

Rother Valley Railway (Bodiam to Robertsbridge Junction) Order

Proof of Evidence: Philip Hamshaw MSc MCIHT  
CMILT

TEXT (RVR/W3/1 – HIGHWAYS)

i-Transport Ref: PH/JN/ITL14477-006B

Date: 04 June 2021

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## SECTION 1 INTRODUCTION

### 1.1 Qualifications & Experience

- 1.1.1 My name is Philip Hamshaw. I am a Chartered Member of the Institute of Logistics and Transport and a Member of the Chartered Institution of Highways and Transportation. I have a Masters Degree in Transportation Planning & Engineering. I am a Partner of i-Transport LLP a specialist transport planning consultancy
- 1.1.2 Before joining i-Transport LLP I was a Technical Director of SKM Colin Buchanan between 2008 and 2012, prior to which I was employed as a Director for Faber Maunsell. I have over 25 years experience in the field of transport planning and engineering.

### 1.2 Scope and Nature of Evidence

- 1.2.1 I provide evidence on the following topics;
- The impact of the proposed level crossings on road safety;
  - The impact of the proposed level crossings on traffic flow (and delay);
  - Compliance with highway design requirements;
  - Adequacy of the ES and Further Environmental Information; and
  - Responses to specific third party objectors.
- 1.2.2 My evidence primarily relates to the objections raised by Highways England (HE) in respect of the level crossing on the A21, although I also consider the two level crossings on Northbridge Street and Junction Road. In addition, matters relating to the above topics raised by third parties are covered.
- 1.2.3 With reference to the Statement of Matters my evidence covers 3(a), 3(e), 5 and 6.
- 1.2.4 Overall, I conclude that the proposed level crossings:
- would not have an unacceptable impact on road safety;
  - would not adversely impact on the free flow of A21 road users with the impact being less than severe; and

- would be designed and constructed in accordance with applicable design standards and guidance (including departures).

1.2.5 Accordingly, I respectfully ask the Inspector to find that there is no transport or highways reason for preventing the making of the TWAO.

1.2.6 The evidence that I have prepared and provide for this Inquiry in this Proof is true and has been prepared, and is given, in accordance with the guidance of my professional institutions. I confirm the opinions expressed are my true and professional opinions.

### 1.3 **Background**

1.3.1 Planning permission (RR/2014/1608/P) was granted on 22 March 2017 for the reinstatement of the Rother Valley Railway from Northbridge Street, Robertsbridge to Junction Road. The planning consent provides for the reinstatement of the railway along its original route and requires the creation of three road level crossings on the A21, on Northbridge Street and on Junction Road. The A21 is part of the Strategic Road Network (SRN) and the responsibility of HE. Northbridge Street and Junction Road are the responsibility of the local highway authority East Sussex County Council (ESCC).

1.3.2 Prior to submission of the planning application and to accompany the submission numerous supporting documents were prepared including the following covering highways and transport matters:

- Traffic Impact Study (Rev E, October 2011);
- Highways & Traffic Assessment Report (Response to HA Comments on A21 Crossing) (Jan 2013);
- Traffic Impact Study - Supplementary Technical Note (Jan 2013)
- Highways & Traffic Assessment Report - A21 Assessment of Delays (Aug 2013)
- Environmental Statement

1.3.3 Prior to and during the determination period discussion took place between the applicant and Highways Agency (HA; now HE) with additional documents submitted to HA in response to queries. The final consultation response of the HA was issued on 27 March 2015 and directed that should Rother District Council grant permission that 9 conditions be attached to any

consent. The Decision Notice (RR/2014/1608/P dated 22 March 2017) includes all 9 conditions (numbers 15 to 23).

- 1.3.4 The HA consultation response noted that ***“we do appreciate that the limited nature of a level crossing for a heritage railway, will have less of an impact than a crossing for a mainline railway.”***
- 1.3.5 ESCC as highway authority for Junction Road and Northbridge Street did not object to the proposed level crossings subject to conditions relating to road safety. The Decision Notice includes the proposed conditions (numbers 25 and 26).
- 1.3.6 Planning permission was granted on 22 March 2017. Subsequently, on 19 April 2018 RVR submitted an application under the Transport and Works Act 1992 for a Transport and Works Act Order to construct, operate and maintain the Rother Valley Railway – Proposed Rother Valley Railway (Bodiam to Robertsbridge Junction) Order “the Order”.
- 1.3.7 In September 2018 HE issued their Statement of Case in respect of the Order which raised objection for a number of reasons with which I deal with in subsequent sections of my evidence. I was instructed by RVR in January 2019 and since that time have been working on resolving matters raised by HE in their Statement of Case. In the next section I deal with the ongoing dialogue since that time between RVR and HE, and the current status of those discussions.

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## SECTION 2 HIGHWAYS ENGLAND

### 2.1 Discussions and Agreement

2.1.1 In their Statement of Case HE set out 6 reasons for objecting to the Order. These can be summarised as follows:

- Safety implications for A21 users;
- Impact on traffic flows along the A21;
- Adequacy of the Environmental Statement;
- Conformity with design guidance (DMRB);
- Protective provisions; and
- Stopping up powers.

2.1.2 Discussions have continued with HE since the submission of the Order application in April 2018. Alongside which further information has been provided in response to the queries raised by HE. A summary of the discussions which have taken place and the additional information submitted to HE is attached as Appendix A. In summary there have been 24 meetings between August 2018 and June 2021 with a total of 34 documents prepared in support of various submissions as requested by HE.

2.1.3 The volume of work provided in response to HE's concerns has been substantial. In subsequent sections I summarise the work and the status of discussions. It is worth noting that the A21 level crossing has planning permission and as noted above there are nine planning conditions which will need to be discharged to the satisfaction of HE. In addition, there is a schedule of protective provisions to the benefit of HE which necessitate the approval of HE on all aspects of the level crossing design.

2.1.4 Much of the work undertaken in the last two years is beyond that typically required at this stage of a project and is provided for within the planning conditions and protective provision upon which HE must be satisfied. Nonetheless RVR have engaged positively with HE and despite reservations have undertaken assessments and appraisals which would typically be carried out following grant of a TWAO.

2.1.5 At the time of writing discussions were continuing and a draft statement of common ground (SOCG) had been prepared in discussion with HE. An initial draft and HE's response draft have been submitted to the Inquiry and discussions are ongoing. Subject to ongoing discussion, a number of matters have been largely agreed which are summarised below:

**Safety implications for A21 users:**

- Existing Road Safety Record: the existing road safety record of the A21 in the vicinity of the proposed level crossing has been documented using up to date collision data (Appendix B);
- Walking, Cycling and Horse Riding Review (WCHAR): a WCHAR has been prepared in accordance with GG142 and accepted by HE which assesses the design for safe and appropriate provision for these users;
- Road Safety Audit Brief: a RSA Stage 1 brief has been prepared in accordance with GG119 which includes confirmation that the audit team members meet HE requirements;

**Impact on road users on the A21:**

- Existing A21 Traffic Flows: the traffic flow data collected for the A21 provides an appropriate and up to date basis to assess the impact of the proposals on the A21; and
- Queuing and Delay: the time periods and days used to assess the impact of the level crossing on the A21 represent a robust assessment;

**Adequacy of Environmental Statement:**

- The Further Environmental Information (FEI) provides an appropriate update to the ES with reference to up to date traffic data;

**Conformity with Design Guidance:**

- Design Departure: the DMRB does not contain design requirements for a level crossing and that the parties have engaged regarding the preparation and content of a compliant request for a Departure from DMRB Standards.



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**Protective Provisions:**

- Wording agreed between RVR and HE and provisions will be made contractually binding by means of a side agreement between the parties.

**TWAO Powers in respect of HE's interest**

- The draft TWAO is accepted by HE and no changes are required.

2.1.6 The adequacy of the ES, protective provisions and TWAO powers are matters that are agreed with HE. Therefore, my evidence focuses on the remaining matters.

## 2.2 The A21 Level Crossing Scheme

2.2.1 As part of my early input into discussions with HE it was agreed that it was important to establish the parameters for assessing the impact of the proposed level crossing on the operation and safety of the A21. This included agreeing the operational attributes of the level crossing scheme. These are summarised below (with a more comprehensive note attached at Appendix C) for the purposes of clarity and to provide an unambiguous context to the remainder of my evidence and the basis for the agreement reached.

**Level Crossing Equipment**

2.2.2 It is important to note that should the TWAO be made, this would establish the principle/statutory authority for the heritage railway to cross the A21 at grade. However, the precise nature of the level crossing type and its control system will be subject to final approval by the Office for Rail and Road (ORR). I understand this will be secured through the Level Crossing Order process, made under the Level Crossings Act 1983. This necessarily follows the TWAO process. Further, information on the process is provided in the evidence of Mr Keay (RVR/W8/1).

2.2.3 It is agreed between RVR and HE that for the purposes of assessment the type of level crossing proposed is an 'Automatic Full Barrier Controlled Locally' level crossing (AFBCL).

2.2.4 This type of crossing provides full barrier closure of the carriageway and includes Obstacle Detection equipment. The crossing is automatically activated by an approaching train. The inclusion of obstacle detection means the crossing is not confirmed as clear until the obstacle

detection technology has confirmed that to be the case, at which point the exit barriers of the crossing close. Further details are given in the evidence of David Keay (RVR/W8/1).

### **Level Crossing Operation**

2.2.5 The expected barrier downtime (when vehicles are prevented from travelling along the A21) has been the subject of considerable analysis. It has been agreed with HE that the barrier downtime used to undertake traffic modelling of vehicle queues and delays is 72 seconds. This figure has been calculated based on the expected operational sequence and has been agreed between the relevant specialists on behalf of RVR and HE. It differs from the previous time of 55 seconds which was agreed between ORR and RVR, which assumed different barrier equipment and associated operational sequence.

