along the A21 corridor. At the very least, it is likely to significantly constrain the design options for any such widening and increase the overall costs. This would go against the Highways England remit of ensuring the free movement of users along the A21 in the future. I would also note that RVR present no reference to Highways England plans for safety upgrades along the A21.
- 7.3.63. Reducing the flexibility for improving the A21 is also noted in Ref Obj 778 Rt Hon Greg Clark MP letter, which states the following;
- The proposed installation of a crossing across the A21 would not only risk further congestion on an already busy road (particularly during the peak tourist periods, such as public holidays, when motorists are driving to the South Coast and the railway would presumably run most frequently) but also jeopardise the potential for dualling the road in the future, thus putting at risk the economic development of the South East.*
- 7.3.64. I understand that as part of a forthcoming safety package, Highways England are bringing forward a series of schemes to improve safety along this corridor. This planned work is to improve safety, not improve capacity along the A21, the latter of which will be reviewed as part of Highways England 'route strategy' work which is due to start shortly.
- 7.3.65. The three main benefits of the safety package, as set out by Highways England are;
- Improving safety along the A21 - reducing the number, severity and frequency of incidents for the travelling public and local communities;
 - Improving the customer experience of the A21; and
 - Reducing journey time delays as a result of a reduction in incidents.
- 7.3.66. In the latest update from Highways England, dated 09 April 2021, since starting the project, Highways England has reviewed 10 years-worth of safety data for the A21. This was completed to refine Highways England's safety proposals to ensure a tangible safety benefit for road users. As of

April 2021, the Highways England team have begun reviewing sign locations (signs for junctions, schools, villages and hazards), road markings and also started a review of speed limits along the route to see if those currently in place match the characteristic of the road and if they are encouraging positive driver behaviours.

- 7.3.67. Of relevance to the RVR proposals, Link 4 of the A21 Safety package covers Hurst Green to Hastings. This is the section that includes the A21 adjacent to Robertsbridge. The general improvements are set out and summarised as follows;
- Updating and improving signage;
 - Improving road markings and studs;
 - Improving visibility;
 - Improving driver information;
 - Speed Limit(s) review; and
 - Road alignment improvements.
- 7.3.68. It is noted that George Hill is specifically referenced as a location for further review within the Highways England safety plans. George Hill is located south of the proposed site, approximately 1.1km away. The inclusion of this location within the safety review indicates that the A21 in this location may warrant safety upgrades.
- 7.3.69. The introduction of a new level crossing on this link, which inherently creates more risk and safety concerns, no matter the technology adopted, would appear to go against the Highways England safety package remit. The new level crossing would not result in any safety benefit for road users and would increase safety risks.
- 7.3.70. The RVR level crossing proposals would therefore negate all three of the benefits of the safety package in this area;
- The introduction of a new level crossing will increase the safety risk, no matter what mitigation is placed – thereby reducing safety in this section of the A21, and potentially increasing the frequency of incidents;
 - The level crossing will be called multiple times per day, resulting in additional queuing and flow instability;
 - Barrier closures will lead to increased delays, not only at the level crossing, but also nearby through interaction with adjacent junctions. By definition, the introduction of the barrier will create a new delay point on the Strategic Road Network that is not present under current conditions.

B2244 JUNCTION ROAD

- 7.3.71. Pursuant to Condition 23 traffic calming measures and a speed limit review were required. This has led to a 40 mph speed limit amendment and I understand that matters relating to the necessary TRO have progressed. However, having visited this part of the site, I have concerns as to the compliance of such a speed limit given the straight horizontal alignment of B2244 Junction Road. I consider drivers will not be compelled to comply with such a speed limit to the degree that the TRO is not considered acceptable. This may act as an impediment to the delivery of the Order.

SUMMARY

- 7.3.72. This section has considered the impacts of the level crossings on safety, traffic flows and congestion and the future plans of the A21 in particular. As presented in this section it is forecast that for every robust total barrier closure time, that is 112 seconds, the southbound queue at the level crossing will queue through the roundabout creating a highway safety issue. Shorter queue lengths would occur with a shorter crossing time however queues for southbound traffic would be approaching the Northbridge Roundabout.
- 7.3.73. Further to this it was recorded that the northbound queue at the roundabout could extend back over the level crossing again this creates an additional highway concern.
- 7.3.74. I have undertaken my own analysis using surveys at the Northbridge Street / A21 roundabout and have demonstrated that the roundabout already exhibits significant queuing profiles. When combined with the impacts of the level crossing, this has multiple implications, not only for the likelihood of congestions and further delays on the A21 and Northbridge Street, but also for the potential for increased collisions between vehicles, including rear end shunts. Infrequent drivers will not be expecting to stop for a level crossing on the route and I consider that this will raise the propensity for collisions.
- 7.3.75. I have reviewed recently provided information which sets out I Transport's views on potential queue generation on the A21, which summarises the potential for significant queues in both Northbound and Southbound directions.
- 7.3.76. I would at this stage highlight that queuing is also an indicator of potential delays and therefore suggests that journey times would be affected along the A21. I have seen no updated evidence presented by RVR or its consultants that this has been considered, in capacity, economically or safety terms. Whilst previous documents, such as RVR 33 consider the economic impacts from delays, these are based on older assumptions and no updated assessments have been provided or considered. The introduction of queueing and increased delays would contrast with one of the main benefits of the A21 safety package, as set out by Highways England.
- 7.3.77. RVR have failed to consider changes in potential route diversions as a result of the crossings. Particularly, due to the proximity of Northbridge Street to the A21, drivers, particularly those unfamiliar with the area, if spotting a queue in time, may divert to avoid lengthy delays and stoppages. I have seen no evidence that this has been considered by RVR or their consultants. Northbridge Street is unsuitable to cater for additional traffic, and the existing on-street parking issues identified will likely result in higher delays to residents and increased risk of collision with frustrated drivers.
- 7.3.78. I have reviewed the DMRB requirements for stopping sight distances (SSD) and conclude that with the existing queues added to the level crossing at the A21 that there is insufficient distance to meet the minimum requirements. In addition, I have reviewed speed survey data which has indicated that a high percentage of drivers are travelling above the 40mph speed limit south of the Northbridge / A21 roundabout, which is supported by my own site visit observations. As discussed above, it is evident that RVR are reliant on a TRO to enforce slower speeds south of the proposed crossing. There is no certainty that this TRO will be accepted and indeed Highways England's response to the departure application requires further clarification in respect of engagement / consultation held in this regard.

- 7.3.79. It is clear in my judgement that Highways England have concerns as to the safety implications of the introduction of the crossing given the necessity for RVR to undertake a comparison of risk between the current situation (i.e. without a level crossing) and the risks associated with the at grade level crossing alongside alternative, grade separated crossings.
- 7.3.80. In my professional opinion, the increased risks, increased queues and secondary safety implications, potential for driver behaviour change and rerouting, reduced journey times and increased delays associated with a level crossing outweigh any stated benefit from introduction of a heritage railway.
- 7.3.81. Furthermore, the inclusion of the level crossings on the A21 could impede the ability for Highways England to deliver both safety and capacity improvements along the A21 which should not be jeopardised.
- 7.3.82. In addition, the alternative routes on Northbridge Street or on the nearby roads used by drivers who regularly use the A21 for commuting are not suitable for extra vehicles especially HGVs.
- 7.3.83. The fact that the proposals are a heritage railway, which RVR consider to be less dangerous than their main rail counterparts, should not detract the need for the most stringent safety measures to be in place and set out prior to any order being granted. I consider RVR's approach towards the safety of existing users on the A21, Northbridge Street and B2244 Junction Road to be inappropriate and not reflective of the inherent extremely serious safety implications.

