The Network Rail (Cambridge South Infrastructure Enhancements) Order

Proof of Evidence



NRE 6.1

Summary Proof of Evidence – Level Crossings (Mr John Prest)

Inquiries Procedure (England & Wales) Rules 2004

January 2022

Security Classification: OFFICIAL

The Network Rail (Cambridge South Infrastructure Enhancements) Order

Proof of Evidence



[This page is left intentionally blank]

NRE6.1

CASE FOR CLOSURE OF DUKES No.2 User Worked Crossing (with Telephone) and WEBSTERS User Worked Crossing (with Telephone) LEVEL CROSSINGS

SUMMARY PROOF OF EVIDENCE – JOHN PREST OF NETWORK RAIL

PINS REFERENCE: NRE6.1

CONTENTS

SECTION 1 – Introduction	
1.1	Personal Details3
1.2	Scope of Evidence
SECTION 2 – Summary of Evidence	
2.1	Overview
2.2	The risk of Level Crossings: The Crossings in context
2.3	Accommodation Bridge4
SECTION 3 – Network Rail's obligations regarding network safety and relevant legislation that applies to level crossings	
SECTION	4 – ORR and Network Rail National Policy on Level Crossings4
SECTION 5 – Network Rail's relevant level crossing standards and risk assessment at a user worked level crossing	
SECTION 6 – The assessment of level crossing safety risk and fatality weighted injuries	
SECTION 7 – Detailed description of the Crossings	
SECTION 8 – Current Risk Assessment of the Crossings	
SECTION 9 – Future Risks at Duke's No. 2 and Webster's	
SECTION 10 – The Accommodation Bridge	
SECTION 11 – The objection	
SECTION 12 – Conclusion	

SECTION 1 – Introduction

1.1 Personal Details

- 1.1.1 I, John Prest, am the Route Level Crossing Manager (West Anglia) for Network Rail Anglia Route, based at Ely Network Operations Depot, Station Road, Ely, Cambridgeshire. Since joining Network Rail in 2001, I have worked in various roles within Anglia Route, including that of Level Crossing Manager ("LCM") from 2013 to 2018, becoming a Route LCM in 2018.
- 1.1.2 My involvement in the scheme is in respect of two Level Crossings Dukes No.2 User Worked Crossing with Telephone and Websters User Worked Crossing with Telephone Level Crossings ("the Crossings"). The Crossings are proposed to be closed as part of the Cambridge South Infrastructure Enhancements ("CSIE") Project ("the CSIE Project").

1.2 Scope of Evidence

1.2.1 The scope of my Proof of Evidence covers the assessment by Anglia Route of Safety Risk at a User Worked Level Crossing, the justification for the closure of the Crossings and their replacement with an accommodation bridge..

SECTION 2 – Summary of Evidence

2.1 Overview

- 2.1.1 I outline the CSIE Project which is described in greater detail in **Section 5** of Network Rail's Statement of Case, and other colleagues' Proofs of Evidence. I explain that the CSIE Project seeks powers to take the following three actions:
 - a. To close Dukes No.2 and Websters over the West Anglia Main Line at Shelford
 - b. To extinguish existing private access rights over the Crossings; and
 - c. To provide alternative access measures.
- 2.1.2 I explain that given the powers sought as part of the CSIE Project, my Proof sets out the risks that Level Crossings can pose to users.

2.2 The risk of Level Crossings: The Crossings in context

- 2.2.1 In general terms, Level Crossings present a degree of risk in that they are an open interface between the railway and the highway, giving rise to an increased potential for user behaviour to affect train operations.
- 2.2.2 The Crossings pose a particular risk because they are both User Worked Crossings ("**UWCs**") that have telephones to contact the local signallers at Cambridge. I explain why this is a significant and summarise the risk.