2.2.6 The KESR has a range of steam and diesel engines and passenger carriages. Maximum train length is 115m made up of five passenger carriages (98.5m) and steam locomotive (16.5m). The crossing speed of the train across the A21 level crossing will be limited to 10mph in both directions. These assumptions have been applied to estimate the expected barrier downtime.

### **Operational Timetable**

2.2.7 The existing heritage railway operation between Tenterden and Bodiam, the Kent and East Sussex Railway (KESR), would operate over the RVR to allow services between Robertsbridge and Tenterden. RVR would be responsible for the construction of the new track. KESR would be the operator of services over those tracks. It is assumed that the extended route would operate the same timetable as the current KESR.

2.2.8 The KESR does not offer timetabled and Railway Experience services every day of the year. Generally, it operates on approximately only 50% of days annually. The evidence of Mr Dewey (RVR/W9/1) provides more information on the days services operate.

2.2.9 Level crossing closures will not occur on every day of the week nor every week of the year. For example, for six months of the year, the railway operates on less than half of the days within the month and for three months of the year, on just a single day within that month.

2.2.10 There were generally between 4 and 5 return services per day of operation on the KESR in 2019, which would require between 8 and 10 closures of the proposed A21 Level Crossing.

Even 10 crossings of the A21 per day would amount to no more than 12 minutes of highway closure, over a limited number of days in any given year.

- 2.2.11 The above summarises the expected operations on the proposed railway level crossing of the A21 (and the other road level crossings).

#### **A21 Level Crossing Construction**

- 2.2.12 The ES provided a guide to the likely construction methodology of the entire railway based on the information at the time (2014). In respect of the A21 level crossing it states *"Construction of the level-crossings on the A21 and B2244 Junction Road would be undertaken without a full closure of the highway by implementing a signalised single lane configuration during the works. Initial installation of the new railway crossing surface in the road carriageway would probably be achieved over a period of two/three days with single lane traffic working plus a short night time closure to drop in the full length rails."* (paragraph 2.9.5 Environmental Statement, Volume 2 – Main Statement).
- 2.2.13 In RVR/74-06 Approval in Principle: A21 Level Crossing and Mill Stream Flood Relief Culvert at paragraph 3.14.2 a suggested traffic management regime is set out which states *"It is envisaged that there will be full road closure for one weekend to allow for installation of pre-cast concrete level crossing modules and regrading of the road surface to suit the track gradient where it crosses the highway. Traffic would be diverted through Robertsbridge via The Clappers and Northbridge Street for the duration of the closure"*
- 2.2.14 Notwithstanding the above, the precise details of the construction methodology for the A21 level crossing will be confirmed once the designed is finalised and a contractor has been appointed. As part of discharge of Condition 16 of the planning permission a Construction Traffic Management Plan will be prepared and approved by HE before construction of the level crossing commences. Similar requirements are set out in the protective provisions (paragraph 3(1)(c)(iii)) agreed with HE.
- 2.2.15 Hence, the construction methodology and associated traffic management regime will be controlled by HE, with the installation of the new railway crossing across the A21 expected to occur over a relatively short time period.

## 2.3 Summary

2.3.1 In their Statement of Case HE set out 6 reasons for objecting to the Order. These can be summarised as follows:

- Safety implications for A21 users;
- Impact on traffic flows along the A21;
- Adequacy of the Environmental Statement;
- Conformity with design guidance (DMRB);
- Protective provisions; and
- Stopping up powers.

2.3.2 Discussions have continued with HE since the submission of the Order application in April 2018. Alongside which further information has been provided in response to the queries raised by HE. The volume of work provided in response to HE's concerns has been substantial.

2.3.3 Much of the work undertaken in the last two years is beyond that typically required at this stage of a project and is provided for within the planning conditions and protective provision upon which HE must be satisfied. Nonetheless RVR have engaged positively with HE and despite reservations have undertaken assessments and appraisals which would typically be carried out following grant of a TWAQ.

2.3.4 At the time of writing discussions were continuing and a working draft SOCG had been prepared in discussion with HE. Discussions are focused on the Departure submission which touches upon the first four of HE's objections. The latest draft SOCG highlights some areas of agreement and ongoing discussion on these first four matters: safety for A21 users; impact on traffic flows along the A21; adequacy of the Environmental Statement; and conformity with design guidance (DMRB). The protective provisions and stopping up powers have been agreed.

2.3.5 As part of my early input into discussions with HE it was agreed that it was important to establish the parameters for assessing the impact of the proposed level crossing on the operation and safety of the A21. This included agreeing the operational attributes of the level

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crossing scheme for the purposes of clarity and to provide an unambiguous context to the remainder of my evidence and the basis for the agreement reached.

- 2.3.6 It is agreed between RVR and HE that for the purposes of assessment the type of level crossing proposed is an 'Automatic Full Barrier Controlled Locally' level crossing (AFBCL). This type of crossing provides full barrier closure of the carriageway and includes Obstacle Detection equipment. The crossing is automatically activated by an approaching train.
- 2.3.7 It has been agreed with HE that the barrier downtime used to undertake traffic modelling of vehicle queues and delays is 72 seconds. This figure has been calculated based on the expected operational sequence and has been agreed between the relevant specialists on behalf of RVR and HE. It differs from the previous time of 55 seconds which was agreed between ORR and RVR, which assumed different barrier equipment and associated operational sequence.
- 2.3.8 The existing heritage railway operation between Tenterden and Bodiam, the Kent and East Sussex Railway (KESR), would operate over the RVR to allow services between Robertsbridge and Tenterden. It is assumed that the extended route would operate the same timetable as the current KESR, which operates on approximately only 50% of days annually.
- 2.3.9 There were generally between 4 and 5 return services per day of operation on the KESR in 2019, which would require between 8 and 10 closures of the proposed A21 Level Crossing. Even 10 crossings of the A21 per day would amount to no more than 12 minutes of highway closure, over a limited number of days in any given year.
- 2.3.10 The ES provided a guide to the likely construction methodology of the entire railway based on the information at the time (2014). In RVR/74-06 Approval in Principle: A21 Level Crossing and Mill at paragraph 3.14.2 a suggested traffic management regime is set out. Notwithstanding these approaches, the precise details of the construction methodology for the A21 level crossing will be confirmed once the designed is finalised and a contractor has been appointed.
- 2.3.11 As part of discharge of Condition 16 of the planning permission a Construction Traffic Management Plan will be prepared and approved by HE before construction of the level crossing commences. Similar requirements are set out in the protective provisions. Hence, the construction methodology and associated traffic management regime will be controlled by HE,

with the installation of the new railway crossing across the A21 expected to occur over a relatively short time period.

## SECTION 3 RELEVANT POLICY AND GUIDANCE

### 3.1 National Policy

#### National Planning Policy Framework

3.1.1 The National Planning Policy Framework (NPPF) (revised in February 2019), has three key tests applied to new development to ensure it will be acceptable in highway terms. These are as follows:

- a Appropriate opportunities to promote sustainable transport modes can be or have been taken up;
- 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 effectively mitigated to an acceptable degree.

3.1.2 In addition, paragraph 109 states that any scheme ***“should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”***

3.1.3 The reinstatement of the railway and the level crossing of the A21 already has planning permission and has satisfied these tests (an earlier version of the NPPF was applicable at the time permission was granted, although the tests were broadly similar).

3.1.4 Planning policy support for the RVR scheme can be found at paragraph 83 which encourages a prosperous rural economy particularly ***“sustainable rural tourism and leisure developments”*** such at the RVR scheme.

#### DfT Circular 02/2013 The Strategic Road Network and the Delivery of Sustainable Development

3.1.5 This circular explains how HE (formally Highways Agency) will engage with the planning system. It also gives details on how HE will fulfil its remit to be a delivery partner for sustainable economic growth whilst maintaining, managing and operating a safe and efficient SRN. The circular constitutes HE policy in respect of the SRN. The HE do not have a specific

policy in respect of new level crossings. However, the following paragraphs refer to those policies which I consider are relevant in respect of the RVR scheme.

3.1.6 At paragraph 11 it notes;

***“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. 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.”***

3.1.7 It is clear that HE require physical changes to their network to comply with the Design Manual for Roads and Bridges (DMRB). I comment further on this matter at Section 6.

3.1.8 Paragraphs 37 to 44 deal with access to the SRN. The policy provides a graduated approach to new direct access: on motorways or routes of near motorway standard (dual carriageway routes) new access will only be permitted where essential for the delivery of strategic planned growth; on the remainder of the SRN a less restrictive approach is adopted.

3.1.9 HE operates under a Licence from central government (Highways England: Licence. Secretary of State for Transport statutory directions and guidance to the strategic highways company, 2015). The licence provides further guidance on HE’s obligations in respect of new access. For lower standard strategic roads such as the A21 paragraph 5.36(a)(ii) states that “... there should be a presumption in favour of connection, except where a clear case can be made to prohibit connection on the basis of safety or economic impacts.”

3.1.10 A connection to the A21 accords with policy. Indeed, in applying policy HE should consider proposals on the basis there is a presumption in favour of connection. New level crossings: How ORR applies its policy of no new crossings unless there are exceptional circumstances (RIG-2014-06)

3.1.11 Unlike HE the ORR do have a stated policy in relation to new level crossings which is covered in this document. In summary, new level crossings should only be considered appropriate in exceptional circumstances, which would be when there is no reasonably practicable alternative to crossing on the level at the proposed location. Alternatives are reasonably practicable unless the cost is grossly disproportionate when weighed against the safety benefits.