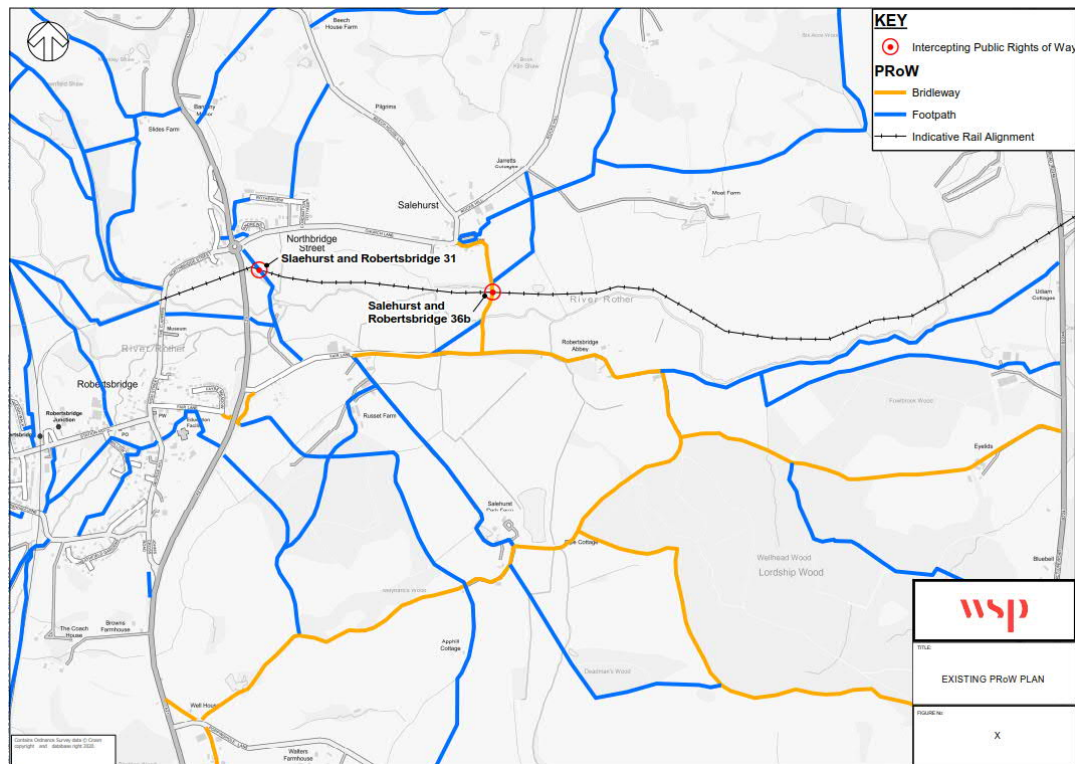
7.4 3B) THE IMPACT OF THE SCHEME ON ROADS, FOOTPATHS AND BRIDLEWAYS, INCLUDING THE IMPACT ON ACCESS TO PROPERTY AND AMENITIES

- 7.4.1. This section focuses on the impacts of the reinstated railway line on the footpaths, bridleways and the impact on access to property and amenities. The impact of the level crossings on the roads has been covered in Section 7.3 above, except a short section on the community severance impact of the level crossing on Northbridge Street.
- 7.4.2. The TRL have provided comment on the community severance and disruptive element caused by a level crossing. The research referenced a study completed in 2005 which stated;
- Community severance occurs when transport schemes have detrimental social impacts on communities that may manifest through physical, social or psychological barriers*
- 7.4.3. The impact of a level crossing in Robertsbridge would create severance between different parts of Robertsbridge. This would have a detrimental impact to the social and physical movements of residents around Robertsbridge.

IMPACT ON FOOTWAYS AND BRIDLEWAYS

Figure 7-3 shows a plan of all the public bridleways and footpaths. The existing PRoWs that will be affected by the reinstatement of the railway line are the Salehurst and Robertsbridge footpath 31, which will be diverted under a proposed bridge, and the PRoW at Salehurst and Robertsbridge 36b Bridleway. Further to this East Sussex County Council within their consultation response were concerned about the level of severance from blocking the existing PRoWs and required further information about how the severance will be mitigated.

Figure 7-3 - Existing PRow Plan



IMPACT ON FARMLAND ACCESS

- 7.4.4. The proposed locations of the private user worked crossings along the reinstated line are shown in Figure 2.4 of the “Track Reinstatement between Northbridge Street and Junction Road Environmental Statement completed by Temple (RVR27). As well as showing the farm access crossings, the figure presents the diversions required for the PRowWs. A user worked crossing puts the onus on the crossing user to check for an approaching train before they cross the railway.
- 7.4.5. If an incident occurred at a User Work Crossing in the vicinity of the A21 or Northbridge Street there is no mention within the Risk Assessment documentation produced by RVR of what would happen to the highway crossings. This might involve the barriers being held closed until the incident is cleared, causing an unmitigated highway impact and causing traffic rerouting on nearby roads unable to cope with the demand.
- 7.4.6. Mr Clark in Section 7 of his proof outlines the design deficiencies of the user worked crossings as presented by RVR based on the information available and the inherent safety risks associated with their use.
- 7.4.7. Throughout the RVR documents no assessment is given to the risk of the User Work Crossings. Within the Statement of Case provided by ORR it states:
- These crossings should be avoided if at all reasonably practicable and we refer the inquiry to the poor safety record such crossings on the mainline railway ... there is evidence that such crossings on minor railways also suffer from levels of user misuse that make them undesirable.*
- 7.4.8. As set out in Mr Clark’s proof, the implementation of the private user work crossing will create safety issues and increase the likelihood of a serious accident occurring.

Pedestrian Route from Bodiam Station to Bodiam Castle

- 7.4.9. Steer on behalf of RVR submitted a Rother Valley Railway Economic Impacts Report in September 2018. The document includes numerous references to the advantages for visitors being able to park at Robertsbridge and then ride the train to Bodiam before walking up to the Castle. This section will audit the pedestrian route from Bodiam Station to Bodiam Castle.
- 7.4.10. As visitors leave Bodiam Station they will head north on the western footway for 150m. At this point the footway stops and a simple drop kerb crossing is provided for pedestrians to cross from the western side to the eastern side as shown in Figure 7-4. Figure 7-4 Visitors will continue north on Main Road for another 170m before reaching the bridge over the River Rother where the footway narrows to approximately 0.9 - 1m, as shown in Figure 7-5. Once over the bridge the footway widens to approximately 1.5m wide and within 20m access will be gained to Bodiam Castle. Manual for Streets recommends the minimum unobstructed width for pedestrians should be 2m, with additional width provided if the footway is heavily used.
- 7.4.11. The route from Bodiam station to Bodiam Castle does not meet the requirements set out in Manual for Streets. I expect the “target audience” of RVR is families with young children who may have pushchairs and will need to escort young children, Manual for Streets presents that a minimum width of 1.5m footway is required for an adult with a pushchair and an adult to walk alongside. This highlights the lack of suitability of this route for visitors to the castle from the station as if two families with pushchairs are walking in opposing directions one of them who need to step into the carriageway in order to pass one another.

