



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

ROTHER VALLEY RAILWAY

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

Summary Proof: Level Crossings and Land Accessibility

Philip Clark

Reference: TWA/18/APP/02/OBJ/1002/PJC/3



1 INTRODUCTION

PERSONAL DETAILS – QUALIFICATIONS AND EXPERIENCE

- 1.1.1. My name is Philip Clark. I am an Associate at WSP UK Limited, currently acting as Project Manager/Design Manager specialising in rail infrastructure projects. I am a Network Rail approved Contractors Responsible Engineer (CRE) for highway infrastructure. I have extensive experience in matters relating to level crossings and have carried out feasibility studies for over 90 level crossings.

DECLARATION

- 1.1.2. I am instructed by the Hoad family of Parsonage Farm, and the Trustees and Executors of the Noel de Quincey Estate and Mrs Emma Ainslie of Moat Farm (“the Landowners”).

HINDERANCE TO EVIDENCE REVIEW

- 1.1.3. Section 2.3 of Mr Fielding’s Proof of Evidence explains that a significant amount of new technical and design information has been made available in the last few weeks prior to the deadline for the exchange of evidence.
- 1.1.4. The late publication of this evidence has made it extremely difficult for me to finalise my evidence as I have been unable to review all the submitted material in detail in the time available. I have noted and commented on the material where possible but like Mr Fielding I reserve my position so far as it is necessary for me to clarify my evidence either before at the public inquiry once I have had a proper opportunity to review the material in full.”
- 1.1.5. Furthermore, Highways England have set out 33 items that the designers must address. The number of items identified required to be responded to confirms the significance of the need to provide a crossing in an appropriate form such that it does not compromise the safety of users of the A21.

2 SUMMARY PROOF

INCONSISTENCY

- 2.1.1. The submission documents contain numerous inconsistencies, particularly in relation to the frequency of barrier closures, duration of barrier down time, and method of operation and control of the barrier equipment, in particular, there is an absence of supporting evidence presenting the calculations to determine the barrier down duration. It is my opinion that such discrepancies misrepresent the actual delay to road users at the level crossings, by underestimating the actual length of closure.

2.2 SUMMARY

RESPONSE TO 3a

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

- 2.2.1. I consider that RVR has failed to appropriately assess and acknowledge the safety risk associated with the introduction of at grade level crossings, particularly on the strategic road network and user worked farm crossings, introducing risk to members of the public where previously there was none.
- 2.2.2. Examples of vehicle collision and degraded operation at level crossings on Heritage railways demonstrate the inherent risk of operating level crossings, even on routes with trains operating at low speed, with a risk of significant disruption to services and users of the level crossing. The consequential impact of incidents at level crossings are not adequately addressed within the Narrative Risk Assessments.
- 2.2.3. The A21 currently has no level crossings along its route between the M25 and Hastings. Level crossings that are present in the area are generally confined to minor local roads, private access and public rights of way; as such, drivers will not expect a level crossing on the A21, or for it to be in operation. This increases the risk of an accident by poor driver behaviour which is one of the reasons for the majority of accidents at Level Crossings.
- 2.2.4. Alternative proposals for grade separation of crossings have been readily discounted on the grounds of Gross Disproportion assuming that a new railway can be delivered within a very unrealistic budget and without a fully considered assessment of the whole life operational costs of level crossings, , cost of continual safety mitigation, and cost of catastrophic incidents.
- 2.2.5. The arrangement for level crossing signalling protection as described within the Narrative Risk Assessment (APP-D) do not reflect the change in level crossing type, from MCB-OD-CCTV to AFBCL-OD; as such, RVR has not fully considered the operational and crossing protection requirements to demonstrate its ability to adequately minimise risk and ensure the safety of users.
- 2.2.6. I am deeply concerned by an unsatisfactory operational procedure placing an expectation that train crew to carryout traffic management duties to halt traffic, with no authority from the highway authority, places train crew in a position of danger by interacting with vehicles on the public highway, and is potentially unsafe.
- 2.2.7. RVR has not considered the consequential impacts of an incident at one crossing, effecting a neighbouring crossing along the line.