## 3.2 Local Policy

### Rother Local Plan Core Strategy (adopted September 2014)

- 3.2.1 The Rother Local Plan Core Strategy has been produced to set out the vision and strategy for land use and development in Rother District up to 2028. The Plan supports rural employment and tourism facilities in Policy RA2: General Strategy for the Countryside with more general support for tourism activities in Policy EC6.
- 3.2.2 Further, it should be noted that the former Rother District Local Plan (2006) included a dedicated policy (EM8) in support of the RVR scheme an extract is shown below:

1.2	<u>The Rother District Local Plan (2006)</u>
1.2.1	<p>Following the adoption of the Rother Local Plan Core Strategy many of the Local Plan (2006) policies have been superseded. Saved policies are those <u>not</u> listed in Appendix 1 of the Core Strategy. Those retained and relevant in respect of this proposal include Policy EM8.</p> <p><i>Policy EM8:</i>  <i>An extension to the Kent and East Sussex Steam Railway from Bodiam to Robertsbridge, along the route identified on the Proposals Map, will be supported, subject to a proposal meeting the following criteria:</i></p> <ul style="list-style-type: none"> <li><i>(i) it must not compromise the integrity of the floodplain and the flood protection measures at Robertsbridge;</i></li> <li><i>(ii) it has an acceptable impact on the High Weald Area of Outstanding Natural Beauty;</i></li> <li><i>(iii) it incorporates appropriate arrangements for crossing the A21, B2244 at Udiam, Northbridge Street and the River Rother.</i></li> </ul> <p>This policy can continue to be afforded weight by decision takers (Paragraph 215 of Annex 1 to The Framework).</p>
1.3	<u>The Rother Local Plan Core Strategy</u>
1.3.1	<p>The Rother Local Plan Core Strategy contains the following relevant policies:</p> <ul style="list-style-type: none"> <li>• Policy OSS1 overall spatial development strategy</li> <li>• Policy OSS4 general development considerations</li> <li>• Policy RA2 general strategy for the countryside</li> <li>• Policy RA3 development in the countryside</li> <li>• Policy EC1 fostering economic activity and growth</li> <li>• Policy EC6 tourism activities and facilities</li> <li>• Policy EN1 landscape stewardship</li> <li>• Policy EN3 design quality</li> <li>• Policy EN5 biodiversity and green space</li> <li>• Policy EN6 flood risk management</li> <li>• Policy EN7 flood risk and development</li> <li>• Policy TR1 management and investment in strategic accessibility</li> <li>• Policy TR2 integrated transport</li> <li>• Policy TR3 access and new development.</li> <li>• Policy TR4 car parking.</li> </ul>

Appendix 1 (Superseded Local Plan 2006 Policies) of the Core Strategy confirmed EM8 as one of the policies in the Rother District Local Plan originally saved by Direction. In December 2019 the Development and Site Allocations Plan (DaSA Plan) which forms part of the statutory development plan was adopted. Policy EM8, having been delivered by the grant of planning permission, is formally expressed to have been superseded by this plan. There is no allocation in the DaSA plan that is inconsistent with the delivery of the railway.

#### **Salehurst & Robertsbridge Neighbourhood Plan 2016-2028 (July 2018)**

3.2.3 The Salehurst & Robertsbridge Neighbourhood Plan (2018) includes economic policies in support of the RVR Scheme with tourism specifically covered by Policy EC5.

3.2.4 Policy IN2 supports the maintenance and improvements to existing infrastructure subject to the following criteria:

- 1 The proposal would not have harmful impacts on the amenities of surrounding residents and other activities;
- 2 The proposal would not have harmful impacts on the surrounding local environment; and
- 3 The proposal would not have significant impacts on the local road network.

#### **Summary**

3.2.5 At both a national and local level there is policy support for the Rother Valley Railway. Alongside which it is clear any proposal should demonstrate it would not have unacceptable impacts upon the operation of the road network (capacity and congestion) or upon road safety. In respect of the SRN there is a presumption in favour of new connections with a requirement for any physical modifications to meet the design standards of HE (DMRB).

### **3.3 Design Guidance**

#### **Design Manual for Roads and Bridges**

##### **GG 101 – Introduction to Design Manual for Roads and Bridges**

3.3.1 The Design Manual for Roads and Bridges (DMRB) sets a standard of good practice that has been developed principally for Motorways and Trunk Roads (SRN) and provides requirements,

advice and guidance for SRN works. Of note, the introduction to GG 101 (Introduction to the Design Manual for Roads and Bridges) states;

***“The DMRB has been prepared for use by competent practitioners, typically qualified professionals able to work independently in relevant fields, who are expected to apply their own skill and judgement when making decisions involving the information that the DMRB contains... DMRB documents are not statutory or regulatory documents or training manuals; neither do they cover every point in exhaustive detail. In general, the DMRB does not duplicate National, UK and European legislative requirements. Anyone engaged in works on or relating to the Overseeing Organisations’ motorway and all-purpose trunk roads should understand and comply with the relevant legislation.”***

3.3.2 As above, whilst extensive, DMRB may not cover all aspects of potential works on the SRN.

3.3.3 Notably in respect of the proposed level crossing of the A21 Trunk Road at Robertsbridge, DMRB does not provide advice or guidance with respect to the introduction of level crossings on the Trunk Road network, which are not covered by DMRB at present. Document GG 101 (Introduction to the Design Manual for Roads and Bridges) provides the following guidance at paragraph 2.7;

***“Where an aspect of the works is not covered by existing requirements, a departure application for an aspect not covered by requirements shall be submitted.***

3.3.4 To accord with DMRB the proposed level crossing requires the submission of a departure application to cover its design requirements. Document GG 101 (Introduction to the Design Manual for Roads and Bridges) goes on to state at paragraph 2.7.1:

***Where an aspect of the works is not covered by existing requirements, the principles of current and relevant guidance should be followed.”***

3.3.5 In other words where DMRB does not cover the design requirements, a departure application should identify appropriate other guidance to which the design should conform. I cover this matter in detail at Section 6.

#### **GG 119 – Road Safety Audit**

3.3.6 GG 119 provides guidance on the applicability of Road Safety Audits (RSAs). On a Trunk road and Motorway network, it states that ***“where there are physical changes to the highway impacting on road user behaviour or resulting in a change to the outcome of a collision on the trunk road and motorway network, road safety audit (RSA) shall apply, regardless of the procurement method.”***

- 3.3.7 A Stage 1 RSA is carried out upon completion of the preliminary design of a scheme. The RSA Brief and the RSA Team have been approved by HE. The RSA Brief is contained at Appendix D

**GG142 - Walking, Cycling and Horse-riding Assessment and Review (WCHAR)**

- 3.3.8 There are two stages to a WCHAR: an assessment and a review. The assessment shall be completed before the end of the preliminary design stage. The assessment is intended to: gain an understanding of existing facilities for pedestrians, cyclists and equestrians; provide background user information; and identify opportunities for users.

- 3.3.9 The assessment is documented in a Walking, Cycling and Horse-Riding Assessment Report. A completed Walking, Cycling and Horse-Riding Assessment Report for the proposed A21 level crossing scheme has been submitted to HE who have accepted the report meets the requirements of GG142.

**GG104 - Requirements for safety risk assessment**

- 3.3.10 A Safety Risk Assessment (SRA) is required for any activity that does or can have an impact on safety on Highways England's motorway and all-purpose trunk roads. This document sets out the framework and approach for safety risk assessments.
- 3.3.11 An SRA in accordance with these requirements has been submitted to HE. That the SRA demonstrates the risk to road user/workers is following mitigation as low as reasonably practicable.

**CG 300 - Technical approval of highway structures**

- 3.3.12 Where new or modified structures are proposed within the highway the technical approval of the design is progressed in accordance with this standard. This requires the completion of an Approval in Principle (AIP) document, which records the agreed basis and criteria for the detailed design or assessment of a highway structure.
- 3.3.13 An AIP submission in respect of changes to the highway embankment and flood culvert has been prepared by Arup and submitted to HE. At the time of writing the matter was still under consideration as noted in the draft SoCG.

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**CD 622 - Managing geotechnical risk**

3.3.14 This standard is used to provide a clear and consistent record of the management of geotechnical risks to the highways asset at all stages in a project. At the time of writing a schedule of requisite documents had been agreed with HE and were in preparation. It is expected that all documents would have been submitted and confirmed as acceptable by HE prior to the start of the Public Inquiry.

**Level Crossings: A Guide for Managers, Designers and Operators (December 2011)**

3.3.15 This document is for people who design, install, maintain and operate level crossings and provides general guidance on the design, safe management, operation, modification and use of them. Guidance is provided on the appropriate traffic signs to be installed on the approach to level crossing with a number of examples of layouts. The document is referenced in the Traffic Signs Manual as providing detailed information for the signage of level crossings.

3.3.16 ORR have recently (February 2021) consulted on a replacement to the above guide which is titled "Principles for managing level crossing safety". The main purpose of this document is to inform the assessment and control of risks at a level crossing and it sets out a number of principles. Each of the principles describes an ORR expectation for identifying or controlling the risks at a level crossing. A list of factors accompany each principle, these set out how the associated principle can be achieved.

3.3.17 As I note at section 6 the current guidance is to be adhered to in progressing the detail design of the crossing. Should the current guidance be replaced by that recently consulted upon then RVR would to adhere to the updated guidance.

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## SECTION 4 EFFECT ON TRAFFIC FLOW

### Previous Assessments

- 4.1.1 The effect of the RVR scheme on traffic flow on the A21 has been assessed through the completion of various reports over a period of almost 10 years. During that time it has been necessary to update and revise the assessments to account for changes in the base traffic situation of the A21 and to the expected operation of the level crossing (timings, barrier equipment etc).
- 4.1.2 Prior to my instruction the following reports were prepared by Mott McDonalds on behalf of RVR:
- Traffic Impact Study (**October 2011**), RVR/34;
  - Highways & Traffic Assessment Report (Response to HA Comments on A21 Crossing) (**January 2013**), RVR/63;
  - Traffic Impact Study - Supplementary Technical Note (**January 2013**) RVR/63 Appendix D; and
  - Addendum to Traffic Impact Study (**December 2018**) RVR/75;
- 4.1.3 The reports considered the effect of the A21 level crossing (and those on Northbridge Street and Junction Road) using the latest available traffic data. The most recent report (December 2018) used traffic data from 2017 and provided an update to the original study in October 2011 which was based on 2010 traffic data.
- 4.1.4 The reports assessed the likely extent of queuing arising from the proposed A21 level crossing based on an assumed barrier down time. The 2018 study assumed a barrier downtime of 55 seconds, which had been agreed with the ORR (a sensitivity assessment assuming 110 second barrier downtime was also undertaken).
- 4.1.5 The assessment of queues arising at the A21 level crossing has varied between reports based on changes in traffic data, although overall the level of queuing has remained at a broadly comparable level.