Figure 7-4 - Photo looking north on Main Road



Figure 7-5 - Photo looking south at the Bridge over the River Rother



Summary

- 7.4.12. This section analyses the impact of the level crossings on footways, bridleways, farmland access and the increase usage of the pedestrian route from Bodiam Station to Bodiam Castle.
- 7.4.13. My colleague Mr Philip Clark reviews the implications of the level crossings and the impacts to NMU's within Chapter 6 of his proof.
- 7.4.14. Whilst new traffic surveys and accident data have been referenced in the revised submission in March 2021, the effects on Non-Motorised Users do not appear to have been considered and updated in relation to the new data and the update did not appear to include new data on NMU activity.
- 7.4.15. I would also draw attention to the WCHAR report, in paragraph 1.1.7, which acknowledges the following *"However, it is recognised that queue lengths may extend through the roundabout and potentially interact with pedestrian and cyclist activity"*.
- 7.4.16. I have not been given enough time to review the WCHAR provided. However, I consider that the document is limited in scope and does not provide an adequate assessment of potential impacts and summarise my notes as follows;
 - There is no assessment of increases in trip generation as a result of the proposals or movements towards Robertsbridge or Robertsbridge car park;
 - There is no assessment of the forecast queue lengths and their impacts on the existing provision;
 - Both of these assessments could have led to identifying further opportunities for improvement for pedestrians, cyclists and equestrians as a result of the developing highway scheme design;
 - Whilst I note the WCHAR references a Footpath 31 crossing upgrade – I have seen no commitment to this or proposals as to the implementation of this;

- The WCHAR should review an area extending up to 1km from the proposals. I would argue that Robertsbridge station (approximately 915m as the crow flies) should have been included as, this forms a key element of the overarching RVR scheme.

- 7.4.17. The reinstatement of the railway has an impact on both a footway and a bridleway, within the East Sussex response concern was expressed about the increase level of severance on the PRoW network. The increase in visitors walking from Bodiam Station to the Castle along Main Road predicted by RVR is a cause for concern as the existing footways do not comply with the guidance for footway widths in Manual for Streets.
- 7.4.18. I understand that the proposals for the farmland access are via five private and a public User Work Crossings, these types of level crossings are the most dangerous as outlined by the RSSD in March 2018. Further to this within the ORR Statement of Case it stated that *“these crossings should be avoided if at all reasonably practicable at all costs”*.

7.5 3E) THE IMPACT ON CAR PARKING PROVISION

ROBERTSBRIDGE STATION CAR PARK

- 7.5.1. Robertsbridge Train Station would become the new terminus for the extended Rother Valley Railway. It would likely become the main visitor access for the heritage railway, due to its proximity to Robertsbridge Station and the A21. The station provides 73 car parking spaces including 2 accessible spaces and 20 cycle spaces.
- 7.5.2. During a site visit in March 2019 a parking survey was undertaken to understand the accumulation of the station car park. Of the 73 spaces, 47 were occupied which equates to approximately two-thirds (66%) of the car park being occupied at 10:30 on a weekday morning. The cost of parking for a weekday is £4.80, £1.50 on a Saturday and £2.70 on a Sunday.

Figure 7-6 - Photo in Robertsbridge Station Car Park



- 7.5.3. The access road to the car park is Station Road. Station Road is a single carriageway road with on-street parking along the southern side of the carriageway as shown in Figure 7-7.
- 7.5.4. The on-street parking reduces the carriageway useable width to a single vehicle. There are no parking restrictions on a short section just to the east of The Ostrich hotel and pub. Continuing east there is further on-street parking between the access to Robertsbridge Village Hall and Willow Bank, the parking is split 50:50 between no parking restrictions (50m) and one hour parking restriction (50m) between 9am and 5pm Monday to Friday.

Figure 7-7 - Photo looking east on Station Road



- 7.5.5. The forecast impact on Robertsbridge Station Car Park is quantified in the Rother Valley Railway Economic Impacts Report by Steer submitted in September 2018 (RVR 09). Table 5-4 of the Steer

report concludes, that the average vehicles per day parking at Robertsbridge Car Park would be 33 vehicles. WSP conducted a parking survey which found that the station car park was 66% occupied equating to 47 of 73 spaces filled. The additional 33 vehicles from RVR when the trains are operating on a weekday would make the car park operate over capacity at 110% occupied on an average weekday. This does not take account of the special event days like 'Santa' and 'Thomas the Tank Engine' specials which are more popular with visitors so it would be reasonable to assume these events would attract more visitors to park at the station.

- 7.5.6. The additional vehicles arriving at Robertsbridge Station would lead to the car park being full, some visitors would then be required to park on-street. Station Road is subject to a single hour parking restriction, most visitors to the railway will have a duration of stay of more than an hour which will make Station Road unattractive to visitors.
- 7.5.7. Furthermore, some visitors may find free parking areas instead of paying for car parking at the station. These two events could put stress on the residential roads in the vicinity which are less suitable for parking, the implications of which have not been considered by RVR.
- 7.5.8. The Steer Economic Impact Report (RVR 09) Figure 5.1 presents the car journey times and distances from Sevenoaks, Uckfield and Hastings to Robertsbridge and Tenterden. The figure highlights that from each location it is quicker to go Robertsbridge than to Tenterden. However, The Steer report (RVR 09) states that
Casual car parking on residential roads is an issue that has existed for many years in Robertsbridge, as with many other towns in the UK
- 7.5.9. Within the Steer Economic Impact Report (RVR 09) it is stated that:
Cars would be discouraged from travelling to Robertsbridge and instead would be redirected to Northiam and Tenterden
- 7.5.10. However, later in the Economic report it highlights that the transport benefits rely on users shifting to Robertsbridge to reduce journey time for visitors.
- 7.5.11. The approach being taken by RVR contradicts this, as they are asking visitors to travel to Tenterden to reduce the car parking pressure at Robertsbridge. The economic review relies on visitors travelling to Robertsbridge and the travel time savings, so I consider there to be an issue relying on any such economic benefit.

SUMMARY

- 7.5.12. As part of site visits to Robertsbridge car park, utilisation counts were undertaken. The site visit, undertaken in March 2019 completed a parking survey to understand the accumulation of the station car park. Of the 73 spaces, 47 were occupied which equates to approximately two-thirds (66%) of the car park being occupied at 10:30 on a weekday morning.
- 7.5.13. I have not seen any car park utilisation data presented by RVR or their consultants.
- 7.5.14. The forecast impact on Robertsbridge Station Car Park is quantified in the Rother Valley Railway Economic Impacts Report by Steer submitted in September 2018 (RVR09). Table 5-4 of the Steer report concludes, that the average vehicles per day parking at Robertsbridge Car Park would be 33 vehicles.

- 7.5.15. This is an average forecast, meaning that some days the demand on the car park could be higher. No further data is presented by Steer on what the maximum or minimum parking stress is likely to occur. This is particularly relevant to the proposed special days by RVR, which could see increased numbers of users. No analysis on the accumulation of the car park and interaction with existing users has been completed.
- 7.5.16. The forecast demand would result in the car park being over-saturated, which is likely to cause inappropriate over-spill parking onto nearby streets.
- 7.5.17. RVR place a reliance on the use of Robertsbridge car park to within their economic analysis, which is in direct contradiction to other statements which suggest that Tenterden would be the primary choice of parking.

7.6 4) THE MEASURES PROPOSED BY RVR TO MITIGATE ANY ADVERSE IMPACTS OF THE SCHEME INCLUDING ANY PROTECTIVE PROVISIONS PROPOSED INCLUSION IN THE DRAFT TWA ORDER OR OTHER MEASURES TO SAFEGUARD THE OPERATIONS OF UTILITY PROVIDERS OR STATUTORY UNDERTAKERS

- 7.6.1. This section outlines the impacts I consider arising from the scheme, considered in the context of accident analysis, potential accidents occurring at level crossing or user worked crossing on heritage railways and the safety implications of queuing. The section also explains why I consider the mitigation measures inadequate, including further safety issues created by providing some of the mitigation.

Existing Accident and Heritage Railway Accident Analysis

- 7.6.2. The existing accident analysis in the vicinity of each of the proposed level crossings is presented in detail within Mr Clarks proof. His evidence outlines that incidents have occurred in the area of the proposed crossing locations.
- 7.6.3. Mr Clark also reviewed Heritage Railways and presents an accident analysis in Section 8 of his proof. I understand that in the last 12 years there have been seven accidents at level crossings on heritage railways. These accidents have occurred on a range of level crossing types from User-worked crossings to barrier crossings. The accidents show that no type of crossing reduces the accidents rates to zero, so implementing any form of crossing provides an inherent risk.