- 2.2.3 At the Crossings, the signage is explicit in directing the Users to telephone the signallers to gain permission to cross before they cross the railway with their vehicles. This is because neither Crossing offers all users the Required Sighting Distance ("**RSD**") in order to be able to safely cross without doing so.
- 2.2.4 In broad terms, Dukes No. 2 crosses two railway lines (to be increased to four lines as part of the CSIE Project) and Websters already crosses four such lines. I explain that this is a risk because multiple railway lines may confuse a user who does not phone for permission to cross, and again I summarise this risk
- 2.2.5 The train service over both Level Crossings, consists of 307 passenger and freight trains and a highest permissible line speed of 90mph. I explain why this risk is significant and summarise this risk

2.3 Accommodation Bridge

- 2.3.1 Network Rail proposes to replace the existing Crossings with an accommodation bridge, which will give access to Hobson's Brook from Addenbrooke's road. The accommodation bridge will allow the existing Authorised Users of the Crossings which use mainly agricultural vehicles, to pass over the railways safely without interfacing with the train service in any way.
- 2.3.2 The accommodation bridge removes all of the current risks associated with both Crossings and also removes any future risks identified by the construction of the new station and other associated works, that are detailed in my Proof of Evidence.
- 2.3.3 Further information about the Accommodation Bridge is given in Section 9.

SECTION 3 – Network Rail's obligations regarding network safety and relevant legislation that applies to level crossings

- 1. I explain Network Rail's licensing conditions and those that as the network operator are regulated by the ORR by means of a network licence granted under section 8 of the Railways Act 1993 (B9)
- 2. I explain Network Rail's duties as the infrastructure manager, under The Railways and Other Guided Transport Systems (Safety) Regulations 2006 ("**ROGS**") (**B10**).
- 3. I explain Network Rails duties under The Health and Safety at Work etc. Act 1974
- 4. I explain the arrangements for managing risk at Level Crossings which are found in The Management of Health and Safety at Work Regulations

SECTION 4 - ORR and Network Rail National Policy on Level Crossings

- 5. I explain both the ORR and Network Rail relevant Level Crossing policies
- 6. Relevant ORR Policies include –

- a. Goal-setting Principles for Railway Health and Safety published in January 2017 (Appendix JP1)
- **b.** ORR's publication RSP7 published on 15th December 2011 (Appendix **JP2**) and also The ORR's 15th June 2021 publication of Principles for Managing Level Crossing Safety (Appendix **JP3**)
- 7. Relevant Network Rail Policies include
 - a. "Enhancing Level Crossing Safety 2019-2029" (Appendix JP4).
 - b. There are two key documents governing the Risk Assessment process for Level Crossings: - NR/L2/XNG/001 (Appendix JP5) and NR/L3/XNG/008 (Appendix JP6)

SECTION 5 – Network Rail's relevant level crossing standards and risk assessment at a user worked level crossing

- 8. I explain that when carrying out a Level Crossing Risk Assessment, in line with Network Rail and ORR policies mentioned above, one must look to reduce hazard through the hierarchy of risk controls.
- 9. I set out the Level Crossing Manager's role including Asset Inspections and the Narrative Risk Assessment ("**NRA**") process and why NRA's are used by Network Rail.

SECTION 6 - The assessment of level crossing safety risk and fatality weighted injuries

- 10. I set out how the Risk Assessment of a given Level Crossing is provided in a NRA Document produced by each individual LCM and its main purpose.
- 11. My Proof describes in detail the NRA and its two main parts: a *quantitative* one, calculated from data input by the LCM into the All Level Crossing Risk Model ("ALCRM"), and *qualitative* one including the structured expert judgement of the LCM.
- 12. I explain Fatality Weighted Injuries (or "FWI"), and how ALCRM assigns a Risk rating and what these are and consist of including a **Risk per Traverse** ("RPT") and a **Collective Risk**. The **RPT** indicates how dangerous a crossing is to use regardless of usage level, and a weighted average is mapped to the existing individual risk scale - A to M, with 'A' representing the highest risk and 'M' representing nil risk. **Collective Risk** is a measure of the total harm, or safety loss and is expressed in terms of FWI per year. Collective Risk is reported by ALCRM in a simplified form referred to as a 'Collective risk number' ranked from '1 to 13' ('1' representing the highest risk and '13' representing nil risk). I explain these in detail and how ALCRM arrives at these ratings
- 13. All these sources of information are collated by the LCM and then used to understand and structure their qualitative opinions/views written into the NRA.
- 14. In my Proof I also address how the frequency of Risk Assessments is derived.