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### **Revised Assessments**

4.1.6 The assessments undertaken in these previous Mott McDonald studies provide a reasonable appraisal of the likely effects of the proposed level crossing on the A21. However, in discussion with HE it was agreed to undertake more detailed analysis which:

- Used up to date traffic data using a survey of the A21 at the location of the level crossing;
- Tested the assumptions regarding the barrier closure times; and
- Used traffic signal modelling software to estimate the queueing on the A21.

4.1.7 The up to date traffic data was supplemented with data from HE's permanent counters on the A21 to the north of Robertsbridge. Assessments were progressed on this basis and submitted for audit by HE. Following a series of comments, reviews and updates to the technical analysis the following has been agreed with HE:

- Typical weekday, weekend and worst case May Day Bank Holiday traffic flows for the busiest 15 minute periods used to assess the extent of queueing;
- The barrier closure times used for assessment was 72 seconds; and
- That the time periods and days used to assess the impact of the level crossing on the SRN represent a robust assessment

4.1.8 The details are set out in a series of technical notes which are attached at Appendix E.

4.1.9 In summary, the predicted queues arising from the proposed level crossing on the A21 would:

- not adversely affect the free flow of traffic on the A21.
- not adversely impact upon the operation of the Robertsbridge roundabout; and
- not adversely interact with the existing A21 pedestrian crossing (north of Robertsbridge roundabout).

4.1.10 The technical analysis has been accepted by HE and discussions continue to confirm agreement through appropriate wording in the SOCG.

### **Planning Conditions**

4.1.11 The planning permission includes two Conditions which were included at the request of HE:

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- Condition 18: Queue Length Monitoring; and
- Condition 21: Restrictions on the Level Crossing Operating Times

4.1.12 Condition 21 reduces the effect of the crossing on the free flow of traffic on the A21 by prohibiting its use during the typical weekday peak hour periods when traffic flow routinely reaches its daily maximum. Condition 18 provides a mechanism to monitor queue lengths with an obligation to provide advance warning signage should queueing exceed those predicted on a regular basis – improving the management of traffic flow on the approach.

## 4.2 Conclusion

4.2.1 Assessments accepted by HE demonstrate that the A21 crossing would not adversely impact the free flow of A21 road users. In accordance with NPPF the impact in terms of capacity and congestion would not be severe.



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## SECTION 5 ROAD SAFETY

### 5.1 Introduction

- 5.1.1 In this section I consider the road safety implications of the introduction of a new level crossing on the A21 at Robertsbridge in the context of the existing situation, applicable policy and the scheme design.

### 5.2 Existing Road Safety Record

- 5.2.1 Personal Injury Accident (PIA) data has been obtained from 'Sussex Safer Roads Partnership' which operates on behalf of Sussex Police for the highway network in the vicinity of the site. For the most recently available five-year period (01/02/2015 – 31/01/2020), a total of four accidents were recorded on the section of the A21 in the vicinity of the proposed crossing; three were slight and one was serious. There were no fatal injury accidents. A full appraisal of the accidents is provided in an Accident Analysis Technical Note at Appendix B. This data has been accepted by HE.

### 5.3 Existing level crossings

- 5.3.1 There are circa 5,800 level crossings currently in use on the mainline National Rail network in Great Britain with another estimated 1,500 level crossings on heritage and minor railways. Reportable incidents for the heritage sector show there were 12 collisions between trains and vehicles between 2011 and October 2019. None of these resulted in injury to the vehicle or train occupants.
- 5.3.2 In contrast, on the mainline railway network, there have been 81 vehicular collisions with trains in the last 10 years. Over the same period there have been 72 fatalities at level crossings of which 53 were pedestrians and 19 were road vehicle users (source: ORR Strategy for regulation of health and safety risks - 4: level crossings, February 2020).
- 5.3.3 The safety record of level crossings on heritage railway lines is not surprisingly considerably better than those on the mainline railway. This reflects the lower speed, lower frequency of train operations on heritage railways compared to mainline railways as noted in Mr Keay's evidence (RVR/W8/1).

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## 5.4 Policy & Standards

- 5.4.1 I set out a summary of HE policy at Section 3.1 above. In respect of level crossings, HE have no policy and indeed they have no requirements in their design standards (DMRB). The proposed level crossing could be construed as a new connection in the context of HE policy (Circular 02/13). As noted at section 3.1 a connection to the A21 accords with policy. In applying policy HE should consider proposals on the basis there is a presumption in favour of connection except where a clear case can be made to prohibit connection on the basis of safety or economic impacts.

### **Departure**

- 5.4.2 In accordance with the HE requirements (DMRB) it is necessary to submit a Departure to HE in respect of the proposed A21 level crossing since there are no requirements for level crossings in DMRB and thus paragraph 2.7 of GG101 applies:

***“Where an aspect of the works is not covered by existing requirements, a departure application for an aspect not covered by requirements shall be submitted.”***

- 5.4.3 I cover the Departure submission in the next section. One of the principal categories in assessing a departure is the impact upon safety, which is noted as being negative. This is because the introduction of a new level crossing on the A21 is a new point of conflict which will increase the overall risk of accidents. However, this needs to be judged against other impacts including economic benefits to reach a balanced judgement on the acceptability of the A21 level crossing.

## 5.5 Proposed A21 Level Crossing

- 5.5.1 As noted at paragraph 2.2.3 the proposed A21 Level Crossing would be an AFBCL type crossing. It provides full barrier closure of the carriageway and includes Obstacle Detection equipment as standard. The crossing will be automatically activated by an approaching train and does not rely on a signaller in a nearby signal box to activate the crossing closure sequence. CCTV monitoring will be provided. Further details are provided in the evidence of Mr Keay (RVR/W8/1).

5.5.2 The proposed crossing type is of significantly safer design compared to those currently in place on HE's SRN. For example, on the A259 (part of the SRN along the south coast) there are two level crossing (east of Rye) which provide half-barrier coverage and no other supporting technology. These cross the mainline where train speeds are high and there is a regular train frequency seven days per week. There are no plans to improve or remove these crossings.

5.5.3 The design of the approach to the Level Crossing on the A21 has been undertaken by Arup. The design has been prepared in accordance with the requirements of DMRB on the approaches to the level crossing location with reference to the ORR Guide and the Traffic Signs Manual as appropriate. The designs have been accepted by HE following technical audit with the following highway design drawings of modifications to the A21 compliant with DMRB insofar as it covers the requirements of the design:

- Robertsbridge Bypass General Arrangement 23905-ARP-XX-XX-DR-CH-0001;
- Robertsbridge Bypass Road Markings 23905-ARP-XX-XX-DR-CH-0002; and
- Robertsbridge Bypass Traffic Signs 23905-ARP-XX-XX-DR-CH-0003.

5.5.4 I make further comment on highway design at Section 6.

5.5.5 The proposed A21 Level Crossing would provide an increased risk compared to the existing situation. Analysis using data from the DfT has been used to estimate the risk of accidents following the introduction of a level crossing. Full details of the analysis is set out in Appendix F. It has been estimated that introduction of a level crossing on the A21 around Robertsbridge would increase the annual risk of a fatality from 0.041 to 0.055.

5.5.6 The level crossing on the A21 will result in queuing on the approaches when the barriers are lowered to allow a train to pass. As noted in the previous section the traffic impacts associated with the operation of the level crossing have been accepted by HE. The assessments have identified the maximum length of queues along the A21 using the peak hour traffic flows on a Spring Bank Holiday (full details are provided in the Appendix E). To establish the ability of the A21 to safely accommodate these maximum queues the geometric characteristics of the existing alignment have been reviewed. Specifically, the forward visibility for vehicles approaching the maximum back of queue and at any point between the maximum back of queue and the level crossing where queuing could occur. Drawing No. ITL14477-GA-003C

attached at Appendix G demonstrates that forward visibility in accordance with the requirements of DMRB is provided in both directions. Thus, drivers would have appropriate and safe visibility of any queues arising from the operation of the level crossing on their approach.

- 5.5.7 Accordingly, the maximum queues arising from the level crossing operation would be accommodated safely within the A21 carriageway.

## 5.6 Risk Assessment

### ORR

- 5.6.1 In progressing the assessments necessary to support the TWAO, the RVR project team have consulted with stakeholders most notably the ORR. One of the principal submissions to the ORR was a Narrative Risk Assessment of the A21 Level Crossing (RVR/75).
- 5.6.2 Following a period of discussion and provision of information on the benefits and impacts of level crossings (further details provided in the evidence of Mr Keay) the ORR set out their position of the RVR scheme in their letter dated 31 January 2020 which included their Statement of Case (REP/017).
- 5.6.3 In summary, in respect of the consented A21 Level Crossing ORR are satisfied that their test of exceptional circumstances has been met and that a tolerably safe level crossing could be created. In reaching this conclusion the ORR has considered the practicable alternatives to a level crossing. The ORR's opinion is that there is a degree of gross disproportion between the costs of a level crossing and the cheapest form of grade separation.