Safety Implications of Queuing

- 7.6.4. As described in Section 7.3 of my proof, it is forecast that the southbound queue arising from the A21 Level Crossing could extend back up to and through the roundabout with Northbridge Street, while the northbound queue could extend for over 100 meters when using the ORR sensitivity test barrier timings. Using the information provided by RVR's consultants, I Transport the queues could extend further than this, reaching 420m northbound and 500m southbound on the A21. This will provide an inherent safety risk which I do not consider is adequately mitigated by proposals put forward by RVR. The Stage 1 road safety audit undertaken by Arup in January 2014 (RVR 44), which is now out of date, identified a list of possible safety issues these were as follows:

- The lack of lighting on the northbound approach;
- Blocking on the circulatory carriageway of the roundabout, blocking through the roundabout and the proposal doesn't consider the existing traffic lights and the impact; and
- Blocking of the proposed level crossing signage on the existing signage which could lead to drivers missing some signs and the perceived warnings about potential conflicts.

- 7.6.5. I note that RVR have considered the lighting arrangement at the level crossing in recent documents. As set out in GG119 the RSA should be re-done considering it is over 5 years old. Whilst I note that this is to be undertaken arising from the outcome of the review of the Departures from Designs standards, the outcomes of any further RSA and whether they can be complied with are not known.
- 7.6.6. The RVR proposals appear to suggest that a speed limit adjustment could be implemented from 60 mph to 40 mph. However, I am not aware as to whether this has successfully been processed, having the support of Highways England and the Police. I also have concerns as to the practicality of compliance with this speed limit change.
- 7.6.7. As set out in Section 6.3 of my evidence, significant further information and assessment is required in order to respond to the points raised by Highways England's response to the level crossing departure application, particularly in terms of considering the risks associated with the crossing in comparison to alternatives. Given that the request for this further information was made available on 27 May 2021, it remains to be seen whether this can be dealt with during the Inquiry timetable.
- 7.6.8. The consultation process required as part of the TRO for the 40mph section around the location of the proposed B2244 Junction Road level crossing was completed in June 2018. Regarding the multiple traffic signs the recommendation is to have a comprehensive review of the existing traffic signs on the B2244 Junction Road. To remove the increased risk from blocking back at the level crossing a yellow box marking should be introduced to deter traffic blocking back at the crossing over accesses. In an attempt to reduce the pinch points, it was recommended to establish priority at the localised narrowing's, this could lead to a further safety concern if queuing extends through the narrowing points.
- 7.6.9. The final Stage 1 Road Safety Audit for Northbridge Street was also undertaken by Arup in 2013 (RVR42) and as set out in GG119 the RSA should be re-done considering it is over 5 years old. The outcomes of any further RSA and whether they can be complied with is not known.
- 7.6.10. I note that conditions 21 of the planning permission would not allow the crossing to operate during the hours of 1700-1900 Monday to Friday and Bank Holidays. I have concerns as to the enforceability of this condition in the event that a train is delayed at Robertsbridge Station for whatever reason. As it relates to Bank Holidays, traffic levels are higher at other times of the day therefore the influence of the condition would be limited.

SUMMARY

- 7.6.11. All previous Stage 1 RSA's are considered to be out of date, and should be re-done, as set out in DMRB guidance GG119.
- 7.6.12. I am aware that an RSA is due to be completed in respect of the A21 level crossing following the outcome of the Departure from Design Standard process, however the outcome of this RSA exercise is not yet known. Whilst I understand that a RSA1 audit brief has been agreed with Highways England, as set out in their draft SoCG with RVR, it is not included in the submission. I understand from discussions with Highways England that the Audit brief is an incomplete draft

pending agreement on the preliminary design and is therefore not yet available for circulation. As such, the ability to address any matters arising from the Audit is not yet known.

- 7.6.13. I have concerns in respect of the enforceability of condition 21 which prevents the crossing being used between the hours of 1700-1900 Monday to Friday and on Bank Holidays. Peak traffic levels during Bank Holidays occur at other times of the day therefore I consider the appropriateness of this condition for traffic conditions during such events to be limited.
- 7.6.14. I also have concerns as to the practicality of compliance with the 40 mph speed limits that are proposed on both the A21 and B2244 Junction Road to the degree that it cannot be stated with certainty that any TROs will be approved.
- 7.6.15. I consider safety of all users to be of the utmost importance when considering any design or infrastructure option.

7.7 5) THE EXTENT TO WHICH THE PROPOSALS ON THE TWA ORDER ARE CONSISTENT WITH THE NATIONAL PLANNING POLICY FRAMEWORK, NATIONAL TRANSPORT POLICY AND LOCAL TRANSPORTS, ENVIRONMENTAL AND PLANNING POLICIES

Transport and Planning Policy

- 7.7.1. This section focuses on the Planning and Transport policies at a national and local government level and whether the reinstatement of the 3.42km heritage railway aligns to the policy guidance.

National Planning Policy

- 7.7.2. The overarching theme of the NPPF is to achieve sustainable developments through economic social and environment consideration. Within the Chapter 9 “Promoting Sustainable Transport” Paragraph 102 highlights that transport issues should be considered at the earliest stages of plan-making, this is so the potential impacts that development can be addressed and mitigated on the transport networks. Development should be focused on locations which can become sustainable and helped reduce congestion and emissions and improve the air quality.
- 7.7.3. Paragraph 108 of the NPPF states that development should only be considered if safe and suitable access can be achieved for all users and the highway safety could be mitigated. The approach outlined by RVR provides little in terms of highway safety mitigation on the A21 with the focus on reducing the speed limit to 40 mph without outlining how this can be achieved. The level crossing on the A21 should not be a traffic calming measure and a range of mitigation measures should be provided.
- 7.7.4. Promoting sustainable transport is seen as a key theme for any proposed development to align with. The forecast increase in traffic of 33 vehicles as presented in the Steer Economic impact report RVR09 at Robertsbridge station car park could cause parking issues on the nearby residential roads.
- 7.7.5. Paragraph 109 highlights that development should only be refused on highway grounds if there would be an unacceptable impact on highway safety. The A21 currently suffers from a poor highway safety record, and I have seen evidence of little or no mitigation suggested by RVR to reduce the additional, adverse impact of installing the level crossings.