SECTION 7 – Detailed description of the Crossings

- 15. My Proof outlines the main Crossing Features at both Duke's and Webster's Crossings, including the location and railway mileage descriptions of both Crossings, General Crossing Features, Gate Arrangements, and layout, traverse distances, Required Sighting Distances, Usage Census etc
- 16. I also explain in detail, the Required Sighting Distances required for Users, how Decision Points are determined and why, and give details of the RSD measurements, and explain that on these Passive Crossings the required sighting distances ("**RSD**") are particularly important. This is the metric used to gauge the ability of persons and vehicles to safely cross a Level Crossing and indicates the distance at which you would need to see the train in order to cross the Level Crossing safely.
- 17. The required sighting distances are not possible to achieve on both of the Crossings for all users. This is why they require users to phone the signallers in advance for permission to cross. I also summarise usage and safety event information.

SECTION 8 – Current Risk Assessment of the Crossings

- 18. Dukes No. 2 has an ALCRM rating of B7 with an FWI of 0.000051023 (roughly 1 in 19,600). This means that the Crossing is considered by Network Rail to be overall a medium risk Crossing of its type based on its ALCRM score. The B element of the Risk Per Traverse for this Crossing is considered to be high risk.
- 19. Websters has an ALCRM rating of B6 with an FWI of 0.000209523 (roughly 1 in 4,775). The Crossing is considered by Network Rail also to be a medium risk Crossing of its type based on its ALCRM score. The B element of the Risk Per Traverse for this Crossing is again considered to be high risk
- 20. In my Proof I describe in detail, the Current Risks Associated with both Crossings, and their safety impact. I detail these risks individually and discuss the various factors that influence them.

SECTION 9 – Future Risks at Duke's No. 2 and Webster's

- 21. In my Proof I detail the Risks that I consider will occur in the future should the CSIE Project go ahead, and the Crossings were to remain open
- 22. I detail these risks individually and explain their impact should the crossings remain open and why these would be considered to be unacceptable.

SECTION 10 – The Accommodation Bridge

23. In my Proof I explain that the Accommodation Bridge will provide appropriate alternative access for users of the existing crossing. Without doubt the most important feature of building the new accommodation bridge is that existing Users of both Crossings will be removed from their interaction with the railway. This is an overwhelming benefit of the Project.

SECTION 11 – The objection

24. I set out the objection raised by the sole objector who has raised issues in relation to the closure of the Crossings and their replacement with an Accommodation Bridge and identify where those concerns are addressed in Network Rail's evidence.

SECTION 12 – Conclusion

- 25. In my Proof I layout my conclusions which include that
 - a. The Crossings will become unacceptably risky if they are left as is, and the CSIE Project goes ahead
 - b. Network Rail is required to reduce risk so far as is reasonably practicable in regards of its Level Crossing Portfolio and closure of both Crossings is therefore entirely compatible with and mandated by national policy and those requirements
 - c. The closure of both Crossings will satisfactorily control both the existing (and future) public safety risk, so far as is reasonably practicable at both locations
 - d. The accommodation bridge will allow the current users to safely cross the track and will lead to the closure of two Crossings which are risky at present and will only pose yet greater risk in the future in the event that the CSIE Project goes ahead and
 - e. Leaving both Crossings open would increase the levels of risk from their current manageable levels and pose an unacceptable risk to the public. The accommodation bridge would, by closing the Crossings, totally eliminate the risk to the public incurred in crossing the railways and well as providing a satisfactory alternative for existing users.