### GG 104 – Safety Risk Assessment

- 5.6.4 In accordance with the requirements of DMRB the highway designers of the scheme prepared a SRA as per the guidance in GG104. This has been submitted to HE for review and at the time of writing discussions are ongoing. The SRA assesses all the foreseeable risks of the proposed level crossing for road users (and road workers).
- 5.6.5 In summary, the SRA demonstrates that each reasonably foreseeable hazard has been assessed prior to and following mitigation. All hazards are shown to have low risk value following mitigation. Following the mitigation described, the evaluation of the reasonably

foreseeable risks has shown that the operation of an at-grade level crossing on the A21(T) would meet the objective of the SRA of being acceptable in terms of safety risk for all populations. Risks would be as low as reasonably practicable

## 5.7 Summary & Conclusion

5.7.1 I have considered the road safety implications of a new level crossing on the A21 around Robertsbridge in the context of the existing road safety record, applicable HE policy, and the proposed design of the level crossing. In summary, based on the appraisal set out above I have shown:

- The A21 in the location of the level crossing has experienced no personal injury accidents;
- The HE should apply a presumption in favour of new connections to the A21 in this location;
- The design of the level crossing approaches accord with HE requirements (DMRB) and safely provides for queueing vehicles;
- The proposed level crossing would incorporate the safest standard of equipment available;
- Separate risk assessments by the designers of the railway and A21 show that risks would be as low as reasonably practicable; and
- The ORR has concluded a tolerably safe crossing can be provided.

5.7.2 I consider safety further in the context of the Departure in the next section. However, based on the above summary I conclude that the proposed level crossing on the A21 would not have an unacceptable impact on road safety.

## SECTION 6 HIGHWAY DESIGN & DEPARTURES

### 6.1 Preliminary Highway Design

6.1.1 A preliminary design of the changes required to the A21 to construct the A21 Level Crossing has been prepared by Arup as Lead Designer. The preliminary design drawings are Inquiry documents RVR/74-01, 02 and 03. The modifications to the A21 comprise:

- Widening of carriageway through level crossing (footway/safety strip);
- Installation of Wig Wag signals and signage;
- Installation of new warning signage on approaches;
- Extended street lighting to encompass crossing and approach;
- Extension of 40mph speed limit south on approach to Level Crossing (which has police support and would be implemented by HE);
- New road markings on approach and through level crossing; and
- Clearing of vegetation on approach to provide requisite visibility.

6.1.2 The horizontal alignment of the A21 would be unchanged. The vertical alignment would require some modification to the A21 over approximately 50m either side of the crossing as shown on Arup drawing no. 239025-ARP-XX-XX-DR-CH-0010 (RVR/74-05).

6.1.3 Where design elements are covered by existing requirements in DMRB then the design accords with those requirements. As part of the preliminary design process in accordance with the requirements of DMRB the following have been prepared:

- WCHAR;
- SRA;
- AIP for changes to highway embankment and flood culvert; and
- Geotechnical Submission;

6.1.4 Associated documents have been submitted to HE for their review including a RSA brief (Appendix D).

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## 6.2 Departure

6.2.1 As noted at paragraph 3.3.3 the DMRB requires that any scheme on HE's network which includes a design requirement not covered by DMRB necessitates a Departure. In this case the requirement for a Departure derives from the absence of design requirements for a level crossing in DMRB. In other words the requirement for a Departure is an HE requirement in accordance with DMRB.

6.2.2 In the context of HE's design requirements it is worth noting again (paragraph 5.6.3) that ORR have concluded that a tolerably safe level crossing could be created on the A21 and in reaching this conclusion were satisfied that their test of exceptional circumstances has been met.

6.2.3 A Departure has been submitted to HE through their on-line Departure Approval System. The benefits, risks and impacts of the proposed Departure are assessed against a design that complies with DMRB, which would be a segregated crossing. The assessments cover safety, technical, programme, budget, environmental, innovative, maintenance and network. The assessment should include the wider economic benefits associated with the departure.

6.2.4 In order for a Departure to be approved by HE, the assessment shall demonstrate that the benefits outweigh the adverse impacts.

6.2.5 The impacts of the A21 Level Crossing Departure when compared against the alternatives can be summarised as follows:

- Safety - Negative
- Technical - Positive
- Programme - Neutral
- Budget - Neutral
- Environmental - Positive
- Innovative - Positive
- Maintenance - Neutral
- Network - Neutral

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### **Safety**

- 6.2.6 The only negative impact likely to result is in relation to safety. The SRA has considered all the safety risks associated with the construction and operation of the proposed level crossing and identified that with appropriate mitigation all risks are as low as reasonably practicable. Therefore, whilst the impact would be negative it would be close to neutral.
- 6.2.7 An assessment of the valuation of accident savings, construction costs and the wider economic benefits of the level crossing compared to the least cost alternative of a road bridge is set out in the Cost Benefit Analysis Technical Note (ITL1477-019 TN, April 2021). Comparing the wider economic Present Value Benefits (PVB) of the RVR with the Present Value Costs (PVC) of construction of the level crossing and Valuation of Accident Prevention associated with increased risk of accidents the net Cost Benefit has been calculated as +£16.83m, with a Benefit to Cost Ratio (BCR) of 3.74. The comparable figures for the least cost alternative road bridge are +£10.57m and 1.85.
- 6.2.8 Thus, the scheme would deliver considerable wider economic benefits which substantially outweigh the likely increased safety risk monetised as a Valuation of Accident Prevention. Similarly ORR accept that there is a degree of gross disproportion between the costs of an alternative when weighed against the safety benefits.
- 6.2.9 The BCR for the level crossing demonstrates that the wider economic benefits substantially outweigh the costs associated with the construction and operation of the scheme. It is noted that the BCR of the level crossing is broadly double that of the lowest cost alternative arrangement. With reference to the GG104 Requirements for Safety Risk Assessment (paragraphs 3.12 to 3.13) it is noted that safety risk mitigation measures with a BCR of greater than 2 can be promoted on safety grounds.

### **Technical**

- 6.2.10 The technical impacts are expected to be overall beneficial with the use of "Level Crossings: A guide for managers, designers and operators" (Railway Safety Publication 7, December 2011) considered the appropriate design guidance in the absence of any design standards or guidance set by the DMRB. Indeed, as noted at paragraph 3.3.4 DMRB (GG101) recommends the use of current and relevant guidance when DMRB does not provide requirements.



6.2.11 Application of the ORR guidance to the RVR A21 Level Crossing would offer benefits given it provides guidance on numerous key design considerations, such as:

- Level Crossing types
- Provision for pedestrians at level crossings
- Traffic signals
- Traffic signs
- Road markings
- Visibility requirements
- Line speed relative to vehicle flow
- Legislative process and Level Crossing Orders

6.2.12 In this circumstance, its use would ensure consistency of level crossing signage, road markings etc. with other level crossings across the wider road network. There are no adverse impacts anticipated with the use of the ORR design guidance and its use accords with DMRB.

### **Environmental**

6.2.13 There are considerable environmental benefits from the proposed departure which would not require unacceptable flooding and landscape impacts.

### **Innovation**

6.2.14 Innovation has positive opportunities which the alternatives do not with the ability to use new technology which could have wider benefits through application at other existing level crossings on HE's network.

6.2.15 On balance therefore comparing the proposed departure with the alternative the environmental, technical and innovation benefits coupled with the wider economic benefits demonstrably outweigh the estimated safety disbenefits.

### **Progress of Departure Process**

6.2.16 In December 2020 an outline of the content and structure of the Departure was submitted to HE and a response was received. Following confirmation on the procedure, the Departure

documentation was submitted on 17 March 2021 via HE's on-line system. Following initial feedback from HE's assigned Project Manager a revised submission was made on the 20 April 2021. Following review by HE a response was received on 27 May 2021 via HE's on-line system. Both the 20 April 2021 submission and the HE response have been shared with the Inquiry and landowners.

6.2.17 HE's response provides a range of general comments on the submission and then identifies 33 matters upon which further information is requested to enable the Departure to be determined. I have reviewed the response along with Arup and RVR. The 33 matters can be divided into three categories: Administrative (11), Design Clarifications (17) and Traffic Clarifications (5). Administrative essentially relate to additional documents, previous correspondence and consultation. Design Clarifications are related to specific elements of the level crossing design and associated changes to the A21. Traffic Clarifications cover assessment of the traffic impact implications of the level crossing.

6.2.18 A meeting between representatives of HE's departure team and the RVR team has been arranged for the 9 June 2021 to discuss each matter and agree the content of a further submission to HE. At the time of submitting my evidence work was underway to set out a response to each matter, which will be shared with HE prior to the meeting and form the basis for discussion.

6.2.19 Following the meeting an update to the Departure submission will be made. An update on the status of discussions with HE will be provided prior to the start of the Inquiry with work continuing alongside on the SoCG.

## 6.3 **Summary**

6.3.1 A preliminary design of the changes required to the A21 to construct the A21 Level Crossing has been prepared by Arup as Lead Designer. The preliminary design drawings are Inquiry documents RVR/74-01, 02 and 03. The horizontal alignment of the A21 would be unchanged. The vertical alignment would require some modification to the A21 over approximately 100m either side of the crossing as shown on Arup drawing no. 239025-ARP-XX-XX-DR-CH-0010 (RVR/74-05).

- 6.3.2 Where design elements are covered by existing requirements in DMRB then the design accords with those requirements. As part of the preliminary design process in accordance with the requirements of DMRB supporting documents have been prepared and submitted to HE including SRA, WCHAR and RSA brief.
- 6.3.3 As noted at paragraph 3.3.3 HE requires that any scheme on HE's network which includes a design requirement not covered by DMRB necessitates a Departure. The requirement for a Departure is an HE requirement in accordance with DMRB. It is noted that ORR have concluded that a tolerably safe level crossing could be created on the A21 and in reaching this conclusion were satisfied that their test of exceptional circumstances has been met.
- 6.3.4 A Departure has been submitted to HE through their on-line Departure Approval System. In order for a Departure to be approved by HE, the assessment shall demonstrate that the benefits outweigh the adverse impacts. The impacts of the A21 Level Crossing Departure when compared against the alternatives can be summarised as follows:
- Safety - Negative
  - Technical - Positive
  - Programme - Neutral
  - Budget - Neutral
  - Environmental - Positive
  - Innovative - Positive
  - Maintenance - Neutral
  - Network - Neutral
- 6.3.5 The only negative impact likely to result is in relation to safety. The SRA has considered all the safety risks associated with the construction and operation of the proposed level crossing and identified that with appropriate mitigation all risks are as low as reasonably practicable. Therefore whilst the impact would be negative it would be close to neutral.
- 6.3.6 An assessment of the valuation of accident savings, construction costs and the wider economic benefits of the level crossing compared to the least cost alternative of a road bridge has been undertaken, which show the scheme would deliver considerable wider economic benefits

which substantially outweigh the likely increased safety risk monetised as a valuation of accident prevention. Similarly ORR accept that there is a degree of gross disproportion between the costs of an alternative when weighed against the safety benefits.