- 7.7.6. I also note that the proposals would be contrary to Circular 02/13, which states at paragraph 11 that *“Where there would be physical changes to the network, schemes must be submitted to road safety, environmental, and non-motorised user audit procedures, as well as any other assessment appropriate to the proposed development. The Design Manual for Roads and Bridges sets out details of the Secretary of State’s requirements for access, design, and audit, with which proposals must conform”*. At this stage I have seen no confirmation that Highway’s England’s procedures as they relate to any physical changes to the Strategic Route Network have been satisfactorily adhered to and concluded.
- 7.7.7. Overall, judging the RVR proposals against the NPPF I consider the proposals to be unacceptable and result in an unmitigated impact on the highway network in terms of safety especially on the A21 Robertsbridge bypass. For this reason, the reinstatement of the level crossings on Northbridge Street and B2244 Junction Road and the creation of a new level crossing on the A21 should be refused on highway grounds. Local Planning and Transport Policy
- 7.7.8. The local planning policy in chapter 18 of the local plan core strategy focuses on the Transport and Accessibility Policies in the region. There are three policies that are relevant to the proposals.
- 7.7.9. Policy EM8 indicates that an extension to the Kent & East Sussex Steam Railway from Bodiam to Robertsbridge, will be supported, however it must incorporate appropriate arrangements for crossing the A21, B2244 at Udiam, and Northbridge Street. At the time of writing, Highways England have expressed the need for further information to be provided to them in order to confirm that indeed an appropriate crossing can be provided of the A21. I have set my own views that the introduction of the crossing will have adverse impacts and that there is no certainty that it can come forward as currently proposed.
- 7.7.10. Policy TR1 focuses on the need for strategic infrastructure to strengthen the Rother region and improve the connectivity along key investment and transport corridors. The construction of the level crossings in particular on the A21 will increase the journey time between London and Hastings and potentially jeopardise future highway improvements of the A21 Robertsbridge bypass.
- 7.7.11. Improving highway safety is a constant theme throughout the LTP3 and is included in policy TR2. The local transport plan understands that the inconsistency of the strategic road network in terms of efficiency and safety is a major constraint, while the local plan core strategy highlights that the Rother region has an accident rate worse than the regional and national average. My review of research documents highlighted that there are increased accidents at level crossings which are caused by driver error. The reinstatement of the level crossings does not accord with policy TR2.
- 7.7.12. Policy TR3 of the local plan aligns with paragraph 109 of the NPPF which highlights that new developments should be refused on Highways ground if the proposals cannot fully mitigate the transport impacts arising from a development. As highlighted throughout Chapter 7 of my proof the mitigation measures provided by RVR do not fully mitigate the safety implications of the proposals.
- 7.7.13. As outlined in the local transport policy there is a theme of safety for road users and residents within East Sussex especially in the Rother region. The implementation of three level crossings and user worked crossings is in contradiction to the policy as highlighted in Section 5.2 which outlined safety as a major constraint to economic growth in the region.
- 7.7.14. Rother District Council is currently undergoing the process to begin working on the new Local Plan that will cover the period 2019-2039. The new Local Plan will outline the spatial strategy for the

region and the areas for new developments, the document will focus on infrastructure improvements to improve connectivity.

SUMMARY

- 7.7.15. The RVR proposals are in contradiction to the National and Local Planning and transport policy. The design and the mitigation measures proposed by RVR will not remove the underlining safety impacts and are thus not in accordance for NPPF paragraph 109 and Local Planning Policy TR3. The proposals would also be in contravention to Circular 02/13.
- 7.7.16. Focusing on the A21, Policy TR1 states the need to strengthen the strategic road infrastructure improving the connectivity to support economic growth, whereas the level crossing will increase delay and potentially lead to additional accidents. It has not been demonstrated that appropriate arrangements are in place for the crossing of the A21, as required by Policy EM8. The likely additional accidents are contrary to the LTP3 produced by East Sussex as the theme throughout the document is to improve road safety especially in the Rother region.

7.8 6) THE ADEQUACY OF THE ENVIRONMENTAL STATEMENT (INCLUDING THE DATA UNDERPINNING IT) SUBMITTED WITH THE APPLICATION FOR THE TWA ORDER, HAVING REGARD TO THE REQUIREMENTS OF THE TRANSPORT AND WORKS (APPLICATIONS AND OBJECTIONS PROCEDURE) RULES 2006

BACKGROUND TO MATTERS

- 7.8.1. The TWA application was submitted in April 2018. At the time of submission, the Environmental Statement used was that produced during the course of the planning application submitted in 2014. At the point of submission of the TWA application, the Environmental Statement comprised:
- RVR24 - RVR Environmental Statement - Volume 1, June 2014 – Temple
 - RVR25 - RVR Environmental Statement - Environmental Statement – Volume 2 Main Statement, June 2014– Temple
 - RVR26 - RVR Environmental Statement - Environmental Statement – Volume 3 Technical and Supporting Reports, June 2014 – Temple
 - RVR27 - RVR Environmental Statement - Volume 4 – Supporting Figures, June 2014 – Temple
 - RVR28 - RVR Environmental Statement Addendum – November 2016 – Temple
- 7.8.2. Various other documents were referred to in the Environmental Statement but not comprised within it – including:
- 23 March 2012 – Rother Valley Railway Proposed Level Crossing Traffic Impacts Study (October 2011 – RVR32);
 - 12 July 2013 - Highways & Traffic Assessment Report - Review of A21 (Corridor Wide) Delays (RVR61)
 - 25 January 2013 – Rother Valley Railway A21: Highways and Traffic Assessment Report Response to HA comments on A21 Crossing (RVR63)
 - 5 November 2013 – A Stage 1 Road Safety Audit (RSA) of the A21 crossings – (RVR44).;

- 18 November 2013 – An economic benefit analysis of the railway, which included an evaluation of the minimal traffic delay, which formed part of the supporting information submitted as part of the applicants Transport & Works Act Order (RVR33);

- 7.8.3. The TWA application was submitted in April 2018, and the assessments comprised within the Environmental Statement (and the data underlying them) were demonstrably out of date even at that point.
- 7.8.4. Both my clients and Highways England raised significant concerns regarding the adequacy of the Environmental Statement in their respective objections in May 2018.
- 7.8.5. Highways England detailed numerous inconsistencies and deficiencies in approach. In its representations it stated that *“The Environmental Statement accompanying the application is out of date and deficient in respect of traffic and transport matters”*. They further explain that *“It is clear therefore that the baseline conditions considered by the ES are now in excess of seven years old”* and *“...the Applicant must review the Traffic and Transport impacts of the proposed development taking into account current flows on the A21 Trunk Road and the current programme for implementation of the proposal.*
- 7.8.6. Highways England concluded that:
20. The Order cannot lawfully be made when the ES is so fundamentally defective.
- 7.8.7. These concerns were then repeated in both my clients' and Highways England's Statement of Case submitted in September 2020.
- 7.8.8. I understand that it is in the context of these representations that the adequacy of the Environmental Information was included as matter on which the Secretary of State wished to be informed.
- 7.8.9. I note that my clients consistently and repeatedly requested that the Environmental Statement should be updated since their first representations in May 2018.
- 7.8.10. Following the second cancellation of the public inquiry in April 2020 the Secretary of State requested additional information be provided pursuant to Rule 17 of The Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 (the 2006 Rules). The letter was issued on 8 June 2020
- 7.8.11. In respect of Transport matters the Secretary of State's Rule 17 letter requested the following:
“An update to the transport assessment chapter, incorporating the results of the 2018 addendum to the Traffic Impact Study submitted in January 2020 to the ORR. Reason: The transport chapter relies on baseline data from 2010, which may no longer be representative2021.
- 7.8.12. The additional Environmental Information purporting to respond to this request was submitted to the Secretary of State on 8 March and made available on the Public Inquiry website on 9 March 2021.
- 7.8.13. The Table at Paragraph 3.0 of the submitted “Environmental Statement and Supporting Information Guide (Explanatory Note)” advises that this information is contained in Appendix F to the 2021 Environmental Statement Revalidation Report.
- 7.8.14. Appendix F is a report entitled “Review of Transport and Traffic Chapter” prepared by Mott Macdonald. Paragraph 1.1 of this report advises that Mott Macdonald had been instructed to undertake a review of the Traffic and Transport Chapter that was first drafted in 2014, specifically to review the baseline traffic data referred to in the ES in the context of more recent traffic data”.