- 2.2.8. Comparisons to existing level crossings in the national rail network suggest crossings similar to those proposed by RVR present a risk to users, particularly as the A21 in which comparators score a High to Very High Collective Risk
- 2.2.9. For User Worked Crossings, the Individual risk to those users is typically very high. This means that an individual user would be exposed to significant risk each time they use the crossing placing an unnecessary burden on my clients.
- 2.2.10. It is my opinion that grade separation is required for the A21 crossing in the interests of highway and user safety. RVR has failed to adequately consider the operational impacts of introducing a level crossing on the strategic road network or demonstrate how incidents of level crossing mis-use will be addressed.

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

- 2.2.11. I have grave concerns regarding the scale of design departures proposed by the RVR, some of which present a safety risk to road users:
- 2.2.12. RVR does not address necessary arrangements to provide access to farm access level crossings. I am concerned by the absence of any provisions for pedestrian and vehicle access to overcome the level difference between the railway and surrounding ground level on the approach to the level crossings, which is a significant oversight in this application. Therefore in my opinion, the scheme is not deliverable given the reliance on additional third party land to accommodate permanent engineering works associated with the construction of a suitable access to avoid land severance and ensure the safe use of the level crossings.
- 2.2.13. Proposed rail signalling layouts, level crossing barrier timing sequences, assumed train stopping distances are below the minimum requirements of the Railway Group Standard, and ORR design requirements.

2.3 CONCLUSIONS

- 2.3.1. I consider the proposals for the scheme to be deficient and therefore unacceptable in the following aspects, as detailed in my evidence, below:
- The application contains numerous technical discrepancies that undermine the accuracy and integrity of the proposals.
 - The proposals lack a full appreciation of safety risk to all users of the level crossings,
 - the barrier closure durations are underestimated
 - the proposals fail to give adequate consideration to agricultural land access and land take requirements for adequate approaches and visibility envelopes
 - The proposals do not meet ORR policy requirements.
 - Level crossings, whether over public highway, public right of way, or private access, provide a point of interaction between members of the public and railway, creating a potential point of conflict resulting in an increased risk to all users.
 - The applicant has substantially underestimated the construction and whole life costs for a fully informed assessment of 'gross disproportionality' when considering alternative grade separated options that would eliminate risk
- 2.3.2. I consider the proposals for this application to be inappropriate as they present a risk to the railway and public highway network as, in my opinion, this scheme would introduce a disproportionate level of risk to potential users within the surrounding network
- 2.3.3. I am concerned by the lack of consideration of sighting distances to all level crossings, and access provisions to UWC on an elevated embankment. Based on the evidence provided, and the absence of any engineering proposals that address the level differences, extent of earthwork, or guidance on the safe operational procedure for a farm access crossing, the proposed works are not achievable within the extents of this application boundary.
- 2.3.4. Precedent from the Cambrian Railways TWAO application, and Network Rail Wells Engine footpath diversion, demonstrate that the Inspector should refuse this application on grounds that the introduction of a level crossing on the strategic road network, and diversion of a public footpath without proper assessment of flood risk, are inappropriate and present an unnecessary risk.
- 2.3.5. I have formed this conclusion by drawing on my extensive experience working with Network Rail on over 90 level crossing projects seeking to minimise risk to all users; furthermore, I find it wholly unacceptable that a project that seeks to introduce new level crossings should be permitted to proceed without full and adequate consideration of level crossing operations and user safety, particularly those on the public highway.
- 2.3.6. I am of the opinion that this scheme, if granted, will introduce a disproportionate level of risk to all users of the level crossings, and unacceptable imposition on my clients as landowners directly affected by the proposals.