- 6.3.7 The technical impacts are expected to be overall beneficial with the use of “Level Crossings: A guide for managers, designers and operators” (Railway Safety Publication 7, December 2011) considered the appropriate design guidance in the absence of any design standards or guidance set by the DMRB.
- 6.3.8 On balance therefore comparing the proposed departure with the alternative the environmental, technical and innovation benefits coupled with the wider economic benefits demonstrably outweigh the estimated safety disbenefits.

## SECTION 7 EAST SUSSEX COUNTY COUNCIL (ESCC)

### 7.1 Introduction

7.1.1 The RVR would create two new level crossings on the local highway network in addition to the crossing on the A21. The level crossings would be located on Junction Road (B2244) and Northbridge Street. ESCC is the local highway authority responsible for both these roads. ESCC did not object to the application for the Order.

7.1.2 The preliminary design of each of the level crossings has been prepared by Arup and their general arrangement design drawings are Inquiry documents RVR/74-01, 02 and 03. These designs were submitted as part of the planning application and were taken into account by ESCC in their consultation response. ESCC raised no objection to the planning application for the proposed level crossings on either Junction Road or Northbridge Street subject to two conditions:

***25. The proposed introduction of level crossings on both the B2244(Junction Road) and the C18 (Northbridge Street) will be subject to associated traffic calming schemes, including a speed limit review, being agreed with this Highway authority. Any proposed works on the existing highway network will be subject of the full Road Safety Audit process and should be carried out in accordance with our Implementation and Road Safety Teams.***

***26. A full Travel Plan for the proposal, in accordance with East Sussex County Council guidance, is required prior to the development being brought into use, and this shall have regard to existing parking limitations, within Robertsbridge. The details of the Travel Plan can, however, be adequately secured by Section 106 agreement so that a final Travel Plan is agreed prior to opening of the RVR and should contain detailed proposals to address on-street parking concerns.***

7.1.3 The first condition relates to the approaches to the level crossings in respect of reducing vehicle speeds through the implementation of appropriate traffic calming measures and a review of speed limits. It can be seen from the design drawings (part of ORR submission, RVR/75) that the proposed approaches to the Junction Road crossing incorporated suggested traffic calming features including roundels, road markings, signage and a reduction in the speed limit to 40mph.

7.1.4 Since the grant of planning permission RVR have continued liaison with ESCC in obtaining a TRO to reduce the speed limit on Junction Road in the location of the proposed crossing. A

public consultation arranged by ESCC on the proposed speed limit change did not receive any objections and ESCC indicated that they would progress the implementation of the TRO. However, the detail of the traffic calming design has not been progressed further pending resolution of the application for statutory powers and the TRO has since expired. Nonetheless, the preliminary design drawings demonstrate suitable traffic calming measures are feasible and as explained the speed limit has the support of ESCC. It is expected that once the design of the traffic calming measures has been agreed with ESCC they will be carried out by RVR under ESCC powers.

- 7.1.5 The Northbridge Street level crossing would be located within the urban area of Robertsbridge where vehicle speeds are commensurate with the existing 30mph speed limit. The road already has appropriate signage and road markings. Thus, there should be no need for further specific measures, although clearly the planning condition provides the opportunity for RVR to demonstrate the existing situation is appropriate to the satisfaction of ESCC.
- 7.1.6 The second condition (26) relates to concerns raised during the application process regarding increased demand for parking in Robertsbridge particularly in the vicinity of the station. The condition requires the preparation of a Travel Plan to manage movement patterns associated with the heritage railway services to and from Station Robertsbridge. It contains a specific requirement to address on street parking concerns. I understand the concerns around parking are based on anecdotal evidence based on experience of prevailing travel behaviour. The pandemic has impacted travel behaviour across the country and it is likely Robertsbridge is no different. Thus, it is appropriate that the concerns around parking are addressed at a time which coincides with the commencement of services to ensure any measures are properly targeted.
- 7.1.7 A Travel Plan provides a mechanism to determine a series of measures that can be implemented to achieve specified objectives in relation to movement patterns – both timing and travel mode. The Travel Plan must be agreed with ESCC prior to commencement of services and will incorporate a monitoring regime to enable ESCC to ensure the measures are successfully implemented. Typically, a Travel Plan covers a period of five years. Condition 26 provides an appropriate means to mitigate any impacts which may arise in and around Robertsbridge Station.

## SECTION 8 THIRD-PARTY POSITIONS

### 8.1 Richard Max & Co

8.1.1 The concerns of the landowners are most recently set out in WSP's letter to HE dated 19 April 2021 (copy attached at Appendix H). The letter raises a list of concerns which are similar to those contained in the Statement of Case (OBJ/1002). The concerns can be summarised under the following headings:

- Road Safety on A21;
- Impact on Traffic flow on A21;
- Incomplete and out of date information;
- Prejudice to A21 dualling; and
- Car parking in Robertsbridge.

8.1.2 I have set out a complete response to each individual point raised in both the Statement of Case and the 19 April 2021 letter which is attached at Appendix H and set out a response to the above listed matters below.

#### **Road Safety on A21**

8.1.3 Section 5 of my evidence deals with the road safety impacts associated with the proposed level crossing on the A21. I conclude that the proposed level crossing on the A21 would not have an unacceptable impact on road safety.

#### **Impact on Traffic flow on A21**

8.1.4 Section 4 of my evidence deals with the traffic flow impacts associated with the proposed level crossing on the A21. Assessments accepted by HE demonstrate that the A21 crossing would not adversely impact the free flow of A21 road users and in accordance with NPPF the impact in terms of capacity and congestion would not be severe.

#### **Incomplete and out of date information**

8.1.5 The concerns essentially relate to:

- Use of out of date traffic flow data on A21;
- Lack of appraisal of road safety record of A21;
- Lack of WCHAR assessment; and
- Absence of RSA documentation.

8.1.6 In response to each of these issues:

- The FEI provides an update to the original ES using data collected in 2019 and accepted as representative by HE;
- The existing road safety record has been assessed (Section 5.1) and accepted as accurate by HE;
- A WCHAR assessment has been completed to the satisfaction of HE; and
- RSA documentation has been prepared and submitted to HE in accordance with their requirements.

**Prejudice to A21 dualling**

8.1.7 There are currently no proposals for the dualling of the A21. It does not form part of HE's Road Investment Strategy, whereas the RVR currently has planning permission. Thus, RVR will be considered a 'committed development' should dualling of the A21 be resurrected.

8.1.8 HE are developing an A21 Safety Package between the M25 and Hastings with a series of schemes to improve safety along this corridor. The measures will include junction improvements, improvements to road alignment and visibility, changes to speed limits, improved signing, markings and road studs. As noted in section 5 the A21 around Robertsbridge has a low incidence of injury accidents and it is notable that the Robertsbridge roundabout is not identified by HE as warranting improvement as part of the A21 Safety Package.

**Car parking in Robertsbridge**

8.1.9 I dealt with this matter at section 7 in respect of the requirement for a Travel Plan as stipulated by Condition 26 of the planning permission. The evidence of Mr Gillett (RVRW1/1) provides further background to parking matters.



## 8.2 **Eric Hardwicke**

- 8.2.1 Mr Hardwicke objects to installing an at-grade level crossing on the A21 because it would add to existing traffic delays and act as an 'obstacle' for people visiting Hastings.
- 8.2.2 I have dealt with traffic flow at Section 4 and that the A21 crossing would not adversely impact the free flow of A21 road users.

## 8.3 **Kathryn Bell**

- 8.3.1 Kathryn Bell objects to the reinstatement of Rother Valley Railway (RVR) from Northbridge Street, Robertsbridge, to Junction Road, Bodiam, for the following three main reasons: a lack of socio/economic benefits; traffic congestion/parking and increased risk of flooding.
- 8.3.2 I deal with the second of these reasons. The others are dealt with by Mr Higbee.
- 8.3.3 Ms Bell raises specific concern about conflict between trains and school traffic during school pick up times. Condition 21 limits the operation of trains to avoid times before 09.00, thus avoiding the morning school peak. Further, services would mainly operate on weekends and during school holiday periods thus avoiding any interaction with school travel patterns.
- 8.3.4 Assessments have been undertaken of maximum traffic flow periods and the A21 crossing would not adversely impact the free flow of A21 road users.

## 8.4 **Greg Clark MP**

- 8.4.1 Mr Clark objects to the installation of an at-grade level crossing on the A21 since it would jeopardise the potential for dualling the road in the future.
- 8.4.2 In response to Mr Clark's objection, whilst it is acknowledged that the A21 Reference Group is campaigning for dualling of the A21 between Tonbridge and Hastings, there are currently no proposals for this to occur, whereas the RVR currently has planning permission. Thus, RVR will be considered a 'committed development' should dualling of the A21 be resurrected.

## 8.5 Specific Objector Topics

### Impact on Robertsbridge (Businesses)

- 8.5.1 Concern relates to the lack of parking controls within Robertsbridge. As noted at section 7 concerns relating to parking will be assessed and managed through the implementation of a Travel Plan. The evidence of Mr Higbee (RVR/W2/1) provides more on the impact on business.