- 7.8.15. With regards to Transport and Access, the ES addendum (RV28) simply refers to the main ES (RVR25) and concludes that “*no significant residual effects as a result of the construction or operation of the Scheme*”.
- 7.8.16. Against this background I set out below my comments on the adequacy of the totality of the Environmental Statement including the additional Environmental Information published on 8 March 2021.
- 7.8.17. First, I note that Appendix F does not incorporate or assess the totality of the information provided to the ORR and submitted January 2020.
- 7.8.18. As set out in section 2.3 of my proof of evidence above, a large volume of additional information has been produced to assess the transport impacts of the application. None of this information was included within the additional Environmental Information. Neither the originally submitted Environmental Statement nor the March 2021 Addendum incorporate or assess the totality of the information that has subsequently been provided to ORR and HE from January 2020 onwards.
- 7.8.19. By way of two examples the Traffic Impact Study dated November 2018 (and provided to ORR in January 2020 contained a Queuing Analysis which has not been considered in the ES Addendum. Likewise, none of the feasibility studies, narrative risk assessments or other documents provided to ORR or Highways England before 8 March 2021 were incorporated into the additional Environmental Information
- 7.8.20. In turn a large amount of material was prepared by RVR in support of its Departures Submission including items referenced as ES Crossing Option Assessments. It does not appear that the information undertaken by I Transport, on behalf of RVR has been checked or utilised within the March 2021 updated ES Chapter, or at the very least it is not demonstrated where this data is included. I note that these reports were largely prepared by I Transport but the ES Addendum Appendix F report was prepared by Mott Macdonald. It is unclear why different consultants were used for directly overlapping assessments. This is a significant omission as the analysis by I Transport is different to that previously undertaken by Mott MacDonald and forecasts higher queues both northbound and southbound on the A21 (extending well beyond the Northbridge Street Roundabout for example). The inclusion of this data could have therefore changed the ES chapter's conclusions and it is unclear to me why two separate analyses have been used. This is not explained in the documentation.
- 7.8.21. As the totality of the recent reports has not been incorporated within the Environmental Statement, I consider that the surveys and assessments underpinning the Environmental Statement (and the associated Addendums) remain out of date. As such, there is a reliance on out of date assessments contained within the analysis. These errors are further compounded by technical consultants relying on this data to make conclusions and / or relying on ‘work undertaken by others’ which should have been rectified by RVR’s consultants.
- 7.8.22. Given the lapse of time since the original surveys and assessment were undertaken, I consider they are no longer sufficiently reliable to assess the environmental effects of the proposals.
- 7.8.23. The Main ES (RVR25) states the following;

13.2.4 Baseline traffic conditions have been sourced from the Traffic Impact Assessment prepared by Mott MacDonald (2011) to assess the operational impacts of the new Level Crossings at the three vehicle crossing locations. Subsequently, Mott MacDonald prepared a number of reports to

deal with technical issues arising from the 2011 report. These also form part of the baseline and include:

- *Highways & Traffic Assessment Report, Response to HA Comments on A21 Crossing. January 2013*
- *Highways & Traffic Assessment Report, A21 Assessment of Delays. August 2013*
- *Non-Motorised User (NMU) Audit – Context Report. January 2013*
- *Non-Motorised User (NMU) Audit Report. September 2013*

13.2.4 No further traffic surveys have been undertaken to support this Report and it is considered that the data contained within the 2011 TA is sufficiently robust and recent to support this Report. The Highways Agency have requested that the latest TRADS data for A21 is included within the EIA to provide the most up to date picture for the SRN.

7.8.24. I do not agree that the previous data remains robust for use in the assessment process. I note that I-Transport had prepared further survey information for the purposes of their assessments, but it is not clear whether this is reflected in the updated ES.

7.8.25. The ES continues and states;

13.3.9 It is considered that the operational impacts of the three vehicular level crossings have been adequately assessed, subject to the caveats contained within the 2011 Mott MacDonald reports, and therefore require no further consideration in this assessment.

13.3.10 No operational assessments have been made of the four footpath crossings. Investigation of the location (or relocation) of the proposed crossings vis a vis pedestrian safety, crossing layout and design is considered later in this chapter.

7.8.26. Severance and the impacts to other users as a result of the proposals is a key component of a Transport ES chapter and should have been assessed without reliance on the Mott MacDonald reports. Equally, the ES does not review driver delay and frustration adequately and no reference is made to the safety implications of the scheme. The conclusions of the ES do not therefore consider these important and relevant impacts.

7.8.27. The ES outlines the following in relation to the construction of the Northbridge Street Crossing;

13.3.39 The third highway level-crossing would be on Northbridge Street and it is proposed that construction of this crossing would be undertaken during a full closure of the highway to vehicle traffic (pedestrian access would be maintained throughout construction). During the temporary closure of Northbridge Street vehicle traffic would be diverted via the A21.

7.8.28. No indication of construction programme has been provided that demonstrates this is feasible or practical. It is unclear whether the proposals from RVR will result in construction overlap between the sites, and there is no mention of any contingency plans should construction in any location be delayed. It is reasonable to assume therefore that a situation may occur where works are being undertaken at 2 of the 3 crossings simultaneously, resulting in the inability to divert traffic as suggested by RVR. Equally, no assessments of the diversion of traffic on the A21 have been completed.

7.8.29. The ES states the following in 13.4.2;

The A21 is a Trunk Road carrying high volumes of traffic resulting in congestion, particularly at peak periods. The B2244 Junction Road is a lower order road but has a poor road safety record in the vicinity of the proposed access point and experiences high traffic speeds.

- 7.8.30. The ES acknowledges the safety issues, alongside capacity and congestion. However, the conclusions outline that the crossings will not result in a material impact.
- 7.8.31. I do not consider the submitted ES to be of a sufficient standard to be relied upon during the Inquiry. The information underpinning it is out of date or flawed as it does not take into account longer crossing times and predicted queue lengths. I therefore disagree with the conclusions of the ES and do not consider it a robust basis on which to assess the Transport impacts of the application.

7.9 9A) WHETHER THERE ARE LIKELY TO BE ANY IMPEDIMENTS TO RVR EXERCISING THE POWERS CONTAINED WITHIN THE ORDERS INCLUDING AVAILABILITY OF FUNDING

- 7.9.1. Reviewing the Costs information provided by RVR (and their consultants) a number of discrepancies have been identified that require further classification and / or discussion. These concerns have been set out above in Section 6.2 of this PoE as well as the correspondence to the ORR within Appendix B.
- 7.9.2. In summary, I consider the cost assumptions to be incomplete and underestimate the costs required for the proposals. I set out below comments on costs.
- 7.9.3. The lack of consideration for these elements show that RVR have not considered the cost implications to a sufficient level. As such, I have not seen any evidence that there is a guarantee that RVR will have the funding to implement the proposals.
- 7.9.4. As a starting point the Estimate of Costs [RVR/21] submitted with the application estimates that the total costs of the project at £5.3m. This Estimate was from April 2018 and these costs will have increased due to inflation in the intervening three years.
- 7.9.5. Within the Estimate of Costs, a figure of £700,000 is provided for “highways works including level crossings”.

COSTS REVIEW WITHIN ARUP’S FEASIBILITY REPORT

- 7.9.6. In 2019 RVR commissioned Arup to undertake a Feasibility Report to consider the costs of the various options for crossing the A21. The Arup A21 (T) Feasibility Report (dated 4 July 2019 RVR/75) estimated the cost of an at grade crossing of the A21 at £6.8m. Appended to the report is a document produced by RVR which sets out their estimate of these works at £1.5m.
- 7.9.7. At the time of writing my Proof, I had not seen any further costing information since the publication of the amended A21 crossing, or as a consequence of further discussions with Highways England. I would make the following points on costs.
- 7.9.8. Firstly, these costs significantly exceed the £700,000 figure in the Estimate of Costs.

- 7.9.9. Secondly my understanding is that the figures discussed within the Arup report relate solely to the A21 crossing whereas the £700,000 estimate in the Estimate of Costs was for all the highways works and 3 level crossings.
- 7.9.10. Arup state that they have also included reasonable (industry standard) assumptions for civil engineering design, delivery and construction costs for provision of the main elements of the scheme. A full list of costing assumptions is provided within the costings report (Appendix C of the Arup report).
- 7.9.11. The highway component of the costing has not been broken down. The cost of the items associated with individual structures has not been provided. Given the nature of the works, an assumption traffic management being required over a period of two nights would seem optimistic.
- 7.9.12. With regards to costs, the Arup options include an optimism bias of 44% which is in line with the industry standards based on the HM Treasury Green Book Supplementary Guidance from June 2004. No allowance is made by Arup for inflation, utilities diversions or operational maintenance.
- 7.9.13. The RVR costings provided within Appendix D of the Arup's report included only allow for 10% contingency / optimism bias. In my view, this underestimates the potential costings of implementing the Level Crossing and renders the comparison between figures unjustified. The comparison exercise should be completed on a like for like basis, with only key variables altered to reflect the nature of the different options. In addition, since no further costing has been provided since the further amendments to the scheme, no further allowances for inflation rises have been identified.
- 7.9.14. No allowance is made for commuted sums to be paid to the Council or Highways England for continuing maintenance of the highway around the Level Crossings in particular of the anti-skid surface on the final 100m on approach to the Stop line together with any other non-standard equipment that may be required. No allowance is made for the costs of financing the bond and cash surety required under the Protective Provisions.
- 7.9.15. The changes to the A21 embankments and vertical changes have not been included within this previous costing exercise.
- 7.9.16. I understand that reference is made to the use of a volunteer work force to deliver the scheme. I understand this is the main reason for the reduction from Arup's estimate of £6,8m and RVR's estimate of £1.5m. I note this is a point of concern to Highways England who state in their response to the departure application that they have approved partners who undertake works to the SRN. RVR contractors or volunteers will be required to apply to Highways England for such approved status and crucially demonstrate suitable experience and expertise concerning the installation of a level crossing on the SRN. I have seen no evidence that RVR's volunteer workforce have experience of the installation of a level crossing on the SRN.
- 7.9.17. Finally, I note that Condition 22 of the planning permission requires that the owners and operators of the crossing shall maintain sufficient insurance to permit complete removal of the A21 crossing together with reinstatement of existing carriageway surfaces. This is replicated in the Protected Provisions which require RVR to put in place insurance up to the value of £10m. I have seen no allowance for the associated costs for this item.
- 7.9.18. When considered together I consider that RVR's original estimate of £700,000 for the totality of the costs of highways works and three level crossings is likely to be wholly inadequate. If RVR are

unable to rely on volunteer workforce for the A21 crossing, based on the Arup costings, the costs of that crossing alone would more than double RVR's 2018 estimate of the costs of the entire project.

- 7.9.19. This is particularly relevant given that the project is proposed to be funded by two private benefactors. The identity of these benefactors is not known and I have seen no evidence that they have the means to meet the true full likely costs of the project or that they have unequivocally committed to meeting the full costs. Given the nature of the highway works proposed, particularly in relation to the SRN, as a private scheme, I consider that there needs to be unequivocal certainty as to the financial deliverability of the scheme.

ECONOMIC DIS-BENEFITS

- 7.9.20. I note in section 7.5 of my proof that I have concerns of the legitimacy of the assumptions contained within the Steer Economic report (RVR 09).
- 7.9.21. I acknowledge that Mott MacDonald's have also produced a "Traffic Delays Economic Costs" (RVR 33) report which forecast the economic costs of the traffic delay due to the queuing at the proposed level crossing,
- 7.9.22. The Mott MacDonald analysis results in a conservative estimate of the total economic cost of delay per closure time. I have considerable concerns with the economic assessments undertaken and consider them to be flawed, underestimating the likely impacts that could occur.
- 7.9.23. For example, included within Appendix D of the "Traffic Impact Study" (RVR34) the level crossing is shown to close twice an hour instead of the once per hour stated by Mott MacDonald in their economic analysis. This would suggest that the estimates underrepresent the potential costs.
- 7.9.24. The economic assessment within RVR 33 is based on old data and does not reflect the updated analysis, assumptions or considers the I Transport queue forecasts. I have therefore not seen any further evidence or analysis as to the cost implications arising from delays or increased journey times based on the updated information presented by RVR.
- 7.9.25. The wider economic matters have been considered within the Proof of Evidence prepared by Volterra (OBJ/1002/EE/1).

Summary

- 7.9.26. I have considered the cost estimates provided by RVR and in my judgement, it is difficult to take the estimates at face value given that there appear to be a number of omissions and assumptions that do not appear correct and call in to question the economic advantages claimed that favour the at grade level crossing of the SRN.
- 7.9.27. Highways England have confirmed that any volunteer workforce would need to be approved by them in order to introduce the A21 level crossing works. Crucially, any workforce will need to demonstrate suitable experience and expertise including the delivery of installing a level crossing on the SRN. I consider that this requirement is likely to be an impediment to the introduction of the A21 crossing as proposed.

8 SUMMARY AND CONCLUSIONS

8.1 SUMMARY

- 8.1.1. This Proof presents my evidence regarding highways and transport matters in response to the Statement of Matters in relation to the TWA Order. It should be noted that my colleague Mr Philip Clark has also prepared a proof of evidence specifically focusing on level crossing elements and should be read in conjunction with my proof.
- 8.1.2. The transport matters I have considered are as follows:

2) The main alternative options considered by RVR and the reasons for choosing the proposals comprised in the scheme.

- 8.1.3. I have reviewed the available documents and concluded that the review process has been biased and does not present a true reflection of the benefits and disbenefits of each alternative option.
- 8.1.4. Whilst I consider that costs are a useful indicator during any review, these should not be the driving force behind choosing an option. I consider that the alternatives reviewed by RVR fail to acknowledge the increased safety risks should an at grade option be delivered and fail to acknowledge that other options would minimise these risks. Highways England have yet to confirm their acceptance of the level crossing of the A21 and require further mitigation measures to be identified in order to respond to forecast changes affecting the travelling public.

3a) The impact of three new level crossings on safety, traffic flows, and congestion particularly in relation to the A21 and future plans for this road

- 8.1.5. Section 7.3 of this Proof details the impacts of the level crossings on the A21, B2244 and Northbridge Street.
- 8.1.6. The safety implications caused by the level crossings, particularly on the A21, will introduce an accident risk that is not currently present and will likely also cause secondary accidents because of queuing, congestion and changes to driver behaviour. The proposals for the A21 level crossing would appear to be in contradiction to the safety packages being determined by Highways England along the A21,
- 8.1.7. Highways England have, following their review of the Departure from Design Standards submission relating to the proposed level crossing, set out 33 items that the designers must address. At the time of writing, it is unclear whether these items can be responded to within the Inquiry timetable. The number of items required to be responded to confirms the significance of the need to provide a crossing in an appropriate form such it does not compromise the safety of users of the A21.

3b) The impact of the scheme on roads, footpaths and bridleways, including the impact on access to property and amenities

- 8.1.8. Section 7.4 of this Proof outlines the impacts of the proposals on other crossing points.

- 8.1.9. The implementation of the private user worked crossing will provide an inherent risk that cannot be mitigated. This is agreed by ORR whose recommendation is to remove the user worked crossings due to the risk of a fatal accident.
- 8.1.10. The introduction of three highway level crossings, one bridleway crossing and private user worked crossings over a relatively short distance disproportionately increases the risks to all road users when compared to the benefits of extending the heritage railway by 3.42km.
- 8.1.11. The claimed increase in visitor numbers to Bodiam Castle arriving via the proposed railway would lead to increases in people using a section of sub-standard footway.

3e) The impact from change to car parking provision

- 8.1.12. Section 7.5 of this proof forecasts that during the summer months the Robertsbridge Car Park will be over capacity increasing the likelihood that visitors to the railway will park in nearby residential streets.
- 8.1.13. RVR have failed to acknowledge this within their analysis and do not present any mitigation to offset the potential impacts.

4) The measures proposed by RVR to mitigate any adverse impacts of the scheme including any protective provisions proposed for inclusion in the draft TWA order or other measures to safeguard the operations of utility providers or statutory undertakers.