### Delayed Emergency Services

- 8.5.2 The A21 crossing would not adversely impact the free flow of A21 road users as explained at Section 4. In addition, it should be noted that the closure times are short, occur for very few occasions during a day and an alternative route via Robertsbridge is available.

### Maintenance of the Railway – Impact on A21

- 8.5.3 Condition 19 of the planning permission requires the preparation, submission and approval by HE of a Level Crossing Maintenance Plan. In addition the protective provisions require the maintenance arrangements to be approved by HE prior to operations commencing. These measures will ensure HE's requirements in terms of safety and traffic management during maintenance activities at the level crossing are adhered to and that there is no adverse impact on the A21.

### Proximity to Roundabout

- 8.5.4 I deal with matters in relation to traffic flow at Section 4. It is explained that the queuing arising from the level crossing would not adversely impact upon the operation of the Robertsbridge roundabout.

### Insufficient/Out of Date Information

- 8.5.5 I deal with this matter at paragraphs 8.1.5 and 8.1.6.

## SECTION 9 SUMMARY AND CONCLUSION

### Overview & Background

9.1.1 I provide evidence on the following topics;

- The impact of the proposed level crossings on road safety;
- The impact of the proposed level crossings on traffic flow (and delay);
- Compliance with highway design requirements;
- Adequacy of the ES and Further Environmental Information; and
- Responses to specific third party objectors.

9.1.2 My evidence primarily relates to the objections raised by Highways England (HE) in respect of the level crossing on the A21, although I also consider the two level crossings on Northbridge Street and Junction Road. In addition, matters relating to the above topics raised by third parties are covered.

9.1.3 With reference to the Statement of Matters my evidence covers 3(a), 3(e), 5 and 6.

9.1.4 Planning permission (RR/2014/1608/P) was granted on 22 March 2017 for the reinstatement of the Rother Valley Railway from Northbridge Street, Robertsbridge to Junction Road. The planning consent provides for the reinstatement of the railway along its original route and requires the creation of three road level crossings on the A21, on Northbridge Street and on Junction Rd. The A21 is part of the SRN and the responsibility of HE. Northbridge Street and Junction Road are the responsibility of the local highway authority East Sussex County Council.

9.1.5 The final consultation response of the HA was issued on 27 March 2015 and directed that should Rother District Council grant permission that 9 conditions be attached to any consent. The Decision Notice (RR/2014/1608/P dated 22 March 2017) includes all 9 conditions (numbers 15 to 23). The HA consultation response noted that ***"we do appreciate that the limited nature of a level crossing for a heritage railway, will have less of an impact than a crossing for a mainline railway."***

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- 9.1.6 ESCC as highway authority for B2244 Junction Road and Northbridge Street did not object to the proposed level crossings subject to a number of conditions relating to road safety. The Decision Notice includes the proposed conditions (numbers 25 and 26).
- 9.1.7 In September 2018 HE issued their Statement of Case in respect of the Order which raised objection for a number of reasons, which can be summarised as follows:
- Safety implications for A21 users;
  - Impact on traffic flows along the A21;
  - Adequacy of the Environmental Statement;
  - Conformity with design guidance (DMRB);
  - Protective provisions; and
  - Stopping up powers.
- 9.1.8 I was instructed RVR in January 2019 and since that time have been working on resolving matters raised by HE in their Statement of Case. Discussions have continued with HE since the submission of the Order application in April 2018. Alongside which further information has been provided in response to the queries raised by HE. The volume of work provided in response to HE's concerns has been substantial.
- 9.1.9 Much of the work undertaken in the last two years is beyond that typically required at this stage of a project and is provided for within the planning conditions and protective provision upon which HE must be satisfied. Nonetheless RVR have engaged positively with HE and despite reservations have undertaken assessments and appraisals which would typically be carried out following grant of a TWAO.
- 9.1.10 At the time of writing discussions were continuing and a working draft SOCG had been prepared in discussion with HE. Discussions are focused on the Departure submission which touches upon the first four of HE's objections. The latest draft SOCG highlights some areas of agreement and ongoing discussion on these first four matters: safety for A21 users; impact on traffic flows along the A21; adequacy of the Environmental Statement; and conformity with design guidance (DMRB). The protective provisions and stopping up powers have been agreed.
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- 9.1.11 As part of my early input into discussions with HE it was agreed that it was important to establish the parameters for assessing the impact of the proposed level crossing on the operation and safety of the A21. This included agreeing the operational attributes of the level crossing scheme for the purposes of clarity and to provide an unambiguous context to the remainder of my evidence and the basis for the agreement reached.
- 9.1.12 It is agreed between RVR and HE that for the purposes of assessment the type of level crossing proposed is an 'Automatic Full Barrier Controlled Locally' level crossing (AFBCL). This type of crossing provides full barrier closure of the carriageway and includes Obstacle Detection equipment. The crossing is automatically activated by an approaching train.
- 9.1.13 It has been agreed with HE that the barrier downtime used to undertake traffic modelling of vehicle queues and delays is 72 seconds. This figure has been calculated based on the expected operational sequence and has been agreed between the relevant specialists on behalf of RVR and HE. It differs from the previous time of 55 seconds which was agreed between ORR and RVR, which assumed different barrier equipment and associated operational sequence.
- 9.1.14 The existing heritage railway operation between Tenterden and Bodiam, the Kent and East Sussex Railway (KESR), would operate over the RVR to allow services between Robertsbridge and Tenterden. It is assumed that the extended route would operate the same timetable as the current KESR, which operates on approximately only 50% of days annually.
- 9.1.15 There were generally between 4 and 5 return services per day of operation on the KESR in 2019, which would require between 8 and 10 closures of the proposed A21 Level Crossing. Even 10 crossings of the A21 per day would amount to no more than 12 minutes of highway closure, over a limited number of days in any given year.
- 9.1.16 The ES provided a guide to the likely construction methodology of the entire railway based on the information at the time (2014). In RVR/74-06 Approval in Principle: A21 Level Crossing and Mill at paragraph 3.14.2 a suggested traffic management regime is set out. Notwithstanding these approaches, the precise details of the construction methodology for the A21 level crossing will be confirmed once the design is finalised and a contractor has been appointed.

9.1.17 As part of discharge of Condition 16 of the planning permission a Construction Traffic Management Plan will be prepared and approved by HE before construction of the level crossing commences. Similar requirements are set out in the protective provisions. Hence, the construction methodology and associated traffic management regime will be controlled by HE, with the installation of the new railway crossing across the A21 expected to occur over a relatively short time period.

### **Policy & Guidance**

9.1.18 At both a national and local level there is policy support for the Rother Valley Railway. Alongside which it is clear any proposal should demonstrate it would not have unacceptable impacts upon the operation of the road network (capacity and congestion) or upon road safety. In respect of the SRN there is a presumption in favour of new connections with a requirement for any physical modifications to meet the design standards of HE (DMRB).

9.1.19 The Design Manual for Roads and Bridges (DMRB) sets a standard of good practice that has been developed principally for Motorways and Trunk Roads and provides requirements, advice and guidance for SRN works. It applies to works to the A21 associated with the proposed level crossing with particular reference to Road Safety Audits, Safety Risk Assessments and WCHAR's.

9.1.20 The ORR publication "Level Crossings: A Guide for Managers, Designers and Operators (December 2011)" is for people who design, install, maintain and operate level crossings and provides general guidance on the design, safe management, operation, modification and use of them. Guidance is provided on the appropriate traffic signs to be installed on the approach to level crossing with a number of examples of layouts. The document is referenced in the Traffic Signs Manual as providing detailed information for the signage of level crossings.

### **Effect on Traffic Flow**

9.1.21 The effect of the RVR scheme on traffic flow on the A21 has been assessed through the completion of various reports over a period of almost 10 years. During that time it has been necessary to update and revise the assessments to account for changes in the base traffic situation of the A21 and to the expected operation of the level crossing (timings, barrier equipment etc). The assessment of queues arising at the A21 level crossing has varied

between reports based on changes in traffic data, although overall the level of queuing has remained at a broadly comparable level.

9.1.22 The latest assessment was progressed in discussion with HE on an agreed basis. Assessments were submitted for audit by HE. Following a series of comments, reviews and updates to the technical analysis the following has been agreed with HE:

- Typical weekday, weekend and worst case May Day Bank Holiday traffic flows for the busiest 15 minute periods used to assess the extent of queuing;
- The barrier closure times used for assessment was 72 seconds; and
- That the time periods and days used to assess the impact of the level crossing on the SRN represent a robust assessment

9.1.23 The details are set out in a series of technical notes which are attached at Appendix E.

9.1.24 In summary, it has been demonstrated to HE that the predicted queues arising from the proposed level crossing on the A21 would:

- not adversely affect the free flow of traffic on the A21.
- not adversely impact upon the operation of the Robertsbridge roundabout; and
- not adversely interact with the existing A21 pedestrian crossing (north of Robertsbridge roundabout).

9.1.25 The planning permission includes two Conditions which were included at the request of HE:

- Condition 18: Queue Length Monitoring; and
- Condition 21: Restrictions on the Level Crossing Operating Times

9.1.26 Condition 21 reduces the effect of the crossing on the free flow of traffic on the A21 by prohibiting its use during the typical weekday peak hour periods when traffic flow routinely reaches its daily maximum. Condition 18 provides a mechanism to monitor queue lengths with an obligation to provide advance warning signage should queueing exceed those predicted on a regular basis – improving the management of traffic flow on the approach.