- 8.1.14. Section 7.6 on this proof details a review of the mitigation proposals set out by RVR.
- 8.1.15. I do not consider that RVR have taken account of the increased accident risk level crossings will have for all road users, and RVR have not considered any potential increase in accidents which are likely to occur as part of the secondary impact of the level crossings. The introduction of a level crossing on the A21 given the current speed limit means that the design does not meet the appropriate design standards set out in DMRB. The TWA Order does not contain any measures to mitigate this, in particular it does not contain any proposals for a TRO to extend the 40mph speed limit on the A21 to the south of the level crossing location. Circular 01/13 states that speed limit changes should not be used as a means to solve isolated hazards. I consider that the proposed change in speed is in direct response to the fact that Site Stopping Distances required for higher design speeds cannot be achieved. I have not seen evidence that Highways England support this change in speed limit and I have reservations that drivers will adhere to it given the nature of the A21 in this location.
- 8.1.16. In addition, acceptance of relevant documentation required in order to support the proposed highway works to the Strategic Road Network remains outstanding with further design activities, assessments and surveys required. I consider the absence of this material a key concern in respect of whether Highways England, as the organisation with responsibility for the operation of the A21 are satisfied that the works can be provided in accordance with their procedures.
- 8.1.17. Given the nature of B2244 Junction Road, I have reservations that the proposed 40 mph speed limit will be adhered to by drivers travelling southbound. This may increase the risk of drivers being able to identify stationary vehicles waiting at the crossing and have sufficient time to react accordingly.

5) The extent to which the proposals on the TWA Order are consistent with the National Planning Policy Framework, National Transport Policy and Local Transports, Environmental and Planning Policies

- 8.1.18. Section 7.7 of this proof outlines how the proposals are not in accordance with the national and local planning policy. The evidence demonstrates that the development proposals conflict with NPPF paragraph 109 with an unacceptable severe impact on highway safety and increased congestion. It has also not reflected the requirements of Circular 02/13.

6) The adequacy of the Environmental Statement (including the data underpinning it) submitted with the application for the TWO Order, having regard to the requirements of the Transport and Works (Applications and Objections Procedure) Rules 2006

- 8.1.19. Section 7.8 of this proof reviews the Environmental Statement and the specific transport reports which are relied upon in terms of data and analysis.
- 8.1.20. I acknowledge that an updated ES Addendum was presented in the March 2021 submission. Reviewing that 2021 document, and in particularly the Transport chapter, I note that this was limited to a review and no substantial new information was presented. A comparison of existing data sets was completed to justify that traffic patterns were not materially different.
- 8.1.21. I do not consider that the 2021 document adequately justifies the use of the original Environmental Statement information and fails to provide any material assessment.
- 8.1.22. The reliance on the original ES remains therefore a concern. I consider that the surveys and assessments underpinning the Environmental Statement (and the associated Addendums) are out of date. There is a reliance on out of date assessments contained within the analysis. This is compounded by technical consultants relying on this data to make conclusions and / or relying on 'work undertaken by others' which should have been rectified by RVR's consultants.
- 8.1.23. Given the lapse of time since the original surveys and assessment were undertaken, in my judgement they are no longer sufficiently reliable to assess the environmental effects of the proposals.
- 8.1.24. I am aware of further material prepared in order to support the assessment of the A21 crossing and which was prepared to support the Departure from Design Standard application. This did not accompany the ES Update and was only made available to me on 24 May 2021.

9a) Whether there are likely to be any impediments to RVR exercising the powers contained within the orders including availability of funding

- 8.1.25. Section 7.9 of this proof provides a summary review of the costing information provided and the associated comparisons contained within the consultant's reports.
- 8.1.26. The costs presented by RVR do not provide a fair comparison against values calculated by other consultants. As such, I have not seen any evidence that there is a guarantee that RVR will have sufficient funding to implement and maintain the proposals. I have reservations in respect of a number of items contained within the costings and there is an over reliance on the use of a volunteer

work force to construction the proposals. Highways England require that any works to the SRN would need to be undertaken by suitably approved design teams and personnel who must have experience of implementing level crossings on the Trunk Road Network. I have not seen a revised costing that reflects the most recent Level Crossing designs.

8.1.27. All of these factors call into question the costing exercises carried out and the conclusions drawn.

8.2 CONCLUSIONS

- 8.2.1. The key transport issues at this Appeal have been set out in the Statement of Matters issued by the Inspector. I have focused on the relevant transport points within those specific matters.
- 8.2.2. My Evidence demonstrates how RVR have failed to address the matters raised by the Inspector and have not presented sufficient information to allow this Appeal to be granted.
- 8.2.3. RVR have failed to adequately assess the impact of three new level crossings on safety, traffic flows, and congestion. Analysis prepared by RVR shows impacts in term of queue lengths at the A21, which do not appear to be adequately mitigated. I have prepared my own analysis which demonstrates an undue rise in safety risk, not only at the crossings but also at the Northbridge Street / A21 Roundabout to the north.
- 8.2.4. The safety implications alongside the forecast traffic congestion mean that the level crossings will increase the likelihood of accidents not only directly at the level crossings, but also secondary accidents caused by queuing and changes in driver behaviour.
- 8.2.5. The location of the A21 level crossing means that the Stopping Sight Distance (SSD) for a 60mph design speed to the end of the northbound queue on the approach to the crossing cannot be achieved. It is understood that RVR propose to extend the existing 40mph limit to the south of the level crossing, but this requires a Traffic Regulation Order (TRO). The TWA Order does not contain any provision for a TRO, so there is no guarantee the speed limit would be extended and / or enforceable.
- 8.2.6. With regards to the proposed crossings at the B2244 and Northbridge Street, whilst I appreciate that these roads do not carry the same volume of traffic as the A21, this does not mean that they should be overlooked. RVR have failed to demonstrate that adequate safety mitigation has been included into their proposals and I have concerns as to the practicality of the proposed 40 mph speed limit at the B2244 crossing. This is particularly relevant as RVR suggest that the increase of visitors to Bodiam Castle will be a key benefit, but do not address the sub-standard footway leading to this attraction adjacent to the B2244 which will only increase the potential impacts between vehicles and pedestrians.
- 8.2.7. RVR has failed to demonstrate any highways mitigation following the implementation of the level crossings that delivers either improvements or minimises the safety risks.
- 8.2.8. The March 2021 update to the ES, specifically the Transport chapter – does not provide new evidence or analysis and provides a comparison against previously reported information. As such, there is still a reliance on data that is out of date. The ES addendum submitted by RVR, continues to report no significant impacts in terms of any of the specific effects related to transport is insufficient, out of date and cannot be relied upon.

- 8.2.9. The analysis work undertaken by RVR is underpinned by out of date. Despite acknowledging this within the ES addendum, no surveys or up to date analysis was undertaken.
- 8.2.10. My proof of evidence demonstrates that the proposals conflict with NPPF paragraph 109 due to the unacceptable impact on highway safety, particularly on the A21 and the congestion caused at the A21 Northbridge Street roundabout. It has also not reflected the requirements of Circular 02/13.
- 8.2.11. The proposals also disregard the Rother District Council Local Plan Core Strategy policies TR1-3 and compliance with Policy EM8 has not been demonstrated.
- 8.2.12. Whilst I acknowledge that at grade crossings are likely to be the cheapest option, this does not mean financial costs should outweigh risks to users. I consider the costs comparisons undertaken by RVR are unduly biased and result in underlying concerns on the potential for the scheme to be funded.
- 8.2.13. The proposals as set out in the TWA order will result in a scheme that does not meets local and national planning policy, increases the safety risk for all users of the A21, Northbridge Street and the B2244 and will result in operational constraints to the A21 and the local network.
- 8.2.14. It is clear from the evidence I have presented that the inherent danger and increased accident risk resulting from the installation of a level crossing on one of the busiest sections of the Strategic Trunk Road Network in the south east far outweighs any benefit of extending a heritage railway line by 3.42km.
- 8.2.15. I therefore believe Application for the draft TWA order should be refused.



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