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### Road Safety

- 9.1.27 For the most recently available five-year period, a total of four accidents were recorded on the section of the A21 in the vicinity of the proposed crossing; three were slight and one was serious. There were no fatal injury accidents. A full appraisal of the accident is provided in an Accident Analysis Technical Note at Appendix B. This data has been accepted by HE.
- 9.1.28 There are circa 5,800 level crossings currently in use on the mainline National Rail network in Great Britain with another estimated 1,500 level crossings on heritage and minor railways. Reportable incidents for the heritage sector show there were 12 collisions between trains and vehicles between 2011 and October 2019. None of these resulted in injury to the vehicle or train occupants.
- 9.1.29 The safety record of level crossings on heritage reflects the lower speed, lower frequency of train operations on heritage railways compared to mainline railways as noted in Mr Keay's evidence (RVR/W8/1).
- 9.1.30 In respect of level crossings HE have no policy and indeed they have no requirements in their design standards (DMRB). The proposed level crossing could be construed as a new connection in the context of HE policy (Circular 02/13). As noted at section 3.1 a connection to the A21 accords with policy. In applying policy HE should consider proposals on the basis there is a presumption in favour of connection except where a clear case can be made to prohibit connection on the basis of safety or economic impacts.
- 9.1.31 The proposed crossing type is of significantly safer design compared to those currently in place on HE's SRN. For example, on the A259 (part of the SRN along the south coast) there are two level crossing (east of Rye) which provide half-barrier coverage and no other supporting technology. These cross the mainline where train speeds are high and along with a regular train frequency 7 days per week. There are no plans to improve or remove these crossings.
- 9.1.32 The design of the approach to the Level Crossing on the A21 has been undertaken by Arup. The design has been prepared in accordance with the requirements of DMRB on the approaches to the level crossing location with reference to the ORR Guide and the Traffic Signs Manual as appropriate. The designs have been subject to technical audit by HE and the



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following highway design drawings of modifications to the A21 are compliant with DMRB insofar as it covers the requirements of the design:

- Robertsbridge Bypass General Arrangement 23905-ARP-XX-XX-DR-CH-0001;
- Robertsbridge Bypass Road Markings 23905-ARP-XX-XX-DR-CH-0002; and
- Robertsbridge Bypass Traffic Signs 23905-ARP-XX-XX-DR-CH-0003.

9.1.33 The proposed A21 Level Crossing would provide an increased risk compared to the existing situation. Analysis using data from the DfT has been used to estimate that the risk of accidents following the introduction of a level crossing. Full details of the analysis is set out in Appendix F. It has been estimated that introduction of a level crossing on the A21 around Robertsbridge would increase the annual risk of a fatality from 0.041 to 0.055.

9.1.34 The ability of the A21 to safely accommodate maximum queues has been reviewed. Specifically, the forward visibility for vehicles approaching the maximum back of queue and at any point between the maximum back of queue and the level crossing where queuing could occur. Drawing No. ITL14477-GA-003C attached at Appendix G demonstrates that forward visibility in accordance with the requirements of DMRB is provided both directions. Accordingly, the maximum queues arising from the level crossing operation would be accommodated safely within the A21 carriageway.

9.1.35 In respect of the consented A21 Level Crossing ORR are satisfied that their test of exceptional circumstances has been met and that a tolerably safe level crossing could be created. In reaching this conclusion the ORR has considered the practicable alternatives to a level crossing. The ORR's opinion is that there is a degree of gross disproportion between the costs of a level crossing and the cheapest form of grade separation.

9.1.36 In accordance with the requirements of DMRB the highway designers of the scheme prepared a SRA as per the guidance in GG104. This has been submitted to HE for review and at the time of writing discussions are ongoing as noted in SoCG. The SRA assesses all the foreseeable risks of the proposed level crossing for road users (and road workers). In summary, the SRA demonstrates that each reasonably foreseeable hazard has been assessed prior to and following mitigation. All hazards are shown to have low risk value following mitigation. Following the mitigation described, the evaluation of the reasonably foreseeable risks has

shown that the operation of an at-grade level crossing on the A21(T) would meet the objective of the SRA of being acceptable in terms of safety risk for all populations.

#### **Highway Design & Departures**

- 9.1.37 A preliminary design of the changes required to the A21 to construct the A21 Level Crossing has been prepared by Arup as Lead Designer. The preliminary design drawings are Inquiry documents RVR/74-01, 02 and 03. The horizontal alignment of the A21 would be unchanged. The vertical alignment would require some modification to the A21 over approximately 100m either side of the crossing as shown on Arup drawing no. 239025-ARP-XX-XX-DR-CH-0010 (RVR/74-05).
- 9.1.38 Where design elements are covered by existing requirements in DMRB then the design accords with those requirements. As part of the preliminary design process in accordance with the requirements of DMRB supporting documents have been prepared and submitted to HE including SRA, WCHAR and RSA brief.
- 9.1.39 As noted at paragraph 3.3.3 the DMRB requires that any scheme on HE's network which includes a design requirement not covered by DMRB necessitates a Departure. The requirement for a Departure is an HE requirement in accordance with DMRB. It is noted that ORR have concluded that a tolerably safe level crossing could be created on the A21 and in reaching this conclusion were satisfied that their test of exceptional circumstances has been met.
- 9.1.40 A Departure has been submitted to HE through their on-line Departure Approval System. In order for a Departure to be approved by HE, the assessment shall demonstrate that the benefits outweigh the adverse impacts. The impacts of the A21 Level Crossing Departure when compared against the alternatives can be summarised as follows:
- Safety - Negative
  - Technical - Positive
  - Programme - Neutral
  - Budget - Neutral
  - Environmental - Positive

- Innovative - Positive
- Maintenance - Neutral
- Network - Neutral

9.1.41 The only negative impact likely to result is in relation to safety. The SRA has considered all the safety risks associated with the construction and operation of the proposed level crossing and identified that with appropriate mitigation all risks are as low as reasonably practicable. Therefore whilst the impact would be negative it would be close to neutral.

9.1.42 An assessment of the valuation of accident savings, construction costs and the wider economic benefits of the level crossing compared to the least cost alternative of a road bridge has been undertaken, which show the scheme would deliver considerable wider economic benefits which substantially outweigh the likely increased safety risk monetised as a valuation of accident prevention. Similarly ORR accept that there is a degree of gross disproportion between the costs of an alternative when weighed against the safety benefits.

9.1.43 The technical impacts are expected to be overall beneficial with the use of "Level Crossings: A guide for managers, designers and operators" (Railway Safety Publication 7, December 2011) considered the appropriate design guidance in the absence of any design standards or guidance set by the DMRB.

9.1.44 On balance therefore comparing the proposed departure with the alternative the environmental, technical and innovation benefits coupled with the wider economic benefits demonstrably outweigh the estimated safety disbenefits.

### ESCC

9.1.45 ESCC raised no objection to the proposed level crossings on either Junction Road or Northbridge Street subject to a two conditions. The first condition relates to the approaches to the level crossings in respect of reducing vehicle speeds through the implementation of appropriate traffic calming measures and a review of speed limits.

9.1.46 It can be seen from the design drawings at (part of RVR/75) that the proposed approaches to the Junction Road crossing incorporated suggested traffic calming features including roundels, road markings, signage and a reduction in the speed limit to 40mph. The preliminary design

drawings demonstrate suitable traffic calming measures are feasible and as explained the speed limit has the support of ESCC.

9.1.47 The Northbridge Street level crossing would be located within the urban area of Robertsbridge where vehicle speeds are commensurate with the existing 30mph speed limit. The road already has appropriate signage and road markings. Thus, there should be no need for further specific measures, although clearly the planning condition provides the opportunity for RVR to demonstrate the existing situation is appropriate to the satisfaction of ESCC.

9.1.48 The second condition (26) relates to concerns raised during the application process regarding increased demand for parking in Robertsbridge particularly in the vicinity of the station. The condition requires the preparation of a Travel Plan to manage movement patterns associated with the heritage railway services to and from Station Robertsbridge. It contains a specific requirement to address on street parking concerns. Condition 26 provides an appropriate means to mitigate any impacts which may arise in and around Robertsbridge Station.

### **Third Party Positions**

9.1.49 I deal with matters raised by third parties insofar as they relate to matters covered in my evidence. Many of the matters raised are consistent with those raised by HE and have referenced accordingly.

## **9.2 Conclusion**

9.2.1 In respect of traffic I have demonstrated that the A21 crossing would not adversely impact the free flow of A21 road users and therefore in accordance with NPPF the impact in terms of capacity and congestion would not be severe.

9.2.2 I have considered the road safety implications of a new level crossing on the A21 around Robertsbridge in the context of the existing road safety record, applicable HE policy, and the proposed design of the level crossing. I have shown:

- The A21 in the location of the level crossing has experienced no personal injury accidents;
- The HE should apply a presumption in favour of new connections to the A21 in this location;

- The design of the level crossing approaches accord with HE requirements (DMRB) and safely provides for queueing vehicles;
- The proposed level crossing would incorporate the safest standard of equipment available;
- Separate risk assessments by the designers of the railway and A21 show that risks would be as low as reasonably practicable; and
- The ORR has concluded a tolerably safe crossing can be provided.

9.2.3 Therefore I conclude that there would not be unacceptable impact of highway safety arising from the proposed A21 level crossing.

9.2.4 In respect of highway design the proposed A21 level crossing is compliant with DMRB where it includes applicable requirements. Where DMRB doesn't include requirements a Departure submission has demonstrated that on balance comparing the proposed departure with the alternative the environmental, technical and innovation benefits coupled with the wider economic benefits demonstrably outweigh the estimated safety disbenefits.

9.2.5 Overall, with respect to Statement of Matters 3(a), (e), 5 and 6:

- There would not be an unacceptable impact on road safety, traffic flow or congestion (matter 3(a));
- Impacts upon parking in and around Robertsbridge Station would be suitably mitigated through a Travel Plan (matter 3(e));
- The proposals accord with NPPF in respect of transport particularly paragraphs 108 and 109 (matter 5); and
- The ES is adequate as confirmed by HE (matter 6).

9.2.6 Accordingly, I respectfully ask the Inspector to find that there is no transport or highways reason for preventing the making of the TWAO.

